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In your requests please include the following reference number 78EE117C99-1983425075

Contents

1.1 libjpeg 6b

1.1.1 Notifications

1.1.2 Available under license

1.2 javax-inject 1

1.2.1 Available under license

1.3 commons-math 2.1

1.3.1 Available under license

1.4 slf4j 1.6.6

1.4.1 Available under license

1.5 commons-configuration 1.8

1.5.1 Available under license

1.6 jeromq 0.3.5

1.6.1 Available under license

1.7 commons-pool 2.4.2

1.7.1 Available under license

1.8 slf4j 1.7.25

1.8.1 Available under license

1.9 annotations 13.0

1.9.1 Available under license

1.10 hdrhistogram 2.1.9

1.10.1 Available under license

1.11 failureaccess 1.0.1

1.12 hk2-utils 2.5.0

1.13 hk2-api 2.5.0

1.14 jersey-container-servlet-core 2.28

1.14.1 Available under license

- 1.15 aopalliance-repackaged 2.5.0**
- 1.16 metrics 4.0.5**
- 1.17 jul-to-slf4j 1.7.26**
- 1.18 profiler 1.0.2**
- 1.19 httpasyncclient 4.1.3**
 - 1.19.1 Available under license
- 1.20 bzip2 1.0.8**
- 1.21 jedis 2.9.0**
 - 1.21.1 Available under license
- 1.22 zkclient 0.10**
- 1.23 disruptor 3.3.6**
- 1.24 jaxb-core 2.2.3-1**
 - 1.24.1 Available under license
- 1.25 asm 3.1**
- 1.26 lcms 2.9**
 - 1.26.1 Available under license
- 1.27 cglib 3.2.9**
 - 1.27.1 Available under license
- 1.28 archaius-core 0.4.1**
- 1.29 hystrix-serialization 1.5.18**
- 1.30 hystrix-metrics-event-stream 1.5.18**
- 1.31 xerces-j 2.7.1**
 - 1.31.1 Available under license
- 1.32 bean-validation-api 2.0.1.Final**
 - 1.32.1 Available under license
- 1.33 rxjava 2.2.8**
- 1.34 guice 4.2.2**
 - 1.34.1 Available under license
- 1.35 giflib 5.2.1**
 - 1.35.1 Available under license
- 1.36 guice-multibindings 4.2.2**
 - 1.36.1 Available under license
- 1.37 guice-assistedinject 4.2.2**
 - 1.37.1 Available under license
- 1.38 swagger-core 1.6.2**
 - 1.38.1 Available under license
- 1.39 swagger 1.6.2**
 - 1.39.1 Available under license
- 1.40 reactive-streams 1.0.2**

- 1.40.1 Available under license
- 1.41 jctools-core 3.1.0**
 - 1.41.1 Available under license
- 1.42 xerces-j 2.12.2**
 - 1.42.1 Available under license
- 1.43 commons-io 2.8.0**
 - 1.43.1 Available under license
- 1.44 httpcomponents-client 4.5.13**
 - 1.44.1 Available under license
- 1.45 aop-alliance 1.0**
 - 1.45.1 Available under license
- 1.46 snake-yaml 2.1**
 - 1.46.1 Available under license
- 1.47 jackson-xc 2.9.8**
 - 1.47.1 Available under license
- 1.48 httpcomponents-core 4.4.13**
 - 1.48.1 Available under license
- 1.49 httpcore-nio 4.4.13**
 - 1.49.1 Available under license
- 1.50 commons-lang3 2.6**
 - 1.50.1 Available under license
- 1.51 httpclient-cache 4.5.13**
 - 1.51.1 Available under license
- 1.52 commons-logging 1.2**
 - 1.52.1 Available under license
- 1.53 javassist 3.25.0-GA**
 - 1.53.1 Available under license
- 1.54 jakarta-annotation-api 1.3.5**
 - 1.54.1 Available under license
- 1.55 commons-codec 1.14**
 - 1.55.1 Available under license
- 1.56 httpcomponents-mime 4.5.12**
 - 1.56.1 Available under license
- 1.57 jakarta-validation-api 2.0.2**
 - 1.57.1 Available under license
- 1.58 jakarta-ws-rs-api 2.1.6**
 - 1.58.1 Available under license
- 1.59 javax-ws-rs-api 2.0.1**
 - 1.59.1 Available under license

- 1.60 commons-codec 1.15**
 - 1.60.1 Available under license
- 1.61 lombok 1.18.6**
 - 1.61.1 Available under license
- 1.62 joda-time 2.9.1**
 - 1.62.1 Available under license
- 1.63 jersey-entity-filtering 2.28**
 - 1.63.1 Available under license
- 1.64 jersey-media-json-jackson 2.28**
 - 1.64.1 Available under license
- 1.65 hk2-locator 2.6.1**
 - 1.65.1 Available under license
- 1.66 resourcelocator 1.0.3**
 - 1.66.1 Available under license
- 1.67 jakarta-inject 2.6.1**
 - 1.67.1 Available under license
- 1.68 rocksdb 1.1.8**
 - 1.68.1 Available under license
- 1.69 xml-commons-resolver 1.2-15.el7**
 - 1.69.1 Available under license
- 1.70 lz4 1.9.3**
 - 1.70.1 Available under license
- 1.71 hystrix-core 1.5.18**
 - 1.71.1 Available under license
- 1.72 guice-servlet 4.2.2**
 - 1.72.1 Available under license
- 1.73 guice-throwingproviders 4.2.2**
 - 1.73.1 Available under license
- 1.74 istack-commons 2.2.3-1**
 - 1.74.1 Available under license
- 1.75 audience-annotations 0.12.0**
 - 1.75.1 Available under license
- 1.76 httpcore-nio 4.4.8**
 - 1.76.1 Available under license
- 1.77 activation-api 1.2.0**
 - 1.77.1 Available under license
- 1.78 commons-io 2.11.0**
 - 1.78.1 Available under license
- 1.79 rxjava 1.3.8**

- 1.79.1 Available under license
- 1.80 jersey-hk2 2.35**
 - 1.80.1 Available under license
- 1.81 namespace 1.4.01**
 - 1.81.1 Available under license
- 1.82 free-type 2.8-14.el7_9.1**
 - 1.82.1 Available under license
- 1.83 jersey-container-servlet 2.35**
 - 1.83.1 Available under license
- 1.84 alpine-keys 2.4-r1**
 - 1.84.1 Available under license
- 1.85 log4j-api 2.17.1**
 - 1.85.1 Available under license
- 1.86 apache-log4j 2.17.1**
 - 1.86.1 Available under license
- 1.87 log4j-jcl 2.17.1**
 - 1.87.1 Available under license
- 1.88 dom 1.0**
 - 1.88.1 Available under license
- 1.89 dagger 2.4**
 - 1.89.1 Available under license
- 1.90 paranamer 2.5.1**
 - 1.90.1 Available under license
- 1.91 metrics-jmx 4.0.5**
 - 1.91.1 Available under license
- 1.92 metrics-servlets 4.0.5**
 - 1.92.1 Available under license
- 1.93 metrics-health-checks 4.0.5**
 - 1.93.1 Available under license
- 1.94 metrics-httpclient 4.0.5**
 - 1.94.1 Available under license
- 1.95 metrics-jvm 4.0.5**
 - 1.95.1 Available under license
- 1.96 metrics-jetty 4.0.5**
 - 1.96.1 Available under license
- 1.97 metrics-json 4.0.5**
 - 1.97.1 Available under license
- 1.98 annotations 4.1.1.4**
 - 1.98.1 Available under license

- 1.99 swagger-annotations 1.6.2**
 - 1.99.1 Available under license
- 1.100 error_prone_annotations 2.3.3**
 - 1.100.1 Available under license
- 1.101 picocontainer 2.15**
 - 1.101.1 Available under license
- 1.102 aop-alliance 2.5.0**
 - 1.102.1 Available under license
- 1.103 apache-log4j 2.17.2**
 - 1.103.1 Available under license
- 1.104 log4j-api 2.17.2**
 - 1.104.1 Available under license
- 1.105 log4j-slf4j-impl 2.17.2**
 - 1.105.1 Available under license
- 1.106 log4j-layout-template-json 2.17.1**
 - 1.106.1 Available under license
- 1.107 servlet-api 3.1.0**
 - 1.107.1 Available under license
- 1.108 listenablefuture 9999.0-empty-to-avoid-conflict-with-guava**
 - 1.108.1 Available under license
- 1.109 agent-api 4.5.13.27526**
 - 1.109.1 Available under license
- 1.110 javassist 3.29.2-GA**
 - 1.110.1 Available under license
- 1.111 lz4 1.2.12**
 - 1.111.1 Available under license
- 1.112 protobuf-java 3.19.6**
 - 1.112.1 Available under license
- 1.113 common-utils 4.1.0**
 - 1.113.1 Available under license
- 1.114 guice-persist 4.2.2**
 - 1.114.1 Available under license
- 1.115 metrics-httpasyncclient 4.0.5**
 - 1.115.1 Available under license
- 1.116 common-config 4.1.0**
 - 1.116.1 Available under license
- 1.117 scala 2.13.10**
 - 1.117.1 Available under license
- 1.118 jctools-core 4.0.1**

- 1.118.1 Available under license
- 1.119 rocksdbjni 7.1.2**
 - 1.119.1 Available under license
- 1.120 httpcomponents-core 4.4.16**
 - 1.120.1 Available under license
- 1.121 httpcomponents-client 4.5.14**
 - 1.121.1 Available under license
- 1.122 gson 2.10.1**
 - 1.122.1 Available under license
- 1.123 commons-fileupload 1.5**
 - 1.123.1 Available under license
- 1.124 snake-yaml 2.0**
 - 1.124.1 Available under license
- 1.125 error_prone_annotations 2.18.0**
 - 1.125.1 Available under license
- 1.126 opentelemetry-proto 0.11.0**
 - 1.126.1 Available under license
- 1.127 bridgeutils 1.7.1-r2**
 - 1.127.1 Available under license
- 1.128 zstd-jni 1.5.5-1**
 - 1.128.1 Available under license
- 1.129 kafka-streams-avro-serde 6.2.1**
 - 1.129.1 Available under license
- 1.130 kafka-schema-registry-client 6.2.1**
 - 1.130.1 Available under license
- 1.131 kafka-schema-serializer 6.2.1**
 - 1.131.1 Available under license
- 1.132 kafka-avro-serializer 6.2.1**
 - 1.132.1 Available under license
- 1.133 kafka-protobuf-provider 5.5.5**
 - 1.133.1 Available under license
- 1.134 kafka-protobuf-serializer 5.5.5**
 - 1.134.1 Available under license
- 1.135 zstd 1.4.9**
 - 1.135.1 Available under license
- 1.136 xml-apis 1.4.01**
 - 1.136.1 Available under license
- 1.137 libucontext 1.2-r2**
 - 1.137.1 Available under license

1.138 okhttp 4.11.0

1.138.1 Available under license

1.139 musl-obstack 1.2.3-r2

1.139.1 Available under license

1.140 libc-utils 0.7.2-r5

1.140.1 Available under license

1.141 animal-sniffer-annotation 1.23

1.141.1 Available under license

1.142 j2objc-annotations 2.8

1.142.1 Available under license

1.143 tre 0.8.0-r2

1.143.1 Available under license

1.144 guice-bridge 2.5.0

1.144.1 Available under license

1.145 hystrix-codahale-metrics-publisher 1.5.18

1.145.1 Available under license

1.146 slf4j-impl 2.17.2

1.146.1 Available under license

1.147 lz4 1.5.2

1.147.1 Available under license

1.148 guava 32.0.1-jre

1.148.1 Available under license

1.149 jackson-module-afterburner 2.7.5

1.149.1 Available under license

1.150 bcel 5.2-19.el7_9

1.150.1 Available under license

1.151 mime-pull 1.9.6-4.el7

1.151.1 Available under license

1.152 openorb 1.8.0_211-amd64

1.152.1 Available under license

1.153 saaj 1.8.0_211-amd64

1.153.1 Available under license

1.154 pax-utils 1.3.7-r2

1.154.1 Available under license

1.155 netty-tcnative-boringssl-static 2.0.61.Final

1.155.1 Available under license

1.156 netty-tcnative-classes 2.0.61.Final

1.156.1 Available under license

1.157 guava 32.1.2-jre

- 1.157.1 Available under license
- 1.158 opentelemetry-sdk-extension-autoconfigure-spi 1.29.0**
 - 1.158.1 Available under license
- 1.159 opentelemetry-sdk 1.29.0**
 - 1.159.1 Available under license
- 1.160 guava 32.0.1-android**
 - 1.160.1 Available under license
- 1.161 kotlin 1.8.21**
 - 1.161.1 Available under license
- 1.162 opentelemetry-semconv 1.29.0-alpha**
 - 1.162.1 Available under license
- 1.163 avro 1.11.3**
 - 1.163.1 Available under license
- 1.164 libpng 1.6.39**
 - 1.164.1 Available under license
- 1.165 jackson-databind 2.15.3**
 - 1.165.1 Available under license
- 1.166 jackson-annotations 2.15.3**
 - 1.166.1 Available under license
- 1.167 jackson-dataformat-yaml 2.15.3**
 - 1.167.1 Available under license
- 1.168 jackson 2.15.3**
 - 1.168.1 Available under license
- 1.169 okio 3.6.0**
 - 1.169.1 Available under license
- 1.170 libcxxabi 1.1.10.5**
 - 1.170.1 Available under license
- 1.171 libgcc 13.2.1_git20231014-r0**
 - 1.171.1 Available under license
- 1.172 libstdc++ 13.2.1_git20231014-r0**
 - 1.172.1 Available under license
- 1.173 cpp 13.2.1_git20231014-r0**
 - 1.173.1 Available under license
- 1.174 jersey-client 2.41**
 - 1.174.1 Available under license
- 1.175 busybox 1.36.1-r15**
 - 1.175.1 Available under license
- 1.176 musl 1.2.4_git20230717-r4**
 - 1.176.1 Available under license

- 1.177 jackson-databind 2.16.0**
 - 1.177.1 Available under license
- 1.178 jackson 2.16.0**
 - 1.178.1 Available under license
- 1.179 jackson-annotations 2.16.0**
 - 1.179.1 Available under license
- 1.180 commons-lang3 3.14.0**
 - 1.180.1 Available under license
- 1.181 jackson-dataformat-yaml 2.16.0**
 - 1.181.1 Available under license
- 1.182 alpine-baselayout 3.4.3-r2**
 - 1.182.1 Available under license
- 1.183 musl-utils 1.2.4_git20230717-r4**
 - 1.183.1 Available under license
- 1.184 logback-core 1.4.14**
 - 1.184.1 Available under license
- 1.185 jersey-server 2.41**
 - 1.185.1 Available under license
- 1.186 snappy-java 1.1.10.5**
 - 1.186.1 Available under license
- 1.187 jersey-common 2.41**
 - 1.187.1 Available under license
- 1.188 protobuf-java-util 3.25.1**
 - 1.188.1 Available under license
- 1.189 protobuf-java 3.25.1**
 - 1.189.1 Available under license
- 1.190 gcompat 1.1.0-r4**
 - 1.190.1 Available under license
- 1.191 jre 1.8.0_402-b06**
 - 1.191.1 Available under license
- 1.192 zt 1.16**
 - 1.192.1 Available under license
- 1.193 openjdk 1.8.0u402**
 - 1.193.1 Available under license
- 1.194 zstd 1.5.2**
 - 1.194.1 Available under license
- 1.195 zlib 1.3.1-r0**
 - 1.195.1 Available under license
- 1.196 zlib 1.2.13**

- 1.196.1 Available under license
- 1.197 kotlin 1.4.10**
 - 1.197.1 Available under license
- 1.198 openjdk-jre 1.8.0u402**
 - 1.198.1 Available under license
- 1.199 zlib 1.3.1**
 - 1.199.1 Available under license
- 1.200 lz4-java 1.8.0**
 - 1.200.1 Available under license
- 1.201 busybox 1.36.1**
 - 1.201.1 Available under license
- 1.202 alpine-baselayout-data 3.4.3-r2**
 - 1.202.1 Available under license
- 1.203 commons-compress 1.26.0**
 - 1.203.1 Available under license
- 1.204 ca-certificates 20240226-r0**
 - 1.204.1 Available under license
- 1.205 kafka-clients 3.5.0**
 - 1.205.1 Available under license
- 1.206 leveldb 1.5**
 - 1.206.1 Available under license
- 1.207 jetty-util-ajax 9.4.54.v20240208**
 - 1.207.1 Available under license
- 1.208 jetty-security 9.4.54.v20240208**
 - 1.208.1 Available under license
- 1.209 jetty-continuation 9.4.54.v20240208**
 - 1.209.1 Available under license
- 1.210 jetty-servlets 9.4.54.v20240208**
 - 1.210.1 Available under license
- 1.211 jetty-webapp 9.4.54.v20240208**
 - 1.211.1 Available under license
- 1.212 jetty 9.4.54.v20240208**
 - 1.212.1 Available under license
- 1.213 jetty-util 9.4.54.v20240208**
 - 1.213.1 Available under license
- 1.214 jetty-jmx 9.4.54.v20240208**
 - 1.214.1 Available under license
- 1.215 jetty-xml 9.4.54.v20240208**
 - 1.215.1 Available under license

- 1.216 jetty 9.4.54.v20240208**
 - 1.216.1 Available under license
- 1.217 zookeeper 3.9.2**
 - 1.217.1 Available under license
- 1.218 zookeeper-jute 3.9.2**
 - 1.218.1 Available under license
- 1.219 netty-codec 4.1.108.Final**
 - 1.219.1 Available under license
- 1.220 netty-codec-socks 4.1.108.Final**
 - 1.220.1 Available under license
- 1.221 netty-handler 4.1.108.Final**
 - 1.221.1 Available under license
- 1.222 netty-handler-proxy 4.1.108.Final**
 - 1.222.1 Available under license
- 1.223 netty-codec-dns 4.1.108.Final**
 - 1.223.1 Available under license
- 1.224 netty-transport-native-unix-common 4.1.108.Final**
 - 1.224.1 Available under license
- 1.225 netty-resolver 4.1.108.Final**
 - 1.225.1 Available under license
- 1.226 netty-resolver-dns 4.1.108.Final**
 - 1.226.1 Available under license
- 1.227 netty-codec-http 4.1.108.Final**
 - 1.227.1 Available under license
- 1.228 netty 4.1.108.Final**
 - 1.228.1 Available under license
- 1.229 netty-transport-classes-epoll 4.1.108.Final**
 - 1.229.1 Available under license
- 1.230 netty-transport 4.1.108.Final**
 - 1.230.1 Available under license
- 1.231 netty-transport-classes-kqueue 4.1.108.Final**
 - 1.231.1 Available under license
- 1.232 netty-resolver-dns-classes-macos 4.1.108.Final**
 - 1.232.1 Available under license
- 1.233 netty-transport-sctp 4.1.108.Final**
 - 1.233.1 Available under license
- 1.234 netty-codec-xml 4.1.108.Final**
 - 1.234.1 Available under license
- 1.235 netty-codec-redis 4.1.108.Final**

- 1.235.1 Available under license
- 1.236 netty-handler-ssl-ocsp 4.1.108.Final**
 - 1.236.1 Available under license
- 1.237 netty-transport-rxtx 4.1.108.Final**
 - 1.237.1 Available under license
- 1.238 netty-codec-smtp 4.1.108.Final**
 - 1.238.1 Available under license
- 1.239 netty-codec-stomp 4.1.108.Final**
 - 1.239.1 Available under license
- 1.240 netty-codec-memcache 4.1.108.Final**
 - 1.240.1 Available under license
- 1.241 netty-codec-haproxy 4.1.108.Final**
 - 1.241.1 Available under license
- 1.242 netty-codec-mqtt 4.1.108.Final**
 - 1.242.1 Available under license
- 1.243 netty-transport-udt 4.1.108.Final**
 - 1.243.1 Available under license
- 1.244 activation 1.2.2**
 - 1.244.1 Available under license
- 1.245 openssl 3.1.4-r6**
 - 1.245.1 Available under license
- 1.246 jaxb-api 2.3.1**
 - 1.246.1 Available under license
- 1.247 apk-tools 2.14.4-r0**
 - 1.247.1 Available under license
- 1.248 ca-certificates-bundle 20240226-r0**
 - 1.248.1 Available under license
- 1.249 ssl-client 1.36.1-r15**
 - 1.249.1 Available under license
- 1.250 servlet-api 3.0.1**
 - 1.250.1 Available under license
- 1.251 disruptor 2.11.2.3**
 - 1.251.1 Available under license
- 1.252 perfmark-api 0.17.0**
 - 1.252.1 Available under license
- 1.253 scanelf 1.3.7-r2**
 - 1.253.1 Available under license
- 1.254 libssl3 3.1.4-r6**
 - 1.254.1 Available under license

1.255 libcrypto3 3.1.4-r6

1.255.1 Available under license

1.256 jsr305 3.0.2

1.256.1 Available under license

1.1 libjpeg 6b

1.1.1 Notifications :

This software is based in part on the work of the Independent JPEG Group.

1.1.2 Available under license :

The Independent JPEG Group's JPEG software

=====
README for release 6b of 27-Mar-1998
=====

This distribution contains the sixth public release of the Independent JPEG Group's free JPEG software. You are welcome to redistribute this software and to use it for any purpose, subject to the conditions under LEGAL ISSUES, below.

Serious users of this software (particularly those incorporating it into larger programs) should contact IJG at jpeg-info@uunet.uu.net to be added to our electronic mailing list. Mailing list members are notified of updates and have a chance to participate in technical discussions, etc.

This software is the work of Tom Lane, Philip Gladstone, Jim Boucher, Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi, Guido Vollbeding, Ge' Weijers, and other members of the Independent JPEG Group.

IJG is not affiliated with the official ISO JPEG standards committee.

DOCUMENTATION

ROADMAP

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This file contains the following sections:

OVERVIEW General description of JPEG and the IJG software.
LEGAL ISSUES Copyright, lack of warranty, terms of distribution.
REFERENCES Where to learn more about JPEG.
ARCHIVE LOCATIONS Where to find newer versions of this software.
RELATED SOFTWARE Other stuff you should get.
FILE FORMAT WARS Software *not* to get.
TO DO Plans for future IJG releases.

Other documentation files in the distribution are:

User documentation:

install.doc How to configure and install the IJG software.
usage.doc Usage instructions for cjpeg, djpeg, jpegtran,
rdjpgcom, and wrjpgcom.
*.1 Unix-style man pages for programs (same info as usage.doc).
wizard.doc Advanced usage instructions for JPEG wizards only.
change.log Version-to-version change highlights.

Programmer and internal
documentation:

libjpeg.doc How to use the JPEG library in your own programs.
example.c Sample code for calling the JPEG library.
structure.doc Overview of the JPEG library's internal structure.
filelist.doc Road map of IJG files.
coderrules.doc Coding style rules --- please read if you contribute code.

Please read at least the files install.doc and usage.doc. Useful information can also be found in the JPEG FAQ (Frequently Asked Questions) article. See ARCHIVE LOCATIONS below to find out where to obtain the FAQ article.

If you want to understand how the JPEG code works, we suggest reading one or more of the REFERENCES, then looking at the documentation files (in roughly the order listed) before diving into the code.

OVERVIEW

=====

This package contains C software to implement JPEG image compression and decompression. JPEG (pronounced "jay-peg") is a standardized compression method for full-color and gray-scale images.

JPEG is intended for compressing "real-world" scenes; line drawings, cartoons and other non-realistic images are not its strong suit. JPEG is lossy, meaning that the output image is not exactly identical to the input image. Hence you must not use JPEG if you have to have identical output bits. However, on typical photographic images, very good compression levels can be obtained with no visible change, and remarkably high compression levels are possible if you can tolerate a low-quality image. For more details, see the references, or just experiment with various compression settings.

This software implements JPEG baseline, extended-sequential, and progressive compression processes. Provision is made for supporting all variants of these processes, although some uncommon parameter settings aren't implemented yet. For legal reasons, we are not distributing code for the arithmetic-coding variants of JPEG; see LEGAL ISSUES. We have made no provision for supporting

the
hierarchical or lossless processes defined in the standard.

We provide a set of library routines for reading and writing JPEG image files, plus two sample applications "cjpeg" and "djpeg", which use the library to perform conversion between JPEG and some other popular image file formats. The library is intended to be reused in other applications.

In order to support file conversion and viewing software, we have included considerable functionality beyond the bare JPEG coding/decoding capability; for example, the color quantization modules are not strictly part of JPEG decoding, but they are essential for output to colormapped file formats or colormapped displays. These extra functions can be compiled out of the library if not required for a particular application. We have also included "jpegtran", a utility for lossless transcoding between different JPEG processes, and "rdjpgcom" and "wrjpgcom", two simple applications for inserting and extracting textual comments in JFIF files.

The emphasis in designing this software has been on achieving portability and flexibility, while also making it fast enough to be useful. In particular, the software is not intended to be read as a tutorial on JPEG. (See the REFERENCES section for introductory material.) Rather, it is intended to be reliable, portable, industrial-strength code. We do not claim to have achieved that goal in every aspect of the software, but we strive for it.

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The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub,

ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

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REFERENCES

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We

highly recommend reading one or more of these references before trying to understand the innards of the JPEG software.

The best short technical introduction to the JPEG compression algorithm is Wallace, Gregory K. "The JPEG Still Picture Compression Standard", Communications of the ACM, April 1991 (vol. 34 no. 4), pp. 30-44. (Adjacent articles in that issue discuss MPEG motion picture compression, applications of JPEG, and related topics.) If you don't have the CACM issue handy, a PostScript file containing a revised version of Wallace's article is available at <ftp://ftp.uu.net/graphics/jpeg/wallace.ps.gz>. The file (actually a preprint for an article that appeared in IEEE Trans. Consumer Electronics) omits the sample images that appeared in CACM, but it includes corrections and some added material. Note: the Wallace article is copyright ACM and IEEE, and it may not be used for commercial purposes.

A somewhat less technical, more leisurely introduction to JPEG can be found in "The Data Compression Book" by Mark Nelson and Jean-loup Gailly, published by

M&T Books (New York), 2nd ed. 1996, ISBN 1-55851-434-1. This book provides good explanations and example C code for a multitude of compression methods including JPEG. It is an excellent source if you are comfortable reading C code but don't know much about data compression in general. The book's JPEG sample code is far from industrial-strength, but when you are ready to look at a full implementation, you've got one here...

The best full description of JPEG is the textbook "JPEG Still Image Data Compression Standard" by William B. Pennebaker and Joan L. Mitchell, published by Van Nostrand Reinhold, 1993, ISBN 0-442-01272-1. Price US\$59.95, 638 pp. The book includes the complete text of the ISO JPEG standards (DIS 10918-1 and draft DIS 10918-2). This is by far the most complete exposition of JPEG in existence, and we highly recommend it.

The

JPEG standard itself is not available electronically; you must order a paper copy through ISO or ITU. (Unless you feel a need to own a certified official copy, we recommend buying the Pennebaker and Mitchell book instead; it's much cheaper and includes a great deal of useful explanatory material.) In the USA, copies of the standard may be ordered from ANSI Sales at (212) 642-4900, or from Global Engineering Documents at (800) 854-7179. (ANSI doesn't take credit card orders, but Global does.) It's not cheap: as of 1992, ANSI was charging \$95 for Part 1 and \$47 for Part 2, plus 7% shipping/handling. The standard is divided into two parts, Part 1 being the actual specification, while Part 2 covers compliance testing methods. Part 1 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 1: Requirements and guidelines" and has document numbers ISO/IEC IS 10918-1, ITU-T T.81. Part 2 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 2: Compliance testing" and has document numbers ISO/IEC IS 10918-2, ITU-T T.83.

Some extensions to the original JPEG standard are defined in JPEG Part 3, a newer ISO standard numbered ISO/IEC IS 10918-3 and ITU-T T.84. IJG currently does not support any Part 3 extensions.

The JPEG standard does not specify all details of an interchangeable file format. For the omitted details we follow the "JFIF" conventions, revision 1.02. A copy of the JFIF spec is available from:

Literature Department

C-Cube Microsystems, Inc.

1778 McCarthy Blvd.

Milpitas, CA 95035

phone (408) 944-6300, fax (408) 944-6314

A PostScript version of this document is available by FTP at

<ftp://ftp.uu.net/graphics/jpeg/jfif.ps.gz>. There is also a plain text

version at <ftp://ftp.uu.net/graphics/jpeg/jfif.txt.gz>, but it is missing

the figures.

The TIFF 6.0 file format specification can be obtained by FTP from <ftp://ftp.sgi.com/graphics/tiff/TIFF6.ps.gz>. The JPEG incorporation scheme found in the TIFF 6.0 spec of 3-June-92 has a number of serious problems. IJG does not recommend use of the TIFF 6.0 design (TIFF Compression tag 6). Instead, we recommend the JPEG design proposed by TIFF Technical Note #2 (Compression tag 7). Copies of this Note can be obtained from <ftp.sgi.com> or from <ftp://ftp.uu.net/graphics/jpeg/>. It is expected that the next revision of the TIFF spec will replace the 6.0 JPEG design with the Note's design. Although IJG's own code does not support TIFF/JPEG, the free libtiff library uses our library to implement TIFF/JPEG per the Note. libtiff is available from <ftp://ftp.sgi.com/graphics/tiff/>.

ARCHIVE LOCATIONS

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The "official" archive site for this software is <ftp.uu.net> (Internet address 192.48.96.9). The most recent released version can always be found there in directory <graphics/jpeg>. This particular version will be archived as <ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz>. If you don't have direct Internet access, UUNET's archives are also available via UUCP; contact help@uunet.uu.net for information on retrieving files that way.

Numerous Internet sites maintain copies of the UUNET files. However, only <ftp.uu.net> is guaranteed to have the latest official version.

You can also obtain this software in DOS-compatible "zip" archive format from the SimTel archives (<ftp://ftp.simtel.net/pub/simtelnet/msdos/graphics/>), or on CompuServe in the Graphics Support forum (GO CIS:GRAPHSUP), library 12 "JPEG Tools". Again, these versions may sometimes lag behind the <ftp.uu.net> release.

The JPEG FAQ (Frequently Asked Questions) article is a useful source of general information about JPEG. It is updated constantly and therefore is not included in this distribution. The FAQ is posted every two weeks to Usenet newsgroups <comp.graphics.misc>, <news.answers>, and other groups. It is available on the World Wide Web at <http://www.faqs.org/faqs/jpeg-faq/> and other <news.answers> archive sites, including the official <news.answers> archive at <rtfm.mit.edu>: <ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/>. If you don't have Web or FTP access, send e-mail to mail-server@rtfm.mit.edu with body
send <usenet/news.answers/jpeg-faq/part1>
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RELATED SOFTWARE

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Numerous viewing and image manipulation programs now support JPEG. (Quite a few of them use this library to do so.) The JPEG FAQ described above lists some of the more popular free and shareware viewers, and tells where to obtain them on Internet.

If you are on a Unix machine, we highly recommend Jef Poskanzer's free PBPLUS software, which provides many useful operations on PPM-format image files. In particular, it can convert PPM images to and from a wide range of other formats, thus making cjpeg/djpeg considerably more useful. The latest version is distributed by the NetPBM group, and is available from numerous sites,

notably <ftp://wuarchive.wustl.edu/graphics/graphics/packages/NetPBM/>.

Unfortunately PBPLUS/NETPBM is not nearly as portable as the IJG software is; you are likely to have difficulty making it work on any non-Unix machine.

A different free JPEG implementation, written by the PVRG group at Stanford, is available from <ftp://havefun.stanford.edu/pub/jpeg/>. This program is designed for research and experimentation rather than production use; it is slower, harder to use, and less portable than the IJG code, but it is easier to read and modify. Also, the PVRG code supports lossless JPEG, which we do not. (On the other hand, it doesn't do progressive JPEG.)

FILE FORMAT WARS

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Some JPEG programs produce files that are not compatible with our library. The root of the problem is that the ISO JPEG committee failed to specify a concrete file format. Some vendors "filled in the blanks" on their own, creating proprietary formats that no one else could read.

(For example, none of the early commercial JPEG implementations for the Macintosh were able to exchange compressed files.)

The file format we have adopted is called JFIF (see REFERENCES). This format has been agreed to by a number of major commercial JPEG vendors, and it has become the de facto standard. JFIF is a minimal or "low end" representation. We recommend the use of TIFF/JPEG (TIFF revision 6.0 as modified by TIFF Technical Note #2) for "high end" applications that need to record a lot of additional data about an image. TIFF/JPEG is fairly new and not yet widely supported, unfortunately.

The upcoming JPEG Part 3 standard defines a file format called SPIFF. SPIFF is interoperable with JFIF, in the sense that most JFIF decoders should

be able to read the most common variant of SPIFF. SPIFF has some technical advantages over JFIF, but its major claim to fame is simply that it is an official standard rather than an informal one. At this point it is unclear whether

SPIFF will supersede JFIF or whether JFIF will remain the de-facto standard. IJG intends to support SPIFF once the standard is frozen, but we have not decided whether it should become our default output format or not. (In any case, our decoder will remain capable of reading JFIF indefinitely.)

Various proprietary file formats incorporating JPEG compression also exist. We have little or no sympathy for the existence of these formats. Indeed, one of the original reasons for developing this free software was to help force convergence on common, open format standards for JPEG files. Don't use a proprietary file format!

TO DO

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The major thrust for v7 will probably be improvement of visual quality. The current method for scaling the quantization tables is known not to be very good at low Q values. We also intend to investigate block boundary smoothing, "poor man's variable quantization", and other means of improving quality-vs-file-size performance without sacrificing compatibility.

In future versions, we are considering supporting some of the upcoming JPEG Part 3 extensions --- principally, variable quantization and the SPIFF file format.

As always, speeding things up is of great interest.

Please send bug reports, offers of help, etc. to jpeg-info@uunet.uu.net.

1.2 javax-inject 1

1.2.1 Available under license :

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Version 2.0, January 2004

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1.8 slf4j 1.7.25

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1.9 annotations 13.0

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jar/org/intellij/lang/annotations/Identifier.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/Pattern.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/Language.java
*
/opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/PrintFormat.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/RegExp.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/Subst.java
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jar/org/jetbrains/annotations/Contract.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/Flow.java

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jar/org/jetbrains/annotations/Nullable.java

* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/jetbrains/annotations/NonNls.java

*

/opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/jetbrains/annotations/PropertyKey.java

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jar/org/jetbrains/annotations/TestOnly.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/JdkConstants.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/jetbrains/annotations/NotNull.java
*
/opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/intellij/lang/annotations/MagicConstant.java
```

1.10 hdrhistogram 2.1.9

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```
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```
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/AtomicHistogram.java
```

```
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
```

```

jar/org/HdrHistogram/RecordedValuesIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoubleRecorder.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/ShortCountsHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/EncodableHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/ZigZagEncoding.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/HistogramLogReader.java
*
/opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoublePercentileIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoubleHistogramIterationValue.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoubleHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/HistogramIterationValue.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/AllValuesIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoubleLinearIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/Histogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/AbstractHistogram.java
*
/opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/ConcurrentHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/Version.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/Recorder.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoubleRecordedValuesIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/LogarithmicIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/HistogramLogProcessor.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/SingleWriterDoubleRecorder.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/AbstractHistogramIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoubleAllValuesIterator.java
*
/opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/IntCountsHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-

```



```
jar/org/HdrHistogram/SynchronizedDoubleHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/PercentileIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/SingleWriterRecorder.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/ConcurrentDoubleHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/SynchronizedHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/DoubleLogarithmicIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/AbstractHistogramLogReader.java
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/opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/LinearIterator.java
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```
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*/
```

```
package org.HdrHistogram;
```

```
final class Version {
    public static final String version="$VERSION$";
    public static final String build_time="$BUILD_TIME$";
}
```

Found in path(s):

```
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
jar/org/HdrHistogram/Version.java.template
```

1.11 failureaccess 1.0.1

1.12 hk2-utils 2.5.0

1.13 hk2-api 2.5.0

1.14 jersey-container-servlet-core 2.28

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1.21 jedis 2.9.0

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1.22 zkclient 0.10

1.23 disruptor 3.3.6

1.24 jaxb-core 2.2.3-1

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1.25 asm 3.1

1.26 Icms 2.9

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1.27 cglib 3.2.9

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1.28 archaius-core 0.4.1

1.29 hystrix-serialization 1.5.18

1.30 hystrix-metrics-event-stream 1.5.18

1.31 xerces-j 2.7.1

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1.36 guice-multibindings 4.2.2

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1.38 swagger-core 1.6.2

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1.40 reactive-streams 1.0.2

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***/
```

Found in path(s):

```
* /opt/ws_local/PERMITS_SQL/1092915250_1600810885.15/0/reactive-streams-1-0-2-sources-1-  
jar/org/reactivestreams/Subscriber.java  
* /opt/ws_local/PERMITS_SQL/1092915250_1600810885.15/0/reactive-streams-1-0-2-sources-1-  
jar/org/reactivestreams/Subscription.java
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*

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jar/org/reactivestreams/Publisher.java

* /opt/ws_local/PERMITS_SQL/1092915250_1600810885.15/0/reactive-streams-1-0-2-sources-1-

jar/org/reactivestreams/Processor.java

1.41 jctools-core 3.1.0

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```

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```

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```
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```
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  <version>3.1.1</version>
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  </repository>
</distributionManagement>

<url>https://github.com/JCTools</url>
<inceptionYear>2013</inceptionYear>

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  <license>
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License, Version 2.0</name>
    <url>http://www.apache.org/licenses/LICENSE-2.0.txt</url>
    <distribution>repo</distribution>
  </license>
</licenses>

<scm>
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  <connection>scm:git:https://github.com/JCTools/JCTools</connection>
  <tag>HEAD</tag>
</scm>

<developers>
  <developer>
    <url>https://github.com/nitsanw</url>
  </developer>
  <developer>
    <url>https://github.com/mjpt777</url>
  </developer>
  <developer>
    <url>https://github.com/RichardWarburton</url>
  </developer>
  <developer>
    <url>https://github.com/kay</url>
  </developer>
  <developer>

```

```

<url>https://github.com/franz1981</url>
</developer>
</developers>

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</prerequisites>

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<java.version>1.6</java.version>
<java.test.version>1.8</java.test.version>

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<maven.compiler.testSource>${java.test.version}</maven.compiler.testSource>
<maven.compiler.testTarget>${java.test.version}</maven.compiler.testTarget>

<hamcrest.version>1.3</hamcrest.version>
<junit.version>4.12</junit.version>
<guava-testlib.version>21.0</guava-testlib.version>
</properties>
</project>

```

Found

in path(s):

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/META-INF/maven/org.jctools/jctools-core/pom.xml

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* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/spec/Ordering.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-

```

jar/org/jctools/queues/atomic/SpSCUnboundedAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/SpmcAtomicArrayQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MessagePassingQueueUtil.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/MpmcAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/UnsafeJvmInfo.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/LinkedQueueAtomicNode.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/SpSCLinkedQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscUnboundedXaddArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/spec/Preference.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/MpscAtomicArrayQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MessagePassingQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/SupportsIterator.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpmcUnboundedXaddArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscGrowableArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/BaseSpSCLinkedAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/AtomicQueueFactory.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpmcArrayQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/SpSCAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/SpSCLinkedAtomicQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/SpmcArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/maps/AbstractEntry.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpmcUnboundedXaddChunk.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscChunkedArrayQueue.java

```

```

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/maps/NonBlockingHashMapLong.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/MpscChunkedAtomicArrayQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/ConcurrentSequencedCircularArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/UnsafeLongArrayAccess.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscBlockingConsumerArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/BaseMpscLinkedAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/maps/NonBlockingHashMap.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/BaseMpscLinkedArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/MpscGrowableAtomicArrayQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/maps/NonBlockingIdentityHashMap.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/BaseLinkedQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/InternalAPI.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/maps/NonBlockingHashSet.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/Pow2.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/spec/ConcurrentQueueSpec.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/SpSCChunkedAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/maps/ConcurrentAutoTable.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscUnboundedXaddChunk.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/MpscUnboundedAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/LinkedQueueNode.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/SpSCUnboundedArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/PortableJvmInfo.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-

```



```

jar/org/jctools/queues/ConcurrentCircularArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/maps/NonBlockingSetInt.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/BaseLinkedAtomicQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/SequencedAtomicReferenceArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscLinkedQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/UnsafeRefArrayAccess.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscCompoundQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/SpSCChunkedArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/SpSCArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/AtomicReferenceArrayQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/QueueFactory.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/UnsafeAccess.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/MpscUnboundedArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/SpSCGrowableAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/IndexedQueueSizeUtil.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/atomic/MpscLinkedAtomicQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/SpSCGrowableArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/util/RangeUtil.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/package-info.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
jar/org/jctools/queues/BaseSpSCLinkedArrayQueue.java

```

1.42 xerces-j 2.12.2

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1.50 commons-lang3 2.6

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1.51 httpclient-cache 4.5.13

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1.52 commons-logging 1.2

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* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-jar/org/apache/commons/logging/impl/LogFactoryImpl.java

*

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*/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtPrimitiveType.java
*/
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/MethodInfo.java
```

* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/AccessorMaker.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/Lex.java
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 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/rmi/AppletServer.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/MethodCall.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/stackmap/MapMaker.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/StackMapTable.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/Loader.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/Visitor.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/util/proxy/ProxyObjectOutputStream.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/Javac.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CodeConverter.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/ByteArray.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/Translator.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/reflect/ClassMetaobject.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/AccessFlag.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/ASTree.java

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* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/StackMap.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/tools/reflect/Metalevel.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/NotFoundException.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/Variable.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/DeprecatedAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/ASTList.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/CodeAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/ClassFilePrinter.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/rmi/Sample.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/AssignExpr.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/ClassClassPath.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/Bytecode.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/util/proxy/MethodHandler.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/Expr.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/ConstPool.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/util/proxy/ProxyFactory.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/MethodDecl.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/InnerClassesAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/TokenId.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/MemberResolver.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtClassType.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/Declarator.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/NoSuchClassError.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtNewMethod.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtNewConstructor.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/analysis/ControlFlow.java

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* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/rmi/RemoteRef.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/rmi/Proxy.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/LoaderClassPath.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/StringL.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/Descriptor.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/reflect/Metaobject.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/CodeGen.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/ArrayInit.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/Frame.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/FieldInfo.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/annotation/AnnotationImpl.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtNewClass.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/util/proxy/ProxyObject.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/stackmap/TypeTag.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/scopedpool/ScopedClassPoolRepositoryImpl.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/SubroutineScanner.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/NoFieldException.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtMember.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/ConstructorCall.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/scopedpool/SoftValueHashMap.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/ParameterAnnotationsAttribute.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/runtime/DotClass.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/IntQueue.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/ClassPool.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/URLClassPath.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/SyntheticAttribute.java

* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/ExprEditor.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ProceedHandler.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/scopedpool/ScopedClassPoolFactoryImpl.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/convert/TransformNew.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/convert/TransformAccessArrayField.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/AttributeInfo.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/Subroutine.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtField.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/util/proxy/DefinePackageHelper.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/LineNumberAttribute.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/Expr.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/ClassFile.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/Modifier.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/annotation/AnnotationsWriter.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/SyntaxError.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/framedump.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/ByteStream.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/convert/TransformFieldAccess.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/web/BadHttpRequest.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/rmi/RemoteException.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/stackmap/BasicBlock.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/convert/TransformCall.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/SignatureAttribute.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/Callback.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/reflect/CannotCreateException.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-

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jar/javassist/compiler/JvstCodeGen.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/convert/TransformBefore.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/runtime/Cflow.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/BadBytecode.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/stackmap/TypeData.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/ExceptionsAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/AnnotationsAttribute.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/util/proxy/MethodFilter.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/DuplicateMemberException.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/NestHostAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/scopedpool/ScopedClassPool.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/ClassPoolTail.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/ClassPath.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/util/HotSwapper.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/convert/TransformNewClass.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/SourceFileAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/util/proxy/SecurityActions.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/TypeChecker.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/ClassMap.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/FieldDecl.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/LongVector.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/tools/web/Webserver.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtMethod.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/ClassFileWriter.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/Stmnt.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/tools/reflect/Sample.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-

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jar/javassist/util/proxy/RuntimeSupport.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/util/proxy/SerializedProxy.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/util/HotSwapAgent.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/Parser.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/NewArray.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/IntConst.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/tools/reflect/Reflection.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/MemberCodeGen.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/tools/rmi/ObjectImporter.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/scopedpool/ScopedClassPoolRepository.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/convert/Transformer.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/Cast.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/tools/reflect/CannotInvokeException.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/ConstantAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/convert/TransformWriteField.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtBehavior.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/SymbolTable.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/analysis/MultiType.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/stackmap/TypedBlock.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/Keyword.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/stackmap/Tracer.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/compiler/ast/Member.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/NewExpr.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/runtime/Desc.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/CtNewWrappedConstructor.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/util/proxy/FactoryHelper.java

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* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/NewExpr.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtConstructor.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/rmi/ObjectNotFoundException.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/Mnemonic.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/CastExpr.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/EnclosingMethodAttribute.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtArray.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/CompileError.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/FramePrinter.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CannotCompileException.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/convert/TransformAfter.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/Analyzer.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/ExceptionTable.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/rmi/StubGenerator.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/DoubleConst.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/CodeAnalyzer.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/BinExpr.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/Util.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/util/proxy/Proxy.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/analysis/Type.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtNewWrappedMethod.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/util/proxy/ProxyObjectInputStream.java
 * /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/KeywordTable.java
 *
 /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/NestMembersAttribute.java

* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/InstructionPrinter.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/LocalVariableAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/reflect/CannotReflectException.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/CallExpr.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/reflect/Compiler.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/Dump.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/CodeIterator.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/Instanceof.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/AnnotationDefaultAttribute.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/runtime/Inner.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/scopedpool/ScopedClassPoolFactory.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/bytecode/Opcodes.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/tools/reflect/Loader.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/Handler.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/CtClass.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/compiler/ast/InstanceOfExpr.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/SerialVersionUID.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-jar/javassist/expr/FieldAccess.java
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Found in path(s):

```
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/MemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/ByteMemberValue.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/EnumMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/ClassMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/AnnotationMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/IntegerMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/StringMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/LongMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/FloatMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/MemberValueVisitor.java
*
/opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/CharMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/BooleanMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/ShortMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/Annotation.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/ArrayMemberValue.java
* /opt/cola/permits/1135869399_1613618193.6/0/javassist-3-25-0-ga-sources-3-
jar/javassist/bytecode/annotation/DoubleMemberValue.java
```

1.54 jakarta-annotation-api 1.3.5

1.54.1 Available under license :

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1.55 commons-codec 1.14

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1.56 httpcomponents-mime 4.5.12

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```
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Validator.java  
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/CascadableDescriptor.java  
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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/FutureOrPresent.java
```

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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/Null.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/ConstraintValidatorContext.java
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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/MessageInterpolator.java
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jar/javax/validation/metadata/package-info.java
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jar/javax/validation/valueextraction/Unwrapping.java
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jar/javax/validation/valueextraction/ValueExtractor.java
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jar/javax/validation/package-info.java
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jar/javax/validation/constraints/Past.java
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~

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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/META-
INF/maven/jakarta.validation/jakarta.validation-api/pom.xml
```

1.58 jakarta-ws-rs-api 2.1.6

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* <https://github.com/eclipse-ee4j/jaxrs-api>

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* Source: <https://github.com/mockito/mockito/releases/tag/v2.16.0>

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1.62 joda-time 2.9.1

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1.63 jersey-entity-filtering 2.28

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== Contributors ==

* Tatu Saloranta

* Providing benchmark suite

* Alec Wysoker

* Performance and memory usage improvement

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Upstream-Name: liblz4

Upstream-Contact: Yann Collet <Cyan4973@github.com>

Source: <https://github.com/lz4/lz4>

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* Original location: <https://github.com/JCTools/JCTools/blob/master/jctools-core/src/main/java/org/jctools/queues/atomic/BaseLinkedAtomicQueue.java>
*/

Found in path(s):

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/atomic/BaseLinkedAtomicQueue.java

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* Originally from <https://code.google.com/p/guava->

[libraries/source/browse/guava/src/com/google/common/annotations/Beta.java](https://code.google.com/p/guava-)

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Found in path(s):

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/annotations/Beta.java

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*/

Found in path(s):

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/unsafe/MpmcArrayQueue.java

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Found in path(s):

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/unsafe/SpmcArrayQueue.java

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* Original location: <https://github.com/JCTools/JCTools/blob/master/jctools-core/src/main/java/org/jctools/queues/atomic/MpscLinkedAtomicQueue.java>
*/

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/atomic/MpscLinkedAtomicQueue.java
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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeFlatMapSingle.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeFlatMapCompletable.java
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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/schedulers/SchedulerLifecycle.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeReduce.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/SuppressAnimalSniffer.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeTakeLastOne.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/DeferredScalarSubscriber.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/ExceptionsUtils.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeConcatMap.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeCollect.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/SingleOnSubscribeUsing.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeFromCallable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/DeferredScalarSubscriberSafe.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/SingleOperatorOnErrorResumeNext.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeReduceSeed.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribePublishMulticast.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/SingleOperatorZip.java

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableOnSubscribeConcat.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/SingleOperatorCast.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observables/ConnectableObservable.java

*

/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableOnSubscribeMergeArray.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func7.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/plugins/RxJavaPlugins.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subscriptions/BooleanSubscription.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/exceptions/MissingBackpressureException.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorSkipWhile.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorAsObservable.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorToObservableSortedList.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorElementAt.java
 *
 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/BufferUntilSubscriber.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorObserveOn.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/SubscriptionList.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/ScalarSynchronousObservable.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorDoOnSubscribe.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableOnSubscribeConcatIterable.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorWithLatestFromMany.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/IndexedRingBuffer.java
 *
 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/BackpressureDrainManager.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorTakeUntil.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorSubscribeOn.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorReplay.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/exceptions/UnsubscribeFailedException.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorTakeLast.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeFromArray.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/Subscription.java
 *
 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableOnSubscribeMergeDelayErrorIterable.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/schedulers/Schedulers.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func4.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeSingle.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorSkip.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/Producer.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeTimeoutTimedWithFallback.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-

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jar/rx/internal/operators/OnSubscribeAmb.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorIgnoreElements.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorDoOnRequest.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeToMap.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/Completable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/PublishSubject.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func6.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/schedulers/NewThreadScheduler.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/Subject.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorOnBackpressureBuffer.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action9.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/schedulers/TimeInterval.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeTimeoutSelectorWithFallback.java
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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorAll.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/NotificationLite.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action5.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func0.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func9.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorTimestamp.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/Scheduler.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/SerializedSubscriber.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Functions.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observables/SyncOnSubscribe.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func8.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action4.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeDefer.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/RxRingBuffer.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorDematerialize.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeGroupJoin.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeRange.java

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action3.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeFromIterable.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/BlockingOperatorLatest.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/Subscribers.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorMaterialize.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/SingleDoOnEvent.java
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 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subscriptions/MultipleAssignmentSubscription.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/SingleOnSubscribeMap.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorOnBackpressureDrop.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/exceptions/OnCompletedFailedException.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/schedulers/TrampolineScheduler.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorThrottleFirst.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/schedulers/ImmediateScheduler.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/TestSubscriber.java
 *
 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorUnsubscribeOn.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorSequenceEqual.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorToObservableList.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorSkipLast.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/SubjectSubscriptionManager.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action8.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorGroupBy.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeMap.java
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 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/SerializedObserver.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Function.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/package-info.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorZip.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action1.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/schedulers/TestScheduler.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/TestObserver.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/schedulers/ImmediateScheduler.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorZipIterable.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subscriptions/RefCountSubscription.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeSwitchIfEmpty.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/plugins/RxJavaObservableExecutionHook.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeDoOnEach.java
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 *
 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func2.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableOnSubscribeMerge.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action7.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/schedulers/CachedThreadScheduler.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/schedulers/package-info.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/Subscriber.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorDelay.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/BehaviorSubject.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action6.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observables/GroupedObservable.java
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 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/BlockingOperatorToFuture.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/plugins/RxJavaObservableExecutionHookDefault.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/ReplaySubject.java
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 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorDoOnUnsubscribe.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action2.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableOnSubscribeMergeIterable.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorTimeInterval.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func5.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeRedo.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OnSubscribeFilter.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/BlockingOperatorToIterator.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/SafeSubscriber.java
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 /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableOnSubscribeMergeDelayErrorArray.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/schedulers/GenericScheduledExecutorService.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorTakeLastTimed.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CachedObservable.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/LinkedList.java
 * /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorTakeUntilPredicate.java

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Func1.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subscriptions/Subscriptions.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/exceptions/Exceptions.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/subscriptions/SerialSubscription.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/subscriptions/CompositeSubscription.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorSkipLastTimed.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorMerge.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/exceptions/CompositeException.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/exceptions/OnErrorThrowable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/schedulers/NewThreadScheduler.java
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/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/exceptions/OnErrorFailedException.java
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jar/rx/internal/schedulers/SleepingAction.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Action0.java
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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/AsyncSubject.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/BlockingOperatorNext.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/ActionN.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorOnErrorResumeNextViaFunction.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeToObservableFuture.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/SerializedSubject.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/CompletableOnSubscribeConcatArray.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/FuncN.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorScan.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/schedulers/TrampolineScheduler.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorTake.java
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*/
```

Found in path(s):

```
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
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*/
```

Found in path(s):

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/singles/BlockingSingle.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observables/AsyncOnSubscribe.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/BlockingUtils.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/SingleSubscriber.java

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/CompletableSubscriber.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/SingleEmitter.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/CompletableFromEmitter.java

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeCombineLatest.java

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* Modified from <http://www.javacodegeeks.com/2013/08/simple-and-lightweight-pool-implementation.html>

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This package contains code that relies on sun.misc.Unsafe. Before using it you MUST assert
UnsafeAccess.isUnsafeAvailable() == true

Much of the code in this package comes from or is inspired by the JCTools project:

<https://github.com/JCTools/JCTools>

JCTools has now published artifacts (<https://github.com/JCTools/JCTools/issues/17>) so RxJava could add JCTools
as a "shadow" dependency (<https://github.com/ReactiveX/RxJava/issues/1735>).

RxJava has a "zero dependency" policy for the core library, so if we do add it as a dependency, it won't be an

externally visible dependency that results in a separate jar.

The license for the JCTools code is <https://github.com/JCTools/JCTools/blob/master/LICENSE>

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/producers/QueuedValueProducer.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/producers/ProducerObserverArbiter.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/producers/QueuedProducer.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/BackpressureUtils.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/producers/ProducerArbiter.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/producers/SingleProducer.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/producers/SingleDelayedProducer.java
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jar/rx/internal/operators/OperatorBufferWithTime.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-

jar/rx/internal/operators/OperatorMulticast.java

*

/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-

jar/rx/internal/operators/OperatorMapPair.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-

jar/rx/internal/operators/OperatorEagerConcatMap.java

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-

jar/rx/internal/operators/OperatorDistinct.java

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jar/rx/internal/schedulers/ScheduledAction.java

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jar/rx/internal/operators/OperatorDebounceWithTime.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorWindowWithStartEndObservable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/RxThreadFactory.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeDelaySubscription.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorWindowWithObservable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeDelaySubscriptionOther.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeSkipTimed.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorSkipUntil.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeTimerOnce.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorWindowWithObservableFactory.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorDistinctUntilChanged.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleOnSubscribeDelaySubscriptionOther.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorPublish.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorBufferWithStartEndObservable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/PlatformDependent.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorRetryWithPredicate.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeDelaySubscriptionWithSelector.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorBufferWithSingleObservable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorDelayWithSelector.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorDoAfterTerminate.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorTakeTimed.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorWindowWithSize.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorSwitch.java
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/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/schedulers/NewThreadWorker.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorOnBackpressureLatest.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorSampleWithTime.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorWindowWithTime.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OperatorWithLatestFrom.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeRefCount.java
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* Original location: <https://github.com/JCTools/JCTools/blob/master/jctools-core/src/main/java/org/jctools/queues/QueueProgressIndicators.java>
*/

Found in path(s):

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/unsafe/QueueProgressIndicators.java

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*/
/**
* This plugin class provides 2 ways to customize {@link Scheduler} functionality
* 1. You may redefine entire schedulers, if you so choose. To do so, override
* the 3 methods that return Scheduler (io(), computation(), newThread()).
* 2. You may wrap/decorate an {@link Action0}, before it is handed off to a Scheduler. The
system-
* supplied Schedulers (Schedulers.ioScheduler, Schedulers.computationScheduler,
* Scheduler.newThreadScheduler) all use this hook, so it's a convenient way to
* modify Scheduler functionality without redefining Schedulers wholesale.
*
* Also, when redefining Schedulers, you are free to use/not use the onSchedule decoration hook.
* <p>
* See {@link RxJavaPlugins} or the RxJava GitHub Wiki for information on configuring plugins:
* <a
href="https://github.com/ReactiveX/RxJava/wiki/Plugins">https://github.com/ReactiveX/RxJava/wiki/Plugins</a>.
*/

```

Found in path(s):

```

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/plugins/RxJavaSchedulersHook.java
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Found in path(s):

```

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/UtilityFunctions.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/Observable.java
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core/src/main/java/org/jctools/queues/atomic/SpSCAtomicArrayQueue.java
*/
```

Found in path(s):

```
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/util/atomic/SpSCExactAtomicArrayQueue.java
*
```

```
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/util/atomic/SpSCAtomicArrayQueue.java
```

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jar/rx/internal/operators/OnSubscribeToMultimap.java
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core/src/main/java/org/jctools/queues/ConcurrentSequencedCircularArrayQueue.java
*/
```

Found in path(s):

```
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/util/unsafe/ConcurrentSequencedCircularArrayQueue.java
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```
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeDetach.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/Emitter.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleTakeUntilObservable.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observables/package-info.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/observers/SafeCompletableSubscriber.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/ActionObserver.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeThrow.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/package-info.java
```



```

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleTakeUntilCompletable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/CompletableFlatMapSingleToCompletable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/annotations/package-info.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/util/InternalObservableUtils.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/BackpressureOverflow.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/plugins/RxJavaCompletableExecutionHook.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleDoOnUnsubscribe.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/subscriptions/Unsubscribed.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeLift.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleLiftObservableOperator.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/plugins/RxJavaSingleExecutionHook.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleOnErrorReturn.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeOnAssembly.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/package-info.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleFromObservable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeOnAssemblyCompletable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleFromEmitter.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeCreate.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/util/ActionNotificationObserver.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeOnAssemblySingle.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/subscriptions/CancellableSubscription.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleObserveOn.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/schedulers/GenericScheduledExecutorServiceFactory.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/observers/AssertableSubscriber.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subjects/package-info.java

```

```

* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/plugins/RxJavaSingleExecutionHookDefault.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/observers/AssertableSubscriberObservable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleFromCallable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/util/ObserverSubscriber.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/plugins/package-info.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/exceptions/package-info.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/exceptions/AssemblyStackTraceException.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleFromFuture.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleTakeUntilSingle.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/functions/Cancellable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/EmptyObservableHolder.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleToObservable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/schedulers/SchedulerWhen.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/NeverObservableHolder.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/observers/AsyncCompletableSubscriber.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/schedulers/SchedulePeriodicHelper.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/OnSubscribeFlattenIterable.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/plugins/RxJavaHooks.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/singles/package-info.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/subscriptions/package-info.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/SingleDelay.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleTimeout.java
*
/opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-
jar/rx/internal/operators/SingleDoOnSubscribe.java
* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/util/ActionSubscriber.java
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Found in path(s):

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* /opt/cola/permits/1199767188_1630583074.7/0/rxjava-1-3-8-sources-4-jar/rx/internal/operators/OperatorGroupByEvicting.java
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#
src/base/fthash.c
src/base/md5.c
src/base/md5.h
#
src/bdf/bdf.c
src/bdf/bdf.h
src/bdf/bdfdrivr.c
src/bdf/bdfdrivr.h
src/bdf/bdferror.h
src/bdf/bdfplib.c
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#
src/pcf/module.mk
src/pcf/pcf.c
src/pcf/pcf.h
src/pcf/pcfdrivr.c
src/pcf/pcfdrivr.h
src/pcf/pcferror.h
src/pcf/pcfread.c
src/pcf/pcfread.h
src/pcf/pcfutil.c
src/pcf/pcfutil.h
src/pcf/README
src/pcf/rules.mk
#
src/gzip/adler32.c
src/gzip/infblock.c
```

```
src/gzip/infblock.h
src/gzip/infcodes.c
src/gzip/infcodes.h
src/gzip/inffixed.h
src/gzip/inflate.c
src/gzip/inftrees.c
src/gzip/inftrees.h
src/gzip/inftutil.c
src/gzip/inftutil.h
src/gzip/zconf.h
src/gzip/zlib.h
src/gzip/zutil.c
src/gzip/zutil.h
#
src/tools/apinames.c
src/tools/ftrandom/ftrandom.c
#
#
EOF
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1.84 alpine-keys 2.4-r1

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1.85 log4j-api 2.17.1

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1.86 apache-log4j 2.17.1

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1.87 log4j-jcl 2.17.1

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1.88 dom 1.0

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Found in path(s):

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/w3c/dom/html/HTMLDOMImplementation.java

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Found in path(s):

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ElementEditAS.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASNotationDeclaration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASObject.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/CharacterDataEditAS.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/DOMImplementationAS.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASModel.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/DocumentAS.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASAttributeDeclaration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASElementDeclaration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASEntityDeclaration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASNamedObjectMap.java
*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASDataType.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASContentModel.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/DOMASWriter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/DocumentEditAS.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/ASObjectList.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/DOMASBuilder.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/DOMASException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom3/as/NodeEditAS.java

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*/

/**

```
* Checks if this content model has had its min/maxOccurs values reduced for
* purposes of speeding up UPA. If
so, this content model should not be used
* for any purpose other than checking unique particle attribution
*
* @return a boolean that says whether this content has been compacted for UPA
*/
```

Found in path(s):

```
*/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/XSCMValidator.java
```

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```
/*
```

```
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```

```
*/
```

```
/**
```

```
* DOM Level 3 LS CR - Experimental.
* Create a new LSParser. The newly constructed parser may
*
then be configured by means of its DOMConfiguration
* object, and used to parse documents by means of its parse
* method.
* @param mode The mode argument is either
* MODE_SYNCHRONOUS or MODE_ASYNCHRONOUS, if
* mode is MODE_SYNCHRONOUS then the
* LSParser that is created will operate in synchronous
* mode, if it's MODE_ASYNCHRONOUS then the
* LSParser that is created will operate in asynchronous
* mode.
* @param schemaType An absolute URI representing the type of the schema
* language used during the load of a Document using the
* newly created LSParser. Note that no lexical checking
* is done on the absolute URI. In order to create a
* LSParser for any kind of schema types (i.e. the
```

- * LSParser will be free to use any schema found), use the value
- * `<code>null</code>.`
- * `<p >Note: For W3C XML Schema [XML Schema Part 1\]`
- * , applications must use the value
- * `<code>"http://www.w3.org/2001/XMLSchema"</code>.` For XML DTD [`XML 1.0`],
- * applications must use the value
- * `<code>"http://www.w3.org/TR/REC-xml"</code>.` Other Schema languages
- * are outside the scope of the W3C and therefore should recommend an
- * absolute URI in order to use this method.
- * `@return` The newly created `<code>LSParser</code>` object. This
- * `<code>LSParser</code>` is either synchronous or asynchronous
- * depending on the value of the `<code>mode</code>` argument.
- * `<p >Note: By default, the newly created <code>LSParser</code>`
- * does not contain a `<code>DOMErrorHandler</code>`, i.e. the value of
- * the "``
- * `error-handler`" configuration parameter is `<code>null</code>.` However, implementations
- * may provide a default error handler at creation time. In that case,
- * the initial value of the `<code>"error-handler"</code>` configuration
- * parameter on the new created `<code>LSParser</code>` contains a
- * reference to the default error handler.
- * `@exception` DOMException
- * NOT_SUPPORTED_ERR: Raised if the requested mode or schema type is
- * not supported.
- */

Found in path(s):

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CoreDOMImplementationImpl.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDDocumentInfo.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDElementTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLErrorHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFrameElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLEntityDescriptionImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/ShadowedSymbolTable.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/ObjectListImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLImgElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLOptgroupElement.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLInputSource.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLImgElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredCDATASectionImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDAbstractIDConstraintTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLTimerElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSParticle.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLWmlElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/AnySimpleDV.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/StringList.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTimerElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/CaseInsensitiveMap.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

```

jar/org/apache/xerces/impl/xs/opti/SchemaDOMImplementation.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/opti/DefaultXMLDocumentHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DeferredElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLAnchorElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/HTMLSerializer.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLHtmlElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/stax/DefaultNamespaceContext.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xinclude/MultipleScopeNamespaceSupport.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/opti/SchemaParsingConfig.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/XML11NSDTDValidator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xpointer/XPointerMessageFormatter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLMetaElementImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLQuoteElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/EncodingMap.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xinclude/XIncludeTextReader.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DOMInputImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/ObjectFactory.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xpointer/XPointerHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/XMLCatalogResolver.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/TeeXMLDocumentFilterImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLTableSectionElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/models/CMStateSet.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/Base64BinaryDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/DraconianErrorHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/JAXPValidatorComponent.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTitleElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XML11NonValidatingConfiguration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ElementDefinitionImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLElementDecl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSAttributeGroupDecl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/AbstractDOMParser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLSelectElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLLabelElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFieldSetElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLCardElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/ShortListImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/util/Base64.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CDATASectionImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/XSGrammarPoolContainer.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/CMBuilder.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLMetaElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/XSSimpleType.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/XSSimpleTypeDelegate.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/SchemaDOMParser.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xpath/regex/RegularExpression.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/opti/ElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/events/UIEventImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/Method.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/events/EntityReferenceImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xs/datatypes/ByteList.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/html/dom/HTMLBodyElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dtd/XMLNSDTDValidator.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/models/XSCMBinOp.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/DeferredAttrImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/DOMUtil.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLIElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/SAXParserFactoryImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xpointer/ElementSchemePointer.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/msg/XMLMessageFormatter.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 *
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLTdElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/XMLEntityDescription.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xni/parser/XMLDTDScanner.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SecurityManager.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSModel.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLErrorCode.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/DOMResultAugmentor.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/FieldActivator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ParentNode.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XIntPool.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTableCellElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/SchemaSymbols.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ObjectFactory.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/UTF16Reader.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/TextImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMStringListImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/NonValidatingConfiguration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLImageElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DecimalDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSModelImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/ShortList.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/ListDatatypeValidator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/StAXEventResultBuilder.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredAttrNSImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/DTDGrammar.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredEntityReferenceImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/ObjectList.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/XPathMatcher.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLHeadElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/PSVLErrorList.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/XML11NMTOKENDatatypeValidator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/StartDocumentImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/XMLSerializer.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/KeyRef.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSDDescription.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLAttributes.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLHeadElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredEntityImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/StAXDocumentHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/Latin1Reader.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/LCount.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLDTPProcessor.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/BooleanDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLEntityResolver.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMMessageFormatter.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/SchemaGrammar.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/grammars/XMLGrammarDescription.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XSInputSource.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/impl/dv/ValidatedInfo.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/ChildNode.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/util/XSNamedMapImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/Constants.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/events/MouseEventImpl.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dtd/XMLDTDValidatorFilter.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/validation/Util.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xinclude/XInclude11TextReader.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/SchemaValidatorConfiguration.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLPostfieldElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/DOMErrorImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/parsers/XMLDocumentParser.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/traversers/XSDComplexTypeTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLNoopElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/SecuritySupport.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/DatatypeException.java
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/traversers/SchemaContentHandler.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 *
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/WMLDOMImplementation.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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jar/org/apache/xerces/xs/XSImplementation.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/NamespaceContext.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLTdElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLDListElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/DayTimeDurationDV.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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*
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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jar/org/apache/xerces/jaxp/DocumentBuilderImpl.java
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/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/DatatypeValidator.java
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/AttributePSVI.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/Token.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredNode.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/XML11Serializer.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDAttributeGroupTraverser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/HexBinaryDV.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLGoElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/SimpleLocator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/MessageFormatter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLErrorReporter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSLoaderImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11NamespaceBinder.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/SecuritySupport.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFormElementImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLResourceIdentifierImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/XPath.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLMenuElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLCollectionImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLDocumentFragmentHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSComplexTypeDecl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SAXInputSource.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XPointerParserConfiguration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/datatype/SerializedDuration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/UTF8Reader.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/InvalidDatatypeValueException.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/DOMInputSource.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSNotationDecl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLAreaElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLBigElement.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLChar.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLPostfieldElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeepNodeListImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/EntityReferenceImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ProcessingInstructionImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLPrevElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMXSImplementationSourceImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/MixedContentModel.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/Augmentations.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/BaseDVFactory.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLVersionDetector.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/grammars/XMLDTDDescription.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/IDDatatypeValidator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-


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jar/org/apache/xerces/jaxp/validation/StAXValidatorHelper.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSComplexTypeDefinition.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/NotationImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLBElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/identity/UniqueOrKey.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/datatype/DatatypeFactoryImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLAnchorElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/DOMSerializerImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLIFrameElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/LineSeparator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/XMLLocatorWrapper.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSWildcard.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/StreamValidatorHelper.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/StAXLocationWrapper.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLDoElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/IntegratedParserConfiguration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/XMLNotationDecl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/ValidatorHelper.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/BaseSchemaDVFactory.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/identity/IdentityConstraint.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/datatypes/XSDouble.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xinclude/SecuritySupport.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/CommentImpl.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/events/CommentImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLSetvarElementImpl.java
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 jar/org/apache/xerces/dom/ASDOMImplementationImpl.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/events/NotationDeclarationImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/SoftReferenceSymbolTable.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/validation/EntityState.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/XHTMLSerializer.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/WMLWmlElement.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/ASModelImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/DeferredDocumentTypeImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/validation/DOMValidatorHelper.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/traversers/XSAnnotationInfo.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/XML11DTDSscannerImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/opti/NodeImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/parsers/XMLGrammarCachingConfiguration.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/html/dom/HTMLBaseElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xpointer/XPointerPart.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xni/QName.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLEmElementImpl.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xni/grammars/XMLGrammarPool.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/html/dom/HTMLFormControl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/dom/DeferredTextImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/xs/FloatDV.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/XML11DocumentScannerImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/ErrorHandlerWrapper.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xs/XSAttributeGroupDefinition.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dtd/models/CMAAny.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/events/StartElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/DOMSerializer.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xs/XSModelGroupDefinition.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/events/EndElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/xs/QNameDV.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLBrElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/html/dom/HTMLScriptElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/XMLStringBuffer.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/events/MutationEventImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/ObjectFactory.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/traversers/XSDGroupTraverser.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/xs/FullDVFactory.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xinclude/ObjectFactory.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/events/DTDImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/parsers/DOMParserImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/WMLTrElement.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dtd/models/CMUniOp.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DocumentFragmentImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLSelectElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDSimpleTypeTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11EntityScanner.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/StringDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/IDREFDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLButtonElementImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/Field.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DocumentImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/TextImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLOneventElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/util/ByteListImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XIncludeParserConfiguration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLStrongElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/CachingParserPool.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/ParserConfigurationSettings.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLDocument.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/EmptyXMLSchema.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSObjectList.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/DefaultNode.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLMapElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11NSDocumentScannerImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLSmallElement.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/XMLDTDCContentModelHandler.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLStartElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/PSVIDocumentImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/DTDGrammarBucket.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/ElementPSVImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/REUtil.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLParseException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/Op.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLDTDCContentModelSource.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/XML11DTDCConfiguration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLTemplateElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/SecuritySupport.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLInputElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/NMTOKENDatatypeValidator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLParagraphElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/OutputFormat.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/NOTATIONDatatypeValidator.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/DTDParse.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/SymbolHash.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/ListDV.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLULListElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DOMImplementationSourceImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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jar/org/apache/wml/WMLBrElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/CharacterDataImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/RangeImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/SerializerFactoryImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/XMLSchemaLoader.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/XMLScanner.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/XMLGrammarPoolImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/ElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLStrongElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSNotationDeclaration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/EncodingInfo.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLMetaElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/CMNodeFactory.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLFontElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLTableElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLAppletElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/IDDV.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/SecuritySupport.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSObject.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/SchemaDVFactory.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/XMLEntityDecl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/ErrorHandlerProxy.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/DTDDVFactoryImpl.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/CMNode.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/StringListImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTemplateElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XML11Configurable.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/InvalidDatatypeFacetException.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDAbstractParticleTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/StAXStreamResultBuilder.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/datatype/XMLGregorianCalendarImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XInt.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSConstants.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/Serializer.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/SubstitutionGroupHandler.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/TypeValidator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/SAXParserImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XMLParser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSGroupDecl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DoubleDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/Version.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/IntStack.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/ASCIIReader.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSIDCDefinition.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLCardElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/wml/WMLFieldsetElement.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/AttrImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLAElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/opti/DefaultDocument.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/FilePathToURI.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/parsers/ObjectFactory.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLPrevElementImpl.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/util/HexBin.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/datatype/SerializedXMLGregorianCalendar.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xs/XSModelGroup.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/html/dom/HTMLBaseFontElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dtd/XMLDTDLoader.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/dom/DeferredElementDefinitionImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/XSElementDeclHelper.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xni/parser/XMLComponentManager.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/PrimeNumberSequenceGenerator.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/dom/WMLOneventElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/xs/SchemaDVFactoryImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/ImmutableLocation.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/validation/XMLSchema.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xs/XSLoader.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/dv/xs/UnionDV.java
 *

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/XNIException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLDocumentSource.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/grammars/XSGrammar.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLBElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/SAXParser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/datatypes/XSDecimal.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/XSWildcardDecl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DOMConfigurationImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLTableColElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLTrElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLDOMImplementationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/XSCMUniOp.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/grammars/XMLGrammarLoader.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/validation/ConfigurableValidationState.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/IndentPrinter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/ElementState.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/ObjectFactory.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/PSVIDOMImplementationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/models/DFACContentModel.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/AttributeMap.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/stax/events/EndDocumentImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLPElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/datatypes/XSFloat.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/XSCMRepeatingLeaf.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/PSVIAttrNSImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/XMLDocumentFragmentScannerImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/ValidationContext.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/grammars/Grammar.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLAccessElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/Match.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/XSMMessageFormatter.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/TextSerializer.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/stax/events/NamespaceImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSAttributeDeclaration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/JAXPCConstants.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLAElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/EntityResolverWrapper.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DOMOutputImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/ExternalSubsetResolver.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/NodeListCache.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/PSVIElementNSImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xinclude/XIncludeHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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jar/org/apache/xerces/util/SAXMessageFormatter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DeferredCommentImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLTableElementImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLHRElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSNamespaceItemList.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/DOMEntityResolverWrapper.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/RegexParser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/ElementNSImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/stax/events/AttributeImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/IDREFDatatypeValidator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLUElement.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLHeadElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/XSCMLLeaf.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/LocatorProxy.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/identity/Selector.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/XML11IDDatatypeValidator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSElementDeclaration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/XSAnnotationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/LSInputList.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/XPathException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/stax/events/EntityDeclarationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/AbstractSAXParser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLBigElementImpl.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLLocator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSTypeDefinition.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/ItemPSVI.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/URI.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLObjectElementImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/AnyAtomicDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/NamedNodeMapImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLBuilder.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/WeakReferenceXMLSchema.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/XSQName.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/NodeIteratorImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/DefaultErrorHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/BMPattern.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/DTDCConfiguration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/SimpleXMLSchema.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLLegendElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/YearMonthDurationDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDWildcardTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLHeadingElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/XSFacets.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/ElementPSVI.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLRefreshElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XSGrammarPool.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLResourceIdentifier.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLDirectoryElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XML11Configuration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/EntityImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/MalformedByteSequenceException.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/UnparsedEntityHandler.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLAccessElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLSymbols.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/XPointerProcessor.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLSetvarElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLDTDHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSMultiValueFacet.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSAnnotation.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLLinkElementImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/events/EventImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/DTDDVFactory.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/ValueStore.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/ValidatorHandlerImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/DOMErrorHandlerWrapper.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/XMLEventImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XS10TypeHelper.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLDivElementImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSNamespaceItem.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XML11Char.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFrameSetElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLNamespaceBinder.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XMLGrammarPreparser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSImplementationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLBRElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/RangeExceptionImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/PSVIProvider.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XMLSchemaException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSNamedMap.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLStyleElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSAttributeUseImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/validation/ValidationManager.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/EntityResolver2Wrapper.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSElementDecl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/DOMParser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLAttributeDecl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLLIElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSParticleDecl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/ContentModelValidator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/StAXInputSource.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLContentSpec.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DocumentTypeImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLOptionElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xinclude/XIncludeMessageFormatter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/AttributePSVImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLSelectElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/XMLString.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/XMLSchemaValidatorComponentManager.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLTableRowElementImpl.java
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/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLLOListElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/opti/SchemaDOM.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/XMLDTDScannerImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLInputElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/PrecisionDecimalDV.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/DOMDocumentHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLPullParserConfiguration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/SecureProcessingConfiguration.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLDocumentFilter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/util/XSObjectListImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/NamedNodeMapImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSFacet.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLGoElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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jar/org/apache/xerces/impl/xs/traversers/XSDAbstractTraverser.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/Printer.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 *
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 jar/org/apache/xerces/impl/dtd/XMLDTDDescription.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/EmptyLocation.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/SerializerFactory.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/HTTPInputSource.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/Encodings.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 jar/org/apache/xerces/stax/XMLEventFactoryImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/JAXPNamespaceContextWrapper.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/Namespacesupport.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLDocumentHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMLocatorImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/LSInputListImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSDeclarationPool.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/JAXPValidationMessageFormatter.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/CMBinOp.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/ExtendedSchemaDVFactoryImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XML11DTDValidator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/EntityDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SymbolTable.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/AnyURIDV.java

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/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLEntityScanner.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLEntityManager.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSAttributeDecl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xinclude/XIncludeNamespacesupport.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/XSEmptyCM.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLOptGroupElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/DVFactoryException.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLDocumentImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/SchemaDateTimeException.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLOptionElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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jar/org/apache/wml/WMLPElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLOptionElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLParamElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/TreeWalkerImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/XML11DTDDVFactoryImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/ParseException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLDTDFilter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/XMLDTDValidator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSDNotationTraverser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/grammars/XMLSchemaDescription.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/DOMResultBuilder.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLAnchorElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLModElementImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLDocumentImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DeferredElementNSImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLTableCaptionElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/XMLEntityHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/StandardParserConfiguration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/XSAllCM.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/opti/AttrImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLFieldsetElementImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLDoElementImpl.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/RangeToken.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/DOMASBuilderImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/NameNodeListImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLDOMImplementationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/io/UCSReader.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/XIncludeAwareParserConfiguration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/RevalidationHandler.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSValue.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/NodeImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/XML11IDREFDatatypeValidator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLConfigurationException.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/AttributesProxy.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/ValidatorImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/parsers/XMLGrammarParser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/XMLSimpleType.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/SchemaNamespaceSupport.java
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/**

* used to check the 3 constraints against each complex type
* (should be each model group):
* Unique Particle

Attribution, Particle Derivation (Restriction),

* Element Declarations Consistent.

*/

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*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/YearDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDKeyrefTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DateDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DateDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDUniqueOrKeyTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/MonthDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DurationDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/MonthDayDV.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/TimeDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSAttributeChecker.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/YearMonthDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSModelGroupImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/XSSimpleTypeDecl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DayDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XMLSchemaValidator.java

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- * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/msg/DOMMessages.properties
- * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/msg/XPointerMessages.properties
- * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/msg/DatatypeMessages.properties
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- /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/message_fr.properties
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- * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/message_ja.properties
- * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/msg/JAXPValidationMessages.properties

1.89 dagger 2.4

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* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntKey.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/StringKey.java
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* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Beta.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/ClassKey.java
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```

Found in path(s):

```
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Reusable.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/ProviderOfLazy.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Binds.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Preconditions.java
*
/opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/DoubleCheck.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-
jar/dagger/multibindings/ElementsIntoSet.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntoMap.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/package-info.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntoSet.java
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```

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* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/MembersInjector.java

1.90 paranamer 2.5.1

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- * /opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-jar/com/thoughtworks/paranamer/BytecodeReadingParanamer.java

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```
* /opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-
jar/com/thoughtworks/paranamer/NullParanamer.java
```

```
* /opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-
jar/com/thoughtworks/paranamer/AdaptiveParanamer.java
```

```
* /opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-
jar/com/thoughtworks/paranamer/ParameterNamesNotFoundException.java
```

```
*
```

```
/opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-
jar/com/thoughtworks/paranamer/CachingParanamer.java
```

```
* /opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-
jar/com/thoughtworks/paranamer/DefaultParanamer.java
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*/opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-
jar/com/thoughtworks/paranamer/JavadocParanamer.java
```

1.91 metrics-jmx 4.0.5

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```
* /opt/cola/permits/1258811491_1643111603.33/0/annotations-4-1-1-4-sources-
jar/android/annotation/SuppressLint.java
* /opt/cola/permits/1258811491_1643111603.33/0/annotations-4-1-1-4-sources-
jar/android/annotation/TargetApi.java
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1.99 swagger-annotations 1.6.2

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```
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Authorization.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ExternalDocs.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Info.java
*
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ExampleProperty.java
```

```

* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiModelProperty.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiModel.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ResponseHeader.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Tag.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/SwaggerDefinition.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiResponses.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ExtensionProperty.java
*
/opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Extension.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiResponse.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/License.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Api.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiImplicitParam.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/AuthorizationScope.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiImplicitParams.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiParam.java
*
/opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiOperation.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Example.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Contact.java

```

1.100 error_prone_annotations 2.3.3

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* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/CompatibleWith.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/FormatMethod.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/MustBeClosed.java
*

/opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/RestrictedApi.java

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/FormatString.java

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* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/DoNotCall.java

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/GuardedBy.java

*

/opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/CheckReturnValue.java

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* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/LockMethod.java

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/UnlockMethod.java

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- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/SuppressPackageLocation.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/Immutable.java
- *
- /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/RequiredModifiers.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/Var.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/ForOverride.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/LazyInit.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/CanIgnoreReturnValue.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/IncompatibleModifiers.java

1.101 picocontainer 2.15

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- * /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/ComponentLifecycle.java
- * /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/security/CustomPermissionsURLClassLoader.java
- *
- /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/ComponentMonitorStrategy.java
- * /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Stored.java

```

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/FactoryInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/references/SimpleReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Guarded.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Provider.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/CompositeInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/Injector.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/InjectInto.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/references/ThreadLocalMapObjectReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/CompositeInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Injector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/MultiInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/ObjectReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Decorated.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Reinjection.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/references/ThreadLocalReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Reinjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/MultiInjection.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/classname/ClassPathElement.java

```

```

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/classname/ClassName.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/classname/ClassLoadingPicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/parameters/DefaultConstructorParameter.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/classname/DefaultClassLoadingPicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/parameters/NullParameter.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/LifecycleState.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/StartableLifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/visitors/MethodCallingVisitor.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/AbstractMonitoringLifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/visitors/TraversalCheckingVisitor.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/converters/Converter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/ReflectionLifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoVisitor.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/ComponentAdapter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/JavaEE5LifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/Converters.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/LifecycleStrategy.java

```

```
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/visitors/VerifyingVisitor.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/DefaultLifecycleState.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/CompositeLifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/ReflectionLifecycleException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/visitors/AbstractPicoVisitor.java
```

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/AnnotatedFieldInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/NamedFieldInjector.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Automated.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Locked.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/NameBinding.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/AdaptingBehavior.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/PropertyApplicator.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/AnnotatedFieldInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/monitors/LifecycleComponentMonitor.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoContainer.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Automating.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
```


jar/org/picocontainer/ComponentFactory.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/adapters/AbstractAdapter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Injectors.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/Characteristics.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/PropertyApplying.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/annotations/Inject.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/containers/TransientPicoContainer.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/DefaultPicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/NullLifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/parameters/BasicComponentParameter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Synchronizing.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/NamedMethodInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoVerificationException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/annotations/Cache.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/containers/CommandLinePicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/TypedFieldInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/adapters/InstanceAdapter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/TypedFieldInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/NamedFieldInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/parameters/CollectionComponentParameter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Locking.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/annotations/Nullable.java
*

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/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Behaviors.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/AbstractInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/BehaviorFactory.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoBuilder.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/InjectionFactory.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/AnnotatedMethodInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/ImplementationHiding.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/HiddenImplementation.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/parameters/ComponentParameter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/containers/ImmutablePicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Synchronized.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/SetterInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoClassNotFoundException.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/monitors/NullComponentMonitor.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/AbstractBehavior.java
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jar/org/picocontainer/behaviors/Decorating.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/FieldDecorating.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/monitors/ComponentMonitorHelper.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/monitors/WriterComponentMonitor.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/monitors/ConsoleComponentMonitor.java
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* Original code by the committers                                     *
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/PrimitiveMemberChecker.java
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* Idea by Rachel Davies, Original code by various
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Found in path(s):
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/CompositePicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/MutablePicoContainer.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/monitors/AbstractComponentMonitor.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/MethodInjector.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Intercepting.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/PicoLifecycleException.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ForgetfulConstructorInjection.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Intercepted.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/SystemPropertiesPicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/CommandLineArgumentsPicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ParameterNameBinding.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/parameters/AbstractParameter.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/SingleMemberInjector.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/monitors/ComposingMonitor.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/Parameter.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Guarding.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/SetterInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/MethodInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/AnnotatedMethodInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/AdaptingInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ConstructorInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/ThreadCaching.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ConstructorInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Storing.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Caching.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/PicoCompositionException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

jar/org/picocontainer/behaviors/OptInCaching.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
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1.102 aop-alliance 2.5.0

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1.103 apache-log4j 2.17.2

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1.104 log4j-api 2.17.2

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1.106 log4j-layout-template-json 2.17.1

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1.108 listenablefuture 9999.0-empty-to-avoid-conflict-with-guava

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1.109 agent-api 4.5.13.27526

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* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/AppdynamicsAgent.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/impl/NoOpExitCall.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/ExitCall.java
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* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/EventPublisher.java
*

/opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/MetricPublisher.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/impl/NoOpTransaction.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/Transaction.java

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* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/ExitTypes.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/bootstrap/NoOpTransactionDelegate.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/bootstrap/IApiTransactionDelegate.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-jar/com/appdynamics/agent/api/EntryTypes.java

1.110 javassist 3.29.2-GA

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 */
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```
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ByteStream.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/Callback.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtConstructor.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/InnerClassesAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/compiler/Lex.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/scopedpool/ScopedClassPoolFactoryImpl.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtNewClass.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/NewExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/CodeIterator.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/CtNewWrappedConstructor.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/expr/FieldAccess.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/Loader.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/IntQueue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Member.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
```

```

jar/javassist/scopedpool/ScopedClassPool.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/LineNumberAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/BinExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/StackMap.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/runtime/Desc.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/scopedpool/SoftValueHashMap.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/web/Viewer.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/stackmap/BasicBlock.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/FactoryHelper.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/Modifier.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/Type.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/NestMembersAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/ByteArrayClassPath.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/MemberCodeGen.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/NestHostAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/KeywordTable.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/expr/Expr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Pair.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/ClassClassPath.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/AccessFlag.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/Transformer.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/HotSwapAgent.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ProceedHandler.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtClassType.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/FieldInfo.java

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* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/ObjectNotFoundException.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformNewClass.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/runtime/Inner.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/ClassMap.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/ClassPoolTail.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/ClassPath.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ClassFilePrinter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/TypeChecker.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ParameterAnnotationsAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformAfter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ConstantAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/ClassPool.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/DeprecatedAttribute.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/web/BadHttpRequest.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/ProxyFactory.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/CastExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/ASTree.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/Frame.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/CtNewMethod.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/stackmap/TypeData.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/CtPrimitiveType.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/stackmap/MapMaker.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/InstanceOfExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/SerializedProxy.java

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* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/expr/ExprEditor.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/Translator.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/LoaderClassPath.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/Analyzer.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformReadField.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/expr/Handler.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/scopedpool/ScopedClassPoolFactory.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/NoSuchClassError.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/BadBytecode.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Stmnt.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ByteArray.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Symbol.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformCall.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformFieldAccess.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/AppletServer.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/Parser.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/Proxy.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Keyword.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/expr/NewArray.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/CallExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/CodeConverter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/DoubleConst.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformAccessArrayField.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-

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jar/javassist/tools/rmi/ObjectImporter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/CannotReflectException.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformWriteField.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/Opcode.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/EnclosingMethodAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/MultiArrayType.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/Compiler.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/ProxyObjectOutputStream.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Declarator.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/CannotCompileException.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/stackmap/Tracer.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtBehavior.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/IntConst.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/expr/MethodCall.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/framedump.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/DefinePackageHelper.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/Subroutine.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/JvstCodeGen.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformBefore.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtMethod.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Visitor.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/scopedpool/ScopedClassPoolRepositoryImpl.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/Loader.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/CodeGen.java
*

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/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/FramePrinter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/StubGenerator.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/runtime/DotClass.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/CodeAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ConstPool.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/SerialVersionUID.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/FieldDecl.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/LongVector.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ExceptionsAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/stackmap/TypedBlock.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/StackMapTable.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/LocalVariableAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ClassFileWriter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ExceptionTable.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/RemoteRef.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/Proxy.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/Javac.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtMember.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/CondExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/CtNewConstructor.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/expr/ConstructorCall.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/Executor.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/SyntaxError.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-

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jar/javassist/compiler/SymbolTable.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/ClassMetaobject.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/Sample.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/tools/Dump.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/CtNewWrappedMethod.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/MethodHandler.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/ProxyObject.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/JvstTypeChecker.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/ControlFlow.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/NotFoundExpection.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/scopedpool/ScopedClassPoolRepository.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/SyntheticAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/AccessorMaker.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/Sample.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/Metaobject.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/MethodFilter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/runtime/Cflow.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/CompileError.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtClass.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/CannotCreateException.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/Bytecode.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/ASTList.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtArray.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/stackmap/TypeTag.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-

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jar/javassist/util/proxy/DefineClassHelper.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/MultiType.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/MethodInfo.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ClassFile.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/AnnotationDefaultAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/expr/Instanceof.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/MethodDecl.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/AssignExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/Mnemonic.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/Util.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/NoFieldException.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/expr/Cast.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/DuplicateMemberException.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/Metalevel.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/AnnotationImpl.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/URLClassPath.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/Descriptor.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/HotSwapper.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/RemoteException.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/AnnotationsWriter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/MemberResolver.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/LocalVariableTypeAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Expr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-

```

```

jar/javassist/bytecode/SourceFileAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformNew.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/ArrayInit.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/CannotInvokeException.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/SecurityActions.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/ProxyObjectInputStream.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/InstructionPrinter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/web/Webserver.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/StringL.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/TokenId.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Variable.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/RuntimeSupport.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/AttributeInfo.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/SignatureAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/Reflection.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/AnnotationsAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/SubroutineScanner.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtField.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/expr/NewExpr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/CodeAnalyzer.java

```

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* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/FloatMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/MemberValueVisitor.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/MemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/LongMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/CharMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/ByteMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/ClassMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/Annotation.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/ArrayMemberValue.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/DoubleMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/ShortMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/IntegerMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/StringMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/EnumMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/BooleanMemberValue.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/AnnotationMemberValue.java

1.111 Iz4 1.2.12

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1.112 protobuf-java 3.19.6

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Manifest-Version: 1.0
Automatic-Module-Name: com.google.protobuf
Bnd-LastModified: 1664485905970
Build-Jdk: 1.8.0_181-google-v7
Built-By: mkruskal
Bundle-Description: Core Protocol Buffers library. Protocol Buffers are a way of encoding structured data in an efficient yet extensible format.
Bundle-DocURL: <https://developers.google.com/protocol-buffers/>
Bundle-License: <https://opensource.org/licenses/BSD-3-Clause>
Bundle-ManifestVersion: 2
Bundle-Name: Protocol Buffers [Core]
Bundle-SymbolicName: com.google.protobuf
Bundle-Version: 3.19.6
Created-By: Apache Maven Bundle Plugin
Export-Package: com.google.protobuf;version="3.19.6"
Import-Package: sun.misc;resolution:=optional,com.google.protobuf;version="[3.19,4)"
Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.7))"
Tool: Bnd-3.0.0.201509101326

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* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/META-INF/MANIFEST.MF

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* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/timestamp.proto

* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/struct.proto

* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/wrappers.proto

- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/type.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/empty.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/any.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/descriptor.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/duration.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/field_mask.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/compiler/plugin.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/source_context.proto
- * /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/api.proto

1.113 common-utils 4.1.0

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 - * HOMEPAGE: <https://github.com/sgroschupf/zkclient>

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1.114 guice-persist 4.2.2

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not-a-legal-formal-parameter.tuple.scala:2: error: not a legal formal parameter.

Note: Tuples cannot be directly destructured in method or function parameters.

Either create a single parameter accepting the Tuple2,

or consider a pattern matching anonymous function: `{ case (a, b) => ... }`

`val x: ((Int, Int) => Int) = (((a, b)) => a)`

^

not-a-legal-formal-parameter-tuple.scala:3: error: not a legal formal parameter.

Note: Tuples cannot be directly destructured in method or function parameters.

Either create a single parameter accepting the Tuple2,

or consider a pattern matching anonymous function: `{ case (param1, param2) => ... }`

```
val y: ((Int, Int, Int) => Int) = (((a, !)) => a)
```

^

not-a-legal-formal-parameter-tuple.scala:4: error: not a legal formal parameter.

Note: Tuples cannot be directly destructured in method or function parameters.

Either create a single parameter accepting the

Tuple3,

or consider a pattern matching anonymous function: `{ case (param1, ..., param3) => ... }`

```
val z: ((Int, Int, Int) => Int) = (((a, NotAPatternVariableName, c)) => a)
```

^

3 errors

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```
{% if site.thisScalaVersion != site.latestScalaVersion %}
```

```
<div class="version-notice">This is the specification of {{ site.versionCompareMessage }} version of Scala. See the <a href="{{ site.baseurl }}/../{{ site.latestScalaVersion }}">Scala {{ site.latestScalaVersion }} spec</a>.</div>
```

```
{% endif %}
```

Scala includes the ASM library.

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1.118 jctools-core 4.0.1

1.118.1 Available under license :

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Manifest-Version: 1.0
Bnd-LastModified: 1662622707903
Build-Jdk-Spec: 11
Bundle-Description: Java Concurrency Tools Core Library
Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>
Bundle-ManifestVersion: 2
Bundle-Name: Java Concurrency Tools Core Library
Bundle-SymbolicName: org.jctools.core
Bundle-Version: 4.0.1
Created-By: Apache Maven Bundle Plugin 5.1.6
Export-Package: org.jctools.maps;version="4.0.1",org.jctools.util;uses
:="sun.misc";version="4.0.1",org.jctools.queues;version="4.0.1",org.j
ctools.queues.atomic;uses:="org.jctools.queues";version="4.0.1",org.j
ctools.queues.unpadded;uses:="org.jctools.queues";version="4.0.1",org
.jctools.counters;version="4.0.1"
Import-Package: sun.misc;resolution:=optional
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.6))"
Tool: Bnd-6.2.0.202202251641

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1.119 rocksdbjni 7.1.2

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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/RocksMutableObject.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractNativeReference.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Holder.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/VectorMemTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractTableFilter.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MutableOptionValue.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/HashLinkedListMemTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractMutableOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TableProperties.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/util/Environment.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MutableOptionKey.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/SkipListMemTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/SizeApproximationFlag.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompactionStopStyle.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/HashSkipListMemTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MutableDBOptionsInterface.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TableFilter.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
```

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jar/org/rocksdb/TransactionLogIterator.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/NativeLibraryLoader.java
*
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Found in path(s):

```
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/StatsLevel.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ThreadStatus.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/BlockBasedTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/HistogramType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/RocksDBException.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TableFormatConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompactionOptions.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/ExternalFileIngestionInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompactionJobInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/OptimisticTransactionOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksObject.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/SstFileWriter.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Statistics.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractCompactionFilterFactory.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/DbPath.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/StatisticsCollectorCallback.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/StateType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TxnDBWritePolicy.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/PersistentCache.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/WalProcessingOption.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Experimental.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Logger.java
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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ReusedSynchronisationType.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/DBOptionsInterface.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractTransactionNotifier.java

*

/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ClockCache.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ColumnFamilyMetaData.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WALRecoveryMode.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteBatchInterface.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionOptionsFIFO.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/NativeComparatorWrapper.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ThreadType.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TtlDB.java

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/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/MutableColumnFamilyOptionsInterface.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/LevelMetaData.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractWalFilter.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteStallInfo.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/OptionsUtil.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksCallbackObject.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/util/SizeUnit.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ColumnFamilyDescriptor.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionOptionsUniversal.java

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/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ColumnFamilyHandle.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/IngestExternalFileOptions.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Snapshot.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/MemoryUtil.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/SstFileReader.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/BackupEngine.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionStyle.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/PlainTableConfig.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/StatsCollectorInput.java
 *
 /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/IndexShorteningMode.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Range.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksDB.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ComparatorOptions.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionPriority.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/util/ReverseBytewiseComparator.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteBatch.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RateLimiterMode.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/SstFileManager.java
 *
 /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Options.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractWriteBatch.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/HistogramData.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Slice.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ColumnFamilyOptions.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ReadTier.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteStallCondition.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Status.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TransactionDBOptions.java
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 /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AccessHint.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TraceWriter.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/DirectSlice.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AdvancedMutableColumnFamilyOptionsInterface.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/MemoryUsageType.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TransactionOptions.java
 * /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Transaction.java

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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/ComparatorType.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MutableDBOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/StatisticsCollector.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractEventListener.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/EncodingType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/SstFileMetaData.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/FlushReason.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TableFileCreationBriefInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/OperationType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/LiveFileMetaData.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/ColumnFamilyOptionsInterface.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/LRUCache.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MutableColumnFamilyOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompactionJobStats.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/FlushOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompressionType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksEnv.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/FileOperationInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/BuiltinComparator.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/IndexType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TableFileCreationReason.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TransactionalDB.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/DataBlockIndexType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractCompactionFilter.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TransactionalOptions.java

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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteBufferManager.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractTraceWriter.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TableFileCreationInfo.java

*

/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/OptionString.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/SstFileReaderIterator.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/BackupEngineOptions.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactRangeOptions.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/EventListener.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksIterator.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Filter.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TickerType.java

*

/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractComparatorJniBridge.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ChecksumType.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Env.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RemoveEmptyValueCompactionFilter.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/BackgroundErrorReason.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionReason.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/KeyMayExist.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksIteratorInterface.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/SstPartitionerFactory.java

*

/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/BloomFilter.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/MemTableConfig.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TraceOptions.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TransactionDB.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/util/BytewiseComparator.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/LogFile.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TimedEnv.java

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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractSlice.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractComparator.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WalFileType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TableFileDeletionInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Priority.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/FlushJobInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/RocksMemEnv.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/RestoreOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/OperationStage.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/WriteBatchWithIndex.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AbstractRocksIterator.java
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/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/AdvancedColumnFamilyOptionsInterface.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/EnvOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WalFilter.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/BackupInfo.java
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jar/org/rocksdb/MemTableInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/SstPartitionerFixedPrefixFactory.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Cache.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompressionOptions.java

```

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Found in path(s):

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbsjni-7-1-2-sources-jar/org/rocksdbs/MergeOperator.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbsjni-7-1-2-sources-jar/org/rocksdbs/StringAppendOperator.java

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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbsjni-7-1-2-sources-jar/org/rocksdbs/UInt64AddOperator.java

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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbsjni-7-1-2-sources-jar/org/rocksdbs/CassandraValueMergeOperator.java

* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbsjni-7-1-2-sources-jar/org/rocksdbs/CassandraCompactionFilter.java

1.120 httpcomponents-core 4.4.16

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1.121 httpcomponents-client 4.5.14

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1.122 gson 2.10.1

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Manifest-Version: 1.0
Created-By: 11.0.16.1 (Azul Systems, Inc.)
Build-Jdk-Spec: 11
Bnd-LastModified: 1673019830620
Bundle-ContactAddress: <https://github.com/google/gson>
Bundle-Description: Gson JSON library

Bundle-Developers: google;organization=Google;organizationUrl="https://www.google.com"
Bundle-DocURL: https://github.com/google/gson/gson
Bundle-License: "Apache-2.0";link="https://www.apache.org/licenses/LICENSE-2.0.txt"
Bundle-ManifestVersion: 2
Bundle-Name: Gson
Bundle-RequiredExecutionEnvironment: JavaSE-1.7, JavaSE-1.8
Bundle-SCM: url="https://github.com/google/gson/gson/",connection="scm:git:https://github.com/google/gson.git/gson",developer-connection="scm:git:git@github.com:google/gson.git/gson",tag="gson-parent-2.10.1"
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Import-Package: sun.misc;resolution:=optional,com.google.gson.annotations
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.7))"
Tool: Bnd-6.4.0.202211291949
Multi-Release: true

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* /opt/cola/permits/1570533427_1676891842.8285189/0/gson-2-10-1-jar/META-INF/MANIFEST.MF

1.123 commons-fileupload 1.5

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1.124 snake-yaml 2.0

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```
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```

```
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```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/representer/SafeRepresenter.java
```

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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/parser/Parser.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/env/EnvScalarConstructor.java
```

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*
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/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/nodes/ScalarNode.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/tokens/ValueToken.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-  
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
```

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jar/org/yaml/snakeyaml/emitter/ScalarAnalysis.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/events/ScalarEvent.java
*
/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/emitter/EmitterState.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/tokens/DirectiveToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/events/StreamStartEvent.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/events/CommentEvent.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/tokens/AliasToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/constructor/Construct.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/events/ImplicitTuple.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/constructor/CustomClassLoaderConstructor.java
*
/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/introspector/Property.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/parser/Production.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/resolver/ResolverTuple.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/scanner/Scanner.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/composer/ComposerException.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/nodes/MappingNode.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/emitter/Emitable.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/tokens/FlowMappingEndToken.java
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/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/DumperOptions.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/tokens/FlowSequenceEndToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/nodes/AnchorNode.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/representer/Represent.java

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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/nodes/Node.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/FlowMappingStartToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/reader/ReaderException.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/SafeConstructor.java
*
/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/scanner/Constant.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/nodes/NodeId.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/serializer/AnchorGenerator.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/DocumentEndToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/parser/ParserImpl.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/ScalarToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/MethodProperty.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/CollectionStartEvent.java
*
/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/util/UriEncoder.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/reader/UnicodeReader.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/BlockMappingStartToken.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/DocumentStartToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/BlockSequenceStartToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/ConstructorException.java
*
/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/SequenceStartEvent.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/representer/BaseRepresenter.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/extensions/compactnotation/PackageCompactConstructor.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
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jar/org/yaml/snakeyaml/serializer/SerializerException.java
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/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
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jar/org/yaml/snakeyaml/emitter/Emitter.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/events/MappingEndEvent.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/scanner/SimpleKey.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/composer/Composer.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactData.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/PropertyUtils.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/nodes/Tag.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/NodeEvent.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/reader/StreamReader.java
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/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/internal/Logger.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/MappingStartEvent.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/scanner/ScannerImpl.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/KeyToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/TagTuple.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/BlockEntryToken.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/MissingProperty.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/Event.java
*
/opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/DuplicateKeyException.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactConstructor.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/comments/CommentType.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/GenericProperty.java
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* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/external/com/google/gdata/util/common/base/Escaper.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/external/com/google/gdata/util/common/base/PercentEscaper.java
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/external/com/google/gdata/util/common/base/UnicodeEscaper.java
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Found in path(s):

* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-jar/META-INF/maven/org.yaml/snakeyaml/pom.xml

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/**
 * A Base64 encoder/decoder.
 *
 * <p>
 * This class is used to encode and decode data in Base64 format as described in RFC 1521.
 *
 * <p>
 * Project home page: <a href="http://www.source-code.biz/base64coder/java/">www.
 * source-code.biz/base64coder/java</a><br>
 * Author: Christian d'Heureuse, Inventec Informatik AG, Zurich, Switzerland<br>
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 */
```

Found in path(s):

```
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/external/biz/base64Coder/Base64Coder.java
```

1.125 error_prone_annotations 2.18.0

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```
-->
```

Found in path(s):

```
* /opt/cola/permits/1606613656_1679417956.422988/0/error-prone-annotations-2-18-0-1-jar/META-
INF/maven/com.google.errorprone/error_prone_annotations/pom.xml
```

1.126 opentelemetry-proto 0.11.0

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1.127 bridgeutils 1.7.1-r2

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```
<one line to give the program's name and a brief idea of what it does.>  
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```

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```
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This is free software, and you are welcome to redistribute it  
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```

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<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

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1.128 zstd-jni 1.5.5-1

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'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice
```

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Zstd-jni: JNI bindings to Zstd Library

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1.129 kafka-streams-avro-serde 6.2.1

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```
<name>Apache License 2.0</name>
<url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
```

Found in path(s):

```
* /opt/cola/permits/1638896082_1681459442.486575/0/kafka-streams-avro-serde-6-2-1-jar/META-INF/maven/io.confluent/kafka-streams-avro-serde/pom.xml
```

1.130 kafka-schema-registry-client 6.2.1

1.130.1 Available under license :

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```
<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://maven.apache.org/POM/4.0.0"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <parent>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry-parent</artifactId>
    <version>6.2.1</version>
  </parent>

  <licenses>
    <license>
      <name>Apache License 2.0</name>
      <url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
      <distribution>repo</distribution>
    </license>
  </licenses>

  <artifactId>kafka-schema-registry-client</artifactId>
  <packaging>jar</packaging>
  <name>kafka-schema-registry-client</name>
```

```
<dependencies>
  <dependency>
    <groupId>org.apache.kafka</groupId>
    <artifactId>kafka-clients</artifactId>
  </dependency>
  <dependency>
    <groupId>org.apache.avro</groupId>
    <artifactId>avro</artifactId>
  </dependency>
  <dependency>
    <groupId>org.apache.commons</groupId>
    <artifactId>commons-compress</artifactId>
  </dependency>
  <dependency>
    <groupId>com.fasterxml.jackson.core</groupId>
    <artifactId>jackson-databind</artifactId>
  </dependency>
  <dependency>
    <groupId>jakarta.ws.rs</groupId>
    <artifactId>jakarta.ws.rs-api</artifactId>
  </dependency>
  <dependency>
    <groupId>org.glassfish.jersey.core</groupId>
    <artifactId>jersey-common</artifactId>
    <version>${jersey.version}</version>
  </dependency>
  <dependency>
    <groupId>org.easymock</groupId>
    <artifactId>easymock</artifactId>
    <scope>test</scope>
  </dependency>
  <dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-module-junit4</artifactId>
    <scope>test</scope>
  </dependency>
  <dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-api-easymock</artifactId>
    <scope>test</scope>
  </dependency>
  <dependency>
    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <scope>test</scope>
  </dependency>
  <dependency>
    <groupId>io.swagger</groupId>
```

```

    <artifactId>swagger-annotations</artifactId>
  </dependency>
</dependency>
  <groupId>io.swagger</groupId>
  <artifactId>swagger-core</artifactId>
  <version>1.6.2</version>
  <exclusions>
    <exclusion>
      <groupId>javax.validation</groupId>
      <artifactId>validation-api</artifactId>
    </exclusion>
    <exclusion>
      <groupId>com.google.guava</groupId>
      <artifactId>guava</artifactId>
    </exclusion>
  </exclusions>
</dependency>
<dependency>
  <groupId>com.google.guava</groupId>
  <artifactId>guava</artifactId>
  <version>${ guava.version }</version>
</dependency>
</dependencies>
</project>

```

Found in path(s):

```

* /opt/cola/permits/1638896121_1681819594.9636126/0/kafka-schema-registry-client-6-2-1-jar/META-INF/maven/io.confluent/kafka-schema-registry-client/pom.xml

```

1.131 kafka-schema-serializer 6.2.1

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```

<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://maven.apache.org/POM/4.0.0"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <parent>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry-parent</artifactId>
    <version>6.2.1</version>
  </parent>

```

```

<licenses>
  <license>
    <name>Apache License 2.0</name>
    <url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
    <distribution>repo</distribution>
  </license>
</licenses>

<artifactId>kafka-schema-serializer</artifactId>
<packaging>jar</packaging>
<name>kafka-schema-serializer</name>

<dependencies>
  <dependency>
    <groupId>org.apache.kafka</groupId>
    <artifactId>kafka_${kafka.scala.version}</artifactId>
    <scope>provided</scope>
  </dependency>
  <dependency>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry-client</artifactId>
    <version>${io.confluent.schema-registry.version}</version>
  </dependency>
  <dependency>
    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <scope>test</scope>
  </dependency>
</dependencies>
</project>

```

Found in path(s):

```

* /opt/cola/permits/1638896081_1681459386.3648345/0/kafka-schema-serializer-6-2-1-jar/META-INF/maven/io.confluent/kafka-schema-serializer/pom.xml

```

1.132 kafka-avro-serializer 6.2.1

1.132.1 Available under license :

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```

<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://maven.apache.org/POM/4.0.0"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <parent>

```



```

    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry-parent</artifactId>
    <version>6.2.1</version>
  </parent>

  <licenses>
    <license>
      <name>Apache License 2.0</name>
      <url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
      <distribution>repo</distribution>
    </license>
  </licenses>

  <artifactId>kafka-avro-serializer</artifactId>
  <packaging>jar</packaging>
  <name>kafka-avro-serializer</name>

  <dependencies>
    <dependency>
      <groupId>org.apache.kafka</groupId>
      <artifactId>kafka_${kafka.scala.version}</artifactId>
      <scope>provided</scope>
    </dependency>
    <dependency>
      <groupId>org.apache.avro</groupId>
      <artifactId>avro</artifactId>
    </dependency>
    <dependency>
      <groupId>org.apache.commons</groupId>
      <artifactId>commons-compress</artifactId>
    </dependency>
    <dependency>
      <groupId>io.confluent</groupId>
      <artifactId>kafka-schema-serializer</artifactId>
      <version>${io.confluent.schema-registry.version}</version>
    </dependency>
    <dependency>
      <groupId>io.confluent</groupId>
      <artifactId>kafka-schema-registry-client</artifactId>
      <version>${io.confluent.schema-registry.version}</version>
    </dependency>

    <dependency>
      <groupId>com.google.guava</groupId>
      <artifactId>guava</artifactId>
      <scope>test</scope>
    </dependency>
  </dependencies>

```

```

    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <scope>test</scope>
</dependency>
<dependency>
    <groupId>org.slf4j</groupId>
    <artifactId>slf4j-log4j12</artifactId>
    <scope>test</scope>
</dependency>
<dependency>
    <groupId>io.confluent</groupId>
    <artifactId>confluent-log4j</artifactId>
    <scope>test</scope>
</dependency>
</dependencies>

<build>
  <plugins>
    <plugin>
      <groupId>org.apache.avro</groupId>
      <artifactId>avro-maven-plugin</artifactId>
      <executions>
        <execution>
          <phase>generate-sources</phase>
          <goals>
            <goal>schema</goal>
          </goals>
          <configuration>
            <testSourceDirectory>${project.basedir}/src/test/avro</testSourceDirectory>
          </configuration>
        </execution>
      </executions>
    </plugin>
  </plugins>
</build>
</project>

```

Found in path(s):

* /opt/cola/permits/1638896301_1681459399.8776171/0/kafka-avro-serializer-6-2-1-jar/META-INF/maven/io.confluent/kafka-avro-serializer/pom.xml

1.133 kafka-protobuf-provider 5.5.5

1.133.1 Available under license :

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```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <parent>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry-parent</artifactId>
    <version>5.5.5</version>
  </parent>

  <licenses>
    <license>
      <name>Confluent Community License</name>
      <url>http://www.confluent.io/confluent-community-license</url>
      <distribution>repo</distribution>
    </license>
    <license>
      <name>Apache License 2.0</name>
      <url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
      <distribution>repo</distribution>
    </license>
  </licenses>

  <artifactId>kafka-protobuf-provider</artifactId>
  <packaging>jar</packaging>
  <name>kafka-protobuf-provider</name>

  <dependencies>
    <dependency>
      <groupId>com.squareup.wire</groupId>
      <artifactId>wire-schema</artifactId>
    </dependency>
    <dependency>
      <groupId>org.jetbrains.kotlin</groupId>
      <artifactId>kotlin-stdlib</artifactId>
    </dependency>
    <dependency>
      <groupId>com.google.protobuf</groupId>
      <artifactId>protobuf-java</artifactId>
    </dependency>
    <dependency>
      <groupId>com.google.protobuf</groupId>
      <artifactId>protobuf-java-util</artifactId>
    </dependency>
```

```

<dependency>
  <groupId>io.confluent</groupId>
  <artifactId>kafka-schema-registry-client</artifactId>
</dependency>
<dependency>
  <groupId>org.mockito</groupId>
  <artifactId>mockito-core</artifactId>
  <scope>test</scope>
</dependency>
<dependency>

  <groupId>junit</groupId>
  <artifactId>junit</artifactId>
  <scope>test</scope>
</dependency>
</dependencies>

<build>
  <plugins>
    <plugin>
      <groupId>com.github.os72</groupId>
      <artifactId>protoc-jar-maven-plugin</artifactId>
    </plugin>
  </plugins>
</build>
</project>

```

Found in path(s):

```

* /opt/cola/permits/1643953215_1681954623.4885044/0/kafka-protobuf-provider-5-5-5-jar/META-
INF/maven/io.confluent/kafka-protobuf-provider/pom.xml

```

1.134 kafka-protobuf-serializer 5.5.5

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```

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <parent>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry-parent</artifactId>
    <version>5.5.5</version>
  </parent>

```

```
<licenses>
  <license>
    <name>Confluent Community License</name>
    <url>http://www.confluent.io/confluent-community-license</url>
    <distribution>repo</distribution>
  </license>
  <license>
    <name>Apache License 2.0</name>
    <url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
    <distribution>repo</distribution>
  </license>
</licenses>
```

```
<artifactId>kafka-protobuf-serializer</artifactId>
<packaging>jar</packaging>
<name>kafka-protobuf-serializer</name>
```

```
<dependencies>
  <dependency>
    <groupId>org.apache.kafka</groupId>
    <artifactId>kafka_${kafka.scala.version}</artifactId>
    <scope>provided</scope>
  </dependency>
  <dependency>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-protobuf-provider</artifactId>
  </dependency>
  <dependency>
    <groupId>com.google.protobuf</groupId>
    <artifactId>protobuf-java-util</artifactId>
  </dependency>
  <dependency>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-serializer</artifactId>
  </dependency>
  <dependency>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry-client</artifactId>
  </dependency>
  <dependency>
    <groupId>io.confluent</groupId>
    <artifactId>kafka-schema-registry</artifactId>
  </dependency>
  <scope>test</scope>
</dependency>
<dependency>
  <groupId>io.confluent</groupId>
  <artifactId>kafka-schema-registry</artifactId>
```

```

    <type>test-jar</type>
    <scope>test</scope>
</dependency>
<dependency>
  <groupId>org.apache.kafka</groupId>
  <artifactId>connect-api</artifactId>
  <scope>provided</scope>
</dependency>
<dependency>
  <groupId>org.apache.kafka</groupId>
  <artifactId>kafka-clients</artifactId>
  <classifier>test</classifier>
  <scope>test</scope>
</dependency>
<dependency>
  <groupId>org.apache.kafka</groupId>
  <artifactId>kafka_${kafka.scala.version}</artifactId>
  <classifier>test</classifier>
  <scope>test</scope>
</dependency>
<dependency>
  <groupId>org.mockito</groupId>
  <artifactId>mockito-core</artifactId>

  <scope>test</scope>
</dependency>
<dependency>
  <groupId>junit</groupId>
  <artifactId>junit</artifactId>
  <scope>test</scope>
</dependency>
</dependencies>

<build>
  <plugins>
    <plugin>
      <groupId>com.github.os72</groupId>
      <artifactId>protoc-jar-maven-plugin</artifactId>
    </plugin>
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-jar-plugin</artifactId>
      <version>2.6</version>
      <executions>
        <execution>
          <goals>
            <goal>test-jar</goal>
          </goals>
        </execution>
      </executions>
    </plugin>
  </plugins>
</build>

```

```
<phase>test-compile</phase>
</execution>
</executions>
</plugin>
</plugins>
</build>
</project>
```

Found in path(s):

```
* /opt/cola/permits/1643953259_1681957005.4570937/0/kafka-protobuf-serializer-5-5-5-jar/META-INF/maven/io.confluent/kafka-protobuf-serializer/pom.xml
```

1.135 zstd 1.4.9

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```

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```
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```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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1.136 xml-apis 1.4.01

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1.137 libucontext 1.2-r2

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1.138 okhttp 4.11.0

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1.139 musl-obstack 1.2.3-r2

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1.140 libc-utils 0.7.2-r5

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 * @(#)queue.h 8.5 (Berkeley) 8/20/94
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* /opt/cola/permits/1686513755_1685082238.691036/0/aports-master-main-libc-dev-
 zip/aports-master-main-libc-dev/main/libc-dev/sys-queue.h

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* /opt/cola/permits/1686513755_1685082238.691036/0/aports-master-main-libc-dev-zip/aports-master-main-libc-dev/main/libc-dev/sys-tree.h

1.141 animal-sniffer-annotation 1.23

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* /opt/cola/permits/1699778818_1685371632.5170038/0/animal-sniffer-annotations-1-23-jar/META-INF/maven/org.codehaus.mojo/animal-sniffer-annotations/pom.xml

1.142 j2objc-annotations 2.8

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 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/OnDealloc.java
 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/J2ObjCIncompatible.java
 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/LoopTranslation.java
 *
 /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/RetainedLocalRef.java
 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/ReflectionSupport.java
 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/Property.java
 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/WeakOuter.java
 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/RetainedWith.java
 * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/ObjectiveCName.java
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- * /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-jar/com/google/j2objc/annotations/AutoreleasePool.java

1.143 tre 0.8.0-r2

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1.144 guice-bridge 2.5.0

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jar/org/jvnet/hk2/guice/bridge/internal/HK2ToGuiceTypeListenerImpl.java

```

* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/api/HK2Inject.java
*
/opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/internal/GuiceToHk2JITResolver.java
* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/api/GuiceBridge.java
* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/internal/GuiceBridgeImpl.java
* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/internal/GuiceServiceHk2Bean.java
* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/internal/GuiceIntoHK2BridgeImpl.java
* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/internal/GuiceScopeContext.java
* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/api/HK2IntoGuiceBridge.java
*
/opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/api/GuiceIntoHK2Bridge.java
* /opt/cola/permits/1707954296_1686173302.826909/0/guice-bridge-2-5-0-sources-1-
jar/org/jvnet/hk2/guice/bridge/api/GuiceScope.java

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1.145 hystrix-codahale-metrics-publisher

1.5.18

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/opt/cola/permits/1707954198_1686173261.7841008/0/hystrix-codahale-metrics-publisher-1-5-18-sources-1-jar/com/netflix/hystrix/contrib/codahalemetricspublisher/HystrixCodaHaleMetricsPublisherCommand.java
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* /opt/cola/permits/1707954198_1686173261.7841008/0/hystrix-codahale-metrics-publisher-1-5-18-sources-1-jar/com/netflix/hystrix/contrib/codahalemetricspublisher/HystrixCodaHaleMetricsPublisherThreadPool.java
```

1.146 slf4j-impl 2.17.2

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* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-jar/io/netty/internal/tcnative/SessionTicketKey.java

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* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-
jar/io/netty/internal/tcnative/SSL.java
* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-
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 * Set the maximum number of bytes for the certificate chain during handshake.
 * See
 * <a
href="https://www.openssl.org/docs/man1.1.1/man3/SSL_CTX_set_max_cert_list.html">SSL_CTX_set_max_cert_
list</a>
 * for more details.
 * @param ctx context to use
 * @param size the maximum number of bytes
 */

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jar/io/netty/internal/tcnative/AsyncSSLPrivateKeyMethod.java
* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-
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* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-
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* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-
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* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-jar/io/netty/internal/tcnative/CertificateVerifierTask.java
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* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-jar/io/netty/internal/tcnative/SSLPrivateKeyMethod.java
* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-jar/io/netty/internal/tcnative/SSLPrivateKeyMethodDecryptTask.java
* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-jar/io/netty/internal/tcnative/SSLTask.java
* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-jar/io/netty/internal/tcnative/CertificateCallbackTask.java
* /opt/cola/permits/1735716099_1688166883.981445/0/netty-tcnative-classes-2-0-61-final-sources-jar/io/netty/internal/tcnative/SSLPrivateKeyMethodTask.java

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jar/com/google/common/util/concurrent/TrustedListenableFutureTask.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/FileBackedOutputStream.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Booleans.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Floats.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/thirdparty/publicsuffix/TrieParser.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Stopwatch.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Bytes.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Chars.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/FluentIterable.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Converter.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Joiner.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/Escaper.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Doubles.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/PercentEscaper.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/internal/Finalizer.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Shorts.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/CharMatcher.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/SequentialExecutor.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/UnicodeEscaper.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableCollection.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSortedSet.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableBiMap.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/PeekingIterator.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Range.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableMultimap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableMap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableMultiset.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/TreeBasedTable.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/thirdparty/publicsuffix/PublicSuffixPatterns.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/UnmodifiableIterator.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

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jar/com/google/common/collect/StandardTable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableEntry.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/StandardRowSortedTable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/HashBasedTable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Platform.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/EmptyImmutableListMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableMapValues.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableBiMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Tables.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableMapEntrySet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Serialization.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableListMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Table.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableMapKeySet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Collections2.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/CollectPreconditions.java
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jar/com/google/common/util/concurrent/ServiceManagerBridge.java

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*/

/**

* Returns an array containing all of the elements in the specified collection. This method

* returns the elements in the order they are returned by the collection's iterator. The returned

* array is "safe" in that no references to it are maintained by the collection. The caller is

* thus free to modify the returned

array.

*

* <p>This method assumes that the collection size doesn't change while the method is running.

*

* <p>TODO(kevinb): support concurrently modified collections?

*

* @param c the collection for which to return an array of elements

*/

Found in path(s):

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ObjectArrays.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/hash/AbstractHashFunction.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingCondition.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/ImmutableLongArray.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/ImmutableIntArray.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingLock.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/ImmutableDoubleArray.java
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jar/com/google/common/base/CommonMatcher.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/JdkPattern.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/base/PatternCompiler.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/base/CommonPattern.java

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jar/com/google/common/util/concurrent/ForwardingBlockingDeque.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/CompactLinkedHashSet.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingDeque.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractNavigableMap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AllEqualOrdering.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/FilteredKeySetMultimap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/TransformedIterator.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/DescendingImmutableSortedSet.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/RegularImmutableAsList.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/FilteredMultimap.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/FilteredKeyListMultimap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/TransformedListIterator.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingImmutableMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/FilteredEntryMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/CompactHashMap.java
*
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jar/com/google/common/collect/ImmutableEnumMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingImmutableList.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingNavigableSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/TreeTraverser.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
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*
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jar/com/google/common/collect/DescendingMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/CompactHashSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractSortedKeySortedSetMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/FilteredEntrySetMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/SortedMultisetBridge.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/EvictingQueue.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/RangeMap.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingBlockingDeque.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/CompactLinkedHashMap.java

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jar/com/google/common/graph/EdgesConnecting.java
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jar/com/google/common/graph/AbstractUndirectedNetworkConnections.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/GraphConstants.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/StandardMutableNetwork.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableMultisetGwtSerializationDependencies.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/EndpointPair.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ValueGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/MapRetrievalCache.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ForwardingGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ValueGraphBuilder.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/NetworkBuilder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/UndirectedMultiNetworkConnections.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Comparators.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
```

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jar/com/google/common/collect/LinkedHashMapMultimapGwtSerializationDependencies.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/AbstractValueGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/GraphBuilder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/MultiEdgesConnecting.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/EndpointPairIterator.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ForwardingNetwork.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ArrayListMultimapGwtSerializationDependencies.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/AbstractGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ImmutableValueGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/DirectedGraphConnections.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/StandardMutableValueGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/GraphConnections.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ElementOrder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/AbstractGraphBuilder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/MutableValueGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/AbstractDirectedNetworkConnections.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/DirectedNetworkConnections.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/StandardMutableGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/UndirectedGraphConnections.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/RangeGwtSerializationDependencies.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/AbstractNetwork.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/NetworkConnections.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/HashMapMultimapGwtSerializationDependencies.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ForwardingValueGraph.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/MapIteratorCache.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/DirectedMultiNetworkConnections.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/StandardNetwork.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/UndirectedNetworkConnections.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/StandardValueGraph.java
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```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/SortedMapDifference.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/MinMaxPriorityQueue.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingSetMultimap.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingListMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/UnmodifiableListIterator.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractSequentialIterator.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingSortedSetMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
```

jar/com/google/common/collect/ForwardingImmutableCollection.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/RowSortedTable.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/io/ReaderInputStream.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/util/concurrent/AggregateFutureState.java

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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/hash/LittleEndianByteArray.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/ConsumingQueueIterator.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/util/concurrent/CombinedFuture.java

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jar/com/google/common/util/concurrent/Platform.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/hash/FarmHashFingerprint64.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/util/concurrent/AsyncCallable.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/hash/MacHashFunction.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/IndexedImmutableSet.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/ToDoubleRounder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/BigDecimalMath.java
*
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/OverflowAvoidingLockSupport.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/Java8Compatibility.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Java8Compatibility.java

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jar/com/google/common/util/concurrent/NullnessCasts.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/NullnessCasts.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/NullnessCasts.java

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jar/com/google/common/collect/CompactHashing.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/IncidentEdgeSet.java

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jar/com/google/common/util/concurrent/Monitor.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/Strings.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/Equivalence.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/SortedLists.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/Atomics.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Ascii.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ThreadFactoryBuilder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/package-info.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/package-info.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListeningExecutorService.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/annotations/package-info.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/UncaughtExceptionHandler.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingBlockingQueue.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/annotations/Beta.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ContiguousSet.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/Flushables.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/package-info.java

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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/LittleEndianDataOutputStream.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/HashBiMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/FinalizablePhantomReference.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/AllowConcurrentEvents.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/Files.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/MultiInputStream.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Function.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListenableFuture.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/FinalizableWeakReference.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/LineBuffer.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/LineReader.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Throwables.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/AsyncEventBus.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Predicates.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/FinalizableReference.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/EventBus.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Predicate.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/package-info.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteStreams.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CountingOutputStream.java

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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/FinalizableSoftReference.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Primitives.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Defaults.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ExecutionList.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CountingInputStream.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CharStreams.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Supplier.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/AbstractIterator.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Functions.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/DeadEvent.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/TempFileCreator.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/Closeables.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/DirectExecutor.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Interners.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Charsets.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Objects.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractFuture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Suppliers.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/FinalizableReferenceQueue.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Preconditions.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/Subscribe.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/package-info.java

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/*

* This following method is a modified version of one found in

* <http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/src/test/tck/AbstractExecutorServiceTest.java?revision=1.30>

* which contained the following notice:

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*

* Other contributors include Andrew Wright, Jeffrey Hayes, Pat Fisher, Mike Judd.

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/MoreExecutors.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SortedMultiset.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SortedMultisets.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/TypeToken.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/PatternFilenameFilter.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ImmediateFuture.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/Futures.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/UncheckedTimeoutException.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/annotations/VisibleForTesting.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/CharEscaper.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractCatchingFuture.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/CharEscaperBuilder.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/AppendableWriter.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/CollectionFuture.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/FakeTimeLimiter.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/FuturesGetChecked.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/GwtFuturesCatchingSpecialization.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/SimpleTimeLimiter.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AggregateFuture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/GwtFluentFutureCatchingSpecialization.java
*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/TimeLimiter.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/FluentFuture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/CaseFormat.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractTransformFuture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/TimeoutFuture.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Splitter.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteProcessor.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/ArrayBasedEscaperMap.java
*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractIdleService.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/SignedBytes.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingFuture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingListenableFuture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/ArrayBasedCharEscaper.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SparseImmutableTable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractService.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingFluentFuture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Cut.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/annotations/J2ktIncompatible.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/DenseImmutableTable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/Escapers.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/LineProcessor.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/annotations/GwtIncompatible.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/LocalCache.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/MapMakerInternalMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteArrayDataOutput.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/xml/XmlEscapers.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/ReferenceEntry.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/CacheBuilder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/Service.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/HostSpecifier.java
*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/UnsignedBytes.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableTable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteArrayDataInput.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/html/HtmlEscapers.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Platform.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/annotations/GwtCompatible.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractExecutionThreadService.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/TypeResolver.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/Callables.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/MapMaker.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/ArrayBasedUnicodeEscaper.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/UrlEscapers.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/InternetDomainName.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/JdkFutureAdapters.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/SettableFuture.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/Platform.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/ImmutableSupplier.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ExecutionSequencer.java

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/*

* This method was rewritten in Java from an intermediate step of the Murmur hash function in

```
* http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp, which contained the
* following header:
*
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* hereby
disclaims copyright to this source code.
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Hashing.java
```

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```

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```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/TypeCapture.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/hash/LongAddable.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/io/BaseEncoding.java
```

```
*
```

```
 /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/MutableTypeToInstanceMap.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/math/PairedStats.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/ClassPath.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableRangeMap.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/TypeToInstanceMap.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/hash/ChecksumHashFunction.java
```

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/LongAddables.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/PairedStatsAccumulator.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteSource.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/Invokable.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/ImmutableTypeToInstanceMap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/FileWriteMode.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/AbstractByteHasher.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/html/package-info.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ServiceManager.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CharSink.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/StatsAccumulator.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/package-info.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CharSource.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/AbstractInvocationHandler.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/LinearTransformation.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/LongAddable.java

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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListenableScheduledFuture.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/CartesianList.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/SipHashFunction.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/FilteredKeyMultimap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteSink.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/io/Closer.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/package-info.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/math/Stats.java
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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/StandardSystemProperty.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/SmoothRateLimiter.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/xml/package-info.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableRangeSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/Parameter.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/RateLimiter.java
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jar/com/google/common/cache/Striped64.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/cache/LongAdder.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/AtomicDoubleArray.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/package-info.java
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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Enums.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Optional.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Absent.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractListeningExecutorService.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/RemovalListener.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/UnsignedLong.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Murmur3_32HashFunction.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/UncheckedExecutionException.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/HashCode.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/DoubleUtils.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/DoubleMath.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/BoundType.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/Uninterruptibles.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/LoadingCache.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/UnsignedLongs.java
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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Funnel.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/AbstractHasher.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/RemovalNotification.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/UnsignedInteger.java
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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListeningScheduledExecutorService.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Murmur3_128HashFunction.java
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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/IntMath.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Ticker.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AtomicLongMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/DescendingImmutableSortedMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Hasher.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/Cache.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularContiguousSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/AbstractLoadingCache.java

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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingExecutorService.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Funnels.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/AbstractStreamingHasher.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/BigIntegerMath.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/CacheLoader.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/MessageDigestHashFunction.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/WrappingExecutorService.java

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/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/BloomFilterStrategies.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AbstractScheduledService.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingListeningExecutorService.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/HostAndPort.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/AbstractNonStreamingHashFunction.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/EmptyContiguousSet.java

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jar/com/google/common/util/concurrent/ClosingFuture.java

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jar/com/google/common/collect/ObjectCountHashMap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/graph/AbstractBaseGraph.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/graph/BaseGraph.java

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jar/com/google/common/base/VerifyException.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/eventbus/SubscriberExceptionContext.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/hash/HashingInputStream.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/FilteredMultimapValues.java

*

```
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/eventbus/SubscriberExceptionHandler.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/Verify.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractTable.java
```

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/Reflection.java
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```
*/
```

```
/**
```

```
* Not supported. <b>You are attempting to create a map that may contain a non-{@code Comparable}
* key.</b> Proper calls will resolve to the version in { @code ImmutableSortedMap }, not this dummy
* version.
```

```
*
```

```
* @throws UnsupportedOperationException always
* @deprecated <b>Pass a key of type { @code Comparable}
to use { @link
*   ImmutableSortedMap#of(Comparable, Object)}.</b>
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableSortedMapFauxverideShim.java
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```
*/
```

```
/**
```

```
* Holder for web specializations of methods of { @code Doubles}. Intended to be empty for regular
* version.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/DoublesMethodsForWeb.java
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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Maps.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SetMultimap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/LinkedListMultimap.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingIterator.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Multimap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableSet.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Multiset.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/NullsFirstOrdering.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingMapEntry.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Iterators.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/LinkedHashMultiset.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/AbstractIterator.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ByFunctionOrdering.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/HashMultimap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingSortedMap.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableList.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/package-info.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/HashMultiset.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/LexicographicalOrdering.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingObject.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/ReverseNaturalOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/CompoundOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/UsingToStringOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/NullsLastOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Multisets.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/MapDifference.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ListMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/TreeMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingSortedSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ExplicitOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/TreeMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Interner.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ReverseOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Lists.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ArrayListMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractSetMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ComparatorOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ConcurrentHashMultiset.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Sets.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingQueue.java

```

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingListIterator.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractListMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractMapBasedMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractMapBasedMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingCollection.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Multimaps.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/NaturalOrdering.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractMapEntry.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/EnumBiMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/BiMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/LinkedHashMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/SortedSetMultimap.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Synchronized.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingConcurrentMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ClassToInstanceMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractSortedSetMultimap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Ordering.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractBiMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingList.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

```


jar/com/google/common/collect/SingletonImmutableSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Iterables.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/EnumHashBiMap.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/MutableClassToInstanceMap.java
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```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/MutableGraph.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/MutableNetwork.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/TopKSelector.java  
*  
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/Graph.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/Network.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/SuccessorsFunction.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/Graphs.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/PredecessorsFunction.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/ImmutableGraph.java  
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/ImmutableNetwork.java
```

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Fingerprint2011.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/MultimapBuilder.java

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*/

/**

* Holder for web specializations of methods of { @code Shorts }. Intended to be empty for regular

* version.

*/

Found in path(s):

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/ShortsMethodsForWeb.java

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* the License.

*/

/**

* Holder for web specializations of methods of { @code Floats }. Intended to be empty for regular
* version.

*/

Found in path(s):

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/FloatsMethodsForWeb.java

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SortedIterables.java

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/SortedIterable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/AbstractRangeSet.java
```

```
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ForwardingSortedMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/RegularImmutableSortedMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/RangeSet.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/GeneralRange.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableSortedMultiset.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Count.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableSortedMultisetFauxverideShim.java
```

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```
*/
```

```
/*
```

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```

```
/*
```

```
* As of 2010/06/11, this method is identical to the (package private) hash method in OpenJDK 7's
* java.util.HashMap
```

```
class.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/Striped.java
```

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*/

/**

* Holder for web specializations of methods of { @code Ints }. Intended to be empty for regular

* version.

*/

Found in path(s):

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/IntsMethodsForWeb.java

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*/

/*

* This method was rewritten in Java from an intermediate step of the Murmur hash function in

* <http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp>, which contained the

* following header:

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*/

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* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/ElementTypesAreNonnullByDefault.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/ElementTypesAreNonnullByDefault.java

*

/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/ElementTypesAreNonnullByDefault.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/ParametricNullness.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/ElementTypesAreNonnullByDefault.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/ParametricNullness.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ParametricNullness.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/xml/ElementTypesAreNonnullByDefault.java

* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/ParametricNullness.java

*

```
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/math/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/cache/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/html/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/html/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/ParametricNullness.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/hash/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/eventbus/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/io/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/escape/ParametricNullness.java
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jar/com/google/common/xml/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/hash/ParametricNullness.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/escape/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/cache/ParametricNullness.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/io/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/reflect/ElementTypesAreNonnullByDefault.java
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- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/EmptyImmutableSetMultimap.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSortedMap.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSortedSetFauxverideShim.java
- *
- /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableTable.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableClassToInstanceMap.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSetMultimap.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableEnumSet.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingTable.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableSortedSet.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ArrayTable.java
- *
- /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SingletonImmutableTable.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableAsList.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/AbstractIndexedListIterator.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableList.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ComparisonChain.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/DiscreteDomain.java
- * /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/ComputationException.java

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 */
/**
 * Outer class that exists solely to let us write {@code Partially.GwtIncompatible} instead of plain
 * {@code GwtIncompatible}. This is more accurate for {@link Futures#catching}, which is available
 * under GWT but with a slightly different signature.
 *
 * <p>We can't use {@code PartiallyGwtIncompatible} because then the GWT compiler
 * wouldn't recognize
 * it as a {@code GwtIncompatible} annotation. And for {@code Futures.catching}, we need the GWT
 * compiler to autostrip the normal server method in order to expose the special, inherited GWT
 * version.
 */
```

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```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/Partially.java
```

1.161 kotlin 1.8.21

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1.162 opentelemetry-semconv 1.29.0-alpha

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* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/internal/SegmentedByteString.kt

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* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/internal/FileSystem.kt
* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/FileHandle.kt
* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/unixMain/okio/UnixFileHandle.kt
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* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/nativeMain/okio/FileSystem.kt
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*
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* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Sink.kt
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* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Segment.kt
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* /opt/cola/permits/1825538429_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/ForwardingSource.kt
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1.170 libcxxabi 1.1.10.5

1.170.1 Available under license :

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Manifest-Version: 1.0

Bnd-LastModified: 1695799258578

Bundle-ActivationPolicy: lazy

Bundle-Activator: org.xerial.snappy.SnappyBundleActivator

Bundle-Description: snappy-java: A fast compression/decompression library

Bundle-DocURL: <http://www.xerial.org/>

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-ManifestVersion: 2

Bundle-Name: snappy-java: A fast compression/decompression library

Bundle-NativeCode: org/xerial/snappy/native/Windows/x86_64/snappyjava.dll;osname=win32;processor=x86-64,org/xerial/snappy/native/Windows/x86_64/snappyjava.dll;osname=win32;processor=x64,org/xerial/snappy/native/Windows/x86_64/snappyjava.dll;osname=win32;processor=amd64,org/xerial/snappy/native/Windows/x86/snappyjava.dll;osname=win32;processor=x86,org/xerial/snappy/native/Mac/x86/libsnappyjava.jnilib;osname=macosx;processor=x86,org/xerial/snappy/native/Mac/x86_64/libsnappyjava.dylib;osname=macosx;processor=x86-64,org/xerial/snappy/native/Mac/aarch64/libsnappyjava.dylib;osname=macosx;processor=aarch64,org/xerial/snappy/native/Linux/x86_64/libsnappyjava.so;osname=linux;processor=x86-64,org/xerial/snappy/native/Linux/x86_64/libsnappyjava.so;osname=linux;processor=x64,org/xerial/snappy/native/Linux/x86_64/libsnappyjava.so;osname=linux;processor=amd64,org/xerial/snappy/native/Linux/x86/libsnappyjava.so;osname=linux;processor=x86,org/xerial/snappy/native/Linux/aarch64/libsnappyjava.so;osname=linux;processor=aarch64,org/xerial/snappy/native/Linux/riscv64/libsnappyjava.so;osname=linux;processor=riscv64,org/xerial/snappy/native/Linux/arm/libsnappyjava.so;osname=linux;processor=arm,org/xerial/snappy/native/Linux/armv7/libsnappyjava.so;osname=linux;processor=arm_le,org/xerial/snappy/native/Linux/ppc64/libsnappyjava.so;osname=linux;processor=ppc64le,org/xerial/snappy/native/Linux/s390x/libsnappyjava.so;osname=linux;processor=s390x,org/xerial/snappy/native/AIX/ppc/libsnappyjava.a;osname=aix;processor=ppc,org/xerial/snappy/native/AIX/ppc64/libsnappyjava.a;osname=aix;processor=ppc64,org/xerial/snappy/native/SunOS/x86/libsnappyjava.so;osname=sunos;processor=x86,org/xerial/snappy/native/SunOS/x86_64/libsnappyjava.so;osname=sunos;processor=x86-64,org/xerial/snappy/native/SunOS/sparc/libsnappyjava.so;osname=sunos;processor=sparc

Bundle-SymbolicName: org.xerial.snappy.snappy-java

Bundle-Vendor: xerial.org

Bundle-Version: 1.1.10.5

Created-By: 11.0.20 (Azul Systems, Inc.)
Export-Package: org.xerial.snappy;uses:="org.osgi.framework,org.xerial.snappy.buffer,org.xerial.snappy.pool";version="1.1.10",org.xerial.snappy.buffer;version="1.1.10",org.xerial.snappy.pool;version="1.1.10"
Implementation-Title: snappy-java
Implementation-URL: <https://github.com/xerial/snappy-java>
Implementation-Vendor: xerial.org
Implementation-Vendor-Id: org.xerial.snappy
Implementation-Version: 1.1.10.5
Import-Package: org.osgi.framework;version="[1.5,2)"
Private-Package:
org.xerial.snappy.native.AIX.ppc,org.xerial.snappy.native.AIX.ppc64,org.xerial.snappy.native.FreeBSD.x86_64,org.xerial.snappy.native.Linux.aarch64,org.xerial.snappy.native.Linux.android-aarch64,org.xerial.snappy.native.Linux.android-arm,org.xerial.snappy.native.Linux.arm,org.xerial.snappy.native.Linux.armv6,org.xerial.snappy.native.Linux.armv7,org.xerial.snappy.native.Linux.ppc,org.xerial.snappy.native.Linux.ppc64,org.xerial.snappy.native.Linux.ppc64le,org.xerial.snappy.native.Linux.riscv64,org.xerial.snappy.native.Linux.s390x,org.xerial.snappy.native.Linux.x86,org.xerial.snappy.native.Linux.x86_64,org.xerial.snappy.native.Mac.aarch64,org.xerial.snappy.native.Mac.x86_64,org.xerial.snappy.native.Mac.x86_64,org.xerial.snappy.native,org.xerial.snappy.native.SunOS.sparc,org.xerial.snappy.native.SunOS.x86,org.xerial.snappy.native.SunOS.x86_64,org.xerial.snappy.native.Windows.aarch64,org.xerial.snappy.native.Windows.x86,org.xerial.snappy.native.Windows.x86_64
Require-Capability:
osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.7))"
Specification-Title: snappy-java
Specification-Vendor: xerial.org
Specification-Version: 1.1.10.5
Tool: Bnd-5.1.2.202007211702

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* /opt/cola/permits/1825539415_1697666805.4214594/0/snappy-java-1-1-10-5-jar/META-INF/MANIFEST.MF

1.171 libgcc 13.2.1_git20231014-r0

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Any

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```

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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```

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```
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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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Any

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1.173 cpp 13.2.1_git20231014-r0

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bzip2/libbzip2 version 1.0.4 of 20 December 2006

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1.177 jackson-databind 2.16.0

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1.178 jackson 2.16.0

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1.179 jackson-annotations 2.16.0

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1.180 commons-lang3 3.14.0

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1.181 jackson-dataformat-yaml 2.16.0

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1.182 alpine-baselayout 3.4.3-r2

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_pkgreal=BSD-Resource
pkgver=1.2911
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pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
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depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/${_pkgreal}-${pkgver}"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
```



```

}

package() {
    make DESTDIR="$pkgdir" install
    find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
    BSD-Resource-1.2911.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.2.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

check() {
    python3 -m venv --clear --without-pip --system-site-packages .testenv
    .testenv/bin/python3 -m installer .dist/*.whl
    .testenv/bin/python3 -m pytest
}

package() {
    python3 -m installer -d "$pkgdir" \
        .dist/*.whl
}

sha512sums="
7be7ebab1d980063ab846a228c5247570d0e23ed52f4362ef7d88eb7a59274e6f74653b4e9cff8225597693087d750c5

```

bf7fcf604440d8d3d2976ebcd7442c24

license-expression-30.2.0.tar.gz

"

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

Maintainer: Jakub Panek <me@panekj.dev>

pkgname=cargo-license

pkgver=0.5.1

pkgrel=4

pkgdesc="Cargo subcommand to see license of dependencies"

url="https://github.com/onur/cargo-license"

arch="all !s390x !riscv64" # rust

license="MIT"

makedepends="cargo cargo-auditable"

source="\$pkgname-\$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/\$pkgver/download"

```
prepare() {
```

```
    default_prepare
```

```
    cargo fetch --target="$CTARGET" --locked
```

```

}

build() {
    cargo auditable build --release --frozen
}

check() {
    cargo test --frozen
}

package() {
    install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
4d8d430df91c6aac53d2305d3125eae492324e85c4db29d33d452b3848f33a55088e71247c6c72c6a62f4e924a374a
115bf14b4f398e7950b9eb52415f2244 cargo-license-0.5.1.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
    # some GNU autoconf options are ignored, but it works
    ./configure \
        --build=$CBUILD \
        --host=$CHOST \
        --prefix=/usr \
        --sysconfdir=/etc \
        --mandir=/usr/share/man \
        --localstatedir=/var/lib # it really shouldn't be in /var
    make
}

package() {
    make DESTDIR="$pkgdir" install
    install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

```

```

}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdft rdfturtle rdfxml template text"

for type in $_types; do
  subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
  mkdir -p "$pkgdir"
}

_subpkg() {
  local type=${subpkgname/$pkgname-/}
  pkgdesc="$pkgdesc ($type)"
  install_if="$pkgname"
  mkdir -p "$subpkgdir"/usr/share/spdx
  cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
  pkgdesc="$pkgdesc (licence list)"
  mkdir -p "$subpkgdir"/usr/share/spdx
  local i; for i in "$builddir"/text/*.txt; do
    local license=${i##*/}
    echo
    ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
  done
}

```

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"

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http://www.geocities.com/SiliconValley/Campus/8645/index.html
http://members.nbc.com/silicon39/
http://www.mp3.com/silicon39
https://analoguesque.x10host.com/

```

# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=1
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright" # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
    python3 setup.py build
}

package() {
    python3 setup.py install --skip-build --root="$pkgdir"
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d flake8-copyright-0.2.4.tar.gz
"

# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check" # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-$pkgver.tar.bz2"

builddir="$srcdir"/libart-lgpl-$pkgver

prepare() {
    update_config_sub

```

```
default_prepare
```

```
}
```

```
build() {
```

```
./configure \
```

```
--build=$CBUILD \
```

```
--host=$CHOST \
```

```
--prefix=/usr
```

```
make
```

```
}
```

```
package() {
```

```
make DESTDIR="$pkgdir" install
```

```
}
```

```
sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7  
6654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"
```

```
mini_sendmail - accept email on behalf of real sendmail
```

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1.183 musl-utils 1.2.4_git20230717-r4

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1.184 logback-core 1.4.14

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```

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```
*/
```

Found in path(s):

```
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/DefaultTimeBasedFileNamingAndTriggeringPolicy.java
```

```
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/SizeAndTimeBasedFNATP.java
```

```
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/TimeBasedArchiveRemover.java
```

```
*
```

```
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/GenericXMLConfigurator.java
```

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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/DefaultProcessor.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/sanity/AppenderWithinAppenderSanityChecker.java
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/ModelClassToModelHandlerLinkerBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/SerializeModelModelHandler.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/SerializeModelAction.java
*

/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/DummyEncoder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/XTeeOutputStream.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/encoder/JsonEscapeUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/SerializeModelModel.java

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Found in path(s):

* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/sift/SiftModelHandler.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/sift/NOPSiftModelHandler.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/sift/SiftingAppenderBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/ImplicitModelHandler.java
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/EnvUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/status/StatusUtil.java
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Found in path(s):

* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/AppenderModelHandler.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/AppenderRefModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/NamedComponentModel.java
No license file was found, but licenses were detected in source scan.

/*

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* under the terms of the GNU Lesser General Public License version 2.1
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Found in path(s):

* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/ConfigurationEventListener.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/NPEAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/FileTestUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/DelayingListAppender.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/RandomUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/MockInitialContextFactory.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-

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jar/ch/qos/logback/core/testUtil/FileToBufferUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/EnvUtilForTests.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/TeeOutputStream.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/ConfigurationEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/TrivialStatusListener.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/MockInitialContext.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/StringListAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/CoreTestConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/SimpleInvocationGate.java
No license file was found, but licenses were detected in source scan.
```

```
/**
```

```
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*/
```

```
Found in path(s):
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```
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/SaxEventInterpreter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/MonoTypedConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ImplicitModelDataForComplexProperty.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/MagentaCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/recovery/ResilientSyslogOutputStream.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ConversionRuleAction.java
```



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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/LifeCycleManager.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/DefaultInvocationGate.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/SyslogConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/ContextBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/LayoutBase.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/TokenConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/SaxEventRecorder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/RenameUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/LogbackLock.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BoldBlueCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/YellowCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/FixedWindowRollingPolicy.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/HostClassAndPropertyDouble.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/Client.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/PropertyContainer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BlackCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/StatusListenerAsList.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/read/CyclicBufferAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/StatusPrinter.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/html/CssBuilder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/property/ResourceExistsPropertyDefiner.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/LoginAuthenticator.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-

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jar/ch/qos/logback/core/boolex/JaninoEventEvaluatorBase.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/read/ListAppender.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/pattern/PatternLayoutEncoderBase.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/pattern/color/BoldRedCompositeConverter.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/pattern/ReplacingCompositeConverter.java
 *
 /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/joran/action/ParamAction.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/joran/util/StringToObjectConverter.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/util/StatusListenerConfigHelper.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/spi/AbstractComponentTracker.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/spi/PreSerializationTransformer.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/spi/FilterAttachable.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/joran/spi/JoranException.java
 *
 /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/Layout.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/pattern/color/ForegroundCompositeConverterBase.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/net/ObjectWriter.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/sift/DefaultDiscriminator.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/OutputStreamAppender.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/pattern/color/BoldWhiteCompositeConverter.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/joran/action/ImplicitActionDataForBasicProperty.java
 *
 /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/pattern/util/AlmostAsIsEscapeUtil.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/recovery/RecoveryCoordinator.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/pattern/PatternLayoutBase.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/recovery/ResilientOutputStreamBase.java

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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/sift/SiftProcessor.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/NewRuleAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/SiftAction.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/filter/Filter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/ContextUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/AppenderBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/LocationUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/util/ConfigurationWatchListUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/AbstractSSLSocketAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/SocketConnector.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/DeferredProcessingAware.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ContextPropertyAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/DefaultNestedComponentRegistry.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/DynamicConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/conditional/PropertyEvalScriptBuilder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/util/AsIsEscapeUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/WarnStatus.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/NOPAction.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/EventEvaluatorAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/parser/OptionTokenizer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/StatusListenerAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/encoder/EncoderBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-

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jar/ch/qos/logback/core/joran/action/AppenderRefAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/AppenderAttachableImpl.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/parser/Node.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/property/FileExistsPropertyDefiner.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/FormatInfo.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/SizeBasedTriggeringPolicy.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/FileUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/InfoStatus.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/KeyStoreFactoryBean.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/TriggeringPolicy.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/DateTokenConverter.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/stax/BodyEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/ElementPath.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/PropertySetterException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/RemoteReceiverStreamClient.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/IncompatibleClassException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSLConfigurable.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/ContextAware.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/Converter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/parser/Compiler.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/GreenCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/filter/AbstractMatcherFilter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/encoder/NonClosableInputStream.java

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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSLContextFactoryBean.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/sift/AppenderFactory.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/sift/AppenderFactoryUsingSiftModel.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/filter/EvaluatorFilter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/PreconditionValidator.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/Status.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/RemoteReceiverClient.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/AbstractSocketAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/subst/NodeToStringTransformer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/CharSequenceToRegexMapper.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/AppenderAttachable.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/StatusBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/hook/DefaultShutdownHook.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/conditional/Condition.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/hook/ShutdownHookBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/hook/ShutdownHook.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/RedCompositeConverter.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/NoAutoStartUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/AggregationType.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/sift/AbstractDiscriminator.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/Compressor.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/ConfigurationWatchList.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-

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jar/ch/qos/logback/core/subst/Token.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/SizeAndTimeBasedRollingPolicy.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/IdentityCompositeConverter.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/ActionUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/PostCompileProcessor.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/sift/AppenderTracker.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/parser/Parser.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/RollingFileAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/ComponentTracker.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/ObjectWriterFactory.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/parser/SimpleKeywordNode.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/encoder/Encoder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/event/StartEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/SpacePadder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/event/stax/StaxEventRecorder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/boolex/EventEvaluatorBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/AbstractServerSocketAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/ssl/SSLComponent.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/helpers/NOPAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/SyslogAppenderBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/util/RestrictedEscapeUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/helpers/CyclicBuffer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/SizeAndTimeBasedArchiveRemover.java

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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/Action.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/GrayCompositeConverter.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/CyclicBufferTracker.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/FileStoreUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/NopStatusListener.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/OnPrintStreamStatusListenerBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ShutdownHookAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/node/ComponentNode.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/Appender.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/CyanCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/OnConsoleStatusListener.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/CharSequenceState.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/ANSIConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/DelayStrategy.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/Duration.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/TrustManagerFactoryFactoryBean.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/UnsynchronizedAppenderBase.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/ContentTypeUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/recovery/ResilientFileOutputStream.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/ServerRunner.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ImplicitModelData.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/PropertyAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-

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jar/ch/qos/logback/core/spi/FilterAttachableImpl.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/PropertyDefiner.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BoldYellowCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/ArchiveRemover.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/SyslogOutputStream.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/RuleStore.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/KeyManagerFactoryFactoryBean.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/ConfigurableSSLSocketFactory.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BlueCompositeConverter.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/PeriodicityType.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/sift/Discriminator.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSLNestedComponentRegistryRules.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/stax/StartEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/SaxEventInterpretationContext.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSLConfigurableServerSocket.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/util/RegularEscapeUtil.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/FileAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/CoreConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/TriggeringPolicyBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/stax/StaxEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/parser/FormattingNode.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/FileNamePattern.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/ConsoleTarget.java

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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ImportAction.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/XMLUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/ConverterUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/StatusListener.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/QueueFactory.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/CompressionMode.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/FileFilterUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/RemoteReceiverServerListener.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/JNDIUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/SequenceNumberGeneratorAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/CloseUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/subst/Parser.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/StatusManager.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/layout/EchoLayout.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/LifeCycle.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/TimeUtil.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/ConsoleAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSLParametersConfiguration.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/BodyEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/util/PropertySetter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/RollingPolicyBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/ContextAwareImpl.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-

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jar/ch/qos/logback/core/status/OnErrorConsoleStatusListener.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/WhiteCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BoldGreenCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/Loader.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/html/IThrowableRenderer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/ServerSocketListener.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/html/HTMLLayoutBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/subst/Tokenizer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/ClientVisitor.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/encoder/LayoutWrappingEncoder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/DefinePropertyAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/NoAutoStart.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/CompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/parser/TokenStream.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/AsyncAppenderBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/ActionException.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/parser/Token.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/OptionHelper.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/TimestampAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/SSLServerSocketAppenderBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/FilterReply.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BoldMagentaCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/parser/CompositeNode.java

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*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/stax/EndEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/boolex/EventEvaluator.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/boolex/EvaluationException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/EndEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/DefaultClass.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/util/IEscapeUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/SMTPAppenderBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/subst/Node.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/Context.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/CachingDateFormatter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/LiteralConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/SimpleRuleStore.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/PropertyDefinerBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/ExecutorServiceUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/FileSize.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/RollingCalendar.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/ConcurrentServerRunner.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSL.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/IntegerTokenConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSLConfiguration.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/BasicStatusManager.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/ScanException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-

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jar/ch/qos/logback/core/util/DatePatternToRegexUtil.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/FixedDelay.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/StringCollectionUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/SystemInfo.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/RemoteReceiverServerRunner.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/RollingPolicy.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/IncludeAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/AutoFlushingObjectWriter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/boolex/Matcher.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/DynamicClassLoadingException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/FormattingConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/helpers/ThrowableToStringArray.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/encoder/EchoEncoder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/ElementSelector.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/ContextAwareBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/TimeBasedFileNamingAndTriggeringPolicyBase.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/encoder/ByteArrayUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/ConfigurableSSLServerSocketFactory.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SSLConfigurableSocket.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/EventPlayer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/RolloverFailure.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BoldCyanCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/ServerListener.java

```

```

*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SecureRandomFactoryBean.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/ViewStatusMessagesServletBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/HttpStatus.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/LogbackException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/SaxEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/JoranConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/helpers/Transform.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/html/NOThrowableRenderer.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/DefaultSocketConnector.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/conditional/PropertyWrapperForScripts.java
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```

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```

Found in path(s):

```

* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/JoranConfiguratorBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/util/ParentTag_Tag_Class_Tuple.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/model/processor/PhaseIndicator.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/model/InsertFromJNDIModel.java
*

```

/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/DefineModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ImplicitModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/ShutdownHookModelHandler.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/TimestampModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/conditional/ThenAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ShutdownHookModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/ImplicitModelAction.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/conditional/ElseAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ImportModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ComponentModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/sanity/SanityChecker.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/ErrorCodes.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ModelConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/NamedModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/ProcessingPhase.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/BaseModelAction.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/Model.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/RefContainerDependencyAnalyser.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/conditional/ThenModelHandler.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/conditional/IfModel.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/DependencyDefinition.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/AppenderRefDependencyAnalyser.java
*

/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/ModelInterpretationContext.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/TimestampModelHandler.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/joran/conditional/IfAction.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/DefineModelHandler.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/EventEvaluatorModel.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/SequenceNumberGeneratorModel.java
 *
 /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/conditional/ElseModel.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/ModelHandlerFactoryMethod.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/net/HardenedObjectInputStream.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/conditional/ElseModelHandler.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/recovery/RecoveryListener.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/StatusListenerModel.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/conditional/IfModelHandler.java
 *
 /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/ModelHandlerBase.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/rolling/TimeBasedFileNamingAndTriggeringPolicy.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/rolling/TimeBasedRollingPolicy.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/SequenceNumberGeneratorModelHandler.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/AppenderModel.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/processor/NOPModelHandler.java
 * /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
 jar/ch/qos/logback/core/model/SiftModel.java

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1.186 snappy-java 1.1.10.5

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Manifest-Version: 1.0

Bnd-LastModified: 1695799258578

Bundle-ActivationPolicy: lazy

Bundle-Activator: org.xerial.snappy.SnappyBundleActivator

Bundle-Description: snappy-java: A fast compression/decompression library

Bundle-DocURL: <http://www.xerial.org/>

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-ManifestVersion: 2

Bundle-Name: snappy-java: A fast compression/decompression library

Bundle-NativeCode: org/xerial/snappy/native/Windows/x86_64/snappyjava.

dll;osname=win32;processor=x86-64,org/xerial/snappy/native/Windows/x8

6_64/snappyjava.dll;osname=win32;processor=x64,org/xerial/snappy/nati

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libsnappyjava.so;osname=sunos;processor=sparc
Bundle-SymbolicName: org.xerial.snappy.snappy-java
Bundle-Vendor: xerial.org
Bundle-Version: 1.1.10.5
Created-By: 11.0.20 (Azul Systems, Inc.)
Export-Package: org.xerial.snappy;uses:="org.osgi.framework,org.xerial
.snappy.buffer,org.xerial.snappy.pool";version="1.1.10",org.xerial.sn
appy.buffer;version="1.1.10",org.xerial.snappy.pool;version="1.1.10"
Implementation-Title: snappy-java
Implementation-URL: <https://github.com/xerial/snappy-java>
Implementation-Vendor: xerial.org
Implementation-Vendor-Id: org.xerial.snappy
Implementation-Version: 1.1.10.5
Import-Package: org.osgi.framework;version="[1.5,2)"
Private-Package:
org.xerial.snappy.native.AIX.ppc,org.xerial.snappy.na
tive.AIX.ppc64,org.xerial.snappy.native.FreeBSD.x86_64,org.xerial.sna
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e.Linux.arm,org.xerial.snappy.native.Linux.armv6,org.xerial.snappy.na
tive.Linux.armv7,org.xerial.snappy.native.Linux.ppc,org.xerial.snappy
.native.Linux.ppc64,org.xerial.snappy.native.Linux.ppc64le,org.xerial
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.xerial.snappy.native.Linux.x86,org.xerial.snappy.native.Linux.x86_64
,org.xerial.snappy.native.Mac.aarch64,org.xerial.snappy.native.Mac.x8
6,org.xerial.snappy.native.Mac.x86_64,org.xerial.snappy.native,org.xe
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arch64,org.xerial.snappy.native.Windows.x86,org.xerial.snappy.native.

Windows.x86_64

Require-Capability:

osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.7))"

Specification-Title: snappy-java

Specification-Vendor: xerial.org

Specification-Version: 1.1.10.5

Tool: Bnd-5.1.2.202007211702

Found in path(s):

* /opt/cola/permits/1866412376_1702418090.4402528/0/snappy-java-1-1-10-5-1-jar/META-INF/MANIFEST.MF

1.187 jersey-common 2.41

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1.188 protobuf-java-util 3.25.1

1.188.1 Available under license :

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Manifest-Version: 1.0

Bnd-LastModified: 1700075044472

Bundle-Description: Utilities for Protocol Buffers

Bundle-DocURL: <https://developers.google.com/protocol-buffers/>

Bundle-License: <https://opensource.org/licenses/BSD-3-Clause>

Bundle-ManifestVersion: 2

Bundle-Name: Protocol Buffers [Util]

Bundle-SymbolicName: com.google.protobuf.util
Bundle-Version: 3.25.1
Export-Package: com.google.protobuf.util;version="3.25.1";uses:="com.google.protobuf,java.xml.annotation"
Import-Package: com.google.common.base;version="[32.0,33)",com.google.common.io;version="[32.0,33)",com.google.common.math;version="[32.0,33)",com.google.common.primitives;version="[32.0,33)",com.google.gson;version="[2.8,3)",com.google.gson.stream;version="[2.8,3)",com.google.protobuf,java.xml.annotation;version="[3.0,4)",sun.misc;resolution:=optional
Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.4.0.202211291949
Created-By:
mergejars

Found in path(s):

* /opt/cola/permits/1870521227_1702990644.4292412/0/protobuf-java-util-3-25-1-jar/META-INF/MANIFEST.MF

1.189 protobuf-java 3.25.1

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```

Found in path(s):

```
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/duration.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/field_mask.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/type.proto  
*  
/opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/any.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/source_context.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/descriptor.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/empty.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/wrappers.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/api.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/timestamp.proto  
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/struct.proto
```

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Manifest-Version: 1.0
Created-By: mergejars
Bnd-LastModified: 1700075063475
Bundle-Description: Core Protocol Buffers library. Protocol Buffers are a way of encoding structured data in an efficient yet extensible format
.
Bundle-DocURL: <https://developers.google.com/protocol-buffers/>
Bundle-License: <https://opensource.org/licenses/BSD-3-Clause>
Bundle-ManifestVersion: 2
Bundle-Name: Protocol Buffers [Core]
Bundle-SymbolicName: com.google.protobuf
Bundle-Version: 3.25.1
Export-Package: com.google.protobuf;version="3.25.1",com.google.protobuf.compiler;version="3.25.1";uses:="com.google.protobuf"
Import-Package: com.google.protobuf;version="[3.25,4)",sun.misc;resolution:=optional
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.4.0.202211291949
Target-Label: //java/core:lite_runtime_only

Found in path(s):

* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/META-INF/MANIFEST.MF

1.190 gcompat 1.1.0-r4

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1.191 jre 1.8.0_402-b06

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```

```
signature of Ty Coon, 1 April 1989
```

```
Ty Coon, President of Vice
```

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1.192 zt 1.16

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```

Found in path(s):

```
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/timestamps/TimestampStrategy.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-jar/org/zeroturnaround/zip/Zips.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/timestamps/Java8TimestampStrategy.java
*
/opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/timestamps/PreJava8TimestampStrategy.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZipEntryUtil.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/IdentityNameMapper.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/FileSource.java
```

```
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/NameMapper.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZipEntrySource.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ByteSource.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZipInfoCallback.java
*
/opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-jar/org/zeroturnaround/zip/ZipUtil.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZTFileUtil.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/timestamps/TimestampStrategyFactory.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZipEntryCallback.java
```

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```
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/commons/StringBuilderWriter.java
*
/opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/commons/FilenameUtils.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/commons/FileUtilsV2_2.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/commons/FileExistsException.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/commons/IUtils.java
```


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```

Found in path(s):

```
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/extra/ZipConstants.java
*
 /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/extra/AsiExtraField.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/extra/ZipShort.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/extra/ZipExtraField.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/extra/ExtraFieldUtils.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/extra/UnrecognizedExtraField.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/extra/ZipLong.java
```

1.193 openjdk 1.8.0u402

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xwd v1.0.7

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Mesa 3-D Graphics Library v21.0.3

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Mesa 3-D
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```
include/GL/glex.h  
include/GL/glxext.h  
include/GL/wglxext.h :
```

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Bert Belder: wepoll v 1.5.8

wepoll License

wepoll - epoll for Windows

<https://github.com/piscisaureus/wepoll>

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include/GL/gl.h :

Mesa 3-D
graphics library

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include/GL/glxext.h  
include/GL/wglxext.h :
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1.201 busybox 1.36.1

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=====

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Julian Seward, Cambridge, UK.

jseward@bzip.org

bzip2/libbzip2 version 1.0.4 of 20 December 2006

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```

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1.202 alpine-baselayout-data 3.4.3-r2

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```
# Automatically generated by apkbuild-cpan, template 3
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgver=1.2911
pkgrel=9
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/${_pkgreal}-${pkgver}"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
```

```

make
}

check() {
export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
make test
}

package() {
make DESTDIR="$pkgdir" install
find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.2.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
gpep517 build-wheel \
--wheel-dir .dist \
--output-fd 3 3>&1 >&2
}

check() {
python3 -m venv --clear --without-pip --system-site-packages .testenv
.testenv/bin/python3 -m installer .dist/*.whl
.testenv/bin/python3 -m pytest
}

package() {

```

```
python3 -m installer -d "$pkgdir" \  
  .dist/*.whl  
}
```

sha512sums="

```
7be7ebab1d980063ab846a228c5247570d0e23ed52f4362ef7d88eb7a59274e6f74653b4e9cff8225597693087d750c5  
bf7fcf604440d8d3d2976ebcd7442c24
```

```
  license-expression-30.2.0.tar.gz
```

"

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"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95

<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

Maintainer: Jakub Panek <me@panekj.dev>

```
pkgname=cargo-license
```

```
pkgver=0.5.1
```

```
pkgrel=4
```

```
pkgdesc="Cargo subcommand to see license of dependencies"
```

```
url="https://github.com/onur/cargo-license"
```

```
arch="all !s390x !riscv64" # rust
```

```
license="MIT"
```

```
makedepends="cargo cargo-auditable"
```

```
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"
```

```

prepare() {
    default_prepare

    cargo fetch --target="$CTARGET" --locked
}

build() {
    cargo auditable build --release --frozen
}

check() {
    cargo test --frozen
}

package() {
    install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
4d8d430df91c6aac53d2305d3125eae492324e85c4db29d33d452b3848f33a55088e71247c6c72c6a62f4e924a374a
115bf14b4f398e7950b9eb52415f2244 cargo-license-0.5.1.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
    # some GNU autoconf options are ignored, but it works
    ./configure \
        --build=$CBUILD \
        --host=$CHOST \
        --prefix=/usr \
        --sysconfdir=/etc \
        --mandir=/usr/share/man \
        --localstatedir=/var/lib # it really shouldn't be in /var
}

```



```

make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
"

# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
mkdir -p "$pkgdir"
}

_subpkg() {
local type=${subpkgname/$pkgname-/}
pkgdesc="$pkgdesc ($type)"
install_if="$pkgname"
mkdir -p "$subpkgdir"/usr/share/spdx
cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
pkgdesc="$pkgdesc (licence list)"
mkdir -p "$subpkgdir"/usr/share/spdx

```

```
local i; for i in "$builddir"/text/*.txt; do
  local license=${i##*/}
  echo
  ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
done
}
```

```
sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"
```

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(EMU Soundfont 2 Format)

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vintagedreamworks@hotmail.com
<http://www.geocities.com/SiliconValley/Campus/8645/index.html>
<http://members.nbc.com/silicon39/>
<http://www.mp3.com/silicon39>
<https://analoguesque.x10host.com/>
Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=1
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
subpackages="\$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/\${_pkgname:0:1}/\${_pkgname}/\${_pkgname}-\${pkgver}.tar.gz"
builddir="\$srcdir"/\${_pkgname}-\${pkgver}

replaces="py-flake8-copyright" # Backwards compatibility
provides="py-flake8-copyright=\${pkgver}-r\${pkgrel}" # Backwards compatibility

```
build() {  
    python3 setup.py build  
}
```

```
package() {  
    python3 setup.py install --skip-build --root="$pkgdir"  
}
```

```
sha512sums="  
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237  
b316bd503ae7dceed6ca284ccd5a74d flake8-copyright-0.2.4.tar.gz  
"
```

mini_sendmail - accept email on behalf of real sendmail

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
```

```
pkgname=libart-lgpl
```

```
pkgver=2.3.21
```

```
pkgrel=8
```

```
pkgdesc="A library for high-performance 2D graphics"
```

```
url="https://www.levien.com/libart/"
```

```
arch="all"
```

```
options="!check" # No test suite.
```

```
license="LGPL-2.0-or-later"
```

```
subpackages="$pkgname-dev"
```

```
source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-$pkgver.tar.bz2"
```

```
"
```

```
builddir="$srcdir"/libart-lgpl-$pkgver
```

```
prepare() {  
  update_config_sub  
  default_prepare  
}
```

```
build() {  
  ./configure \  
  --build=$CBUILD \  
  --host=$CHOST \  
  --prefix=/usr  
  make  
}
```

```
package() {  
  make DESTDIR="$pkgdir" install  
}
```

```
sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7"
```

1.203 commons-compress 1.26.0

1.203.1 Available under license :

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1.204 ca-certificates 20240226-r0

1.204.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/* c_rehash.c - Create hash symlinks for certificates
 * C implementation based on the original Perl and shell versions
 *
 * Copyright (c) 2013-2014 Timo Teräs <timo.teras@iki.fi>
 * All rights reserved.
 *
 * This software is licensed under the MIT License.
 * Full license available at: http://opensource.org/licenses/MIT
 */
```

Found in path(s):

```
* /opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-
```

20230506/c_rehash.c

No license file was found, but licenses were detected in source scan.

```
#
# This Source Code Form is subject to the terms of the Mozilla Public
# License, v. 2.0. If a copy of the MPL was not distributed with this
# file, You can obtain one at http://mozilla.org/MPL/2.0/.
#
# certdata.txt
#
# This file contains the object definitions for the certs and other
# information "built into" NSS.
#
# Object definitions:
#
# Certificates
#
# -- Attribute --      -- type --      -- value --
# CKA_CLASS            CK_OBJECT_CLASS  CKO_CERTIFICATE
# CKA_TOKEN            CK_BBOOL      CK_TRUE
# CKA_PRIVATE          CK_BBOOL      CK_FALSE
# CKA_MODIFIABLE       CK_BBOOL      CK_FALSE
# CKA_LABEL            UTF8          (varies)
# CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
# CKA_SUBJECT          DER+base64    (varies)
# CKA_ID               byte array    (varies)
#
# CKA_ISSUER           DER+base64    (varies)
# CKA_SERIAL_NUMBER   DER+base64    (varies)
# CKA_VALUE            DER+base64    (varies)
# CKA_NSS_EMAIL        ASCII7        (unused here)
# CKA_NSS_SERVER_DISTRUST_AFTER DER+base64    (varies)
# CKA_NSS_EMAIL_DISTRUST_AFTER DER+base64    (varies)
#
# Trust
#
# -- Attribute --      -- type --      -- value --
# CKA_CLASS            CK_OBJECT_CLASS  CKO_TRUST
# CKA_TOKEN            CK_BBOOL      CK_TRUE
# CKA_PRIVATE          CK_BBOOL      CK_FALSE
# CKA_MODIFIABLE       CK_BBOOL      CK_FALSE
# CKA_LABEL            UTF8          (varies)
# CKA_ISSUER           DER+base64    (varies)
# CKA_SERIAL_NUMBER   DER+base64    (varies)
# CKA_CERT_HASH        binary+base64  (varies)
# CKA_EXPIRES          CK_DATE
```

```

(not used here)
# CKA_TRUST_DIGITAL_SIGNATURE CK_TRUST      (varies)
# CKA_TRUST_NON_REPUDIATION  CK_TRUST      (varies)
# CKA_TRUST_KEY_ENCIPHERMENT CK_TRUST      (varies)
# CKA_TRUST_DATA_ENCIPHERMENT CK_TRUST     (varies)
# CKA_TRUST_KEY_AGREEMENT    CK_TRUST     (varies)
# CKA_TRUST_KEY_CERT_SIGN    CK_TRUST     (varies)
# CKA_TRUST_CRL_SIGN         CK_TRUST     (varies)
# CKA_TRUST_SERVER_AUTH      CK_TRUST     (varies)
# CKA_TRUST_CLIENT_AUTH      CK_TRUST     (varies)
# CKA_TRUST_CODE_SIGNING     CK_TRUST     (varies)
# CKA_TRUST_EMAIL_PROTECTION CK_TRUST     (varies)
# CKA_TRUST_IPSEC_END_SYSTEM CK_TRUST     (varies)
# CKA_TRUST_IPSEC_TUNNEL     CK_TRUST     (varies)
# CKA_TRUST_IPSEC_USER       CK_TRUST     (varies)
# CKA_TRUST_TIME_STAMPING    CK_TRUST     (varies)
# CKA_TRUST_STEP_UP_APPROVED CK_BBOOL    (varies)
# (other
  trust attributes can be defined)
#

#
# The object to tell NSS that this is a root list and we don't
# have to go looking for others.
#
BEGINDATA
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_BUILTIN_ROOT_LIST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Mozilla Builtin Roots"

#
# Certificate "GlobalSign Root CA"
#
# Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Serial Number:04:00:00:00:00:01:15:4b:5a:c3:94
# Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Tue Sep 01 12:00:00 1998
# Not Valid After : Fri Jan 28 12:00:00 2028
# Fingerprint (SHA-256):
EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99
# Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign

```

Root CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\013\004\000\000\000\000\001\025\113\132\303\224

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\165\060\202\002\135\240\003\002\001\002\002\013\004
\000\000\000\000\001\025\113\132\303\224\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\060\127\061\013\060\011\006
\003\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004
\012\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166
\055\163\141\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\033\060\031\006\003\125\004\003\023\022
\107\154\157\142\141\154\123\151\147\156\040\122\157\157\164\040
\103\101\060\036\027\015\071\070\060\071\060\061\061\062\060\060
\060\060\132\027\015\062\070\060\061\062\070\061\062\060\060\060
\060\132\060\127\061\013\060\011\006\003\125\004\006\023\002\102
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142
\141\154\123\151\147\156\040\156\166\055\163\141\061\020\060\016
\006\003\125\004\013\023\007\122\157\157\164\040\103\101\061\033
\060\031\006\003\125\004\003\023\022\107\154\157\142\141\154\123
\151\147\156\040\122\157\157\164\040\103\101\060\202\001\042\060
\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202
\001\017\000\060\202\001\012\002\202\001\001\000\332\016\346\231
\215\316\243\343\117\212\176\373\361\213\203\045\153\352\110\037
\361\052\260\271\225\021\004\275\360\143\321\342\147\146\317\034
\335\317\033\110\053\356\215\211\216\232\257\051\200\145\253\351
\307\055\022\313\253\034\114\160\007\241\075\012\060\315\025\215
\117\370\335\324\214\120\025\034\357\120\356\304\056\367\374\351
\122\362\221\175\340\155\325\065\060\216\136\103\163\362\101\351
\325\152\343\262\211\072\126\071\070\157\006\074\210\151\133\052

\115\305\247\124\270\154\211\314\233\371\074\312\345\375\211\365
\022\074\222\170\226\326\334\164\156\223\104\141\321\215\307\106
\262\165\016\206\350\031\212\325\155\154\325\170\026\225\242\351
\310\012\070\353\362\044\023\117\163\124\223\023\205\072\033\274
\036\064\265\213\005\214\271\167\213\261\333\037\040\221\253\011
\123\156\220\316\173\067\164\271\160\107\221\042\121\143\026\171
\256\261\256\101\046\010\310\031\053\321\106\252\110\326\144\052
\327\203\064\377\054\052\301\154\031\103\112\007\205\347\323\174
\366\041\150\357\352\362\122\237\177\223\220\317\002\003\001\000
\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\140\173\146\032\105\015\227\312\211\120\057\175\004\315\064
\250\377\374\375\113\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\003\202\001\001\000\326\163\347\174\117\166\320
\215\277\354\272\242\276\064\305\050\062\265\174\374\154\234\054
\053\275\011\236\123\277\153\136\252\021\110\266\345\010\243\263
\312\075\141\115\323\106\011\263\076\303\240\343\143\125\033\362
\272\357\255\071\341\103\271\070\243\346\057\212\046\073\357\240
\120\126\371\306\012\375\070\315\304\013\160\121\224\227\230\004
\337\303\137\224\325\025\311\024\101\234\304\135\165\144\025\015
\377\125\060\354\206\217\377\015\357\054\271\143\106\366\252\374
\337\274\151\375\056\022\110\144\232\340\225\360\246\357\051\217
\001\261\025\265\014\035\245\376\151\054\151\044\170\036\263\247
\034\161\142\356\312\310\227\254\027\135\212\302\370\107\206\156
\052\304\126\061\225\320\147\211\205\053\371\154\246\135\106\235
\014\252\202\344\231\121\335\160\267\333\126\075\141\344\152\341
\134\326\366\376\075\336\101\314\007\256\143\122\277\123\123\364
\053\351\307\375\266\367\202\137\205\322\101\030\333\201\263\004
\034\305\037\244\200\157\025\040\311\336\014\210\012\035\326\146
\125\342\374\110\311\051\046\151\340

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root CA"

Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE

Serial Number:04:00:00:00:01:15:4b:5a:c3:94

Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE

Not Valid Before: Tue Sep 01 12:00:00 1998

#

Not Valid After : Fri Jan 28 12:00:00 2028

Fingerprint (SHA-256):

EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99

Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\261\274\226\213\324\364\235\142\052\250\232\201\362\025\001\122
\244\035\202\234
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\076\105\122\025\011\121\222\341\267\135\067\237\261\207\051\212
END
CKA_ISSUER MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\025\113\132\303\224
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Verisign Class 1 Public Primary Certification Authority - G3"
#
# Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4
# Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65
#
Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA_SUBJECT MULTILINE_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\021\000\213\133\165\126\204\124\205\013\000\317\257\070\110
\316\261\244

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\032\060\202\003\002\002\021\000\213\133\165\126\204
\124\205\013\000\317\257\070\110\316\261\244\060\015\006\011\052
\206\110\206\367\015\001\001\005\005\000\060\201\312\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\126\145\162\151\123\151\147\156\054\040\111
\156\143\056\061\037\060\035\006\003\125\004\013\023\026\126\145
\162\151\123\151\147\156\040\124\162\165\163\164\040\116\145\164
\167\157\162\153\061\072\060\070\006\003\125\004\013\023\061\050
\143\051\040\061\071\071\071\040\126\145\162\151\123\151\147\156
\054\040\111\156\143\056\040\055\040\106\157\162\040\141\165\164

\150\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171
\061\105\060\103\006\003\125\004\003\023\074\126\145\162\151\123
\151\147\156\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\063\060\036\027\015\071\071\061\060\060
\061\060\060\060\060\060\060\132\027\015\063\066\060\067\061\066
\062\063\065\071\065\071\132\060\201\312\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\027\060\025\006\003\125\004\012
\023\016\126\145\162\151\123\151\147\156\054\040\111\156\143\056
\061\037\060\035\006\003\125\004\013\023\026\126\145\162\151\123
\151\147\156\040\124\162\165\163\164\040\116\145\164\167\157\162
\153\061\072\060\070\006\003\125\004\013\023\061\050\143\051\040
\061\071\071\071\040\126\145\162\151\123\151\147\156\054\040\111
\156\143\056\040\055\040\106\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\105\060
\103\006\003\125\004\003\023\074\126\145\162\151\123\151\147\156
\040\103\154\141\163\163\040\061\040\120\165\142\154\151\143\040
\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040
\055\040\107\063\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\335\204\324\271\264\371\247\330\363\004\170
\234\336\075\334\154\023\026\331\172\335\044\121\146\300\307\046
\131\015\254\006\010\302\224\321\063\037\360\203\065\037\156\033
\310\336\252\156\025\116\124\047\357\304\155\032\354\013\343\016
\360\104\245\127\307\100\130\036\243\107\037\161\354\140\366\155
\224\310\030\071\355\376\102\030\126\337\344\114\111\020\170\116
\001\166\065\143\022\066\335\146\274\001\004\066\243\125\150\325
\242\066\011\254\253\041\046\124\006\255\077\312\024\340\254\312
\255\006\035\225\342\370\235\361\340\140\377\302\177\165\053\114
\314\332\376\207\231\041\352\272\376\076\124\327\322\131\170\333
\074\156\317\240\023\000\032\270\047\241\344\276\147\226\312\240
\305\263\234\335\311\165\236\353\060\232\137\243\315\331\256\170
\031\077\043\351\134\333\051\275\255\125\310\033\124\214\143\366
\350\246\352\307\067\022\134\243\051\036\002\331\333\037\073\264
\327\017\126\107\201\025\004\112\257\203\047\321\305\130\210\301
\335\366\252\247\243\030\332\150\252\155\021\121\341\277\145\153
\237\226\166\321\075\002\003\001\000\001\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\253\146
\215\327\263\272\307\232\266\346\125\320\005\361\237\061\215\132
\252\331\252\106\046\017\161\355\245\255\123\126\142\001\107\052
\104\351\376\077\164\013\023\233\271\364\115\033\262\321\137\262
\266\322\210\134\263\237\315\313\324\247\331\140\225\204\072\370
\301\067\035\141\312\347\260\305\345\221\332\124\246\254\061\201
\256\227\336\315\010\254\270\300\227\200\177\156\162\244\347\151
\023\225\145\037\304\223\074\375\171\217\004\324\076\117\352\367
\236\316\315\147\174\117\145\002\377\221\205\124\163\307\377\066


```
\367\206\055\354\320\136\117\377\021\237\162\006\326\270\032\361
\114\015\046\145\342\104\200\036\307\237\343\335\350\012\332\354
\245\040\200\151\150\241\117\176\341\153\317\007\101\372\203\216
\274\070\335\260\056\021\261\153\262\102\314\232\274\371\110\042
\171\112\031\017\262\034\076\040\164\331\152\303\276\362\050\170
\023\126\171\117\155\120\352\033\260\265\127\261\067\146\130\043
\363\334\017\337\012\207\304\357\206\005\325\070\024\140\231\243
\113\336\006\226\161\054\362\333\266\037\244\357\077\356
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

Trust for "Verisign Class 1 Public Primary Certification Authority - G3"

Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4

Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Not Valid Before: Fri Oct 01 00:00:00 1999

Not Valid After : Wed Jul 16 23:59:59 2036

Fingerprint (SHA-256):

CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65

Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\040\102\205\334\367\353\166\101\225\127\216\023\153\324\267\321
\351\216\106\245

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\261\107\274\030\127\321\030\240\170\055\354\161\350\052\225\163

END

CKA_ISSUER

MULTILINE_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145

```
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

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\002\021\000\213\133\165\126\204\124\205\013\000\317\257\070\110
\316\261\244
```

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Verisign Class 2 Public Primary Certification Authority - G3"

#

Issuer: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a

Subject: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Not Valid Before: Fri Oct 01 00:00:00 1999

Not Valid After : Wed Jul 16 23:59:59 2036

Fingerprint (SHA-256):

92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB

Fingerprint (SHA1): 61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Verisign Class 2 Public Primary Certification Authority - G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
```

\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\141\160\313\111\214\137\230\105\051\347\260\246\331\120
\133\172

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\031\060\202\003\001\002\020\141\160\313\111\214\137
\230\105\051\347\260\246\331\120\133\172\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\060\201\312\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003\125
\004\012\023\016\126\145\162\151\123\151\147\156\054\040\111\156
\143\056\061\037\060\035\006\003\125\004\013\023\026\126\145\162
\151\123\151\147\156\040\124\162\165\163\164\040\116\145\164\167
\157\162\153\061\072\060\070\006\003\125\004\013\023\061\050\143
\051\040\061\071\071\071\040\126\145\162\151\123\151\147\156\054
\040\111\156\143\056\040\055\040\106\157\162\040\141\165\164\150
\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171\061
\105\060\103\006\003\125\004\003\023\074\126\145\162\151\123\151
\147\156\040\103\154\141\163\163\040\062\040\120\165\142\154\151
\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\063\060\036\027\015\071\071\061\060\060\061
\060\060\060\060\060\060\132\027\015\063\066\060\067\061\066\062
\063\065\071\065\071\132\060\201\312\061\013\060\011\006\003\125
\004\006\023\002\125\123\061\027\060\025\006\003\125\004\012\023
\016\126\145\162\151\123\151\147\156\054\040\111\156\143\056\061

\037\060\035\006\003\125\004\013\023\026\126\145\162\151\123\151
\147\156\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\072\060\070\006\003\125\004\013\023\061\050\143\051\040\061
\071\071\071\040\126\145\162\151\123\151\147\156\054\040\111\156
\143\056\040\055\040\106\157\162\040\141\165\164\150\157\162\151
\172\145\144\040\165\163\145\040\157\156\154\171\061\105\060\103
\006\003\125\004\003\023\074\126\145\162\151\123\151\147\156\040
\103\154\141\163\163\040\062\040\120\165\142\154\151\143\040\120
\162\151\155\141\162\171\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\055
\040\107\063\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\257\012\015\302\325\054\333\147\271\055\345\224
\047\335\245\276\340\260\115\217\263\141\126\074\326\174\303\364
\315\076\206\313\242\210\342\341\330\244\151\305\265\342\277\301
\246\107\120\136\106\071\213\325\226\272\265\157\024\277\020\316
\047\023\236\005\107\233\061\172\023\330\037\331\323\002\067\213
\255\054\107\360\216\201\006\247\015\060\014\353\367\074\017\040
\035\334\162\106\356\245\002\310\133\303\311\126\151\114\305\030
\301\221\173\013\325\023\000\233\274\357\303\110\076\106\140\040
\205\052\325\220\266\315\213\240\314\062\335\267\375\100\125\262
\120\034\126\256\314\215\167\115\307\040\115\247\061\166\357\150
\222\212\220\036\010\201\126\262\255\151\243\122\320\313\034\304
\043\075\037\231\376\114\350\026\143\216\306\010\216\366\061\366
\322\372\345\166\335\265\034\222\243\111\315\315\001\315\150\315
\251\151\272\243\353\035\015\234\244\040\246\301\240\305\321\106
\114\027\155\322\254\146\077\226\214\340\204\324\066\377\042\131
\305\371\021\140\250\137\004\175\362\032\366\045\102\141\017\304
\112\270\076\211\002\003\001\000\001\060\015\006\011\052\206\110
\206\367\015\001\001\005\005\000\003\202\001\001\000\064\046\025
\074\300\215\115\103\111\035\275\351\041\222\327\146\234\267\336
\305\270\320\344\135\137\166\042\300\046\371\204\072\072\371\214
\265\373\354\140\361\350\316\004\260\310\335\247\003\217\060\363
\230\337\244\346\244\061\337\323\034\013\106\334\162\040\077\256
\356\005\074\244\063\077\013\071\254\160\170\163\113\231\053\337
\060\302\124\260\250\073\125\241\376\026\050\315\102\275\164\156
\200\333\047\104\247\316\104\135\324\033\220\230\015\036\102\224
\261\000\054\004\320\164\243\002\005\042\143\143\315\203\265\373
\301\155\142\153\151\165\375\135\160\101\271\365\277\174\337\276
\301\062\163\042\041\213\130\201\173\025\221\172\272\343\144\110
\260\177\373\066\045\332\225\320\361\044\024\027\335\030\200\153
\106\043\071\124\365\216\142\011\004\035\224\220\246\233\346\045
\342\102\105\252\270\220\255\276\010\217\251\013\102\030\224\317
\162\071\341\261\103\340\050\317\267\347\132\154\023\153\111\263
\377\343\030\174\211\213\063\135\254\063\327\247\371\332\072\125
\311\130\020\371\252\357\132\266\317\113\113\337\052

END

CKA_NSS_MOZILLA_CA_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
# For Email Distrust After: Wed Aug 31 00:00:00 2022
CKA_NSS_EMAIL_DISTRUST_AFTER MULTILINE_OCTAL
\062\062\060\070\063\061\060\060\060\060\060\060\132
END

# Trust for "Verisign Class 2 Public Primary Certification Authority - G3"
# Issuer: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a
#
Subject: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB
# Fingerprint (SHA1): 61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 2 Public Primary Certification Authority - G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\141\357\103\327\177\312\324\141\121\274\230\340\303\131\022\257
\237\353\143\021
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\276\304\143\042\311\250\106\164\213\270\035\036\112\053\366
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063
END
CKA_SERIAL_NUMBER

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MULTILINE_OCTAL
\002\020\141\160\313\111\214\137\230\105\051\347\260\246\331\120
\133\172
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust.net Premium 2048 Secure Server CA"
#
# Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Serial Number: 946069240 (0x3863def8)
# Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Not Valid Before: Fri Dec 24 17:50:51 1999
# Not Valid After : Tue Jul 24 14:15:12 2029
# Fingerprint (SHA-256):
6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77
# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "Entrust.net Premium 2048 Secure Server CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125

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\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\004\070\143\336\370

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\052\060\202\003\022\240\003\002\001\002\002\004\070
\143\336\370\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\060\201\264\061\024\060\022\006\003\125\004\012\023\013
\105\156\164\162\165\163\164\056\156\145\164\061\100\060\076\006
\003\125\004\013\024\067\167\167\167\056\145\156\164\162\165\163
\164\056\156\145\164\057\103\120\123\137\062\060\064\070\040\151
\156\143\157\162\160\056\040\142\171\040\162\145\146\056\040\050
\154\151\155\151\164\163\040\154\151\141\142\056\051\061\045\060
\043\006\003\125\004\013\023\034\050\143\051\040\061\071\071\071
\040\105\156\164\162\165\163\164\056\156\145\164\040\114\151\155
\151\164\145\144\061\063\060\061\006\003\125\004\003\023\052\105
\156\164\162\165\163\164\056\156\145\164\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\050\062\060\064\070\051\060\036\027\015\071\071\061
\062\062\064\061\067\065\060\065\061\132\027\015\062\071\060\067
\062\064\061\064\061\065\061\062\132\060\201\264\061\024\060\022
\006\003\125\004\012\023\013\105\156\164\162\165\163\164\056\156
\145\164\061\100\060\076\006\003\125\004\013\024\067\167\167\167
\056\145\156\164\162\165\163\164\056\156\145\164\057\103\120\123
\137\062\060\064\070\040\151\156\143\157\162\160\056\040\142\171
\040\162\145\146\056\040\050\154\151\155\151\164\163\040\154\151
\141\142\056\051\061\045\060\043\006\003\125\004\013\023\034\050
\143\051\040\061\071\071\071\040\105\156\164\162\165\163\164\056
\156\145\164\040\114\151\155\151\164\145\144\061\063\060\061\006
\003\125\004\003\023\052\105\156\164\162\165\163\164\056\156\145
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\040\050\062\060\064\070\051
\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001
\000\255\115\113\251\022\206\262\352\243\040\007\025\026\144\052
\053\113\321\277\013\112\115\216\355\200\166\245\147\267\170\100
\300\163\102\310\150\300\333\123\053\335\136\270\166\230\065\223

\213\032\235\174\023\072\016\037\133\267\036\317\345\044\024\036
\261\201\251\215\175\270\314\153\113\003\361\002\014\334\253\245
\100\044\000\177\164\224\241\235\010\051\263\210\013\365\207\167
\235\125\315\344\303\176\327\152\144\253\205\024\206\225\133\227
\062\120\157\075\310\272\146\014\343\374\275\270\111\301\166\211
\111\031\375\300\250\275\211\243\147\057\306\237\274\161\031\140
\270\055\351\054\311\220\166\146\173\224\342\257\170\326\145\123
\135\074\326\234\262\317\051\003\371\057\244\120\262\324\110\316
\005\062\125\212\375\262\144\114\016\344\230\007\165\333\177\337
\271\010\125\140\205\060\051\371\173\110\244\151\206\343\065\077
\036\206\135\172\172\025\275\357\000\216\025\042\124\027\000\220
\046\223\274\016\111\150\221\277\370\107\323\235\225\102\301\016
\115\337\157\046\317\303\030\041\142\146\103\160\326\325\300\007
\341\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\125\344\201\321\021\200\276\330\211\271
\010\243\061\371\241\044\011\026\271\160\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\073\233
\217\126\233\060\347\123\231\174\172\171\247\115\227\327\031\225
\220\373\006\037\312\063\174\106\143\217\226\146\044\372\100\033
\041\047\312\346\162\163\362\117\376\061\231\375\310\014\114\150
\123\306\200\202\023\230\372\266\255\332\135\075\361\316\156\366
\025\021\224\202\014\356\077\225\257\021\253\017\327\057\336\037
\003\217\127\054\036\311\273\232\032\104\225\353\030\117\246\037
\315\175\127\020\057\233\004\011\132\204\265\156\330\035\072\341
\326\236\321\154\171\136\171\034\024\305\343\320\114\223\073\145
\074\355\337\075\276\246\345\225\032\303\265\031\303\275\136\133
\273\377\043\357\150\031\313\022\223\047\134\003\055\157\060\320
\036\266\032\254\336\132\367\321\252\250\047\246\376\171\201\304
\171\231\063\127\272\022\260\251\340\102\154\223\312\126\336\376
\155\204\013\010\213\176\215\352\327\230\041\306\363\347\074\171
\057\136\234\321\114\025\215\341\354\042\067\314\232\103\013\227
\334\200\220\215\263\147\233\157\110\010\025\126\317\277\361\053
\174\136\232\166\351\131\220\305\174\203\065\021\145\121

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Entrust.net Premium 2048 Secure Server CA"

Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net

Serial Number: 946069240 (0x3863def8)

Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net

Not Valid Before: Fri Dec 24 17:50:51 1999


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# Not Valid After : Tue Jul 24 14:15:12 2029
# Fingerprint (SHA-256):
6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77
# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust.net Premium 2048 Secure Server CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\120\060\006\011\035\227\324\365\256\071\367\313\347\222\175\175
\145\055\064\061
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\356\051\061\274\062\176\232\346\350\265\367\121\264\064\161\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\070\143\336\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Baltimore CyberTrust Root"
#
# Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Serial Number: 33554617 (0x20000b9)
# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Not Valid Before: Fri May 12 18:46:00 2000
# Not Valid After : Mon May 12 23:59:00 2025

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```

# Fingerprint (SHA-256):
16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB
# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\002\000\000\271
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\004\002
\000\000\271\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\111
\105\061\022\060\020\006\003\125\004\012\023\011\102\141\154\164
\151\155\157\162\145\061\023\060\021\006\003\125\004\013\023\012
\103\171\142\145\162\124\162\165\163\164\061\042\060\040\006\003
\125\004\003\023\031\102\141\154\164\151\155\157\162\145\040\103
\171\142\145\162\124\162\165\163\164\040\122\157\157\164\060\036
\027\015\060\060\060\065\061\062\061\070\064\066\060\060\132\027
\015\062\065\060\065\061\062\062\063\065\071\060\060\132\060\132
\061\013\060\011\006\003\125\004\006\023\002\111\105\061\022\060
\020\006\003\125\004\012\023\011\102\141\154\164\151\155\157\162
\145\061\023\060\021\006\003\125\004\013\023\012\103\171\142\145
\162\124\162\165\163\164\061\042\060\040\006\003\125\004\003\023
\031\102\141\154\164\151\155\157\162\145\040\103\171\142\145\162
\124\162\165\163\164\040\122\157\157\164\060\202\001\042\060\015

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\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001
\017\000\060\202\001\012\002\202\001\001\000\243\004\273\042\253
\230\075\127\350\046\162\232\265\171\324\051\342\341\350\225\200
\261\260\343\133\216\053\051\232\144\337\241\135\355\260\011\005
\155\333\050\056\316\142\242\142\376\264\210\332\022\353\070\353
\041\235\300\101\053\001\122\173\210\167\323\034\217\307\272\271
\210\265\152\011\347\163\350\021\100\247\321\314\312\142\215\055
\345\217\013\246\120\322\250\120\303\050\352\365\253\045\207\212
\232\226\034\251\147\270\077\014\325\367\371\122\023\057\302\033
\325\160\160\360\217\300\022\312\006\313\232\341\331\312\063\172
\167\326\370\354\271\361\150\104\102\110\023\322\300\302\244\256
\136\140\376\266\246\005\374\264\335\007\131\002\324\131\030\230
\143\365\245\143\340\220\014\175\135\262\006\172\363\205\352\353
\324\003\256\136\204\076\137\377\025\355\151\274\371\071\066\162
\165\317\167\122\115\363\311\220\054\271\075\345\311\043\123\077
\037\044\230\041\134\007\231\051\275\306\072\354\347\156\206\072
\153\227\164\143\063\275\150\030\061\360\170\215\166\277\374\236
\216\135\052\206\247\115\220\334\047\032\071\002\003\001\000\001
\243\105\060\103\060\035\006\003\125\035\016\004\026\004\024\345
\235\131\060\202\107\130\314\254\372\010\124\066\206\173\072\265
\004\115\360\060\022\006\003\125\035\023\001\001\377\004\010\060
\006\001\001\377\002\001\003\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\003\202\001\001\000\205\014\135\216\344
\157\121\150\102\005\240\335\273\117\047\045\204\003\275\367\144
\375\055\327\060\343\244\020\027\353\332\051\051\266\171\077\166
\366\031\023\043\270\020\012\371\130\244\324\141\160\275\004\141
\152\022\212\027\325\012\275\305\274\060\174\326\351\014\045\215
\206\100\117\354\314\243\176\070\306\067\021\117\355\335\150\061
\216\114\322\263\001\164\356\276\165\136\007\110\032\177\160\377
\026\134\204\300\171\205\270\005\375\177\276\145\021\243\017\300
\002\264\370\122\067\071\004\325\251\061\172\030\277\240\052\364
\022\231\367\243\105\202\343\074\136\365\235\236\265\310\236\174
\056\310\244\236\116\010\024\113\155\375\160\155\153\032\143\275
\144\346\037\267\316\360\362\237\056\273\033\267\362\120\210\163
\222\302\342\343\026\215\232\062\002\253\216\030\335\351\020\021
\356\176\065\253\220\257\076\060\224\172\320\063\075\247\145\017
\365\374\216\236\142\317\107\104\054\001\135\273\035\265\062\322
\107\322\070\056\320\376\201\334\062\152\036\265\356\074\325\374
\347\201\035\031\303\044\102\352\143\071\251

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Baltimore CyberTrust Root"

Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE

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# Serial Number: 33554617
(0x20000b9)
# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Not Valid Before: Fri May 12 18:46:00 2000
# Not Valid After : Mon May 12 23:59:00 2025
# Fingerprint (SHA-256):
16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB
# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\324\336\040\320\136\146\374\123\376\032\120\210\054\170\333\050
\122\312\344\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\254\266\224\245\234\027\340\327\221\122\233\261\227\006\246\344
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\002\000\000\271
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority"
#
# Issuer: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is
incorporated by reference,O="Entrust, Inc.",C=US
# Serial Number: 1164660820 (0x456b5054)
# Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is
incorporated by reference,O="Entrust, Inc.",C=US
# Not Valid Before: Mon Nov 27 20:23:42 2006
# Not Valid After : Fri Nov 27 20:53:42 2026
# Fingerprint (SHA-256):

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73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C

#

Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\004\105\153\120\124

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\004\221\060\202\003\171\240\003\002\001\002\002\004\105
\153\120\124\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\060\201\260\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156\164

\162\165\163\164\054\040\111\156\143\056\061\071\060\067\006\003
\125\004\013\023\060\167\167\167\056\145\156\164\162\165\163\164
\056\156\145\164\057\103\120\123\040\151\163\040\151\156\143\157
\162\160\157\162\141\164\145\144\040\142\171\040\162\145\146\145
\162\145\156\143\145\061\037\060\035\006\003\125\004\013\023\026
\050\143\051\040\062\060\060\066\040\105\156\164\162\165\163\164
\054\040\111\156\143\056\061\055\060\053\006\003\125\004\003\023
\044\105\156\164\162\165\163\164\040\122\157\157\164\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171\060\036\027\015\060\066\061\061\062\067\062\060
\060\062\063\064\062\132\027\015\062\066\061\061\062\067\062\060
\065\063\064\062\132\060\201\260\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\026\060\024\006\003\125\004\012\023\015
\105\156\164\162\165\163\164\054\040\111\156\143\056\061\071\060
\067\006\003\125\004\013\023\060\167\167\167\056\145\156\164\162
\165\163\164\056\156\145\164\057\103\120\123\040\151\163\040\151
\156\143\157\162\160\157\162\141\164\145\144\040\142\171\040\162
\145\146\145\162\145\156\143\145\061\037\060\035\006\003\125\004
\013\023\026\050\143\051\040\062\060\060\066\040\105\156\164\162
\165\163\164\054\040\111\156\143\056\061\055\060\053\006\003\125
\004\003\023\044\105\156\164\162\165\163\164\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\266\225\266\103\102\372\306
\155\052\157\110\337\224\114\071\127\005\356\303\171\021\101\150
\066\355\354\376\232\001\217\241\070\050\374\367\020\106\146\056
\115\036\032\261\032\116\306\321\300\225\210\260\311\377\061\213
\063\003\333\267\203\173\076\040\204\136\355\262\126\050\247\370
\340\271\100\161\067\305\313\107\016\227\052\150\300\042\225\142
\025\333\107\331\365\320\053\377\202\113\311\255\076\336\114\333
\220\200\120\077\011\212\204\000\354\060\012\075\030\315\373\375
\052\131\232\043\225\027\054\105\236\037\156\103\171\155\014\134
\230\376\110\247\305\043\107\134\136\375\156\347\036\264\366\150
\105\321\206\203\133\242\212\215\261\343\051\200\376\045\161\210
\255\276\274\217\254\122\226\113\252\121\215\344\023\061\031\350
\116\115\237\333\254\263\152\325\274\071\124\161\312\172\172\177
\220\335\175\035\200\331\201\273\131\046\302\021\376\346\223\342
\367\200\344\145\373\064\067\016\051\200\160\115\257\070\206\056
\236\177\127\257\236\027\256\353\034\313\050\041\137\266\034\330
\347\242\004\042\371\323\332\330\313\002\003\001\000\001\243\201
\260\060\201\255\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\053\006\003\125\035\020\004\044\060\042
\200\017\062\060\060\066\061\061\062\067\062\060\062\063\064\062
\132\201\017\062\060\062\066\061\061\062\067\062\060\065\063\064
\062\132\060\037\006\003\125\035\043\004\030\060\026\200\024\150
\220\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373

\204\275\155\060\035\006\003\125\035\016\004\026\004\024\150\220
\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373\204
\275\155\060\035\006\011\052\206\110\206\366\175\007\101\000\004
\020\060\016\033\010\126\067\056\061\072\064\056\060\003\002\004
\220\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\003\202\001\001\000\223\324\060\260\327\003\040\052\320\371\143
\350\221\014\005\040\251\137\031\312\173\162\116\324\261\333\320
\226\373\124\132\031\054\014\010\367\262\274\205\250\235\177\155
\073\122\263\052\333\347\324\204\214\143\366\017\313\046\001\221
\120\154\364\137\024\342\223\164\300\023\236\060\072\120\343\264
\140\305\034\360\042\104\215\161\107\254\310\032\311\351\233\232
\000\140\023\377\160\176\137\021\115\111\033\263\025\122\173\311
\124\332\277\235\225\257\153\232\330\236\351\361\344\103\215\342
\021\104\072\277\257\275\203\102\163\122\213\252\273\247\051\317
\365\144\034\012\115\321\274\252\254\237\052\320\377\177\177\332
\175\352\261\355\060\045\301\204\332\064\322\133\170\203\126\354
\234\066\303\046\342\021\366\147\111\035\222\253\214\373\353\377
\172\356\205\112\247\120\200\360\247\134\112\224\056\137\005\231
\074\122\101\340\315\264\143\317\001\103\272\234\203\334\217\140
\073\363\132\264\264\173\256\332\013\220\070\165\357\201\035\146
\322\367\127\160\066\263\277\374\050\257\161\045\205\133\023\376
\036\177\132\264\074

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Entrust Root Certification Authority"

Issuer: CN=Entrust

Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by
reference,O="Entrust, Inc.",C=US

Serial Number: 1164660820 (0x456b5054)

Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is
incorporated by reference,O="Entrust, Inc.",C=US

Not Valid Before: Mon Nov 27 20:23:42 2006

Not Valid After : Fri Nov 27 20:53:42 2026

Fingerprint (SHA-256):

73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C

Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\263\036\261\267\100\343\154\204\002\332\334\067\324\115\365\324
\147\111\122\371

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\326\245\303\355\135\335\076\000\301\075\207\222\037\035\077\344
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\004\105\153\120\124
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST
CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Root CA"
#
# Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
# Serial Number: 65568 (0x10020)
# Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
# Not Valid Before: Tue Jun 11 10:46:39 2002
# Not Valid After : Fri Jun 11 10:46:39 2027
# Fingerprint (SHA-256):
D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24
# Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164

```



```
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\001\000\040
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\014\060\202\001\364\240\003\002\001\002\002\003\001
\000\040\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103
\101\060\036\027\015\060\062\060\066\061\061\061\060\064\066\063
\071\132\027\015\062\067\060\066\061\061\061\060\064\066\063\071
\132\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\316\261\301\056\323\117\174\315\045\316\030\076\117\304
\214\157\200\152\163\310\133\121\370\233\322\334\273\000\134\261
\240\374\165\003\356\201\360\210\356\043\122\351\346\025\063\215
\254\055\011\305\166\371\053\071\200\211\344\227\113\220\245\250
\170\370\163\103\173\244\141\260\330\130\314\341\154\146\176\234
\363\011\136\125\143\204\325\250\357\363\261\056\060\150\263\304
\074\330\254\156\215\231\132\220\116\064\334\066\232\217\201\210
\120\267\155\226\102\011\363\327\225\203\015\101\113\260\152\153
\370\374\017\176\142\237\147\304\355\046\137\020\046\017\010\117
\360\244\127\050\316\217\270\355\105\366\156\356\045\135\252\156
\071\276\344\223\057\331\107\240\162\353\372\246\133\257\312\123
\077\342\016\306\226\126\021\156\367\351\146\251\046\330\177\225
\123\355\012\205\210\272\117\051\245\102\214\136\266\374\205\040
\000\252\150\013\241\032\205\001\234\304\106\143\202\210\266\042
\261\356\376\252\106\131\176\317\065\054\325\266\332\135\367\110
\063\024\124\266\353\331\157\316\315\210\326\253\033\332\226\073
\035\131\002\003\001\000\001\243\023\060\021\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
```

```
\270\215\316\357\347\024\272\317\356\260\104\222\154\264\071\076
\242\204\156\255\270\041\167\322\324\167\202\207\346\040\101\201
\356\342\370\021\267\143\321\027\067\276\031\166\044\034\004\032
\114\353\075\252\147\157\055\324\315\376\145\061\160\305\033\246
\002\012\272\140\173\155\130\302\232\111\376\143\062\013\153\343
\072\300\254\253\073\260\350\323\011\121\214\020\203\306\064\340
\305\053\340\032\266\140\024\047\154\062\167\214\274\262\162\230
\317\315\314\077\271\310\044\102\024\326\127\374\346\046\103\251
\035\345\200\220\316\003\124\050\076\367\077\323\370\115\355\152
\012\072\223\023\233\073\024\043\023\143\234\077\321\207\047\171
\345\114\121\343\001\255\205\135\032\073\261\325\163\020\244\323
\362\274\156\144\365\132\126\220\250\307\016\114\164\017\056\161
\073\367\310\107\364\151\157\025\362\021\136\203\036\234\174\122
\256\375\002\332\022\250\131\147\030\333\274\160\335\233\261\151
\355\200\316\211\100\110\152\016\065\312\051\146\025\041\224\054
\350\140\052\233\205\112\100\363\153\212\044\354\006\026\054\163
END
```

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum Root CA"

Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

Serial Number: 65568 (0x10020)

Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

Not Valid Before: Tue Jun 11 10:46:39 2002

Not Valid After : Fri Jun 11

10:46:39 2027

Fingerprint (SHA-256):

D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24

Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\142\122\334\100\367\021\103\242\057\336\236\367\064\216\006\102
\121\261\201\030
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\054\217\237\146\035\030\220\261\107\046\235\216\206\202\214\251
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
```

```

\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\001\000\040
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Comodo AAA Services root"
#
# Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB
# Serial Number: 1 (0x1)
# Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB
# Not Valid Before: Thu Jan 01 00:00:00 2004
# Not Valid After : Sun Dec 31 23:59:59 2028
# Fingerprint (SHA-256):
D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4
# Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Comodo AAA Services root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151
\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151

```

\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\062\060\202\003\032\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033
\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145\162
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006
\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032\060
\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040\103
\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003\125
\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151\143
\141\164\145\040\123\145\162\166\151\143\145\163\060\036\027\015
\060\064\060\061\060\061\060\060\060\060\060\132\027\015\062
\070\061\062\063\061\062\063\065\071\065\071\132\060\173\061\013
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006
\003\125\004\010\014\022\107\162\145\141\164\145\162\040\115\141
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004
\007\014\007\123\141\154\146\157\162\144\061\032\060\030\006\003
\125\004\012\014\021\103\157\155\157\144\157\040\103\101\040\114
\151\155\151\164\145\144\061\041\060\037\006\003\125\004\003\014
\030\101\101\101\040\103\145\162\164\151\146\151\143\141\164\145
\040\123\145\162\166\151\143\145\163\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\276\100\235\364\156\341
\352\166\207\034\115\105\104\216\276\106\310\203\006\235\301\052
\376\030\037\216\344\002\372\363\253\135\120\212\026\061\013\232
\006\320\305\160\042\315\111\055\124\143\314\266\156\150\106\013
\123\352\313\114\044\300\274\162\116\352\361\025\256\364\124\232
\022\012\303\172\262\063\140\342\332\211\125\363\042\130\363\336
\334\317\357\203\206\242\214\224\117\237\150\362\230\220\106\204
\047\307\166\277\343\314\065\054\213\136\007\144\145\202\300\110
\260\250\221\371\141\237\166\040\120\250\221\307\146\265\353\170
\142\003\126\360\212\032\023\352\061\243\036\240\231\375\070\366
\366\047\062\130\157\007\365\153\270\373\024\053\257\267\252\314
\326\143\137\163\214\332\005\231\250\070\250\313\027\170\066\121
\254\351\236\364\170\072\215\317\017\331\102\342\230\014\253\057
\237\016\001\336\357\237\231\111\361\055\337\254\164\115\033\230
\265\107\305\345\051\321\371\220\030\307\142\234\276\203\307\046
\173\076\212\045\307\300\335\235\346\065\150\020\040\235\217\330
\336\322\303\204\234\015\136\350\057\311\002\003\001\000\001\243
\201\300\060\201\275\060\035\006\003\125\035\016\004\026\004\024
\240\021\012\043\076\226\361\007\354\342\257\051\357\202\245\177
\320\060\244\264\060\016\006\003\125\035\017\001\001\377\004\004

\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\173\006\003\125\035\037\004\164\060\162
\060\070\240\066\240\064\206\062\150\164\164\160\072\057\057\143
\162\154\056\143\157\155\157\144\157\143\141\056\143\157\155\057
\101\101\101\103\145\162\164\151\146\151\143\141\164\145\123\145
\162\166\151\143\145\163\056\143\162\154\060\066\240\064\240\062
\206\060\150\164\164\160\072\057\057\143\162\154\056\143\157\155
\157\144\157\056\156\145\164\057\101\101\101\103\145\162\164\151
\146\151\143\141\164\145\123\145\162\166\151\143\145\163\056\143
\162\154\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\003\202\001\001\000\010\126\374\002\360\233\350\377\244\372
\326\173\306\104\200\316\117\304\305\366\000\130\314\246\266\274
\024\111\150\004\166\350\346\356\135\354\002\017\140\326\215\120
\030\117\046\116\001\343\346\260\245\356\277\274\164\124\101\277
\375\374\022\270\307\117\132\364\211\140\005\177\140\267\005\112
\363\366\361\302\277\304\271\164\206\266\055\175\153\314\322\363
\106\335\057\306\340\152\303\303\064\003\054\175\226\335\132\302
\016\247\012\231\301\005\213\253\014\057\363\134\072\317\154\067
\125\011\207\336\123\100\154\130\357\374\266\253\145\156\004\366
\033\334\074\340\132\025\306\236\331\361\131\110\060\041\145\003
\154\354\351\041\163\354\233\003\241\340\067\255\240\025\030\217
\372\272\002\316\247\054\251\020\023\054\324\345\010\046\253\042
\227\140\370\220\136\164\324\242\232\123\275\362\251\150\340\242
\156\302\327\154\261\243\017\236\277\353\150\347\126\362\256\362
\343\053\070\072\011\201\265\153\205\327\276\055\355\077\032\267
\262\143\342\365\142\054\202\324\152\000\101\120\361\071\203\237
\225\351\066\226\230\156

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Comodo AAA Services root"

Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number: 1 (0x1)

Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Thu Jan 01 00:00:00 2004

Not Valid After : Sun Dec 31 23:59:59 2028

Fingerprint

(SHA-256):

D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4

Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Comodo AAA Services root"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\321\353\043\244\155\027\326\217\331\045\144\302\361\361\140\027
\144\330\343\111
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\111\171\004\260\353\207\031\254\107\260\274\021\121\233\164\320
END
CKA_ISSUER MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151
\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 2"
#
# Issuer: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM
# Serial Number: 1289 (0x509)
# Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 18:27:00 2006
# Not Valid After : Mon Nov 24 18:23:33 2031
# Fingerprint (SHA-256):
85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86
# Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003

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\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\005\011
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\267\060\202\003\237\240\003\002\001\002\002\002\005
\011\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\060\036\027\015\060\066\061\061\062
\064\061\070\062\067\060\060\132\027\015\063\061\061\061\062\064
\061\070\062\063\063\063\132\060\105\061\013\060\011\006\003\125
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126
\141\144\151\163\040\122\157\157\164\040\103\101\040\062\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\232
\030\312\113\224\015\000\055\257\003\051\212\360\017\201\310\256
\114\031\205\035\010\237\253\051\104\205\363\057\201\255\062\036
\220\106\277\243\206\046\032\036\376\176\034\030\072\134\234\140
\027\052\072\164\203\063\060\175\141\124\021\313\355\253\340\346
\322\242\176\365\153\157\030\267\012\013\055\375\351\076\357\012
\306\263\020\351\334\302\106\027\370\135\375\244\332\377\236\111
\132\234\346\063\346\044\226\367\077\272\133\053\034\172\065\302
\326\147\376\253\146\120\213\155\050\140\053\357\327\140\303\307
\223\274\215\066\221\363\177\370\333\021\023\304\234\167\166\301
\256\267\002\152\201\172\251\105\203\342\005\346\271\126\301\224
\067\217\110\161\143\042\354\027\145\007\225\212\113\337\217\306
\132\012\345\260\343\137\136\153\021\253\014\371\205\353\104\351
\370\004\163\362\351\376\134\230\214\365\163\257\153\264\176\315
\324\134\002\053\114\071\341\262\225\225\055\102\207\327\325\263
\220\103\267\154\023\361\336\335\366\304\370\211\077\321\165\365
\222\303\221\325\212\210\320\220\354\334\155\336\211\302\145\161
\226\213\015\003\375\234\277\133\026\254\222\333\352\376\171\174
\255\353\257\367\026\313\333\315\045\053\345\037\373\232\237\342
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\121\314\072\123\014\110\346\016\275\311\264\166\006\122\346\021
\023\205\162\143\003\004\340\004\066\053\040\031\002\350\164\247
\037\266\311\126\146\360\165\045\334\147\301\016\141\140\210\263
\076\321\250\374\243\332\035\260\321\261\043\124\337\104\166\155
\355\101\330\301\262\042\266\123\034\337\065\035\334\241\167\052
\061\344\055\365\345\345\333\310\340\377\345\200\327\013\143\240
\377\063\241\017\272\054\025\025\352\227\263\322\242\265\276\362
\214\226\036\032\217\035\154\244\141\067\271\206\163\063\327\227
\226\236\043\175\202\244\114\201\342\241\321\272\147\137\225\007
\243\047\021\356\026\020\173\274\105\112\114\262\004\322\253\357
\325\375\014\121\316\120\152\010\061\371\221\332\014\217\144\134
\003\303\072\213\040\077\156\215\147\075\072\326\376\175\133\210
\311\136\373\314\141\334\213\063\167\323\104\062\065\011\142\004
\222\026\020\330\236\047\107\373\073\041\343\370\353\035\133\002
\003\001\000\001\243\201\260\060\201\255\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003\125
\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016\004
\026\004\024\032\204\142\274\110\114\063\045\004\324\356\320\366
\003\304\031\106\321\224\153\060\156\006\003\125\035\043\004\147
\060\145\200\024\032\204\142\274\110\114\063\045\004\324\356\320
\366\003\304\031\106\321\224\153\241\111\244\107\060\105\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\033\060\031\006\003\125\004\003\023
\022\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\062\202\002\005\011\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\003\202\002\001\000\076\012\026\115\237
\006\133\250\256\161\135\057\005\057\147\346\023\105\203\304\066
\366\363\300\046\014\015\265\107\144\135\370\264\162\311\106\245
\003\030\047\125\211\170\175\166\352\226\064\200\027\040\334\347
\203\370\215\374\007\270\332\137\115\056\147\262\204\375\331\104
\374\167\120\201\346\174\264\311\015\013\162\123\370\166\007\007
\101\107\226\014\373\340\202\046\223\125\214\376\042\037\140\145
\174\137\347\046\263\367\062\220\230\120\324\067\161\125\366\222
\041\170\367\225\171\372\370\055\046\207\146\126\060\167\246\067
\170\063\122\020\130\256\077\141\216\362\152\261\357\030\176\112
\131\143\312\215\242\126\325\247\057\274\126\037\317\071\301\342
\373\012\250\025\054\175\115\172\143\306\154\227\104\074\322\157
\303\112\027\012\370\220\322\127\242\031\121\245\055\227\101\332
\007\117\251\120\332\220\215\224\106\341\076\360\224\375\020\000
\070\365\073\350\100\341\264\156\126\032\040\314\157\130\215\355
\056\105\217\326\351\223\077\347\261\054\337\072\326\042\214\334
\204\273\042\157\320\370\344\306\071\351\004\210\074\303\272\353
\125\172\155\200\231\044\365\154\001\373\370\227\260\224\133\353
\375\322\157\361\167\150\015\065\144\043\254\270\125\241\003\321
\115\102\031\334\370\165\131\126\243\371\250\111\171\370\257\016
\271\021\240\174\267\152\355\064\320\266\046\142\070\032\207\014
\370\350\375\056\323\220\177\007\221\052\035\326\176\134\205\203


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\231\260\070\010\077\351\136\371\065\007\344\311\142\156\127\177
\247\120\225\367\272\310\233\346\216\242\001\305\326\146\277\171
\141\363\074\034\341\271\202\134\135\240\303\351\330\110\275\031
\242\021\024\031\156\262\206\033\150\076\110\067\032\210\267\135
\226\136\234\307\357\047\142\010\342\221\031\134\322\361\041\335
\272\027\102\202\227\161\201\123\061\251\237\366\175\142\277\162
\341\243\223\035\314\212\046\132\011\070\320\316\327\015\200\026
\264\170\245\072\207\114\215\212\245\325\106\227\362\054\020\271
\274\124\042\300\001\120\151\103\236\364\262\357\155\370\354\332
\361\343\261\357\337\221\217\124\052\013\045\301\046\031\304\122
\020\005\145\325\202\020\352\302\061\315\056
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "QuoVadis Root CA 2"

Issuer: CN=QuoVadis Root

CA 2,O=QuoVadis Limited,C=BM

Serial Number: 1289 (0x509)

Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM

Not Valid Before: Fri Nov 24 18:27:00 2006

Not Valid After : Mon Nov 24 18:23:33 2031

Fingerprint (SHA-256):

85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86

Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\312\072\373\317\022\100\066\113\104\262\026\040\210\200\110\071
\031\223\174\367
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\136\071\173\335\370\272\354\202\351\254\142\272\014\124\000\053
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\002\005\011
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3"
#
# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Serial Number: 1478 (0x5c6)
# Subject: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 19:11:23 2006
# Not Valid After : Mon Nov 24 19:06:44 2031
# Fingerprint (SHA-256):
18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35
# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "QuoVadis Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\005\306
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\235\060\202\004\205\240\003\002\001\002\002\002\005
\306\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061

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\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\060\036\027\015\060\066\061\061\062
\064\061\071\061\061\062\063\132\027\015\063\061\061\061\062\064
\061\071\060\066\064\064\132\060\105\061\013\060\011\006\003\125
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126
\141\144\151\163\040\122\157\157\164\040\103\101\040\063\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\314
\127\102\026\124\234\346\230\323\323\115\356\376\355\307\237\103
\071\112\145\263\350\026\210\064\333\015\131\221\164\317\222\270
\004\100\255\002\113\061\253\274\215\221\150\330\040\016\032\001
\342\032\173\116\027\135\342\212\267\077\231\032\315\353\141\253
\302\145\246\037\267\267\275\267\217\374\375\160\217\013\240\147
\276\001\242\131\317\161\346\017\051\166\377\261\126\171\105\053
\037\236\172\124\350\243\051\065\150\244\001\117\017\244\056\067
\357\033\277\343\217\020\250\162\253\130\127\347\124\206\310\311
\363\133\332\054\332\135\216\156\074\243\076\332\373\202\345\335
\362\134\262\005\063\157\212\066\316\320\023\116\377\277\112\014
\064\114\246\303\041\275\120\004\125\353\261\273\235\373\105\036
\144\025\336\125\001\214\002\166\265\313\241\077\102\151\274\057
\275\150\103\026\126\211\052\067\141\221\375\246\256\116\300\313
\024\145\224\067\113\222\006\357\004\320\310\234\210\333\013\173
\201\257\261\075\052\304\145\072\170\266\356\334\200\261\322\323
\231\234\072\356\153\132\153\263\215\267\325\316\234\302\276\245
\113\057\026\261\236\150\073\006\157\256\175\237\370\336\354\314
\051\247\230\243\045\103\057\357\361\137\046\341\210\115\370\136
\156\327\331\024\156\031\063\151\247\073\204\211\223\304\123\125
\023\241\121\170\100\370\270\311\242\356\173\272\122\102\203\236
\024\355\005\122\132\131\126\247\227\374\235\077\012\051\330\334
\117\221\016\023\274\336\225\244\337\213\231\276\254\233\063\210
\357\265\201\257\033\306\042\123\310\366\307\356\227\024\260\305
\174\170\122\310\360\316\156\167\140\204\246\351\052\166\040\355
\130\001\027\060\223\351\032\213\340\163\143\331\152\222\224\111
\116\264\255\112\205\304\243\042\060\374\011\355\150\042\163\246
\210\014\125\041\130\305\341\072\237\052\335\312\341\220\340\331
\163\253\154\200\270\350\013\144\223\240\234\214\031\377\263\322
\014\354\221\046\207\212\263\242\341\160\217\054\012\345\315\155
\150\121\353\332\077\005\177\213\062\346\023\134\153\376\137\100
\342\042\310\264\264\144\117\326\272\175\110\076\250\151\014\327
\273\206\161\311\163\270\077\073\235\045\113\332\377\100\353\002
\003\001\000\001\243\202\001\225\060\202\001\221\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\201\341
\006\003\125\035\040\004\201\331\060\201\326\060\201\323\006\011
\053\006\001\004\001\276\130\000\003\060\201\305\060\201\223\006

\010\053\006\001\005\005\007\002\002\060\201\206\032\201\203\101
\156\171\040\165\163\145\040\157\146\040\164\150\151\163\040\103
\145\162\164\151\146\151\143\141\164\145\040\143\157\156\163\164
\151\164\165\164\145\163\040\141\143\143\145\160\164\141\156\143
\145\040\157\146\040\164\150\145\040\121\165\157\126\141\144\151
\163\040\122\157\157\164\040\103\101\040\063\040\103\145\162\164
\151\146\151\143\141\164\145\040\120\157\154\151\143\171\040\057
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\120
\162\141\143\164\151\143\145\040\123\164\141\164\145\155\145\156
\164\056\060\055\006\010\053\006\001\005\005\007\002\001\026\041
\150\164\164\160\072\057\057\167\167\167\056\161\165\157\166\141
\144\151\163\147\154\157\142\141\154\056\143\157\155\057\143\160
\163\060\013\006\003\125\035\017\004\004\003\002\001\006\060\035
\006\003\125\035\016\004\026\004\024\362\300\023\340\202\103\076
\373\356\057\147\062\226\065\134\333\270\313\002\320\060\156\006
\003\125\035\043\004\147\060\145\200\024\362\300\023\340\202\103
\076\373\356\057\147\062\226\065\134\333\270\313\002\320\241\111
\244\107\060\105\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\033\060\031
\006\003\125\004\003\023\022\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\063\202\002\005\306\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\002\001
\000\117\255\240\054\114\372\300\362\157\367\146\125\253\043\064
\356\347\051\332\303\133\266\260\203\331\320\320\342\041\373\363
\140\247\073\135\140\123\047\242\233\366\010\042\052\347\277\240
\162\345\234\044\152\061\261\220\172\047\333\204\021\211\047\246
\167\132\070\327\277\254\206\374\356\135\203\274\006\306\321\167
\153\017\155\044\057\113\172\154\247\007\226\312\343\204\237\255
\210\213\035\253\026\215\133\146\027\331\026\364\213\200\322\335
\370\262\166\303\374\070\023\252\014\336\102\151\053\156\363\074
\353\200\047\333\365\246\104\015\237\132\125\131\013\325\015\122
\110\305\256\237\362\057\200\305\352\062\120\065\022\227\056\301
\341\377\361\043\210\121\070\237\362\146\126\166\347\017\121\227
\245\122\014\115\111\121\225\066\075\277\242\113\014\020\035\206
\231\114\252\363\162\021\223\344\352\366\233\332\250\135\247\115
\267\236\002\256\163\000\310\332\043\003\350\371\352\031\164\142
\000\224\313\042\040\276\224\247\131\265\202\152\276\231\171\172
\251\362\112\044\122\367\164\375\272\116\346\250\035\002\156\261
\015\200\104\301\256\323\043\067\137\273\205\174\053\222\056\350
\176\245\213\335\231\341\277\047\157\055\135\252\173\207\376\012
\335\113\374\216\365\046\344\156\160\102\156\063\354\061\236\173
\223\301\344\311\151\032\075\300\153\116\042\155\356\253\130\115
\306\320\101\301\053\352\117\022\207\136\353\105\330\154\365\230
\002\323\240\330\125\212\006\231\031\242\240\167\321\060\236\254
\314\165\356\203\365\260\142\071\317\154\127\342\114\322\221\013
\016\165\050\033\232\277\375\032\103\361\312\167\373\073\217\141
\270\151\050\026\102\004\136\160\052\034\041\330\217\341\275\043

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\133\055\164\100\222\331\143\031\015\163\335\151\274\142\107\274
\340\164\053\262\353\175\276\101\033\265\300\106\305\241\042\313
\137\116\301\050\222\336\030\272\325\052\050\273\021\213\027\223
\230\231\140\224\134\043\317\132\047\227\136\013\005\006\223\067
\036\073\151\066\353\251\236\141\035\217\062\332\216\014\326\164
\076\173\011\044\332\001\167\107\304\073\315\064\214\231\365\312
\341\045\141\063\262\131\033\342\156\327\067\127\266\015\251\022
\332
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "QuoVadis Root CA 3"
# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Serial Number: 1478 (0x5c6)
# Subject:
  CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 19:11:23 2006
# Not Valid After : Mon Nov 24 19:06:44 2031
# Fingerprint (SHA-256):
18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35
# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\111\024\367\330\164\225\035\335\256\002\300\276\375\072\055
\202\165\121\205
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\061\205\074\142\224\227\143\271\252\375\211\116\257\157\340\317
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\005\306
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

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CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication Root CA"
#
# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Not Valid Before: Tue Sep 30 04:20:49 2003
# Not Valid After : Sat Sep 30 04:20:49 2023
# Fingerprint (SHA-256):
E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C
# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication
Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\132\060\202\002\102\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061\030
\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040\124
\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125\004

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\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155\155
\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103\101
\061\060\036\027\015\060\063\060\071\063\060\060\064\062\060\064
\071\132\027\015\062\063\060\071\063\060\060\064\062\060\064\071
\132\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120
\061\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115
\040\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003
\125\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157
\155\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164
\103\101\061\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\263\263\376\177\323\155\261\357\026\174\127\245
\014\155\166\212\057\113\277\144\373\114\356\212\360\363\051\174
\365\377\356\052\340\351\351\272\133\144\042\232\232\157\054\072
\046\151\121\005\231\046\334\325\034\152\161\306\232\175\036\235
\335\174\154\306\214\147\147\112\076\370\161\260\031\047\251\011
\014\246\225\277\113\214\014\372\125\230\073\330\350\042\241\113
\161\070\171\254\227\222\151\263\211\176\352\041\150\006\230\024
\226\207\322\141\066\274\155\047\126\236\127\356\300\300\126\375
\062\317\244\331\216\302\043\327\215\250\363\330\045\254\227\344
\160\070\364\266\072\264\235\073\227\046\103\243\241\274\111\131
\162\114\043\060\207\001\130\366\116\276\034\150\126\146\257\315
\101\135\310\263\115\052\125\106\253\037\332\036\342\100\075\333
\315\175\271\222\200\234\067\335\014\226\144\235\334\042\367\144
\213\337\141\336\025\224\122\025\240\175\122\311\113\250\041\311
\306\261\355\313\303\225\140\321\017\360\253\160\370\337\313\115
\176\354\326\372\253\331\275\177\124\362\245\351\171\372\331\326
\166\044\050\163\002\003\001\000\001\243\077\060\075\060\035\006
\003\125\035\016\004\026\004\024\240\163\111\231\150\334\205\133
\145\343\233\050\057\127\237\275\063\274\007\110\060\013\006\003
\125\035\017\004\004\003\002\001\006\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\150\100
\251\250\273\344\117\135\171\263\005\265\027\263\140\023\353\306
\222\135\340\321\323\152\376\373\276\233\155\277\307\005\155\131
\040\304\034\360\267\332\204\130\002\143\372\110\026\357\117\245
\013\367\112\230\362\077\236\033\255\107\153\143\316\010\107\353
\122\077\170\234\257\115\256\370\325\117\317\232\230\052\020\101
\071\122\304\335\331\233\016\357\223\001\256\262\056\312\150\102
\044\102\154\260\263\072\076\315\351\332\110\304\025\313\351\371
\007\017\222\120\111\212\335\061\227\137\311\351\067\252\073\131
\145\227\224\062\311\263\237\076\072\142\130\305\111\255\142\016
\161\245\062\252\057\306\211\166\103\100\023\023\147\075\242\124
\045\020\313\361\072\362\331\372\333\111\126\273\246\376\247\101
\065\303\340\210\141\311\210\307\337\066\020\042\230\131\352\260
\112\373\126\026\163\156\254\115\367\042\241\117\255\035\172\055
\105\047\345\060\301\136\362\332\023\313\045\102\121\225\107\003
\214\154\041\314\164\102\355\123\377\063\213\217\017\127\001\026

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\057\317\246\356\311\160\042\024\275\375\276\154\013\003
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Security Communication Root CA"
# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Not Valid Before: Tue Sep 30 04:20:49 2003
# Not Valid After : Sat Sep 30 04:20:49 2023
# Fingerprint (SHA-256):
E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C
# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\066\261\053\111\371\201\236\327\114\236\274\070\017\306\126\217
\135\254\262\367
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\361\274\143\152\124\340\265\047\365\315\347\032\343\115\156\112
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Camerfirma Chambers of Commerce Root"

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#
# Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Serial Number: 0 (0x0)
# Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Not Valid Before: Tue Sep 30 16:13:43 2003
# Not Valid After : Wed Sep 30 16:13:44 2037
# Fingerprint (SHA-256):
0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3
# Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Camerfirma Chambers of Commerce Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\275\060\202\003\245\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
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\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061\047
\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155\145
\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101\070
\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004\013
\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150\141
\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060\040
\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163\040
\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157\164
\060\036\027\015\060\063\060\071\063\060\061\066\061\063\064\063
\132\027\015\063\067\060\071\063\060\061\066\061\063\064\064\132
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164\060\202\001\040\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\015\000\060\202\001\010\002\202\001
\001\000\267\066\125\345\245\135\030\060\340\332\211\124\221\374
\310\307\122\370\057\120\331\357\261\165\163\145\107\175\033\133
\272\165\305\374\241\210\044\372\057\355\312\010\112\071\124\304
\121\172\265\332\140\352\070\074\201\262\313\361\273\331\221\043
\077\110\001\160\165\251\005\052\255\037\161\363\311\124\075\035
\006\152\100\076\263\014\205\356\134\033\171\302\142\304\270\066
\216\065\135\001\014\043\004\107\065\252\233\140\116\240\146\075
\313\046\012\234\100\241\364\135\230\277\161\253\245\000\150\052
\355\203\172\017\242\024\265\324\042\263\200\260\074\014\132\121
\151\055\130\030\217\355\231\236\361\256\342\225\346\366\107\250
\326\014\017\260\130\130\333\303\146\067\236\233\221\124\063\067
\322\224\034\152\110\311\311\362\245\332\245\014\043\367\043\016
\234\062\125\136\161\234\204\005\121\232\055\375\346\116\052\064
\132\336\312\100\067\147\014\124\041\125\167\332\012\014\314\227
\256\200\334\224\066\112\364\076\316\066\023\036\123\344\254\116
\072\005\354\333\256\162\234\070\213\320\071\073\211\012\076\167
\376\165\002\001\003\243\202\001\104\060\202\001\100\060\022\006
\003\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001
\014\060\074\006\003\125\035\037\004\065\060\063\060\061\240\057
\240\055\206\053\150\164\164\160\072\057\057\143\162\154\056\143
\150\141\155\142\145\162\163\151\147\156\056\157\162\147\057\143
\150\141\155\142\145\162\163\162\157\157\164\056\143\162\154\060
\035\006\003\125\035\016\004\026\004\024\343\224\365\261\115\351
\333\241\051\133\127\213\115\166\006\166\341\321\242\212\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\021
\006\011\140\206\110\001\206\370\102\001\001\004\004\003\002\000
\007\060\047\006\003\125\035\021\004\040\060\036\201\034\143\150
\141\155\142\145\162\163\162\157\157\164\100\143\150\141\155\142

\145\162\163\151\147\156\056\157\162\147\060\047\006\003\125\035
\022\004\040\060\036\201\034\143\150\141\155\142\145\162\163\162
\157\157\164\100\143\150\141\155\142\145\162\163\151\147\156\056
\157\162\147\060\130\006\003\125\035\040\004\121\060\117\060\115
\006\013\053\006\001\004\001\201\207\056\012\003\001\060\076\060
\074\006\010\053\006\001\005\005\007\002\001\026\060\150\164\164
\160\072\057\057\143\160\163\056\143\150\141\155\142\145\162\163
\151\147\156\056\157\162\147\057\143\160\163\057\143\150\141\155
\142\145\162\163\162\157\157\164\056\150\164\155\154\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001
\000\014\101\227\302\032\206\300\042\174\237\373\220\363\032\321
\003\261\357\023\371\041\137\004\234\332\311\245\215\047\154\226
\207\221\276\101\220\001\162\223\347\036\175\137\366\211\306\135
\247\100\011\075\254\111\105\105\334\056\215\060\150\262\011\272
\373\303\057\314\272\013\337\077\167\173\106\175\072\022\044\216
\226\217\074\005\012\157\322\224\050\035\155\014\300\056\210\042
\325\330\317\035\023\307\360\110\327\327\005\247\317\307\107\236
\073\074\064\310\200\117\324\024\273\374\015\120\367\372\263\354
\102\137\251\335\155\310\364\165\317\173\301\162\046\261\001\034
\134\054\375\172\116\264\001\305\005\127\271\347\074\252\005\331
\210\351\007\106\101\316\357\101\201\256\130\337\203\242\256\312
\327\167\037\347\000\074\235\157\216\344\062\011\035\115\170\064
\170\064\074\224\233\046\355\117\161\306\031\172\275\040\042\110
\132\376\113\175\003\267\347\130\276\306\062\116\164\036\150\335
\250\150\133\263\076\356\142\175\331\200\350\012\165\172\267\356
\264\145\232\041\220\340\252\320\230\274\070\265\163\074\213\370
\334

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

For Email Distrust After: Mon Mar 01 00:00:00 2021

CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL

\062\061\060\063\060\061\060\060\060\060\060\060\132

END

Trust for "Camerfirma Chambers of Commerce Root"

Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU

Serial Number: 0 (0x0)

Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU

Not Valid Before: Tue Sep 30 16:13:43 2003

Not Valid After : Wed Sep 30 16:13:44 2037

Fingerprint (SHA-256):

0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3

Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Camerfirma Chambers of Commerce Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\156\072\125\244\031\014\031\134\223\204\074\300\333\162\056\061
\060\141\360\261
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\260\001\356\024\331\257\051\030\224\166\216\361\151\063\052\204
END
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "XRamp Global CA Root"
#
# Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US
# Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad
# Subject: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US
# Not Valid Before: Mon Nov 01 17:14:04 2004
# Not Valid After : Mon Jan 01 05:37:19 2035
# Fingerprint (SHA-256):
CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2
# Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "XRamp Global CA Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217
\240\255
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\060\060\202\003\030\240\003\002\001\002\002\020\120
\224\154\354\030\352\325\234\115\325\227\357\165\217\240\255\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\202\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036
\060\034\006\003\125\004\013\023\025\167\167\167\056\170\162\141
\155\160\163\145\143\165\162\151\164\171\056\143\157\155\061\044
\060\042\006\003\125\004\012\023\033\130\122\141\155\160\040\123
\145\143\165\162\151\164\171\040\123\145\162\166\151\143\145\163
\040\111\156\143\061\055\060\053\006\003\125\004\003\023\044\130
\122\141\155\160\040\107\154\157\142\141\154\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\060\036\027\015\060\064\061\061\060\061\061\067\061
\064\060\064\132\027\015\063\065\060\061\060\061\060\065\063\067
\061\071\132\060\201\202\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\036\060\034\006\003\125\004\013\023\025\167\167
```

\167\056\170\162\141\155\160\163\145\143\165\162\151\164\171\056
\143\157\155\061\044\060\042\006\003\125\004\012\023\033\130\122
\141\155\160\040\123\145\143\165\162\151\164\171\040\123\145\162
\166\151\143\145\163\040\111\156\143\061\055\060\053\006\003\125
\004\003\023\044\130\122\141\155\160\040\107\154\157\142\141\154
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\230\044\036\275\025\264\272
\337\307\214\245\047\266\070\013\151\363\266\116\250\054\056\041
\035\134\104\337\041\135\176\043\164\376\136\176\264\112\267\246
\255\037\256\340\006\026\342\233\133\331\147\164\153\135\200\217
\051\235\206\033\331\234\015\230\155\166\020\050\130\344\145\260
\177\112\230\171\237\340\303\061\176\200\053\265\214\300\100\073
\021\206\320\313\242\206\066\140\244\325\060\202\155\331\156\320
\017\022\004\063\227\137\117\141\132\360\344\371\221\253\347\035
\073\274\350\317\364\153\055\064\174\342\110\141\034\216\363\141
\104\314\157\240\112\251\224\260\115\332\347\251\064\172\162\070
\250\101\314\074\224\021\175\353\310\246\214\267\206\313\312\063
\073\331\075\067\213\373\172\076\206\054\347\163\327\012\127\254
\144\233\031\353\364\017\004\010\212\254\003\027\031\144\364\132
\045\042\215\064\054\262\366\150\035\022\155\323\212\036\024\332
\304\217\246\342\043\205\325\172\015\275\152\340\351\354\354\027
\273\102\033\147\252\045\355\105\203\041\374\301\311\174\325\142
\076\372\362\305\055\323\375\324\145\002\003\001\000\001\243\201
\237\060\201\234\060\023\006\011\053\006\001\004\001\202\067\024
\002\004\006\036\004\000\103\000\101\060\013\006\003\125\035\017
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\306\117\242\075\006\143\204\011\234\316\142\344\004\254
\215\134\265\351\266\033\060\066\006\003\125\035\037\004\057\060
\055\060\053\240\051\240\047\206\045\150\164\164\160\072\057\057
\143\162\154\056\170\162\141\155\160\163\145\143\165\162\151\164
\171\056\143\157\155\057\130\107\103\101\056\143\162\154\060\020
\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\001\001\000\221\025\071\003\001\033\147\373\112\034\371\012
\140\133\241\332\115\227\142\371\044\123\047\327\202\144\116\220
\056\303\111\033\053\232\334\374\250\170\147\065\361\035\360\021
\275\267\110\343\020\366\015\337\077\322\311\266\252\125\244\110
\272\002\333\336\131\056\025\133\073\235\026\175\107\327\067\352
\137\115\166\022\066\273\037\327\241\201\004\106\040\243\054\155
\251\236\001\176\077\051\316\000\223\337\375\311\222\163\211\211
\144\236\347\053\344\034\221\054\322\271\316\175\316\157\061\231
\323\346\276\322\036\220\360\011\024\171\134\043\253\115\322\332
\041\037\115\231\171\235\341\317\047\237\020\233\034\210\015\260
\212\144\101\061\270\016\154\220\044\244\233\134\161\217\272\273
\176\034\033\333\152\200\017\041\274\351\333\246\267\100\364\262

```
\213\251\261\344\357\232\032\320\075\151\231\356\250\050\243\341
\074\263\360\262\021\234\317\174\100\346\335\347\103\175\242\330
\072\265\251\215\362\064\231\304\324\020\341\006\375\011\204\020
\073\356\304\114\364\354\047\174\102\302\164\174\202\212\011\311
\264\003\045\274
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "XRamp Global CA Root"

Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US

Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad

Subject: CN=XRamp

Global Certification Authority,O=XRamp Security Services Inc,OU=www.xrampsecurity.com,C=US

Not Valid Before: Mon Nov 01 17:14:04 2004

Not Valid After : Mon Jan 01 05:37:19 2035

Fingerprint (SHA-256):

CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2

Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "XRamp Global CA Root"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\001\206\321\353\234\206\245\101\004\317\060\124\363\114\122
\267\345\130\306
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\241\013\104\263\312\020\330\000\156\235\017\330\017\222\012\321
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217
```

```

\240\255
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Go Daddy Class 2 CA"
#
# Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US
# Serial Number: 0 (0x0)
# Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US
# Not Valid Before: Tue Jun 29 17:06:20 2004
# Not Valid After : Thu Jun
29 17:06:20 2034
# Fingerprint (SHA-256):
C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4
# Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Go Daddy Class 2 CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END

```


CKA_VALUE MULTILINE_OCTAL

\060\202\004\000\060\202\002\350\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061\041
\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157\040
\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156\143
\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040\104
\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\060\036\027\015\060\064\060\066\062\071\061\067
\060\066\062\060\132\027\015\063\064\060\066\062\071\061\067\060
\066\062\060\132\060\143\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\041\060\037\006\003\125\004\012\023\030\124\150
\145\040\107\157\040\104\141\144\144\171\040\107\162\157\165\160
\054\040\111\156\143\056\061\061\060\057\006\003\125\004\013\023
\050\107\157\040\104\141\144\144\171\040\103\154\141\163\163\040
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\060\202\001\040\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\015
\000\060\202\001\010\002\202\001\001\000\336\235\327\352\127\030
\111\241\133\353\327\137\110\206\352\276\335\377\344\357\147\034
\364\145\150\263\127\161\240\136\167\273\355\233\111\351\160\200
\075\126\030\143\010\157\332\362\314\320\077\177\002\124\042\124
\020\330\262\201\324\300\165\075\113\177\307\167\303\076\170\253
\032\003\265\040\153\057\152\053\261\305\210\176\304\273\036\260
\301\330\105\047\157\252\067\130\367\207\046\327\330\055\366\251
\027\267\037\162\066\116\246\027\077\145\230\222\333\052\156\135
\242\376\210\340\013\336\177\345\215\025\341\353\313\072\325\342
\022\242\023\055\330\216\257\137\022\075\240\010\005\010\266\134
\245\145\070\004\105\231\036\243\140\140\164\305\101\245\162\142
\033\142\305\037\157\137\032\102\276\002\121\145\250\256\043\030
\152\374\170\003\251\115\177\200\303\372\253\132\374\241\100\244
\312\031\026\376\262\310\357\136\163\015\356\167\275\232\366\171
\230\274\261\007\147\242\025\015\335\240\130\306\104\173\012\076
\142\050\137\272\101\007\123\130\317\021\176\070\164\305\370\377
\265\151\220\217\204\164\352\227\033\257\002\001\003\243\201\300
\060\201\275\060\035\006\003\125\035\016\004\026\004\024\322\304
\260\322\221\324\114\021\161\263\141\313\075\241\376\335\250\152
\324\343\060\201\215\006\003\125\035\043\004\201\205\060\201\202
\200\024\322\304\260\322\221\324\114\021\161\263\141\313\075\241
\376\335\250\152\324\343\241\147\244\145\060\143\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\041\060\037\006\003\125
\004\012\023\030\124\150\145\040\107\157\040\104\141\144\144\171
\040\107\162\157\165\160\054\040\111\156\143\056\061\061\060\057
\006\003\125\004\013\023\050\107\157\040\104\141\144\144\171\040
\103\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202
\001\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377

```
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\001\001\000\062\113\363\262\312\076\221\374\022\306\241\007
\214\216\167\240\063\006\024\134\220\036\030\367\010\246\075\012
\031\371\207\200\021\156\151\344\226\027\060\377\064\221\143\162
\070\356\314\034\001\243\035\224\050\244\061\366\172\304\124\327
\366\345\061\130\003\242\314\316\142\333\224\105\163\265\277\105
\311\044\265\325\202\002\255\043\171\151\215\270\266\115\316\317
\114\312\063\043\350\034\210\252\235\213\101\156\026\311\040\345
\211\236\315\073\332\160\367\176\231\046\040\024\124\045\253\156
\163\205\346\233\041\235\012\154\202\016\250\370\302\014\372\020
\036\154\226\357\207\015\304\017\141\213\255\356\203\053\225\370
\216\222\204\162\071\353\040\352\203\355\203\315\227\156\010\274
\353\116\046\266\163\053\344\323\366\114\376\046\161\342\141\021
\164\112\377\127\032\207\017\165\110\056\317\121\151\027\240\002
\022\141\225\325\321\100\262\020\114\356\304\254\020\103\246\245
\236\012\325\225\142\232\015\317\210\202\305\062\014\344\053\237
\105\346\015\237\050\234\261\271\052\132\127\255\067\017\257\035
\177\333\275\237
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Go Daddy Class 2 CA"

Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

Serial Number: 0 (0x0)

Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

Not Valid Before: Tue

Jun 29 17:06:20 2004

Not Valid After : Thu Jun 29 17:06:20 2034

Fingerprint (SHA-256):

C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4

Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Go Daddy Class 2 CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\047\226\272\346\077\030\001\342\167\046\033\240\327\167\160\002
\217\040\356\344
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\221\336\006\045\253\332\375\062\027\014\273\045\027\052\204\147
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\001\000
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Starfield Class 2 CA"

#

Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Serial Number: 0 (0x0)

Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Not Valid Before: Tue Jun 29 17:39:16 2004

Not Valid After : Thu Jun 29 17:39:16 2034

Fingerprint (SHA-256):

14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58

Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE

CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Starfield Class 2 CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
```

\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\017\060\202\002\367\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061\045
\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151\145
\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163\054
\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023\051
\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163\040
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\060\036\027\015\060\064\060
\066\062\071\061\067\063\071\061\066\132\027\015\063\064\060\066
\062\071\061\067\063\071\061\066\132\060\150\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\045\060\043\006\003\125\004
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143
\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061
\062\060\060\006\003\125\004\013\023\051\123\164\141\162\146\151
\145\154\144\040\103\154\141\163\163\040\062\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\060\202\001\040\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\015\000\060\202\001\010\002
\202\001\001\000\267\062\310\376\351\161\246\004\205\255\014\021
\144\337\316\115\357\310\003\030\207\077\241\253\373\074\246\237
\360\303\241\332\324\330\156\053\123\220\373\044\244\076\204\360
\236\350\137\354\345\047\104\365\050\246\077\173\336\340\052\360
\310\257\123\057\236\312\005\001\223\036\217\146\034\071\247\115
\372\132\266\163\004\045\146\353\167\177\347\131\306\112\231\045
\024\124\353\046\307\363\177\031\325\060\160\217\257\260\106\052
\377\255\353\051\355\327\237\252\004\207\243\324\371\211\245\064
\137\333\103\221\202\066\331\146\074\261\270\271\202\375\234\072
\076\020\310\073\357\006\145\146\172\233\031\030\075\377\161\121
\074\060\056\137\276\075\167\163\262\135\006\154\303\043\126\232
\053\205\046\222\034\247\002\263\344\077\015\257\010\171\202\270
\066\075\352\234\323\065\263\274\151\312\365\314\235\350\375\144
\215\027\200\063\156\136\112\135\231\311\036\207\264\235\032\300
\325\156\023\065\043\136\337\233\137\075\357\326\367\166\302\352
\076\273\170\015\034\102\147\153\004\330\370\326\332\157\213\362
\104\240\001\253\002\001\003\243\201\305\060\201\302\060\035\006
\003\125\035\016\004\026\004\024\277\137\267\321\316\335\037\206
\364\133\125\254\334\327\020\302\016\251\210\347\060\201\222\006

\003\125\035\043\004\201\212\060\201\207\200\024\277\137\267\321
\316\335\037\206\364\133\125\254\334\327\020\302\016\251\210\347
\241\154\244\152\060\150\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\045\060\043\006\003\125\004\012\023\034\123\164
\141\162\146\151\145\154\144\040\124\145\143\150\156\157\154\157
\147\151\145\163\054\040\111\156\143\056\061\062\060\060\006\003
\125\004\013\023\051\123\164\141\162\146\151\145\154\144\040\103
\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202\001
\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202
\001\001\000\005\235\077\210\235\321\311\032\125\241\254\151\363
\363\131\332\233\001\207\032\117\127\251\241\171\011\052\333\367
\057\262\036\314\307\136\152\330\203\207\241\227\357\111\065\076
\167\006\101\130\142\277\216\130\270\012\147\077\354\263\335\041
\146\037\311\124\372\162\314\075\114\100\330\201\257\167\236\203
\172\273\242\307\365\064\027\216\331\021\100\364\374\054\052\115
\025\177\247\142\135\056\045\323\000\013\040\032\035\150\371\027
\270\364\275\213\355\050\131\335\115\026\213\027\203\310\262\145
\307\055\172\245\252\274\123\206\155\335\127\244\312\370\040\101
\013\150\360\364\373\164\276\126\135\172\171\365\371\035\205\343
\055\225\276\365\161\220\103\314\215\037\232\000\012\207\051\351
\125\042\130\000\043\352\343\022\103\051\133\107\010\335\214\101
\152\145\006\250\345\041\252\101\264\225\041\225\271\175\321\064
\253\023\326\255\274\334\342\075\071\315\275\076\165\160\241\030
\131\003\311\042\264\217\234\325\136\052\327\245\266\324\012\155
\370\267\100\021\106\232\037\171\016\142\277\017\227\354\340\057
\037\027\224

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Starfield Class 2 CA"

Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Serial Number: 0 (0x0)

Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Not Valid Before: Tue Jun 29 17:39:16 2004

Not Valid After : Thu Jun 29 17:39:16 2034

Fingerprint (SHA-256):

14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58

#

Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

CKA_LABEL UTF8 "Starfield Class 2 CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\255\176\034\050\260\144\357\217\140\003\100\040\024\303\320\343
\067\016\265\212
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\062\112\113\273\310\143\151\233\276\164\232\306\335\035\106\044
END
CKA_ISSUER MULTILINE_OCTAL
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Assured ID Root CA"
#
# Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39
# Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C
# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT
MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023

```

\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360
\060\071

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\003\267\060\202\002\237\240\003\002\001\002\002\020\014
\347\340\345\027\330\106\376\217\345\140\374\033\360\060\071\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157
\157\164\040\103\101\060\036\027\015\060\066\061\061\061\060\060
\060\060\060\060\060\132\027\015\063\061\061\061\061\060\060\060
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145
\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145
\144\040\111\104\040\122\157\157\164\040\103\101\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\255\016\025
\316\344\103\200\134\261\207\363\267\140\371\161\022\245\256\334
\046\224\210\252\364\316\365\040\071\050\130\140\014\370\200\332
\251\025\225\062\141\074\265\261\050\204\212\212\334\237\012\014
\203\027\172\217\220\254\212\347\171\123\134\061\204\052\366\017
\230\062\066\166\314\336\335\074\250\242\357\152\373\041\362\122
\141\337\237\040\327\037\342\261\331\376\030\144\322\022\133\137
\371\130\030\065\274\107\315\241\066\371\153\177\324\260\070\076

\301\033\303\214\063\331\330\057\030\376\050\017\263\247\203\326
\303\156\104\300\141\065\226\026\376\131\234\213\166\155\327\361
\242\113\015\053\377\013\162\332\236\140\320\216\220\065\306\170
\125\207\040\241\317\345\155\012\310\111\174\061\230\063\154\042
\351\207\320\062\132\242\272\023\202\021\355\071\027\235\231\072
\162\241\346\372\244\331\325\027\061\165\256\205\175\042\256\077
\001\106\206\366\050\171\310\261\332\344\127\027\304\176\034\016
\260\264\222\246\126\263\275\262\227\355\252\247\360\267\305\250
\077\225\026\320\377\241\226\353\010\137\030\167\117\002\003\001
\000\001\243\143\060\141\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\105\353\242\257\364\222\313\202\061\055\121\213\247\247
\041\235\363\155\310\017\060\037\006\003\125\035\043\004\030\060
\026\200\024\105\353\242\257\364\222\313\202\061\055\121\213\247
\247\041\235\363\155\310\017\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\003\202\001\001\000\242\016\274\337\342
\355\360\343\162\163\172\144\224\277\367\162\146\330\062\344\102
\165\142\256\207\353\362\325\331\336\126\263\237\314\316\024\050
\271\015\227\140\134\022\114\130\344\323\075\203\111\105\130\227
\065\151\032\250\107\352\126\306\171\253\022\330\147\201\204\337
\177\011\074\224\346\270\046\054\040\275\075\263\050\211\367\137
\377\042\342\227\204\037\351\145\357\207\340\337\301\147\111\263
\135\353\262\011\052\353\046\355\170\276\175\077\053\363\267\046
\065\155\137\211\001\266\111\133\237\001\005\233\253\075\045\301
\314\266\177\302\361\157\206\306\372\144\150\353\201\055\224\353
\102\267\372\214\036\335\142\361\276\120\147\267\154\275\363\361
\037\153\014\066\007\026\177\067\174\251\133\155\172\361\022\106
\140\203\327\047\004\276\113\316\227\276\303\147\052\150\021\337
\200\347\014\063\146\277\023\015\024\156\363\177\037\143\020\036
\372\215\033\045\155\154\217\245\267\141\001\261\322\243\046\241
\020\161\235\255\342\303\371\303\231\121\267\053\007\010\316\056
\346\120\262\247\372\012\105\057\242\360\362

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Assured ID Root CA"

Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39

Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Fri Nov 10 00:00:00 2006

Not Valid After : Mon Nov 10 00:00:00 2031

Fingerprint (SHA-256):

3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C


```

# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\005\143\270\143\015\142\327\132\273\310\253\036\113\337\265\250
\231\262\115\103
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\207\316\013\173\052\016\111\000\341\130\161\233\067\250\223\162
END
CKA_ISSUER
MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360
\060\071
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root CA"
#
# Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a
#
Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61
# Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

```
CKA_LABEL UTF8 "DigiCert Global Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221
\307\112
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\257\060\202\002\227\240\003\002\001\002\002\020\010
\073\340\126\220\102\106\261\241\165\152\311\131\221\307\112\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\103
\101\060\036\027\015\060\066\061\061\061\060\060\060\060\060\060
\060\132\027\015\063\061\061\061\061\060\060\060\060\060\060\060
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103
\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013
\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157
\164\040\103\101\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\342\073\341\021\162\336\250\244\323\243\127
\252\120\242\217\013\167\220\311\242\245\356\022\316\226\133\001
```

\011\040\314\001\223\247\116\060\267\123\367\103\304\151\000\127
\235\342\215\042\335\207\006\100\000\201\011\316\316\033\203\277
\337\315\073\161\106\342\326\146\307\005\263\166\047\026\217\173
\236\036\225\175\356\267\110\243\010\332\326\257\172\014\071\006
\145\177\112\135\037\274\027\370\253\276\356\050\327\164\177\172
\170\231\131\205\150\156\134\043\062\113\277\116\300\350\132\155
\343\160\277\167\020\277\374\001\366\205\331\250\104\020\130\062
\251\165\030\325\321\242\276\107\342\047\152\364\232\063\370\111
\010\140\213\324\137\264\072\204\277\241\252\112\114\175\076\317
\117\137\154\166\136\240\113\067\221\236\334\042\346\155\316\024
\032\216\152\313\376\315\263\024\144\027\307\133\051\236\062\277
\362\356\372\323\013\102\324\253\267\101\062\332\014\324\357\370
\201\325\273\215\130\077\265\033\350\111\050\242\160\332\061\004
\335\367\262\026\362\114\012\116\007\250\355\112\075\136\265\177
\243\220\303\257\047\002\003\001\000\001\243\143\060\141\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\035\006\003\125\035\016\004\026\004\024\003\336\120\065\126\321
\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060\037
\006\003\125\035\043\004\030\060\026\200\024\003\336\120\065\126
\321\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202
\001\001\000\313\234\067\252\110\023\022\012\372\335\104\234\117
\122\260\364\337\256\004\365\171\171\010\243\044\030\374\113\053
\204\300\055\271\325\307\376\364\301\037\130\313\270\155\234\172
\164\347\230\051\253\021\265\343\160\240\241\315\114\210\231\223
\214\221\160\342\253\017\034\276\223\251\377\143\325\344\007\140
\323\243\277\235\133\011\361\325\216\343\123\364\216\143\372\077
\247\333\264\146\337\142\146\326\321\156\101\215\362\055\265\352
\167\112\237\235\130\342\053\131\300\100\043\355\055\050\202\105
\076\171\124\222\046\230\340\200\110\250\067\357\360\326\171\140
\026\336\254\350\016\315\156\254\104\027\070\057\111\332\341\105
\076\052\271\066\123\317\072\120\006\367\056\350\304\127\111\154
\141\041\030\325\004\255\170\074\054\072\200\153\247\353\257\025
\024\351\330\211\301\271\070\154\342\221\154\212\377\144\271\167
\045\127\060\300\033\044\243\341\334\351\337\107\174\265\264\044
\010\005\060\354\055\275\013\277\105\277\120\271\251\363\353\230
\001\022\255\310\210\306\230\064\137\215\012\074\306\351\325\225
\225\155\336

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Global Root CA"

Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a

```

# Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61
#
Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\250\230\135\072\145\345\345\304\262\327\326\155\100\306\335\057
\261\234\124\066
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\171\344\251\204\015\175\072\226\327\300\117\342\103\114\211\056
END
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221
\307\112
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert High Assurance EV Root CA"
#
# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77
# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF

```

Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert High Assurance EV Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106
\045\167
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\305\060\202\002\255\240\003\002\001\002\002\020\002
\254\134\046\152\013\100\233\217\013\171\362\256\106\045\167\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\154
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\053\060\051\006\003\125\004\003\023\042\104\151\147\151\103\145
\162\164\040\110\151\147\150\040\101\163\163\165\162\141\156\143
\145\040\105\126\040\122\157\157\164\040\103\101\060\036\027\015
\060\066\061\061\061\060\060\060\060\060\060\060\132\027\015\063
\061\061\061\061\060\060\060\060\060\060\060\132\060\154\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006
\003\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111
\156\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167
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\056\144\151\147\151\143\145\162\164\056\143\157\155\061\053\060
\051\006\003\125\004\003\023\042\104\151\147\151\103\145\162\164
\040\110\151\147\150\040\101\163\163\165\162\141\156\143\145\040
\105\126\040\122\157\157\164\040\103\101\060\202\001\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001
\017\000\060\202\001\012\002\202\001\001\000\306\314\345\163\346
\373\324\273\345\055\055\062\246\337\345\201\077\311\315\045\111
\266\161\052\303\325\224\064\147\242\012\034\260\137\151\246\100
\261\304\267\262\217\320\230\244\251\101\131\072\323\334\224\326
\074\333\164\070\244\112\314\115\045\202\367\112\245\123\022\070
\356\363\111\155\161\221\176\143\266\253\246\137\303\244\204\370
\117\142\121\276\370\305\354\333\070\222\343\006\345\010\221\014
\304\050\101\125\373\313\132\211\025\176\161\350\065\277\115\162
\011\075\276\072\070\120\133\167\061\033\215\263\307\044\105\232
\247\254\155\000\024\132\004\267\272\023\353\121\012\230\101\101
\042\116\145\141\207\201\101\120\246\171\134\211\336\031\112\127
\325\056\346\135\034\123\054\176\230\315\032\006\026\244\150\163
\320\064\004\023\134\241\161\323\132\174\125\333\136\144\341\067
\207\060\126\004\345\021\264\051\200\022\361\171\071\210\242\002
\021\174\047\146\267\210\267\170\362\312\012\250\070\253\012\144
\302\277\146\135\225\204\301\241\045\036\207\135\032\120\013\040
\022\314\101\273\156\013\121\070\270\113\313\002\003\001\000\001
\243\143\060\141\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024
\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002\357
\143\144\053\303\060\037\006\003\125\035\043\004\030\060\026\200
\024\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002
\357\143\144\053\303\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\003\202\001\001\000\034\032\006\227\334\327\234
\237\074\210\146\006\010\127\041\333\041\107\370\052\147\252\277
\030\062\166\100\020\127\301\212\363\172\331\021\145\216\065\372
\236\374\105\265\236\331\114\061\113\270\221\350\103\054\216\263
\170\316\333\343\123\171\161\326\345\041\224\001\332\125\207\232
\044\144\366\212\146\314\336\234\067\315\250\064\261\151\233\043
\310\236\170\042\053\160\103\343\125\107\061\141\031\357\130\305
\205\057\116\060\366\240\061\026\043\310\347\342\145\026\063\313
\277\032\033\240\075\370\312\136\213\061\213\140\010\211\055\014
\006\134\122\267\304\371\012\230\321\025\137\237\022\276\174\066
\143\070\275\104\244\177\344\046\053\012\304\227\151\015\351\214
\342\300\020\127\270\310\166\022\221\125\362\110\151\330\274\052
\002\133\017\104\324\040\061\333\364\272\160\046\135\220\140\236
\274\113\027\011\057\264\313\036\103\150\311\007\047\301\322\134
\367\352\041\271\150\022\234\074\234\277\236\374\200\134\233\143
\315\354\107\252\045\047\147\240\067\363\000\202\175\124\327\251
\370\351\056\023\243\167\350\037\112

END

CKA_NSS_MOZILLA_CA_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert High Assurance EV Root CA"
# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77
# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF
# Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert High Assurance EV Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\137\267\356\006\063\342\131\333\255\014\114\232\346\323\217\032
\141\307\334\045
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\324\164\336\127\134\071\262\323\234\205\203\305\300\145\111\212
END
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106
\045\167
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Gold CA - G2"
#

```

```
# Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Serial Number:00:bb:40:1c:43:f5:5e:4f:b0
# Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:30:35 2006
# Not Valid After : Sat Oct 25 08:30:35 2036
# Fingerprint (SHA-256):
62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95
# Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Gold CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\272\060\202\003\242\240\003\002\001\002\002\011\000
\273\100\034\103\365\136\117\260\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\105\061\013\060\011\006\003\125
\004\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023
\014\123\167\151\163\163\123\151\147\156\040\101\107\061\037\060
\035\006\003\125\004\003\023\026\123\167\151\163\163\123\151\147
\156\040\107\157\154\144\040\103\101\040\055\040\107\062\060\036
\027\015\060\066\061\060\062\065\060\070\063\060\063\065\132\027
\015\063\066\061\060\062\065\060\070\063\060\063\065\132\060\105
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025\060
\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151\147
\156\040\101\107\061\037\060\035\006\003\125\004\003\023\026\123
\167\151\163\163\123\151\147\156\040\107\157\154\144\040\103\101
\040\055\040\107\062\060\202\002\042\060\015\006\011\052\206\110
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\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002
\012\002\202\002\001\000\257\344\356\176\213\044\016\022\156\251
\120\055\026\104\073\222\222\134\312\270\135\204\222\102\023\052
\274\145\127\202\100\076\127\044\315\120\213\045\052\267\157\374
\357\242\320\300\037\002\044\112\023\226\217\043\023\346\050\130
\000\243\107\307\006\247\204\043\053\273\275\226\053\177\125\314
\213\301\127\037\016\142\145\017\335\075\126\212\163\332\256\176
\155\272\201\034\176\102\214\040\065\331\103\115\204\372\204\333
\122\054\363\016\047\167\013\153\277\021\057\162\170\237\056\330
\076\346\030\067\132\052\162\371\332\142\220\222\225\312\037\234
\351\263\074\053\313\363\001\023\277\132\317\301\265\012\140\275
\335\265\231\144\123\270\240\226\263\157\342\046\167\221\214\340
\142\020\002\237\064\017\244\325\222\063\121\336\276\215\272\204
\172\140\074\152\333\237\053\354\336\336\001\077\156\115\345\120
\206\313\264\257\355\104\100\305\312\132\214\332\322\053\174\250
\356\276\246\345\012\252\016\245\337\005\122\267\125\307\042\135
\062\152\227\227\143\023\333\311\333\171\066\173\205\072\112\305
\122\211\371\044\347\235\167\251\202\377\125\034\245\161\151\053
\321\002\044\362\263\046\324\153\332\004\125\345\301\012\307\155
\060\067\220\052\344\236\024\063\136\026\027\125\305\133\265\313
\064\211\222\361\235\046\217\241\007\324\306\262\170\120\333\014
\014\013\174\013\214\101\327\271\351\335\214\210\367\243\115\262
\062\314\330\027\332\315\267\316\146\235\324\375\136\377\275\227
\076\051\165\347\176\247\142\130\257\045\064\245\101\307\075\274
\015\120\312\003\003\017\010\132\037\225\163\170\142\277\257\162
\024\151\016\245\345\003\016\170\216\046\050\102\360\007\013\142
\040\020\147\071\106\372\251\003\314\004\070\172\146\357\040\203
\265\214\112\126\216\221\000\374\216\134\202\336\210\240\303\342
\150\156\175\215\357\074\335\145\364\135\254\121\357\044\200\256
\252\126\227\157\371\255\175\332\141\077\230\167\074\245\221\266
\034\214\046\332\145\242\011\155\301\342\124\343\271\312\114\114
\200\217\167\173\140\232\036\337\266\362\110\036\016\272\116\124
\155\230\340\341\242\032\242\167\120\317\304\143\222\354\107\031
\235\353\346\153\316\301\002\003\001\000\001\243\201\254\060\201
\251\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\035\006\003\125\035\016\004\026\004\024\133\045\173
\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347\360
\356\060\037\006\003\125\035\043\004\030\060\026\200\024\133\045
\173\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347
\360\356\060\106\006\003\125\035\040\004\077\060\075\060\073\006
\011\140\205\164\001\131\001\002\001\001\060\056\060\054\006\010
\053\006\001\005\005\007\002\001\026\040\150\164\164\160\072\057
\057\162\145\160\157\163\151\164\157\162\171\056\163\167\151\163
\163\163\151\147\156\056\143\157\155\057\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\047\272
\343\224\174\361\256\300\336\027\346\345\330\325\365\124\260\203
\364\273\315\136\005\173\117\237\165\146\257\074\350\126\176\374

\162\170\070\003\331\053\142\033\000\271\370\351\140\315\314\316
\121\212\307\120\061\156\341\112\176\030\057\151\131\266\075\144
\201\053\343\203\204\346\042\207\216\175\340\356\002\231\141\270
\036\364\270\053\210\022\026\204\302\061\223\070\226\061\246\271
\073\123\077\303\044\223\126\133\151\222\354\305\301\273\070\000
\343\354\027\251\270\334\307\174\001\203\237\062\107\272\122\042
\064\035\062\172\011\126\247\174\045\066\251\075\113\332\300\202
\157\012\273\022\310\207\113\047\021\371\036\055\307\223\077\236
\333\137\046\153\122\331\056\212\361\024\306\104\215\025\251\267
\277\275\336\246\032\356\256\055\373\110\167\027\376\273\354\257
\030\365\052\121\360\071\204\227\225\154\156\033\303\053\304\164
\140\171\045\260\012\047\337\337\136\322\071\317\105\175\102\113
\337\263\054\036\305\306\135\312\125\072\240\234\151\232\217\332
\357\262\260\074\237\207\154\022\053\145\160\025\122\061\032\044
\317\157\061\043\120\037\214\117\217\043\303\164\101\143\034\125
\250\024\335\076\340\121\120\317\361\033\060\126\016\222\260\202
\205\330\203\313\042\144\274\055\270\045\325\124\242\270\006\352
\255\222\244\044\240\301\206\265\112\023\152\107\317\056\013\126
\225\124\313\316\232\333\152\264\246\262\333\101\010\206\047\167
\367\152\240\102\154\013\070\316\327\165\120\062\222\302\337\053
\060\042\110\320\325\101\070\045\135\244\351\135\237\306\224\165
\320\105\375\060\227\103\217\220\253\012\307\206\163\140\112\151
\055\336\245\170\327\006\332\152\236\113\076\167\072\040\023\042
\001\320\277\150\236\143\140\153\065\115\013\155\272\241\075\300
\223\340\177\043\263\125\255\162\045\116\106\371\322\026\357\260
\144\301\001\236\351\312\240\152\230\016\317\330\140\362\057\111
\270\344\102\341\070\065\026\364\310\156\117\367\201\126\350\272
\243\276\043\257\256\375\157\003\340\002\073\060\166\372\033\155
\101\317\001\261\351\270\311\146\364\333\046\363\072\244\164\362
\111\044\133\311\260\320\127\301\372\076\172\341\227\311

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SwissSign Gold CA - G2"

Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

Serial Number:00:bb:40:1c:43:f5:5e:4f:b0

Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

Not Valid Before: Wed Oct 25 08:30:35 2006

Not Valid

After : Sat Oct 25 08:30:35 2036

Fingerprint (SHA-256):

62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95

Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Gold CA - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\330\305\070\212\267\060\033\033\156\324\172\346\105\045\072\157
\237\032\047\141
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\044\167\331\250\221\321\073\372\210\055\302\377\370\315\063\223
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Silver CA - G2"
#
# Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Serial Number:4f:1b:d4:2f:54:bb:2f:4b
# Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:32:46 2006
# Not Valid After : Sat Oct 25 08:32:46 2036
# Fingerprint (SHA-256):
BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5
# Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Silver CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145

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\162\040\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\117\033\324\057\124\273\057\113
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\275\060\202\003\245\240\003\002\001\002\002\010\117
\033\324\057\124\273\057\113\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\107\061\013\060\011\006\003\125\004
\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023\014
\123\167\151\163\163\123\151\147\156\040\101\107\061\041\060\037
\006\003\125\004\003\023\030\123\167\151\163\163\123\151\147\156
\040\123\151\154\166\145\162\040\103\101\040\055\040\107\062\060
\036\027\015\060\066\061\060\062\065\060\070\063\062\064\066\132
\027\015\063\066\061\060\062\065\060\070\063\062\064\066\132\060
\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025
\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151
\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023\030
\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145\162
\040\103\101\040\055\040\107\062\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\304\361\207\177\323\170\061
\367\070\311\370\303\231\103\274\307\367\274\067\347\116\161\272
\113\217\245\163\035\134\156\230\256\003\127\256\070\067\103\057
\027\075\037\310\316\150\020\301\170\256\031\003\053\020\372\054
\171\203\366\350\271\150\271\125\362\004\104\247\071\371\374\004
\213\036\361\242\115\047\371\141\173\272\267\345\242\023\266\353
\141\076\320\154\321\346\373\372\136\355\035\264\236\240\065\133
\241\222\313\360\111\222\376\205\012\005\076\346\331\013\342\117
\273\334\225\067\374\221\351\062\065\042\321\037\072\116\047\205
\235\260\025\224\062\332\141\015\107\115\140\102\256\222\107\350
\203\132\120\130\351\212\213\271\135\241\334\335\231\112\037\066
\147\273\110\344\203\266\067\353\110\072\257\017\147\217\027\007
\350\004\312\357\152\061\207\324\300\266\371\224\161\173\147\144
\270\266\221\112\102\173\145\056\060\152\014\365\220\356\225\346
\362\315\202\354\331\241\112\354\366\262\113\345\105\205\346\155
\170\223\004\056\234\202\155\066\251\304\061\144\037\206\203\013
\052\364\065\012\170\311\125\317\101\260\107\351\060\237\231\276
\141\250\006\204\271\050\172\137\070\331\033\251\070\260\203\177
```

\163\301\303\073\110\052\202\017\041\233\270\314\250\065\303\204
\033\203\263\076\276\244\225\151\001\072\211\000\170\004\331\311
\364\231\031\253\126\176\133\213\206\071\025\221\244\020\054\011
\062\200\140\263\223\300\052\266\030\013\235\176\215\111\362\020
\112\177\371\325\106\057\031\222\243\231\247\046\254\273\214\074
\346\016\274\107\007\334\163\121\361\160\144\057\010\371\264\107
\035\060\154\104\352\051\067\205\222\150\146\274\203\070\376\173
\071\056\323\120\360\037\373\136\140\266\251\246\372\047\101\361
\233\030\162\362\365\204\164\112\311\147\304\124\256\110\144\337
\214\321\156\260\035\341\007\217\010\036\231\234\161\351\114\330
\245\367\107\022\037\164\321\121\236\206\363\302\242\043\100\013
\163\333\113\246\347\163\006\214\301\240\351\301\131\254\106\372
\346\057\370\317\161\234\106\155\271\304\025\215\070\171\003\105
\110\357\304\135\327\010\356\207\071\042\206\262\015\017\130\103
\367\161\251\110\056\375\352\326\037\002\003\001\000\001\243\201
\254\060\201\251\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024
\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034\302
\230\372\206\130\060\037\006\003\125\035\043\004\030\060\026\200
\024\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034
\302\230\372\206\130\060\106\006\003\125\035\040\004\077\060\075
\060\073\006\011\140\205\164\001\131\001\003\001\001\060\056\060
\054\006\010\053\006\001\005\005\007\002\001\026\040\150\164\164
\160\072\057\057\162\145\160\157\163\151\164\157\162\171\056\163
\167\151\163\163\163\151\147\156\056\143\157\155\057\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\002\001
\000\163\306\201\340\047\322\055\017\340\225\060\342\232\101\177
\120\054\137\137\142\141\251\206\152\151\030\014\164\111\326\135
\204\352\101\122\030\157\130\255\120\126\040\152\306\275\050\151
\130\221\334\221\021\065\251\072\035\274\032\245\140\236\330\037
\177\105\221\151\331\176\273\170\162\301\006\017\052\316\217\205
\160\141\254\240\315\013\270\071\051\126\204\062\116\206\273\075
\304\052\331\327\037\162\356\376\121\241\042\101\261\161\002\143
\032\202\260\142\253\136\127\022\037\337\313\335\165\240\300\135
\171\220\214\033\340\120\346\336\061\376\230\173\160\137\245\220
\330\255\370\002\266\157\323\140\335\100\113\042\305\075\255\072
\172\237\032\032\107\221\171\063\272\202\334\062\151\003\226\156
\037\113\360\161\376\343\147\162\240\261\277\134\213\344\372\231
\042\307\204\271\033\215\043\227\077\355\045\340\317\145\273\365
\141\004\357\335\036\262\132\101\042\132\241\237\135\054\350\133
\311\155\251\014\014\170\252\140\306\126\217\001\132\014\150\274
\151\031\171\304\037\176\227\005\277\305\351\044\121\136\324\325
\113\123\355\331\043\132\066\003\145\243\301\003\255\101\060\363
\106\033\205\220\257\145\265\325\261\344\026\133\170\165\035\227
\172\155\131\251\052\217\173\336\303\207\211\020\231\111\163\170
\310\075\275\121\065\164\052\325\361\176\151\033\052\273\073\275
\045\270\232\132\075\162\141\220\146\207\356\014\326\115\324\021

```
\164\013\152\376\013\003\374\243\125\127\211\376\112\313\256\133
\027\005\310\362\215\043\061\123\070\322\055\152\077\202\271\215
\010\152\367\136\101\164\156\303\021\176\007\254\051\140\221\077
\070\312\127\020\015\275\060\057\307\245\346\101\240\332\256\005
\207\232\240\244\145\154\114\011\014\211\272\270\323\271\300\223
\212\060\372\215\345\232\153\025\001\116\147\252\332\142\126\076
\204\010\146\322\304\066\175\247\076\020\374\210\340\324\200\345
\000\275\252\363\116\006\243\172\152\371\142\162\343\011\117\353
\233\016\001\043\361\237\273\174\334\334\154\021\227\045\262\362
\264\143\024\322\006\052\147\214\203\365\316\352\007\330\232\152
\036\354\344\012\273\052\114\353\011\140\071\316\312\142\330\056
\156
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SwissSign Silver CA - G2"

Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH

Serial Number:4f:1b:d4:2f:54:bb:2f:4b

#

Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH

Not Valid Before: Wed Oct 25 08:32:46 2006

Not Valid After : Sat Oct 25 08:32:46 2036

Fingerprint (SHA-256):

BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5

Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SwissSign Silver CA - G2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\233\252\345\237\126\356\041\313\103\132\276\045\223\337\247\360
\100\321\035\313
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\340\006\241\311\175\317\311\374\015\300\126\165\226\330\142\023
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\010\117\033\324\057\124\273\057\113
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureTrust CA"
#
# Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0
# Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:31:18 2006
# Not Valid After : Mon Dec 31 19:40:55 2029
# Fingerprint (SHA-256):
F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73
# Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureTrust CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030
\131\320
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\270\060\202\002\240\240\003\002\001\002\002\020\014
\360\216\134\010\026\245\255\102\177\360\353\047\030\131\320\060

```

\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\110
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\027\060\025\006\003\125\004\003\023\016\123\145\143\165\162\145
\124\162\165\163\164\040\103\101\060\036\027\015\060\066\061\061
\060\067\061\071\063\061\061\070\132\027\015\062\071\061\062\063
\061\061\071\064\060\065\065\132\060\110\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\040\060\036\006\003\125\004\012
\023\027\123\145\143\165\162\145\124\162\165\163\164\040\103\157
\162\160\157\162\141\164\151\157\156\061\027\060\025\006\003\125
\004\003\023\016\123\145\143\165\162\145\124\162\165\163\164\040
\103\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\253\244\201\345\225\315\365\366\024\216\302\117\312
\324\342\170\225\130\234\101\341\015\231\100\044\027\071\221\063
\146\351\276\341\203\257\142\134\211\321\374\044\133\141\263\340
\021\021\101\034\035\156\360\270\273\370\336\247\201\272\246\110
\306\237\035\275\276\216\251\101\076\270\224\355\051\032\324\216
\322\003\035\003\357\155\015\147\034\127\327\006\255\312\310\365
\376\016\257\146\045\110\004\226\013\135\243\272\026\303\010\117
\321\106\370\024\134\362\310\136\001\231\155\375\210\314\206\250
\301\157\061\102\154\122\076\150\313\363\031\064\337\273\207\030
\126\200\046\304\320\334\300\157\337\336\240\302\221\026\240\144
\021\113\104\274\036\366\347\372\143\336\146\254\166\244\161\243
\354\066\224\150\172\167\244\261\347\016\057\201\172\342\265\162
\206\357\242\153\213\360\017\333\323\131\077\272\162\274\104\044
\234\343\163\263\367\257\127\057\102\046\235\251\164\272\000\122
\362\113\315\123\174\107\013\066\205\016\146\251\010\227\026\064
\127\301\146\367\200\343\355\160\124\307\223\340\056\050\025\131
\207\272\273\002\003\001\000\001\243\201\235\060\201\232\060\023
\006\011\053\006\001\004\001\202\067\024\002\004\006\036\004\000
\103\000\101\060\013\006\003\125\035\017\004\004\003\002\001\206
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\102\062\266\026
\372\004\375\376\135\113\172\303\375\367\114\100\035\132\103\257
\060\064\006\003\125\035\037\004\055\060\053\060\051\240\047\240
\045\206\043\150\164\164\160\072\057\057\143\162\154\056\163\145
\143\165\162\145\164\162\165\163\164\056\143\157\155\057\123\124
\103\101\056\143\162\154\060\020\006\011\053\006\001\004\001\202
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\001\001\000\060\355\117\112
\341\130\072\122\162\133\265\246\243\145\030\246\273\121\073\167
\351\235\352\323\237\134\340\105\145\173\015\312\133\342\160\120
\262\224\005\024\256\111\307\215\101\007\022\163\224\176\014\043
\041\375\274\020\177\140\020\132\162\365\230\016\254\354\271\177
\335\172\157\135\323\034\364\377\210\005\151\102\251\005\161\310
\267\254\046\350\056\264\214\152\377\161\334\270\261\337\231\274


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\174\041\124\053\344\130\242\273\127\051\256\236\251\243\031\046
\017\231\056\010\260\357\375\151\317\231\032\011\215\343\247\237
\053\311\066\064\173\044\263\170\114\225\027\244\006\046\036\266
\144\122\066\137\140\147\331\234\305\005\164\013\347\147\043\322
\010\374\210\351\256\213\177\341\060\364\067\176\375\306\062\332
\055\236\104\060\060\154\356\007\336\322\064\374\322\377\100\366
\113\364\146\106\006\124\246\362\062\012\143\046\060\153\233\321
\334\213\107\272\341\271\325\142\320\242\240\364\147\005\170\051
\143\032\157\004\326\370\306\114\243\232\261\067\264\215\345\050
\113\035\236\054\302\270\150\274\355\002\356\061
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SecureTrust CA"

#

Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US

Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0

Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US

Not Valid Before: Tue Nov 07 19:31:18 2006

Not Valid After : Mon Dec 31 19:40:55 2029

Fingerprint (SHA-256):

F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73

Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SecureTrust CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\207\202\306\303\004\065\073\317\322\226\222\322\131\076\175\104
\331\064\377\021
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\334\062\303\247\155\045\127\307\150\011\235\352\055\251\242\321
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030
```

```

\131\320
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Secure Global CA"
#
# Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5
# Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:42:28 2006
# Not Valid After : Mon Dec 31 19:52:06 2029
# Fingerprint (SHA-256):
42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69
# Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Secure Global CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370
\352\245
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\003\274\060\202\002\244\240\003\002\001\002\002\020\007
\126\042\244\350\324\212\211\115\364\023\310\360\370\352\245\060

```

\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\112
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\031\060\027\006\003\125\004\003\023\020\123\145\143\165\162\145
\040\107\154\157\142\141\154\040\103\101\060\036\027\015\060\066
\061\061\060\067\061\071\064\062\062\070\132\027\015\062\071\061
\062\063\061\061\071\065\062\060\066\132\060\112\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\040\060\036\006\003\125
\004\012\023\027\123\145\143\165\162\145\124\162\165\163\164\040
\103\157\162\160\157\162\141\164\151\157\156\061\031\060\027\006
\003\125\004\003\023\020\123\145\143\165\162\145\040\107\154\157
\142\141\154\040\103\101\060\202\001\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202
\001\012\002\202\001\001\000\257\065\056\330\254\154\125\151\006
\161\345\023\150\044\263\117\330\314\041\107\370\361\140\070\211
\211\003\351\275\352\136\106\123\011\334\134\365\132\350\367\105
\052\002\353\061\141\327\051\063\114\316\307\174\012\067\176\017
\272\062\230\341\035\227\257\217\307\334\311\070\226\363\333\032
\374\121\355\150\306\320\156\244\174\044\321\256\102\310\226\120
\143\056\340\376\165\376\230\247\137\111\056\225\343\071\063\144
\216\036\244\137\220\322\147\074\262\331\376\101\271\125\247\011
\216\162\005\036\213\335\104\205\202\102\320\111\300\035\140\360
\321\027\054\225\353\366\245\301\222\243\305\302\247\010\140\015
\140\004\020\226\171\236\026\064\346\251\266\372\045\105\071\310
\036\145\371\223\365\252\361\122\334\231\230\075\245\206\032\014
\065\063\372\113\245\004\006\025\034\061\200\357\252\030\153\302
\173\327\332\316\371\063\040\325\365\275\152\063\055\201\004\373
\260\134\324\234\243\342\134\035\343\251\102\165\136\173\324\167
\357\071\124\272\311\012\030\033\022\231\111\057\210\113\375\120
\142\321\163\347\217\172\103\002\003\001\000\001\243\201\235\060
\201\232\060\023\006\011\053\006\001\004\001\202\067\024\002\004
\006\036\004\000\103\000\101\060\013\006\003\125\035\017\004\004
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024
\257\104\004\302\101\176\110\203\333\116\071\002\354\354\204\172
\346\316\311\244\060\064\006\003\125\035\037\004\055\060\053\060
\051\240\047\240\045\206\043\150\164\164\160\072\057\057\143\162
\154\056\163\145\143\165\162\145\164\162\165\163\164\056\143\157
\155\057\123\107\103\101\056\143\162\154\060\020\006\011\053\006
\001\004\001\202\067\025\001\004\003\002\001\000\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
\143\032\010\100\175\244\136\123\015\167\330\172\256\037\015\013
\121\026\003\357\030\174\310\343\257\152\130\223\024\140\221\262
\204\334\210\116\276\071\212\072\363\346\202\211\135\001\067\263
\253\044\244\025\016\222\065\132\112\104\136\116\127\372\165\316
\037\110\316\146\364\074\100\046\222\230\154\033\356\044\106\014
\027\263\122\245\333\245\221\221\317\067\323\157\347\047\010\072

```
\116\031\037\072\247\130\134\027\317\171\077\213\344\247\323\046
\043\235\046\017\130\151\374\107\176\262\320\215\213\223\277\051
\117\103\151\164\166\147\113\317\007\214\346\002\367\265\341\264
\103\265\113\055\024\237\371\334\046\015\277\246\107\164\006\330
\210\321\072\051\060\204\316\322\071\200\142\033\250\307\127\111
\274\152\125\121\147\025\112\276\065\007\344\325\165\230\067\171
\060\024\333\051\235\154\305\151\314\107\125\242\060\367\314\134
\177\302\303\230\034\153\116\026\200\353\172\170\145\105\242\000
\032\257\014\015\125\144\064\110\270\222\271\361\264\120\051\362
\117\043\037\332\154\254\037\104\341\335\043\170\121\133\307\026
END
```

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Secure Global CA"

Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US

Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5

Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US

Not Valid Before: Tue Nov 07 19:42:28 2006

Not Valid After : Mon Dec 31 19:52:06 2029

Fingerprint (SHA-256):

42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69

Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Secure Global CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\072\104\163\132\345\201\220\037\044\206\141\106\036\073\234\304
\137\365\072\033
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\317\364\047\015\324\355\334\145\026\111\155\075\332\277\156\336
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370
\352\245
```

```

END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO Certification Authority"
#
# Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d
# Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Fri Dec 01 00:00:00 2006
# Not Valid After : Mon Dec 31 23:59:59 2029
# Fingerprint (SHA-256):
0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66
# Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171

```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106
\345\075

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\035\060\202\003\005\240\003\002\001\002\002\020\116
\201\055\212\202\145\340\013\002\356\076\065\002\106\345\075\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\201\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033
\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103
\101\040\114\151\155\151\164\145\144\061\047\060\045\006\003\125
\004\003\023\036\103\117\115\117\104\117\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\060\036\027\015\060\066\061\062\060\061\060\060\060\060
\060\060\132\027\015\062\071\061\062\063\061\062\063\065\071\065
\071\132\060\201\201\061\013\060\011\006\003\125\004\006\023\002
\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162\145
\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162\061
\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157\162
\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115\117
\104\117\040\103\101\040\114\151\155\151\164\145\144\061\047\060
\045\006\003\125\004\003\023\036\103\117\115\117\104\117\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\060\202\001\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202
\001\012\002\202\001\001\000\320\100\213\213\162\343\221\033\367
\121\301\033\124\004\230\323\251\277\301\346\212\135\073\207\373
\273\210\316\015\343\057\077\006\226\360\242\051\120\231\256\333
\073\241\127\260\164\121\161\315\355\102\221\115\101\376\251\310
\330\152\206\167\104\273\131\146\227\120\136\264\324\054\160\104
\317\332\067\225\102\151\074\060\304\161\263\122\360\041\115\241
\330\272\071\174\034\236\243\044\235\362\203\026\230\252\026\174
\103\233\025\133\267\256\064\221\376\324\142\046\030\106\232\077
\353\301\371\361\220\127\353\254\172\015\213\333\162\060\152\146
\325\340\106\243\160\334\150\331\377\004\110\211\167\336\265\351
\373\147\155\101\351\274\071\275\062\331\142\002\361\261\250\075
\156\067\234\342\057\342\323\242\046\213\306\270\125\103\210\341
\043\076\245\322\044\071\152\107\253\000\324\241\263\251\045\376
\015\077\247\035\272\323\121\301\013\244\332\254\070\357\125\120
\044\005\145\106\223\064\117\055\215\255\306\324\041\031\322\216
\312\005\141\161\007\163\107\345\212\031\022\275\004\115\316\116
\234\245\110\254\273\046\367\002\003\001\000\001\243\201\216\060
\201\213\060\035\006\003\125\035\016\004\026\004\024\013\130\345
\213\306\114\025\067\244\100\251\060\251\041\276\107\066\132\126

\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\111\006\003\125\035\037\004\102\060\100\060\076\240
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056
\143\157\155\157\144\157\143\141\056\143\157\155\057\103\117\115
\117\104\117\103\145\162\164\151\146\151\143\141\164\151\157\156
\101\165\164\150\157\162\151\164\171\056\143\162\154\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001
\000\076\230\236\233\366\033\351\327\071\267\170\256\035\162\030
\111\323\207\344\103\202\353\077\311\252\365\250\265\357\125\174
\041\122\145\371\325\015\341\154\364\076\214\223\163\221\056\002
\304\116\007\161\157\300\217\070\141\010\250\036\201\012\300\057
\040\057\101\213\221\334\110\105\274\361\306\336\272\166\153\063
\310\000\055\061\106\114\355\347\235\317\210\224\377\063\300\126
\350\044\206\046\270\330\070\070\337\052\153\335\022\314\307\077
\107\027\114\242\302\006\226\011\326\333\376\077\074\106\101\337
\130\342\126\017\074\073\301\034\223\065\331\070\122\254\356\310
\354\056\060\116\224\065\264\044\037\113\170\151\332\362\002\070
\314\225\122\223\360\160\045\131\234\040\147\304\356\371\213\127
\141\364\222\166\175\077\204\215\125\267\350\345\254\325\361\365
\031\126\246\132\373\220\034\257\223\353\345\034\324\147\227\135
\004\016\276\013\203\246\027\203\271\060\022\240\305\063\025\005
\271\015\373\307\005\166\343\330\112\215\374\064\027\243\306\041
\050\276\060\105\061\036\307\170\276\130\141\070\254\073\342\001
\145

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "COMODO Certification Authority"

Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d

Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Fri Dec 01 00:00:00 2006

Not Valid After : Mon Dec 31 23:59:59 2029

Fingerprint (SHA-256):

0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66

Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "COMODO Certification Authority"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\146\061\277\236\367\117\236\266\311\325\246\014\272\152\276\321
\367\275\357\173
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\134\110\334\367\102\162\354\126\224\155\034\314\161\065\200\165
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106
\345\075
END
CKA_TRUST_SERVER_AUTH CK_TRUST
CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO ECC Certification Authority"
#
# Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number: 1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a
# Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Thu Mar 06 00:00:00 2008
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7
# Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO ECC Certification Authority"
CKA_CERTIFICATE_TYPE

```


CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143
\231\052

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\211\060\202\002\017\240\003\002\001\002\002\020\037
\107\257\252\142\000\160\120\124\114\001\236\233\143\231\052\060
\012\006\010\052\206\110\316\075\004\003\003\060\201\205\061\013
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006
\003\125\004\010\023\022\107\162\145\141\164\145\162\040\115\141
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004
\007\023\007\123\141\154\146\157\162\144\061\032\060\030\006\003
\125\004\012\023\021\103\117\115\117\104\117\040\103\101\040\114
\151\155\151\164\145\144\061\053\060\051\006\003\125\004\003\023
\042\103\117\115\117\104\117\040\105\103\103\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\060\036\027\015\060\070\060\061\061\070\062\063\065\071
\060\060\060\132\027\015\063\070\060\061\061\070\062\063\065\071
\065\071\132\060\201\205\061\013\060\011\006\003\125\004\006\023
\002\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162
\145\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162
\061\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157
\162\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115

\117\104\117\040\103\101\040\114\151\155\151\164\145\144\061\053
\060\051\006\003\125\004\003\023\042\103\117\115\117\104\117\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\166\060\020\006
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003
\142\000\004\003\107\173\057\165\311\202\025\205\373\165\344\221
\026\324\253\142\231\365\076\122\013\006\316\101\000\177\227\341
\012\044\074\035\001\004\356\075\322\215\011\227\014\340\165\344
\372\373\167\212\052\365\003\140\113\066\213\026\043\026\255\011
\161\364\112\364\050\120\264\376\210\034\156\077\154\057\057\011
\131\133\245\133\013\063\231\342\303\075\211\371\152\054\357\262
\323\006\351\243\102\060\100\060\035\006\003\125\035\016\004\026
\004\024\165\161\247\031\110\031\274\235\235\352\101\107\337\224
\304\110\167\231\323\171\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\061\000\357\003\133\172\254
\267\170\012\162\267\210\337\377\265\106\024\011\012\372\240\346
\175\010\306\032\207\275\030\250\163\275\046\312\140\014\235\316
\231\237\317\134\017\060\341\276\024\061\352\002\060\024\364\223
\074\111\247\063\172\220\106\107\263\143\175\023\233\116\267\157
\030\067\200\123\376\335\040\340\065\232\066\321\307\001\271\346
\334\335\363\377\035\054\072\026\127\331\222\071\326

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "COMODO ECC Certification Authority"

Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number:1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a

Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Thu Mar 06 00:00:00 2008

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7

Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "COMODO ECC Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE OCTAL

\237\164\116\237\053\115\272\354\017\061\054\120\266\126\073\216

\055\223\303\021

```

END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\174\142\377\164\235\061\123\136\150\112\325\170\252\036\277\043
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143
\231\052
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "OISTE WISeKey Global Root GA CA"
#
# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a
# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Not Valid Before: Sun Dec 11 16:03:44 2005
# Not Valid After : Fri Dec 11 16:09:51 2037
# Fingerprint (SHA-256):
41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5
# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GA CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113

```

\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124
\337\232

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\361\060\202\002\331\240\003\002\001\002\002\020\101
\075\162\307\364\153\037\201\103\175\361\322\050\124\337\232\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\212\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020
\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171
\061\033\060\031\006\003\125\004\013\023\022\103\157\160\171\162
\151\147\150\164\040\050\143\051\040\062\060\060\065\061\042\060
\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157
\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145
\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124
\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154
\040\122\157\157\164\040\107\101\040\103\101\060\036\027\015\060
\065\061\062\061\061\061\066\060\063\064\064\132\027\015\063\067
\061\062\061\061\061\066\060\071\065\061\132\060\201\212\061\013
\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006
\003\125\004\012\023\007\127\111\123\145\113\145\171\061\033\060
\031\006\003\125\004\013\023\022\103\157\160\171\162\151\147\150
\164\040\050\143\051\040\062\060\060\065\061\042\060\040\006\003
\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156\144
\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061\050
\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040\127

\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122\157
\157\164\040\107\101\040\103\101\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\313\117\263\000\233\075\066
\335\371\321\111\152\153\020\111\037\354\330\053\262\306\370\062
\201\051\103\225\114\232\031\043\041\025\105\336\343\310\034\121
\125\133\256\223\350\067\377\053\153\351\324\352\276\052\335\250
\121\053\327\146\303\141\134\140\002\310\365\316\162\173\073\270
\362\116\145\010\232\315\244\152\031\301\001\273\163\246\327\366
\303\335\315\274\244\213\265\231\141\270\001\242\243\324\115\324
\005\075\221\255\370\264\010\161\144\257\160\361\034\153\176\366
\303\167\235\044\163\173\344\014\214\341\331\066\341\231\213\005
\231\013\355\105\061\011\312\302\000\333\367\162\240\226\252\225
\207\320\216\307\266\141\163\015\166\146\214\334\033\264\143\242
\237\177\223\023\060\361\241\047\333\331\377\054\125\210\221\240
\340\117\007\260\050\126\214\030\033\227\104\216\211\335\340\027
\156\347\052\357\217\071\012\061\204\202\330\100\024\111\056\172
\101\344\247\376\343\144\314\301\131\161\113\054\041\247\133\175
\340\035\321\056\201\233\303\330\150\367\275\226\033\254\160\261
\026\024\013\333\140\271\046\001\005\002\003\001\000\001\243\121
\060\117\060\013\006\003\125\035\017\004\004\003\002\001\206\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\263\003\176\256\066
\274\260\171\321\334\224\046\266\021\276\041\262\151\206\224\060
\020\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001
\000\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\003\202\001\001\000\113\241\377\013\207\156\263\371\301\103\261
\110\363\050\300\035\056\311\011\101\372\224\000\034\244\244\253
\111\117\217\075\036\357\115\157\275\274\244\366\362\046\060\311
\020\312\035\210\373\164\031\037\205\105\275\260\154\121\371\066
\176\333\365\114\062\072\101\117\133\107\317\350\013\055\266\304
\031\235\164\305\107\306\073\152\017\254\024\333\074\364\163\234
\251\005\337\000\334\164\170\372\370\065\140\131\002\023\030\174
\274\373\115\260\040\155\103\273\140\060\172\147\063\134\305\231
\321\370\055\071\122\163\373\214\252\227\045\134\162\331\010\036
\253\116\074\343\201\061\237\003\246\373\300\376\051\210\125\332
\204\325\120\003\266\342\204\243\246\066\252\021\072\001\341\030
\113\326\104\150\263\075\371\123\164\204\263\106\221\106\226\000
\267\200\054\266\341\343\020\342\333\242\347\050\217\001\226\142
\026\076\000\343\034\245\066\201\030\242\114\122\166\300\021\243
\156\346\035\272\343\132\276\066\123\305\076\165\217\206\151\051
\130\123\265\234\273\157\237\134\305\030\354\335\057\341\230\311
\374\276\337\012\015

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "OISTE WISeKey Global Root GA CA"
# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a
# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Not Valid Before: Sun Dec 11 16:03:44 2005
# Not Valid After : Fri
Dec 11 16:09:51 2037
# Fingerprint (SHA-256):
41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5
# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GA CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\131\042\241\341\132\352\026\065\041\370\230\071\152\106\106\260
\104\033\017\251
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\274\154\121\063\247\351\323\146\143\124\025\162\033\041\222\223
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124
\337\232
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certigna"

```

```
#
# Issuer: CN=Certigna,O=Dhimyotis,C=FR
# Serial Number:00:fe:dc:e3:01:0f:c9:48:ff
# Subject: CN=Certigna,O=Dhimyotis,C=FR
# Not Valid Before: Fri Jun 29 15:13:05 2007
# Not Valid After : Tue Jun 29 15:13:05 2027
# Fingerprint (SHA-256):
E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D
# Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\376\334\343\001\017\311\110\377
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\250\060\202\002\220\240\003\002\001\002\002\011\000
\376\334\343\001\017\311\110\377\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\064\061\013\060\011\006\003\125
\004\006\023\002\106\122\061\022\060\020\006\003\125\004\012\014
\011\104\150\151\155\171\157\164\151\163\061\021\060\017\006\003
\125\004\003\014\010\103\145\162\164\151\147\156\141\060\036\027
\015\060\067\060\066\062\071\061\065\061\063\060\065\132\027\015
\062\067\060\066\062\071\061\065\061\063\060\065\132\060\064\061
\013\060\011\006\003\125\004\006\023\002\106\122\061\022\060\020
\006\003\125\004\012\014\011\104\150\151\155\171\157\164\151\163
\061\021\060\017\006\003\125\004\003\014\010\103\145\162\164\151
\147\156\141\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\310\150\361\311\326\326\263\064\165\046\202\036
\354\264\276\352\134\341\046\355\021\107\141\341\242\174\026\170
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\100\041\344\140\236\132\310\143\341\304\261\226\222\377\030\155
\151\043\341\053\142\367\335\342\066\057\221\007\271\110\317\016
\354\171\266\054\347\064\113\160\010\045\243\074\207\033\031\362
\201\007\017\070\220\031\323\021\376\206\264\362\321\136\036\036
\226\315\200\154\316\073\061\223\266\362\240\320\251\225\022\175
\245\232\314\153\310\204\126\212\063\251\347\042\025\123\026\360
\314\027\354\127\137\351\242\012\230\011\336\343\137\234\157\334
\110\343\205\013\025\132\246\272\237\254\110\343\011\262\367\364
\062\336\136\064\276\034\170\135\102\133\316\016\042\217\115\220
\327\175\062\030\263\013\054\152\277\216\077\024\021\211\040\016
\167\024\265\075\224\010\207\367\045\036\325\262\140\000\354\157
\052\050\045\156\052\076\030\143\027\045\077\076\104\040\026\366
\046\310\045\256\005\112\264\347\143\054\363\214\026\123\176\134
\373\021\032\010\301\106\142\237\042\270\361\302\215\151\334\372
\072\130\006\337\002\003\001\000\001\243\201\274\060\201\271\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\032\355\376\101\071
\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021\060
\144\006\003\125\035\043\004\135\060\133\200\024\032\355\376\101
\071\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021
\241\070\244\066\060\064\061\013\060\011\006\003\125\004\006\023
\002\106\122\061\022\060\020\006\003\125\004\012\014\011\104\150
\151\155\171\157\164\151\163\061\021\060\017\006\003\125\004\003
\014\010\103\145\162\164\151\147\156\141\202\011\000\376\334\343
\001\017\311\110\377\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\021\006\011\140\206\110\001\206\370\102
\001\001\004\004\003\002\000\007\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\001\001\000\205\003\036\222
\161\366\102\257\341\243\141\236\353\363\300\017\362\245\324\332
\225\346\326\276\150\066\075\176\156\037\114\212\357\321\017\041
\155\136\245\122\143\316\022\370\357\052\332\157\353\067\376\023
\002\307\313\073\076\042\153\332\141\056\177\324\162\075\335\060
\341\036\114\100\031\214\017\327\234\321\203\060\173\230\131\334
\175\306\271\014\051\114\241\063\242\353\147\072\145\204\323\226
\342\355\166\105\160\217\265\053\336\371\043\326\111\156\074\024
\265\306\237\065\036\120\320\301\217\152\160\104\002\142\313\256
\035\150\101\247\252\127\350\123\252\007\322\006\366\325\024\006
\013\221\003\165\054\154\162\265\141\225\232\015\213\271\015\347
\365\337\124\315\336\346\330\326\011\010\227\143\345\301\056\260
\267\104\046\300\046\300\257\125\060\236\073\325\066\052\031\004
\364\134\036\377\317\054\267\377\320\375\207\100\021\325\021\043
\273\110\300\041\251\244\050\055\375\025\370\260\116\053\364\060
\133\041\374\021\221\064\276\101\357\173\235\227\165\377\227\225
\300\226\130\057\352\273\106\327\273\344\331\056

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Certigna"

Issuer: CN=Certigna,O=Dhimyotis,C=FR

Serial Number:00:fe:dc:e3:01:0f:c9:48:ff

Subject: CN=Certigna,O=Dhimyotis,C=FR

Not Valid Before: Fri Jun 29 15:13:05 2007

#

Not Valid After : Tue Jun 29 15:13:05 2027

Fingerprint (SHA-256):

E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D

Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certigna"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\261\056\023\143\105\206\244\157\032\262\140\150\067\130\055\304

\254\375\224\227

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\253\127\246\133\175\102\202\031\265\330\130\046\050\136\375\377

END

CKA_ISSUER MULTILINE_OCTAL

\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061

\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157

\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145

\162\164\151\147\156\141

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\011\000\376\334\343\001\017\311\110\377

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "ePKI Root Certification Authority"

#

Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Serial Number: 15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d

Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Not Valid Before: Mon Dec 20 02:31:27 2004

Not Valid After : Wed Dec 20 02:31:27 2034

Fingerprint (SHA-256):

C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5

Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ePKI Root Certification Authority"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT

MULTILINE_OCTAL

\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322
\274\235

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\260\060\202\003\230\240\003\002\001\002\002\020\025
\310\275\145\107\134\257\270\227\000\136\344\006\322\274\235\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\136
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036
\027\015\060\064\061\062\062\060\060\062\063\061\062\067\132\027
\015\063\064\061\062\062\060\060\062\063\061\062\067\132\060\136
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\202

\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\341
\045\017\356\215\333\210\063\165\147\315\255\037\175\072\116\155
\235\323\057\024\363\143\164\313\001\041\152\067\352\204\120\007
\113\046\133\011\103\154\041\236\152\310\325\003\365\140\151\217
\314\360\042\344\037\347\367\152\042\061\267\054\025\362\340\376
\000\152\103\377\207\145\306\265\032\301\247\114\155\042\160\041
\212\061\362\227\164\211\011\022\046\034\236\312\331\022\242\225
\074\332\351\147\277\010\240\144\343\326\102\267\105\357\227\364
\366\365\327\265\112\025\002\130\175\230\130\113\140\274\315\327
\015\232\023\063\123\321\141\371\172\325\327\170\263\232\063\367
\000\206\316\035\115\224\070\257\250\354\170\121\160\212\134\020
\203\121\041\367\021\075\064\206\136\345\110\315\227\201\202\065
\114\031\354\145\366\153\305\005\241\356\107\023\326\263\041\047
\224\020\012\331\044\073\272\276\104\023\106\060\077\227\074\330
\327\327\152\356\073\070\343\053\324\227\016\271\033\347\007\111
\177\067\052\371\167\170\317\124\355\133\106\235\243\200\016\221
\103\301\326\133\137\024\272\237\246\215\044\107\100\131\277\162
\070\262\066\154\067\377\231\321\135\016\131\012\253\151\367\300
\262\004\105\172\124\000\256\276\123\366\265\347\341\370\074\243
\061\322\251\376\041\122\144\305\246\147\360\165\007\006\224\024
\201\125\306\047\344\001\217\027\301\152\161\327\276\113\373\224
\130\175\176\021\063\261\102\367\142\154\030\326\317\011\150\076
\177\154\366\036\217\142\255\245\143\333\011\247\037\042\102\101
\036\157\231\212\076\327\371\077\100\172\171\260\245\001\222\322
\235\075\010\025\245\020\001\055\263\062\166\250\225\015\263\172
\232\373\007\020\170\021\157\341\217\307\272\017\045\032\164\052
\345\034\230\101\231\337\041\207\350\225\006\152\012\263\152\107
\166\145\366\072\317\217\142\027\031\173\012\050\315\032\322\203
\036\041\307\054\277\276\377\141\150\267\147\033\273\170\115\215
\316\147\345\344\301\216\267\043\146\342\235\220\165\064\230\251
\066\053\212\232\224\271\235\354\314\212\261\370\045\211\134\132
\266\057\214\037\155\171\044\247\122\150\303\204\065\342\146\215
\143\016\045\115\325\031\262\346\171\067\247\042\235\124\061\002
\003\001\000\001\243\152\060\150\060\035\006\003\125\035\016\004
\026\004\024\036\014\367\266\147\362\341\222\046\011\105\300\125
\071\056\167\077\102\112\242\060\014\006\003\125\035\023\004\005
\060\003\001\001\377\060\071\006\004\147\052\007\000\004\061\060
\057\060\055\002\001\000\060\011\006\005\053\016\003\002\032\005
\000\060\007\006\005\147\052\003\000\000\004\024\105\260\302\307
\012\126\174\356\133\170\014\225\371\030\123\301\246\034\330\020
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\002\001\000\011\263\203\123\131\001\076\225\111\271\361\201
\272\371\166\040\043\265\047\140\164\324\152\231\064\136\154\000
\123\331\237\362\246\261\044\007\104\152\052\306\245\216\170\022
\350\107\331\130\033\023\052\136\171\233\237\012\052\147\246\045
\077\006\151\126\163\303\212\146\110\373\051\201\127\164\006\312
\234\352\050\350\070\147\046\053\361\325\265\077\145\223\370\066

\135\216\215\215\100\040\207\031\352\357\047\300\075\264\071\017
\045\173\150\120\164\125\234\014\131\175\132\075\101\224\045\122
\010\340\107\054\025\061\031\325\277\007\125\306\273\022\265\227
\364\137\203\205\272\161\301\331\154\201\021\166\012\012\260\277
\202\227\367\352\075\372\372\354\055\251\050\224\073\126\335\322
\121\056\256\300\275\010\025\214\167\122\064\226\326\233\254\323
\035\216\141\017\065\173\233\256\071\151\013\142\140\100\040\066
\217\257\373\066\356\055\010\112\035\270\277\233\134\370\352\245
\033\240\163\246\330\370\156\340\063\004\137\150\252\047\207\355
\331\301\220\234\355\275\343\152\065\257\143\337\253\030\331\272
\346\351\112\352\120\212\017\141\223\036\342\055\031\342\060\224
\065\222\135\016\266\007\257\031\200\217\107\220\121\113\056\115
\335\205\342\322\012\122\012\027\232\374\032\260\120\002\345\001
\243\143\067\041\114\104\304\233\121\231\021\016\163\234\006\217
\124\056\247\050\136\104\071\207\126\055\067\275\205\104\224\341
\014\113\054\234\303\222\205\064\141\313\017\270\233\112\103\122
\376\064\072\175\270\351\051\334\166\251\310\060\370\024\161\200
\306\036\066\110\164\042\101\134\207\202\350\030\161\213\101\211
\104\347\176\130\133\250\270\215\023\351\247\154\303\107\355\263
\032\235\142\256\215\202\352\224\236\335\131\020\303\255\335\342
\115\343\061\325\307\354\350\362\260\376\222\036\026\012\032\374
\331\363\370\047\266\311\276\035\264\154\144\220\177\364\344\304
\133\327\067\256\102\016\335\244\032\157\174\210\124\305\026\156
\341\172\150\056\370\072\277\015\244\074\211\073\170\247\116\143
\203\004\041\010\147\215\362\202\111\320\133\375\261\315\017\203
\204\324\076\040\205\367\112\075\053\234\375\052\012\011\115\352
\201\370\021\234

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "ePKI Root Certification Authority"

Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Serial Number:15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d

Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Not Valid Before: Mon Dec 20 02:31:27 2004

Not Valid After : Wed Dec 20 02:31:27 2034

Fingerprint (SHA-256):

C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5

Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ePKI Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\147\145\015\361\176\216\176\133\202\100\244\364\126\113\317\342
\075\151\306\360

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\033\056\000\312\046\006\220\075\255\376\157\025\150\323\153\263

END

CKA_ISSUER
MULTILINE_OCTAL
\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322
\274\235

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "certSIGN ROOT CA"

#

Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Serial Number:20:06:05:16:70:02

Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Not Valid Before: Tue Jul 04 17:20:04

2006

Not Valid After : Fri Jul 04 17:20:04 2031

Fingerprint (SHA-256):

EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB

Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "certSIGN ROOT CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\006\040\006\005\026\160\002

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\070\060\202\002\040\240\003\002\001\002\002\006\040
\006\005\026\160\002\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\060\073\061\013\060\011\006\003\125\004\006\023
\002\122\117\061\021\060\017\006\003\125\004\012\023\010\143\145
\162\164\123\111\107\116\061\031\060\027\006\003\125\004\013\023
\020\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103
\101\060\036\027\015\060\066\060\067\060\064\061\067\062\060\060
\064\132\027\015\063\061\060\067\060\064\061\067\062\060\060\064
\132\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117
\061\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123
\111\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145
\162\164\123\111\107\116\040\122\117\117\124\040\103\101\060\202
\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000\267
\063\271\176\310\045\112\216\265\333\264\050\033\252\127\220\350
\321\042\323\144\272\323\223\350\324\254\206\141\100\152\140\127
\150\124\204\115\274\152\124\002\005\377\337\233\232\052\256\135
\007\217\112\303\050\177\357\373\053\372\171\361\307\255\360\020
\123\044\220\213\146\311\250\210\253\257\132\243\000\351\276\272
\106\356\133\163\173\054\027\202\201\136\142\054\241\002\145\263
\275\305\053\000\176\304\374\003\063\127\015\355\342\372\316\135
\105\326\070\315\065\266\262\301\320\234\201\112\252\344\262\001
\134\035\217\137\231\304\261\255\333\210\041\353\220\010\202\200
\363\060\243\103\346\220\202\256\125\050\111\355\133\327\251\020
\070\016\376\217\114\133\233\106\352\101\365\260\010\164\303\320
\210\063\266\174\327\164\337\334\204\321\103\016\165\071\241\045
\100\050\352\170\313\016\054\056\071\235\214\213\156\026\034\057
\046\202\020\342\343\145\224\012\004\300\136\367\135\133\370\020
\342\320\272\172\113\373\336\067\000\000\032\133\050\343\322\234
\163\076\062\207\230\241\311\121\057\327\336\254\063\263\117\002
\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023\001
\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\306\060\035\006\003\125\035\016
\004\026\004\024\340\214\233\333\045\111\263\361\174\206\326\262
\102\207\013\320\153\240\331\344\060\015\006\011\052\206\110\206

```
\367\015\001\001\005\005\000\003\202\001\001\000\076\322\034\211
\056\065\374\370\165\335\346\177\145\210\364\162\114\311\054\327
\062\116\363\335\031\171\107\275\216\073\133\223\017\120\111\044
\023\153\024\006\162\357\011\323\241\241\343\100\204\311\347\030
\062\164\074\110\156\017\237\113\324\367\036\323\223\206\144\124
\227\143\162\120\325\125\317\372\040\223\002\242\233\303\043\223
\116\026\125\166\240\160\171\155\315\041\037\317\057\055\274\031
\343\210\061\370\131\032\201\011\310\227\246\164\307\140\304\133
\314\127\216\262\165\375\033\002\011\333\131\157\162\223\151\367
\061\101\326\210\070\277\207\262\275\026\171\371\252\344\276\210
\045\335\141\047\043\034\265\061\007\004\066\264\032\220\275\240
\164\161\120\211\155\274\024\343\017\206\256\361\253\076\307\240
\011\314\243\110\321\340\333\144\347\222\265\317\257\162\103\160
\213\371\303\204\074\023\252\176\222\233\127\123\223\372\160\302
\221\016\061\371\233\147\135\351\226\070\136\137\263\163\116\210
\025\147\336\236\166\020\142\040\276\125\151\225\103\000\071\115
\366\356\260\132\116\111\104\124\130\137\102\203
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "certSIGN ROOT CA"

Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Serial Number:20:06:05:16:70:02

Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Not Valid Before: Tue Jul 04 17:20:04 2006

Not Valid After : Fri Jul 04 17:20:04 2031

Fingerprint (SHA-256):

EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB

#

Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "certSIGN ROOT CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\372\267\356\066\227\046\142\373\055\260\052\366\277\003\375\350
\174\113\057\233
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\030\230\300\326\351\072\374\371\260\365\014\367\113\001\104\027
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
```

```

\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\006\040\006\005\026\160\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "NetLock Arany (Class Gold) Ftanúsítvány"
#
# Issuer: CN=NetLock Arany (Class Gold) F.tan...s.tv..ny,OU=Tan...s.tv..nykiad..k (Certification
Services),O=NetLock Kft.,L=Budapest,C=HU
# Serial Number:49:41:2c:e4:00:10
# Subject: CN=NetLock Arany (Class Gold) F.tan...s.tv..ny,OU=Tan...s.tv..nykiad..k (Certification
Services),O=NetLock Kft.,L=Budapest,C=HU
# Not Valid Before: Thu Dec 11 15:08:21 2008
# Not Valid After : Wed Dec 06 15:08:21 2028
# Fingerprint (SHA-256):
6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98
# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125

```


\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\006\111\101\054\344\000\020

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\025\060\202\002\375\240\003\002\001\002\002\006\111
\101\054\344\000\020\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\060\201\247\061\013\060\011\006\003\125\004\006
\023\002\110\125\061\021\060\017\006\003\125\004\007\014\010\102
\165\144\141\160\145\163\164\061\025\060\023\006\003\125\004\012
\014\014\116\145\164\114\157\143\153\040\113\146\164\056\061\067
\060\065\006\003\125\004\013\014\056\124\141\156\303\272\163\303
\255\164\166\303\241\156\171\153\151\141\144\303\263\153\040\050
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\051\061\065\060\063\006\003\125\004\003
\014\054\116\145\164\114\157\143\153\040\101\162\141\156\171\040
\050\103\154\141\163\163\040\107\157\154\144\051\040\106\305\221
\164\141\156\303\272\163\303\255\164\166\303\241\156\171\060\036
\027\015\060\070\061\062\061\061\061\065\060\070\062\061\132\027
\015\062\070\061\062\060\066\061\065\060\070\062\061\132\060\201
\247\061\013\060\011\006\003\125\004\006\023\002\110\125\061\021
\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145\163
\164\061\025\060\023\006\003\125\004\012\014\014\116\145\164\114
\157\143\153\040\113\146\164\056\061\067\060\065\006\003\125\004
\013\014\056\124\141\156\303\272\163\303\255\164\166\303\241\156
\171\153\151\141\144\303\263\153\040\050\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163
\051\061\065\060\063\006\003\125\004\003\014\054\116\145\164\114
\157\143\153\040\101\162\141\156\171\040\050\103\154\141\163\163
\040\107\157\154\144\051\040\106\305\221\164\141\156\303\272\163
\303\255\164\166\303\241\156\171\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\304\044\136\163\276\113\155
\024\303\241\364\343\227\220\156\322\060\105\036\074\356\147\331
\144\340\032\212\177\312\060\312\203\343\040\301\343\364\072\323
\224\137\032\174\133\155\277\060\117\204\047\366\237\037\111\274
\306\231\012\220\362\017\365\177\103\204\067\143\121\213\172\245

\160\374\172\130\315\216\233\355\303\106\154\204\160\135\332\363
\001\220\043\374\116\060\251\176\341\047\143\347\355\144\074\240
\270\311\063\143\376\026\220\377\260\270\375\327\250\300\300\224
\103\013\266\325\131\246\236\126\320\044\037\160\171\257\333\071
\124\015\145\165\331\025\101\224\001\257\136\354\366\215\361\377
\255\144\376\040\232\327\134\353\376\246\037\010\144\243\213\166
\125\255\036\073\050\140\056\207\045\350\252\257\037\306\144\106
\040\267\160\177\074\336\110\333\226\123\267\071\167\344\032\342
\307\026\204\166\227\133\057\273\031\025\205\370\151\205\365\231
\247\251\362\064\247\251\266\246\003\374\157\206\075\124\174\166
\004\233\153\371\100\135\000\064\307\056\231\165\235\345\210\003
\252\115\370\003\322\102\166\300\033\002\003\000\250\213\243\105
\060\103\060\022\006\003\125\035\023\001\001\377\004\010\060\006
\001\001\377\002\001\004\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004
\024\314\372\147\223\360\266\270\320\245\300\036\363\123\375\214
\123\337\203\327\226\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\003\202\001\001\000\253\177\356\034\026\251\234
\074\121\000\240\300\021\010\005\247\231\346\157\001\210\124\141
\156\361\271\030\255\112\255\376\201\100\043\224\057\373\165\174
\057\050\113\142\044\201\202\013\365\141\361\034\156\270\141\070
\353\201\372\142\241\073\132\142\323\224\145\304\341\346\155\202
\370\057\045\160\262\041\046\301\162\121\037\214\054\303\204\220
\303\132\217\272\317\364\247\145\245\353\230\321\373\005\262\106
\165\025\043\152\157\205\143\060\200\360\325\236\037\051\034\302
\154\260\120\131\135\220\133\073\250\015\060\317\277\175\177\316
\361\235\203\275\311\106\156\040\246\371\141\121\272\041\057\173
\276\245\025\143\241\324\225\207\361\236\271\363\211\363\075\205
\270\270\333\276\265\271\051\371\332\067\005\000\111\224\003\204
\104\347\277\103\061\317\165\213\045\321\364\246\144\365\222\366
\253\005\353\075\351\245\013\066\142\332\314\006\137\066\213\266
\136\061\270\052\373\136\366\161\337\104\046\236\304\346\015\221
\264\056\165\225\200\121\152\113\060\246\260\142\241\223\361\233
\330\316\304\143\165\077\131\107\261

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "NetLock Arany (Class Gold) Ftanúsítvány"

Issuer:

CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

Serial Number:49:41:2c:e4:00:10

Subject: CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

Not Valid Before: Thu Dec 11 15:08:21 2008

```

# Not Valid After : Wed Dec 06 15:08:21 2028
# Fingerprint (SHA-256):
6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98
# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\006\010\077\131\077\025\241\004\240\151\244\153\251\003\320\006
\267\227\011\221
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\241\267\377\163\335\326\327\064\062\030\337\374\074\255\210
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\006\111\101\054\344\000\020
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Hongkong Post Root CA 1"
#
# Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Serial Number: 1000 (0x3e8)
# Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Not Valid Before: Thu May 15 05:13:14 2003
# Not Valid After : Mon May 15 04:52:29 2023
# Fingerprint (SHA-256):

```

```
F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2
# Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\003\350
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\060\060\202\002\030\240\003\002\001\002\002\002\003
\350\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061\060\036\027\015\060\063\060
\065\061\065\060\065\061\063\061\064\132\027\015\062\063\060\065
\061\065\060\064\065\062\062\071\132\060\107\061\013\060\011\006
\003\125\004\006\023\002\110\113\061\026\060\024\006\003\125\004
\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164
\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153
\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101
\040\061\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\254\377\070\266\351\146\002\111\343\242\264\341\220
\371\100\217\171\371\342\275\171\376\002\275\356\044\222\035\042
\366\332\205\162\151\376\327\077\011\324\335\221\265\002\234\320
\215\132\341\125\303\120\206\271\051\046\302\343\331\240\361\151
\003\050\040\200\105\042\055\126\247\073\124\225\126\042\131\037
```

\050\337\037\040\075\155\242\066\276\043\240\261\156\265\261\047
\077\071\123\011\352\253\152\350\164\262\302\145\134\216\277\174
\303\170\204\315\236\026\374\365\056\117\040\052\010\237\167\363
\305\036\304\232\122\146\036\110\136\343\020\006\217\042\230\341
\145\216\033\135\043\146\073\270\245\062\121\310\206\252\241\251
\236\177\166\224\302\246\154\267\101\360\325\310\006\070\346\324
\014\342\363\073\114\155\120\214\304\203\047\301\023\204\131\075
\236\165\164\266\330\002\136\072\220\172\300\102\066\162\354\152
\115\334\357\304\000\337\023\030\127\137\046\170\310\326\012\171
\167\277\367\257\267\166\271\245\013\204\027\135\020\352\157\341
\253\225\021\137\155\074\243\134\115\203\133\362\263\031\212\200
\213\013\207\002\003\001\000\001\243\046\060\044\060\022\006\003
\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001\003
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\306
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\001\001\000\016\106\325\074\256\342\207\331\136\201\213\002
\230\101\010\214\114\274\332\333\356\047\033\202\347\152\105\354
\026\213\117\205\240\363\262\160\275\132\226\272\312\156\155\356
\106\213\156\347\052\056\226\263\031\063\353\264\237\250\262\067
\356\230\250\227\266\056\266\147\047\324\246\111\375\034\223\145
\166\236\102\057\334\042\154\232\117\362\132\025\071\261\161\327
\053\121\350\155\034\230\300\331\052\364\241\202\173\325\311\101
\242\043\001\164\070\125\213\017\271\056\147\242\040\004\067\332
\234\013\323\027\041\340\217\227\171\064\157\204\110\002\040\063
\033\346\064\104\237\221\160\364\200\136\204\103\302\051\322\154
\022\024\344\141\215\254\020\220\236\204\120\273\360\226\157\105
\237\212\363\312\154\117\372\021\072\025\025\106\303\315\037\203
\133\055\101\022\355\120\147\101\023\075\041\253\224\212\252\116
\174\301\261\373\247\326\265\047\057\227\253\156\340\035\342\321
\034\054\037\104\342\374\276\221\241\234\373\326\051\123\163\206
\237\123\330\103\016\135\326\143\202\161\035\200\164\312\366\342
\002\153\331\132

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hongkong Post Root CA

1"

Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK

Serial Number: 1000 (0x3e8)

Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK

Not Valid Before: Thu May 15 05:13:14 2003

Not Valid After : Mon May 15 04:52:29 2023

Fingerprint (SHA-256):

F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2

Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58

```

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\326\332\250\040\215\011\322\025\115\044\265\057\313\064\156\262
\130\262\212\130
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\250\015\157\071\170\271\103\155\167\102\155\230\132\314\043\312
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\003\350
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureSign RootCA11"
#
# Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Serial Number: 1 (0x1)
# Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Not Valid Before: Wed Apr 08 04:56:47 2009
# Not Valid After : Sun Apr 08 04:56:47 2029
# Fingerprint (SHA-256):
BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12
# Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureSign RootCA11"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061

```

\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\155\060\202\002\125\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061\053
\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145\162
\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032\006
\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147\156
\040\122\157\157\164\103\101\061\061\060\036\027\015\060\071\060
\064\060\070\060\064\065\066\064\067\132\027\015\062\071\060\064
\060\070\060\064\065\066\064\067\132\060\130\061\013\060\011\006
\003\125\004\006\023\002\112\120\061\053\060\051\006\003\125\004
\012\023\042\112\141\160\141\156\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163\054
\040\111\156\143\056\061\034\060\032\006\003\125\004\003\023\023
\123\145\143\165\162\145\123\151\147\156\040\122\157\157\164\103
\101\061\061\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\375\167\252\245\034\220\005\073\313\114\233\063
\213\132\024\105\244\347\220\026\321\337\127\322\041\020\244\027
\375\337\254\326\037\247\344\333\174\367\354\337\270\003\332\224
\130\375\135\162\174\214\077\137\001\147\164\025\226\343\002\074
\207\333\256\313\001\216\302\363\146\306\205\105\364\002\306\072
\265\142\262\257\372\234\277\244\346\324\200\060\230\363\015\266
\223\217\251\324\330\066\362\260\374\212\312\054\241\025\063\225
\061\332\300\033\362\356\142\231\206\143\077\277\335\223\052\203
\250\166\271\023\037\267\316\116\102\205\217\042\347\056\032\362
\225\011\262\005\265\104\116\167\241\040\275\251\362\116\012\175
\120\255\365\005\015\105\117\106\161\375\050\076\123\373\004\330

\055\327\145\035\112\033\372\317\073\260\061\232\065\156\310\213
\006\323\000\221\362\224\010\145\114\261\064\006\000\172\211\342
\360\307\003\131\317\325\326\350\247\062\263\346\230\100\206\305
\315\047\022\213\314\173\316\267\021\074\142\140\007\043\076\053
\100\156\224\200\011\155\266\263\157\167\157\065\010\120\373\002
\207\305\076\211\002\003\001\000\001\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\133\370\115\117\262\245\206\324
\072\322\361\143\232\240\276\011\366\127\267\336\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001
\000\240\241\070\026\146\056\247\126\037\041\234\006\372\035\355
\271\042\305\070\046\330\116\117\354\243\177\171\336\106\041\241
\207\167\217\007\010\232\262\244\305\257\017\062\230\013\174\146
\051\266\233\175\045\122\111\103\253\114\056\053\156\172\160\257
\026\016\343\002\154\373\102\346\030\235\105\330\125\310\350\073
\335\347\341\364\056\013\034\064\134\154\130\112\373\214\210\120
\137\225\034\277\355\253\042\265\145\263\205\272\236\017\270\255
\345\172\033\212\120\072\035\275\015\274\173\124\120\013\271\102
\257\125\240\030\201\255\145\231\357\276\344\234\277\304\205\253
\101\262\124\157\334\045\315\355\170\342\216\014\215\011\111\335
\143\173\132\151\226\002\041\250\275\122\131\351\175\065\313\310
\122\312\177\201\376\331\153\323\367\021\355\045\337\370\347\371
\244\372\162\227\204\123\015\245\320\062\030\121\166\131\024\154
\017\353\354\137\200\214\165\103\203\303\205\230\377\114\236\055
\015\344\167\203\223\116\265\226\007\213\050\023\233\214\031\215
\101\047\111\100\356\336\346\043\104\071\334\241\042\326\272\003
\362

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SecureSign RootCA11"

Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

Serial Number: 1 (0x1)

Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

#

Not Valid Before: Wed Apr 08 04:56:47 2009

Not Valid After : Sun Apr 08 04:56:47 2029

Fingerprint (SHA-256):

BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12

Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE


```

CKA_LABEL UTF8 "SecureSign RootCA11"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\073\304\237\110\370\363\163\240\234\036\275\370\133\261\303\145
\307\330\021\263
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\267\122\164\342\222\264\200\223\362\165\344\314\327\362\352\046
END
CKA_ISSUER MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Microsec e-Szigno Root CA 2009"
#
# Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:00:c2:7e:43:04:4e:47:3f:19
# Subject: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Jun 16 11:30:18 2009
# Not Valid After : Sun Dec 30 11:30:18 2029
# Fingerprint (SHA-256):
3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78
# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006

```

\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\011\000\302\176\103\004\116\107\077\031

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\012\060\202\002\362\240\003\002\001\002\002\011\000
\302\176\103\004\116\107\077\031\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003
\125\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007
\014\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003
\125\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164
\144\056\061\047\060\045\006\003\125\004\003\014\036\115\151\143
\162\157\163\145\143\040\145\055\123\172\151\147\156\157\040\122
\157\157\164\040\103\101\040\062\060\060\071\061\037\060\035\006
\011\052\206\110\206\367\015\001\011\001\026\020\151\156\146\157
\100\145\055\163\172\151\147\156\157\056\150\165\060\036\027\015
\060\071\060\066\061\066\061\061\063\060\061\070\132\027\015\062
\071\061\062\063\060\061\061\063\060\061\070\132\060\201\202\061
\013\060\011\006\003\125\004\006\023\002\110\125\061\021\060\017
\006\003\125\004\007\014\010\102\165\144\141\160\145\163\164\061
\026\060\024\006\003\125\004\012\014\015\115\151\143\162\157\163
\145\143\040\114\164\144\056\061\047\060\045\006\003\125\004\003
\014\036\115\151\143\162\157\163\145\143\040\145\055\123\172\151
\147\156\157\040\122\157\157\164\040\103\101\040\062\060\060\071
\061\037\060\035\006\011\052\206\110\206\367\015\001\011\001\026
\020\151\156\146\157\100\145\055\163\172\151\147\156\157\056\150
\165\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\351\370\217\363\143\255\332\206\330\247\340\102\373\317
\221\336\246\046\370\231\245\143\160\255\233\256\312\063\100\175

\155\226\156\241\016\104\356\341\023\235\224\102\122\232\275\165
\205\164\054\250\016\035\223\266\030\267\214\054\250\317\373\134
\161\271\332\354\376\350\176\217\344\057\035\262\250\165\207\330
\267\241\345\073\317\231\112\106\320\203\031\175\300\241\022\034
\225\155\112\364\330\307\245\115\063\056\205\071\100\165\176\024
\174\200\022\230\120\307\101\147\270\240\200\141\124\246\154\116
\037\340\235\016\007\351\311\272\063\347\376\300\125\050\054\002
\200\247\031\365\236\334\125\123\003\227\173\007\110\377\231\373
\067\212\044\304\131\314\120\020\143\216\252\251\032\260\204\032
\206\371\137\273\261\120\156\244\321\012\314\325\161\176\037\247
\033\174\365\123\156\042\137\313\053\346\324\174\135\256\326\302
\306\114\345\005\001\331\355\127\374\301\043\171\374\372\310\044
\203\225\363\265\152\121\001\320\167\326\351\022\241\371\032\203
\373\202\033\271\260\227\364\166\006\063\103\111\240\377\013\265
\372\265\002\003\001\000\001\243\201\200\060\176\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006
\003\125\035\016\004\026\004\024\313\017\306\337\102\103\314\075
\313\265\110\043\241\032\172\246\052\273\064\150\060\037\006\003
\125\035\043\004\030\060\026\200\024\313\017\306\337\102\103\314
\075\313\265\110\043\241\032\172\246\052\273\064\150\060\033\006
\003\125\035\021\004\024\060\022\201\020\151\156\146\157\100\145
\055\163\172\151\147\156\157\056\150\165\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\001\001\000\311\321
\016\136\056\325\314\263\174\076\313\374\075\377\015\050\225\223
\004\310\277\332\315\171\270\103\220\360\244\276\357\362\357\041
\230\274\324\324\135\006\366\356\102\354\060\154\240\252\251\312
\361\257\212\372\077\013\163\152\076\352\056\100\176\037\256\124
\141\171\353\056\010\067\327\043\363\214\237\276\035\261\341\244
\165\333\240\342\124\024\261\272\034\051\244\030\366\022\272\242
\024\024\343\061\065\310\100\377\267\340\005\166\127\301\034\131
\362\370\277\344\355\045\142\134\204\360\176\176\037\263\276\371
\267\041\021\314\003\001\126\160\247\020\222\036\033\064\201\036
\255\234\032\303\004\074\355\002\141\326\036\006\363\137\072\207
\362\053\361\105\207\345\075\254\321\307\127\204\275\153\256\334
\330\371\266\033\142\160\013\075\066\311\102\362\062\327\172\141
\346\322\333\075\317\310\251\311\233\334\333\130\104\327\157\070
\257\177\170\323\243\255\032\165\272\034\301\066\174\217\036\155
\034\303\165\106\256\065\005\246\366\134\075\041\356\126\360\311
\202\042\055\172\124\253\160\303\175\042\145\202\160\226

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Microsec e-Szigno Root CA 2009"

Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU

```
# Serial Number:00:c2:7e:43:04:4e:47:3f:19
# Subject: E=info@e-szigno.hu,CN=Microsec
e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Jun 16 11:30:18 2009
# Not Valid After : Sun Dec 30 11:30:18 2029
# Fingerprint (SHA-256):
3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78
# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\211\337\164\376\134\364\017\112\200\371\343\067\175\124\332\221
\341\001\061\216
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\111\364\003\274\104\055\203\276\110\151\175\051\144\374\261
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\302\176\103\004\116\107\077\031
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Root CA - R3"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Serial Number:04:00:00:00:00:01:21:58:53:08:a2
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Not Valid Before: Wed Mar 18 10:00:00 2009
# Not Valid After : Sun Mar 18 10:00:00 2029
```

Fingerprint (SHA-256):

CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B

#

Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Root CA - R3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\013\004\000\000\000\000\001\041\130\123\010\242

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\137\060\202\002\107\240\003\002\001\002\002\013\004
\000\000\000\000\001\041\130\123\010\242\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\114\061\040\060\036\006
\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147\156
\040\122\157\157\164\040\103\101\040\055\040\122\063\061\023\060
\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123\151
\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154\157
\142\141\154\123\151\147\156\060\036\027\015\060\071\060\063\061
\070\061\060\060\060\060\060\132\027\015\062\071\060\063\061\070
\061\060\060\060\060\060\132\060\114\061\040\060\036\006\003\125
\004\013\023\027\107\154\157\142\141\154\123\151\147\156\040\122
\157\157\164\040\103\101\040\055\040\122\063\061\023\060\021\006
\003\125\004\012\023\012\107\154\157\142\141\154\123\151\147\156
\061\023\060\021\006\003\125\004\003\023\012\107\154\157\142\141
\154\123\151\147\156\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\314\045\166\220\171\006\170\042\026\365
\300\203\266\204\312\050\236\375\005\166\021\305\255\210\162\374

\106\002\103\307\262\212\235\004\137\044\313\056\113\341\140\202
\106\341\122\253\014\201\107\160\154\335\144\321\353\365\054\243
\017\202\075\014\053\256\227\327\266\024\206\020\171\273\073\023
\200\167\214\010\341\111\322\152\142\057\037\136\372\226\150\337
\211\047\225\070\237\006\327\076\311\313\046\131\015\163\336\260
\310\351\046\016\203\025\306\357\133\213\322\004\140\312\111\246
\050\366\151\073\366\313\310\050\221\345\235\212\141\127\067\254
\164\024\334\164\340\072\356\162\057\056\234\373\320\273\277\365
\075\000\341\006\063\350\202\053\256\123\246\072\026\163\214\335
\101\016\040\072\300\264\247\241\351\262\117\220\056\062\140\351
\127\313\271\004\222\150\150\345\070\046\140\165\262\237\167\377
\221\024\357\256\040\111\374\255\100\025\110\321\002\061\141\031
\136\270\227\357\255\167\267\144\232\172\277\137\301\023\357\233
\142\373\015\154\340\124\151\026\251\003\332\156\351\203\223\161
\166\306\151\205\202\027\002\003\001\000\001\243\102\060\100\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\217\360\113\177\250
\056\105\044\256\115\120\372\143\232\213\336\342\335\033\274\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\001\001\000\113\100\333\300\120\252\376\310\014\357\367\226\124
\105\111\273\226\000\011\101\254\263\023\206\206\050\007\063\312
\153\346\164\271\272\000\055\256\244\012\323\365\361\361\017\212
\277\163\147\112\203\307\104\173\170\340\257\156\154\157\003\051
\216\063\071\105\303\216\344\271\127\154\252\374\022\226\354\123
\306\055\344\044\154\271\224\143\373\334\123\150\147\126\076\203
\270\317\065\041\303\311\150\376\316\332\302\123\252\314\220\212
\351\360\135\106\214\225\335\172\130\050\032\057\035\336\315\000
\067\101\217\355\104\155\327\123\050\227\176\363\147\004\036\025
\327\212\226\264\323\336\114\047\244\114\033\163\163\166\364\027
\231\302\037\172\016\343\055\010\255\012\034\054\377\074\253\125
\016\017\221\176\066\353\303\127\111\276\341\056\055\174\140\213
\303\101\121\023\043\235\316\367\062\153\224\001\250\231\347\054
\063\037\072\073\045\322\206\100\316\073\054\206\170\311\141\057
\024\272\356\333\125\157\337\204\356\005\011\115\275\050\330\162
\316\323\142\120\145\036\353\222\227\203\061\331\263\265\312\107
\130\077\137

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root CA - R3"

Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3

Serial Number:04:00:00:00:00:01:21:58:53:08:a2

#

```

Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Not Valid Before: Wed Mar 18 10:00:00 2009
# Not Valid After : Sun Mar 18 10:00:00 2029
# Fingerprint (SHA-256):
CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B
# Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\326\233\126\021\110\360\034\167\305\105\170\301\011\046\337\133
\205\151\166\255
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\337\270\111\312\005\023\125\356\055\272\032\303\076\260\050
END
CKA_ISSUER MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\041\130\123\010\242
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"
#
# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Serial Number:53:ec:3b:ee:fb:b2:48:5f
# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Not Valid Before: Wed May 20 08:38:15 2009
# Not Valid After : Tue Dec 31 08:38:15 2030
# Fingerprint (SHA-256):
04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF
# Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\123\354\073\356\373\262\110\137
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\123
\354\073\356\373\262\110\137\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\121\061\013\060\011\006\003\125\004
\006\023\002\105\123\061\102\060\100\006\003\125\004\003\014\071
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162
\164\151\146\151\143\141\143\151\157\156\040\106\151\162\155\141
\160\162\157\146\145\163\151\157\156\141\154\040\103\111\106\040
\101\066\062\066\063\064\060\066\070\060\036\027\015\060\071\060
\065\062\060\060\070\063\070\061\065\132\027\015\063\060\061\062
\063\061\060\070\063\070\061\065\132\060\121\061\013\060\011\006
\003\125\004\006\023\002\105\123\061\102\060\100\006\003\125\004
\003\014\071\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\040\106\151
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\226\046\353\061\110\022\375\052\332\311\006\317\164\036\251\113
\325\207\050\371\171\064\222\076\056\104\350\366\217\117\217\065
\077\045\263\071\334\143\052\220\153\040\137\304\122\022\116\227
\054\052\254\235\227\336\110\362\243\146\333\302\322\203\225\246
\146\247\236\045\017\351\013\063\221\145\012\132\303\331\124\022
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\336\322\117\044\005\363\154\116\365\114\111\146\215\321\377\322
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\373\042\006\313\036\335\027\107\034\137\146\271\323\032\242\332
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END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Autoridad de Certificacion Firmaprofesional CIF A62634068"

Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Serial Number:53:ec:3b:ee:fb:b2:48:5f

Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Not Valid Before: Wed May 20 08:38:15 2009

Not Valid After : Tue Dec 31 08:38:15 2030

Fingerprint (SHA-256):

04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF

#

Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

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CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\256\305\373\077\310\341\277\304\345\117\003\007\132\232\350\000
\267\367\266\372
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\163\072\164\172\354\273\243\226\246\302\344\342\310\233\300\303
END
CKA_ISSUER MULTILINE_OCTAL
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\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\123\354\073\356\373\262\110\137
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CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Izenpe.com"
#
# Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES
# Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d
# Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES
# Not Valid Before: Thu Dec 13 13:08:28 2007
# Not Valid After : Sun Dec 13 08:27:25 2037
# Fingerprint (SHA-256):
25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F
# Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Izenpe.com"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\070\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\024\060\022\006\003\125\004\012\014\013\111\132\105\116\120\105
\040\123\056\101\056\061\023\060\021\006\003\125\004\003\014\012
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END

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CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

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\024\060\022\006\003\125\004\012\014\013\111\132\105\116\120\105
\040\123\056\101\056\061\023\060\021\006\003\125\004\003\014\012
\111\172\145\156\160\145\056\143\157\155

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

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\346\175

END

CKA_VALUE MULTILINE_OCTAL

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\061\013\060\011\006\003\125\004\006\023\002\105\123\061\024\060
\022\006\003\125\004\012\014\013\111\132\105\116\120\105\040\123
\056\101\056\061\023\060\021\006\003\125\004\003\014\012\111\172
\145\156\160\145\056\143\157\155\060\036\027\015\060\067\061\062
\061\063\061\063\060\070\062\070\132\027\015\063\067\061\062\061
\063\060\070\062\067\062\065\132\060\070\061\013\060\011\006\003
\125\004\006\023\002\105\123\061\024\060\022\006\003\125\004\012
\014\013\111\132\105\116\120\105\040\123\056\101\056\061\023\060
\021\006\003\125\004\003\014\012\111\172\145\156\160\145\056\143
\157\155\060\202\002\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202
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\335\015\166\343\072\327\367\264\150\276\242\365\343\201\156\301
\106\157\135\215\340\115\306\124\125\211\032\063\061\012\261\127
\271\243\212\230\303\354\073\064\305\225\101\151\176\165\302\074
\040\305\141\272\121\107\240\040\220\223\241\220\113\363\116\174
\205\105\124\232\321\005\046\101\260\265\115\035\063\276\304\003
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\304\254\076\310\313\222\114\123\071\067\043\354\323\001\371\340
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\150\103\110\262\333\353\163\044\347\221\177\124\244\266\200\076
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```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Izenpe.com"

#

Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES

Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d

Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES

Not Valid Before: Thu Dec 13 13:08:28 2007

Not Valid After : Sun Dec 13 08:27:25 2037

Fingerprint (SHA-256):

25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F

Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Izenpe.com"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\057\170\075\045\122\030\247\112\145\071\161\265\054\242\234\105
```

```
\025\157\351\031
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\246\260\315\205\200\332\134\120\064\243\071\220\057\125\147\163
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\070\061\013\060\011\006\003\125\004\006\023\002\105\123\061
```

```
\024\060\022\006\003\125\004\012\014\013\111\132\105\116\120\105
```

```
\040\123\056\101\056\061\023\060\021\006\003\125\004\003\014\012
```

```
\111\172\145\156\160\145\056\143\157\155
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\020\000\260\267\132\026\110\137\277\341\313\365\213\327\031
\346\175
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Chambers of Commerce Root - 2008"
#
# Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Serial Number:00:a3:da:42:7e:a4:b1:ae:da
# Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:29:50 2008
# Not Valid After : Sat Jul 31 12:29:50 2038
# Fingerprint (SHA-256):
06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0
#
Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Chambers of Commerce Root - 2008"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151

```

\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\011\000\243\332\102\176\244\261\256\332

END

CKA_VALUE MULTILINE_OCTAL

\060\202\007\117\060\202\005\067\240\003\002\001\002\002\011\000
\243\332\102\176\244\261\256\332\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\201\256\061\013\060\011\006\003
\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007
\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165
\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164
\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056
\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020
\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067
\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141
\155\145\162\146\151\162\155\141\040\123\056\101\056\061\051\060
\047\006\003\125\004\003\023\040\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164\040\055\040\062\060\060\070\060\036\027\015\060\070\060\070
\060\061\061\062\062\071\065\060\132\027\015\063\070\060\067\063
\061\061\062\062\071\065\060\132\060\201\256\061\013\060\011\006
\003\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004
\007\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143
\165\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141
\164\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141
\056\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060
\020\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070
\067\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103
\141\155\145\162\146\151\162\155\141\040\123\056\101\056\061\051
\060\047\006\003\125\004\003\023\040\103\150\141\155\142\145\162
\163\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157
\157\164\040\055\040\062\060\060\070\060\202\002\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017
\000\060\202\002\012\002\202\002\001\000\257\000\313\160\067\053
\200\132\112\072\154\170\224\175\243\177\032\037\366\065\325\275
\333\313\015\104\162\076\046\262\220\122\272\143\073\050\130\157
\245\263\155\224\246\363\335\144\014\125\366\366\347\362\042\042
\200\136\341\142\306\266\051\341\201\154\362\277\345\175\062\152

\124\240\062\031\131\376\037\213\327\075\140\206\205\044\157\343
\021\263\167\076\040\226\065\041\153\263\010\331\160\056\144\367
\204\222\123\326\016\260\220\212\212\343\207\215\006\323\275\220
\016\342\231\241\033\206\016\332\232\012\273\013\141\120\006\122
\361\236\177\166\354\313\017\320\036\015\317\231\060\075\034\304
\105\020\130\254\326\323\350\327\345\352\305\001\007\167\326\121
\346\003\177\212\110\245\115\150\165\271\351\274\236\116\031\161
\365\062\113\234\155\140\031\013\373\314\235\165\334\277\046\315
\217\223\170\071\171\163\136\045\016\312\134\353\167\022\007\313
\144\101\107\162\223\253\120\303\353\011\166\144\064\322\071\267
\166\021\011\015\166\105\304\251\256\075\152\257\265\175\145\057
\224\130\020\354\134\174\257\176\342\266\030\331\320\233\116\132
\111\337\251\146\013\314\074\306\170\174\247\234\035\343\316\216
\123\276\005\336\140\017\153\345\032\333\077\343\341\041\311\051
\301\361\353\007\234\122\033\001\104\121\074\173\045\327\304\345
\122\124\135\045\007\312\026\040\270\255\344\101\356\172\010\376
\231\157\203\246\221\002\260\154\066\125\152\347\175\365\226\346
\312\201\326\227\361\224\203\351\355\260\261\153\022\151\036\254
\373\135\251\305\230\351\264\133\130\172\276\075\242\104\072\143
\131\324\013\045\336\033\117\275\345\001\236\315\322\051\325\237
\027\031\012\157\277\014\220\323\011\137\331\343\212\065\314\171
\132\115\031\067\222\267\304\301\255\257\364\171\044\232\262\001
\013\261\257\134\226\363\200\062\373\134\075\230\361\240\077\112
\336\276\257\224\056\331\125\232\027\156\140\235\143\154\270\143
\311\256\201\134\030\065\340\220\273\276\074\117\067\042\271\176
\353\317\236\167\041\246\075\070\201\373\110\332\061\075\053\343
\211\365\320\265\275\176\340\120\304\022\211\263\043\232\020\061
\205\333\256\157\357\070\063\030\166\021\002\003\001\000\001\243
\202\001\154\060\202\001\150\060\022\006\003\125\035\023\001\001
\377\004\010\060\006\001\001\377\002\001\014\060\035\006\003\125
\035\016\004\026\004\024\371\044\254\017\262\265\370\171\300\372
\140\210\033\304\331\115\002\236\027\031\060\201\343\006\003\125
\035\043\004\201\333\060\201\330\200\024\371\044\254\017\262\265
\370\171\300\372\140\210\033\304\331\115\002\236\027\031\241\201
\264\244\201\261\060\201\256\061\013\060\011\006\003\125\004\006
\023\002\105\125\061\103\060\101\006\003\125\004\007\023\072\115
\141\144\162\151\144\040\050\163\145\145\040\143\165\162\162\145
\156\164\040\141\144\144\162\145\163\163\040\141\164\040\167\167
\167\056\143\141\155\145\162\146\151\162\155\141\056\143\157\155
\057\141\144\144\162\145\163\163\051\061\022\060\020\006\003\125
\004\005\023\011\101\070\062\067\064\063\062\070\067\061\033\060
\031\006\003\125\004\012\023\022\101\103\040\103\141\155\145\162
\146\151\162\155\141\040\123\056\101\056\061\051\060\047\006\003
\125\004\003\023\040\103\150\141\155\142\145\162\163\040\157\146
\040\103\157\155\155\145\162\143\145\040\122\157\157\164\040\055
\040\062\060\060\070\202\011\000\243\332\102\176\244\261\256\332
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006
\060\075\006\003\125\035\040\004\066\060\064\060\062\006\004\125

\035\040\000\060\052\060\050\006\010\053\006\001\005\005\007\002
\001\026\034\150\164\164\160\072\057\057\160\157\154\151\143\171
\056\143\141\155\145\162\146\151\162\155\141\056\143\157\155\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202
\002\001\000\220\022\257\042\065\302\243\071\360\056\336\351\265
\351\170\174\110\276\077\175\105\222\136\351\332\261\031\374\026
\074\237\264\133\146\236\152\347\303\271\135\210\350\017\255\317
\043\017\336\045\072\136\314\117\245\301\265\055\254\044\322\130
\007\336\242\317\151\204\140\063\350\020\015\023\251\043\320\205
\345\216\173\246\236\075\162\023\162\063\365\252\175\306\143\037
\010\364\376\001\177\044\317\053\054\124\011\336\342\053\155\222
\306\071\117\026\352\074\176\172\106\324\105\152\106\250\353\165
\202\126\247\253\240\174\150\023\063\366\235\060\360\157\047\071
\044\043\052\220\375\220\051\065\362\223\337\064\245\306\367\370
\357\214\017\142\112\174\256\323\365\124\370\215\266\232\126\207
\026\202\072\063\253\132\042\010\367\202\272\352\056\340\107\232
\264\265\105\243\005\073\331\334\056\105\100\073\352\334\177\350
\073\353\321\354\046\330\065\244\060\305\072\254\127\236\263\166
\245\040\173\371\036\112\005\142\001\246\050\165\140\227\222\015
\156\076\115\067\103\015\222\025\234\030\042\315\121\231\240\051
\032\074\137\212\062\063\133\060\307\211\057\107\230\017\243\003
\306\366\361\254\337\062\360\331\201\032\344\234\275\366\200\024
\360\321\054\271\205\365\330\243\261\310\245\041\345\034\023\227
\356\016\275\337\051\251\357\064\123\133\323\344\152\023\204\006
\266\062\002\304\122\256\042\322\334\262\041\102\032\332\100\360
\051\311\354\012\014\134\342\320\272\314\110\323\067\012\314\022
\012\212\171\260\075\003\177\151\113\364\064\040\175\263\064\352
\216\113\144\365\076\375\263\043\147\025\015\004\270\360\055\301
\011\121\074\262\154\025\360\245\043\327\203\164\344\345\056\311
\376\230\047\102\306\253\306\236\260\320\133\070\245\233\120\336
\176\030\230\265\105\073\366\171\264\350\367\032\173\006\203\373
\320\213\332\273\307\275\030\253\010\157\074\200\153\100\077\031
\031\272\145\212\346\276\325\134\323\066\327\357\100\122\044\140
\070\147\004\061\354\217\363\202\306\336\271\125\363\073\061\221
\132\334\265\010\025\255\166\045\012\015\173\056\207\342\014\246
\006\274\046\020\155\067\235\354\335\170\214\174\200\305\360\331
\167\110\320

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Chambers of Commerce Root - 2008"

Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU

Serial Number:00:a3:da:42:7e:a4:b1:ae:da

#

Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU

Not Valid Before: Fri Aug 01 12:29:50 2008
Not Valid After : Sat Jul 31 12:29:50 2038
Fingerprint (SHA-256):
06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0
Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Chambers of Commerce Root - 2008"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\170\152\164\254\166\253\024\177\234\152\060\120\272\236\250\176
\376\232\316\074
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\136\200\236\204\132\016\145\013\027\002\363\125\030\052\076\327
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\243\332\102\176\244\261\256\332
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

Certificate "Global Chambersign Root - 2008"

Issuer: CN=Global Chambersign
Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at
www.camerfirma.com/address),C=EU

```

# Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce
# Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:31:40 2008
# Not Valid After : Sat Jul 31 12:31:40 2038
# Fingerprint (SHA-256):
13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA
# Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Global Chambersign Root - 2008"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
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\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
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\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
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\062\063\061\064\060\132\060\201\254\061\013\060\011\006\003\125
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\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
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\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070\202
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END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Global Chambersign Root - 2008"

Issuer: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at www.camerfirma.com/address),C=EU

Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce

Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at www.camerfirma.com/address),C=EU

Not Valid Before: Fri Aug 01 12:31:40 2008

Not Valid After : Sat Jul 31 12:31:40 2038

Fingerprint (SHA-256):

13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA

Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL

CK_FALSE

CKA_LABEL UTF8 "Global Chambersign Root - 2008"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

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\366\326\252\014
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CKA_CERT_MD5_HASH MULTILINE_OCTAL

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END

CKA_ISSUER MULTILINE_OCTAL

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END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\011\000\311\315\323\351\325\175\043\316

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Go Daddy Root Certificate Authority - G2"

#

Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com,
Inc.",L=Scottsdale,ST=Arizona,C=US

Not Valid Before: Tue Sep 01 00:00:00 2009

Not Valid After : Thu Dec 31 23:59:59 2037

Fingerprint (SHA-256):

45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA

Fingerprint (SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE

CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

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CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

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\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
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END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

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\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156
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\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012\023
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\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\062\060\036\027\015\060\071\060\071\060\061\060
\060\060\060\060\060\132\027\015\063\067\061\062\063\061\062\063
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\001\013\005\000\003\202\001\001\000\231\333\135\171\325\371\227
\131\147\003\141\361\176\073\006\061\165\055\241\040\216\117\145
\207\264\367\246\234\274\330\351\057\320\333\132\356\317\164\214
\163\264\070\102\332\005\173\370\002\165\270\375\245\261\327\256
\366\327\336\023\313\123\020\176\212\106\321\227\372\267\056\053
\021\253\220\260\047\200\371\350\237\132\351\067\237\253\344\337
\154\263\205\027\235\075\331\044\117\171\221\065\326\137\004\353
\200\203\253\232\002\055\265\020\364\330\220\307\004\163\100\355
\162\045\240\251\237\354\236\253\150\022\231\127\306\217\022\072
\011\244\275\104\375\006\025\067\301\233\344\062\243\355\070\350
\330\144\363\054\176\024\374\002\352\237\315\377\007\150\027\333
\042\220\070\055\172\215\321\124\361\151\343\137\063\312\172\075
\173\012\343\312\177\137\071\345\342\165\272\305\166\030\063\316
\054\360\057\114\255\367\261\347\316\117\250\304\233\112\124\006
\305\177\175\325\010\017\342\034\376\176\027\270\254\136\366\324
\026\262\103\011\014\115\366\247\153\264\231\204\145\312\172\210
\342\342\104\276\134\367\352\034\365

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Go Daddy Root Certificate Authority - G2"

Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com,
Inc.",L=Scottsdale,ST=Arizona,C=US

Not Valid Before: Tue Sep 01 00:00:00 2009

```

# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA
# Fingerprint
(SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\107\276\253\311\042\352\350\016\170\170\064\142\247\237\105\302
\124\375\346\213
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\200\072\274\042\301\346\373\215\233\073\047\112\062\033\232\001
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Starfield Root Certificate Authority - G2"
#
# Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before: Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):

```

```
2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5
# Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\335\060\202\002\305\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062\060
\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145\154
```

\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062\060\036\027\015\060\071\060\071\060\061\060\060\060\060\060
\060\132\027\015\063\067\061\062\063\061\062\063\065\071\065\071
\132\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172
\157\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143
\157\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143
\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061
\062\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151
\145\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055
\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\275\355\301\003\374\366\217\374\002\261\157\133
\237\110\331\235\171\342\242\267\003\141\126\030\303\107\266\327
\312\075\065\056\211\103\367\241\151\233\336\212\032\375\023\040
\234\264\111\167\062\051\126\375\271\354\214\335\042\372\162\334
\047\141\227\356\366\132\204\354\156\031\271\211\054\334\204\133
\325\164\373\153\137\305\211\245\020\122\211\106\125\364\270\165
\034\346\177\344\124\256\113\370\125\162\127\002\031\370\027\161
\131\353\036\050\007\164\305\235\110\276\154\264\364\244\260\363
\144\067\171\222\300\354\106\136\177\341\155\123\114\142\257\315
\037\013\143\273\072\235\373\374\171\000\230\141\164\317\046\202
\100\143\363\262\162\152\031\015\231\312\324\016\165\314\067\373
\213\211\301\131\361\142\177\137\263\137\145\060\370\247\267\115
\166\132\036\166\136\064\300\350\226\126\231\212\263\360\177\244
\315\275\334\062\061\174\221\317\340\137\021\370\153\252\111\134
\321\231\224\321\242\343\143\133\011\166\265\126\142\341\113\164
\035\226\324\046\324\010\004\131\320\230\016\016\346\336\374\303
\354\037\220\361\002\003\001\000\001\243\102\060\100\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035
\006\003\125\035\016\004\026\004\024\174\014\062\037\247\331\060
\177\304\175\150\243\142\250\241\316\253\007\133\047\060\015\006
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001
\000\021\131\372\045\117\003\157\224\231\073\232\037\202\205\071
\324\166\005\224\136\341\050\223\155\142\135\011\302\240\250\324
\260\165\070\361\064\152\235\344\237\212\206\046\121\346\054\321
\306\055\156\225\040\112\222\001\354\270\212\147\173\061\342\147
\056\214\225\003\046\056\103\235\112\061\366\016\265\014\273\267
\342\067\177\042\272\000\243\016\173\122\373\153\273\073\304\323
\171\121\116\315\220\364\147\007\031\310\074\106\172\015\001\175
\305\130\347\155\346\205\060\027\232\044\304\020\340\004\367\340
\362\177\324\252\012\377\102\035\067\355\224\345\144\131\022\040
\167\070\323\062\076\070\201\165\226\163\372\150\217\261\313\316
\037\305\354\372\234\176\317\176\261\361\007\055\266\374\277\312

```
\244\277\320\227\005\112\274\352\030\050\002\220\275\124\170\011
\041\161\323\321\175\035\331\026\260\251\141\075\320\012\000\042
\374\307\173\313\011\144\105\013\073\100\201\367\175\174\062\365
\230\312\130\216\175\052\356\220\131\163\144\371\066\164\136\045
\241\365\146\005\056\177\071\025\251\052\373\120\213\216\205\151
\364
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Starfield Root Certificate Authority - G2"

Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

#

Not Valid Before: Tue Sep 01 00:00:00 2009

Not Valid After : Thu Dec 31 23:59:59 2037

Fingerprint (SHA-256):

2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5

Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Starfield Root Certificate Authority - G2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\265\034\006\174\356\053\014\075\370\125\253\055\222\364\376\071
\324\347\017\016
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\326\071\201\306\122\176\226\151\374\374\312\146\355\005\362\226
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Starfield Services Root Certificate Authority - G2"
#
# Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before:
Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5
# Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Services Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012

```

\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\357\060\202\002\327\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073\060
\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145\154
\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164\040
\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150
\157\162\151\164\171\040\055\040\107\062\060\036\027\015\060\071
\060\071\060\061\060\060\060\060\060\060\132\027\015\063\067\061
\062\063\061\062\063\065\071\065\071\132\060\201\230\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\020\060\016\006\003
\125\004\010\023\007\101\162\151\172\157\156\141\061\023\060\021
\006\003\125\004\007\023\012\123\143\157\164\164\163\144\141\154
\145\061\045\060\043\006\003\125\004\012\023\034\123\164\141\162
\146\151\145\154\144\040\124\145\143\150\156\157\154\157\147\151
\145\163\054\040\111\156\143\056\061\073\060\071\006\003\125\004
\003\023\062\123\164\141\162\146\151\145\154\144\040\123\145\162
\166\151\143\145\163\040\122\157\157\164\040\103\145\162\164\151
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\325\014\072\304\052\371\116\342\365\276
\031\227\137\216\210\123\261\037\077\313\317\237\040\023\155\051
\072\310\017\175\074\367\153\166\070\143\331\066\140\250\233\136
\134\000\200\262\057\131\177\366\207\371\045\103\206\347\151\033
\122\232\220\341\161\343\330\055\015\116\157\366\310\111\331\266
\363\032\126\256\053\266\164\024\353\317\373\046\343\032\272\035
\226\056\152\073\130\224\211\107\126\377\045\240\223\160\123\203
\332\204\164\024\303\147\236\004\150\072\337\216\100\132\035\112
\116\317\103\221\073\347\126\326\000\160\313\122\356\173\175\256
\072\347\274\061\371\105\366\302\140\317\023\131\002\053\200\314
\064\107\337\271\336\220\145\155\002\317\054\221\246\246\347\336
\205\030\111\174\146\116\243\072\155\251\265\356\064\056\272\015

\003\270\063\337\107\353\261\153\215\045\331\233\316\201\321\105
\106\062\226\160\207\336\002\016\111\103\205\266\154\163\273\144
\352\141\101\254\311\324\124\337\207\057\307\042\262\046\314\237
\131\124\150\237\374\276\052\057\304\125\034\165\100\140\027\205
\002\125\071\213\177\005\002\003\001\000\001\243\102\060\100\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006
\060\035\006\003\125\035\016\004\026\004\024\234\137\000\337\252
\001\327\060\053\070\210\242\270\155\112\234\362\021\221\203\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\001\001\000\113\066\246\204\167\151\335\073\031\237\147\043\010
\157\016\141\311\375\204\334\137\330\066\201\315\330\033\101\055
\237\140\335\307\032\150\331\321\156\206\341\210\043\317\023\336
\103\317\342\064\263\004\235\037\051\325\277\370\136\310\325\301
\275\356\222\157\062\164\362\221\202\057\275\202\102\172\255\052
\267\040\175\115\274\172\125\022\302\025\352\275\367\152\225\056
\154\164\237\317\034\264\362\305\001\243\205\320\162\076\255\163
\253\013\233\165\014\155\105\267\216\224\254\226\067\265\240\320
\217\025\107\016\343\350\203\335\217\375\357\101\001\167\314\047
\251\142\205\063\362\067\010\357\161\317\167\006\336\310\031\035
\210\100\317\175\106\035\377\036\307\341\316\377\043\333\306\372
\215\125\116\251\002\347\107\021\106\076\364\375\275\173\051\046
\273\251\141\142\067\050\266\055\052\366\020\206\144\311\160\247
\322\255\267\051\160\171\352\074\332\143\045\237\375\150\267\060
\354\160\373\165\212\267\155\140\147\262\036\310\271\351\330\250
\157\002\213\147\015\115\046\127\161\332\040\374\301\112\120\215
\261\050\272

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Starfield Services Root Certificate Authority - G2"

Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

Not Valid Before: Tue Sep 01 00:00:00 2009

Not Valid After : Thu Dec 31 23:59:59 2037

Fingerprint (SHA-256):

56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5

Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

CKA_LABEL UTF8 "Starfield Services Root
Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\222\132\217\215\054\155\004\340\146\137\131\152\377\042\330\143
\350\045\157\077
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\027\065\164\257\173\141\034\353\364\371\074\342\356\100\371\242
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Commercial"
#
# Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US
# Serial Number:77:77:06:27:26:a9:b1:7c
# Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:06:06 2010
# Not Valid After : Tue Dec 31 14:06:06 2030
# Fingerprint (SHA-256):
03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7
# Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Commercial"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\010\167\167\006\047\046\251\261\174

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\167
\167\006\047\046\251\261\174\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\104\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163
\164\040\103\157\155\155\145\162\143\151\141\154\060\036\027\015
\061\060\060\061\062\071\061\064\060\066\060\066\132\027\015\063
\060\061\062\063\061\061\064\060\066\060\066\132\060\104\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151
\162\155\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\366\033\117\147\007\053\241\025\365\006\042\313\037
\001\262\343\163\105\006\104\111\054\273\111\045\024\326\316\303
\267\253\054\117\306\101\062\224\127\372\022\247\133\016\342\217
\037\036\206\031\247\252\265\055\271\137\015\212\302\257\205\065
\171\062\055\273\034\142\067\362\261\133\112\075\312\315\161\137
\351\102\276\224\350\310\336\371\042\110\144\306\345\253\306\053
\155\255\005\360\372\325\013\317\232\345\360\120\244\213\073\107
\245\043\133\172\172\370\063\077\270\357\231\227\343\040\301\326
\050\211\317\224\373\271\105\355\343\100\027\021\324\164\360\013
\061\342\053\046\152\233\114\127\256\254\040\076\272\105\172\005
\363\275\233\151\025\256\175\116\040\143\304\065\166\072\007\002
\311\067\375\307\107\356\350\361\166\035\163\025\362\227\244\265
\310\172\171\331\102\252\053\177\134\376\316\046\117\243\146\201
\065\257\104\272\124\036\034\060\062\145\235\346\074\223\136\120

```
\116\172\343\072\324\156\314\032\373\371\322\067\256\044\052\253
\127\003\042\050\015\111\165\177\267\050\332\165\277\216\343\334
\016\171\061\002\003\001\000\001\243\102\060\100\060\035\006\003
\125\035\016\004\026\004\024\235\223\306\123\213\136\312\257\077
\237\036\017\345\231\225\274\044\366\224\217\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011
\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001\000
\130\254\364\004\016\315\300\015\377\012\375\324\272\026\137\051
\275\173\150\231\130\111\322\264\035\067\115\177\047\175\106\006
\135\103\306\206\056\076\163\262\046\175\117\223\251\266\304\052
\232\253\041\227\024\261\336\214\323\253\211\025\330\153\044\324
\361\026\256\330\244\134\324\177\121\216\355\030\001\261\223\143
\275\274\370\141\200\232\236\261\316\102\160\342\251\175\006\045
\175\047\241\376\157\354\263\036\044\332\343\113\125\032\000\073
\065\264\073\331\327\135\060\375\201\023\211\362\302\006\053\355
\147\304\216\311\103\262\134\153\025\211\002\274\142\374\116\362
\265\063\252\262\157\323\012\242\120\343\366\073\350\056\104\302
\333\146\070\251\063\126\110\361\155\033\063\215\015\214\077\140
\067\235\323\312\155\176\064\176\015\237\162\166\213\033\237\162
\375\122\065\101\105\002\226\057\034\262\232\163\111\041\261\111
\107\105\107\264\357\152\064\021\311\115\232\314\131\267\326\002
\236\132\116\145\265\224\256\033\337\051\260\026\361\277\000\236
\007\072\027\144\265\004\265\043\041\231\012\225\073\227\174\357
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AffirmTrust Commercial"

Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

Serial Number:77:77:06:27:26:a9:b1:7c

Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

Not Valid Before: Fri Jan 29 14:06:06 2010

Not Valid After : Tue Dec 31 14:06:06 2030

Fingerprint (SHA-256):

03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7

Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "AffirmTrust Commercial"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\371\265\266\062\105\137\234\276\354\127\137\200\334\351\156\054
\307\262\170\267
```

END

```

CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\202\222\272\133\357\315\212\157\246\075\125\371\204\366\326\267
END
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\167\167\006\047\046\251\261\174
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Networking"
#
# Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Serial Number:7c:4f:04:39:1c:d4:99:2d
# Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:08:24 2010
# Not Valid After : Tue Dec
31 14:08:24 2030
# Fingerprint (SHA-256):
0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B
# Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Networking"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155

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\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\174
\117\004\071\034\324\231\055\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\104\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163
\164\040\116\145\164\167\157\162\153\151\156\147\060\036\027\015
\061\060\060\061\062\071\061\064\060\070\062\064\132\027\015\063
\060\061\062\063\061\061\064\060\070\062\064\132\060\104\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151
\162\155\124\162\165\163\164\040\116\145\164\167\157\162\153\151
\156\147\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\264\204\314\063\027\056\153\224\154\153\141\122\240
\353\243\317\171\224\114\345\224\200\231\313\125\144\104\145\217
\147\144\342\006\343\134\067\111\366\057\233\204\204\036\055\362
\140\235\060\116\314\204\205\342\054\317\036\236\376\066\253\063
\167\065\104\330\065\226\032\075\066\350\172\016\330\325\107\241
\152\151\213\331\374\273\072\256\171\132\325\364\326\161\273\232
\220\043\153\232\267\210\164\207\014\036\137\271\236\055\372\253
\123\053\334\273\166\076\223\114\010\010\214\036\242\043\034\324
\152\255\042\272\231\001\056\155\145\313\276\044\146\125\044\113
\100\104\261\033\327\341\302\205\300\336\020\077\075\355\270\374
\361\361\043\123\334\277\145\227\157\331\371\100\161\215\175\275
\225\324\316\276\240\136\047\043\336\375\246\320\046\016\000\051
\353\074\106\360\075\140\277\077\120\322\334\046\101\121\236\024
\067\102\004\243\160\127\250\033\207\355\055\372\173\356\214\012
\343\251\146\211\031\313\101\371\335\104\066\141\317\342\167\106
\310\175\366\364\222\201\066\375\333\064\361\162\176\363\014\026
\275\264\025\002\003\001\000\001\243\102\060\100\060\035\006\003
\125\035\016\004\026\004\024\007\037\322\347\234\332\302\156\242
\100\264\260\172\120\020\120\164\304\310\275\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
\211\127\262\026\172\250\302\375\326\331\233\233\064\302\234\264
\062\024\115\247\244\337\354\276\247\276\370\103\333\221\067\316

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\264\062\056\120\125\032\065\116\166\103\161\040\357\223\167\116
\025\160\056\207\303\301\035\155\334\313\265\047\324\054\126\321
\122\123\072\104\322\163\310\304\033\005\145\132\142\222\234\356
\101\215\061\333\347\064\352\131\041\325\001\172\327\144\270\144
\071\315\311\355\257\355\113\003\110\247\240\231\001\200\334\145
\243\066\256\145\131\110\117\202\113\310\145\361\127\035\345\131
\056\012\077\154\330\321\365\345\011\264\154\124\000\012\340\025
\115\207\165\155\267\130\226\132\335\155\322\000\240\364\233\110
\276\303\067\244\272\066\340\174\207\205\227\032\025\242\336\056
\242\133\275\257\030\371\220\120\315\160\131\370\047\147\107\313
\307\240\007\072\175\321\054\135\154\031\072\146\265\175\375\221
\157\202\261\276\010\223\333\024\107\361\242\067\307\105\236\074
\307\167\257\144\250\223\337\366\151\203\202\140\362\111\102\064
\355\132\000\124\205\034\026\066\222\014\134\372\246\255\277\333
END
```

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AffirmTrust Networking"

Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US

Serial Number:7c:4f:04:39:1c:d4:99:2d

Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US

Not Valid Before: Fri Jan

29 14:08:24 2010

Not Valid After : Tue Dec 31 14:08:24 2030

Fingerprint (SHA-256):

0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B

Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "AffirmTrust Networking"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\051\066\041\002\213\040\355\002\365\146\305\062\321\326\355\220
\237\105\000\057
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\102\145\312\276\001\232\232\114\251\214\101\111\315\300\325\177
```

CKA_ISSUER MULTILINE_OCTAL

```
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
```

```

END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Premium"
#
# Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Serial Number:6d:8c:14:46:b1:a6:0a:ee
# Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:10:36 2010
# Not Valid After : Mon Dec 31 14:10:36 2040
# Fingerprint (SHA-256):
70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A
# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\155\214\024\106\261\246\012\356
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\106\060\202\003\056\240\003\002\001\002\002\010\155

```


\214\024\106\261\246\012\356\060\015\006\011\052\206\110\206\367
\015\001\001\014\005\000\060\101\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\034\060\032\006
\003\125\004\003\014\023\101\146\146\151\162\155\124\162\165\163
\164\040\120\162\145\155\151\165\155\060\036\027\015\061\060\060
\061\062\071\061\064\061\060\063\066\132\027\015\064\060\061\062
\063\061\061\064\061\060\063\066\132\060\101\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125\004
\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061\034
\060\032\006\003\125\004\003\014\023\101\146\146\151\162\155\124
\162\165\163\164\040\120\162\145\155\151\165\155\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\304\022\337
\251\137\376\101\335\335\365\237\212\343\366\254\341\074\170\232
\274\330\360\177\172\240\063\052\334\215\040\133\256\055\157\347
\223\331\066\160\152\150\317\216\121\243\205\133\147\004\240\020
\044\157\135\050\202\301\227\127\330\110\051\023\266\341\276\221
\115\337\205\014\123\030\232\036\044\242\117\217\360\242\205\013
\313\364\051\177\322\244\130\356\046\115\311\252\250\173\232\331
\372\070\336\104\127\025\345\370\214\310\331\110\342\015\026\047
\035\036\310\203\205\045\267\272\252\125\101\314\003\042\113\055
\221\215\213\346\211\257\146\307\351\377\053\351\074\254\332\322
\263\303\341\150\234\211\370\172\000\126\336\364\125\225\154\373
\272\144\335\142\213\337\013\167\062\353\142\314\046\232\233\273
\252\142\203\114\264\006\172\060\310\051\277\355\006\115\227\271
\034\304\061\053\325\137\274\123\022\027\234\231\127\051\146\167
\141\041\061\007\056\045\111\235\030\362\356\363\053\161\214\265
\272\071\007\111\167\374\357\056\222\220\005\215\055\057\167\173
\357\103\277\065\273\232\330\371\163\247\054\362\320\127\356\050
\116\046\137\217\220\150\011\057\270\370\334\006\351\056\232\076
\121\247\321\042\304\012\247\070\110\154\263\371\377\175\253\206
\127\343\272\326\205\170\167\272\103\352\110\177\366\330\276\043
\155\036\277\321\066\154\130\134\361\356\244\031\124\032\365\003
\322\166\346\341\214\275\074\263\323\110\113\342\310\370\177\222
\250\166\106\234\102\145\076\244\036\301\007\003\132\106\055\270
\227\363\267\325\262\125\041\357\272\334\114\000\227\373\024\225
\047\063\277\350\103\107\106\322\010\231\026\140\073\232\176\322
\346\355\070\352\354\001\036\074\110\126\111\011\307\114\067\000
\236\210\016\300\163\341\157\146\351\162\107\060\076\020\345\013
\003\311\232\102\000\154\305\224\176\141\304\212\337\177\202\032
\013\131\304\131\062\167\263\274\140\151\126\071\375\264\006\173
\054\326\144\066\331\275\110\355\204\037\176\245\042\217\052\270
\102\364\202\267\324\123\220\170\116\055\032\375\201\157\104\327
\073\001\164\226\102\340\000\342\056\153\352\305\356\162\254\273
\277\376\352\252\250\370\334\366\262\171\212\266\147\002\003\001
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\235\300\147\246\014\042\331\046\365\105\253\246\145\122\021

\047\330\105\254\143\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015
\001\001\014\005\000\003\202\002\001\000\263\127\115\020\142\116
\072\344\254\352\270\034\257\062\043\310\263\111\132\121\234\166
\050\215\171\252\127\106\027\325\365\122\366\267\104\350\010\104
\277\030\204\322\013\200\315\305\022\375\000\125\005\141\207\101
\334\265\044\236\074\304\330\310\373\160\236\057\170\226\203\040
\066\336\174\017\151\023\210\245\165\066\230\010\246\306\337\254
\316\343\130\326\267\076\336\272\363\353\064\100\330\242\201\365
\170\077\057\325\245\374\331\242\324\136\004\016\027\255\376\101
\360\345\262\162\372\104\202\063\102\350\055\130\367\126\214\142
\077\272\102\260\234\014\134\176\056\145\046\134\123\117\000\262
\170\176\241\015\231\055\215\270\035\216\242\304\260\375\140\320
\060\244\216\310\004\142\251\304\355\065\336\172\227\355\016\070
\136\222\057\223\160\245\251\234\157\247\175\023\035\176\306\010
\110\261\136\147\353\121\010\045\351\346\045\153\122\051\221\234
\322\071\163\010\127\336\231\006\264\133\235\020\006\341\302\000
\250\270\034\112\002\012\024\320\301\101\312\373\214\065\041\175
\202\070\362\251\124\221\031\065\223\224\155\152\072\305\262\320
\273\211\206\223\350\233\311\017\072\247\172\270\241\360\170\106
\372\374\067\057\345\212\204\363\337\376\004\331\241\150\240\057
\044\342\011\225\006\325\225\312\341\044\226\353\174\366\223\005
\273\355\163\351\055\321\165\071\327\347\044\333\330\116\137\103
\217\236\320\024\071\277\125\160\110\231\127\061\264\234\356\112
\230\003\226\060\037\140\006\356\033\043\376\201\140\043\032\107
\142\205\245\314\031\064\200\157\263\254\032\343\237\360\173\110
\255\325\001\331\147\266\251\162\223\352\055\146\265\262\270\344
\075\074\262\357\114\214\352\353\007\277\253\065\232\125\206\274
\030\246\265\250\136\264\203\154\153\151\100\323\237\334\361\303
\151\153\271\341\155\011\364\361\252\120\166\012\172\175\172\027
\241\125\226\102\231\061\011\335\140\021\215\005\060\176\346\216
\106\321\235\024\332\307\027\344\005\226\214\304\044\265\033\317
\024\007\262\100\370\243\236\101\206\274\004\320\153\226\310\052
\200\064\375\277\357\006\243\335\130\305\205\075\076\217\376\236
\051\340\266\270\011\150\031\034\030\103

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AffirmTrust Premium"

Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US

Serial Number:6d:8c:14:46:b1:a6:0a:ee

Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US

Not Valid Before: Fri Jan 29 14:10:36 2010

Not Valid After : Mon Dec 31 14:10:36 2040

```

# Fingerprint (SHA-256):
70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A
# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium"
CKA_CERT_SHA1_HASH
MULTILINE_OCTAL
\330\246\063\054\340\003\157\261\205\366\143\117\175\152\006\145
\046\062\050\047
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\304\135\016\110\266\254\050\060\116\012\274\371\070\026\207\127
END
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\155\214\024\106\261\246\012\356
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Premium ECC"
#
# Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
# Serial Number:74:97:25:8a:c7:3f:7a:54
# Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
#
Not Valid Before: Fri Jan 29 14:20:24 2010
# Not Valid After : Mon Dec 31 14:20:24 2040
# Fingerprint (SHA-256):
BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23
# Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium ECC"

```

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\164\227\045\212\307\077\172\124

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\376\060\202\001\205\240\003\002\001\002\002\010\164
\227\045\212\307\077\172\124\060\012\006\010\052\206\110\316\075
\004\003\003\060\105\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\024\060\022\006\003\125\004\012\014\013\101\146\146
\151\162\155\124\162\165\163\164\061\040\060\036\006\003\125\004
\003\014\027\101\146\146\151\162\155\124\162\165\163\164\040\120
\162\145\155\151\165\155\040\105\103\103\060\036\027\015\061\060
\060\061\062\071\061\064\062\060\062\064\132\027\015\064\060\061
\062\063\061\061\064\062\060\062\064\132\060\105\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125
\004\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061
\040\060\036\006\003\125\004\003\014\027\101\146\146\151\162\155
\124\162\165\163\164\040\120\162\145\155\151\165\155\040\105\103
\103\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\015\060\136\033\025\235\003
\320\241\171\065\267\072\074\222\172\312\025\034\315\142\363\234
\046\134\007\075\345\124\372\243\326\314\022\352\364\024\137\350
\216\031\253\057\056\110\346\254\030\103\170\254\320\067\303\275
\262\315\054\346\107\342\032\346\143\270\075\056\057\170\304\117
\333\364\017\244\150\114\125\162\153\225\035\116\030\102\225\170
\314\067\074\221\342\233\145\053\051\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\232\257\051\172\300\021\065\065
\046\121\060\000\303\152\376\100\325\256\326\074\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006
\010\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060
\027\011\363\207\210\120\132\257\310\300\102\277\107\137\365\154

```
\152\206\340\304\047\164\344\070\123\327\005\177\033\064\343\306
\057\263\312\011\074\067\235\327\347\270\106\361\375\241\342\161
\002\060\102\131\207\103\324\121\337\272\323\011\062\132\316\210
\176\127\075\234\137\102\153\365\007\055\265\360\202\223\371\131
\157\256\144\372\130\345\213\036\343\143\276\265\201\315\157\002
\214\171
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AffirmTrust Premium ECC"

Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US

Serial Number:74:97:25:8a:c7:3f:7a:54

Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US

Not Valid Before: Fri Jan 29 14:20:24 2010

Not Valid After : Mon Dec 31 14:20:24 2040

Fingerprint (SHA-256):

BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23

Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "AffirmTrust Premium ECC"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\043\153\000\057\035\026\206\123\001\125\154\021\244\067\312
\353\377\303\273
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\144\260\011\125\317\261\325\231\342\276\023\253\246\135\352\115
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\010\164\227\045\212\307\077\172\124
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED

CK_BBOOL CK_FALSE

#

Certificate "Certum Trusted Network CA"

#

Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Serial Number: 279744 (0x444c0)

Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Not Valid Before: Wed Oct 22 12:07:37 2008

Not Valid After : Mon Dec 31 12:07:37 2029

Fingerprint (SHA-256):

5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E

Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Trusted Network CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\003\004\104\300

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\003\273\060\202\002\243\240\003\002\001\002\002\003\004
\104\300\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\060\036\027\015\060\070\061\060\062\062\061\062\060\067\063
\067\132\027\015\062\071\061\062\063\061\061\062\060\067\063\067
\132\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\343\373\175\243\162\272\302\360\311\024\207\365\153\001
\116\341\156\100\007\272\155\047\135\177\367\133\055\263\132\307
\121\137\253\244\062\246\141\207\266\156\017\206\322\060\002\227
\370\327\151\127\241\030\071\135\152\144\171\306\001\131\254\074
\061\112\070\174\322\004\322\113\050\350\040\137\073\007\242\314
\115\163\333\363\256\117\307\126\325\132\247\226\211\372\363\253
\150\324\043\206\131\047\317\011\047\274\254\156\162\203\034\060
\162\337\340\242\351\322\341\164\165\031\275\052\236\173\025\124
\004\033\327\103\071\255\125\050\305\342\032\273\364\300\344\256
\070\111\063\314\166\205\237\071\105\322\244\236\362\022\214\121
\370\174\344\055\177\365\254\137\353\026\237\261\055\321\272\314
\221\102\167\114\045\311\220\070\157\333\360\314\373\216\036\227
\131\076\325\140\116\346\005\050\355\111\171\023\113\272\110\333
\057\371\162\323\071\312\376\037\330\064\162\365\264\100\317\061
\001\303\354\336\021\055\027\135\037\270\120\321\136\031\247\151
\336\007\063\050\312\120\225\371\247\124\313\124\206\120\105\251
\371\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\010\166\315\313\007\377\044\366\305
\315\355\273\220\274\342\204\067\106\165\367\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\246
\250\255\042\316\001\075\246\243\377\142\320\110\235\213\136\162
\260\170\104\343\334\034\257\011\375\043\110\372\275\052\304\271
\125\004\265\020\243\215\047\336\013\202\143\320\356\336\014\067

```
\171\101\133\042\262\260\232\101\134\246\160\340\324\320\167\313
\043\323\000\340\154\126\057\341\151\015\015\331\252\277\041\201
\120\331\006\245\250\377\225\067\320\252\376\342\263\365\231\055
\105\204\212\345\102\011\327\164\002\057\367\211\330\231\351\274
\047\324\107\215\272\015\106\034\167\317\024\244\034\271\244\061
\304\234\050\164\003\064\377\063\031\046\245\351\015\164\267\076
\227\306\166\350\047\226\243\146\335\341\256\362\101\133\312\230
\126\203\163\160\344\206\032\322\061\101\272\057\276\055\023\132
\166\157\116\350\116\201\016\077\133\003\042\240\022\276\146\130
\021\112\313\003\304\264\052\052\055\226\027\340\071\124\274\110
\323\166\047\235\232\055\006\246\311\354\071\322\253\333\237\232
\013\047\002\065\051\261\100\225\347\371\350\234\125\210\031\106
\326\267\064\365\176\316\071\232\331\070\361\121\367\117\054
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum Trusted Network CA"

Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL

Serial Number: 279744 (0x444c0)

Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL

Not Valid Before: Wed Oct 22 12:07:37 2008

Not Valid After : Mon Dec 31 12:07:37 2029

Fingerprint (SHA-256):

5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E

Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Trusted Network CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\007\340\062\340\040\267\054\077\031\057\006\050\242\131\072\031
\247\017\006\236
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\325\351\201\100\305\030\151\374\106\054\211\165\142\017\252\170
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
```



```
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END
```

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\003\004\104\300
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "TWCA Root Certification Authority"

#

Issuer: CN=TWCA Root Certification Authority,OU=Root

CA,O=TAIWAN-CA,C=TW

Serial Number: 1 (0x1)

Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

Not Valid Before: Thu Aug 28 07:24:33 2008

Not Valid After : Tue Dec 31 15:59:59 2030

Fingerprint (SHA-256):

BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44

Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TWCA Root Certification Authority"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
```

\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\001
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\173\060\202\002\143\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061\022
\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116\055
\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157\157
\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041\124
\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\060\036\027\015\060\070\060\070\062\070\060\067\062\064\063\063
\132\027\015\063\060\061\062\063\061\061\065\065\071\065\071\132
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\260\176\162\270\244\003\224\346\247\336\011\070\221\112
\021\100\207\247\174\131\144\024\173\265\021\020\335\376\277\325
\300\273\126\342\205\045\364\065\162\017\370\123\320\101\341\104
\001\302\264\034\303\061\102\026\107\205\063\042\166\262\012\157
\017\345\045\120\117\205\206\276\277\230\056\020\147\036\276\021
\005\206\005\220\304\131\320\174\170\020\260\200\134\267\341\307
\053\165\313\174\237\256\265\321\235\043\067\143\247\334\102\242
\055\222\004\033\120\301\173\270\076\033\311\126\004\213\057\122
\233\255\251\126\351\301\377\255\251\130\207\060\266\201\367\227
\105\374\031\127\073\053\157\344\107\364\231\105\376\035\361\370
\227\243\210\035\067\034\134\217\340\166\045\232\120\370\240\124
\377\104\220\166\043\322\062\306\303\253\006\277\374\373\277\363
\255\175\222\142\002\133\051\323\065\243\223\232\103\144\140\135
\262\372\062\377\073\004\257\115\100\152\371\307\343\357\043\375
\153\313\345\017\213\070\015\356\012\374\376\017\230\237\060\061
\335\154\122\145\371\213\201\276\042\341\034\130\003\272\221\033
\211\007\002\003\001\000\001\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\152\070\133\046\215\336\213\132\362
\117\172\124\203\031\030\343\010\065\246\272\060\015\006\011\052
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\074

```
\325\167\075\332\337\211\272\207\014\010\124\152\040\120\222\276
\260\101\075\271\046\144\203\012\057\350\100\300\227\050\047\202
\060\112\311\223\377\152\347\246\000\177\211\102\232\326\021\345
\123\316\057\314\362\332\005\304\376\342\120\304\072\206\175\314
\332\176\020\011\073\222\065\052\123\262\376\353\053\005\331\154
\135\346\320\357\323\152\146\236\025\050\205\172\350\202\000\254
\036\247\011\151\126\102\323\150\121\030\276\124\232\277\104\101
\272\111\276\040\272\151\134\356\270\167\315\316\154\037\255\203
\226\030\175\016\265\024\071\204\361\050\351\055\243\236\173\036
\172\162\132\203\263\171\157\357\264\374\320\012\245\130\117\106
\337\373\155\171\131\362\204\042\122\256\017\314\373\174\073\347
\152\312\107\141\303\172\370\323\222\004\037\270\040\204\341\066
\124\026\307\100\336\073\212\163\334\337\306\011\114\337\354\332
\377\324\123\102\241\311\362\142\035\042\203\074\227\305\371\031
\142\047\254\145\042\327\323\074\306\345\216\262\123\314\111\316
\274\060\376\173\016\063\220\373\355\322\024\221\037\007\257
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "TWCA Root Certification Authority"

Issuer: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

Serial Number: 1 (0x1)

Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

Not Valid Before: Thu Aug 28 07:24:33 2008

Not Valid After : Tue Dec 31 15:59:59 2030

Fingerprint (SHA-256):

BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44

Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TWCA Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\317\236\207\155\323\353\374\102\046\227\243\265\243\172\240\166
\251\006\043\110
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\252\010\217\366\371\173\267\362\261\247\036\233\352\352\275\171
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
```

```

\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
#
Certificate "Explicitly Distrust DigiNotar Root CA"
#
# Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL
# Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff
# Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL
# Not Valid Before: Fri Jul 27 17:19:37 2007
# Not Valid After : Mon Mar 31 18:19:22 2025
# Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E
# Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156
\154
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156

```

\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377\377\377
\377\377
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\212\060\202\003\162\240\003\002\001\002\002\020\017
\377\377\377\377\377\377\377\377\377\377\377\377\377\377\377\377\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\137
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022\060
\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164\141
\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147\151
\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040\060
\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151\156
\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154\060
\036\027\015\060\067\060\067\062\067\061\067\061\071\063\067\132
\027\015\062\065\060\063\063\061\061\070\061\071\062\062\132\060
\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022
\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164
\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147
\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040
\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151
\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\254\260\130\301\000\275\330\041\010\013\053\232\376\156\126
\060\005\237\033\167\220\020\101\134\303\015\207\021\167\216\201
\361\312\174\351\214\152\355\070\164\065\273\332\337\371\273\300
\011\067\264\226\163\201\175\063\032\230\071\367\223\157\225\177
\075\271\261\165\207\272\121\110\350\213\160\076\225\004\305\330
\266\303\026\331\210\260\261\207\035\160\332\206\264\017\024\213
\172\317\020\321\164\066\242\022\173\167\206\112\171\346\173\337
\002\021\150\245\116\206\256\064\130\233\044\023\170\126\042\045
\036\001\213\113\121\161\373\202\314\131\226\151\210\132\150\123
\305\271\015\002\067\313\113\274\146\112\220\176\052\013\005\007
\355\026\137\125\220\165\330\106\311\033\203\342\010\276\361\043
\314\231\035\326\052\017\203\040\025\130\047\202\056\372\342\042
\302\111\261\271\001\201\152\235\155\235\100\167\150\166\116\041
\052\155\204\100\205\116\166\231\174\202\363\363\267\002\131\324
\046\001\033\216\337\255\123\006\321\256\030\335\342\262\072\313
\327\210\070\216\254\133\051\271\031\323\230\371\030\003\317\110
\202\206\146\013\033\151\017\311\353\070\210\172\046\032\005\114
\222\327\044\324\226\362\254\122\055\243\107\325\122\366\077\376
\316\204\006\160\246\252\076\242\362\266\126\064\030\127\242\344
\201\155\347\312\360\152\323\307\221\153\002\203\101\174\025\357
\153\232\144\136\343\320\074\345\261\353\173\135\206\373\313\346
\167\111\315\243\145\334\367\271\234\270\344\013\137\223\317\314

\060\032\062\034\316\034\143\225\245\371\352\341\164\213\236\351
\053\251\060\173\240\030\037\016\030\013\345\133\251\323\321\154
\036\007\147\217\221\113\251\212\274\322\146\252\223\001\210\262
\221\372\061\134\325\246\301\122\010\011\315\012\143\242\323\042
\246\350\241\331\071\006\227\365\156\215\002\220\214\024\173\077
\200\315\033\234\272\304\130\162\043\257\266\126\237\306\172\102
\063\051\007\077\202\311\346\037\005\015\315\114\050\066\213\323
\310\076\034\306\210\357\136\356\211\144\351\035\353\332\211\176
\062\246\151\321\335\314\210\237\321\320\311\146\041\334\006\147
\305\224\172\232\155\142\114\175\314\340\144\200\262\236\107\216
\243\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125
\035\016\004\026\004\024\210\150\277\340\216\065\304\073\070\153
\142\367\050\073\204\201\310\014\327\115\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\073\002
\215\313\074\060\350\156\240\255\362\163\263\137\236\045\023\004
\005\323\366\343\213\273\013\171\316\123\336\344\226\305\321\257
\163\274\325\303\320\100\125\174\100\177\315\033\137\011\325\362
\174\237\150\035\273\135\316\172\071\302\214\326\230\173\305\203
\125\250\325\175\100\312\340\036\367\211\136\143\135\241\023\302
\135\212\266\212\174\000\363\043\303\355\205\137\161\166\360\150
\143\252\105\041\071\110\141\170\066\334\361\103\223\324\045\307
\362\200\145\341\123\002\165\121\374\172\072\357\067\253\204\050
\127\014\330\324\324\231\126\154\343\242\376\131\204\264\061\350
\063\370\144\224\224\121\227\253\071\305\113\355\332\335\200\013
\157\174\051\015\304\216\212\162\015\347\123\024\262\140\101\075
\204\221\061\150\075\047\104\333\345\336\364\372\143\105\310\114
\076\230\365\077\101\272\116\313\067\015\272\146\230\361\335\313
\237\134\367\124\066\202\153\054\274\023\141\227\102\370\170\273
\314\310\242\237\312\360\150\275\153\035\262\337\215\157\007\235
\332\216\147\307\107\036\312\271\277\052\102\221\267\143\123\146
\361\102\243\341\364\132\115\130\153\265\344\244\063\255\134\160
\035\334\340\362\353\163\024\221\232\003\301\352\000\145\274\007
\374\317\022\021\042\054\256\240\275\072\340\242\052\330\131\351
\051\323\030\065\244\254\021\137\031\265\265\033\377\042\112\134
\306\172\344\027\357\040\251\247\364\077\255\212\247\232\004\045
\235\016\312\067\346\120\375\214\102\051\004\232\354\271\317\113
\162\275\342\010\066\257\043\057\142\345\312\001\323\160\333\174
\202\043\054\026\061\014\306\066\007\220\172\261\037\147\130\304
\073\130\131\211\260\214\214\120\263\330\206\313\150\243\304\012
\347\151\113\040\316\301\036\126\113\225\251\043\150\330\060\330
\303\353\260\125\121\315\345\375\053\270\365\273\021\237\123\124
\366\064\031\214\171\011\066\312\141\027\045\027\013\202\230\163
\014\167\164\303\325\015\307\250\022\114\307\247\124\161\107\056
\054\032\175\311\343\053\073\110\336\047\204\247\143\066\263\175
\217\240\144\071\044\015\075\173\207\257\146\134\164\033\113\163
\262\345\214\360\206\231\270\345\305\337\204\301\267\353

END

#

Trust for Certificate "Explicitly Distrust DigiNotar Root CA"

Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff

Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

Not Valid Before: Fri Jul 27 17:19:37 2007

Not Valid After : Mon Mar 31 18:19:22 2025

Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E

Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\301\167\313\113\340\264\046\216\365\307\317\105\231\042\271\260

\316\272\041\057

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\012\244\325\314\272\264\373\243\131\343\346\001\335\123\331\116

END

CKA_ISSUER MULTILINE_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061

\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157

\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151

\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061

\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021

\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156

\154

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377\377

\377\377

END

CKA_TRUST_SERVER_AUTH CK_TRUST

CKT_NSS_NOT_TRUSTED

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_NOT_TRUSTED

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_NOT_TRUSTED

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Security Communication RootCA2"

#

Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number: 0 (0x0)

```
# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Fri May 29 05:00:39 2009
# Not Valid After : Tue May 29 05:00:39 2029
# Fingerprint (SHA-256):
51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6
# Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045
\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124
\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056
\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036
\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151
\143\141\164\151\157\156\040\122\157\157\164\103\101\062\060\036
\027\015\060\071\060\065\062\071\060\065\060\060\063\071\132\027
\015\062\071\060\065\062\071\060\065\060\060\063\071\132\060\135
\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045\060
\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124\162
\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056\054
\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036\123
```


\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151\143
\141\164\151\157\156\040\122\157\157\164\103\101\062\060\202\001
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\001\017\000\060\202\001\012\002\202\001\001\000\320\025
\071\122\261\122\263\272\305\131\202\304\135\122\256\072\103\145
\200\113\307\362\226\274\333\066\227\326\246\144\214\250\136\360
\343\012\034\367\337\227\075\113\256\366\135\354\041\265\101\253
\315\271\176\166\237\276\371\076\066\064\240\073\301\366\061\021
\105\164\223\075\127\200\305\371\211\231\312\345\253\152\324\265
\332\101\220\020\301\326\326\102\211\302\277\364\070\022\225\114
\124\005\367\066\344\105\203\173\024\145\326\334\014\115\321\336
\176\014\253\073\304\025\276\072\126\246\132\157\166\151\122\251
\172\271\310\353\152\232\135\122\320\055\012\153\065\026\011\020
\204\320\152\312\072\006\000\067\107\344\176\127\117\077\213\353
\147\270\210\252\305\276\123\125\262\221\304\175\271\260\205\031
\006\170\056\333\141\032\372\205\365\112\221\241\347\026\325\216
\242\071\337\224\270\160\037\050\077\213\374\100\136\143\203\074
\203\052\032\231\153\317\336\131\152\073\374\157\026\327\037\375
\112\020\353\116\202\026\072\254\047\014\123\361\255\325\044\260
\153\003\120\301\055\074\026\335\104\064\047\032\165\373\002\003
\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026
\004\024\012\205\251\167\145\005\230\174\100\201\370\017\227\054
\070\361\012\354\074\317\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\001\001\000\114\072\243\104\254
\271\105\261\307\223\176\310\013\012\102\337\144\352\034\356\131
\154\010\272\211\137\152\312\112\225\236\172\217\007\305\332\105
\162\202\161\016\072\322\314\157\247\264\241\043\273\366\044\237
\313\027\376\214\246\316\302\322\333\314\215\374\161\374\003\051
\301\154\135\063\137\144\266\145\073\211\157\030\166\170\365\334
\242\110\037\031\077\216\223\353\361\372\027\356\315\116\343\004
\022\125\326\345\344\335\373\076\005\174\342\035\136\306\247\274
\227\117\150\072\365\351\056\012\103\266\257\127\134\142\150\174
\267\375\243\212\204\240\254\142\276\053\011\207\064\360\152\001
\273\233\051\126\074\376\000\067\317\043\154\361\116\252\266\164
\106\022\154\221\356\064\325\354\232\221\347\104\276\220\061\162
\325\111\002\366\002\345\364\037\353\174\331\226\125\251\377\354
\212\371\231\107\377\065\132\002\252\004\313\212\133\207\161\051
\221\275\244\264\172\015\275\232\365\127\043\000\007\041\027\077
\112\071\321\005\111\013\247\266\067\201\245\135\214\252\063\136
\201\050\174\247\175\047\353\000\256\215\067

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "Security Communication RootCA2"
# Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Fri May 29 05:00:39 2009
# Not Valid After : Tue May 29 05:00:39 2029
# Fingerprint (SHA-256):
51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6
#
Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\137\073\214\362\370\020\263\175\170\264\316\354\031\031\303\163
\064\271\307\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\154\071\175\244\016\125\131\262\077\326\101\261\022\120\336\103
END
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Actalis Authentication Root CA"
#
# Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Serial Number:57:0a:11:97:42:c4:e3:cc
# Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Not Valid Before: Thu Sep 22 11:22:02 2011
# Not Valid After : Sun Sep 22 11:22:02 2030
# Fingerprint (SHA-256):

```

55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66

Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Actalis Authentication Root CA"

CKA_CERTIFICATE_TYPE

CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\127\012\021\227\102\304\343\314

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\273\060\202\003\243\240\003\002\001\002\002\010\127
\012\021\227\102\304\343\314\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\153\061\013\060\011\006\003\125\004
\006\023\002\111\124\061\016\060\014\006\003\125\004\007\014\005
\115\151\154\141\156\061\043\060\041\006\003\125\004\012\014\032
\101\143\164\141\154\151\163\040\123\056\160\056\101\056\057\060
\063\063\065\070\065\062\060\071\066\067\061\047\060\045\006\003
\125\004\003\014\036\101\143\164\141\154\151\163\040\101\165\164
\150\145\156\164\151\143\141\164\151\157\156\040\122\157\157\164
\040\103\101\060\036\027\015\061\061\060\071\062\062\061\061\062
\062\060\062\132\027\015\063\060\060\071\062\062\061\061\062\062
\060\062\132\060\153\061\013\060\011\006\003\125\004\006\023\002
\111\124\061\016\060\014\006\003\125\004\007\014\005\115\151\154
\141\156\061\043\060\041\006\003\125\004\012\014\032\101\143\164
\141\154\151\163\040\123\056\160\056\101\056\057\060\063\063\065

\070\065\062\060\071\066\067\061\047\060\045\006\003\125\004\003
\014\036\101\143\164\141\154\151\163\040\101\165\164\150\145\156
\164\151\143\141\164\151\157\156\040\122\157\157\164\040\103\101
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\247\306\304\245\051\244\054\357\345\030\305\260\120\243\157
\121\073\237\012\132\311\302\110\070\012\302\034\240\030\177\221
\265\207\271\100\077\335\035\150\037\010\203\325\055\036\210\240
\370\217\126\217\155\231\002\222\220\026\325\137\010\154\211\327
\341\254\274\040\302\261\340\203\121\212\151\115\000\226\132\157
\057\300\104\176\243\016\344\221\315\130\356\334\373\307\036\105
\107\335\047\271\010\001\237\246\041\035\365\101\055\057\114\375
\050\255\340\212\255\042\264\126\145\216\206\124\217\223\103\051
\336\071\106\170\243\060\043\272\315\360\175\023\127\300\135\322
\203\153\110\114\304\253\237\200\132\133\072\275\311\247\042\077
\200\047\063\133\016\267\212\014\135\007\067\010\313\154\322\172
\107\042\104\065\305\314\314\056\216\335\052\355\267\175\146\015
\137\141\121\042\125\033\343\106\343\343\075\320\065\142\232\333
\257\024\310\133\241\314\211\033\341\060\046\374\240\233\037\201
\247\107\037\004\353\243\071\222\006\237\231\323\277\323\352\117
\120\234\031\376\226\207\036\074\145\366\243\030\044\203\206\020
\347\124\076\250\072\166\044\117\201\041\305\343\017\002\370\223
\224\107\040\273\376\324\016\323\150\271\335\304\172\204\202\343
\123\124\171\335\333\234\322\362\007\233\056\266\274\076\355\205
\155\357\045\021\362\227\032\102\141\367\112\227\350\213\261\020
\007\372\145\201\262\242\071\317\367\074\377\030\373\306\361\132
\213\131\342\002\254\173\222\320\116\024\117\131\105\366\014\136
\050\137\260\350\077\105\317\317\257\233\157\373\204\323\167\132
\225\157\254\224\204\236\356\274\300\112\217\112\223\370\104\041
\342\061\105\141\120\116\020\330\343\065\174\114\031\264\336\005
\277\243\006\237\310\265\315\344\037\327\027\006\015\172\225\164
\125\015\150\032\374\020\033\142\144\235\155\340\225\240\303\224
\007\127\015\024\346\275\005\373\270\237\346\337\213\342\306\347
\176\226\366\123\305\200\064\120\050\130\360\022\120\161\027\060
\272\346\170\143\274\364\262\255\233\053\262\376\341\071\214\136
\272\013\040\224\336\173\203\270\377\343\126\215\267\021\351\073
\214\362\261\301\135\235\244\013\114\053\331\262\030\365\265\237
\113\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035
\016\004\026\004\024\122\330\210\072\310\237\170\146\355\211\363
\173\070\160\224\311\002\002\066\320\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035
\043\004\030\060\026\200\024\122\330\210\072\310\237\170\146\355
\211\363\173\070\160\224\311\002\002\066\320\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\013
\173\162\207\300\140\246\111\114\210\130\346\035\210\367\024\144
\110\246\330\130\012\016\117\023\065\337\065\035\324\355\006\061
\310\201\076\152\325\335\073\032\062\356\220\075\021\322\056\364

\216\303\143\056\043\146\260\147\276\157\266\300\023\071\140\252
\242\064\045\223\165\122\336\247\235\255\016\207\211\122\161\152
\026\074\031\035\203\370\232\051\145\276\364\077\232\331\360\363
\132\207\041\161\200\115\313\340\070\233\077\273\372\340\060\115
\317\206\323\145\020\031\030\321\227\002\261\053\162\102\150\254
\240\275\116\132\332\030\277\153\230\201\320\375\232\276\136\025
\110\315\021\025\271\300\051\134\264\350\210\367\076\066\256\267
\142\375\036\142\336\160\170\020\034\110\133\332\274\244\070\272
\147\355\125\076\136\127\337\324\003\100\114\201\244\322\117\143
\247\011\102\011\024\374\000\251\302\200\163\117\056\300\100\331
\021\173\110\352\172\002\300\323\353\050\001\046\130\164\301\300
\163\042\155\223\225\375\071\175\273\052\343\366\202\343\054\227
\137\116\037\221\224\372\376\054\243\330\166\032\270\115\262\070
\117\233\372\035\110\140\171\046\342\363\375\251\320\232\350\160
\217\111\172\326\345\275\012\016\333\055\363\215\277\353\343\244
\175\313\307\225\161\350\332\243\174\305\302\370\164\222\004\033
\206\254\244\042\123\100\266\254\376\114\166\317\373\224\062\300
\065\237\166\077\156\345\220\156\240\246\046\242\270\054\276\321
\053\205\375\247\150\310\272\001\053\261\154\164\035\270\163\225
\347\356\267\307\045\360\000\114\000\262\176\266\013\213\034\363
\300\120\236\045\271\340\010\336\066\146\377\067\245\321\273\124
\144\054\311\047\265\113\222\176\145\377\323\055\341\271\116\274
\177\244\101\041\220\101\167\246\071\037\352\236\343\237\320\146
\157\005\354\252\166\176\277\153\026\240\353\265\307\374\222\124
\057\053\021\047\045\067\170\114\121\152\260\363\314\130\135\024
\361\152\110\025\377\302\007\266\261\215\017\216\134\120\106\263
\075\277\001\230\117\262\131\124\107\076\064\173\170\155\126\223
\056\163\352\146\050\170\315\035\024\277\240\217\057\056\270\056
\216\362\024\212\314\351\265\174\373\154\235\014\245\341\226

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Actalis Authentication Root CA"

Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

Serial Number:57:0a:11:97:42:c4:e3:cc

Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

Not Valid Before: Thu Sep 22 11:22:02 2011

Not Valid After : Sun Sep 22 11:22:02 2030

Fingerprint (SHA-256):

55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66

Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

CKA_LABEL UTF8 "Actalis Authentication Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\363\163\263\207\006\132\050\204\212\362\363\112\316\031\053\335
\307\216\234\254
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\151\301\015\117\007\243\033\303\376\126\075\004\274\021\366\246
END
CKA_ISSUER MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\127\012\021\227\102\304\343\314
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Buypass Class 2 Root
CA"
#
# Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:38:03 2010
# Not Valid After : Fri Oct 26 08:38:03 2040
# Fingerprint (SHA-256):
9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48
# Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Buypass Class 2 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040

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```
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060
\036\027\015\061\060\061\060\062\066\060\070\063\070\060\063\132
\027\015\064\060\061\060\062\066\060\070\063\070\060\063\132\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\327\307\136\367\301\007\324\167\373\103\041\364\364\365\151\344
\356\062\001\333\243\206\037\344\131\015\272\347\165\203\122\353
\352\034\141\025\110\273\035\007\312\214\256\260\334\226\235\352
\303\140\222\206\202\050\163\234\126\006\377\113\144\360\014\052
\067\111\265\345\317\014\174\356\361\112\273\163\060\145\363\325
\057\203\266\176\343\347\365\236\253\140\371\323\361\235\222\164
\212\344\034\226\254\133\200\351\265\364\061\207\243\121\374\307
\176\241\157\216\123\167\324\227\301\125\063\222\076\030\057\165
\324\255\206\111\313\225\257\124\006\154\330\006\023\215\133\377
\341\046\031\131\300\044\272\201\161\171\220\104\120\150\044\224
\137\270\263\021\361\051\101\141\243\101\313\043\066\325\301\361
\062\120\020\116\177\364\206\223\354\204\323\216\274\113\277\134
\001\116\007\075\334\024\212\224\012\244\352\163\373\013\121\350
\023\007\030\372\016\361\053\321\124\025\175\074\341\367\264\031
\102\147\142\136\167\340\242\125\354\266\331\151\027\325\072\257
\104\355\112\305\236\344\172\047\174\345\165\327\252\313\045\347
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\337\153\012\333\017\115\223\116\250\240\315\173\056\362\131\001
\152\267\015\270\007\201\176\213\070\033\070\346\012\127\231\075
\356\041\350\243\365\014\026\335\213\354\064\216\234\052\034\000
\025\027\215\150\203\322\160\237\030\010\315\021\150\325\311\153
\122\315\304\106\217\334\265\363\330\127\163\036\351\224\071\004
\277\323\336\070\336\264\123\354\151\034\242\176\304\217\344\033
\160\255\362\242\371\373\367\026\144\146\151\237\111\121\242\342
\025\030\147\006\112\177\325\154\265\115\263\063\340\141\353\135
\276\351\230\017\062\327\035\113\074\056\132\001\122\221\011\362
\337\352\215\330\006\100\143\252\021\344\376\303\067\236\024\122
\077\364\342\314\362\141\223\321\375\147\153\327\122\256\277\150
\253\100\103\240\127\065\123\170\360\123\370\141\102\007\144\306
\327\157\233\114\070\015\143\254\142\257\066\213\242\163\012\015
\365\041\275\164\252\115\352\162\003\111\333\307\137\035\142\143
\307\375\335\221\354\063\356\365\155\264\156\060\150\336\310\326
\046\260\165\136\173\264\007\040\230\241\166\062\270\115\154\117
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\311\200\167\340\142\222\202\365\106\234\363
\272\367\114\303\336\270\243\255\071\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\003\202\002\001\000\123\137\041
\365\272\260\072\122\071\054\222\260\154\000\311\357\316\040\357
\006\362\226\236\351\244\164\177\172\026\374\267\365\266\373\025
\033\077\253\246\300\162\135\020\261\161\356\274\117\343\255\254
\003\155\056\161\056\257\304\343\255\243\275\014\021\247\264\377
\112\262\173\020\020\037\247\127\101\262\300\256\364\054\131\326
\107\020\210\363\041\121\051\060\312\140\206\257\106\253\035\355
\072\133\260\224\336\104\343\101\010\242\301\354\035\326\375\117
\266\326\107\320\024\013\312\346\312\265\173\167\176\101\037\136
\203\307\266\214\071\226\260\077\226\201\101\157\140\220\342\350
\371\373\042\161\331\175\263\075\106\277\264\204\257\220\034\017
\217\022\152\257\357\356\036\172\256\002\112\212\027\053\166\376
\254\124\211\044\054\117\077\266\262\247\116\214\250\221\227\373
\051\306\173\134\055\271\313\146\266\267\250\133\022\121\205\265
\011\176\142\170\160\376\251\152\140\266\035\016\171\014\375\312
\352\044\200\162\303\227\077\362\167\253\103\042\012\307\353\266
\014\204\202\054\200\153\101\212\010\300\353\245\153\337\231\022
\313\212\325\136\200\014\221\340\046\010\066\110\305\372\070\021
\065\377\045\203\055\362\172\277\332\375\216\376\245\313\105\054
\037\304\210\123\256\167\016\331\232\166\305\216\054\035\243\272
\325\354\062\256\300\252\254\367\321\172\115\353\324\007\342\110
\367\042\216\260\244\237\152\316\216\262\262\140\364\243\042\320
\043\353\224\132\172\151\335\017\277\100\127\254\153\131\120\331
\243\231\341\156\376\215\001\171\047\043\025\336\222\235\173\011
\115\132\347\113\110\060\132\030\346\012\155\346\217\340\322\273
\346\337\174\156\041\202\301\150\071\115\264\230\130\146\142\314
\112\220\136\303\372\047\004\261\171\025\164\231\314\276\255\040


```
\336\046\140\034\353\126\121\246\243\352\344\243\077\247\377\141
\334\361\132\115\154\062\043\103\356\254\250\356\356\112\022\011
\074\135\161\302\276\171\372\302\207\150\035\013\375\134\151\314
\006\320\232\175\124\231\052\311\071\032\031\257\113\052\103\363
\143\135\132\130\342\057\343\035\344\251\326\320\012\320\236\277
\327\201\011\361\311\307\046\015\254\230\026\126\240
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Buypass Class 2 Root CA"

Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO

Serial Number: 2 (0x2)

Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO

Not Valid Before: Tue Oct 26 08:38:03 2010

Not Valid After : Fri Oct 26 08:38:03 2040

Fingerprint (SHA-256):

9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48

Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Buypass Class 2 Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\111\012\165\164\336\207\012\107\376\130\356\366\307\153\353\306
\013\022\100\231
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\106\247\322\376\105\373\144\132\250\131\220\233\170\104\233\051
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\001\002
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

#
# Certificate "Buypass Class 3 Root CA"
#
# Issuer: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:28:58 2010
# Not Valid After : Fri Oct 26 08:28:58
2040
# Fingerprint (SHA-256):
ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D
# Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Buypass Class 3 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060
\036\027\015\061\060\061\060\062\066\060\070\062\070\065\070\132
\027\015\064\060\061\060\062\066\060\070\062\070\065\070\132\060

```

\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\245\332\012\225\026\120\343\225\362\136\235\166\061\006\062\172
\233\361\020\166\270\000\232\265\122\066\315\044\107\260\237\030
\144\274\232\366\372\325\171\330\220\142\114\042\057\336\070\075
\326\340\250\351\034\054\333\170\021\351\216\150\121\025\162\307
\363\063\207\344\240\135\013\134\340\127\007\052\060\365\315\304
\067\167\050\115\030\221\346\277\325\122\375\161\055\160\076\347
\306\304\212\343\360\050\013\364\166\230\241\213\207\125\262\072
\023\374\267\076\047\067\216\042\343\250\117\052\357\140\273\075
\267\071\303\016\001\107\231\135\022\117\333\103\372\127\241\355
\371\235\276\021\107\046\133\023\230\253\135\026\212\260\067\034
\127\235\105\377\210\226\066\277\273\312\007\173\157\207\143\327
\320\062\152\326\135\154\014\361\263\156\071\342\153\061\056\071
\000\047\024\336\070\300\354\031\146\206\022\350\235\162\026\023
\144\122\307\251\067\034\375\202\060\355\204\030\035\364\256\134
\377\160\023\000\353\261\365\063\172\113\326\125\370\005\215\113
\151\260\365\263\050\066\134\024\304\121\163\115\153\013\361\064
\007\333\027\071\327\334\050\173\153\365\237\363\056\301\117\027
\052\020\363\314\312\350\353\375\153\253\056\232\237\055\202\156
\004\324\122\001\223\055\075\206\374\176\374\337\357\102\035\246
\153\357\271\040\306\367\275\240\247\225\375\247\346\211\044\330
\314\214\064\154\342\043\057\331\022\032\041\271\125\221\157\013
\221\171\031\014\255\100\210\013\160\342\172\322\016\330\150\110
\273\202\023\071\020\130\351\330\052\007\306\022\333\130\333\322
\073\125\020\107\005\025\147\142\176\030\143\246\106\077\011\016
\124\062\136\277\015\142\172\047\357\200\350\333\331\113\006\132
\067\132\045\320\010\022\167\324\157\011\120\227\075\310\035\303
\337\214\105\060\126\306\323\144\253\146\363\300\136\226\234\303
\304\357\303\174\153\213\072\171\177\263\111\317\075\342\211\237
\240\060\113\205\271\234\224\044\171\217\175\153\251\105\150\017
\053\320\361\332\034\313\151\270\312\111\142\155\310\320\143\142
\335\140\017\130\252\217\241\274\005\245\146\242\317\033\166\262
\204\144\261\114\071\122\300\060\272\360\214\113\002\260\266\267
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\107\270\315\377\345\157\356\370\262\354\057
\116\016\371\045\260\216\074\153\303\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\003\202\002\001\000\000\040\043
\101\065\004\220\302\100\142\140\357\342\065\114\327\077\254\342
\064\220\270\241\157\166\372\026\026\244\110\067\054\351\220\302
\362\074\370\012\237\330\201\345\273\133\332\045\054\244\247\125

\161\044\062\366\310\013\362\274\152\370\223\254\262\007\302\137
\237\333\314\310\212\252\276\152\157\341\111\020\314\061\327\200
\273\273\310\330\242\016\144\127\352\242\365\302\251\061\025\322
\040\152\354\374\042\001\050\317\206\270\200\036\251\314\021\245
\074\362\026\263\107\235\374\322\200\041\304\313\320\107\160\101
\241\312\203\031\010\054\155\362\135\167\234\212\024\023\324\066
\034\222\360\345\006\067\334\246\346\220\233\070\217\134\153\033
\106\206\103\102\137\076\001\007\123\124\135\145\175\367\212\163
\241\232\124\132\037\051\103\024\047\302\205\017\265\210\173\032
\073\224\267\035\140\247\265\234\347\051\151\127\132\233\223\172
\103\060\033\003\327\142\310\100\246\252\374\144\344\112\327\221
\123\001\250\040\210\156\234\137\104\271\313\140\201\064\354\157
\323\175\332\110\137\353\264\220\274\055\251\034\013\254\034\325
\242\150\040\200\004\326\374\261\217\057\273\112\061\015\112\206
\034\353\342\066\051\046\365\332\330\304\362\165\141\317\176\256
\166\143\112\172\100\145\223\207\370\036\200\214\206\345\206\326
\217\016\374\123\054\140\350\026\141\032\242\076\103\173\315\071
\140\124\152\365\362\211\046\001\150\203\110\242\063\350\311\004
\221\262\021\064\021\076\352\320\103\031\037\003\223\220\014\377
\121\075\127\364\101\156\341\313\240\276\353\311\143\315\155\314
\344\370\066\252\150\235\355\275\135\227\160\104\015\266\016\065
\334\341\014\135\273\240\121\224\313\176\026\353\021\057\243\222
\105\310\114\161\331\274\311\231\122\127\106\057\120\317\275\065
\151\364\075\025\316\006\245\054\017\076\366\201\272\224\273\303
\273\277\145\170\322\206\171\377\111\073\032\203\014\360\336\170
\354\310\362\115\114\032\336\202\051\370\301\132\332\355\356\346
\047\136\350\105\320\235\034\121\250\150\253\104\343\320\213\152
\343\370\073\273\334\115\327\144\362\121\276\346\252\253\132\351
\061\356\006\274\163\277\023\142\012\237\307\271\227

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Bypass Class 3 Root CA"

#

Issuer: CN=Bypass Class 3 Root CA,O=Bypass AS-983163327,C=NO

Serial Number: 2 (0x2)

Subject: CN=Bypass Class 3 Root CA,O=Bypass AS-983163327,C=NO

Not Valid Before: Tue Oct 26 08:28:58 2010

Not Valid After : Fri Oct 26 08:28:58 2040

Fingerprint (SHA-256):

ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D

Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Bypass Class 3 Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\332\372\367\372\146\204\354\006\217\024\120\275\307\302\201\245
\274\251\144\127
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\075\073\030\236\054\144\132\350\325\210\316\016\371\067\302\354
END
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "T-TeleSec GlobalRoot Class 3"
#
# Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Serial Number: 1 (0x1)
# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Not Valid Before: Wed Oct 01 10:29:56 2008
# Not Valid After : Sat Oct 01 23:59:59 2033
# Fingerprint (SHA-256):
FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD
# Fingerprint (SHA1):
55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163

```

\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141
\163\163\040\063\060\036\027\015\060\070\061\060\060\061\061\060
\062\071\065\066\132\027\015\063\063\061\060\060\061\062\063\065
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171
\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157
\164\040\103\154\141\163\163\040\063\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\275\165\223\360\142\042

\157\044\256\340\172\166\254\175\275\331\044\325\270\267\374\315
\360\102\340\353\170\210\126\136\233\232\124\035\115\014\212\366
\323\317\160\364\122\265\330\223\004\343\106\206\161\101\112\053
\360\052\054\125\003\326\110\303\340\071\070\355\362\134\074\077
\104\274\223\075\141\253\116\315\015\276\360\040\047\130\016\104
\177\004\032\207\245\327\226\024\066\220\320\111\173\241\165\373
\032\153\163\261\370\316\251\011\054\362\123\325\303\024\104\270
\206\245\366\213\053\071\332\243\063\124\331\372\162\032\367\042
\025\034\210\221\153\177\146\345\303\152\200\260\044\363\337\206
\105\210\375\031\177\165\207\037\037\261\033\012\163\044\133\271
\145\340\054\124\310\140\323\146\027\077\341\314\124\063\163\221
\002\072\246\177\173\166\071\242\037\226\266\070\256\265\310\223
\164\035\236\271\264\345\140\235\057\126\321\340\353\136\133\114
\022\160\014\154\104\040\253\021\330\364\031\366\322\234\122\067
\347\372\266\302\061\073\112\324\024\231\255\307\032\365\135\137
\372\007\270\174\015\037\326\203\036\263\002\003\001\000\001\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\265
\003\367\166\073\141\202\152\022\252\030\123\353\003\041\224\277
\376\316\312\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\126\075\357\224\325\275\332\163\262
\130\276\256\220\255\230\047\227\376\001\261\260\122\000\270\115
\344\033\041\164\033\176\300\356\136\151\052\045\257\134\326\035
\332\322\171\311\363\227\051\340\206\207\336\004\131\017\361\131
\324\144\205\113\231\257\045\004\036\311\106\251\227\336\202\262
\033\160\237\234\366\257\161\061\335\173\005\245\054\323\271\312
\107\366\312\362\366\347\255\271\110\077\274\026\267\301\155\364
\352\011\257\354\363\265\347\005\236\246\036\212\123\121\326\223
\201\314\164\223\366\271\332\246\045\005\164\171\132\176\100\076
\202\113\046\021\060\156\341\077\101\307\107\000\065\325\365\323
\367\124\076\201\075\332\111\152\232\263\357\020\075\346\353\157
\321\310\042\107\313\314\317\001\061\222\331\030\343\042\276\011
\036\032\076\132\262\344\153\014\124\172\175\103\116\270\211\245
\173\327\242\075\226\206\314\362\046\064\055\152\222\235\232\032
\320\060\342\135\116\004\260\137\213\040\176\167\301\075\225\202
\321\106\232\073\074\170\270\157\241\320\015\144\242\170\036\051
\116\223\303\244\124\024\133

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "T-TeleSec GlobalRoot Class 3"

Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE

Serial Number: 1 (0x1)

```

# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Not Valid Before: Wed Oct 01 10:29:56 2008
# Not Valid After : Sat Oct 01 23:59:59 2033
# Fingerprint (SHA-256):
FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD
# Fingerprint (SHA1): 55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\125\246\162\076\313\362\354\315\303\043\164\160\031\235\052\276
\021\343\201\321
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\312\373\100\250\116\071\222\212\035\376\216\057\304\047\352\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root Class 3 CA 2 2009"
#
# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623603 (0x983f3)
# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:35:58 2009
# Not Valid After : Mon Nov 05 08:35:58 2029
# Fingerprint (SHA-256):

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49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1
Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\363
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\063\060\202\003\033\240\003\002\001\002\002\003\011
\203\363\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003
\014\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\154\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
\060\036\027\015\060\071\061\061\060\065\060\070\063\065\065\070
\132\027\015\062\071\061\061\060\065\060\070\063\065\065\070\132
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071\060
\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000
\323\262\112\317\172\107\357\165\233\043\372\072\057\326\120\105
\211\065\072\306\153\333\376\333\000\150\250\340\003\021\035\067
\120\010\237\115\112\150\224\065\263\123\321\224\143\247\040\126
\257\336\121\170\354\052\075\363\110\110\120\076\012\337\106\125

\213\047\155\303\020\115\015\221\122\103\330\207\340\135\116\066
\265\041\312\137\071\100\004\137\133\176\314\243\306\053\251\100
\036\331\066\204\326\110\363\222\036\064\106\040\044\301\244\121
\216\112\032\357\120\077\151\135\031\177\105\303\307\001\217\121
\311\043\350\162\256\264\274\126\011\177\022\313\034\261\257\051
\220\012\311\125\314\017\323\264\032\355\107\065\132\112\355\234
\163\004\041\320\252\275\014\023\265\000\312\046\154\304\153\014
\224\132\225\224\332\120\232\361\377\245\053\146\061\244\311\070
\240\337\035\037\270\011\056\363\247\350\147\122\253\225\037\340
\106\076\330\244\303\312\132\305\061\200\350\110\232\237\224\151
\376\031\335\330\163\174\201\312\226\336\216\355\263\062\005\145
\204\064\346\346\375\127\020\265\137\166\277\057\260\020\015\305
\002\003\001\000\001\243\202\001\032\060\202\001\026\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035
\006\003\125\035\016\004\026\004\024\375\332\024\304\237\060\336
\041\275\036\102\071\374\253\143\043\111\340\361\204\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\323
\006\003\125\035\037\004\201\313\060\201\310\060\201\200\240\176
\240\174\206\172\154\144\141\160\072\057\057\144\151\162\145\143
\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164
\057\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157
\157\164\045\062\060\103\154\141\163\163\045\062\060\063\045\062
\060\103\101\045\062\060\062\045\062\060\062\060\060\071\054\117
\075\104\055\124\162\165\163\164\045\062\060\107\155\142\110\054
\103\075\104\105\077\143\145\162\164\151\146\151\143\141\164\145
\162\145\166\157\143\141\164\151\157\156\154\151\163\164\060\103
\240\101\240\077\206\075\150\164\164\160\072\057\057\167\167\167
\056\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154
\057\144\055\164\162\165\163\164\137\162\157\157\164\137\143\154
\141\163\163\137\063\137\143\141\137\062\137\062\060\060\071\056
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\177\227\333\060\310\337\244\234\175
\041\172\200\160\316\024\022\151\210\024\225\140\104\001\254\262
\351\060\117\233\120\302\146\330\176\215\060\265\160\061\351\342
\151\307\363\160\333\040\025\206\320\015\360\276\254\001\165\204
\316\176\237\115\277\267\140\073\234\363\312\035\342\136\150\330
\243\235\227\345\100\140\322\066\041\376\320\264\270\027\332\164
\243\177\324\337\260\230\002\254\157\153\153\054\045\044\162\241
\145\356\045\132\345\346\062\347\362\337\253\111\372\363\220\151
\043\333\004\331\347\134\130\374\145\324\227\276\314\374\056\012
\314\045\052\065\004\370\140\221\025\165\075\101\377\043\037\031
\310\154\353\202\123\004\246\344\114\042\115\215\214\272\316\133
\163\354\144\124\120\155\321\234\125\373\151\303\066\303\214\274
\074\205\246\153\012\046\015\340\223\230\140\256\176\306\044\227
\212\141\137\221\216\146\222\011\207\066\315\213\233\055\076\366
\121\324\120\324\131\050\275\203\362\314\050\173\123\206\155\330
\046\210\160\327\352\221\315\076\271\312\300\220\156\132\306\136
\164\145\327\134\376\243\342

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END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "D-TRUST Root Class 3 CA 2 2009"
# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623603 (0x983f3)
# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:35:58 2009
# Not Valid After : Mon Nov 05 08:35:58 2029
# Fingerprint (SHA-256):
49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1
# Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\350\253\260\066\025\063\373\200\367\233\033\155\051\323\377
\215\137\000\360
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\315\340\045\151\215\107\254\234\211\065\220\367\375\121\075\057
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\363
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root Class 3 CA 2 EV 2009"
#
# Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

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# Serial Number: 623604 (0x983f4)
# Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:50:46 2009
# Not Valid After : Mon Nov 05 08:50:46 2029
# Fingerprint (SHA-256):
EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81
# Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\364
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\103\060\202\003\053\240\003\002\001\002\002\003\011
\203\364\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003
\014\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\154\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062
\060\060\071\060\036\027\015\060\071\061\061\060\065\060\070\065
\060\064\066\132\027\015\062\071\061\061\060\065\060\070\065\060
\064\066\132\060\120\061\013\060\011\006\003\125\004\006\023\002
\104\105\061\025\060\023\006\003\125\004\012\014\014\104\055\124
\162\165\163\164\040\107\155\142\110\061\052\060\050\006\003\125
\004\003\014\041\104\055\124\122\125\123\124\040\122\157\157\164

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\040\103\154\141\163\163\040\063\040\103\101\040\062\040\105\126
\040\062\060\060\071\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\231\361\204\064\160\272\057\267\060\240
\216\275\174\004\317\276\142\274\231\375\202\227\322\172\012\147
\226\070\011\366\020\116\225\042\163\231\215\332\025\055\347\005
\374\031\163\042\267\216\230\000\274\074\075\254\241\154\373\326
\171\045\113\255\360\314\144\332\210\076\051\270\017\011\323\064
\335\063\365\142\321\341\315\031\351\356\030\117\114\130\256\342
\036\326\014\133\025\132\330\072\270\304\030\144\036\343\063\262
\265\211\167\116\014\277\331\224\153\023\227\157\022\243\376\231
\251\004\314\025\354\140\150\066\355\010\173\267\365\277\223\355
\146\061\203\214\306\161\064\207\116\027\352\257\213\221\215\034
\126\101\256\042\067\136\067\362\035\331\321\055\015\057\151\121
\247\276\146\246\212\072\052\275\307\032\261\341\024\360\276\072
\035\271\317\133\261\152\376\264\261\106\040\242\373\036\073\160
\357\223\230\175\214\163\226\362\305\357\205\160\255\051\046\374
\036\004\076\034\240\330\017\313\122\203\142\174\356\213\123\225
\220\251\127\242\352\141\005\330\371\115\304\047\372\156\255\355
\371\327\121\367\153\245\002\003\001\000\001\243\202\001\044\060
\202\001\040\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\323
\224\212\114\142\023\052\031\056\314\257\162\212\175\066\327\232
\034\334\147\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\201\335\006\003\125\035\037\004\201\325\060\201
\322\060\201\207\240\201\204\240\201\201\206\177\154\144\141\160
\072\057\057\144\151\162\145\143\164\157\162\171\056\144\055\164
\162\165\163\164\056\156\145\164\057\103\116\075\104\055\124\122
\125\123\124\045\062\060\122\157\157\164\045\062\060\103\154\141
\163\163\045\062\060\063\045\062\060\103\101\045\062\060\062\045
\062\060\105\126\045\062\060\062\060\060\071\054\117\075\104\055
\124\162\165\163\164\045\062\060\107\155\142\110\054\103\075\104
\105\077\143\145\162\164\151\146\151\143\141\164\145\162\145\166
\157\143\141\164\151\157\156\154\151\163\164\060\106\240\104\240
\102\206\100\150\164\164\160\072\057\057\167\167\167\056\144\055
\164\162\165\163\164\056\156\145\164\057\143\162\154\057\144\055
\164\162\165\163\164\137\162\157\157\164\137\143\154\141\163\163
\137\063\137\143\141\137\062\137\145\166\137\062\060\060\071\056
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\064\355\173\132\074\244\224\210\357
\032\021\165\007\057\263\376\074\372\036\121\046\353\207\366\051
\336\340\361\324\306\044\011\351\301\317\125\033\264\060\331\316
\032\376\006\121\246\025\244\055\357\262\113\277\040\050\045\111
\321\246\066\167\064\350\144\337\122\261\021\307\163\172\315\071
\236\302\255\214\161\041\362\132\153\257\337\074\116\125\257\262
\204\145\024\211\271\167\313\052\061\276\317\243\155\317\157\110
\224\062\106\157\347\161\214\240\246\204\031\067\007\362\003\105
\011\053\206\165\174\337\137\151\127\000\333\156\330\246\162\042

```
\113\120\324\165\230\126\337\267\030\377\103\103\120\256\172\104
\173\360\171\121\327\103\075\247\323\201\323\360\311\117\271\332
\306\227\206\320\202\303\344\102\155\376\260\342\144\116\016\046
\347\100\064\046\265\010\211\327\010\143\143\070\047\165\036\063
\352\156\250\335\237\231\117\164\115\201\211\200\113\335\232\227
\051\134\057\276\201\101\271\214\377\352\175\140\006\236\315\327
\075\323\056\243\025\274\250\346\046\345\157\303\334\270\003\041
\352\237\026\361\054\124\265
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "D-TRUST Root Class 3 CA 2 EV 2009"

Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

Serial Number: 623604 (0x983f4)

Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

Not Valid Before: Thu Nov 05 08:50:46 2009

Not Valid After : Mon Nov 05 08:50:46 2029

Fingerprint (SHA-256):

EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81

Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\226\311\033\013\225\264\020\230\102\372\320\330\042\171\376\140
\372\271\026\203
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\252\306\103\054\136\055\315\304\064\300\120\117\021\002\117\266
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\003\011\203\364
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

```
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
```

```
# Certificate "CA Disig Root R2"
```

```
#
```

```
# Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
```

```
# Serial Number:00:92:b8:88:db:b0:8a:c1:63
```

```
# Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
```

```
# Not Valid Before: Thu
```

```
Jul 19 09:15:30 2012
```

```
# Not Valid After : Sat Jul 19 09:15:30 2042
```

```
# Fingerprint (SHA-256):
```

```
E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03
```

```
# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "CA Disig Root R2"
```

```
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
```

```
CKA_SUBJECT MULTILINE_OCTAL
```

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
```

```
END
```

```
CKA_ID UTF8 "0"
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
```

```
END
```

```
CKA_SERIAL_NUMBER
```

```
MULTILINE_OCTAL
```

```
\002\011\000\222\270\210\333\260\212\301\143
```

```
END
```

```
CKA_VALUE MULTILINE_OCTAL
```

```
\060\202\005\151\060\202\003\121\240\003\002\001\002\002\011\000
\222\270\210\333\260\212\301\143\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\122\061\013\060\011\006\003\125
\004\006\023\002\123\113\061\023\060\021\006\003\125\004\007\023
```

\012\102\162\141\164\151\163\154\141\166\141\061\023\060\021\006
\003\125\004\012\023\012\104\151\163\151\147\040\141\056\163\056
\061\031\060\027\006\003\125\004\003\023\020\103\101\040\104\151
\163\151\147\040\122\157\157\164\040\122\062\060\036\027\015\061
\062\060\067\061\071\060\071\061\065\063\060\132\027\015\064\062
\060\067\061\071\060\071\061\065\063\060\132\060\122\061\013\060
\011\006\003\125\004\006\023\002\123\113\061\023\060\021\006\003
\125\004\007\023\012\102\162\141\164\151\163\154\141\166\141\061
\023\060\021\006\003\125\004\012\023\012\104\151\163\151\147\040
\141\056\163\056\061\031\060\027\006\003\125\004\003\023\020\103
\101\040\104\151\163\151\147\040\122\157\157\164\040\122\062\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\242\243\304\000\011\326\205\135\055\155\024\366\302\303\163\236
\065\302\161\125\176\201\373\253\106\120\340\301\174\111\170\346
\253\171\130\074\332\377\174\034\237\330\227\002\170\076\153\101
\004\351\101\275\276\003\054\105\366\057\144\324\253\135\243\107
\075\144\233\351\150\232\306\314\033\077\272\276\262\213\064\002
\056\230\125\031\374\214\157\252\137\332\114\316\115\003\041\243
\330\322\064\223\126\226\313\114\014\000\026\074\137\032\315\310
\307\154\246\255\323\061\247\274\350\345\341\146\326\322\373\003
\264\101\145\311\020\256\016\005\143\306\200\152\151\060\375\322
\356\220\357\015\047\337\237\225\163\364\341\045\332\154\026\336
\101\070\064\352\213\374\321\350\004\024\141\055\101\176\254\307
\167\116\313\121\124\373\136\222\030\033\004\132\150\306\311\304
\372\267\023\240\230\267\021\053\267\326\127\314\174\236\027\321
\313\045\376\206\116\044\056\126\014\170\115\236\001\022\246\053
\247\001\145\156\174\142\035\204\204\337\352\300\153\265\245\052
\225\203\303\123\021\014\163\035\013\262\106\220\321\102\072\316
\100\156\225\255\377\306\224\255\156\227\204\216\175\157\236\212
\200\015\111\155\163\342\173\222\036\303\363\301\363\353\056\005
\157\331\033\317\067\166\004\310\264\132\344\027\247\313\335\166
\037\320\031\166\350\054\005\263\326\234\064\330\226\334\141\207
\221\005\344\104\010\063\301\332\271\010\145\324\256\262\066\015
\353\272\070\272\014\345\233\236\353\215\146\335\231\317\326\211
\101\366\004\222\212\051\051\155\153\072\034\347\165\175\002\161
\016\363\300\347\275\313\031\335\235\140\262\302\146\140\266\261
\004\356\311\346\206\271\232\146\100\250\347\021\355\201\105\003
\213\366\147\131\350\301\006\021\275\335\317\200\002\117\145\100
\170\134\107\120\310\233\346\037\201\173\344\104\250\133\205\232
\342\336\132\325\307\371\072\104\146\113\344\062\124\174\344\154
\234\263\016\075\027\242\262\064\022\326\176\262\250\111\273\321
\172\050\100\276\242\026\037\337\344\067\037\021\163\373\220\012
\145\103\242\015\174\370\006\001\125\063\175\260\015\270\364\365
\256\245\102\127\174\066\021\214\173\136\304\003\235\214\171\235
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125\035

\016\004\026\004\024\265\231\370\257\260\224\365\343\040\326\012
\255\316\116\126\244\056\156\102\355\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\003\202\002\001\000\046\006\136
\160\347\145\063\310\202\156\331\234\027\072\033\172\146\262\001
\366\170\073\151\136\057\352\377\116\371\050\303\230\052\141\114
\264\044\022\212\175\155\021\024\367\234\265\312\346\274\236\047
\216\114\031\310\251\275\172\300\327\066\016\155\205\162\156\250
\306\242\155\366\372\163\143\177\274\156\171\010\034\235\212\237
\032\212\123\246\330\273\331\065\125\261\021\305\251\003\263\126
\073\271\204\223\042\136\176\301\366\022\122\213\352\054\147\274
\376\066\114\365\270\317\321\263\111\222\073\323\051\016\231\033
\226\367\141\270\073\304\053\266\170\154\264\043\157\360\375\323
\262\136\165\037\231\225\250\254\366\332\341\305\061\173\373\321
\106\263\322\274\147\264\142\124\272\011\367\143\260\223\242\232
\371\351\122\056\213\140\022\253\374\365\140\126\357\020\134\213
\304\032\102\334\203\133\144\016\313\265\274\326\117\301\174\074
\156\215\023\155\373\173\353\060\320\334\115\257\305\325\266\245
\114\133\161\311\350\061\276\350\070\006\110\241\032\342\352\322
\336\022\071\130\032\377\200\016\202\165\346\267\311\007\154\016
\357\377\070\361\230\161\304\267\177\016\025\320\045\151\275\042
\235\053\355\005\366\106\107\254\355\300\360\324\073\342\354\356
\226\133\220\023\116\036\126\072\353\260\357\226\273\226\043\021
\272\362\103\206\164\144\225\310\050\165\337\035\065\272\322\067
\203\070\123\070\066\073\317\154\351\371\153\016\320\373\004\350
\117\167\327\145\001\170\206\014\172\076\041\142\361\177\143\161
\014\311\237\104\333\250\047\242\165\276\156\201\076\327\300\353
\033\230\017\160\134\064\262\212\314\300\205\030\353\156\172\263
\367\132\241\007\277\251\102\222\363\140\042\227\344\024\241\007
\233\116\166\300\216\175\375\244\045\307\107\355\377\037\163\254
\314\303\245\351\157\012\216\233\145\302\120\205\265\243\240\123
\022\314\125\207\141\363\201\256\020\106\141\275\104\041\270\302
\075\164\317\176\044\065\372\034\007\016\233\075\042\312\357\061
\057\214\254\022\275\357\100\050\374\051\147\237\262\023\117\146
\044\304\123\031\351\036\051\025\357\346\155\260\177\055\147\375
\363\154\033\165\106\243\345\112\027\351\244\327\013

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "CA Disig Root R2"

Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK

Serial Number:00:92:b8:88:db:b0:8a:c1:63

Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK

Not Valid Before: Thu Jul 19 09:15:30 2012

Not Valid After : Sat Jul 19 09:15:30 2042

Fingerprint (SHA-256):

```

E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03
# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CA Disig Root R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\265\141\353\352\244\336\344\045\113\151\032\230\245\127\107\302
\064\307\331\161
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\046\001\373\330\047\247\027\232\105\124\070\032\103\001\073\003
END
CKA_ISSUER
MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\222\270\210\333\260\212\301\143
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ACCVRAIZ1"
#
# Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Serial Number:5e:c3:b7:a6:43:7f:a4:e0
# Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Not Valid Before: Thu May 05 09:37:37 2011
# Not Valid After : Tue Dec 31 09:37:37 2030
# Fingerprint (SHA-256):
9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13
#
Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ACCVRAIZ1"

```

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\136\303\267\246\103\177\244\340

END

CKA_VALUE MULTILINE_OCTAL

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\060\013\006\003\125\004\012\014\004\101\103\103\126\061\013\060
\011\006\003\125\004\006\023\002\105\123\060\036\027\015\061\061
\060\065\060\065\060\071\063\067\063\067\132\027\015\063\060\061
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\323\074\060\223\365\215\241\250\374\006\215\104\364\312\026\225
\174\063\334\142\213\250\067\370\047\330\011\055\033\357\310\024
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END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "ACCVRAIZ1"

Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

Serial Number:5e:c3:b7:a6:43:7f:a4:e0

Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

Not Valid Before: Thu May 05 09:37:37 2011

Not Valid After : Tue Dec 31 09:37:37 2030

Fingerprint (SHA-256):

9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13

Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8

"ACCVRAIZ1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

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\223\005\172\210\025\306\117\316\210\057\372\221\026\122\050\170
\274\123\144\027
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END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

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\320\240\132\356\005\266\011\224\041\241\175\361\262\051\202\002
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END

CKA_ISSUER MULTILINE_OCTAL

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\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
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END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

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\002\010\136\303\267\246\103\177\244\340
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END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "TWCA Global Root CA"

```

#
# Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW
# Serial Number: 3262 (0xcbe)
# Subject: CN=TWCA Global
  Root CA,OU=Root CA,O=TAIWAN-CA,C=TW
# Not Valid Before: Wed Jun 27 06:28:33 2012
# Not Valid After : Tue Dec 31 15:59:59 2030
# Fingerprint (SHA-256):
59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B
# Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TWCA Global Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
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\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
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\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
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CKA_ID UTF8 "0"
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MULTILINE_OCTAL
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END
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\070\063\063\132\027\015\063\060\061\062\063\061\061\065\065\071
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\034\324\330\245\175\006\172\157\325\337\020\337\201\116\041\145
\261\266\341\027\171\225\105\006\316\137\314\334\106\211\143\150
\104\215\223\364\144\160\240\075\235\050\005\303\071\160\270\142
\173\040\375\344\333\351\010\241\270\236\075\011\307\117\373\054
\370\223\166\101\336\122\340\341\127\322\235\003\274\167\236\376
\236\051\136\367\301\121\140\037\336\332\013\262\055\165\267\103
\110\223\347\366\171\306\204\135\200\131\140\224\374\170\230\217
\074\223\121\355\100\220\007\337\144\143\044\313\116\161\005\241
\327\224\032\210\062\361\042\164\042\256\245\246\330\022\151\114
\140\243\002\356\053\354\324\143\222\013\136\276\057\166\153\243
\266\046\274\217\003\330\012\362\114\144\106\275\071\142\345\226
\353\064\143\021\050\314\225\361\255\357\357\334\200\130\110\351
\113\270\352\145\254\351\374\200\265\265\310\105\371\254\301\237
\331\271\352\142\210\216\304\361\113\203\022\255\346\213\204\326
\236\302\353\203\030\237\152\273\033\044\140\063\160\314\354\367
\062\363\134\331\171\175\357\236\244\376\311\043\303\044\356\025
\222\261\075\221\117\046\206\275\146\163\044\023\352\244\256\143
\301\255\175\204\003\074\020\170\206\033\171\343\304\363\362\004
\225\040\256\043\202\304\263\072\000\142\277\346\066\044\341\127
\272\307\036\220\165\325\137\077\225\141\053\301\073\315\345\263
\150\141\320\106\046\251\041\122\151\055\353\056\307\353\167\316
\246\072\265\003\063\117\166\321\347\134\124\001\135\313\170\364
\311\014\277\317\022\216\027\055\043\150\224\347\253\376\251\262
\053\006\320\004\315

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL

CK_FALSE

Trust for "TWCA Global Root CA"

Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

Serial Number: 3262 (0xcbe)

Subject: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

Not Valid Before: Wed Jun 27 06:28:33 2012

Not Valid After : Tue Dec 31 15:59:59 2030

Fingerprint (SHA-256):

59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B

Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TWCA Global Root CA"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\234\273\110\123\366\244\366\323\122\244\350\062\122\125\140\023
\365\255\257\145
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\371\003\176\317\346\236\074\163\172\052\220\007\151\377\053\226
END
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\014\276
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TeliaSonera Root CA v1"
#
# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96
# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Not Valid Before: Thu Oct 18 12:00:50 2007
# Not Valid After : Mon Oct 18 12:00:50 2032
# Fingerprint (SHA-256):
DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89
# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TeliaSonera Root CA v1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
END

```

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372
\213\315\226

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\070\060\202\003\040\240\003\002\001\002\002\021\000
\225\276\026\240\367\056\106\361\173\071\202\162\372\213\315\226
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154\151
\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004\003
\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122\157
\157\164\040\103\101\040\166\061\060\036\027\015\060\067\061\060
\061\070\061\062\060\060\065\060\132\027\015\063\062\061\060\061
\070\061\062\060\060\065\060\132\060\067\061\024\060\022\006\003
\125\004\012\014\013\124\145\154\151\141\123\157\156\145\162\141
\061\037\060\035\006\003\125\004\003\014\026\124\145\154\151\141
\123\157\156\145\162\141\040\122\157\157\164\040\103\101\040\166
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\302\276\353\047\360\041\243\363\151\046\125\176\235\305
\125\026\221\134\375\357\041\277\123\200\172\055\322\221\214\143
\061\360\354\044\360\303\245\322\162\174\020\155\364\067\267\345
\346\174\171\352\214\265\202\213\256\110\266\254\000\334\145\165
\354\052\115\137\301\207\365\040\145\053\201\250\107\076\211\043
\225\060\026\220\177\350\127\007\110\347\031\256\277\105\147\261
\067\033\006\052\376\336\371\254\175\203\373\136\272\344\217\227
\147\276\113\216\215\144\007\127\070\125\151\064\066\075\023\110
\357\117\342\323\146\036\244\317\032\267\136\066\063\324\264\006
\275\030\001\375\167\204\120\000\105\365\214\135\350\043\274\176
\376\065\341\355\120\173\251\060\215\031\323\011\216\150\147\135
\277\074\227\030\123\273\051\142\305\312\136\162\301\307\226\324
\333\055\240\264\037\151\003\354\352\342\120\361\014\074\360\254
\363\123\055\360\034\365\355\154\071\071\163\200\026\310\122\260
\043\315\340\076\334\335\074\107\240\273\065\212\342\230\150\213
\276\345\277\162\356\322\372\245\355\022\355\374\230\030\251\046
\166\334\050\113\020\040\034\323\177\026\167\055\355\157\200\367
\111\273\123\005\273\135\150\307\324\310\165\026\077\211\132\213
\367\027\107\324\114\361\322\211\171\076\115\075\230\250\141\336
\072\036\322\370\136\003\340\301\311\034\214\323\215\115\323\225
\066\263\067\137\143\143\233\063\024\360\055\046\153\123\174\211
\214\062\302\156\354\075\041\000\071\311\241\150\342\120\203\056

\260\072\053\363\066\240\254\057\344\157\141\302\121\011\071\076
\213\123\271\273\147\332\334\123\271\166\131\066\235\103\345\040
\340\075\062\140\205\042\121\267\307\063\273\335\025\057\244\170
\246\007\173\201\106\066\004\206\335\171\065\307\225\054\073\260
\243\027\065\345\163\037\264\134\131\357\332\352\020\145\173\172
\320\177\237\263\264\052\067\073\160\213\233\133\271\053\267\354
\262\121\022\227\123\051\132\324\360\022\020\334\117\002\273\022
\222\057\142\324\077\151\103\174\015\326\374\130\165\001\210\235
\130\026\113\336\272\220\377\107\001\211\006\152\366\137\262\220
\152\263\002\246\002\210\277\263\107\176\052\331\325\372\150\170
\065\115\002\003\001\000\001\243\077\060\075\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003
\125\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016
\004\026\004\024\360\217\131\070\000\263\365\217\232\226\014\325
\353\372\173\252\027\350\023\022\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\002\001\000\276\344\134\142
\116\044\364\014\010\377\360\323\014\150\344\223\111\042\077\104
\047\157\273\155\336\203\146\316\250\314\015\374\365\232\006\345
\167\024\221\353\235\101\173\231\052\204\345\377\374\041\301\135
\360\344\037\127\267\165\251\241\137\002\046\377\327\307\367\116
\336\117\370\367\034\106\300\172\117\100\054\042\065\360\031\261
\320\153\147\054\260\250\340\300\100\067\065\366\204\134\134\343
\257\102\170\376\247\311\015\120\352\015\204\166\366\121\357\203
\123\306\172\377\016\126\111\056\217\172\326\014\346\047\124\343
\115\012\140\162\142\315\221\007\326\245\277\310\231\153\355\304
\031\346\253\114\021\070\305\157\061\342\156\111\310\077\166\200
\046\003\046\051\340\066\366\366\040\123\343\027\160\064\027\235
\143\150\036\153\354\303\115\206\270\023\060\057\135\106\015\107
\103\325\033\252\131\016\271\134\215\006\110\255\164\207\137\307
\374\061\124\101\023\342\307\041\016\236\340\036\015\341\300\173
\103\205\220\305\212\130\306\145\012\170\127\362\306\043\017\001
\331\040\113\336\017\373\222\205\165\052\134\163\215\155\173\045
\221\312\356\105\256\006\113\000\314\323\261\131\120\332\072\210
\073\051\103\106\136\227\053\124\316\123\157\215\112\347\226\372
\277\161\016\102\213\174\375\050\240\320\110\312\332\304\201\114
\273\242\163\223\046\310\353\014\326\046\210\266\300\044\317\273
\275\133\353\165\175\351\010\216\206\063\054\171\167\011\151\245
\211\374\263\160\220\207\166\217\323\042\273\102\316\275\163\013
\040\046\052\320\233\075\160\036\044\154\315\207\166\251\027\226
\267\317\015\222\373\216\030\251\230\111\321\236\376\140\104\162
\041\271\031\355\302\365\061\361\071\110\210\220\044\165\124\026
\255\316\364\370\151\024\144\071\373\243\270\272\160\100\307\047
\034\277\304\126\123\372\143\145\320\363\034\016\026\365\153\206
\130\115\030\324\344\015\216\245\235\133\221\334\166\044\120\077
\306\052\373\331\267\234\265\326\346\320\331\350\031\213\025\161
\110\255\267\352\330\131\210\324\220\277\026\263\331\351\254\131
\141\124\310\034\272\312\301\312\341\271\040\114\217\072\223\211
\245\240\314\277\323\366\165\244\165\226\155\126

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "TeliaSonera Root CA v1"
# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96
# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Not Valid Before: Thu Oct 18 12:00:50 2007
# Not Valid After : Mon Oct 18 12:00:50 2032
# Fingerprint (SHA-256):
DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89
# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TeliaSonera Root CA v1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\103\023\273\226\361\325\206\233\301\116\152\222\366\317\366\064
\151\207\202\067
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\067\101\111\033\030\126\232\046\365\255\302\146\373\100\245\114
END
CKA_ISSUER MULTILINE_OCTAL
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372
\213\315\226
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Certification Authority"
#
# Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im

```

```
Teknolojileri ve Hizmetleri A...,L=Ankara,C=TR
# Serial Number:6a:68:3e:9c:51:9b:cb:53
# Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A...,L=Ankara,C=TR
# Not Valid Before: Tue Mar 05 12:09:48 2013
# Not Valid After : Fri Mar 03 12:09:48 2023
# Fingerprint (SHA-256):
B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C
# Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\152\150\076\234\121\233\313\123
```

END

CKA_VALUE MULTILINE_OCTAL

\060\202\006\113\060\202\004\063\240\003\002\001\002\002\010\152
\150\076\234\121\233\313\123\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\262\061\013\060\011\006\003\125
\004\006\023\002\124\122\061\017\060\015\006\003\125\004\007\014
\006\101\156\153\141\162\141\061\100\060\076\006\003\125\004\012
\014\067\105\055\124\165\304\237\162\141\040\105\102\107\040\102
\151\154\151\305\237\151\155\040\124\145\153\156\157\154\157\152
\151\154\145\162\151\040\166\145\040\110\151\172\155\145\164\154
\145\162\151\040\101\056\305\236\056\061\046\060\044\006\003\125
\004\013\014\035\105\055\124\165\147\162\141\040\123\145\162\164
\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145\172
\151\061\050\060\046\006\003\125\004\003\014\037\105\055\124\165
\147\162\141\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061
\063\060\063\060\065\061\062\060\071\064\070\132\027\015\062\063
\060\063\060\063\061\062\060\071\064\070\132\060\201\262\061\013
\060\011\006\003\125\004\006\023\002\124\122\061\017\060\015\006
\003\125\004\007\014\006\101\156\153\141\162\141\061\100\060\076
\006\003\125\004\012\014\067\105\055\124\165\304\237\162\141\040
\105\102\107\040\102\151\154\151\305\237\151\155\040\124\145\153
\156\157\154\157\152\151\154\145\162\151\040\166\145\040\110\151
\172\155\145\164\154\145\162\151\040\101\056\305\236\056\061\046
\060\044\006\003\125\004\013\014\035\105\055\124\165\147\162\141
\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040\115
\145\162\153\145\172\151\061\050\060\046\006\003\125\004\003\014
\037\105\055\124\165\147\162\141\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\342\365\077\223\005\121\036\205\142\124\136\172\013\365\030
\007\203\256\176\257\174\367\324\212\153\245\143\103\071\271\113
\367\303\306\144\211\075\224\056\124\200\122\071\071\007\113\113
\335\205\007\166\207\314\277\057\225\114\314\175\247\075\274\107
\017\230\160\370\214\205\036\164\216\222\155\033\100\321\231\015
\273\165\156\310\251\153\232\300\204\061\257\312\103\313\353\053
\064\350\217\227\153\001\233\325\016\112\010\252\133\222\164\205
\103\323\200\256\241\210\133\256\263\352\136\313\026\232\167\104
\310\241\366\124\150\316\336\217\227\053\272\133\100\002\014\144
\027\300\265\223\315\341\361\023\146\316\014\171\357\321\221\050
\253\137\240\022\122\060\163\031\216\217\341\214\007\242\303\273
\112\360\352\037\025\250\356\045\314\244\106\370\033\042\357\263
\016\103\272\054\044\270\305\054\134\324\034\370\135\144\275\303
\223\136\050\247\077\047\361\216\036\323\052\120\005\243\125\331
\313\347\071\123\300\230\236\214\124\142\213\046\260\367\175\215
\174\344\306\236\146\102\125\202\107\347\262\130\215\146\367\007
\174\056\066\346\120\034\077\333\103\044\305\277\206\107\171\263

\171\034\367\132\364\023\354\154\370\077\342\131\037\225\356\102
\076\271\255\250\062\205\111\227\106\376\113\061\217\132\313\255
\164\107\037\351\221\267\337\050\004\042\240\324\017\135\342\171
\117\352\154\205\206\275\250\246\316\344\372\303\341\263\256\336
\074\121\356\313\023\174\001\177\204\016\135\121\224\236\023\014
\266\056\245\114\371\071\160\066\157\226\312\056\014\104\125\305
\312\372\135\002\243\337\326\144\214\132\263\001\012\251\265\012
\107\027\377\357\221\100\052\216\241\106\072\061\230\345\021\374
\314\273\111\126\212\374\271\320\141\232\157\145\154\346\303\313
\076\165\111\376\217\247\342\211\305\147\327\235\106\023\116\061
\166\073\044\263\236\021\145\206\253\177\357\035\324\370\274\347
\254\132\134\267\132\107\134\125\316\125\264\042\161\133\133\013
\360\317\334\240\141\144\352\251\327\150\012\143\247\340\015\077
\240\257\323\252\322\176\357\121\240\346\121\053\125\222\025\027
\123\313\267\146\016\146\114\370\371\165\114\220\347\022\160\307
\105\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035
\016\004\026\004\024\056\343\333\262\111\320\234\124\171\134\372
\047\052\376\314\116\322\350\116\124\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035
\043\004\030\060\026\200\024\056\343\333\262\111\320\234\124\171
\134\372\047\052\376\314\116\322\350\116\124\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\005
\067\072\364\115\267\105\342\105\165\044\217\266\167\122\350\034
\330\020\223\145\363\362\131\006\244\076\036\051\354\135\321\320
\253\174\340\012\220\110\170\355\116\230\003\231\376\050\140\221
\035\060\035\270\143\174\250\346\065\265\372\323\141\166\346\326
\007\113\312\151\232\262\204\172\167\223\105\027\025\237\044\320
\230\023\022\377\273\240\056\375\116\114\207\370\316\134\252\230
\033\005\340\000\106\112\202\200\245\063\213\050\334\355\070\323
\337\345\076\351\376\373\131\335\141\204\117\322\124\226\023\141
\023\076\217\200\151\276\223\107\265\065\103\322\132\273\075\134
\357\263\102\107\315\073\125\023\006\260\011\333\375\143\366\072
\210\012\231\157\176\341\316\033\123\152\104\146\043\121\010\173
\274\133\122\242\375\006\067\070\100\141\217\112\226\270\220\067
\370\146\307\170\220\000\025\056\213\255\121\065\123\007\250\153
\150\256\371\116\074\007\046\315\010\005\160\314\071\077\166\275
\245\323\147\046\001\206\246\123\322\140\073\174\103\177\125\212
\274\225\032\301\050\071\114\037\103\322\221\364\162\131\212\271
\126\374\077\264\235\332\160\234\166\132\214\103\120\356\216\060
\162\115\337\377\111\367\306\251\147\331\155\254\002\021\342\072
\026\045\247\130\010\313\157\123\101\234\110\070\107\150\063\321
\327\307\217\324\164\041\324\303\005\220\172\377\316\226\210\261
\025\051\135\043\253\320\140\241\022\117\336\364\027\315\062\345
\311\277\310\103\255\375\056\216\361\257\342\364\230\372\022\037
\040\330\300\247\014\205\305\220\364\073\055\226\046\261\054\276
\114\253\353\261\322\212\311\333\170\023\017\036\011\235\155\217
\000\237\002\332\301\372\037\172\172\011\304\112\346\210\052\227


```
\237\211\213\375\067\137\137\072\316\070\131\206\113\257\161\013
\264\330\362\160\117\237\062\023\343\260\247\127\345\332\332\103
\313\204\064\362\050\304\352\155\364\052\357\301\153\166\332\373
\176\273\205\074\322\123\302\115\276\161\341\105\321\375\043\147
\015\023\165\373\317\145\147\042\235\256\260\011\321\011\377\035
\064\277\376\043\227\067\322\071\372\075\015\006\013\264\333\073
\243\253\157\134\035\266\176\350\263\202\064\355\006\134\044
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "E-Tugra Certification Authority"

Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

Serial Number:6a:68:3e:9c:51:9b:cb:53

Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

Not Valid Before: Tue Mar 05 12:09:48 2013

Not Valid After : Fri Mar 03 12:09:48 2023

Fingerprint (SHA-256):

B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C

Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39

CKA_CLASS CK_OBJECT_CLASS

CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\121\306\347\010\111\006\156\363\222\324\134\240\015\155\243\142
\217\303\122\071
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\270\241\003\143\260\275\041\161\160\212\157\023\072\273\171\111
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
```

\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150

\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\152\150\076\234\121\233\313\123

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "T-TeleSec GlobalRoot Class 2"

#

Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Serial Number: 1 (0x1)

Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Not Valid Before: Wed Oct 01 10:40:14 2008

Not Valid After : Sat Oct 01 23:59:59 2033

Fingerprint (SHA-256):

91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52

Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105

\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163

\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040

\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060

\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155

\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045

\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123

\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154

\141\163\163\040\062

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105

\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163

\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040

\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141
\163\163\040\062\060\036\027\015\060\070\061\060\060\061\061\060
\064\060\061\064\132\027\015\063\063\061\060\060\061\062\063\065
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171
\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157
\164\040\103\154\141\163\163\040\062\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\252\137\332\033\137\350
\163\221\345\332\134\364\242\346\107\345\363\150\125\140\005\035
\002\244\263\233\131\363\036\212\257\064\255\374\015\302\331\110
\031\356\151\217\311\040\374\041\252\007\031\355\260\134\254\145
\307\137\355\002\174\173\174\055\033\326\272\271\200\302\030\202
\026\204\372\146\260\010\306\124\043\201\344\315\271\111\077\366
\117\156\067\110\050\070\017\305\276\347\150\160\375\071\227\115
\322\307\230\221\120\252\304\104\263\043\175\071\107\351\122\142
\326\022\223\136\267\061\226\102\005\373\166\247\036\243\365\302
\374\351\172\305\154\251\161\117\352\313\170\274\140\257\307\336
\364\331\313\276\176\063\245\156\224\203\360\064\372\041\253\352
\216\162\240\077\244\336\060\133\357\206\115\152\225\133\103\104
\250\020\025\034\345\001\127\305\230\361\346\006\050\221\252\040
\305\267\123\046\121\103\262\013\021\225\130\341\300\017\166\331

\300\215\174\201\363\162\160\236\157\376\032\216\331\137\065\306
\262\157\064\174\276\110\117\342\132\071\327\330\235\170\236\237
\206\076\003\136\031\213\104\242\325\307\002\003\001\000\001\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\277
\131\040\066\000\171\240\240\042\153\214\325\362\141\322\270\054
\313\202\112\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\061\003\242\141\013\037\164\350\162
\066\306\155\371\115\236\372\042\250\341\201\126\317\315\273\237
\352\253\221\031\070\257\252\174\025\115\363\266\243\215\245\364
\216\366\104\251\247\350\041\225\255\076\000\142\026\210\360\002
\272\374\141\043\346\063\233\060\172\153\066\142\173\255\004\043
\204\130\145\342\333\053\212\347\045\123\067\142\123\137\274\332
\001\142\051\242\246\047\161\346\072\042\176\301\157\035\225\160
\040\112\007\064\337\352\377\025\200\345\272\327\172\330\133\165
\174\005\172\051\107\176\100\250\061\023\167\315\100\073\264\121
\107\172\056\021\343\107\021\336\235\146\320\213\325\124\146\372
\203\125\352\174\302\051\211\033\351\157\263\316\342\005\204\311
\057\076\170\205\142\156\311\137\301\170\143\164\130\300\110\030
\014\231\071\353\244\314\032\265\171\132\215\025\234\330\024\015
\366\172\007\127\307\042\203\005\055\074\233\045\046\075\030\263
\251\103\174\310\310\253\144\217\016\243\277\234\033\235\060\333
\332\320\031\056\252\074\361\373\063\200\166\344\315\255\031\117
\005\047\216\023\241\156\302

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "T-TeleSec GlobalRoot Class 2"

Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Serial Number: 1 (0x1)

Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Not Valid Before: Wed Oct 01 10:40:14 2008

Not Valid After : Sat Oct 01 23:59:59 2033

Fingerprint (SHA-256):

91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52

#

Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\131\015\055\175\210\117\100\056\141\176\245\142\062\027\145\317
\027\330\224\351
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\053\233\236\344\173\154\037\000\162\032\314\301\167\171\337\152
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Atos TrustedRoot 2011"
#
# Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011
# Serial Number:5c:33:cb:62:2c:5f:b3:32
# Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011
# Not Valid Before: Thu Jul 07 14:58:30 2011
# Not Valid After : Tue Dec 31 23:59:59 2030
# Fingerprint (SHA-256):
F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74
# Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Atos TrustedRoot 2011"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060

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\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
\163\061\013\060\011\006\003\125\004\006\023\002\104\105
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
\163\061\013\060\011\006\003\125\004\006\023\002\104\105
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\134\063\313\142\054\137\263\062
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\010\134
\063\313\142\054\137\263\062\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\074\061\036\060\034\006\003\125\004
\003\014\025\101\164\157\163\040\124\162\165\163\164\145\144\122
\157\157\164\040\062\060\061\061\061\015\060\013\006\003\125\004
\012\014\004\101\164\157\163\061\013\060\011\006\003\125\004\006
\023\002\104\105\060\036\027\015\061\061\060\067\060\067\061\064
\065\070\063\060\132\027\015\063\060\061\062\063\061\062\063\065
\071\065\071\132\060\074\061\036\060\034\006\003\125\004\003\014
\025\101\164\157\163\040\124\162\165\163\164\145\144\122\157\157
\164\040\062\060\061\061\061\015\060\013\006\003\125\004\012\014
\004\101\164\157\163\061\013\060\011\006\003\125\004\006\023\002
\104\105\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\225\205\073\227\157\052\073\056\073\317\246\363\051
\065\276\317\030\254\076\252\331\370\115\240\076\032\107\271\274
\232\337\362\376\314\076\107\350\172\226\302\044\216\065\364\251
\014\374\202\375\155\301\162\142\047\275\352\153\353\347\212\314
\124\076\220\120\317\200\324\225\373\350\265\202\324\024\305\266
\251\125\045\127\333\261\120\366\260\140\144\131\172\151\317\003
\267\157\015\276\312\076\157\164\162\352\252\060\052\163\142\276
\111\221\141\310\021\376\016\003\052\367\152\040\334\002\025\015
\136\025\152\374\343\202\301\265\305\235\144\011\154\243\131\230
\007\047\307\033\226\053\141\164\161\154\103\361\367\065\211\020
\340\236\354\125\241\067\042\242\207\004\005\054\107\175\264\034
\271\142\051\146\050\312\267\341\223\365\244\224\003\231\271\160
\205\265\346\110\352\215\120\374\331\336\314\157\007\016\335\013
\162\235\200\060\026\007\225\077\050\016\375\305\165\117\123\326
\164\232\264\044\056\216\002\221\317\166\305\233\036\125\164\234
\170\041\261\360\055\361\013\237\302\325\226\030\037\360\124\042
\172\214\007\002\003\001\000\001\243\175\060\173\060\035\006\003
\125\035\016\004\026\004\024\247\245\006\261\054\246\011\140\356
\321\227\351\160\256\274\073\031\154\333\041\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003
```

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\125\035\043\004\030\060\026\200\024\247\245\006\261\054\246\011
\140\356\321\227\351\160\256\274\073\031\154\333\041\060\030\006
\003\125\035\040\004\021\060\017\060\015\006\013\053\006\001\004
\001\260\055\003\004\001\001\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\001\001\000\046\167\064\333\224
\110\206\052\101\235\054\076\006\220\140\304\214\254\013\124\270
\037\271\173\323\007\071\344\372\076\173\262\075\116\355\237\043
\275\227\363\153\134\357\356\375\100\246\337\241\223\241\012\206
\254\357\040\320\171\001\275\170\367\031\330\044\061\064\004\001
\246\272\025\232\303\047\334\330\117\017\314\030\143\377\231\017
\016\221\153\165\026\341\041\374\330\046\307\107\267\246\317\130
\162\161\176\272\341\115\225\107\073\311\257\155\241\264\301\354
\211\366\264\017\070\265\342\144\334\045\317\246\333\353\232\134
\231\241\305\010\336\375\346\332\325\326\132\105\014\304\267\302
\265\024\357\264\021\377\016\025\265\365\365\333\306\275\353\132
\247\360\126\042\251\074\145\124\306\025\250\275\206\236\315\203
\226\150\172\161\201\211\341\013\341\352\021\033\150\010\314\151
\236\354\236\101\236\104\062\046\172\342\207\012\161\075\353\344
\132\244\322\333\305\315\306\336\140\177\271\363\117\104\222\357
\052\267\030\076\247\031\331\013\175\261\067\101\102\260\272\140
\035\362\376\011\021\260\360\207\173\247\235
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Atos TrustedRoot 2011"

Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011

Serial Number:5c:33:cb:62:2c:5f:b3:32

Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011

Not Valid Before: Thu Jul 07 14:58:30 2011

Not Valid After : Tue Dec 31 23:59:59 2030

Fingerprint (SHA-256):

F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74

Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Atos TrustedRoot 2011"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\053\261\365\076\125\014\035\305\361\324\346\267\152\106\113\125
\006\002\254\041
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\256\271\304\062\113\254\177\135\146\314\167\224\273\052\167\126

END

CKA_ISSUER MULTILINE_OCTAL

\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157

\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060

\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157

\163\061\013\060\011\006\003\125\004\006\023\002\104\105

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\010\134\063\313\142\054\137\263\062

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate

"QuoVadis Root CA 1 G3"

#

Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93

Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

Not Valid Before: Thu Jan 12 17:27:44 2012

Not Valid After : Sun Jan 12 17:27:44 2042

Fingerprint (SHA-256):

8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74

Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 1 G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144

\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157

\157\164\040\103\101\040\061\040\107\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144

\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157

\157\164\040\103\101\040\061\040\107\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023
\050\265\226\324\145\223

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\170
\130\137\056\255\054\031\113\343\067\007\065\064\023\050\265\226
\324\145\223\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\061\040\107\063\060\036\027\015
\061\062\060\061\061\062\061\067\062\067\064\064\132\027\015\064
\062\060\061\061\062\061\067\062\067\064\064\132\060\110\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\061\040\107\063\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\240\276\120\020\216\351\362\154\100
\264\004\234\205\271\061\312\334\055\344\021\251\004\074\033\125
\301\347\130\060\035\044\264\303\357\205\336\214\054\341\301\075
\337\202\346\117\255\107\207\154\354\133\111\301\112\325\273\217
\354\207\254\177\202\232\206\354\075\003\231\122\001\322\065\236
\254\332\360\123\311\146\074\324\254\002\001\332\044\323\073\250
\002\106\257\244\034\343\370\163\130\166\267\366\016\220\015\265
\360\317\314\372\371\306\114\345\303\206\060\012\215\027\176\065
\353\305\337\273\016\234\300\215\207\343\210\070\205\147\372\076
\307\253\340\023\234\005\030\230\317\223\365\261\222\264\374\043
\323\317\325\304\047\111\340\236\074\233\010\243\213\135\052\041
\340\374\071\252\123\332\175\176\317\032\011\123\274\135\005\004
\317\241\112\217\213\166\202\015\241\370\322\307\024\167\133\220
\066\007\201\233\076\006\372\122\136\143\305\246\000\376\245\351
\122\033\122\265\222\071\162\003\011\142\275\260\140\026\156\246
\335\045\302\003\146\335\363\004\321\100\342\116\213\206\364\157
\345\203\240\047\204\136\004\301\365\220\275\060\075\304\357\250
\151\274\070\233\244\244\226\321\142\332\151\300\001\226\256\313
\304\121\064\352\014\252\377\041\216\131\217\112\134\344\141\232
\247\322\351\052\170\215\121\075\072\025\356\242\131\216\251\134
\336\305\371\220\042\345\210\105\161\335\221\231\154\172\237\075
\075\230\174\136\366\276\026\150\240\136\256\013\043\374\132\017
\252\042\166\055\311\241\020\035\344\323\104\043\220\210\237\306
\052\346\327\365\232\263\130\036\057\060\211\010\033\124\242\265
\230\043\354\010\167\034\225\135\141\321\313\211\234\137\242\112

\221\232\357\041\252\111\026\010\250\275\141\050\061\311\164\255
\205\366\331\305\261\213\321\345\020\062\115\137\213\040\072\074
\111\037\063\205\131\015\333\313\011\165\103\151\163\373\153\161
\175\360\337\304\114\175\306\243\056\310\225\171\313\163\242\216
\116\115\044\373\136\344\004\276\162\033\246\047\055\111\132\231
\172\327\134\011\040\267\177\224\271\117\361\015\034\136\210\102
\033\021\267\347\221\333\236\154\364\152\337\214\006\230\003\255
\314\050\357\245\107\363\123\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\035\006\003\125\035\016\004\026\004\024\243\227\326\363
\136\242\020\341\253\105\237\074\027\144\074\356\001\160\234\314
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\030\372\133\165\374\076\172\307\137\167\307\312
\337\317\137\303\022\304\100\135\324\062\252\270\152\327\325\025
\025\106\230\043\245\346\220\133\030\231\114\343\255\102\243\202
\061\066\210\315\351\373\304\004\226\110\213\001\307\215\001\317
\133\063\006\226\106\146\164\035\117\355\301\266\271\264\015\141
\314\143\176\327\056\167\214\226\034\052\043\150\153\205\127\166
\160\063\023\376\341\117\246\043\167\030\372\032\214\350\275\145
\311\317\077\364\311\027\334\353\307\274\300\004\056\055\106\057
\151\146\303\033\217\376\354\076\323\312\224\277\166\012\045\015
\251\173\002\034\251\320\073\137\013\300\201\072\075\144\341\277
\247\055\116\275\115\304\330\051\306\042\030\320\305\254\162\002
\202\077\252\072\242\072\042\227\061\335\010\143\303\165\024\271
\140\050\055\133\150\340\026\251\146\202\043\121\365\353\123\330
\061\233\173\351\267\235\113\353\210\026\317\371\135\070\212\111
\060\217\355\361\353\031\364\167\032\061\030\115\147\124\154\057
\157\145\371\333\075\354\041\354\136\364\364\213\312\140\145\124
\321\161\144\364\371\246\243\201\063\066\063\161\360\244\170\137
\116\255\203\041\336\064\111\215\350\131\254\235\362\166\132\066
\362\023\364\257\340\011\307\141\052\154\367\340\235\256\273\206
\112\050\157\056\356\264\171\315\220\063\303\263\166\372\365\360
\154\235\001\220\372\236\220\366\234\162\317\107\332\303\037\344
\065\040\123\362\124\321\337\141\203\246\002\342\045\070\336\205
\062\055\136\163\220\122\135\102\304\316\075\113\341\371\031\204
\035\325\242\120\314\101\373\101\024\303\275\326\311\132\243\143
\146\002\200\275\005\072\073\107\234\354\000\046\114\365\210\121
\277\250\043\177\030\007\260\013\355\213\046\241\144\323\141\112
\353\134\237\336\263\257\147\003\263\037\335\155\135\151\150\151
\253\136\072\354\174\151\274\307\073\205\116\236\025\271\264\025
\117\303\225\172\130\327\311\154\351\154\271\363\051\143\136\264
\054\360\055\075\355\132\145\340\251\133\100\302\110\231\201\155
\236\037\006\052\074\022\264\213\017\233\242\044\360\246\215\326
\172\340\113\266\144\226\143\225\204\302\112\315\034\056\044\207
\063\140\345\303

END

CKA_NSS_MOZILLA_CA_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "QuoVadis Root CA 1 G3"
# Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93
# Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 17:27:44 2012
# Not Valid After : Sun Jan 12 17:27:44 2042
# Fingerprint (SHA-256):
8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74
# Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis
Root CA 1 G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\03\216\352\127\226\051\032\311\071\352\270\012\201\032\163\163
\300\223\171\147
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\244\274\133\077\376\067\232\372\144\360\342\372\005\075\013\253
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\061\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023
\050\265\226\324\145\223
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 2 G3"
#
# Issuer: CN=QuoVadis Root CA
2 G3,O=QuoVadis Limited,C=BM
# Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28

```

```
# Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 18:59:32 2012
# Not Valid After : Sun Jan 12 18:59:32 2042
# Fingerprint (SHA-256):
8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40
# Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\104
\127\064\044\133\201\211\233\065\362\316\270\053\073\133\247\046
\360\165\050\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\062\040\107\063\060\036\027\015
\061\062\060\061\061\062\061\070\065\071\063\062\132\027\015\064
\062\060\061\061\062\061\070\065\071\063\062\132\060\110\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\062\040\107\063\060\202\002\042\060\015\006\011\052\206
```

\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\241\256\045\262\001\030\334\127\210
\077\106\353\371\257\342\353\043\161\342\232\321\141\146\041\137
\252\257\047\121\345\156\033\026\324\055\175\120\260\123\167\275
\170\072\140\342\144\002\233\174\206\233\326\032\216\255\377\037
\025\177\325\225\036\022\313\346\024\204\004\301\337\066\263\026
\237\212\343\311\333\230\064\316\330\063\027\050\106\374\247\311
\360\322\264\325\115\011\162\111\371\362\207\343\251\332\175\241
\175\153\262\072\045\251\155\122\104\254\370\276\156\373\334\246
\163\221\220\141\246\003\024\040\362\347\207\243\210\255\255\240
\214\377\246\013\045\122\045\347\026\001\325\313\270\065\201\014
\243\073\360\341\341\374\132\135\316\200\161\155\370\111\253\076
\073\272\270\327\200\001\373\245\353\133\263\305\136\140\052\061
\240\257\067\350\040\072\237\250\062\054\014\314\011\035\323\236
\216\135\274\114\230\356\305\032\150\173\354\123\246\351\024\065
\243\337\315\200\237\014\110\373\034\364\361\277\112\270\372\325
\214\161\112\307\037\255\376\101\232\263\203\135\362\204\126\357
\245\127\103\316\051\255\214\253\125\277\304\373\133\001\335\043
\041\241\130\000\216\303\320\152\023\355\023\343\022\053\200\334
\147\346\225\262\315\036\042\156\052\370\101\324\362\312\024\007
\215\212\125\022\306\151\365\270\206\150\057\123\136\260\322\252
\041\301\230\346\060\343\147\125\307\233\156\254\031\250\125\246
\105\006\320\043\072\333\353\145\135\052\021\021\360\073\117\312
\155\364\064\304\161\344\377\000\132\366\134\256\043\140\205\163
\361\344\020\261\045\256\325\222\273\023\301\014\340\071\332\264
\071\127\265\253\065\252\162\041\073\203\065\347\061\337\172\041
\156\270\062\010\175\035\062\221\025\112\142\162\317\343\167\241
\274\325\021\033\166\001\147\010\340\101\013\303\353\025\156\370
\244\031\331\242\253\257\342\047\122\126\053\002\212\054\024\044
\371\277\102\002\277\046\310\306\217\340\156\070\175\123\055\345
\355\230\263\225\143\150\177\371\065\364\337\210\305\140\065\222
\300\174\151\034\141\225\026\320\353\336\013\257\076\004\020\105
\145\130\120\070\257\110\362\131\266\026\362\074\015\220\002\306
\160\056\001\255\074\025\327\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\035\006\003\125\035\016\004\026\004\024\355\347\157\166
\132\277\140\354\111\133\306\245\167\273\162\026\161\233\304\075
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\221\337\200\077\103\011\176\161\302\367\353\263
\210\217\341\121\262\274\075\165\371\050\135\310\274\231\233\173
\135\252\345\312\341\012\367\350\262\323\237\335\147\061\176\272
\001\252\307\152\101\073\220\324\010\134\262\140\152\220\360\310
\316\003\142\371\213\355\373\156\052\334\006\115\074\051\017\211
\026\212\130\114\110\017\350\204\141\352\074\162\246\167\344\102
\256\210\243\103\130\171\176\256\312\245\123\015\251\075\160\275
\040\031\141\244\154\070\374\103\062\341\301\107\377\370\354\361
\021\042\062\226\234\302\366\133\151\226\173\040\014\103\101\232

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\133\366\131\031\210\336\125\210\067\121\013\170\134\012\036\243
\102\375\307\235\210\017\300\362\170\002\044\124\223\257\211\207
\210\311\112\200\035\352\320\156\076\141\056\066\273\065\016\047
\226\375\146\064\073\141\162\163\361\026\134\107\006\124\111\000
\172\130\022\260\012\357\205\375\261\270\063\165\152\223\034\022
\346\140\136\157\035\177\311\037\043\313\204\141\237\036\202\104
\371\137\255\142\125\044\232\122\230\355\121\347\241\176\227\072
\346\057\037\021\332\123\200\054\205\236\253\065\020\333\042\137
\152\305\136\227\123\362\062\002\011\060\243\130\360\015\001\325
\162\306\261\174\151\173\303\365\066\105\314\141\156\136\114\224
\305\136\256\350\016\136\213\277\367\315\340\355\241\016\033\063
\356\124\030\376\017\276\357\176\204\153\103\343\160\230\333\135
\165\262\015\131\007\205\025\043\071\326\361\337\251\046\017\326
\110\307\263\246\042\365\063\067\132\225\107\237\173\272\030\025
\157\377\326\024\144\203\111\322\012\147\041\333\017\065\143\140
\050\042\343\261\225\203\315\205\246\335\057\017\347\147\122\156
\273\057\205\174\365\112\163\347\305\076\300\275\041\022\005\077
\374\267\003\111\002\133\310\045\346\342\124\070\365\171\207\214
\035\123\262\116\205\173\006\070\307\054\370\370\260\162\215\045
\345\167\122\364\003\034\110\246\120\137\210\040\060\156\362\202
\103\253\075\227\204\347\123\373\041\301\117\017\042\232\206\270
\131\052\366\107\075\031\210\055\350\205\341\236\354\205\010\152
\261\154\064\311\035\354\110\053\073\170\355\146\304\216\171\151
\203\336\177\214
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "QuoVadis Root CA 2 G3"

Issuer: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28

Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

Not Valid Before: Thu Jan 12 18:59:32 2012

Not Valid After : Sun Jan 12 18:59:32 2042

Fingerprint (SHA-256):

8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40

Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 2 G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\011\074\141\363\213\213\334\175\125\337\165\070\002\005\000\341
\045\365\310\066
```

END

```

CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\257\014\206\156\277\100\055\177\013\076\022\120\272\022\075\006
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3 G3"
#
# Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d
#
# Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 20:26:32 2012
# Not Valid After : Sun Jan 12 20:26:32 2042
# Fingerprint (SHA-256):
88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46
# Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

```

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275
\003\240\317\022\152\035

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\056
\365\233\002\050\247\333\172\377\325\243\251\356\275\003\240\317
\022\152\035\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\063\040\107\063\060\036\027\015
\061\062\060\061\061\062\062\060\062\066\063\062\132\027\015\064
\062\060\061\061\062\062\060\062\066\063\062\132\060\110\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\063\040\107\063\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\263\313\016\020\147\216\352\024\227
\247\062\052\012\126\066\177\150\114\307\263\157\072\043\024\221
\377\031\177\245\312\254\356\263\166\235\172\351\213\033\253\153
\061\333\372\013\123\114\257\305\245\032\171\074\212\114\377\254
\337\045\336\116\331\202\062\013\104\336\312\333\214\254\243\156
\026\203\073\246\144\113\062\211\373\026\026\070\176\353\103\342
\323\164\112\302\142\012\163\012\335\111\263\127\322\260\012\205
\235\161\074\336\243\313\300\062\363\001\071\040\103\033\065\321
\123\263\261\356\305\223\151\202\076\026\265\050\106\241\336\352
\211\011\355\103\270\005\106\212\206\365\131\107\276\033\157\001
\041\020\271\375\251\322\050\312\020\071\011\312\023\066\317\234
\255\255\100\164\171\053\002\077\064\377\372\040\151\175\323\356
\141\365\272\263\347\060\320\067\043\206\162\141\105\051\110\131
\150\157\167\246\056\201\276\007\115\157\257\316\304\105\023\221
\024\160\006\217\037\237\370\207\151\261\016\357\303\211\031\353
\352\034\141\374\172\154\212\334\326\003\013\236\046\272\022\335
\324\124\071\253\046\243\063\352\165\201\332\055\315\017\117\344
\003\321\357\025\227\033\153\220\305\002\220\223\146\002\041\261
\107\336\213\232\112\200\271\125\217\265\242\057\300\326\063\147
\332\176\304\247\264\004\104\353\107\373\346\130\271\367\014\360
\173\053\261\300\160\051\303\100\142\055\073\110\151\334\043\074

\110\353\173\011\171\251\155\332\250\060\230\317\200\162\003\210
\246\133\106\256\162\171\174\010\003\041\145\256\267\341\034\245
\261\052\242\061\336\146\004\367\300\164\350\161\336\377\075\131
\314\226\046\022\213\205\225\127\032\253\153\165\013\104\075\021
\050\074\173\141\267\342\217\147\117\345\354\074\114\140\200\151
\127\070\036\001\133\215\125\350\307\337\300\314\167\043\064\111
\165\174\366\230\021\353\055\336\355\101\056\024\005\002\177\340
\376\040\353\065\347\021\254\042\316\127\075\336\311\060\155\020
\003\205\315\361\377\214\026\265\301\262\076\210\154\140\177\220
\117\225\367\366\055\255\001\071\007\004\372\165\200\175\277\111
\120\355\357\311\304\174\034\353\200\176\333\266\320\335\023\376
\311\323\234\327\262\227\251\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\035\006\003\125\035\016\004\026\004\024\306\027\320\274
\250\352\002\103\362\033\006\231\135\053\220\040\271\327\234\344
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\064\141\331\126\265\022\207\125\115\335\243\065
\061\106\273\244\007\162\274\137\141\142\350\245\373\013\067\261
\074\266\263\372\051\235\177\002\365\244\311\250\223\267\172\161
\050\151\217\163\341\122\220\332\325\276\072\345\267\166\152\126
\200\041\337\135\346\351\072\236\345\076\366\242\151\307\052\012
\260\030\107\334\040\160\175\122\243\076\131\174\301\272\311\310
\025\100\141\312\162\326\160\254\322\267\360\034\344\206\051\360
\316\357\150\143\320\265\040\212\025\141\232\176\206\230\264\311
\302\166\373\314\272\060\026\314\243\141\306\164\023\345\153\357
\243\025\352\003\376\023\213\144\344\323\301\322\350\204\373\111
\321\020\115\171\146\353\252\375\364\215\061\036\160\024\255\334
\336\147\023\114\201\025\141\274\267\331\221\167\161\031\201\140
\273\360\130\245\265\234\013\367\217\042\125\047\300\113\001\155
\073\231\015\324\035\233\143\147\057\320\356\015\312\146\274\224
\117\246\255\355\374\356\143\254\127\077\145\045\317\262\206\217
\320\010\377\270\166\024\156\336\345\047\354\253\170\265\123\271
\266\077\350\040\371\322\250\276\141\106\312\207\214\204\363\371
\361\240\150\233\042\036\201\046\233\020\004\221\161\300\006\037
\334\240\323\271\126\247\343\230\055\177\203\235\337\214\053\234
\062\216\062\224\360\001\074\042\052\237\103\302\056\303\230\071
\007\070\173\374\136\000\102\037\363\062\046\171\203\204\366\345
\360\301\121\022\300\013\036\004\043\014\124\245\114\057\111\305
\112\321\266\156\140\015\153\374\153\213\205\044\144\267\211\016
\253\045\107\133\074\317\176\111\275\307\351\012\306\332\367\176
\016\027\010\323\110\227\320\161\222\360\017\071\076\064\152\034
\175\330\362\042\256\273\151\364\063\264\246\110\125\321\017\016
\046\350\354\266\013\055\247\205\065\315\375\131\310\237\321\315
\076\132\051\064\271\075\204\316\261\145\324\131\221\221\126\165
\041\301\167\236\371\172\341\140\235\323\255\004\030\364\174\353
\136\223\217\123\112\042\051\370\110\053\076\115\206\254\133\177
\313\006\231\131\140\330\130\145\225\215\104\321\367\177\176\047

\177\175\256\200\365\007\114\266\076\234\161\124\231\004\113\375

\130\371\230\364

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "QuoVadis Root CA 3 G3"

Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM

Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d

Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM

Not Valid Before: Thu Jan 12 20:26:32 2012

Not Valid After : Sun Jan 12 20:26:32 2042

Fingerprint (SHA-256):

88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46

Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 3 G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\110\022\275\222\074\250\304\071\006\347\060\155\047\226\346\244

\317\042\056\175

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

\337\175\271\255\124\157\150\241\337\211\127\003\227\103\260\327

END

CKA_ISSUER MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144

\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157

\157\164\040\103\101\040\063\040\107\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275

\003\240\317\022\152\035

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DigiCert Assured ID Root G2"

```

#
# Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b
# Subject:
  CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85
# Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
END
CKA_ID
  UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232
\364\113
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\226\060\202\002\176\240\003\002\001\002\002\020\013
\223\034\072\326\071\147\352\147\043\277\303\257\232\364\113\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061

```

\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157
\157\164\040\107\062\060\036\027\015\061\063\060\070\060\061\061
\062\060\060\060\060\132\027\015\063\070\060\061\061\065\061\062
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145
\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145
\144\040\111\104\040\122\157\157\164\040\107\062\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\331\347\050
\057\122\077\066\162\111\210\223\064\363\370\152\036\061\124\200
\237\255\124\101\265\107\337\226\250\324\257\200\055\271\012\317
\165\375\211\245\175\044\372\343\042\014\053\274\225\027\013\063
\277\031\115\101\006\220\000\275\014\115\020\376\007\265\347\034
\156\042\125\061\145\227\275\323\027\322\036\142\363\333\352\154
\120\214\077\204\014\226\317\267\313\003\340\312\155\241\024\114
\033\211\335\355\000\260\122\174\257\221\154\261\070\023\321\351
\022\010\300\000\260\034\053\021\332\167\160\066\233\256\316\171
\207\334\202\160\346\011\164\160\125\151\257\243\150\237\277\335
\266\171\263\362\235\160\051\125\364\253\377\225\141\363\311\100
\157\035\321\276\223\273\323\210\052\273\235\277\162\132\126\161
\073\077\324\363\321\012\376\050\357\243\356\331\231\257\003\323
\217\140\267\362\222\241\261\275\211\211\037\060\315\303\246\056
\142\063\256\026\002\167\104\132\347\201\012\074\247\104\056\171
\270\077\004\274\134\240\207\341\033\257\121\216\315\354\054\372
\370\376\155\360\072\174\252\213\344\147\225\061\215\002\003\001
\000\001\243\102\060\100\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026
\004\024\316\303\112\271\231\125\362\270\333\140\277\251\176\275
\126\265\227\066\247\326\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\001\001\000\312\245\125\214\343\310
\101\156\151\047\247\165\021\357\074\206\066\157\322\235\306\170
\070\035\151\226\242\222\151\056\070\154\233\175\004\324\211\245
\261\061\067\212\311\041\314\253\154\315\213\034\232\326\277\110
\322\062\146\301\212\300\363\057\072\357\300\343\324\221\206\321
\120\343\003\333\163\167\157\112\071\123\355\336\046\307\265\175
\257\053\102\321\165\142\343\112\053\002\307\120\113\340\151\342
\226\154\016\104\146\020\104\217\255\005\353\370\171\254\246\033
\350\067\064\235\123\311\141\252\242\122\257\112\160\026\206\302
\072\310\261\023\160\066\330\317\356\364\012\064\325\133\114\375
\007\234\242\272\331\001\162\134\363\115\301\335\016\261\034\015
\304\143\276\255\364\024\373\211\354\242\101\016\114\314\310\127
\100\320\156\003\252\315\014\216\211\231\231\154\360\074\060\257
\070\337\157\274\243\276\051\040\047\253\164\377\023\042\170\336

```
\227\122\125\036\203\265\124\040\003\356\256\300\117\126\336\067
\314\303\177\252\004\047\273\323\167\270\142\333\027\174\234\050
\042\023\163\154\317\046\365\212\051\347
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Assured ID Root G2"

Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b

Subject: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85

#

Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert Assured ID Root G2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\241\113\110\331\103\356\012\016\100\220\117\074\340\244\300\221
```

```
\223\121\135\077
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\222\070\271\370\143\044\202\145\054\127\063\346\376\201\217\235
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
```

```
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
```

```
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
```

```
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
```

```
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
```

```
\122\157\157\164\040\107\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232
```

```
\364\113
```

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DigiCert Assured ID Root G3"

#

Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec

Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2

Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL

UTF8 "DigiCert Assured ID Root G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240
\154\354

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\106\060\202\001\315\240\003\002\001\002\002\020\013
\241\132\372\035\337\240\265\111\104\257\315\044\240\154\354\060
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060

\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056
\144\151\147\151\143\145\162\164\056\143\157\155\061\044\060\042
\006\003\125\004\003\023\033\104\151\147\151\103\145\162\164\040
\101\163\163\165\162\145\144\040\111\104\040\122\157\157\164\040
\107\063\060\036\027\015\061\063\060\070\060\061\061\062\060\060
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060
\060\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056
\143\157\155\061\044\060\042\006\003\125\004\003\023\033\104\151
\147\151\103\145\162\164\040\101\163\163\165\162\145\144\040\111
\104\040\122\157\157\164\040\107\063\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\031\347\274\254\104\145\355\315\270\077\130\373\215\261\127
\251\104\055\005\025\362\357\013\377\020\164\237\265\142\122\137
\146\176\037\345\334\033\105\171\013\314\306\123\012\235\215\135
\002\331\251\131\336\002\132\366\225\052\016\215\070\112\212\111
\306\274\306\003\070\007\137\125\332\176\011\156\342\177\136\320
\105\040\017\131\166\020\326\240\044\360\055\336\066\362\154\051
\071\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026\004
\024\313\320\275\251\341\230\005\121\241\115\067\242\203\171\316
\215\035\052\344\204\060\012\006\010\052\206\110\316\075\004\003
\003\003\147\000\060\144\002\060\045\244\201\105\002\153\022\113
\165\164\117\310\043\343\160\362\165\162\336\174\211\360\317\221
\162\141\236\136\020\222\131\126\271\203\307\020\347\070\351\130
\046\066\175\325\344\064\206\071\002\060\174\066\123\360\060\345
\142\143\072\231\342\266\243\073\233\064\372\036\332\020\222\161
\136\221\023\247\335\244\156\222\314\062\326\365\041\146\307\057
\352\226\143\152\145\105\222\225\001\264

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Assured ID Root G3"

Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec

Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri

Jan 15 12:00:00 2038

Fingerprint (SHA-256):

```

7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2
# Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\365\027\242\117\232\110\306\311\370\242\000\046\237\334\017\110
\054\253\060\211
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\174\177\145\061\014\201\337\215\272\076\231\342\134\255\156\373
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240
\154\354
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root G2"
#
# Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5
# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F
# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```



```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011
\372\345
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\216\060\202\002\166\240\003\002\001\002\002\020\003
\072\361\346\247\021\251\240\273\050\144\261\035\011\372\345\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107
\062\060\036\027\015\061\063\060\070\060\061\061\062\060\060\060
\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060\060
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103
\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013
\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157
\164\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\273\067\315\064\334\173\153\311\262\150\220
```

\255\112\165\377\106\272\041\012\010\215\365\031\124\311\373\210
\333\363\256\362\072\211\221\074\172\346\253\006\032\153\317\254
\055\350\136\011\044\104\272\142\232\176\326\243\250\176\340\124
\165\040\005\254\120\267\234\143\032\154\060\334\332\037\031\261
\327\036\336\375\327\340\313\224\203\067\256\354\037\103\116\335
\173\054\322\275\056\245\057\344\251\270\255\072\324\231\244\266
\045\351\233\153\000\140\222\140\377\117\041\111\030\367\147\220
\253\141\006\234\217\362\272\351\264\351\222\062\153\265\363\127
\350\135\033\315\214\035\253\225\004\225\111\363\065\055\226\343
\111\155\335\167\343\373\111\113\264\254\125\007\251\217\225\263
\264\043\273\114\155\105\360\366\251\262\225\060\264\375\114\125
\214\047\112\127\024\174\202\235\315\163\222\323\026\112\006\014
\214\120\321\217\036\011\276\027\241\346\041\312\375\203\345\020
\274\203\245\012\304\147\050\366\163\024\024\075\106\166\303\207
\024\211\041\064\115\257\017\105\014\246\111\241\272\273\234\305
\261\063\203\051\205\002\003\001\000\001\243\102\060\100\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060
\035\006\003\125\035\016\004\026\004\024\116\042\124\040\030\225
\346\343\156\346\017\372\372\271\022\355\006\027\217\071\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001
\001\000\140\147\050\224\157\016\110\143\353\061\335\352\147\030
\325\211\175\074\305\213\112\177\351\276\333\053\027\337\260\137
\163\167\052\062\023\071\201\147\102\204\043\362\105\147\065\354
\210\277\370\217\260\141\014\064\244\256\040\114\204\306\333\370
\065\341\166\331\337\246\102\273\307\104\010\206\177\066\164\044
\132\332\154\015\024\131\065\275\362\111\335\266\037\311\263\015
\107\052\075\231\057\273\134\273\265\324\040\341\231\137\123\106
\025\333\150\233\360\363\060\325\076\061\342\215\204\236\343\212
\332\332\226\076\065\023\245\137\360\371\160\120\160\107\101\021
\127\031\116\300\217\256\006\304\225\023\027\057\033\045\237\165
\362\261\216\231\241\157\023\261\101\161\376\210\052\310\117\020
\040\125\327\363\024\105\345\340\104\364\352\207\225\062\223\016
\376\123\106\372\054\235\377\213\042\271\113\331\011\105\244\336
\244\270\232\130\335\033\175\122\237\216\131\103\210\201\244\236
\046\325\157\255\335\015\306\067\175\355\003\222\033\345\167\137
\166\356\074\215\304\135\126\133\242\331\146\156\263\065\067\345
\062\266

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Global Root G2"

Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5

```
# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F
# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\337\074\044\371\277\326\146\166\033\046\200\163\376\006\321\314
\215\117\202\244
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\344\246\212\310\124\254\122\102\106\012\375\162\110\033\052\104
END
CKA_ISSUER
MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011
\372\345
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root G3"
#
# Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72
# Subject: CN=DigiCert Global
Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0
```

Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063

END

CKA_ID
UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253
\105\162

END

CKA_VALUE MULTILINE_OCTAL
\060\202\002\077\060\202\001\305\240\003\002\001\002\002\020\005
\125\126\274\362\136\244\065\065\303\244\017\325\253\105\162\060
\012\006\010\052\206\110\316\075\004\003\003\060\141\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056
\144\151\147\151\143\145\162\164\056\143\157\155\061\040\060\036
\006\003\125\004\003\023\027\104\151\147\151\103\145\162\164\040
\107\154\157\142\141\154\040\122\157\157\164\040\107\063\060\036
\027\015\061\063\060\070\060\061\061\062\060\060\060\060\132\027
\015\063\070\060\061\061\065\061\062\060\060\060\060\132\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145

```
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107
\063\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\335\247\331\273\212\270\013
\373\013\177\041\322\360\276\276\163\363\063\135\032\274\064\352
\336\306\233\274\320\225\366\360\314\320\013\272\141\133\121\106
\176\236\055\237\356\216\143\014\027\354\007\160\365\317\204\056
\100\203\234\350\077\101\155\073\255\323\244\024\131\066\170\235
\003\103\356\020\023\154\162\336\256\210\247\241\153\265\103\316
\147\334\043\377\003\034\243\342\076\243\102\060\100\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\035
\006\003\125\035\016\004\026\004\024\263\333\110\244\371\241\305
\330\256\066\101\314\021\143\151\142\051\274\113\306\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061
\000\255\274\362\154\077\022\112\321\055\071\303\012\011\227\163
\364\210\066\214\210\047\273\346\210\215\120\205\247\143\371\236
\062\336\146\223\017\361\314\261\011\217\335\154\253\372\153\177
\240\002\060\071\146\133\302\144\215\270\236\120\334\250\325\111
\242\355\307\334\321\111\177\027\001\270\310\206\217\116\214\210
\053\250\232\251\212\305\321\000\275\370\124\342\232\345\133\174
\263\047\027
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Global Root G3"

Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72

Subject: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0

Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert Global Root G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\176\004\336\211\152\076\146\155\000\346\207\323\077\372\331\073
\350\075\064\236
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\365\135\244\120\245\373\050\176\036\017\015\314\226\127\126\312
```

```

END
CKA_ISSUER
MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253
\105\162
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Trusted Root G4"
#
# Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c
# Subject: CN=DigiCert
Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88
# Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Trusted Root G4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064
END
CKA_ID

```

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167
\165\134

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\220\060\202\003\170\240\003\002\001\002\002\020\005
\233\033\127\236\216\041\062\342\071\007\275\247\167\165\134\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\142
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\041\060\037\006\003\125\004\003\023\030\104\151\147\151\103\145
\162\164\040\124\162\165\163\164\145\144\040\122\157\157\164\040
\107\064\060\036\027\015\061\063\060\070\060\061\061\065\061\062\060\060
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060
\060\132\060\142\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056
\143\157\155\061\041\060\037\006\003\125\004\003\023\030\104\151
\147\151\103\145\162\164\040\124\162\165\163\164\145\144\040\122
\157\157\164\040\107\064\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\277\346\220\163\150\336\273\344\135
\112\074\060\042\060\151\063\354\302\247\045\056\311\041\075\362
\212\330\131\302\341\051\247\075\130\253\166\232\315\256\173\033
\204\015\304\060\037\363\033\244\070\026\353\126\306\227\155\035
\253\262\171\362\312\021\322\344\137\326\005\074\122\017\122\037
\306\236\025\245\176\276\237\251\127\026\131\125\162\257\150\223
\160\302\262\272\165\231\152\163\062\224\321\020\104\020\056\337
\202\363\007\204\346\164\073\155\161\342\055\014\033\356\040\325
\311\040\035\143\051\055\316\354\136\116\310\223\370\041\141\233
\064\353\005\306\136\354\133\032\274\353\311\317\315\254\064\100
\137\261\172\146\356\167\310\110\250\146\127\127\237\124\130\216
\014\053\267\117\247\060\331\126\356\312\173\135\343\255\311\117
\136\345\065\347\061\313\332\223\136\334\216\217\200\332\266\221
\230\100\220\171\303\170\307\266\261\304\265\152\030\070\003\020

\215\330\324\067\244\056\005\175\210\365\202\076\020\221\160\253
\125\202\101\062\327\333\004\163\052\156\221\001\174\041\114\324
\274\256\033\003\165\135\170\146\331\072\061\104\232\063\100\277
\010\327\132\111\244\302\346\251\240\147\335\244\047\274\241\117
\071\265\021\130\027\367\044\134\106\217\144\367\301\151\210\166
\230\166\075\131\135\102\166\207\211\227\151\172\110\360\340\242
\022\033\146\232\164\312\336\113\036\347\016\143\256\346\324\357
\222\222\072\236\075\334\000\344\105\045\211\266\232\104\031\053
\176\300\224\264\322\141\155\353\063\331\305\337\113\004\000\314
\175\034\225\303\217\367\041\262\262\021\267\273\177\362\325\214
\160\054\101\140\252\261\143\030\104\225\032\166\142\176\366\200
\260\373\350\144\246\063\321\211\007\341\275\267\346\103\244\030
\270\246\167\001\341\017\224\014\041\035\262\124\051\045\211\154
\345\016\122\121\107\164\276\046\254\266\101\165\336\172\254\137
\215\077\311\274\323\101\021\022\133\345\020\120\353\061\305\312
\162\026\042\011\337\174\114\165\077\143\354\041\137\304\040\121
\153\157\261\253\206\213\117\302\326\105\137\235\040\374\241\036
\305\300\217\242\261\176\012\046\231\365\344\151\057\230\035\055
\365\331\251\262\035\345\033\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\206\060\035\006\003\125\035\016\004\026\004\024\354\327\343\202
\322\161\135\144\114\337\056\147\077\347\272\230\256\034\017\117
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003
\202\002\001\000\273\141\331\175\251\154\276\027\304\221\033\303
\241\242\000\215\343\144\150\017\126\317\167\256\160\371\375\232
\112\231\271\311\170\134\014\014\137\344\346\024\051\126\013\066
\111\135\104\143\340\255\234\226\030\146\033\043\015\075\171\351
\155\153\326\124\370\322\074\301\103\100\256\035\120\365\122\374
\220\073\273\230\231\151\153\307\301\247\250\150\244\047\334\235
\371\047\256\060\205\271\366\147\115\072\076\217\131\071\042\123
\104\353\310\135\003\312\355\120\172\175\142\041\012\200\310\163
\146\321\240\005\140\137\350\245\264\247\257\250\367\155\065\234
\174\132\212\326\242\070\231\363\170\213\364\115\322\040\013\336
\004\356\214\233\107\201\162\015\300\024\062\357\060\131\056\256
\340\161\362\126\344\152\227\157\222\120\155\226\215\150\172\232
\262\066\024\172\006\362\044\271\011\021\120\327\010\261\270\211
\172\204\043\141\102\051\345\243\315\242\040\101\327\321\234\144
\331\352\046\241\213\024\327\114\031\262\120\101\161\075\077\115
\160\043\206\014\112\334\201\322\314\062\224\204\015\010\011\227
\034\117\300\356\153\040\164\060\322\340\071\064\020\205\041\025
\001\010\350\125\062\336\161\111\331\050\027\120\115\346\276\115
\321\165\254\320\312\373\101\270\103\245\252\323\303\005\104\117
\054\066\233\342\372\342\105\270\043\123\154\006\157\147\125\177
\106\265\114\077\156\050\132\171\046\322\244\250\142\227\322\036
\342\355\112\213\274\033\375\107\112\015\337\147\146\176\262\133
\101\320\073\344\364\073\364\004\143\351\357\302\124\000\121\240
\212\052\311\316\170\314\325\352\207\004\030\263\316\257\111\210


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\257\363\222\231\266\263\346\141\017\322\205\000\347\120\032\344
\033\225\235\031\241\271\234\261\233\261\000\036\357\320\017\117
\102\154\311\012\274\356\103\372\072\161\245\310\115\046\245\065
\375\211\135\274\205\142\035\062\322\240\053\124\355\232\127\301
\333\372\020\317\031\267\213\112\033\217\001\266\047\225\123\350
\266\211\155\133\274\150\324\043\350\213\121\242\126\371\360\246
\200\240\326\036\263\274\017\017\123\165\051\252\352\023\167\344
\336\214\201\041\255\007\020\107\021\255\207\075\007\321\165\274
\317\363\146\176
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Trusted Root G4"

Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c

Subject: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88

#

Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert Trusted Root G4"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\335\373\026\315\111\061\311\163\242\003\175\077\310\072\115\175
\167\135\005\344
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\170\362\374\252\140\037\057\264\353\311\067\272\123\056\165\111
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167
```

```

\165\134
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO RSA Certification Authority"
#
# Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d
# Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Tue Jan 19 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34
# Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO RSA Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101

```

\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\114\252\371\312\333\143\157\340\037\367\116\330\133\003
\206\235

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\330\060\202\003\300\240\003\002\001\002\002\020\114
\252\371\312\333\143\157\340\037\367\116\330\133\003\206\235\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\201
\205\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033
\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103
\101\040\114\151\155\151\164\145\144\061\053\060\051\006\003\125
\004\003\023\042\103\117\115\117\104\117\040\122\123\101\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\060\036\027\015\061\060\060\061\061\071
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062
\063\065\071\065\071\132\060\201\205\061\013\060\011\006\003\125
\004\006\023\002\107\102\061\033\060\031\006\003\125\004\010\023
\022\107\162\145\141\164\145\162\040\115\141\156\143\150\145\163
\164\145\162\061\020\060\016\006\003\125\004\007\023\007\123\141
\154\146\157\162\144\061\032\060\030\006\003\125\004\012\023\021
\103\117\115\117\104\117\040\103\101\040\114\151\155\151\164\145
\144\061\053\060\051\006\003\125\004\003\023\042\103\117\115\117
\104\117\040\122\123\101\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\221
\350\124\222\322\012\126\261\254\015\044\335\305\317\104\147\164
\231\053\067\243\175\043\160\000\161\274\123\337\304\372\052\022
\217\113\177\020\126\275\237\160\162\267\141\177\311\113\017\027
\247\075\343\260\004\141\356\377\021\227\307\364\206\076\012\372
\076\134\371\223\346\064\172\331\024\153\347\234\263\205\240\202
\172\166\257\161\220\327\354\375\015\372\234\154\372\337\260\202
\364\024\176\371\276\304\246\057\117\177\231\177\265\374\147\103
\162\275\014\000\326\211\353\153\054\323\355\217\230\034\024\253
\176\345\343\156\374\330\250\344\222\044\332\103\153\142\270\125
\375\352\301\274\154\266\213\363\016\215\232\344\233\154\151\231
\370\170\110\060\105\325\255\341\015\074\105\140\374\062\226\121
\047\274\147\303\312\056\266\153\352\106\307\307\040\240\261\037
\145\336\110\010\272\244\116\251\362\203\106\067\204\353\350\314
\201\110\103\147\116\162\052\233\134\275\114\033\050\212\134\042
\173\264\253\230\331\356\340\121\203\303\011\106\116\155\076\231

\372\225\027\332\174\063\127\101\074\215\121\355\013\266\134\257
\054\143\032\337\127\310\077\274\351\135\304\233\257\105\231\342
\243\132\044\264\272\251\126\075\317\157\252\377\111\130\276\360
\250\377\364\270\255\351\067\373\272\270\364\013\072\371\350\103
\102\036\211\330\204\313\023\361\331\273\341\211\140\270\214\050
\126\254\024\035\234\012\347\161\353\317\016\335\075\251\226\241
\110\275\074\367\257\265\015\042\114\300\021\201\354\126\073\366
\323\242\342\133\267\262\004\042\122\225\200\223\151\350\216\114
\145\361\221\003\055\160\164\002\352\213\147\025\051\151\122\002
\273\327\337\120\152\125\106\277\240\243\050\141\177\160\320\303
\242\252\054\041\252\107\316\050\234\006\105\166\277\202\030\047
\264\325\256\264\313\120\346\153\364\114\206\161\060\351\246\337
\026\206\340\330\377\100\335\373\320\102\210\177\243\063\072\056
\134\036\101\021\201\143\316\030\161\153\053\354\246\212\267\061
\134\072\152\107\340\303\171\131\326\040\032\257\362\152\230\252
\162\274\127\112\322\113\235\273\020\374\260\114\101\345\355\035
\075\136\050\235\234\314\277\263\121\332\247\107\345\204\123\002
\003\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004
\026\004\024\273\257\176\002\075\372\246\361\074\204\216\255\356
\070\230\354\331\062\062\324\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\015\006\011\052\206\110\206
\367\015\001\001\014\005\000\003\202\002\001\000\012\361\325\106
\204\267\256\121\273\154\262\115\101\024\000\223\114\234\313\345
\300\124\317\240\045\216\002\371\375\260\242\015\365\040\230\074
\023\055\254\126\242\260\326\176\021\222\351\056\272\236\056\232
\162\261\275\031\104\154\141\065\242\232\264\026\022\151\132\214
\341\327\076\244\032\350\057\003\364\256\141\035\020\033\052\244
\213\172\305\376\005\246\341\300\326\310\376\236\256\217\053\272
\075\231\370\330\163\011\130\106\156\246\234\364\327\047\323\225
\332\067\203\162\034\323\163\340\242\107\231\003\070\135\325\111
\171\000\051\034\307\354\233\040\034\007\044\151\127\170\262\071
\374\072\204\240\265\234\174\215\277\056\223\142\047\267\071\332
\027\030\256\275\074\011\150\377\204\233\074\325\326\013\003\343
\127\236\024\367\321\353\117\310\275\207\043\267\266\111\103\171
\205\134\272\353\222\013\241\306\350\150\250\114\026\261\032\231
\012\350\123\054\222\273\241\011\030\165\014\145\250\173\313\043
\267\032\302\050\205\303\033\377\320\053\142\357\244\173\011\221
\230\147\214\024\001\315\150\006\152\143\041\165\003\200\210\212
\156\201\306\205\362\251\244\055\347\364\245\044\020\107\203\312
\315\364\215\171\130\261\006\233\347\032\052\331\235\001\327\224
\175\355\003\112\312\360\333\350\251\001\076\365\126\231\311\036
\216\111\075\273\345\011\271\340\117\111\222\075\026\202\100\314
\314\131\306\346\072\355\022\056\151\074\154\225\261\375\252\035
\173\177\206\276\036\016\062\106\373\373\023\217\165\177\114\213
\113\106\143\376\000\064\100\160\301\303\271\241\335\246\160\342
\004\263\101\274\351\200\221\352\144\234\172\341\042\003\251\234
\156\157\016\145\117\154\207\207\136\363\156\240\371\165\245\233

```
\100\350\123\262\047\235\112\271\300\167\041\215\377\207\362\336
\274\214\357\027\337\267\111\013\321\362\156\060\013\032\016\116
\166\355\021\374\365\351\126\262\175\277\307\155\012\223\214\245
\320\300\266\035\276\072\116\224\242\327\156\154\013\302\212\174
\372\040\363\304\344\345\315\015\250\313\221\222\261\174\205\354
\265\024\151\146\016\202\347\315\316\310\055\246\121\177\041\301
\065\123\205\006\112\135\237\255\273\033\137\164
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "COMODO RSA Certification Authority"

Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d

Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Tue Jan 19 00:00:00 2010

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34

Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "COMODO RSA Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\257\345\322\104\250\321\031\102\060\377\107\237\342\370\227\273
\315\172\214\264
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\033\061\260\161\100\066\314\024\066\221\255\304\076\375\354\030
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\020\114\252\371\312\333\143\157\340\037\367\116\330\133\003
\206\235
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "USERTrust RSA Certification Authority"
#
# Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d
# Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon
Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2
# Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust RSA Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122

```

\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\001\375\155\060\374\243\312\121\250\033\274\144\016\065
\003\055

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\336\060\202\003\306\240\003\002\001\002\002\020\001
\375\155\060\374\243\312\121\250\033\274\144\016\065\003\055\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\201
\210\061\013\060\011\006\003\125\004\006\023\002\125\123\061\023
\060\021\006\003\125\004\010\023\012\116\145\167\040\112\145\162
\163\145\171\061\024\060\022\006\003\125\004\007\023\013\112\145
\162\163\145\171\040\103\151\164\171\061\036\060\034\006\003\125
\004\012\023\025\124\150\145\040\125\123\105\122\124\122\125\123
\124\040\116\145\164\167\157\162\153\061\056\060\054\006\003\125
\004\003\023\045\125\123\105\122\124\162\165\163\164\040\122\123
\101\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\060\036\027\015\061\060\060
\062\060\061\060\060\060\060\060\132\027\015\063\070\060\061
\061\070\062\063\065\071\065\071\132\060\201\210\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\023\060\021\006\003\125
\004\010\023\012\116\145\167\040\112\145\162\163\145\171\061\024
\060\022\006\003\125\004\007\023\013\112\145\162\163\145\171\040
\103\151\164\171\061\036\060\034\006\003\125\004\012\023\025\124
\150\145\040\125\123\105\122\124\122\125\123\124\040\116\145\164
\167\157\162\153\061\056\060\054\006\003\125\004\003\023\045\125
\123\105\122\124\162\165\163\164\040\122\123\101\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\060\202\002\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012
\002\202\002\001\000\200\022\145\027\066\016\303\333\010\263\320
\254\127\015\166\355\315\047\323\114\255\120\203\141\342\252\040
\115\011\055\144\011\334\316\211\237\314\075\251\354\366\317\301
\334\361\323\261\326\173\067\050\021\053\107\332\071\306\274\072
\031\264\137\246\275\175\235\243\143\102\266\166\362\251\073\053
\221\370\342\157\320\354\026\040\220\011\076\342\350\164\311\030
\264\221\324\142\144\333\177\243\006\361\210\030\152\220\042\074
\274\376\023\360\207\024\173\366\344\037\216\324\344\121\306\021
\147\106\010\121\313\206\024\124\077\274\063\376\176\154\234\377
\026\235\030\275\121\216\065\246\247\146\310\162\147\333\041\146
\261\324\233\170\003\300\120\072\350\314\360\334\274\236\114\376
\257\005\226\065\037\127\132\267\377\316\371\075\267\054\266\366
\124\335\310\347\022\072\115\256\114\212\267\134\232\264\267\040
\075\312\177\042\064\256\176\073\150\146\001\104\347\001\116\106

\123\233\063\140\367\224\276\123\067\220\163\103\363\062\303\123
\357\333\252\376\164\116\151\307\153\214\140\223\336\304\307\014
\337\341\062\256\314\223\073\121\170\225\147\213\356\075\126\376
\014\320\151\017\033\017\363\045\046\153\063\155\367\156\107\372
\163\103\345\176\016\245\146\261\051\174\062\204\143\125\211\304
\015\301\223\124\060\031\023\254\323\175\067\247\353\135\072\154
\065\134\333\101\327\022\332\251\111\013\337\330\200\212\011\223
\142\216\265\146\317\045\210\315\204\270\261\077\244\071\017\331
\002\236\353\022\114\225\174\363\153\005\251\136\026\203\314\270
\147\342\350\023\235\314\133\202\323\114\263\355\133\377\336\345
\163\254\043\073\055\000\277\065\125\164\011\111\330\111\130\032
\177\222\066\346\121\222\016\363\046\175\034\115\027\274\311\354
\103\046\320\277\101\137\100\251\104\104\364\231\347\127\207\236
\120\037\127\124\250\076\375\164\143\057\261\120\145\011\346\130
\102\056\103\032\114\264\360\045\107\131\372\004\036\223\324\046
\106\112\120\201\262\336\276\170\267\374\147\025\341\311\127\204
\036\017\143\326\351\142\272\326\137\125\056\352\134\306\050\010
\004\045\071\270\016\053\251\362\114\227\034\007\077\015\122\365
\355\357\057\202\017\002\003\001\000\001\243\102\060\100\060\035
\006\003\125\035\016\004\026\004\024\123\171\277\132\252\053\112
\317\124\200\341\330\233\300\235\362\262\003\146\313\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\015
\006\011\052\206\110\206\367\015\001\001\014\005\000\003\202\002
\001\000\134\324\174\015\317\367\001\175\101\231\145\014\163\305
\122\237\313\370\317\231\006\177\033\332\103\025\237\236\002\125
\127\226\024\361\122\074\047\207\224\050\355\037\072\001\067\242
\166\374\123\120\300\204\233\306\153\116\272\214\041\117\242\216
\125\142\221\363\151\025\330\274\210\343\304\252\013\375\357\250
\351\113\125\052\006\040\155\125\170\051\031\356\137\060\134\113
\044\021\125\377\044\232\156\136\052\053\356\013\115\237\177\367
\001\070\224\024\225\103\007\011\373\140\251\356\034\253\022\214
\240\232\136\247\230\152\131\155\213\077\010\373\310\321\105\257
\030\025\144\220\022\017\163\050\056\305\342\044\116\374\130\354
\360\364\105\376\042\263\353\057\216\322\331\105\141\005\301\227
\157\250\166\162\217\213\214\066\257\277\015\005\316\161\215\346
\246\157\037\154\246\161\142\305\330\320\203\162\014\361\147\021
\211\014\234\023\114\162\064\337\274\325\161\337\252\161\335\341
\271\154\214\074\022\135\145\332\275\127\022\266\103\153\377\345
\336\115\146\021\121\317\231\256\354\027\266\350\161\221\214\336
\111\376\335\065\161\242\025\047\224\034\317\141\343\046\273\157
\243\147\045\041\135\346\335\035\013\056\150\033\073\202\257\354
\203\147\205\324\230\121\164\261\271\231\200\211\377\177\170\031
\134\171\112\140\056\222\100\256\114\067\052\054\311\307\142\310
\016\135\367\066\133\312\340\045\045\001\264\335\032\007\234\167
\000\077\320\334\325\354\075\324\372\273\077\314\205\326\157\177
\251\055\337\271\002\367\365\227\232\265\065\332\303\147\260\207
\112\251\050\236\043\216\377\134\047\153\341\260\117\363\007\356


```
\000\056\324\131\207\313\122\101\225\352\364\107\327\356\144\101
\125\174\215\131\002\225\335\142\235\302\271\356\132\050\164\204
\245\233\267\220\307\014\007\337\365\211\066\164\062\326\050\301
\260\260\013\340\234\114\303\034\326\374\343\151\265\107\106\201
\057\242\202\253\323\143\104\160\304\215\377\055\063\272\255\217
\173\265\160\210\256\076\031\317\100\050\330\374\310\220\273\135
\231\042\365\122\346\130\305\037\210\061\103\356\210\035\327\306
\216\074\103\152\035\247\030\336\175\075\026\361\142\371\312\220
\250\375
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "USERTrust RSA Certification Authority"

Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d

Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Not Valid Before: Mon Feb 01 00:00:00 2010

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2

Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "USERTrust RSA Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\053\217\033\127\063\015\273\242\320\172\154\121\367\016\351\015
\332\271\255\216
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\033\376\151\321\221\267\031\063\243\162\250\017\341\125\345\265
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
```

```

\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\001\375\155\060\374\243\312\121\250\033\274\144\016\065
\003\055
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "USERTrust ECC Certification Authority"
#
# Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26
# Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A
# Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust ECC Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013

```

\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200
\314\046

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\217\060\202\002\025\240\003\002\001\002\002\020\134
\213\231\305\132\224\305\322\161\126\336\315\211\200\314\046\060
\012\006\010\052\206\110\316\075\004\003\003\060\201\210\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\023\060\021\006
\003\125\004\010\023\012\116\145\167\040\112\145\162\163\145\171
\061\024\060\022\006\003\125\004\007\023\013\112\145\162\163\145
\171\040\103\151\164\171\061\036\060\034\006\003\125\004\012\023
\025\124\150\145\040\125\123\105\122\124\122\125\123\124\040\116
\145\164\167\157\162\153\061\056\060\054\006\003\125\004\003\023
\045\125\123\105\122\124\162\165\163\164\040\105\103\103\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\060\036\027\015\061\060\060\062\060\061
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062
\063\065\071\065\071\132\060\201\210\061\013\060\011\006\003\125
\004\006\023\002\125\123\061\023\060\021\006\003\125\004\010\023
\012\116\145\167\040\112\145\162\163\145\171\061\024\060\022\006
\003\125\004\007\023\013\112\145\162\163\145\171\040\103\151\164
\171\061\036\060\034\006\003\125\004\012\023\025\124\150\145\040
\125\123\105\122\124\122\125\123\124\040\116\145\164\167\157\162
\153\061\056\060\054\006\003\125\004\003\023\045\125\123\105\122
\124\162\165\163\164\040\105\103\103\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\032\254\124\132\251\371\150
\043\347\172\325\044\157\123\306\132\330\113\253\306\325\266\321
\346\163\161\256\335\234\326\014\141\375\333\240\211\003\270\005
\024\354\127\316\356\135\077\342\041\263\316\367\324\212\171\340
\243\203\176\055\227\320\141\304\361\231\334\045\221\143\253\177
\060\243\264\160\342\307\241\063\234\363\277\056\134\123\261\137
\263\175\062\177\212\064\343\171\171\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\072\341\011\206\324\317\031\302
\226\166\164\111\166\334\340\065\306\143\143\232\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060

```
\066\147\241\026\010\334\344\227\000\101\035\116\276\341\143\001
\317\073\252\102\021\144\240\235\224\071\002\021\171\134\173\035
\372\144\271\356\026\102\263\277\212\302\011\304\354\344\261\115
\002\061\000\351\052\141\107\214\122\112\113\116\030\160\366\326
\104\326\156\365\203\272\155\130\275\044\331\126\110\352\357\304
\242\106\201\210\152\072\106\321\251\233\115\311\141\332\321\135
\127\152\030
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "USERTrust ECC Certification Authority"

Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26

Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Not Valid Before: Mon Feb 01 00:00:00 2010

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A

Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "USERTrust ECC Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\321\313\312\135\262\325\052\177\151\073\147\115\345\360\132\035
\014\225\175\360
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\372\150\274\331\265\177\255\375\311\035\006\203\050\314\044\301
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

```

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200
\314\046
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign ECC Root CA - R5"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5
# Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24
# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371
\112\330\154

```

END

CKA_VALUE MULTILINE_OCTAL

```
\060\202\002\036\060\202\001\244\240\003\002\001\002\002\021\140
\131\111\340\046\056\273\125\371\012\167\212\161\371\112\330\154
\060\012\006\010\052\206\110\316\075\004\003\003\060\120\061\044
\060\042\006\003\125\004\013\023\033\107\154\157\142\141\154\123
\151\147\156\040\105\103\103\040\122\157\157\164\040\103\101\040
\055\040\122\065\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156\060\036
\027\015\061\062\061\061\061\063\060\060\060\060\060\132\027
\015\063\070\060\061\061\071\060\063\061\064\060\067\132\060\120
\061\044\060\042\006\003\125\004\013\023\033\107\154\157\142\141
\154\123\151\147\156\040\105\103\103\040\122\157\157\164\040\103
\101\040\055\040\122\065\061\023\060\021\006\003\125\004\012\023
\012\107\154\157\142\141\154\123\151\147\156\061\023\060\021\006
\003\125\004\003\023\012\107\154\157\142\141\154\123\151\147\156
\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053
\201\004\000\042\003\142\000\004\107\105\016\226\373\175\135\277
\351\071\321\041\370\237\013\266\325\173\036\222\072\110\131\034
\360\142\061\055\300\172\050\376\032\247\134\263\266\314\227\347
\105\324\130\372\321\167\155\103\242\300\207\145\064\012\037\172
\335\353\074\063\241\305\235\115\244\157\101\225\070\177\311\036
\204\353\321\236\111\222\207\224\207\014\072\205\112\146\237\235
\131\223\115\227\141\006\206\112\243\102\060\100\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006
\003\125\035\016\004\026\004\024\075\346\051\110\233\352\007\312
\041\104\112\046\336\156\336\322\203\320\237\131\060\012\006\010
\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061\000
\345\151\022\311\156\333\306\061\272\011\101\341\227\370\373\375
\232\342\175\022\311\355\174\144\323\313\005\045\213\126\331\240
\347\136\135\116\013\203\234\133\166\051\240\011\046\041\152\142
\002\060\161\322\265\217\134\352\073\341\170\011\205\250\165\222
\073\310\134\375\110\357\015\164\042\250\010\342\156\305\111\316
\307\014\274\247\141\151\361\367\073\341\052\313\371\053\363\146
\220\067
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign ECC Root CA - R5"

Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c

Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

Not Valid Before: Tue Nov 13 00:00:00 2012

```

# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24
# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\044\306\060\315\244\030\357\040\151\377\255\117\335\137\106
\072\033\151\252
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\237\255\073\034\002\036\212\272\027\164\070\201\014\242\274\010
END
CKA_ISSUER
MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371
\112\330\154
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Staat der Nederlanden Root CA - G3"
#
# Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL
# Serial Number: 10003001 (0x98a239)
# Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL
#
Not Valid Before: Thu Nov 14 11:28:42 2013
# Not Valid After : Mon Nov 13 23:00:00 2028
# Fingerprint (SHA-256):
3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28
# Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Staat der Nederlanden Root CA - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\000\230\242\071
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\004\000
\230\242\071\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\116
\114\061\036\060\034\006\003\125\004\012\014\025\123\164\141\141
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145
\156\061\053\060\051\006\003\125\004\003\014\042\123\164\141\141
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145
\156\040\122\157\157\164\040\103\101\040\055\040\107\063\060\036
\027\015\061\063\061\061\061\064\061\061\062\070\064\062\132\027
\015\062\070\061\061\061\063\062\063\060\060\060\060\132\060\132
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\036\060
\034\006\003\125\004\012\014\025\123\164\141\141\164\040\144\145
\162\040\116\145\144\145\162\154\141\156\144\145\156\061\053\060
\051\006\003\125\004\003\014\042\123\164\141\141\164\040\144\145
\162\040\116\145\144\145\162\154\141\156\144\145\156\040\122\157
\157\164\040\103\101\040\055\040\107\063\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\276\062\242\124\017
\160\373\054\134\131\353\154\304\244\121\350\205\052\263\314\112
\064\362\260\137\363\016\307\034\075\123\036\210\010\150\330\157
\075\255\302\236\314\202\147\007\047\207\150\161\072\237\165\226
\042\106\005\260\355\255\307\133\236\052\336\234\374\072\306\225
```


\247\365\027\147\030\347\057\111\010\014\134\317\346\314\064\355
\170\373\120\261\334\153\062\360\242\376\266\074\344\354\132\227
\307\077\036\160\010\060\240\334\305\263\155\157\320\202\162\021
\253\322\201\150\131\202\027\267\170\222\140\372\314\336\077\204
\353\215\070\063\220\012\162\043\372\065\314\046\161\061\321\162
\050\222\331\133\043\155\146\265\155\007\102\353\246\063\316\222
\333\300\366\154\143\170\315\312\116\075\265\345\122\233\361\276
\073\346\124\140\260\146\036\011\253\007\376\124\211\021\102\321
\367\044\272\140\170\032\230\367\311\021\375\026\301\065\032\124
\165\357\103\323\345\256\116\316\347\173\303\306\116\141\121\113
\253\232\105\113\241\037\101\275\110\123\025\161\144\013\206\263
\345\056\276\316\244\033\301\051\204\242\265\313\010\043\166\103
\042\044\037\027\004\324\156\234\306\374\177\053\146\032\354\212
\345\326\317\115\365\143\011\267\025\071\326\173\254\353\343\174
\351\116\374\165\102\310\355\130\225\014\006\102\242\234\367\344
\160\263\337\162\157\132\067\100\211\330\205\244\327\361\013\336
\103\031\324\112\130\054\214\212\071\236\277\204\207\361\026\073
\066\014\351\323\264\312\154\031\101\122\011\241\035\260\152\277
\202\357\160\121\041\062\334\005\166\214\313\367\144\344\003\120
\257\214\221\147\253\305\362\356\130\330\336\276\367\347\061\317
\154\311\073\161\301\325\210\265\145\274\300\350\027\027\007\022
\265\134\322\253\040\223\264\346\202\203\160\066\305\315\243\215
\255\213\354\243\301\103\207\346\103\342\064\276\225\213\065\355
\007\071\332\250\035\172\237\066\236\022\260\014\145\022\220\025
\140\331\046\100\104\343\126\140\245\020\324\152\074\375\101\334
\016\132\107\266\357\227\141\165\117\331\376\307\262\035\324\355
\135\111\263\251\152\313\146\204\023\325\134\240\334\337\156\167
\006\321\161\165\310\127\157\257\017\167\133\002\003\001\000\001
\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024
\124\255\372\307\222\127\256\312\065\234\056\022\373\344\272\135
\040\334\224\127\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\060\231\235\005\062\310\136\016
\073\230\001\072\212\244\347\007\367\172\370\347\232\337\120\103
\123\227\052\075\312\074\107\230\056\341\025\173\361\222\363\141
\332\220\045\026\145\300\237\124\135\016\003\073\133\167\002\234
\204\266\015\230\137\064\335\073\143\302\303\050\201\302\234\051
\056\051\342\310\303\001\362\063\352\052\252\314\011\010\367\145
\147\306\315\337\323\266\053\247\275\314\321\016\160\137\270\043
\321\313\221\116\012\364\310\172\345\331\143\066\301\324\337\374
\042\227\367\140\135\352\051\057\130\262\275\130\275\215\226\117
\020\165\277\110\173\075\121\207\241\074\164\042\302\374\007\177
\200\334\304\254\376\152\301\160\060\260\351\216\151\342\054\151
\201\224\011\272\335\376\115\300\203\214\224\130\300\106\040\257
\234\037\002\370\065\125\111\057\106\324\300\360\240\226\002\017
\063\305\161\363\236\043\175\224\267\375\072\323\011\203\006\041
\375\140\075\256\062\300\322\356\215\246\360\347\264\202\174\012

```
\314\160\311\171\200\370\376\114\367\065\204\031\212\061\373\012
\331\327\177\233\360\242\232\153\303\005\112\355\101\140\024\060
\321\252\021\102\156\323\043\002\004\013\306\145\335\335\122\167
\332\201\153\262\250\372\001\070\271\226\352\052\154\147\227\211
\224\236\274\341\124\325\344\152\170\357\112\275\053\232\075\100
\176\306\300\165\322\156\373\150\060\354\354\213\235\371\111\065
\232\032\054\331\263\225\071\325\036\222\367\246\271\145\057\345
\075\155\072\110\114\010\334\344\050\022\050\276\175\065\134\352
\340\026\176\023\033\152\327\076\327\236\374\055\165\262\301\024
\325\043\003\333\133\157\013\076\170\057\015\336\063\215\026\267
\110\347\203\232\201\017\173\301\103\115\125\004\027\070\112\121
\325\131\242\211\164\323\237\276\036\113\327\306\155\267\210\044
\157\140\221\244\202\205\133\126\101\274\320\104\253\152\023\276
\321\054\130\267\022\063\130\262\067\143\334\023\365\224\035\077
\100\121\365\117\365\072\355\310\305\353\302\036\035\026\225\172
\307\176\102\161\223\156\113\025\267\060\337\252\355\127\205\110
\254\035\152\335\071\151\344\341\171\170\276\316\005\277\241\014
\367\200\173\041\147\047\060\131
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Staat der Nederlanden Root CA - G3"

Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

Serial Number: 10003001 (0x98a239)

Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

Not Valid Before: Thu Nov 14 11:28:42 2013

Not Valid After : Mon Nov 13 23:00:00 2028

Fingerprint (SHA-256):

3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28

Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Staat der Nederlanden Root CA - G3"

CKA_CERT_SHA1_HASH

MULTILINE_OCTAL

```
\330\353\153\101\121\222\131\340\363\347\205\000\300\075\266\210
\227\311\356\374
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\013\106\147\007\333\020\057\031\214\065\120\140\321\013\364\067
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
```

```
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\004\000\230\242\071
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "IdenTrust Commercial Root CA 1"

#

Issuer: CN=IdenTrust Commercial Root CA

1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02

Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 18:12:23 2014

Not Valid After : Mon Jan 16 18:12:23 2034

Fingerprint (SHA-256):

5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE

Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "IdenTrust Commercial Root CA 1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061
```

END

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000
\000\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\020\012
\001\102\200\000\000\001\105\043\310\104\265\000\000\000\002\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\112
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163
\164\061\047\060\045\006\003\125\004\003\023\036\111\144\145\156
\124\162\165\163\164\040\103\157\155\155\145\162\143\151\141\154
\040\122\157\157\164\040\103\101\040\061\060\036\027\015\061\064
\060\061\061\066\061\070\061\062\062\063\132\027\015\063\064\060
\061\061\066\061\070\061\062\062\063\132\060\112\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125
\004\012\023\011\111\144\145\156\124\162\165\163\164\061\047\060
\045\006\003\125\004\003\023\036\111\144\145\156\124\162\165\163
\164\040\103\157\155\155\145\162\143\151\141\154\040\122\157\157
\164\040\103\101\040\061\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\247\120\031\336\077\231\075\324\063
\106\361\157\121\141\202\262\251\117\217\147\211\135\204\331\123
\335\014\050\331\327\360\377\256\225\103\162\231\371\265\135\174
\212\301\102\341\061\120\164\321\201\015\174\315\233\041\253\103
\342\254\255\136\206\156\363\011\212\037\132\062\275\242\353\224
\371\350\134\012\354\377\230\322\257\161\263\264\123\237\116\207
\357\222\274\275\354\117\062\060\210\113\027\136\127\304\123\302
\366\002\227\215\331\142\053\277\044\037\142\215\337\303\270\051
\113\111\170\074\223\140\210\042\374\231\332\066\310\302\242\324
\054\124\000\147\065\156\163\277\002\130\360\244\335\345\260\242
\046\172\312\340\066\245\031\026\365\375\267\357\256\077\100\365
\155\132\004\375\316\064\312\044\334\164\043\033\135\063\023\022
\135\304\001\045\366\060\335\002\135\237\340\325\107\275\264\353
\033\241\273\111\111\330\237\133\002\363\212\344\044\220\344\142
\117\117\301\257\213\016\164\027\250\321\162\210\152\172\001\111
\314\264\106\171\306\027\261\332\230\036\007\131\372\165\041\205
\145\335\220\126\316\373\253\245\140\235\304\235\371\122\260\213
\275\207\371\217\053\043\012\043\166\073\367\063\341\311\000\363
\151\371\113\242\340\116\274\176\223\071\204\007\367\104\160\176
\376\007\132\345\261\254\321\030\314\362\065\345\111\111\010\312
\126\311\075\373\017\030\175\213\073\301\023\302\115\217\311\117
\016\067\351\037\241\016\152\337\142\056\313\065\006\121\171\054
\310\045\070\364\372\113\247\211\134\234\322\343\015\071\206\112
\164\174\325\131\207\302\077\116\014\134\122\364\075\367\122\202
\361\352\243\254\375\111\064\032\050\363\101\210\072\023\356\350
\336\377\231\035\137\272\313\350\036\362\271\120\140\300\061\323
\163\345\357\276\240\355\063\013\164\276\040\040\304\147\154\360
```

\010\003\172\125\200\177\106\116\226\247\364\036\076\341\366\330
\011\341\063\144\053\143\327\062\136\237\371\300\173\017\170\157
\227\274\223\232\371\234\022\220\170\172\200\207\025\327\162\164
\234\125\164\170\261\272\341\156\160\004\272\117\240\272\150\303
\173\377\061\360\163\075\075\224\052\261\013\101\016\240\376\115
\210\145\153\171\063\264\327\002\003\001\000\001\243\102\060\100
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\355\104\031\300
\323\360\006\213\356\244\173\276\102\347\046\124\310\216\066\166
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\015\256\220\062\366\246\113\174\104\166\031\141
\036\047\050\315\136\124\357\045\274\343\010\220\371\051\327\256
\150\010\341\224\000\130\357\056\056\176\123\122\214\266\134\007
\352\210\272\231\213\120\224\327\202\200\337\141\011\000\223\255
\015\024\346\316\301\362\067\224\170\260\137\234\263\242\163\270
\217\005\223\070\315\215\076\260\270\373\300\317\261\362\354\055
\055\033\314\354\252\232\263\252\140\202\033\055\073\303\204\075
\127\212\226\036\234\165\270\323\060\315\140\010\203\220\323\216
\124\361\115\146\300\135\164\003\100\243\356\205\176\302\037\167
\234\006\350\301\247\030\135\122\225\355\311\335\045\236\155\372
\251\355\243\072\064\320\131\173\332\355\120\363\065\277\355\353
\024\115\061\307\140\364\332\361\207\234\342\110\342\306\305\067
\373\006\020\372\165\131\146\061\107\051\332\166\232\034\351\202
\256\357\232\271\121\367\210\043\232\151\225\142\074\345\125\200
\066\327\124\002\377\361\271\135\316\324\043\157\330\105\204\112
\133\145\357\211\014\335\024\247\040\313\030\245\045\264\015\371
\001\360\242\322\364\000\310\164\216\241\052\110\216\145\333\023
\304\342\045\027\175\353\276\207\133\027\040\124\121\223\112\123
\003\013\354\135\312\063\355\142\375\105\307\057\133\334\130\240
\200\071\346\372\327\376\023\024\246\355\075\224\112\102\164\324
\303\167\131\163\315\217\106\276\125\070\357\372\350\221\062\352
\227\130\004\042\336\070\303\314\274\155\311\063\072\152\012\151
\077\240\310\352\162\217\214\143\206\043\275\155\074\226\236\225
\340\111\114\252\242\271\052\033\234\066\201\170\355\303\350\106
\342\046\131\104\165\036\331\165\211\121\315\020\204\235\141\140
\313\135\371\227\042\115\216\230\346\343\177\366\133\273\256\315
\312\112\201\153\136\013\363\121\341\164\053\351\176\047\247\331
\231\111\116\370\245\200\333\045\017\034\143\142\212\311\063\147
\153\074\020\203\306\255\336\250\315\026\216\215\360\007\067\161
\237\362\253\374\101\365\301\213\354\000\067\135\011\345\116\200
\357\372\261\134\070\006\245\033\112\341\334\070\055\074\334\253
\037\220\032\325\112\234\356\321\160\154\314\356\364\127\370\030
\272\204\156\207

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "IdenTrust Commercial Root CA 1"

Issuer: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02

Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 18:12:23 2014

Not Valid After : Mon Jan 16 18:12:23 2034

Fingerprint (SHA-256):

5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE

Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "IdenTrust Commercial Root CA 1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\337\161\176\252\112\331\116\311\125\204\231\140\055\110\336\137
\274\360\072\045

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

\263\076\167\163\165\356\240\323\343\176\111\143\111\131\273\307
END

CKA_ISSUER MULTILINE_OCTAL

\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000
\000\002

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "IdenTrust Public Sector Root CA 1"

#

Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02

#

Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 17:53:32 2014

```
# Not Valid After : Mon Jan 16 17:53:32 2034
# Fingerprint (SHA-256):
30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F
# Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "IdenTrust Public Sector Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_ID UTF8 "0"
CKA_ISSUER
MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\012
\001\102\200\000\000\001\105\043\317\106\174\000\000\000\002\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163
\164\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156
\124\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143
\164\157\162\040\122\157\157\164\040\103\101\040\061\060\036\027
\015\061\064\060\061\061\066\061\067\065\063\063\062\132\027\015
\063\064\060\061\061\066\061\067\065\063\063\062\132\060\115\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060\020
\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163\164
\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156\124
\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143\164
\157\162\040\122\157\157\164\040\103\101\040\061\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\266\042\224
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\374\244\110\257\350\107\153\012\373\047\166\344\362\077\212\073
\172\112\054\061\052\214\215\260\251\303\061\153\250\167\166\204
\046\266\254\201\102\015\010\353\125\130\273\172\370\274\145\175
\362\240\155\213\250\107\351\142\166\036\021\356\010\024\321\262
\104\026\364\352\320\372\036\057\136\333\313\163\101\256\274\000
\260\112\053\100\262\254\341\073\113\302\055\235\344\241\233\354
\032\072\036\360\010\263\320\344\044\065\007\237\234\264\311\122
\155\333\007\312\217\265\133\360\203\363\117\307\055\245\310\255
\313\225\040\244\061\050\127\130\132\344\215\033\232\253\236\015
\014\362\012\063\071\042\071\012\227\056\363\123\167\271\104\105
\375\204\313\066\040\201\131\055\232\157\155\110\110\141\312\114
\337\123\321\257\122\274\104\237\253\057\153\203\162\357\165\200
\332\006\063\033\135\310\332\143\306\115\315\254\146\061\315\321
\336\076\207\020\066\341\271\244\172\357\140\120\262\313\312\246
\126\340\067\257\253\064\023\071\045\350\071\146\344\230\172\252
\022\230\234\131\146\206\076\255\361\260\312\076\006\017\173\360
\021\113\067\240\104\155\173\313\250\214\161\364\325\265\221\066
\314\360\025\306\053\336\121\027\261\227\114\120\075\261\225\131
\174\005\175\055\041\325\000\277\001\147\242\136\173\246\134\362
\367\042\361\220\015\223\333\252\104\121\146\314\175\166\003\353
\152\250\052\070\031\227\166\015\153\212\141\371\274\366\356\166
\375\160\053\335\051\074\370\012\036\133\102\034\213\126\057\125
\033\034\241\056\265\307\026\346\370\252\074\222\216\151\266\001
\301\265\206\235\211\017\013\070\224\124\350\352\334\236\075\045
\274\123\046\355\325\253\071\252\305\100\114\124\253\262\264\331
\331\370\327\162\333\034\274\155\275\145\137\357\210\065\052\146
\057\356\366\263\145\360\063\215\174\230\101\151\106\017\103\034
\151\372\233\265\320\141\152\315\312\113\331\114\220\106\253\025
\131\241\107\124\051\056\203\050\137\034\302\242\253\162\027\000
\006\216\105\354\213\342\063\075\177\332\031\104\344\142\162\303
\337\042\306\362\126\324\335\137\225\162\355\155\137\367\110\003
\133\375\305\052\240\366\163\043\204\020\033\001\347\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\343\161\340\236\330\247\102\331\333\161\221\153\224\223
\353\303\243\321\024\243\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\002\001\000\107\372\335\012\260\021
\221\070\255\115\135\367\345\016\227\124\031\202\110\207\124\214
\252\144\231\330\132\376\210\001\305\130\245\231\261\043\124\043
\267\152\035\040\127\345\001\142\101\027\323\011\333\165\313\156
\124\220\165\376\032\237\201\012\302\335\327\367\011\320\133\162
\025\344\036\011\152\075\063\363\041\232\346\025\176\255\121\325
\015\020\355\175\102\300\217\356\300\232\010\325\101\326\134\016
\041\151\156\200\141\016\025\300\270\317\305\111\022\122\314\276
\072\314\324\056\070\005\336\065\375\037\157\270\200\150\230\075
\115\240\312\100\145\322\163\174\365\213\331\012\225\077\330\077
\043\155\032\321\052\044\031\331\205\263\027\357\170\156\251\130


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\321\043\323\307\023\355\162\045\177\135\261\163\160\320\177\006
\227\011\204\051\200\141\035\372\136\377\163\254\240\343\211\270
\034\161\025\306\336\061\177\022\334\341\155\233\257\347\350\237
\165\170\114\253\106\073\232\316\277\005\030\135\115\025\074\026
\232\031\120\004\232\262\232\157\145\213\122\137\074\130\004\050
\045\300\146\141\061\176\271\340\165\271\032\250\201\326\162\027
\263\305\003\061\065\021\170\170\242\340\351\060\214\177\200\337
\130\337\074\272\047\226\342\200\064\155\343\230\323\144\047\254
\110\176\050\167\134\306\045\141\045\370\205\014\145\372\304\062
\057\245\230\005\344\370\013\147\026\026\306\202\270\062\031\371
\371\271\171\334\037\315\353\257\253\016\335\033\333\105\344\172
\347\002\342\225\135\374\151\360\123\151\141\225\165\171\013\136
\125\346\070\034\224\251\131\063\236\310\161\164\171\177\121\211
\266\310\152\270\060\310\152\070\303\156\236\341\067\026\352\005
\142\114\133\022\107\355\247\264\263\130\126\307\111\363\177\022
\150\011\061\161\360\155\370\116\107\373\326\205\356\305\130\100
\031\244\035\247\371\113\103\067\334\150\132\117\317\353\302\144
\164\336\264\025\331\364\124\124\032\057\034\327\227\161\124\220
\216\331\040\235\123\053\177\253\217\342\352\060\274\120\067\357
\361\107\265\175\174\054\004\354\150\235\264\111\104\020\364\162
\113\034\144\347\374\346\153\220\335\151\175\151\375\000\126\245
\267\254\266\255\267\312\076\001\357\234
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "IdenTrust Public Sector Root CA 1"

Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02

Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 17:53:32 2014

Not Valid After : Mon Jan 16 17:53:32 2034

Fingerprint (SHA-256):

30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F

Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "IdenTrust Public Sector Root CA 1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

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\272\051\101\140\167\230\077\364\363\357\362\061\005\073\056\352
\155\115\105\375
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END

CKA_CERT_MD5_HASH

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MULTILINE_OCTAL
\067\006\245\260\374\211\235\272\364\153\214\032\144\315\325\272
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G2"
#
# Issuer: CN=Entrust Root Certification Authority
- G2,OU="(c) 2009 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust,
Inc.",C=US
# Serial Number: 1246989352 (0x4a538c28)
# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Jul 07 17:25:54 2009
# Not Valid After : Sat Dec 07 17:55:54 2030
# Fingerprint (SHA-256):
43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39
# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162

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\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\004\112\123\214\050

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\076\060\202\003\046\240\003\002\001\002\002\004\112
\123\214\050\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\201\276\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156\164
\162\165\163\164\054\040\111\156\143\056\061\050\060\046\006\003
\125\004\013\023\037\123\145\145\040\167\167\167\056\145\156\164
\162\165\163\164\056\156\145\164\057\154\145\147\141\154\055\164
\145\162\155\163\061\071\060\067\006\003\125\004\013\023\060\050
\143\051\040\062\060\060\071\040\105\156\164\162\165\163\164\054
\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164\150
\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171\061
\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165\163
\164\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\055
\040\107\062\060\036\027\015\060\071\060\067\060\067\061\067\062
\065\065\064\132\027\015\063\060\061\062\060\067\061\067\065\065
\065\064\132\060\201\276\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156
\164\162\165\163\164\054\040\111\156\143\056\061\050\060\046\006
\003\125\004\013\023\037\123\145\145\040\167\167\167\056\145\156

\164\162\165\163\164\056\156\145\164\057\154\145\147\141\154\055
\164\145\162\155\163\061\071\060\067\006\003\125\004\013\023\060
\050\143\051\040\062\060\060\071\040\105\156\164\162\165\163\164
\054\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164
\150\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171
\061\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165
\163\164\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040
\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\272\204\266\162\333\236\014\153\342\231\351
\060\001\247\166\352\062\270\225\101\032\311\332\141\116\130\162
\317\376\366\202\171\277\163\141\006\012\245\047\330\263\137\323
\105\116\034\162\326\116\062\362\162\212\017\367\203\031\320\152
\200\200\000\105\036\260\307\347\232\277\022\127\047\034\243\150
\057\012\207\275\152\153\016\136\145\363\034\167\325\324\205\215
\160\041\264\263\062\347\213\242\325\206\071\002\261\270\322\107
\316\344\311\111\304\073\247\336\373\124\175\127\276\360\350\156
\302\171\262\072\013\125\342\120\230\026\062\023\134\057\170\126
\301\302\224\263\362\132\344\047\232\237\044\327\306\354\320\233
\045\202\343\314\302\304\105\305\214\227\172\006\153\052\021\237
\251\012\156\110\073\157\333\324\021\031\102\367\217\007\277\365
\123\137\234\076\364\027\054\346\151\254\116\062\114\142\167\352
\267\350\345\273\064\274\031\213\256\234\121\347\267\176\265\123
\261\063\042\345\155\317\160\074\032\372\342\233\147\266\203\364
\215\245\257\142\114\115\340\130\254\144\064\022\003\370\266\215
\224\143\044\244\161\002\003\001\000\001\243\102\060\100\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\035\006\003\125\035\016\004\026\004\024\152\162\046\172\320\036
\357\175\347\073\151\121\324\154\215\237\220\022\146\253\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001
\001\000\171\237\035\226\306\266\171\077\042\215\207\323\207\003
\004\140\152\153\232\056\131\211\163\021\254\103\321\365\023\377
\215\071\053\300\362\275\117\160\214\251\057\352\027\304\013\124
\236\324\033\226\230\063\074\250\255\142\242\000\166\253\131\151
\156\006\035\176\304\271\104\215\230\257\022\324\141\333\012\031
\106\107\363\353\367\143\301\100\005\100\245\322\267\364\265\232
\066\277\251\210\166\210\004\125\004\053\234\207\177\032\067\074
\176\055\245\032\330\324\211\136\312\275\254\075\154\330\155\257
\325\363\166\017\315\073\210\070\042\235\154\223\232\304\075\277
\202\033\145\077\246\017\135\252\374\345\262\025\312\265\255\306
\274\075\320\204\350\352\006\162\260\115\071\062\170\277\076\021
\234\013\244\235\232\041\363\360\233\013\060\170\333\301\334\207
\103\376\274\143\232\312\305\302\034\311\307\215\377\073\022\130
\010\346\266\075\354\172\054\116\373\203\226\316\014\074\151\207
\124\163\244\163\302\223\377\121\020\254\025\124\001\330\374\005
\261\211\241\177\164\203\232\111\327\334\116\173\212\110\157\213

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\105\366
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "Entrust Root Certification Authority - G2"
# Issuer: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number: 1246989352 (0x4a538c28)
# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Jul 07 17:25:54 2009
# Not Valid After : Sat Dec 07 17:55:54 2030
# Fingerprint (SHA-256):
43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39
# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\214\364\047\375\171\014\072\321\146\006\215\350\036\127\357\273
\223\042\162\324
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\113\342\311\221\226\145\014\364\016\132\223\222\240\012\376\262
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062
END
CKA_SERIAL_NUMBER

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MULTILINE_OCTAL
\002\004\112\123\214\050
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - EC1"
#
# Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:a6:8b:79:29:00:00:00:00:50:d0:91:f9
# Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Dec 18 15:25:36 2012
# Not Valid After : Fri Dec 18 15:55:36 2037
# Fingerprint (SHA-256):
02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5
#
Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - EC1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165

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\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\015\000\246\213\171\051\000\000\000\000\120\320\221\371

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\371\060\202\002\200\240\003\002\001\002\002\015\000
\246\213\171\051\000\000\000\000\120\320\221\371\060\012\006\010
\052\206\110\316\075\004\003\003\060\201\277\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\026\060\024\006\003\125\004
\012\023\015\105\156\164\162\165\163\164\054\040\111\156\143\056
\061\050\060\046\006\003\125\004\013\023\037\123\145\145\040\167
\167\167\056\145\156\164\162\165\163\164\056\156\145\164\057\154
\145\147\141\154\055\164\145\162\155\163\061\071\060\067\006\003
\125\004\013\023\060\050\143\051\040\062\060\061\062\040\105\156
\164\162\165\163\164\054\040\111\156\143\056\040\055\040\146\157
\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163\145
\040\157\156\154\171\061\063\060\061\006\003\125\004\003\023\052
\105\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\040\055\040\105\103\061\060\036\027\015\061\062
\061\062\061\070\061\065\062\065\063\066\132\027\015\063\067\061
\062\061\070\061\065\065\065\063\066\132\060\201\277\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\026\060\024\006\003
\125\004\012\023\015\105\156\164\162\165\163\164\054\040\111\156
\143\056\061\050\060\046\006\003\125\004\013\023\037\123\145\145
\040\167\167\167\056\145\156\164\162\165\163\164\056\156\145\164
\057\154\145\147\141\154\055\164\145\162\155\163\061\071\060\067
\006\003\125\004\013\023\060\050\143\051\040\062\060\061\062\040
\105\156\164\162\165\163\164\054\040\111\156\143\056\040\055\040
\146\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165
\163\145\040\157\156\154\171\061\063\060\061\006\003\125\004\003
\023\052\105\156\164\162\165\163\164\040\122\157\157\164\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\040\055\040\105\103\061\060\166\060\020
\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042
\003\142\000\004\204\023\311\320\272\155\101\173\342\154\320\353

```
\125\137\146\002\032\044\364\133\211\151\107\343\270\302\175\361
\362\002\305\237\240\366\133\325\213\006\031\206\117\123\020\155
\007\044\047\241\240\370\325\107\031\141\114\175\312\223\047\352
\164\014\357\157\226\011\376\143\354\160\135\066\255\147\167\256
\311\235\174\125\104\072\242\143\121\037\365\343\142\324\251\107
\007\076\314\040\243\102\060\100\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001
\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016
\004\026\004\024\267\143\347\032\335\215\351\010\246\125\203\244
\340\152\120\101\145\021\102\111\060\012\006\010\052\206\110\316
\075\004\003\003\003\147\000\060\144\002\060\141\171\330\345\102
\107\337\034\256\123\231\027\266\157\034\175\341\277\021\224\321
\003\210\165\344\215\211\244\212\167\106\336\155\141\357\002\365
\373\265\337\314\376\116\377\376\251\346\247\002\060\133\231\327
\205\067\006\265\173\010\375\353\047\213\112\224\371\341\372\247
\216\046\010\350\174\222\150\155\163\330\157\046\254\041\002\270
\231\267\046\101\133\045\140\256\320\110\032\356\006
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Entrust Root Certification Authority - EC1"

Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

Serial Number:00:a6:8b:79:29:00:00:00:00:50:d0:91:f9

Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

Not Valid Before: Tue Dec 18 15:25:36 2012

Not Valid After : Fri Dec 18 15:55:36 2037

Fingerprint (SHA-256):

02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5

Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority - EC1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\040\330\006\100\337\233\045\365\022\045\072\021\352\367\131\212
\353\024\265\107
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\266\176\035\360\130\305\111\154\044\073\075\355\230\030\355\274
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
```



```
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\015\000\246\213\171\051\000\000\000\000\120\320\221\371
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "CFCA EV ROOT"

#

Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Serial Number: 407555286 (0x184accd6)

Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Not Valid Before: Wed Aug 08 03:07:01 2012

#

Not Valid After : Mon Dec 31 03:07:01 2029

Fingerprint (SHA-256):

5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD

Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "CFCA EV ROOT"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\004\030\112\314\326

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\215\060\202\003\165\240\003\002\001\002\002\004\030
\112\314\326\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\126\061\013\060\011\006\003\125\004\006\023\002\103
\116\061\060\060\056\006\003\125\004\012\014\047\103\150\151\156
\141\040\106\151\156\141\156\143\151\141\154\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\061\025\060\023\006\003\125\004\003\014\014\103\106
\103\101\040\105\126\040\122\117\117\124\060\036\027\015\061\062
\060\070\060\070\060\063\060\067\060\061\132\027\015\062\071\061
\062\063\061\060\063\060\067\060\061\132\060\126\061\013\060\011
\006\003\125\004\006\023\002\103\116\061\060\060\056\006\003\125
\004\012\014\047\103\150\151\156\141\040\106\151\156\141\156\143
\151\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\025\060\023\006
\003\125\004\003\014\014\103\106\103\101\040\105\126\040\122\117
\117\124\060\202\002\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202
\002\001\000\327\135\153\315\020\077\037\005\131\325\005\115\067
\261\016\354\230\053\216\025\035\372\223\113\027\202\041\161\020
\122\327\121\144\160\026\302\125\151\115\216\025\155\237\277\014
\033\302\340\243\147\326\014\254\317\042\256\257\167\124\052\113
\114\212\123\122\172\303\356\056\336\263\161\045\301\351\135\075
\356\241\057\243\367\052\074\311\043\035\152\253\035\241\247\361
\363\354\240\325\104\317\025\317\162\057\035\143\227\350\231\371
\375\223\244\124\200\114\122\324\122\253\056\111\337\220\315\270
\137\276\077\336\241\312\115\040\324\045\350\204\051\123\267\261
\210\037\377\372\332\220\237\012\251\055\101\077\261\361\030\051
\356\026\131\054\064\111\032\250\006\327\250\210\322\003\162\172
\062\342\352\150\115\156\054\226\145\173\312\131\372\362\342\335
\356\060\054\373\314\106\254\304\143\353\157\177\066\053\064\163
\022\224\177\337\314\046\236\361\162\135\120\145\131\217\151\263
\207\136\062\157\303\030\212\265\225\217\260\172\067\336\132\105
\073\307\066\341\357\147\321\071\323\227\133\163\142\031\110\055
\207\034\006\373\164\230\040\111\163\360\005\322\033\261\240\243

\267\033\160\323\210\151\271\132\326\070\364\142\334\045\213\170
\277\370\350\176\270\134\311\225\117\137\247\055\271\040\153\317
\153\335\365\015\364\202\267\364\262\146\056\020\050\366\227\132
\173\226\026\217\001\031\055\154\156\177\071\130\006\144\203\001
\203\203\303\115\222\335\062\306\207\244\067\351\026\316\252\055
\150\257\012\201\145\072\160\301\233\255\115\155\124\312\052\055
\113\205\033\263\200\346\160\105\015\153\136\065\360\177\073\270
\234\344\004\160\211\022\045\223\332\012\231\042\140\152\143\140
\116\166\006\230\116\275\203\255\035\130\212\045\205\322\307\145
\036\055\216\306\337\266\306\341\177\212\004\041\025\051\164\360
\076\234\220\235\014\056\361\212\076\132\252\014\011\036\307\325
\074\243\355\227\303\036\064\372\070\371\010\016\343\300\135\053
\203\321\126\152\311\266\250\124\123\056\170\062\147\075\202\177
\164\320\373\341\266\005\140\271\160\333\216\013\371\023\130\157
\161\140\020\122\020\271\301\101\011\357\162\037\147\061\170\377
\226\005\215\002\003\001\000\001\243\143\060\141\060\037\006\003
\125\035\043\004\030\060\026\200\024\343\376\055\375\050\320\013
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035
\006\003\125\035\016\004\026\004\024\343\376\055\375\050\320\013
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\015\006
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001
\000\045\306\272\153\353\207\313\336\202\071\226\075\360\104\247
\153\204\163\003\336\235\053\117\272\040\177\274\170\262\317\227
\260\033\234\363\327\171\056\365\110\266\322\373\027\210\346\323
\172\077\355\123\023\320\342\057\152\171\313\000\043\050\346\036
\067\127\065\211\204\302\166\117\064\066\255\147\303\316\101\006
\210\305\367\356\330\032\270\326\013\177\120\377\223\252\027\113
\214\354\355\122\140\262\244\006\352\116\353\364\153\031\375\353
\365\032\340\045\052\232\334\307\101\066\367\310\164\005\204\071
\225\071\326\013\073\244\047\372\010\330\134\036\370\004\140\122
\021\050\050\003\377\357\123\146\000\245\112\064\026\146\174\375
\011\244\256\236\147\032\157\101\013\153\006\023\233\217\206\161
\005\264\057\215\211\146\063\051\166\124\232\021\370\047\372\262
\077\221\340\316\015\033\363\060\032\255\277\042\135\033\323\277
\045\005\115\341\222\032\177\231\237\074\104\223\312\324\100\111
\154\200\207\327\004\072\303\062\122\065\016\126\370\245\335\175
\304\213\015\021\037\123\313\036\262\027\266\150\167\132\340\324
\313\310\007\256\365\072\056\216\067\267\320\001\113\103\051\167
\214\071\227\217\202\132\370\121\345\211\240\030\347\150\177\135
\012\056\373\243\107\016\075\246\043\172\306\001\307\217\310\136
\277\155\200\126\276\212\044\272\063\352\237\341\062\021\236\361
\322\117\200\366\033\100\257\070\236\021\120\171\163\022\022\315
\346\154\235\054\210\162\074\060\201\006\221\042\352\131\255\332
\031\056\042\302\215\271\214\207\340\146\274\163\043\137\041\144
\143\200\110\365\240\074\030\075\224\310\110\101\035\100\272\136
\376\376\126\071\241\310\317\136\236\031\144\106\020\332\027\221

```
\267\005\200\254\213\231\222\175\347\242\330\007\013\066\047\347
\110\171\140\212\303\327\023\134\370\162\100\337\112\313\317\231
\000\012\000\013\021\225\332\126\105\003\210\012\237\147\320\325
\171\261\250\215\100\155\015\302\172\100\372\363\137\144\107\222
\313\123\271\273\131\316\117\375\320\025\123\001\330\337\353\331
\346\166\357\320\043\273\073\251\171\263\325\002\051\315\211\243
\226\017\112\065\347\116\102\300\165\315\007\317\346\054\353\173
\056
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "CFCA EV ROOT"

Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Serial Number: 407555286 (0x184accd6)

Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Not Valid Before: Wed Aug 08 03:07:01 2012

Not Valid After : Mon Dec 31 03:07:01 2029

Fingerprint (SHA-256):

5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD

Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "CFCA EV ROOT"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\342\270\051\113\125\204\253\153\130\302\220\106\154\254\077\270
\071\217\204\203
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\164\341\266\355\046\172\172\104\060\063\224\253\173\047\201\060
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\004\030\112\314\326
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

```
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
```

```
# Certificate "OISTE WISeKey Global Root GB CA"
```

```
#
```

```
# Issuer: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
```

```
# Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0
```

```
#
```

```
Subject: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
```

```
# Not Valid Before: Mon Dec 01 15:00:32 2014
```

```
# Not Valid After : Thu Dec 01 15:10:31 2039
```

```
# Fingerprint (SHA-256):
```

```
6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6
```

```
# Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "OISTE WISeKey Global Root GB CA"
```

```
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
```

```
CKA_SUBJECT MULTILINE_OCTAL
```

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
```

```
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
```

```
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
```

```
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
```

```
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
```

```
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
```

```
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

```
END
```

```
CKA_ID
```

```
UTF8 "0"
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
```

```
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
```

```
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
```

```
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
```

```
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
```

```
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
```

```
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

```
END
```

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
```

```
\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366
```

```
\302\300
```

```
END
```

```
CKA_VALUE MULTILINE_OCTAL
```

```
\060\202\003\265\060\202\002\235\240\003\002\001\002\002\020\166
```

\261\040\122\164\360\205\207\106\263\370\043\032\366\302\300\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\155
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060
\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\102\040\103\101\060\036\027
\015\061\064\061\062\060\061\061\065\060\060\063\062\132\027\015
\063\071\061\062\060\061\061\065\061\060\063\061\132\060\155\061
\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016
\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061\042
\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106
\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163
\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123
\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141
\154\040\122\157\157\164\040\107\102\040\103\101\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\330\027\267
\034\112\044\052\326\227\261\312\342\036\373\175\070\357\230\365
\262\071\230\116\047\270\021\135\173\322\045\224\210\202\025\046
\152\033\061\273\250\133\041\041\053\330\017\116\237\132\361\261
\132\344\171\326\062\043\053\341\123\314\231\105\134\173\117\255
\274\277\207\112\013\113\227\132\250\366\110\354\175\173\015\315
\041\006\337\236\025\375\101\212\110\267\040\364\241\172\033\127
\324\135\120\377\272\147\330\043\231\037\310\077\343\336\377\157
\133\167\261\153\156\270\311\144\367\341\312\101\106\016\051\161
\320\271\043\374\311\201\137\116\367\157\337\277\204\255\163\144
\273\267\102\216\151\366\324\166\035\176\235\247\270\127\212\121
\147\162\327\324\250\270\225\124\100\163\003\366\352\364\353\376
\050\102\167\077\235\043\033\262\266\075\200\024\007\114\056\117
\367\325\012\026\015\275\146\103\067\176\043\103\171\303\100\206
\365\114\051\332\216\232\255\015\245\004\207\210\036\205\343\351
\123\325\233\310\213\003\143\170\353\340\031\112\156\273\057\153
\063\144\130\223\255\151\277\217\033\357\202\110\307\002\003\001
\000\001\243\121\060\117\060\013\006\003\125\035\017\004\004\003
\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\065
\017\310\066\143\136\342\243\354\371\073\146\025\316\121\122\343
\221\232\075\060\020\006\011\053\006\001\004\001\202\067\025\001
\004\003\002\001\000\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\003\202\001\001\000\100\114\373\207\262\231\201
\220\176\235\305\260\260\046\315\210\173\053\062\215\156\270\041
\161\130\227\175\256\067\024\257\076\347\367\232\342\175\366\161
\230\231\004\252\103\164\170\243\343\111\141\076\163\214\115\224
\340\371\161\304\266\026\016\123\170\037\326\242\207\057\002\071
\201\051\074\257\025\230\041\060\376\050\220\000\214\321\341\313

```
\372\136\310\375\370\020\106\073\242\170\102\221\027\164\125\012
\336\120\147\115\146\321\247\377\375\331\300\265\250\243\212\316
\146\365\017\103\315\247\053\127\173\143\106\152\252\056\122\330
\364\355\341\155\255\051\220\170\110\272\341\043\252\243\211\354
\265\253\226\300\264\113\242\035\227\236\172\362\156\100\161\337
\150\361\145\115\316\174\005\337\123\145\251\245\360\261\227\004
\160\025\106\003\230\324\322\277\124\264\240\130\175\122\157\332
\126\046\142\324\330\333\211\061\157\034\360\042\302\323\142\034
\065\315\114\151\025\124\032\220\230\336\353\036\137\312\167\307
\313\216\075\103\151\234\232\130\320\044\073\337\033\100\226\176
\065\255\201\307\116\161\272\210\023
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "OISTE WISEKey Global Root GB CA"

Issuer: CN=OISTE WISEKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0

Subject:

CN=OISTE WISEKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

Not Valid Before: Mon Dec 01 15:00:32 2014

Not Valid After : Thu Dec 01 15:10:31 2039

Fingerprint (SHA-256):

6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6

Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "OISTE WISEKey Global Root GB CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\017\371\100\166\030\323\327\152\113\230\360\250\065\236\014\375
\047\254\314\355
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\244\353\271\141\050\056\267\057\230\260\065\046\220\231\121\035
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366
\302\300
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SZAFIR ROOT CA2"
#
# Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL
# Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4
# Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL
# Not Valid Before: Mon Oct 19 07:43:30 2015
# Not Valid After : Fri Oct 19 07:43:30 2035
# Fingerprint (SHA-256):
A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE
#
Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SZAFIR ROOT CA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001

```


\353\055\334\344\326\344

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\162\060\202\002\132\240\003\002\001\002\002\024\076
\212\135\007\354\125\322\062\325\267\343\266\137\001\353\055\334
\344\326\344\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\121\061\013\060\011\006\003\125\004\006\023\002\120
\114\061\050\060\046\006\003\125\004\012\014\037\113\162\141\152
\157\167\141\040\111\172\142\141\040\122\157\172\154\151\143\172
\145\156\151\157\167\141\040\123\056\101\056\061\030\060\026\006
\003\125\004\003\014\017\123\132\101\106\111\122\040\122\117\117
\124\040\103\101\062\060\036\027\015\061\065\061\060\061\071\060
\067\064\063\063\060\132\027\015\063\065\061\060\061\071\060\067
\064\063\063\060\132\060\121\061\013\060\011\006\003\125\004\006
\023\002\120\114\061\050\060\046\006\003\125\004\012\014\037\113
\162\141\152\157\167\141\040\111\172\142\141\040\122\157\172\154
\151\143\172\145\156\151\157\167\141\040\123\056\101\056\061\030
\060\026\006\003\125\004\003\014\017\123\132\101\106\111\122\040
\122\117\117\124\040\103\101\062\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\267\274\076\120\250\113\315
\100\265\316\141\347\226\312\264\241\332\014\042\260\372\265\173
\166\000\167\214\013\317\175\250\206\314\046\121\344\040\075\205
\014\326\130\343\347\364\052\030\235\332\321\256\046\356\353\123
\334\364\220\326\023\112\014\220\074\303\364\332\322\216\015\222
\072\334\261\261\377\070\336\303\272\055\137\200\271\002\275\112
\235\033\017\264\303\302\301\147\003\335\334\033\234\075\263\260
\336\000\036\250\064\107\273\232\353\376\013\024\275\066\204\332
\015\040\277\372\133\313\251\026\040\255\071\140\356\057\165\266
\347\227\234\371\076\375\176\115\157\115\057\357\210\015\152\372
\335\361\075\156\040\245\240\022\264\115\160\271\316\327\162\073
\211\223\247\200\204\034\047\111\162\111\265\377\073\225\236\301
\314\310\001\354\350\016\212\012\226\347\263\246\207\345\326\371
\005\053\015\227\100\160\074\272\254\165\132\234\325\115\235\002
\012\322\113\233\146\113\106\007\027\145\255\237\154\210\000\334
\042\211\340\341\144\324\147\274\061\171\141\074\273\312\101\315
\134\152\000\310\074\070\216\130\257\002\003\001\000\001\243\102
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\035\006\003\125\035\016\004\026\004\024\056\026
\251\112\030\265\313\314\365\157\120\363\043\137\370\135\347\254
\360\310\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\003\202\001\001\000\265\163\370\003\334\131\133\035\166\351
\243\052\173\220\050\262\115\300\063\117\252\232\261\324\270\344
\047\377\251\226\231\316\106\340\155\174\114\242\070\244\006\160
\360\364\101\021\354\077\107\215\077\162\207\371\073\375\244\157
\053\123\000\340\377\071\271\152\007\016\353\035\034\366\242\162
\220\313\202\075\021\202\213\322\273\237\052\257\041\346\143\206

```
\235\171\031\357\367\273\014\065\220\303\212\355\117\017\365\314
\022\331\244\076\273\240\374\040\225\137\117\046\057\021\043\203
\116\165\007\017\277\233\321\264\035\351\020\004\376\312\140\217
\242\114\270\255\317\341\220\017\315\256\012\307\135\173\267\120
\322\324\141\372\325\025\333\327\237\207\121\124\353\245\343\353
\311\205\240\045\040\067\373\216\316\014\064\204\341\074\201\262
\167\116\103\245\210\137\206\147\241\075\346\264\134\141\266\076
\333\376\267\050\305\242\007\256\265\312\312\215\052\022\357\227
\355\302\060\244\311\052\172\373\363\115\043\033\231\063\064\240
\056\365\251\013\077\324\135\341\317\204\237\342\031\302\137\212
\326\040\036\343\163\267
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL

CK_FALSE

Trust for "SZAFIR ROOT CA2"

Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4

Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

Not Valid Before: Mon Oct 19 07:43:30 2015

Not Valid After : Fri Oct 19 07:43:30 2035

Fingerprint (SHA-256):

A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE

Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SZAFIR ROOT CA2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\342\122\372\225\077\355\333\044\140\275\156\050\363\234\314\317
\136\263\077\336
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\021\144\301\211\260\044\261\214\261\007\176\211\236\121\236\231
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001
\353\055\334\344\326\344
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Trusted Network CA 2"
#
# Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9
# Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Not Valid Before:
Thu Oct 06 08:39:56 2011
# Not Valid After : Sat Oct 06 08:39:56 2046
# Fingerprint (SHA-256):
B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04
# Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Network CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164

```

\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\041\326\320\112\117\045\017\311\062\067\374\252\136\022
\215\351

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\322\060\202\003\272\240\003\002\001\002\002\020\041
\326\320\112\117\045\017\311\062\067\374\252\136\022\215\351\060
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\201
\200\061\013\060\011\006\003\125\004\006\023\002\120\114\061\042
\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164\157
\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\044\060\042\006
\003\125\004\003\023\033\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101\040
\062\060\042\030\017\062\060\061\061\061\060\060\066\060\070\063
\071\065\066\132\030\017\062\060\064\066\061\060\060\066\060\070
\063\071\065\066\132\060\201\200\061\013\060\011\006\003\125\004
\006\023\002\120\114\061\042\060\040\006\003\125\004\012\023\031
\125\156\151\172\145\164\157\040\124\145\143\150\156\157\154\157
\147\151\145\163\040\123\056\101\056\061\047\060\045\006\003\125
\004\013\023\036\103\145\162\164\165\155\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\061\044\060\042\006\003\125\004\003\023\033\103\145\162
\164\165\155\040\124\162\165\163\164\145\144\040\116\145\164\167
\157\162\153\040\103\101\040\062\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\275\371\170\370\346\325\200
\014\144\235\206\033\226\144\147\077\042\072\036\165\001\175\357
\373\134\147\214\311\314\134\153\251\221\346\271\102\345\040\113
\233\332\233\173\271\231\135\331\233\200\113\327\204\100\053\047
\323\350\272\060\273\076\011\032\247\111\225\357\053\100\044\302
\227\307\247\356\233\045\357\250\012\000\227\205\132\252\235\334
\051\311\342\065\007\353\160\115\112\326\301\263\126\270\241\101
\070\233\321\373\061\177\217\340\137\341\261\077\017\216\026\111
\140\327\006\215\030\371\252\046\020\253\052\323\320\321\147\215
\033\106\276\107\060\325\056\162\321\305\143\332\347\143\171\104
\176\113\143\044\211\206\056\064\077\051\114\122\213\052\247\300
\342\221\050\211\271\300\133\371\035\331\347\047\255\377\232\002
\227\301\306\120\222\233\002\054\275\251\271\064\131\012\277\204
\112\377\337\376\263\237\353\331\236\340\230\043\354\246\153\167
\026\052\333\314\255\073\034\244\207\334\106\163\136\031\142\150

\105\127\344\220\202\102\273\102\326\360\141\340\301\243\075\146
\243\135\364\030\356\210\311\215\027\105\051\231\062\165\002\061
\356\051\046\310\153\002\346\265\142\105\177\067\025\132\043\150
\211\324\076\336\116\047\260\360\100\014\274\115\027\313\115\242
\263\036\320\006\132\335\366\223\317\127\165\231\365\372\206\032
\147\170\263\277\226\376\064\334\275\347\122\126\345\263\345\165
\173\327\101\221\005\334\135\151\343\225\015\103\271\374\203\226
\071\225\173\154\200\132\117\023\162\306\327\175\051\172\104\272
\122\244\052\325\101\106\011\040\376\042\240\266\133\060\215\274
\211\014\325\327\160\370\207\122\375\332\357\254\121\056\007\263
\116\376\320\011\332\160\357\230\372\126\346\155\333\265\127\113
\334\345\054\045\025\310\236\056\170\116\370\332\234\236\206\054
\312\127\363\032\345\310\222\213\032\202\226\172\303\274\120\022
\151\330\016\132\106\213\072\353\046\372\043\311\266\260\201\276
\102\000\244\370\326\376\060\056\307\322\106\366\345\216\165\375
\362\314\271\320\207\133\314\006\020\140\273\203\065\267\136\147
\336\107\354\231\110\361\244\241\025\376\255\214\142\216\071\125
\117\071\026\271\261\143\235\377\267\002\003\001\000\001\243\102
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\035\006\003\125\035\016\004\026\004\024\266\241
\124\071\002\303\240\077\216\212\274\372\324\370\034\246\321\072
\016\375\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\015\006\011\052\206\110\206\367\015\001\001\015\005
\000\003\202\002\001\000\161\245\016\316\344\351\277\077\070\325
\211\132\304\002\141\373\114\305\024\027\055\213\117\123\153\020
\027\374\145\204\307\020\111\220\336\333\307\046\223\210\046\157
\160\326\002\136\071\240\367\217\253\226\265\245\023\134\201\024
\155\016\201\202\021\033\212\116\306\117\245\335\142\036\104\337
\011\131\364\133\167\013\067\351\213\040\306\370\012\116\056\130
\034\353\063\320\317\206\140\311\332\373\200\057\236\114\140\204
\170\075\041\144\326\373\101\037\030\017\347\311\165\161\275\275
\134\336\064\207\076\101\260\016\366\271\326\077\011\023\226\024
\057\336\232\035\132\271\126\316\065\072\260\137\160\115\136\343
\051\361\043\050\162\131\266\253\302\214\146\046\034\167\054\046
\166\065\213\050\247\151\240\371\073\365\043\335\205\020\164\311
\220\003\126\221\347\257\272\107\324\022\227\021\042\343\242\111
\224\154\347\267\224\113\272\055\244\332\063\213\114\246\104\377
\132\074\306\035\144\330\265\061\344\246\074\172\250\127\013\333
\355\141\032\313\361\316\163\167\143\244\207\157\114\121\070\326
\344\137\307\237\266\201\052\344\205\110\171\130\136\073\370\333
\002\202\147\301\071\333\303\164\113\075\066\036\371\051\223\210
\150\133\250\104\031\041\360\247\350\201\015\054\350\223\066\264
\067\262\312\260\033\046\172\232\045\037\232\232\200\236\113\052
\077\373\243\232\376\163\062\161\302\236\306\162\341\212\150\047
\361\344\017\264\304\114\245\141\223\370\227\020\007\052\060\045
\251\271\310\161\270\357\150\314\055\176\365\340\176\017\202\250
\157\266\272\154\203\103\167\315\212\222\027\241\236\133\170\026
\075\105\342\063\162\335\341\146\312\231\323\311\305\046\375\015

```
\150\004\106\256\266\331\233\214\276\031\276\261\306\362\031\343
\134\002\312\054\330\157\112\007\331\311\065\332\100\165\362\304
\247\031\157\236\102\020\230\165\346\225\213\140\274\355\305\022
\327\212\316\325\230\134\126\226\003\305\356\167\006\065\377\317
\344\356\077\023\141\356\333\332\055\205\360\315\256\235\262\030
\011\105\303\222\241\162\027\374\107\266\240\013\054\361\304\336
\103\150\010\152\137\073\360\166\143\373\314\006\054\246\306\342
\016\265\271\276\044\217
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

#

Trust for "Certum Trusted Network CA 2"

Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9

Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Not Valid Before: Thu Oct 06 08:39:56 2011

Not Valid After : Sat Oct 06 08:39:56 2046

Fingerprint (SHA-256):

B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04

Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Trusted Network CA 2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\323\335\110\076\053\277\114\005\350\257\020\365\372\166\046\317
\323\334\060\222
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\155\106\236\331\045\155\010\043\133\136\164\175\036\047\333\362
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
```

```

\101\040\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\041\326\320\112\117\045\017\311\062\067\374\252\136\022
\215\351
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Hellenic Academic and Research Institutions RootCA 2015"
#
# Issuer: CN=Hellenic
Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research Institutions Cert.
Authority,L=Athens,C=GR
# Serial Number: 0 (0x0)
# Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR
# Not Valid Before: Tue Jul 07 10:11:21 2015
# Not Valid After : Sat Jun 30 10:11:21 2040
# Fingerprint (SHA-256):
A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36
# Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
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END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

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\131\145\071\130\172\222\231\162\075\234\204\136\210\041\270\325
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\007\017\352\153\334\037\056\006\162\354\206\210\022\344\055\333
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END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hellenic Academic and Research Institutions RootCA 2015"

Issuer: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR

Serial Number: 0 (0x0)

Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR

Not Valid Before: Tue Jul 07 10:11:21 2015

Not Valid After : Sat Jun 30 10:11:21 2040

Fingerprint (SHA-256):

A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36

Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

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END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

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END

CKA_ISSUER MULTILINE_OCTAL

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\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003
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END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

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END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Hellenic Academic and Research Institutions ECC RootCA 2015"

#

#

Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Serial Number: 0 (0x0)

Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Not Valid Before: Tue Jul 07 10:37:12 2015

Not Valid After : Sat Jun 30 10:37:12 2040

Fingerprint (SHA-256):

44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33

Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

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END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

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END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

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\157\164\103\101\040\062\060\061\065\060\036\027\015\064\060\060\066
\067\060\067\061\060\063\067\061\062\132\027\015\064\060\060\066
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\101\350\113\202\204\134\342\370\061\021\231\206\144\116\011\045
\057\235\101\057\012\256\065\117\164\225\262\121\144\153\215\153
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\216\256\050\236\371\055\116\231\357\054\110\157\114\045\051\350
\321\161\133\337\035\301\165\067\264\327\372\173\172\102\234\152
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END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hellenic Academic and Research Institutions ECC RootCA 2015"

Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Serial Number: 0 (0x0)

Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Not Valid Before: Tue Jul 07 10:37:12 2015

Not Valid After : Sat Jun 30 10:37:12 2040

Fingerprint (SHA-256):

44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33

#

Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\237\361\161\215\222\325\232\363\175\164\227\264\274\157\204\150
```

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\013\272\266\146
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\201\345\264\027\353\302\365\341\113\015\101\173\111\222\376\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103
\103\040\122\157\157\164\103\101\040\062\060\061\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ISRG Root X1"
#
# Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00
# Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Not Valid Before: Thu Jun 04 11:04:38 2015
# Not Valid After : Mon Jun 04 11:04:38 2035
# Fingerprint (SHA-256):
96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6
#
Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145

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\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143
\202\213\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\153\060\202\003\123\240\003\002\001\002\002\021\000
\202\020\317\260\322\100\343\131\104\143\340\273\143\202\213\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\051
\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156\145
\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145\141
\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003\125
\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130\061
\060\036\027\015\061\065\060\066\060\064\061\061\060\064\063\070
\132\027\015\063\065\060\066\060\064\061\061\060\064\063\070\132
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\255\350\044\163\364\024\067\363\233\236\053\127\050\034
\207\276\334\267\337\070\220\214\156\074\346\127\240\170\367\165
\302\242\376\365\152\156\366\000\117\050\333\336\150\206\154\104
\223\266\261\143\375\024\022\153\277\037\322\352\061\233\041\176
\321\063\074\272\110\365\335\171\337\263\270\377\022\361\041\232
\113\301\212\206\161\151\112\146\146\154\217\176\074\160\277\255
\051\042\006\363\344\300\346\200\256\342\113\217\267\231\176\224
\003\237\323\107\227\174\231\110\043\123\350\070\256\117\012\157
\203\056\321\111\127\214\200\164\266\332\057\320\070\215\173\003
\160\041\033\165\362\060\074\372\217\256\335\332\143\253\353\026
\117\302\216\021\113\176\317\013\350\377\265\167\056\364\262\173
\112\340\114\022\045\014\160\215\003\051\240\341\123\044\354\023
```

\331\356\031\277\020\263\112\214\077\211\243\141\121\336\254\207
\007\224\364\143\161\354\056\342\157\133\230\201\341\211\134\064
\171\154\166\357\073\220\142\171\346\333\244\232\057\046\305\320
\020\341\016\336\331\020\216\026\373\267\367\250\367\307\345\002
\007\230\217\066\010\225\347\342\067\226\015\066\165\236\373\016
\162\261\035\233\274\003\371\111\005\330\201\335\005\264\052\326
\101\351\254\001\166\225\012\017\330\337\325\275\022\037\065\057
\050\027\154\322\230\301\250\011\144\167\156\107\067\272\316\254
\131\136\150\235\177\162\326\211\305\006\101\051\076\131\076\335
\046\365\044\311\021\247\132\243\114\100\037\106\241\231\265\247
\072\121\156\206\073\236\175\162\247\022\005\170\131\355\076\121
\170\025\013\003\217\215\320\057\005\262\076\173\112\034\113\163
\005\022\374\306\352\340\120\023\174\103\223\164\263\312\164\347
\216\037\001\010\320\060\324\133\161\066\264\007\272\301\060\060
\134\110\267\202\073\230\246\175\140\212\242\243\051\202\314\272
\275\203\004\033\242\203\003\101\241\326\005\361\033\302\266\360
\250\174\206\073\106\250\110\052\210\334\166\232\166\277\037\152
\245\075\031\217\353\070\363\144\336\310\053\015\012\050\377\367
\333\342\025\102\324\042\320\047\135\341\171\376\030\347\160\210
\255\116\346\331\213\072\306\335\047\121\156\377\274\144\365\063
\103\117\002\003\001\000\001\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\171\264\131\346\173\266\345\344\001
\163\200\010\210\310\032\130\366\351\233\156\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\125
\037\130\251\274\262\250\120\320\014\261\330\032\151\040\047\051
\010\254\141\165\134\212\156\370\202\345\151\057\325\366\126\113
\271\270\163\020\131\323\041\227\176\347\114\161\373\262\322\140
\255\071\250\013\352\027\041\126\205\361\120\016\131\353\316\340
\131\351\272\311\025\357\206\235\217\204\200\366\344\351\221\220
\334\027\233\142\033\105\360\146\225\322\174\157\302\352\073\357
\037\317\313\326\256\047\361\251\260\310\256\375\175\176\232\372
\042\004\353\377\331\177\352\221\053\042\261\027\016\217\362\212
\064\133\130\330\374\001\311\124\271\270\046\314\212\210\063\211
\114\055\204\074\202\337\356\226\127\005\272\054\273\367\304\267
\307\116\073\202\276\061\310\042\163\163\222\321\302\200\244\071
\071\020\063\043\202\114\074\237\206\262\125\230\035\276\051\206
\214\042\233\236\342\153\073\127\072\202\160\115\334\011\307\211
\313\012\007\115\154\350\135\216\311\357\316\253\307\273\265\053
\116\105\326\112\320\046\314\345\162\312\010\152\245\225\343\025
\241\367\244\355\311\054\137\245\373\377\254\050\002\056\276\327
\173\273\343\161\173\220\026\323\007\136\106\123\174\067\007\102
\214\323\304\226\234\325\231\265\052\340\225\032\200\110\256\114
\071\007\316\314\107\244\122\225\053\272\270\373\255\322\063\123
\175\345\035\115\155\325\241\261\307\102\157\346\100\047\065\134
\243\050\267\007\215\347\215\063\220\347\043\237\373\120\234\171
\154\106\325\264\025\263\226\156\176\233\014\226\072\270\122\055


```
\077\326\133\341\373\010\302\204\376\044\250\243\211\332\254\152
\341\030\052\261\250\103\141\133\323\037\334\073\215\166\362\055
\350\215\165\337\027\063\154\075\123\373\173\313\101\137\377\334
\242\320\141\070\341\226\270\254\135\213\067\327\165\325\063\300
\231\021\256\235\101\301\162\165\204\276\002\101\102\137\147\044
\110\224\321\233\047\276\007\077\271\270\117\201\164\121\341\172
\267\355\235\043\342\276\340\325\050\004\023\074\061\003\236\335
\172\154\217\306\007\030\306\177\336\107\216\077\050\236\004\006
\317\245\124\064\167\275\354\211\233\351\027\103\337\133\333\137
\376\216\036\127\242\315\100\235\176\142\042\332\336\030\047
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "ISRG Root X1"

Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US

Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00

Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US

Not Valid Before: Thu Jun 04 11:04:38 2015

Not Valid After : Mon Jun 04 11:04:38 2035

Fingerprint (SHA-256):

96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6

Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ISRG Root X1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\312\275\052\171\241\007\152\061\362\035\045\066\065\313\003\235
\103\051\245\350
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\014\322\371\340\332\027\163\351\355\206\115\245\343\160\347\116
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143
\202\213\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AC RAIZ FNMT-RCM"
#
# Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07
# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Not Valid Before: Wed Oct 29 15:59:56 2008
# Not Valid After : Tue Jan 01 00:00:00 2030
# Fingerprint (SHA-256):
EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA
#
Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AC RAIZ FNMT-RCM"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
\007
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\203\060\202\003\153\240\003\002\001\002\002\017\135
\223\215\060\147\066\310\006\035\032\307\124\204\151\007\060\015

```

\006\011\052\206\110\206\367\015\001\001\013\005\000\060\073\061
\013\060\011\006\003\125\004\006\023\002\105\123\061\021\060\017
\006\003\125\004\012\014\010\106\116\115\124\055\122\103\115\061
\031\060\027\006\003\125\004\013\014\020\101\103\040\122\101\111
\132\040\106\116\115\124\055\122\103\115\060\036\027\015\060\070
\061\060\062\071\061\065\065\071\065\066\132\027\015\063\060\060
\061\060\061\060\060\060\060\060\060\132\060\073\061\013\060\011
\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003\125
\004\012\014\010\106\116\115\124\055\122\103\115\061\031\060\027
\006\003\125\004\013\014\020\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\272\161\200\172\114\206\156\177
\310\023\155\300\306\175\034\000\227\217\054\014\043\273\020\232
\100\251\032\267\207\210\370\233\126\152\373\346\173\216\213\222
\216\247\045\135\131\021\333\066\056\267\121\027\037\251\010\037
\004\027\044\130\252\067\112\030\337\345\071\324\127\375\327\301
\054\221\001\221\342\042\324\003\300\130\374\167\107\354\217\076
\164\103\272\254\064\215\115\070\166\147\216\260\310\157\060\063
\130\161\134\264\365\153\156\324\001\120\270\023\176\154\112\243
\111\321\040\031\356\274\300\051\030\145\247\336\376\357\335\012
\220\041\347\032\147\222\102\020\230\137\117\060\274\076\034\105
\264\020\327\150\100\024\300\100\372\347\167\027\172\346\013\217
\145\133\074\331\232\122\333\265\275\236\106\317\075\353\221\005
\002\300\226\262\166\114\115\020\226\073\222\372\234\177\017\231
\337\276\043\065\105\036\002\134\376\265\250\233\231\045\332\136
\363\042\303\071\365\344\052\056\323\306\037\304\154\252\305\034
\152\001\005\112\057\322\305\301\250\064\046\135\146\245\322\002
\041\371\030\267\006\365\116\231\157\250\253\114\121\350\317\120
\030\305\167\310\071\011\054\111\222\062\231\250\273\027\027\171
\260\132\305\346\243\304\131\145\107\065\203\136\251\350\065\013
\231\273\344\315\040\306\233\112\006\071\265\150\374\042\272\356
\125\214\053\116\352\363\261\343\374\266\231\232\325\102\372\161
\115\010\317\207\036\152\161\175\371\323\264\351\245\161\201\173
\302\116\107\226\245\366\166\205\243\050\217\351\200\156\201\123
\245\155\137\270\110\371\302\371\066\246\056\111\377\270\226\302
\214\007\263\233\210\130\374\353\033\034\336\055\160\342\227\222
\060\241\211\343\274\125\250\047\326\113\355\220\255\213\372\143
\045\131\055\250\065\335\312\227\063\274\345\315\307\235\321\354
\357\136\016\112\220\006\046\143\255\271\331\065\055\007\272\166
\145\054\254\127\217\175\364\007\224\327\201\002\226\135\243\007
\111\325\172\320\127\371\033\347\123\106\165\252\260\171\102\313
\150\161\010\351\140\275\071\151\316\364\257\303\126\100\307\255
\122\242\011\344\157\206\107\212\037\353\050\047\135\203\040\257
\004\311\154\126\232\213\106\365\002\003\001\000\001\243\201\203
\060\201\200\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\367

\175\305\375\304\350\232\033\167\144\247\365\035\240\314\277\207
\140\232\155\060\076\006\003\125\035\040\004\067\060\065\060\063
\006\004\125\035\040\000\060\053\060\051\006\010\053\006\001\005
\005\007\002\001\026\035\150\164\164\160\072\057\057\167\167\167
\056\143\145\162\164\056\146\156\155\164\056\145\163\057\144\160
\143\163\057\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\002\001\000\007\220\112\337\363\043\116\360\303
\234\121\145\233\234\042\242\212\014\205\363\163\051\153\115\376
\001\342\251\014\143\001\277\004\147\245\235\230\137\375\001\023
\372\354\232\142\351\206\376\266\142\322\156\114\224\373\300\165
\105\174\145\014\370\262\067\317\254\017\317\215\157\371\031\367
\217\354\036\362\160\236\360\312\270\357\267\377\166\067\166\133
\366\156\210\363\257\142\062\042\223\015\072\152\216\024\146\014
\055\123\164\127\145\036\325\262\335\043\201\073\245\146\043\047
\147\011\217\341\167\252\103\315\145\121\010\355\121\130\376\346
\071\371\313\107\204\244\025\361\166\273\244\356\244\073\304\137
\357\262\063\226\021\030\267\311\145\276\030\341\243\244\334\372
\030\371\323\274\023\233\071\172\064\272\323\101\373\372\062\212
\052\267\053\206\013\151\203\070\276\315\212\056\013\160\255\215
\046\222\356\036\365\001\053\012\331\326\227\233\156\340\250\031
\034\072\041\213\014\036\100\255\003\347\335\146\176\365\271\040
\015\003\350\226\371\202\105\324\071\340\240\000\135\327\230\346
\175\236\147\163\303\232\052\367\253\213\241\072\024\357\064\274
\122\016\211\230\232\004\100\204\035\176\105\151\223\127\316\353
\316\370\120\174\117\034\156\004\103\233\371\326\073\043\030\351
\352\216\321\115\106\215\361\073\344\152\312\272\373\043\267\233
\372\231\001\051\132\130\132\055\343\371\324\155\016\046\255\301
\156\064\274\062\370\014\005\372\145\243\333\073\067\203\042\351
\326\334\162\063\375\135\362\040\275\166\074\043\332\050\367\371
\033\353\131\144\325\334\137\162\176\040\374\315\211\265\220\147
\115\142\172\077\116\255\035\303\071\376\172\364\050\026\337\101
\366\110\200\005\327\017\121\171\254\020\253\324\354\003\146\346
\152\260\272\061\222\102\100\152\276\072\323\162\341\152\067\125
\274\254\035\225\267\151\141\362\103\221\164\346\240\323\012\044
\106\241\010\257\326\332\105\031\226\324\123\035\133\204\171\360
\300\367\107\357\213\217\305\006\256\235\114\142\235\377\106\004
\370\323\311\266\020\045\100\165\376\026\252\311\112\140\206\057
\272\357\060\167\344\124\342\270\204\231\130\200\252\023\213\121
\072\117\110\366\213\266\263

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AC RAIZ FNMT-RCM"

Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES

#

```
Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07
# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Not Valid Before: Wed Oct 29 15:59:56 2008
# Not Valid After : Tue Jan 01 00:00:00 2030
# Fingerprint (SHA-256):
EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA
# Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AC RAIZ FNMT-RCM"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\354\120\065\007\262\025\304\225\142\031\342\250\232\133\102\231
\054\114\054\040
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\342\011\004\264\323\275\321\240\024\375\032\322\107\304\127\035
END
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
\007
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 1"
#
# Issuer: CN=Amazon Root CA 1,O=Amazon,C=US
# Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca
# Subject: CN=Amazon Root CA 1,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sun Jan 17 00:00:00 2038
# Fingerprint (SHA-256):
8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E
# Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103
\346\226\066\133\312
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\101\060\202\002\051\240\003\002\001\002\002\023\006
\154\237\317\231\277\214\012\071\342\360\170\212\103\346\226\066
\133\312\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172
\157\156\040\122\157\157\164\040\103\101\040\061\060\036\027\015
\061\065\060\065\062\066\060\060\060\060\060\060\132\027\015\063
\070\060\061\061\067\060\060\060\060\060\060\132\060\071\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157
\157\164\040\103\101\040\061\060\202\001\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060
\202\001\012\002\202\001\001\000\262\170\200\161\312\170\325\343
\161\257\107\200\120\164\175\156\330\327\210\166\364\231\150\367
\130\041\140\371\164\204\001\057\254\002\055\206\323\240\103\172
\116\262\244\320\066\272\001\276\215\333\110\310\007\027\066\114
\364\356\210\043\307\076\353\067\365\265\031\370\111\150\260\336
\327\271\166\070\035\141\236\244\376\202\066\245\345\112\126\344
\105\341\371\375\264\026\372\164\332\234\233\065\071\057\372\260
\040\120\006\154\172\320\200\262\246\371\257\354\107\031\217\120
\070\007\334\242\207\071\130\370\272\325\251\371\110\147\060\226
\356\224\170\136\157\211\243\121\300\060\206\146\241\105\146\272
\124\353\243\303\221\371\110\334\377\321\350\060\055\175\055\164
```

```
\160\065\327\210\044\367\236\304\131\156\273\163\207\027\362\062
\106\050\270\103\372\267\035\252\312\264\362\237\044\016\055\113
\367\161\134\136\151\377\352\225\002\313\070\212\256\120\070\157
\333\373\055\142\033\305\307\036\124\341\167\340\147\310\017\234
\207\043\326\077\100\040\177\040\200\304\200\114\076\073\044\046
\216\004\256\154\232\310\252\015\002\003\001\000\001\243\102\060
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\206\060\035\006\003\125\035\016\004\026\004\024\204\030\314
\205\064\354\274\014\224\224\056\010\131\234\307\262\020\116\012
\010\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000
\003\202\001\001\000\230\362\067\132\101\220\241\032\305\166\121
\050\040\066\043\016\256\346\050\273\252\370\224\256\110\244\060
\177\033\374\044\215\113\264\310\241\227\366\266\361\172\160\310
\123\223\314\010\050\343\230\045\317\043\244\371\336\041\323\174
\205\011\255\116\232\165\072\302\013\152\211\170\166\104\107\030
\145\154\215\101\216\073\177\232\313\364\265\247\120\327\005\054
\067\350\003\113\255\351\141\240\002\156\365\362\360\305\262\355
\133\267\334\372\224\134\167\236\023\245\177\122\255\225\362\370
\223\073\336\213\134\133\312\132\122\133\140\257\024\367\113\357
\243\373\237\100\225\155\061\124\374\102\323\307\106\037\043\255
\331\017\110\160\232\331\165\170\161\321\162\103\064\165\156\127
\131\302\002\134\046\140\051\317\043\031\026\216\210\103\245\324
\344\313\010\373\043\021\103\350\103\051\162\142\241\251\135\136
\010\324\220\256\270\330\316\024\302\320\125\362\206\366\304\223
\103\167\146\141\300\271\350\101\327\227\170\140\003\156\112\162
\256\245\321\175\272\020\236\206\154\033\212\271\131\063\370\353
\304\220\276\361\271
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Amazon Root CA 1"

Issuer: CN=Amazon Root CA 1,O=Amazon,C=US

Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca

Subject: CN=Amazon Root CA 1,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After : Sun Jan 17 00:00:00 2038

Fingerprint (SHA-256):

8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E

Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Amazon"

```

Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\215\247\371\145\354\136\374\067\221\017\034\156\131\375\301\314
\152\156\336\026
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\103\306\277\256\354\376\255\057\030\306\210\150\060\374\310\346
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103
\346\226\066\133\312
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 2"
#
# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US
# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37
#
# Subject: CN=Amazon Root CA 2,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4
# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
END
CKA_ID UTF8 "0"

```


CKA_ISSUER MULTILINE_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370
\133\046\273\212\067

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\101\060\202\003\051\240\003\002\001\002\002\023\006
\154\237\322\226\065\206\237\012\017\345\206\170\370\133\046\273
\212\067\060\015\006\011\052\206\110\206\367\015\001\001\014\005
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172
\157\156\040\122\157\157\164\040\103\101\040\062\060\036\027\015
\061\065\060\065\062\066\060\060\060\060\060\060\132\027\015\064
\060\060\065\062\066\060\060\060\060\060\060\132\060\071\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157
\157\164\040\103\101\040\062\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\255\226\237\055\234\112\114\112
\201\171\121\231\354\212\313\153\140\121\023\274\115\155\006\374
\260\010\215\335\031\020\152\307\046\014\065\330\300\157\040\204
\351\224\261\233\205\003\303\133\333\112\350\310\370\220\166\331
\133\117\343\114\350\006\066\115\314\232\254\075\014\220\053\222
\324\006\031\140\254\067\104\171\205\201\202\255\132\067\340\015
\314\235\246\114\122\166\352\103\235\267\004\321\120\366\125\340
\325\322\246\111\205\351\067\351\312\176\256\134\225\115\110\232
\077\256\040\132\155\210\225\331\064\270\122\032\103\220\260\277
\154\005\271\266\170\267\352\320\344\072\074\022\123\142\377\112
\362\173\276\065\005\251\022\064\343\363\144\164\142\054\075\000
\111\132\050\376\062\104\273\207\335\145\047\002\161\073\332\112
\367\037\332\315\367\041\125\220\117\017\354\256\202\341\237\153
\331\105\323\273\360\137\207\355\074\054\071\206\332\077\336\354
\162\125\353\171\243\255\333\335\174\260\272\034\316\374\336\117
\065\166\317\017\370\170\037\152\066\121\106\047\141\133\351\236
\317\360\242\125\175\174\045\212\157\057\264\305\317\204\056\053
\375\015\121\020\154\373\137\033\274\033\176\305\256\073\230\001
\061\222\377\013\127\364\232\262\271\127\351\253\357\015\166\321
\360\356\364\316\206\247\340\156\351\264\151\241\337\151\366\063
\306\151\056\227\023\236\245\207\260\127\020\201\067\311\123\263
\273\177\366\222\321\234\320\030\364\222\156\332\203\117\246\143

\231\114\245\373\136\357\041\144\172\040\137\154\144\205\025\313
\067\351\142\014\013\052\026\334\001\056\062\332\076\113\365\236
\072\366\027\100\224\357\236\221\010\206\372\276\143\250\132\063
\354\313\164\103\225\371\154\151\122\066\307\051\157\374\125\003
\134\037\373\237\275\107\353\347\111\107\225\013\116\211\042\011
\111\340\365\141\036\361\277\056\212\162\156\200\131\377\127\072
\371\165\062\243\116\137\354\355\050\142\331\115\163\362\314\201
\027\140\355\315\353\334\333\247\312\305\176\002\275\362\124\010
\124\375\264\055\011\054\027\124\112\230\321\124\341\121\147\010
\322\355\156\176\157\077\322\055\201\131\051\146\313\220\071\225
\021\036\164\047\376\335\353\257\002\003\001\000\001\243\102\060
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\206\060\035\006\003\125\035\016\004\026\004\024\260\014\360
\114\060\364\005\130\002\110\375\063\345\122\257\113\204\343\146
\122\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000
\003\202\002\001\000\252\250\200\217\016\170\243\340\242\324\315
\346\365\230\172\073\352\000\003\260\227\016\223\274\132\250\366
\054\214\162\207\251\261\374\177\163\375\143\161\170\245\207\131
\317\060\341\015\020\262\023\132\155\202\365\152\346\200\237\240
\005\013\150\344\107\153\307\152\337\266\375\167\062\162\345\030
\372\011\364\240\223\054\135\322\214\165\205\166\145\220\014\003
\171\267\061\043\143\255\170\203\011\206\150\204\312\377\371\317
\046\232\222\171\347\315\113\305\347\141\247\027\313\363\251\022
\223\223\153\247\350\057\123\222\304\140\130\260\314\002\121\030
\133\205\215\142\131\143\266\255\264\336\232\373\046\367\000\047
\300\135\125\067\164\231\311\120\177\343\131\056\104\343\054\045
\356\354\114\062\167\264\237\032\351\113\135\040\305\332\375\034
\207\026\306\103\350\324\273\046\232\105\160\136\251\013\067\123
\342\106\173\047\375\340\106\362\211\267\314\102\266\313\050\046
\156\331\245\311\072\310\101\023\140\367\120\214\025\256\262\155
\032\025\032\127\170\346\222\052\331\145\220\202\077\154\002\257
\256\022\072\047\226\066\004\327\035\242\200\143\251\233\361\345
\272\264\174\024\260\116\311\261\037\164\137\070\366\121\352\233
\372\054\242\021\324\251\055\047\032\105\261\257\262\116\161\015
\300\130\106\326\151\006\313\123\313\263\376\153\101\315\101\176
\175\114\017\174\162\171\172\131\315\136\112\016\254\233\251\230
\163\171\174\264\364\314\271\270\007\014\262\164\134\270\307\157
\210\241\220\247\364\252\371\277\147\072\364\032\025\142\036\267
\237\276\075\261\051\257\147\241\022\362\130\020\031\123\003\060
\033\270\032\211\366\234\275\227\003\216\243\011\363\035\213\041
\361\264\337\344\034\321\237\145\002\006\352\134\326\023\263\204
\357\242\245\134\214\167\051\247\150\300\153\256\100\322\250\264
\352\315\360\215\113\070\234\031\232\033\050\124\270\211\220\357
\312\165\201\076\036\362\144\044\307\030\257\116\377\107\236\007
\366\065\145\244\323\012\126\377\365\027\144\154\357\250\042\045
\111\223\266\337\000\027\332\130\176\135\356\305\033\260\321\321
\137\041\020\307\371\363\272\002\012\047\007\305\361\326\307\323

```

\340\373\011\140\154
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "Amazon Root CA 2"
# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US
# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37
#
# Subject: CN=Amazon Root CA 2,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4
# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\132\214\357\105\327\246\230\131\166\172\214\213\104\226\265\170
\317\107\113\032
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\310\345\215\316\250\102\342\172\300\052\134\174\236\046\277\146
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370
\133\046\273\212\067
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 3"
#

```

```
# Issuer: CN=Amazon Root CA 3,O=Amazon,C=US
# Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a
# Subject: CN=Amazon Root CA 3,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4
# Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350
\236\166\003\362\112
END
CKA_VALUE MULTILINE_OCTAL
\060\202\001\266\060\202\001\133\240\003\002\001\002\002\023\006
\154\237\325\164\227\066\146\077\073\013\232\331\350\236\166\003
\362\112\060\012\006\010\052\206\110\316\075\004\003\002\060\071
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060
\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031
\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040
\122\157\157\164\040\103\101\040\063\060\036\027\015\061\065\060
\065\062\066\060\060\060\060\060\060\132\027\015\064\060\060\065
\062\066\060\060\060\060\060\060\132\060\071\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040
\103\101\040\063\060\131\060\023\006\007\052\206\110\316\075\002
\001\006\010\052\206\110\316\075\003\001\007\003\102\000\004\051
\227\247\306\101\177\300\015\233\350\001\033\126\306\362\122\245
```

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\272\055\262\022\350\322\056\327\372\311\305\330\252\155\037\163
\201\073\073\230\153\071\174\063\245\305\116\206\216\200\027\150
\142\105\127\175\104\130\035\263\067\345\147\010\353\146\336\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\206\060\035\006\003\125\035\016\004\026\004\024\253
\266\333\327\006\236\067\254\060\206\007\221\160\307\234\304\031
\261\170\300\060\012\006\010\052\206\110\316\075\004\003\002\003
\111\000\060\106\002\041\000\340\205\222\243\027\267\215\371\053
\006\245\223\254\032\230\150\141\162\372\341\241\320\373\034\170
\140\246\103\231\305\270\304\002\041\000\234\002\357\361\224\234
\263\226\371\353\306\052\370\266\054\376\072\220\024\026\327\214
\143\044\110\034\337\060\175\325\150\073
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Amazon Root CA 3"

Issuer: CN=Amazon Root CA 3,O=Amazon,C=US

Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a

Subject: CN=Amazon Root CA 3,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After

: Sat May 26 00:00:00 2040

Fingerprint (SHA-256):

18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4

Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Amazon Root CA 3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\015\104\335\214\074\214\032\032\130\165\144\201\351\017\056\052
\377\263\322\156
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\240\324\357\013\367\265\330\111\225\052\354\365\304\374\201\207
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350

\236\166\003\362\112

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Amazon Root CA 4"

#

Issuer: CN=Amazon Root CA 4,O=Amazon,C=US

Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e

Subject: CN=Amazon Root CA 4,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After : Sat May 26 00:00:00 2040

Fingerprint (SHA-256):

E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92

Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Amazon Root CA 4"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156

\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157

\156\040\122\157\157\164\040\103\101\040\064

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156

\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157

\156\040\122\157\157\164\040\103\101\040\064

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173

\054\310\032\301\016

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\362\060\202\001\170\240\003\002\001\002\002\023\006

\154\237\327\301\273\020\114\051\103\345\161\173\173\054\310\032

\301\016\060\012\006\010\052\206\110\316\075\004\003\003\060\071

```
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060
\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031
\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040
\122\157\157\164\040\103\101\040\064\060\036\027\015\061\065\060
\065\062\066\060\060\060\060\060\132\027\015\064\060\060\065
\062\066\060\060\060\060\060\132\060\071\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040
\103\101\040\064\060\166\060\020\006\007\052\206\110\316\075\002
\001\006\005\053\201\004\000\042\003\142\000\004\322\253\212\067
\117\243\123\015\376\301\212\173\113\250\173\106\113\143\260\142
\366\055\033\333\010\161\041\322\000\350\143\275\232\047\373\360
\071\156\135\352\075\245\311\201\252\243\133\040\230\105\135\026
\333\375\350\020\155\343\234\340\343\275\137\204\142\363\160\144
\063\240\313\044\057\160\272\210\241\052\240\165\370\201\256\142
\006\304\201\333\071\156\051\260\036\372\056\134\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\206\060\035\006\003\125\035\016\004\026\004\024\323\354\307\072
\145\156\314\341\332\166\232\126\373\234\363\206\155\127\345\201
\060\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060
\145\002\060\072\213\041\361\275\176\021\255\320\357\130\226\057
\326\353\235\176\220\215\053\317\146\125\303\054\343\050\251\160
\012\107\016\360\067\131\022\377\055\231\224\050\116\052\117\065
\115\063\132\002\061\000\352\165\000\116\073\304\072\224\022\221
\311\130\106\235\041\023\162\247\210\234\212\344\114\112\333\226
\324\254\213\153\153\111\022\123\063\255\327\344\276\044\374\265
\012\166\324\245\274\020
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Amazon Root CA 4"

Issuer: CN=Amazon Root CA 4,O=Amazon,C=US

Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e

Subject:

CN=Amazon Root CA 4,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After : Sat May 26 00:00:00 2040

Fingerprint (SHA-256):

E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92

Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\366\020\204\007\326\370\273\147\230\014\302\342\104\302\353\256
\034\357\143\276
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\211\274\047\325\353\027\215\006\152\151\325\375\211\107\264\315
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173
\054\310\032\301\016
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 1 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98
# Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9
# Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 1 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156

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\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320
\363\230

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\044
\062\165\362\035\057\322\011\063\367\264\152\312\320\363\230\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145
\143\040\103\154\141\163\163\040\061\040\120\165\142\154\151\143
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060
\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074

\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\061
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\307\071\327
\111\144\251\231\202\042\114\352\105\331\007\026\343\173\364\203
\350\231\163\372\153\261\066\340\232\167\240\100\302\201\215\001
\307\314\214\275\217\175\367\171\343\172\114\003\115\331\373\375
\207\070\050\054\335\232\213\124\010\333\147\373\033\214\376\050
\222\057\276\267\262\110\247\201\241\330\136\210\303\314\071\100
\101\132\321\334\345\332\020\237\057\332\001\115\375\056\106\174
\371\056\047\012\151\067\356\221\243\033\152\314\104\277\033\307
\303\324\021\262\120\140\227\011\275\056\042\365\101\204\146\237
\315\100\246\251\000\200\301\037\225\222\237\336\363\110\357\333
\035\167\141\374\177\337\356\226\244\162\320\266\076\377\170\047
\257\313\222\025\151\010\333\143\020\342\346\227\254\156\334\254
\366\242\316\036\107\231\271\211\267\022\346\241\324\315\131\021
\147\303\157\205\330\102\116\050\276\131\125\131\004\225\253\217
\067\200\277\015\360\374\037\072\144\061\130\201\170\327\342\065
\366\040\077\051\270\217\026\156\076\110\334\265\114\007\341\362
\032\352\176\012\171\326\250\275\353\135\206\053\115\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\063\101\350\310\071\022\025\223\110\362\226\062\056\132
\365\332\224\137\123\140\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\001\001\000\025\343\163\127\261\027
\266\137\111\151\104\246\366\136\172\147\254\322\336\165\111\253
\376\045\125\307\072\311\104\025\020\156\277\061\153\313\331\007
\223\177\034\205\143\000\343\062\022\340\314\313\373\071\154\217
\342\123\342\074\100\063\331\244\214\107\346\255\130\373\211\257
\343\336\206\051\126\064\054\105\270\022\372\104\211\156\055\024
\045\050\044\001\145\326\352\122\254\005\156\126\022\011\075\320
\164\364\327\275\006\312\250\072\215\126\102\372\215\162\076\164
\361\003\162\337\207\033\136\016\172\125\226\054\070\267\230\205
\315\115\063\104\311\224\217\132\061\060\067\113\243\072\022\263
\347\066\321\041\150\113\055\070\346\123\256\034\045\126\010\126
\003\147\204\235\306\303\316\044\142\307\114\066\317\260\006\104
\267\365\137\002\335\331\124\351\057\220\116\172\310\116\203\100
\014\232\227\074\067\277\277\354\366\360\264\205\167\050\301\013
\310\147\202\020\027\070\242\267\006\352\233\277\072\370\351\043
\007\277\164\340\230\070\025\125\170\356\162\000\134\031\243\364
\322\063\340\377\275\321\124\071\051\017

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# For Email Distrust After: Wed Aug
31 00:00:00 2022
CKA_NSS_EMAIL_DISTRUST_AFTER MULTILINE_OCTAL
\062\062\060\070\063\061\060\060\060\060\060\060\132
END

# Trust for "Symantec Class 1 Public Primary Certification Authority - G6"
# Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98
# Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9
# Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 1 Public Primary Certification
Authority - G6"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\121\177\141\036\051\221\153\123\202\373\162\347\104\331\215\303
\314\123\155\144
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\057\250\264\332\366\144\113\036\202\371\106\075\124\032\174\260
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320
\363\230
END
CKA_TRUST_SERVER_AUTH

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CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 2 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41
# Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0
# Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151

```

\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261
\377\101
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\144
\202\236\374\067\036\164\135\374\227\377\227\310\261\377\101\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145
\143\040\103\154\141\163\163\040\062\040\120\165\142\154\151\143
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060
\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074
\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\062
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\315\314\351
\005\310\143\205\313\077\100\143\027\275\030\372\065\346\004\147
\127\145\230\051\244\117\311\134\217\017\064\322\370\332\250\023
\142\252\270\036\120\147\170\260\026\114\240\071\251\025\172\256
\355\322\242\300\360\220\067\051\030\046\134\350\015\074\266\154
\111\077\301\340\334\331\113\266\024\031\013\246\323\226\341\326
\011\343\031\046\034\371\037\145\113\371\032\103\034\000\203\326
\320\252\111\242\324\333\346\142\070\272\120\024\103\155\371\061
\370\126\026\331\070\002\221\317\353\154\335\273\071\116\231\341
\060\147\105\361\324\360\215\303\337\376\362\070\007\041\175\000
\136\126\104\263\344\140\275\221\053\234\253\133\004\162\017\262
\050\331\162\253\005\040\102\045\251\133\003\152\040\020\314\061
\360\053\332\065\054\320\373\232\227\116\360\202\113\053\330\137
\066\243\013\055\257\143\015\035\045\177\241\156\134\142\241\215
\050\076\241\374\034\040\370\001\057\272\125\232\021\260\031\322

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\310\120\171\153\016\152\005\327\252\004\066\262\243\362\341\137
\167\247\167\234\345\036\334\351\337\152\301\145\135\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\207\214\040\225\310\230\112\321\326\200\006\112\220\064
\104\337\034\115\277\260\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\001\001\000\201\216\262\245\146\226
\267\041\245\266\357\157\043\132\137\333\201\305\102\245\170\301
\151\375\364\074\327\371\134\153\160\162\032\374\132\227\115\000
\200\210\210\202\212\303\161\015\216\305\211\233\054\355\215\013
\322\162\124\365\175\324\134\103\127\351\363\256\245\002\021\366
\166\053\201\127\335\175\332\164\060\375\124\107\366\340\026\156
\246\264\012\110\346\347\165\007\017\051\031\071\316\171\364\266
\154\305\137\231\325\037\113\372\337\155\054\074\015\124\200\160
\360\210\013\200\317\306\150\242\270\035\160\331\166\214\374\356
\245\311\317\255\035\317\231\045\127\132\142\105\313\026\153\275
\111\315\245\243\214\151\171\045\256\270\114\154\213\100\146\113
\026\077\317\002\032\335\341\154\153\007\141\152\166\025\051\231
\177\033\335\210\200\301\277\265\217\163\305\246\226\043\204\246
\050\206\044\063\152\001\056\127\163\045\266\136\277\217\346\035
\141\250\100\051\147\035\207\233\035\177\233\237\231\315\061\326
\124\276\142\273\071\254\150\022\110\221\040\245\313\261\335\376
\157\374\132\344\202\125\131\257\061\251
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

#

Trust for "Symantec Class 2 Public Primary Certification Authority - G6"

Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust

Network,O=Symantec Corporation,C=US

Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41

Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust

Network,O=Symantec Corporation,C=US

Not Valid Before: Tue Oct 18 00:00:00 2011

Not Valid After : Tue Dec 01 23:59:59 2037

Fingerprint (SHA-256):

CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0

Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\100\263\061\240\351\277\350\125\274\071\223\312\160\117\116\302
\121\324\035\217
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\175\013\203\345\373\174\255\007\117\040\251\265\337\143\355\171
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261
\377\101
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root CA 3 2013"
#
# Issuer: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Serial Number: 1039788 (0xfddac)
# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Not Valid Before: Fri Sep 20 08:25:51 2013
# Not Valid After : Wed Sep 20 08:25:51 2028
# Fingerprint (SHA-256):
A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57
# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root CA 3 2013"

```

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\003\017\335\254

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\016\060\202\002\366\240\003\002\001\002\002\003\017
\335\254\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003
\014\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\101\040\063\040\062\060\061\063\060\036\027\015\061\063\060\071
\062\060\060\070\062\065\065\061\132\027\015\062\070\060\071\062
\060\060\070\062\065\065\061\132\060\105\061\013\060\011\006\003
\125\004\006\023\002\104\105\061\025\060\023\006\003\125\004\012
\014\014\104\055\124\162\165\163\164\040\107\155\142\110\061\037
\060\035\006\003\125\004\003\014\026\104\055\124\122\125\123\124
\040\122\157\157\164\040\103\101\040\063\040\062\060\061\063\060
\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000
\304\173\102\222\202\037\354\355\124\230\216\022\300\312\011\337
\223\156\072\223\134\033\344\020\167\236\116\151\210\154\366\341
\151\362\366\233\242\141\261\275\007\040\164\230\145\361\214\046
\010\315\250\065\312\200\066\321\143\155\350\104\172\202\303\154
\136\336\273\350\066\322\304\150\066\214\237\062\275\204\042\340
\334\302\356\020\106\071\155\257\223\071\256\207\346\303\274\011
\311\054\153\147\133\331\233\166\165\114\013\340\273\305\327\274
\076\171\362\137\276\321\220\127\371\256\366\146\137\061\277\323
\155\217\247\272\112\363\043\145\273\267\357\243\045\327\012\352
\130\266\357\210\372\372\171\262\122\130\325\360\254\214\241\121
\164\051\225\252\121\073\220\062\003\237\034\162\164\220\336\075
\355\141\322\345\343\375\144\107\345\271\267\112\251\367\037\256

\226\206\004\254\057\343\244\201\167\267\132\026\377\330\017\077
\366\267\170\314\244\257\372\133\074\022\133\250\122\211\162\357
\210\363\325\104\201\206\225\043\237\173\335\274\331\064\357\174
\224\074\252\300\101\302\343\235\120\032\300\344\031\042\374\263
\002\003\001\000\001\243\202\001\005\060\202\001\001\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035
\006\003\125\035\016\004\026\004\024\077\220\310\175\307\025\157
\363\044\217\251\303\057\113\242\017\041\262\057\347\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\276
\006\003\125\035\037\004\201\266\060\201\263\060\164\240\162\240
\160\206\156\154\144\141\160\072\057\057\144\151\162\145\143\164
\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164\057
\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157\157
\164\045\062\060\103\101\045\062\060\063\045\062\060\062\060\061
\063\054\117\075\104\055\124\162\165\163\164\045\062\060\107\155
\142\110\054\103\075\104\105\077\143\145\162\164\151\146\151\143
\141\164\145\162\145\166\157\143\141\164\151\157\156\154\151\163
\164\060\073\240\071\240\067\206\065\150\164\164\160\072\057\057
\143\162\154\056\144\055\164\162\165\163\164\056\156\145\164\057
\143\162\154\057\144\055\164\162\165\163\164\137\162\157\157\164
\137\143\141\137\063\137\062\060\061\063\056\143\162\154\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001
\001\000\016\131\016\130\344\164\110\043\104\317\064\041\265\234
\024\032\255\232\113\267\263\210\155\134\251\027\160\360\052\237
\215\173\371\173\205\372\307\071\350\020\010\260\065\053\137\317
\002\322\323\234\310\013\036\356\005\124\256\067\223\004\011\175
\154\217\302\164\274\370\034\224\276\061\001\100\055\363\044\040
\267\204\125\054\134\310\365\164\112\020\031\213\243\307\355\065
\326\011\110\323\016\300\272\071\250\260\106\002\260\333\306\210
\131\302\276\374\173\261\053\317\176\142\207\125\226\314\001\157
\233\147\041\225\065\213\370\020\374\161\033\267\113\067\151\246
\073\326\354\213\356\301\260\363\045\311\217\222\175\241\352\303
\312\104\277\046\245\164\222\234\343\164\353\235\164\331\313\115
\207\330\374\264\151\154\213\240\103\007\140\170\227\351\331\223
\174\302\106\274\233\067\122\243\355\212\074\023\251\173\123\113
\111\232\021\005\054\013\156\126\254\037\056\202\154\340\151\147
\265\016\155\055\331\344\300\025\361\077\372\030\162\341\025\155
\047\133\055\060\050\053\237\110\232\144\053\231\357\362\165\111
\137\134

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "D-TRUST Root CA 3 2013"

Issuer: CN=D-TRUST Root

```
CA 3 2013,O=D-Trust GmbH,C=DE
# Serial Number: 1039788 (0xfddac)
# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Not Valid Before: Fri Sep 20 08:25:51 2013
# Not Valid After : Wed Sep 20 08:25:51 2028
# Fingerprint (SHA-256):
A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57
# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root CA 3 2013"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\154\174\314\347\324\256\121\137\231\010\315\077\366\350\303\170
\337\157\357\227
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\267\042\146\230\176\326\003\340\301\161\346\165\315\126\105\277
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\003\017\335\254
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"
#
# Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu
SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR
# Serial Number: 1 (0x1)
# Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu
SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR
# Not Valid Before: Mon Nov 25 08:25:55 2013
# Not Valid After : Sun Oct 25 08:25:55 2043
# Fingerprint (SHA-256):
46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16
```

#

Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165
\162\165\155\040\061

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165
\162\165\155\040\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\143\060\202\003\113\240\003\002\001\002\002\001\001

\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122\061
\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145\040
\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003\125
\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154\151
\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157\152
\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165\162
\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055\060
\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145\162
\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145
\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060\064
\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040\113
\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040\123
\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165\162
\165\155\040\061\060\036\027\015\061\063\061\061\062\065\060\070
\062\065\065\065\132\027\015\064\063\061\060\062\065\060\070\062
\065\065\065\132\060\201\322\061\013\060\011\006\003\125\004\006
\023\002\124\122\061\030\060\026\006\003\125\004\007\023\017\107
\145\142\172\145\040\055\040\113\157\143\141\145\154\151\061\102
\060\100\006\003\125\004\012\023\071\124\165\162\153\151\171\145
\040\102\151\154\151\155\163\145\154\040\166\145\040\124\145\153
\156\157\154\157\152\151\153\040\101\162\141\163\164\151\162\155
\141\040\113\165\162\165\155\165\040\055\040\124\125\102\111\124
\101\113\061\055\060\053\006\003\125\004\013\023\044\113\141\155
\165\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040
\115\145\162\153\145\172\151\040\055\040\113\141\155\165\040\123
\115\061\066\060\064\006\003\125\004\003\023\055\124\125\102\111
\124\101\113\040\113\141\155\165\040\123\115\040\123\123\114\040
\113\157\153\040\123\145\162\164\151\146\151\153\141\163\151\040
\055\040\123\165\162\165\155\040\061\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\257\165\060\063\252\273
\153\323\231\054\022\067\204\331\215\173\227\200\323\156\347\377
\233\120\225\076\220\225\126\102\327\031\174\046\204\215\222\372
\001\035\072\017\342\144\070\267\214\274\350\210\371\213\044\253
\056\243\365\067\344\100\216\030\045\171\203\165\037\073\377\154
\250\305\306\126\370\264\355\212\104\243\253\154\114\374\035\320
\334\357\150\275\317\344\252\316\360\125\367\242\064\324\203\153
\067\174\034\302\376\265\003\354\127\316\274\264\265\305\355\000
\017\123\067\052\115\364\117\014\203\373\206\317\313\376\214\116
\275\207\371\247\213\041\127\234\172\337\003\147\211\054\235\227
\141\247\020\270\125\220\177\016\055\047\070\164\337\347\375\332
\116\022\343\115\025\042\002\310\340\340\374\017\255\212\327\311
\124\120\314\073\017\312\026\200\204\320\121\126\303\216\126\177
\211\042\063\057\346\205\012\275\245\250\033\066\336\323\334\054
\155\073\307\023\275\131\043\054\346\345\244\367\330\013\355\352
\220\100\104\250\225\273\223\325\320\200\064\266\106\170\016\037
\000\223\106\341\356\351\371\354\117\027\002\003\001\000\001\243

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\102\060\100\060\035\006\003\125\035\016\004\026\004\024\145\077
\307\212\206\306\074\335\074\124\134\065\370\072\355\122\014\107
\127\310\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\052\077\341\361\062\216\256\341\230
\134\113\136\317\153\036\152\011\322\042\251\022\307\136\127\175
\163\126\144\200\204\172\223\344\011\271\020\315\237\052\047\341
\000\167\276\110\310\065\250\201\237\344\270\054\311\177\016\260
\322\113\067\135\352\271\325\013\136\064\275\364\163\051\303\355
\046\025\234\176\010\123\212\130\215\320\113\050\337\301\263\337
\040\363\371\343\343\072\337\314\234\224\330\116\117\303\153\027
\267\367\162\350\255\146\063\265\045\123\253\340\370\114\251\235
\375\362\015\272\256\271\331\252\306\153\371\223\273\256\253\270
\227\074\003\032\272\103\306\226\271\105\162\070\263\247\241\226
\075\221\173\176\300\041\123\114\207\355\362\013\124\225\121\223
\325\042\245\015\212\361\223\016\076\124\016\260\330\311\116\334
\362\061\062\126\352\144\371\352\265\235\026\146\102\162\363\177
\323\261\061\103\374\244\216\027\361\155\043\253\224\146\370\255
\373\017\010\156\046\055\177\027\007\011\262\214\373\120\300\237
\226\215\317\266\375\000\235\132\024\232\277\002\104\365\301\302
\237\042\136\242\017\241\343
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL

CK_FALSE

Trust for "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

Serial Number: 1 (0x1)

Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

Not Valid Before: Mon Nov 25 08:25:55 2013

Not Valid After : Sun Oct 25 08:25:55 2043

Fingerprint (SHA-256):

46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16

Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

CKA_CERT_SHA1_HASH MULTILINE OCTAL

```
\061\103\144\233\354\316\047\354\355\072\077\013\217\015\344\350
```

```
\221\335\356\312
```

```

END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\334\000\201\334\151\057\076\057\260\073\366\075\132\221\216\111
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165
\162\165\155\040\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GDCA TrustAUTH R5 ROOT"
#
# Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN
# Serial Number: 7d:09:97:fe:f0:47:ea:7a
# Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN
# Not Valid Before: Wed Nov 26 05:13:15 2014
# Not Valid After : Mon Dec 31 15:59:59 2040
# Fingerprint (SHA-256):
BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93
# Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE

```

```
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\175\011\227\376\360\107\352\172
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\210\060\202\003\160\240\003\002\001\002\002\010\175
\011\227\376\360\107\352\172\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\142\061\013\060\011\006\003\125\004
\006\023\002\103\116\061\062\060\060\006\003\125\004\012\014\051
\107\125\101\116\107\040\104\117\116\107\040\103\105\122\124\111
\106\111\103\101\124\105\040\101\125\124\110\117\122\111\124\131
\040\103\117\056\054\114\124\104\056\061\037\060\035\006\003\125
\004\003\014\026\107\104\103\101\040\124\162\165\163\164\101\125
\124\110\040\122\065\040\122\117\117\124\060\036\027\015\061\064
\061\061\062\066\060\065\061\063\061\065\132\027\015\064\060\061
\062\063\061\061\065\065\071\065\071\132\060\142\061\013\060\011
\006\003\125\004\006\023\002\103\116\061\062\060\060\006\003\125
\004\012\014\051\107\125\101\116\107\040\104\117\116\107\040\103
\105\122\124\111\106\111\103\101\124\105\040\101\125\124\110\117
\122\111\124\131\040\103\117\056\054\114\124\104\056\061\037\060
\035\006\003\125\004\003\014\026\107\104\103\101\040\124\162\165
\163\164\101\125\124\110\040\122\065\040\122\117\117\124\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\331
\243\026\360\310\164\164\167\233\357\063\015\073\006\176\125\374
\265\140\217\166\206\022\102\175\126\146\076\210\202\355\162\143
```

\016\236\213\335\064\054\002\121\121\303\031\375\131\124\204\311
\361\153\263\114\260\351\350\106\135\070\306\242\247\056\021\127
\272\202\025\242\234\217\155\260\231\112\012\362\353\211\160\143
\116\171\304\267\133\275\242\135\261\362\101\002\053\255\251\072
\243\354\171\012\354\137\072\343\375\357\200\074\255\064\233\032
\253\210\046\173\126\242\202\206\037\353\065\211\203\177\137\256
\051\116\075\266\156\354\256\301\360\047\233\256\343\364\354\357
\256\177\367\206\075\162\172\353\245\373\131\116\247\353\225\214
\042\071\171\341\055\010\217\314\274\221\270\101\367\024\301\043
\251\303\255\232\105\104\263\262\327\054\315\306\051\342\120\020
\256\134\313\202\216\027\030\066\175\227\346\210\232\260\115\064
\011\364\054\271\132\146\052\260\027\233\236\036\166\235\112\146
\061\101\337\077\373\305\006\357\033\266\176\032\106\066\367\144
\143\073\343\071\030\043\347\147\165\024\325\165\127\222\067\275
\276\152\033\046\120\362\066\046\006\220\305\160\001\144\155\166
\146\341\221\333\156\007\300\141\200\056\262\056\057\214\160\247
\321\073\074\263\221\344\156\266\304\073\160\362\154\222\227\011
\315\107\175\030\300\363\273\236\017\326\213\256\007\266\132\017
\316\013\014\107\247\345\076\270\275\175\307\233\065\240\141\227
\072\101\165\027\314\053\226\167\052\222\041\036\331\225\166\040
\147\150\317\015\275\337\326\037\011\152\232\342\314\163\161\244
\057\175\022\200\267\123\060\106\136\113\124\231\017\147\311\245
\310\362\040\301\202\354\235\021\337\302\002\373\032\073\321\355
\040\232\357\145\144\222\020\015\052\342\336\160\361\030\147\202
\214\141\336\270\274\321\057\234\373\017\320\053\355\033\166\271
\344\071\125\370\370\241\035\270\252\200\000\114\202\347\262\177
\011\270\274\060\240\057\015\365\122\236\216\367\222\263\012\000
\035\000\124\227\006\340\261\007\331\307\017\134\145\175\074\155
\131\127\344\355\245\215\351\100\123\237\025\113\240\161\366\032
\041\343\332\160\006\041\130\024\207\205\167\171\252\202\171\002
\003\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004
\026\004\024\342\311\100\237\115\316\350\232\241\174\317\016\077
\145\305\051\210\152\031\121\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\003\202\002\001\000\321\111\127\340
\247\314\150\130\272\001\017\053\031\315\215\260\141\105\254\021
\355\143\120\151\370\037\177\276\026\217\375\235\353\013\252\062
\107\166\322\147\044\355\275\174\063\062\227\052\307\005\206\146
\015\027\175\024\025\033\324\353\375\037\232\366\136\227\151\267
\032\045\244\012\263\221\077\137\066\254\213\354\127\250\076\347
\201\212\030\127\071\205\164\032\102\307\351\133\023\137\217\371
\010\351\222\164\215\365\107\322\253\073\326\373\170\146\116\066
\175\371\351\222\351\004\336\375\111\143\374\155\373\024\161\223
\147\057\107\112\267\271\377\036\052\163\160\106\060\277\132\362
\057\171\245\341\215\014\331\371\262\143\067\214\067\145\205\160
\152\134\133\011\162\271\255\143\074\261\335\370\374\062\277\067
\206\344\273\216\230\047\176\272\037\026\341\160\021\362\003\337


```
\045\142\062\047\046\030\062\204\237\377\000\072\023\272\232\115
\364\117\270\024\160\042\261\312\053\220\316\051\301\160\364\057
\235\177\362\220\036\326\132\337\267\106\374\346\206\372\313\340
\040\166\172\272\246\313\365\174\336\142\245\261\213\356\336\202
\146\212\116\072\060\037\077\200\313\255\047\272\014\136\327\320
\261\126\312\167\161\262\265\165\241\120\251\100\103\027\302\050
\331\317\122\213\133\310\143\324\102\076\240\063\172\106\056\367
\012\040\106\124\176\152\117\061\361\201\176\102\164\070\145\163
\047\356\306\174\270\216\327\245\072\327\230\241\234\214\020\125
\323\333\113\354\100\220\362\315\156\127\322\142\016\174\127\223
\261\247\155\315\235\203\273\052\347\345\266\073\161\130\255\375
\321\105\274\132\221\356\123\025\157\323\105\011\165\156\272\220
\135\036\004\317\067\337\036\250\146\261\214\346\040\152\357\374
\110\116\164\230\102\257\051\157\056\152\307\373\175\321\146\061
\042\314\206\000\176\146\203\014\102\364\275\064\222\303\032\352
\117\312\176\162\115\013\160\214\246\110\273\246\241\024\366\373
\130\104\231\024\256\252\013\223\151\240\051\045\112\245\313\053
\335\212\146\007\026\170\025\127\161\033\354\365\107\204\363\236
\061\067\172\325\177\044\255\344\274\375\375\314\156\203\350\014
\250\267\101\154\007\335\275\074\206\227\057\322
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "GDCA TrustAUTH R5 ROOT"

Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN

Serial Number:7d:09:97:fe:f0:47:ea:7a

Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN

Not Valid Before: Wed Nov 26 05:13:15 2014

Not Valid After : Mon Dec 31 15:59:59 2040

Fingerprint (SHA-256):

BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93

Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\017\066\070\133\201\032\045\303\233\061\116\203\312\351\064\146
\160\314\164\264
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\143\314\331\075\064\065\134\157\123\243\342\010\160\110\037\264

END

CKA_ISSUER MULTILINE_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\175\011\227\376\360\107\352\172

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "TrustCor RootCert CA-1"

#

Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA

Serial Number:00:da:9b:ec:71:f3:03:b0:19

Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor
Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

Not Valid Before: Thu Feb 04 12:32:16 2016

Not Valid After : Mon Dec 31 17:23:16 2029

Fingerprint (SHA-256):

D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C

Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TrustCor RootCert CA-1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164

```
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\332\233\354\161\363\003\260\031
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\060\060\202\003\030\240\003\002\001\002\002\011\000
\332\233\354\161\363\003\260\031\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\201\244\061\013\060\011\006\003
\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157
\162\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040
\122\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124
\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\037\060
\035\006\003\125\004\003\014\026\124\162\165\163\164\103\157\162
\040\122\157\157\164\103\145\162\164\040\103\101\055\061\060\036
\027\015\061\066\060\062\060\064\061\062\063\062\061\066\132\027
\015\062\071\061\062\063\061\061\067\062\063\061\066\132\060\201
\244\061\013\060\011\006\003\125\004\006\023\002\120\101\061\017
\060\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061
\024\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141
\040\103\151\164\171\061\044\060\042\006\003\125\004\012\014\033
\124\162\165\163\164\103\157\162\040\123\171\163\164\145\155\163
\040\123\056\040\144\145\040\122\056\114\056\061\047\060\045\006
\003\125\004\013\014\036\124\162\165\163\164\103\157\162\040\103
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157
\162\151\164\171\061\037\060\035\006\003\125\004\003\014\026\124
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\162\165\163\164\103\157\162\040\122\157\157\164\103\145\162\164
\040\103\101\055\061\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\277\216\267\225\342\302\046\022\153\063
\031\307\100\130\012\253\131\252\215\000\243\374\200\307\120\173
\216\324\040\046\272\062\022\330\043\124\111\045\020\042\230\235
\106\322\301\311\236\116\033\056\054\016\070\363\032\045\150\034
\246\132\005\346\036\213\110\277\230\226\164\076\151\312\351\265
\170\245\006\274\325\000\136\011\012\362\047\172\122\374\055\325
\261\352\264\211\141\044\363\032\023\333\251\317\122\355\014\044
\272\271\236\354\176\000\164\372\223\255\154\051\222\256\121\264
\273\323\127\277\263\363\250\215\234\364\044\113\052\326\231\236
\364\236\376\300\176\102\072\347\013\225\123\332\267\150\016\220
\114\373\160\077\217\112\054\224\363\046\335\143\151\251\224\330
\020\116\305\107\010\220\231\033\027\115\271\154\156\357\140\225
\021\216\041\200\265\275\240\163\330\320\262\167\304\105\352\132
\046\373\146\166\166\370\006\037\141\155\017\125\305\203\267\020
\126\162\006\007\245\363\261\032\003\005\144\016\235\132\212\326
\206\160\033\044\336\376\050\212\053\320\152\260\374\172\242\334
\262\171\016\213\145\017\002\003\001\000\001\243\143\060\141\060
\035\006\003\125\035\016\004\026\004\024\356\153\111\074\172\077
\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060\037
\006\003\125\035\043\004\030\060\026\200\024\356\153\111\074\172
\077\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\001\001\000\045\030\324\221\217\023\356\217\036\035\021\123
\332\055\104\051\031\240\036\153\061\236\115\016\236\255\075\134
\101\157\225\053\044\241\171\230\072\070\066\373\273\146\236\110
\377\220\220\357\075\324\270\233\264\207\165\077\040\233\316\162
\317\241\125\301\115\144\242\031\006\241\007\063\014\013\051\345
\361\352\253\243\354\265\012\164\220\307\175\162\362\327\134\237
\221\357\221\213\267\334\355\146\242\317\216\146\073\274\237\072
\002\340\047\335\026\230\300\225\324\012\244\344\201\232\165\224
\065\234\220\137\210\067\006\255\131\225\012\260\321\147\323\031
\312\211\347\062\132\066\034\076\202\250\132\223\276\306\320\144
\221\266\317\331\266\030\317\333\176\322\145\243\246\304\216\027
\061\301\373\176\166\333\323\205\343\130\262\167\172\166\073\154
\057\120\034\347\333\366\147\171\037\365\202\225\232\007\247\024
\257\217\334\050\041\147\011\322\326\115\132\034\031\034\216\167
\134\303\224\044\075\062\153\113\176\324\170\224\203\276\067\115
\316\137\307\036\116\074\340\211\063\225\013\017\245\062\326\074
\132\171\054\031

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

For Server Distrust After: Wed Nov 30 00:00:00 2022

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CKA_NSS_SERVER_DISTRICT_AFTER_MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END
# For Email Distrust After: Wed Nov 30 00:00:00 2022
CKA_NSS_EMAIL_DISTRICT_AFTER_MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END

# Trust for "TrustCor RootCert CA-1"
# Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
#
Serial Number:00:da:9b:ec:71:f3:03:b0:19
# Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:16 2016
# Not Valid After : Mon Dec 31 17:23:16 2029
# Fingerprint (SHA-256):
D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C
# Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\377\275\315\347\202\310\103\136\074\157\046\206\134\312\250\072
\105\133\303\012
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\156\205\361\334\032\000\323\042\325\262\262\254\153\067\005\105
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\332\233\354\161\363\003\260\031

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END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor RootCert CA-2"
#
# Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor
  Systems S. de R.L.,L=Panama City,ST=Panama,C=PA
# Serial Number:25:a1:df:ca:33:cb:59:02
# Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
  R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:23 2016
# Not Valid After : Sun Dec 31 17:26:39 2034
# Fingerprint (SHA-256):
07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65
# Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162

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\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\045\241\337\312\063\313\131\002

END

CKA_VALUE MULTILINE_OCTAL

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\241\337\312\063\313\131\002\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\244\061\013\060\011\006\003\125
\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010\014
\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004\007
\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044\060
\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157\162
\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040\122
\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124\162
\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143\141
\164\145\040\101\165\164\150\157\162\151\164\171\061\037\060\035
\006\003\125\004\003\014\026\124\162\165\163\164\103\157\162\040
\122\157\157\164\103\145\162\164\040\103\101\055\062\060\036\027
\015\061\066\060\062\060\064\061\062\063\062\062\063\132\027\015
\063\064\061\062\063\061\061\067\062\066\063\071\132\060\201\244
\061\013\060\011\006\003\125\004\006\023\002\120\101\061\017\060
\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061\024
\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141\040
\103\151\164\171\061\044\060\042\006\003\125\004\012\014\033\124
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\123\056\040\144\145\040\122\056\114\056\061\047\060\045\006\003
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\151\164\171\061\037\060\035\006\003\125\004\003\014\026\124\162
\165\163\164\103\157\162\040\122\157\157\164\103\145\162\164\040
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\310\070\176\200\322\253\301\233\145\005\224\364\301\012\020\325
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\101\132\236\165\335\215\312\340\233\354\150\062\244\151\222\150
\214\013\201\016\126\240\076\032\335\054\045\024\202\057\227\323
\144\106\364\124\251\334\072\124\055\061\053\231\202\362\331\052
\327\357\161\000\270\061\244\276\172\044\007\303\102\040\362\212
\324\222\004\033\145\126\114\154\324\373\266\141\132\107\043\264
\330\151\264\267\072\320\164\074\014\165\241\214\116\166\241\351
\333\052\245\073\372\316\260\377\176\152\050\375\047\034\310\261
\351\051\361\127\156\144\264\320\301\025\155\016\276\056\016\106

\310\136\364\121\376\357\016\143\072\073\161\272\317\157\131\312
\014\343\233\135\111\270\114\342\127\261\230\212\102\127\234\166
\357\357\275\321\150\250\322\364\011\273\167\065\276\045\202\010
\304\026\054\104\040\126\251\104\021\167\357\135\264\035\252\136
\153\076\213\062\366\007\057\127\004\222\312\365\376\235\302\351
\350\263\216\114\113\002\061\331\344\074\110\202\047\367\030\202
\166\110\072\161\261\023\241\071\325\056\305\064\302\035\142\205
\337\003\376\115\364\257\075\337\134\133\215\372\160\341\245\176
\047\307\206\056\152\217\022\306\204\136\103\121\120\234\031\233
\170\346\374\366\355\107\176\173\075\146\357\023\023\210\137\074
\241\143\373\371\254\207\065\237\363\202\236\244\077\012\234\061
\151\213\231\244\210\112\216\156\146\115\357\026\304\017\171\050
\041\140\015\205\026\175\327\124\070\361\222\126\375\265\063\114
\203\334\327\020\237\113\375\306\370\102\275\272\174\163\002\340
\377\175\315\133\341\324\254\141\173\127\325\112\173\133\324\205
\130\047\135\277\370\053\140\254\240\046\256\024\041\047\306\167
\232\063\200\074\136\106\077\367\303\261\243\206\063\306\350\136
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\252\344\147\177\156\167\077\364\004\212\057\174\173\343\027\141
\360\335\011\251\040\310\276\011\244\320\176\104\303\262\060\112
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\006\003\125\035\016\004\026\004\024\331\376\041\100\156\224\236
\274\233\075\234\175\230\040\031\345\214\060\142\262\060\037\006
\003\125\035\043\004\030\060\026\200\024\331\376\041\100\156\224
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\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
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\164\247\054\360\010\330\171\132\327\132\204\212\330\022\232\033
\331\175\134\115\160\305\245\371\253\345\243\211\211\335\001\372
\354\335\371\351\222\227\333\260\106\102\363\323\142\252\225\376
\061\147\024\151\130\220\012\252\013\356\067\043\307\120\121\264
\365\176\236\343\173\367\344\314\102\062\055\111\014\313\377\111
\014\233\036\064\375\156\156\226\212\171\003\266\157\333\011\313
\375\137\145\024\067\341\070\365\363\141\026\130\344\265\155\015
\013\004\033\077\120\055\177\263\307\172\032\026\200\140\370\212
\037\351\033\052\306\371\272\001\032\151\277\322\130\307\124\127
\010\217\341\071\140\167\113\254\131\204\032\210\361\335\313\117
\170\327\347\341\063\055\374\356\101\372\040\260\276\313\367\070
\224\300\341\320\205\017\273\355\054\163\253\355\376\222\166\032
\144\177\133\015\063\011\007\063\173\006\077\021\244\134\160\074
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\331\320\205\231\115\224\233\017\113\215\356\000\132\107\035\021
\003\254\101\030\257\207\267\157\014\072\217\312\317\334\003\301


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\242\011\310\345\375\200\136\310\140\102\001\033\032\123\132\273
\067\246\267\274\272\204\351\036\154\032\324\144\332\324\103\376
\223\213\113\362\054\171\026\020\324\223\013\210\217\241\330\206
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\111\354\047\350\100\036\263\246\211\042\162\234\365\015\063\264
\130\243\060\073\335\324\152\124\223\276\032\115\363\223\224\367
\374\204\013\077\204\040\134\064\003\104\305\332\255\274\012\301
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\273\024\062\124\014\002\051\223\036\222\206\366\177\357\347\222
\005\016\131\335\231\010\056\056\372\234\000\122\323\305\146\051
\344\247\227\104\244\016\050\201\023\065\305\366\157\144\346\101
\304\325\057\314\064\105\045\317\101\000\226\075\112\056\302\226
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\326\354\011
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END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL

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\062\062\061\061\063\060\060\060\060\060\060\060\132
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END

For Email Distrust After: Wed Nov 30 00:00:00 2022

CKA_NSS_EMAIL_DISTRICT_AFTER

MULTILINE_OCTAL

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\062\062\061\061\063\060\060\060\060\060\060\060\132
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END

Trust for "TrustCor RootCert CA-2"

Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

Serial Number:25:a1:df:ca:33:cb:59:02

Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

Not Valid Before: Thu Feb 04 12:32:23 2016

Not Valid After : Sun Dec 31 17:26:39 2034

Fingerprint (SHA-256):

07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65

Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TrustCor RootCert CA-2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\276\155\313\126\361\125\271\143\324\022\312\116\006\064\307
\224\262\034\300
```

END

```
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\242\341\370\030\013\272\105\325\307\101\052\273\067\122\105\144
END
```

```
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062
END
```

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\045\241\337\312\063\313\131\002
END
```

```
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST
CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
# Certificate "TrustCor ECA-1"
#
# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Serial Number:00:84:82:2c:5f:1c:62:d0:40
# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:33 2016
# Not Valid After : Mon Dec 31 17:28:07 2029
# Fingerprint (SHA-256):
5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C
# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor ECA-1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
```

\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\011\000\204\202\054\137\034\142\320\100

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\040\060\202\003\010\240\003\002\001\002\002\011\000
\204\202\054\137\034\142\320\100\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\201\234\061\013\060\011\006\003
\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157
\162\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040
\122\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124
\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\027\060
\025\006\003\125\004\003\014\016\124\162\165\163\164\103\157\162
\040\105\103\101\055\061\060\036\027\015\061\066\060\062\060\064
\061\062\063\062\063\063\132\027\015\062\071\061\062\063\061\061
\067\062\070\060\067\132\060\201\234\061\013\060\011\006\003\125
\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010\014
\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004\007
\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044\060
\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157\162
\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040\122

\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124\162
\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143\141
\164\145\040\101\165\164\150\157\162\151\164\171\061\027\060\025
\006\003\125\004\003\014\016\124\162\165\163\164\103\157\162\040
\105\103\101\055\061\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\317\217\340\021\265\237\250\166\166\333
\337\017\124\357\163\143\051\202\255\107\306\243\153\355\376\137
\063\370\103\121\351\032\063\221\061\027\240\164\304\324\247\001
\346\262\222\076\152\235\355\016\371\164\230\100\323\077\003\200
\006\202\100\350\261\342\247\121\247\035\203\046\153\253\336\372
\027\221\053\330\306\254\036\261\236\031\001\325\227\246\352\015
\267\304\125\037\047\174\322\010\325\166\037\051\025\207\100\071
\335\070\105\021\165\320\232\247\064\340\277\315\310\122\035\271
\107\176\015\270\273\306\014\366\163\127\026\132\176\103\221\037
\125\072\306\155\104\004\252\234\251\234\247\114\211\027\203\256
\243\004\136\122\200\213\036\022\045\021\031\327\014\175\175\061
\104\101\352\333\257\260\034\357\201\320\054\305\232\041\233\075
\355\102\073\120\046\362\354\316\161\141\006\142\041\124\116\177
\301\235\076\177\040\214\200\313\052\330\227\142\310\203\063\221
\175\260\242\132\017\127\350\073\314\362\045\262\324\174\057\354
\115\306\241\072\025\172\347\266\135\065\365\366\110\112\066\105
\146\324\272\230\130\301\002\003\001\000\001\243\143\060\141\060
\035\006\003\125\035\016\004\026\004\024\104\236\110\365\314\155
\110\324\240\113\177\376\131\044\057\203\227\231\232\206\060\037
\006\003\125\035\043\004\030\060\026\200\024\104\236\110\365\314
\155\110\324\240\113\177\376\131\044\057\203\227\231\232\206\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\001\001\000\005\076\065\134\025\160\233\311\307\163\141\157
\162\053\324\302\217\362\103\135\002\316\304\224\271\224\021\203
\147\135\342\147\154\165\166\277\273\014\252\066\306\255\107\223
\143\334\036\176\326\336\056\376\351\031\062\070\003\177\024\366
\000\163\054\131\261\041\006\341\373\254\030\225\014\243\377\231
\226\367\053\047\233\325\044\314\035\335\301\072\340\230\104\260
\304\344\076\167\261\163\251\144\054\366\034\001\174\077\135\105
\205\300\205\347\045\217\225\334\027\363\074\237\032\156\260\312
\343\035\052\351\114\143\372\044\141\142\326\332\176\266\034\154
\365\002\035\324\052\335\125\220\353\052\021\107\074\056\136\164
\262\202\042\245\175\123\037\105\354\047\221\175\347\042\026\350
\300\150\066\330\306\361\117\200\104\062\371\341\321\321\035\252
\336\250\253\234\004\257\255\040\016\144\230\115\245\153\300\110
\130\226\151\115\334\007\214\121\223\242\337\237\017\075\213\140
\264\202\215\252\010\116\142\105\340\371\013\322\340\340\074\133
\336\134\161\047\045\302\346\003\201\213\020\123\343\307\125\242
\264\237\327\346

END

```

CKA_NSS_Mozilla_CA_POLICY
CK_BBOOL CK_TRUE
# For Server Distrust After: Wed Nov 30 00:00:00 2022
CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END
# For Email Distrust After: Wed Nov 30 00:00:00
2022
CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END

# Trust for "TrustCor ECA-1"
# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Serial Number:00:84:82:2c:5f:1c:62:d0:40
# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:33 2016
# Not Valid After : Mon Dec 31 17:28:07 2029
# Fingerprint (SHA-256):
5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C
# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor ECA-1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\321\337\225\225\147\153\143\300\360\133\034\027\115\213\204
\013\310\170\275
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\047\222\043\035\012\365\100\174\351\346\153\235\330\365\347\154
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061
END

```

```

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\204\202\054\137\034\142\320\100
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com Root Certification Authority RSA"
#
# Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:7b:2c:9b:d3:16:80:32:99
# Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 17:39:39 2016
# Not Valid After : Tue Feb 12 17:39:39 2041
# Fingerprint (SHA-256):
85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69
# Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority RSA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
END

```

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\173\054\233\323\026\200\062\231

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\335\060\202\003\305\240\003\002\001\002\002\010\173
\054\233\323\026\200\062\231\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\174\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014\005
\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014\007
\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004\012
\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151\157
\156\061\061\060\057\006\003\125\004\003\014\050\123\123\114\056
\143\157\155\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\122\123\101\060\036\027\015\061\066\060\062\061\062\061\067
\063\071\063\071\132\027\015\064\061\060\062\061\062\061\067\063
\071\063\071\132\060\174\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061
\061\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157
\155\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\060\202\002\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202
\002\001\000\371\017\335\243\053\175\313\320\052\376\354\147\205
\246\347\056\033\272\167\341\343\365\257\244\354\372\112\135\221
\304\127\107\153\030\167\153\166\362\375\223\344\075\017\302\026
\236\013\146\303\126\224\236\027\203\205\316\126\357\362\026\375
\000\142\365\042\011\124\350\145\027\116\101\271\340\117\106\227
\252\033\310\270\156\142\136\151\261\137\333\052\002\176\374\154
\312\363\101\330\355\320\350\374\077\141\110\355\260\003\024\035
\020\016\113\031\340\273\116\354\206\145\377\066\363\136\147\002
\013\235\206\125\141\375\172\070\355\376\342\031\000\267\157\241
\120\142\165\164\074\240\372\310\045\222\264\156\172\042\307\370
\036\241\343\262\335\221\061\253\053\035\004\377\245\112\004\067
\351\205\244\063\053\375\342\326\125\064\174\031\244\112\150\307
\262\250\323\267\312\241\223\210\353\301\227\274\214\371\035\331
\042\204\044\164\307\004\075\152\251\051\223\314\353\270\133\341
\376\137\045\252\064\130\310\301\043\124\235\033\230\021\303\070
\234\176\075\206\154\245\017\100\206\174\002\364\134\002\117\050
\313\256\161\237\017\072\310\063\376\021\045\065\352\374\272\305
\140\075\331\174\030\325\262\251\323\165\170\003\162\042\312\072
\303\037\357\054\345\056\251\372\236\054\266\121\106\375\257\003
\326\352\140\150\352\205\026\066\153\205\351\036\300\263\335\304
\044\334\200\052\201\101\155\224\076\310\340\311\201\101\000\236

\136\277\177\305\010\230\242\030\054\102\100\263\371\157\070\047
\113\116\200\364\075\201\107\340\210\174\352\034\316\265\165\134
\121\056\034\053\177\032\162\050\347\000\265\321\164\306\327\344
\237\255\007\223\266\123\065\065\374\067\344\303\366\135\026\276
\041\163\336\222\012\370\240\143\152\274\226\222\152\076\370\274
\145\125\233\336\365\015\211\046\004\374\045\032\246\045\151\313
\302\155\312\174\342\131\137\227\254\353\357\056\310\274\327\033
\131\074\053\314\362\031\310\223\153\047\143\031\317\374\351\046
\370\312\161\233\177\223\376\064\147\204\116\231\353\374\263\170
\011\063\160\272\146\246\166\355\033\163\353\032\245\015\304\042
\023\040\224\126\012\116\054\154\116\261\375\317\234\011\272\242
\063\355\207\002\003\001\000\001\243\143\060\141\060\035\006\003
\125\035\016\004\026\004\024\335\004\011\007\242\365\172\175\122
\123\022\222\225\356\070\200\045\015\246\131\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003
\125\035\043\004\030\060\026\200\024\335\004\011\007\242\365\172
\175\122\123\022\222\225\356\070\200\045\015\246\131\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\206\060\015\006
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001
\000\040\030\021\224\051\373\046\235\034\036\036\160\141\361\225
\162\223\161\044\255\150\223\130\216\062\257\033\263\160\003\374
\045\053\164\205\220\075\170\152\364\271\213\245\227\073\265\030
\221\273\036\247\371\100\133\221\371\125\231\257\036\021\320\134
\035\247\146\343\261\224\007\014\062\071\246\352\033\260\171\330
\035\234\160\104\343\212\335\304\371\225\037\212\070\103\077\001
\205\245\107\247\075\106\262\274\345\042\150\367\173\234\330\054
\076\012\041\310\055\063\254\277\305\201\231\061\164\301\165\161
\305\276\261\360\043\105\364\235\153\374\031\143\235\243\274\004
\306\030\013\045\273\123\211\017\263\200\120\336\105\356\104\177
\253\224\170\144\230\323\366\050\335\207\330\160\145\164\373\016
\271\023\353\247\017\141\251\062\226\314\336\273\355\143\114\030
\273\251\100\367\240\124\156\040\210\161\165\030\352\172\264\064
\162\340\043\047\167\134\266\220\352\206\045\100\253\357\063\017
\313\237\202\276\242\040\373\366\265\055\032\346\302\205\261\164
\017\373\310\145\002\244\122\001\107\335\111\042\301\277\330\353
\153\254\176\336\354\143\063\025\267\043\010\217\306\017\215\101
\132\335\216\305\271\217\345\105\077\170\333\272\322\033\100\261
\376\161\115\077\340\201\242\272\136\264\354\025\340\223\335\010
\037\176\341\125\231\013\041\336\223\236\012\373\346\243\111\275
\066\060\376\347\167\262\240\165\227\265\055\201\210\027\145\040
\367\332\220\000\237\311\122\314\062\312\065\174\365\075\017\330
\053\327\365\046\154\311\006\064\226\026\352\160\131\032\062\171
\171\013\266\210\177\017\122\110\075\277\154\330\242\104\056\321
\116\267\162\130\323\211\023\225\376\104\253\370\327\213\033\156
\234\274\054\240\133\325\152\000\257\137\067\341\325\372\020\013
\230\234\206\347\046\217\316\360\354\156\212\127\013\200\343\116
\262\300\240\143\141\220\272\125\150\067\164\152\266\222\333\237
\241\206\042\266\145\047\016\354\266\237\102\140\344\147\302\265


```
\332\101\013\304\323\213\141\033\274\372\037\221\053\327\104\007
\136\272\051\254\331\305\351\357\123\110\132\353\200\361\050\130
\041\315\260\006\125\373\047\077\123\220\160\251\004\036\127\047
\271
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SSL.com Root Certification Authority RSA"

Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:7b:2c:9b:d3:16:80:32:99

Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

Not Valid Before: Fri Feb 12 17:39:39 2016

Not Valid After : Tue Feb 12 17:39:39 2041

Fingerprint (SHA-256):

85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69

Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN

CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SSL.com Root Certification Authority RSA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\267\253\063\010\321\352\104\167\272\024\200\022\132\157\275\251
\066\111\014\273
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\206\151\022\300\160\361\354\254\254\302\325\274\245\133\241\051
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\010\173\054\233\323\026\200\062\231
```

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "SSL.com Root Certification Authority ECC"

#

Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:75:e6:df:cb:c1:68:5b:a8

Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Not Valid Before: Fri Feb 12 18:14:03 2016

Not Valid After : Tue Feb 12 18:14:03 2041

Fingerprint (SHA-256):

34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65

Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"

CKA_CERTIFICATE_TYPE

CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\165\346\337\313\301\150\133\250

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\215\060\202\002\024\240\003\002\001\002\002\010\165

\346\337\313\301\150\133\250\060\012\006\010\052\206\110\316\075
\004\003\002\060\174\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165
\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\061
\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157\155
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103\060\036\027\015\061\066\060\062\061\062\061\070\061\064\060\063
\063\132\027\015\064\061\060\062\061\062\061\070\061\064\060\063
\132\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057
\006\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\040\105\103\103\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\105\156\251\120\304\246\043\066\236
\137\050\215\027\313\226\042\144\077\334\172\216\035\314\010\263
\242\161\044\272\216\111\271\004\033\107\226\130\253\055\225\310
\355\236\010\065\310\047\353\211\214\123\130\353\142\212\376\360
\133\017\153\061\122\143\101\073\211\315\354\354\266\215\031\323
\064\007\334\273\306\006\177\302\105\225\354\313\177\250\043\340
\011\351\201\372\363\107\323\243\143\060\141\060\035\006\003\125
\035\016\004\026\004\024\202\321\205\163\060\347\065\004\323\216
\002\222\373\345\244\321\304\041\350\315\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125
\035\043\004\030\060\026\200\024\202\321\205\163\060\347\065\004
\323\216\002\222\373\345\244\321\304\041\350\315\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\206\060\012\006\010
\052\206\110\316\075\004\003\002\003\147\000\060\144\002\060\157
\347\353\131\021\244\140\317\141\260\226\173\355\005\371\057\023
\221\334\355\345\374\120\153\021\106\106\263\034\041\000\142\273
\276\303\347\350\315\007\231\371\015\013\135\162\076\304\252\002
\060\037\274\272\013\342\060\044\373\174\155\200\125\012\231\076
\200\015\063\345\146\243\263\243\273\245\325\213\217\011\054\246
\135\176\342\360\007\010\150\155\322\174\151\156\137\337\345\152
\145

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

```

# Trust for "SSL.com Root Certification Authority ECC"
# Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:75:e6:df:cb:c1:68:5b:a8
# Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:14:03 2016
# Not Valid After : Tue Feb 12 18:14:03 2041
# Fingerprint (SHA-256):
34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65
# Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\303\031\174\071\044\346\124\257\033\304\253\040\225\172\342\303
\016\023\002\152
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\056\332\344\071\177\234\217\067\321\160\237\046\027\121\072\216
END
CKA_ISSUER
MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\165\346\337\313\301\150\133\250
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com EV Root Certification Authority RSA R2"
#
# Issuer: CN=SSL.com EV Root
Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:56:b6:29:cd:34:bc:78:f6
# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL
Corporation,L=Houston,ST=Texas,C=US

```

```
# Not Valid Before: Wed May 31 18:14:37 2017
# Not Valid After : Fri May 30 18:14:37 2042
# Fingerprint (SHA-256):
2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C
# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\126\266\051\315\064\274\170\366
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\353\060\202\003\323\240\003\002\001\002\002\010\126
\266\051\315\064\274\170\366\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003\125
\004\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014
\005\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014
\007\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004
\012\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151
\157\156\061\067\060\065\006\003\125\004\003\014\056\123\123\114
```

\056\143\157\155\040\105\126\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\040\122\123\101\040\122\062\060\036\027\015\061
\067\060\065\063\061\061\070\061\064\063\067\132\027\015\064\062
\060\065\063\060\061\070\061\064\063\067\132\060\201\202\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\016\060\014\006
\003\125\004\010\014\005\124\145\170\141\163\061\020\060\016\006
\003\125\004\007\014\007\110\157\165\163\164\157\156\061\030\060
\026\006\003\125\004\012\014\017\123\123\114\040\103\157\162\160
\157\162\141\164\151\157\156\061\067\060\065\006\003\125\004\003
\014\056\123\123\114\056\143\157\155\040\105\126\040\122\157\157
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\040\122\123\101\040\122\062
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\217\066\145\100\341\326\115\300\327\264\351\106\332\153\352
\063\107\315\114\371\175\175\276\275\055\075\360\333\170\341\206
\245\331\272\011\127\150\355\127\076\240\320\010\101\203\347\050
\101\044\037\343\162\025\320\001\032\373\136\160\043\262\313\237
\071\343\317\305\116\306\222\155\046\306\173\273\263\332\047\235
\012\206\351\201\067\005\376\360\161\161\354\303\034\351\143\242
\027\024\235\357\033\147\323\205\125\002\002\326\111\311\314\132
\341\261\367\157\062\237\311\324\073\210\101\250\234\275\313\253
\333\155\173\011\037\242\114\162\220\332\053\010\374\317\074\124
\316\147\017\250\317\135\226\031\013\304\343\162\353\255\321\175
\035\047\357\222\353\020\277\133\353\073\257\317\200\335\301\322
\226\004\133\172\176\244\251\074\070\166\244\142\216\240\071\136
\352\167\317\135\000\131\217\146\054\076\007\242\243\005\046\021
\151\227\352\205\267\017\226\013\113\310\100\341\120\272\056\212
\313\367\017\232\042\347\177\232\067\023\315\362\115\023\153\041
\321\300\314\042\362\241\106\366\104\151\234\312\141\065\007\000
\157\326\141\010\021\352\272\270\366\351\263\140\345\115\271\354
\237\024\146\311\127\130\333\315\207\151\370\212\206\022\003\107
\277\146\023\166\254\167\175\064\044\205\203\315\327\252\234\220
\032\237\041\054\177\170\267\144\270\330\350\246\364\170\263\125
\313\204\322\062\304\170\256\243\217\141\335\316\010\123\255\354
\210\374\025\344\232\015\346\237\032\167\316\114\217\270\024\025
\075\142\234\206\070\006\000\146\022\344\131\166\132\123\300\002
\230\242\020\053\150\104\173\216\171\316\063\112\166\252\133\201
\026\033\265\212\330\320\000\173\136\142\264\011\326\206\143\016
\246\005\225\111\272\050\213\210\223\262\064\034\330\244\125\156
\267\034\320\336\231\125\073\043\364\042\340\371\051\146\046\354
\040\120\167\333\112\013\217\276\345\002\140\160\101\136\324\256
\120\071\042\024\046\313\262\073\163\164\125\107\007\171\201\071
\250\060\023\104\345\004\212\256\226\023\045\102\017\271\123\304
\233\374\315\344\034\336\074\372\253\326\006\112\037\147\246\230
\060\034\335\054\333\334\030\225\127\146\306\377\134\213\126\365
\167\002\003\001\000\001\243\143\060\141\060\017\006\003\125\035

\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125
\035\043\004\030\060\026\200\024\371\140\273\324\343\325\064\366
\270\365\006\200\045\247\163\333\106\151\250\236\060\035\006\003
\125\035\016\004\026\004\024\371\140\273\324\343\325\064\366\270
\365\006\200\045\247\163\333\106\151\250\236\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\126
\263\216\313\012\235\111\216\277\244\304\221\273\146\027\005\121
\230\165\373\345\120\054\172\236\361\024\372\253\323\212\076\377
\221\051\217\143\213\330\264\251\124\001\015\276\223\206\057\371
\112\155\307\136\365\127\371\312\125\034\022\276\107\017\066\305
\337\152\267\333\165\302\107\045\177\271\361\143\370\150\055\125
\004\321\362\215\260\244\317\274\074\136\037\170\347\245\240\040
\160\260\004\305\267\367\162\247\336\042\015\275\063\045\106\214
\144\222\046\343\076\056\143\226\332\233\214\075\370\030\011\327
\003\314\175\206\202\340\312\004\007\121\120\327\377\222\325\014
\357\332\206\237\231\327\353\267\257\150\342\071\046\224\272\150
\267\277\203\323\352\172\147\075\142\147\256\045\345\162\350\342
\344\354\256\022\366\113\053\074\237\351\260\100\363\070\124\263
\375\267\150\310\332\306\217\121\074\262\373\221\334\034\347\233
\235\341\267\015\162\217\342\244\304\251\170\371\353\024\254\306
\103\005\302\145\071\050\030\002\303\202\262\235\005\276\145\355
\226\137\145\164\074\373\011\065\056\173\234\023\375\033\017\135
\307\155\201\072\126\017\314\073\341\257\002\057\042\254\106\312
\106\074\240\034\114\326\104\264\136\056\134\025\146\011\341\046
\051\376\306\122\141\272\261\163\377\303\014\234\345\154\152\224
\077\024\312\100\026\225\204\363\131\251\254\137\114\141\223\155
\321\073\314\242\225\014\042\246\147\147\104\056\271\331\322\212
\101\263\146\013\132\373\175\043\245\362\032\260\377\336\233\203
\224\056\321\077\337\222\267\221\257\005\073\145\307\240\154\261
\315\142\022\303\220\033\343\045\316\064\274\157\167\166\261\020
\303\367\005\032\300\326\257\164\142\110\027\167\222\151\220\141
\034\336\225\200\164\124\217\030\034\303\363\003\320\277\244\103
\165\206\123\030\172\012\056\011\034\066\237\221\375\202\212\042
\113\321\016\120\045\335\313\003\014\027\311\203\000\010\116\065
\115\212\213\355\360\002\224\146\054\104\177\313\225\047\226\027
\255\011\060\254\266\161\027\156\213\027\366\034\011\324\055\073
\230\245\161\323\124\023\331\140\363\365\113\146\117\372\361\356
\040\022\215\264\254\127\261\105\143\241\254\166\251\302\373

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SSL.com EV Root Certification Authority RSA R2"

Issuer: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:56:b6:29:cd:34:bc:78:f6

```

# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL
Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Wed May 31 18:14:37 2017
# Not Valid After : Fri May 30 18:14:37 2042
# Fingerprint (SHA-256):
2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C
# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\164\072\360\122\233\320\062\240\364\112\203\315\324\272\251\173
\174\056\304\232
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\341\036\061\130\032\256\124\123\002\366\027\152\021\173\115\225
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\126\266\051\315\064\274\170\366
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com EV Root Certification Authority ECC"
#
# Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:2c:29:9c:5b:16:ed:05:95
# Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:15:23 2016
# Not Valid After : Tue Feb 12 18:15:23 2041

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# Fingerprint (SHA-256):
22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8
# Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification
  Authority ECC"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\054\051\234\133\026\355\005\225
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\224\060\202\002\032\240\003\002\001\002\002\010\054
\051\234\133\026\355\005\225\060\012\006\010\052\206\110\316\075
\004\003\002\060\177\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165
\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\064
\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157\155
\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

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\040\105\103\103\060\036\027\015\061\066\060\062\061\062\061\070
\061\065\062\063\132\027\015\064\061\060\062\061\062\061\070\061
\065\062\063\132\060\177\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061
\064\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157
\155\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\040\105\103\103\060\166\060\020\006\007\052\206\110\316\075
\002\001\006\005\053\201\004\000\042\003\142\000\004\252\022\107
\220\230\033\373\357\303\100\007\203\040\116\361\060\202\242\006
\321\362\222\206\141\362\366\041\150\312\000\304\307\352\103\000
\124\206\334\375\037\337\000\270\101\142\134\334\160\026\062\336
\037\231\324\314\305\007\310\010\037\141\026\007\121\075\175\134
\007\123\343\065\070\214\337\315\237\331\056\015\112\266\031\056
\132\160\132\006\355\276\360\241\260\312\320\011\051\243\143\060
\141\060\035\006\003\125\035\016\004\026\004\024\133\312\136\345
\336\322\201\252\315\250\055\144\121\266\331\162\233\227\346\117
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\037\006\003\125\035\043\004\030\060\026\200\024\133\312
\136\345\336\322\201\252\315\250\055\144\121\266\331\162\233\227
\346\117\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\206\060\012\006\010\052\206\110\316\075\004\003\002\003\150
\000\060\145\002\061\000\212\346\100\211\067\353\351\325\023\331
\312\324\153\044\363\260\075\207\106\130\032\354\261\337\157\373
\126\272\160\153\307\070\314\350\261\214\117\017\367\361\147\166
\016\203\320\036\121\217\002\060\075\366\043\050\046\114\306\140
\207\223\046\233\262\065\036\272\326\367\074\321\034\316\372\045
\074\246\032\201\025\133\363\022\017\154\356\145\212\311\207\250
\371\007\340\142\232\214\134\112

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SSL.com EV Root Certification Authority ECC"

Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:2c:29:9c:5b:16:ed:05:95

Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Not Valid Before: Fri Feb 12 18:15:23 2016

Not Valid After : Tue Feb 12 18:15:23 2041

Fingerprint (SHA-256):

22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8

Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

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CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\114\335\121\243\321\365\040\062\024\260\306\305\062\043\003\221
\307\106\102\155
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\131\123\042\145\203\102\001\124\300\316\102\271\132\174\362\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\054\051\234\133\026\355\005\225
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
#
Certificate "GlobalSign Root CA - R6"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Not Valid Before: Wed Dec 10 00:00:00 2014
# Not Valid After : Sun Dec 10 00:00:00 2034
# Fingerprint (SHA-256):
2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69
# Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R6"

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CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\203\060\202\003\153\240\003\002\001\002\002\016\105
\346\273\003\203\063\303\205\145\110\346\377\105\121\060\015\006
\011\052\206\110\206\367\015\001\001\014\005\000\060\114\061\040
\060\036\006\003\125\004\013\023\027\107\154\157\142\141\154\123
\151\147\156\040\122\157\157\164\040\103\101\040\055\040\122\066
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\064
\061\062\061\060\060\060\060\060\060\060\132\027\015\063\064\061
\062\061\060\060\060\060\060\060\060\132\060\114\061\040\060\036
\006\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101\040\055\040\122\066\061\023
\060\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123
\151\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154
\157\142\141\154\123\151\147\156\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\225\007\350\163\312\146\371
\354\024\312\173\074\367\015\010\361\264\105\013\054\202\264\110
\306\353\133\074\256\203\270\101\222\063\024\244\157\177\351\052
\314\306\260\210\153\305\266\211\321\306\262\377\024\316\121\024
\041\354\112\335\033\132\306\326\207\356\115\072\025\006\355\144
\146\013\222\200\312\104\336\163\224\116\363\247\211\177\117\170
\143\010\310\022\120\155\102\146\057\115\271\171\050\115\122\032
\212\032\200\267\031\201\016\176\304\212\274\144\114\041\034\103
\150\327\075\074\212\305\262\146\325\220\232\267\061\006\305\276
\342\155\062\006\246\036\371\271\353\252\243\270\277\276\202\143
\120\320\360\030\211\337\344\017\171\365\352\242\037\052\322\160

\056\173\347\274\223\273\155\123\342\110\174\214\020\007\070\377
\146\262\167\141\176\340\352\214\074\252\264\244\366\363\225\112
\022\007\155\375\214\262\211\317\320\240\141\167\310\130\164\260
\324\043\072\367\135\072\312\242\333\235\011\336\135\104\055\220
\361\201\315\127\222\372\176\274\120\004\143\064\337\153\223\030
\276\153\066\262\071\344\254\044\066\267\360\357\266\034\023\127
\223\266\336\262\370\342\205\267\163\242\270\065\252\105\362\340
\235\066\241\157\124\212\361\162\126\156\056\210\305\121\102\104
\025\224\356\243\305\070\226\233\116\116\132\013\107\363\006\066
\111\167\060\274\161\067\345\246\354\041\010\165\374\346\141\026
\077\167\325\331\221\227\204\012\154\324\002\115\164\300\024\355
\375\071\373\203\362\136\024\241\004\260\013\351\376\356\217\341
\156\013\262\010\263\141\146\011\152\261\006\072\145\226\131\300
\360\065\375\311\332\050\215\032\021\207\160\201\012\250\232\165
\035\236\072\206\005\000\236\333\200\326\045\371\334\005\236\047
\131\114\166\071\133\352\371\245\241\330\203\017\321\377\337\060
\021\371\205\317\063\110\365\312\155\144\024\054\172\130\117\323
\113\010\111\305\225\144\032\143\016\171\075\365\263\214\312\130
\255\234\102\105\171\156\016\207\031\134\124\261\145\266\277\214
\233\334\023\351\015\157\270\056\334\147\156\311\213\021\265\204
\024\212\000\031\160\203\171\221\227\221\324\032\047\277\067\036
\062\007\330\024\143\074\050\114\257\002\003\001\000\001\243\143
\060\141\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\035\006\003\125\035\016\004\026\004\024\256\154
\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310\147
\123\240\060\037\006\003\125\035\043\004\030\060\026\200\024\256
\154\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310
\147\123\240\060\015\006\011\052\206\110\206\367\015\001\001\014
\005\000\003\202\002\001\000\203\045\355\350\321\375\225\122\315
\236\300\004\240\221\151\346\134\320\204\336\334\255\242\117\350
\107\170\326\145\230\251\133\250\074\207\174\002\212\321\156\267
\026\163\346\137\300\124\230\325\164\276\301\315\342\021\221\255
\043\030\075\335\341\162\104\226\264\225\136\300\173\216\231\170
\026\103\023\126\127\263\242\263\073\265\167\334\100\162\254\243
\353\233\065\076\261\010\041\241\347\304\103\067\171\062\276\265
\347\234\054\114\274\103\051\231\216\060\323\254\041\340\343\035
\372\330\007\063\166\124\000\042\052\271\115\040\056\160\150\332
\345\123\374\203\134\323\235\362\377\104\014\104\146\362\322\343
\275\106\000\032\155\002\272\045\135\215\241\061\121\335\124\106
\034\115\333\231\226\357\032\034\004\134\246\025\357\170\340\171
\376\135\333\076\252\114\125\375\232\025\251\157\341\246\373\337
\160\060\351\303\356\102\106\355\302\223\005\211\372\175\143\173
\077\320\161\201\174\000\350\230\256\016\170\064\303\045\373\257
\012\237\040\153\335\073\023\217\022\214\342\101\032\110\172\163
\240\167\151\307\266\134\177\202\310\036\376\130\033\050\053\250
\154\255\136\155\300\005\322\173\267\353\200\376\045\067\376\002
\233\150\254\102\135\303\356\365\314\334\360\120\165\322\066\151

```
\234\346\173\004\337\156\006\151\266\336\012\011\110\131\207\353
\173\024\140\172\144\252\151\103\357\221\307\114\354\030\335\154
\357\123\055\214\231\341\136\362\162\076\317\124\310\275\147\354
\244\017\114\105\377\323\271\060\043\007\114\217\020\277\206\226
\331\231\132\264\231\127\034\244\314\273\025\211\123\272\054\005
\017\344\304\236\031\261\030\064\325\114\235\272\355\367\037\257
\044\225\004\170\250\003\273\356\201\345\332\137\174\213\112\241
\220\164\045\247\263\076\113\310\054\126\275\307\310\357\070\342
\134\222\360\171\367\234\204\272\164\055\141\001\040\176\176\321
\362\117\007\131\137\213\055\103\122\353\106\014\224\341\365\146
\107\171\167\325\124\133\037\255\044\067\313\105\132\116\240\104
\110\310\330\260\231\305\025\204\011\366\326\111\111\300\145\270
\346\032\161\156\240\250\361\202\350\105\076\154\326\002\327\012
\147\203\005\132\311\244\020
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root CA - R6"

Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51

Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

Not Valid Before: Wed Dec 10 00:00:00 2014

Not Valid After : Sun Dec 10 00:00:00 2034

Fingerprint (SHA-256):

2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69

Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Root CA - R6"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\200\224\144\016\265\247\241\312\021\234\037\335\325\237\201\002
\143\247\373\321
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\117\335\007\344\324\042\144\071\036\014\067\102\352\321\306\256
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
```

```

END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST
CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "OISTE WISeKey Global Root GC CA"
#
# Issuer: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:2d:3a:ea
# Subject: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Not Valid Before: Tue May 09 09:48:34 2017
# Not Valid After : Fri May 09 09:58:33 2042
# Fingerprint (SHA-256):
85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D
# Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GC CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```

\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055
\072\352

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\002\151\060\202\001\357\240\003\002\001\002\002\020\041
\052\126\014\256\332\014\253\100\105\277\053\242\055\072\352\060
\012\006\010\052\206\110\316\075\004\003\003\060\155\061\013\060
\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003
\125\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040
\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165
\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144
\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105
\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040
\122\157\157\164\040\107\103\040\103\101\060\036\027\015\061\067
\060\065\060\071\060\071\064\070\063\064\132\027\015\064\062\060
\065\060\071\060\071\065\070\063\063\132\060\155\061\013\060\011
\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003\125
\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040\006
\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156
\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061
\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040
\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122
\157\157\164\040\107\103\040\103\101\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\114\351\120\300\306\017\162\030\274\330\361\272\263\211\342
\171\112\243\026\247\153\124\044\333\121\377\352\364\011\044\303
\013\042\237\313\152\047\202\201\015\322\300\257\061\344\164\202
\156\312\045\331\214\165\235\361\333\320\232\242\113\041\176\026
\247\143\220\322\071\324\261\207\170\137\030\226\017\120\033\065
\067\017\152\306\334\331\023\115\244\216\220\067\346\275\133\061
\221\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\110\207\024\254\343\303\236\220\140\072\327\312\211\356\323
\255\214\264\120\146\060\020\006\011\053\006\001\004\001\202\067
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\060\046\307\151\133\334\325
\347\262\347\310\014\214\214\303\335\171\214\033\143\325\311\122
\224\116\115\202\112\163\036\262\200\204\251\045\300\114\132\155
\111\051\140\170\023\342\176\110\353\144\002\061\000\333\064\040
\062\010\377\232\111\002\266\210\336\024\257\135\154\231\161\215
\032\077\213\327\340\242\066\206\034\007\202\072\166\123\375\302
\242\355\357\173\260\200\117\130\017\113\123\071\275

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "OISTE WISeKey Global Root GC CA"

Issuer: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:d:3a:ea

Subject: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

Not Valid Before: Tue May 09

09:48:34 2017

Not Valid After : Fri May 09 09:58:33 2042

Fingerprint (SHA-256):

85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D

Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "OISTE WISeKey Global Root GC CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\340\021\204\136\064\336\276\210\201\271\234\366\026\046\321\226

\037\303\271\061

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\251\326\271\055\057\223\144\370\245\151\312\221\351\150\007\043

END

CKA_ISSUER MULTILINE_OCTAL

\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061

\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145

\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124

\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144

\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037

\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154

\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055

\072\352

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "UCA Global G2 Root"

#

Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN

Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef

```
# Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 11 00:00:00 2016
# Not Valid After : Mon Dec 31 00:00:00 2040
# Fingerprint (SHA-256):
9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C
# Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Global G2 Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\106\060\202\003\056\240\003\002\001\002\002\020\135
\337\261\332\132\243\355\135\276\132\145\040\145\003\220\357\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\075
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164
\061\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107
\154\157\142\141\154\040\107\062\040\122\157\157\164\060\036\027
\015\061\066\060\063\061\061\060\060\060\060\060\060\132\027\015
\064\060\061\062\063\061\060\060\060\060\060\060\132\060\075\061
\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060\017
\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164\061
\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107\154
\157\142\141\154\040\107\062\040\122\157\157\164\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\305\346\053
\157\174\357\046\005\047\243\201\044\332\157\313\001\371\231\232
\251\062\302\042\207\141\101\221\073\313\303\150\033\006\305\114
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\251\053\301\147\027\042\035\053\355\371\051\211\223\242\170\275
\222\153\240\243\015\242\176\312\223\263\246\321\214\065\325\165
\371\027\366\317\105\305\345\172\354\167\223\240\217\043\256\016
\032\003\177\276\324\320\355\056\173\253\106\043\133\377\054\346
\124\172\224\300\052\025\360\311\215\260\172\073\044\341\327\150
\342\061\074\006\063\106\266\124\021\246\245\057\042\124\052\130
\015\001\002\361\372\025\121\147\154\300\372\327\266\033\177\321
\126\210\057\032\072\215\073\273\202\021\340\107\000\320\122\207
\253\373\206\176\017\044\153\100\235\064\147\274\215\307\055\206
\157\171\076\216\251\074\027\113\177\260\231\343\260\161\140\334
\013\365\144\303\316\103\274\155\161\271\322\336\047\133\212\350
\330\306\256\341\131\175\317\050\055\065\270\225\126\032\361\262
\130\113\267\022\067\310\174\263\355\113\200\341\215\372\062\043
\266\157\267\110\225\010\261\104\116\205\214\072\002\124\040\057
\337\277\127\117\073\072\220\041\327\301\046\065\124\040\354\307
\077\107\354\357\132\277\113\172\301\255\073\027\120\134\142\330
\017\113\112\334\053\372\156\274\163\222\315\354\307\120\350\101
\226\327\251\176\155\330\351\035\217\212\265\271\130\222\272\112
\222\053\014\126\375\200\353\010\360\136\051\156\033\034\014\257
\217\223\211\255\333\275\243\236\041\312\211\031\354\337\265\303
\032\353\026\376\170\066\114\326\156\320\076\027\034\220\027\153
\046\272\373\172\057\277\021\034\030\016\055\163\003\217\240\345
\065\240\132\342\114\165\035\161\341\071\070\123\170\100\314\203
\223\327\012\236\235\133\217\212\344\345\340\110\344\110\262\107
\315\116\052\165\052\173\362\042\366\311\276\011\221\226\127\172
\210\210\254\356\160\254\371\334\051\343\014\034\073\022\116\104
\326\247\116\260\046\310\363\331\032\227\221\150\352\357\215\106
\006\322\126\105\130\232\074\014\017\203\270\005\045\303\071\317
\073\244\064\211\267\171\022\057\107\305\347\251\227\151\374\246
\167\147\265\337\173\361\172\145\025\344\141\126\145\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\201\304\214\314\365\344\060\377\245\014\010\137\214\025
\147\041\164\001\337\337\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\002\001\000\023\145\042\365\216\053
\255\104\344\313\377\271\150\346\303\200\110\075\004\173\372\043
\057\172\355\066\332\262\316\155\366\346\236\345\137\130\217\313
\067\062\241\310\145\266\256\070\075\065\033\076\274\073\266\004
\320\274\371\111\365\233\367\205\305\066\266\313\274\370\310\071
\325\344\137\007\275\025\124\227\164\312\312\355\117\272\272\144
\166\237\201\270\204\105\111\114\215\157\242\353\261\314\321\303
\224\332\104\302\346\342\352\030\350\242\037\047\005\272\327\345
\326\251\315\335\357\166\230\215\000\016\315\033\372\003\267\216
\200\130\016\047\077\122\373\224\242\312\136\145\311\326\204\332
\271\065\161\363\046\300\117\167\346\201\047\322\167\073\232\024
\157\171\364\366\320\341\323\224\272\320\127\121\275\047\005\015
\301\375\310\022\060\356\157\215\021\053\010\235\324\324\277\200

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\105\024\232\210\104\332\060\352\264\247\343\356\357\133\202\325
\076\326\255\170\222\333\134\074\363\330\255\372\270\153\177\304
\066\050\266\002\025\212\124\054\234\260\027\163\216\320\067\243
\024\074\230\225\000\014\051\005\133\236\111\111\261\137\307\343
\313\317\047\145\216\065\027\267\127\310\060\331\101\133\271\024
\266\350\302\017\224\061\247\224\230\314\152\353\265\341\047\365
\020\250\001\350\216\022\142\350\210\314\265\177\106\227\300\233
\020\146\070\032\066\106\137\042\150\075\337\311\306\023\047\253
\123\006\254\242\074\206\006\145\157\261\176\261\051\104\232\243
\272\111\151\050\151\217\327\345\137\255\004\206\144\157\032\240
\014\305\010\142\316\200\243\320\363\354\150\336\276\063\307\027
\133\177\200\304\114\114\261\246\204\212\303\073\270\011\315\024
\201\272\030\343\124\127\066\376\333\057\174\107\241\072\063\310
\371\130\073\104\117\261\312\002\211\004\226\050\150\305\113\270
\046\211\273\326\063\057\120\325\376\232\211\272\030\062\222\124
\306\133\340\235\371\136\345\015\042\233\366\332\342\310\041\262
\142\041\252\206\100\262\056\144\323\137\310\343\176\021\147\105
\037\005\376\343\242\357\263\250\263\363\175\217\370\014\037\042
\037\055\160\264\270\001\064\166\060\000\345\043\170\247\126\327
\120\037\212\373\006\365\302\031\360\320
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "UCA Global G2 Root"

Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN

Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef

Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN

Not Valid Before: Fri Mar 11 00:00:00 2016

Not Valid After : Mon Dec 31 00:00:00 2040

Fingerprint (SHA-256):

9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C

Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "UCA Global G2 Root"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\050\371\170\026\031\172\377\030\045\030\252\104\376\301\240\316
\134\266\114\212
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\200\376\360\304\112\360\134\142\062\237\034\272\170\251\120\370
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "UCA Extended Validation Root"
#
# Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60
# Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 13 00:00:00 2015
# Not Valid After : Fri Dec 31 00:00:00 2038
# Fingerprint (SHA-256):
D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24
# Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Extended Validation Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164

```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043
\160\140

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\132\060\202\003\102\240\003\002\001\002\002\020\117
\322\053\217\365\144\310\063\236\117\064\130\146\043\160\140\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\107
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164
\061\045\060\043\006\003\125\004\003\014\034\125\103\101\040\105
\170\164\145\156\144\145\144\040\126\141\154\151\144\141\164\151
\157\156\040\122\157\157\164\060\036\027\015\061\065\060\063\061
\063\060\060\060\060\060\060\132\027\015\063\070\061\062\063\061
\060\060\060\060\060\060\132\060\107\061\013\060\011\006\003\125
\004\006\023\002\103\116\061\021\060\017\006\003\125\004\012\014
\010\125\156\151\124\162\165\163\164\061\045\060\043\006\003\125
\004\003\014\034\125\103\101\040\105\170\164\145\156\144\145\144
\040\126\141\154\151\144\141\164\151\157\156\040\122\157\157\164
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\251\011\007\050\023\002\260\231\340\144\252\036\103\026\172
\163\261\221\240\165\076\250\372\343\070\000\172\354\211\152\040
\017\213\305\260\233\063\003\132\206\306\130\206\325\301\205\273
\117\306\234\100\115\312\276\356\151\226\270\255\201\060\232\174
\222\005\353\005\053\232\110\320\270\166\076\226\310\040\273\322
\260\361\217\330\254\105\106\377\252\147\140\264\167\176\152\037
\074\032\122\172\004\075\007\074\205\015\204\320\037\166\012\367
\152\024\337\162\343\064\174\127\116\126\001\076\171\361\252\051
\073\154\372\370\217\155\115\310\065\337\256\353\334\044\356\171
\105\247\205\266\005\210\336\210\135\045\174\227\144\147\011\331
\277\132\025\005\206\363\011\036\354\130\062\063\021\363\167\144
\260\166\037\344\020\065\027\033\362\016\261\154\244\052\243\163
\374\011\037\036\062\031\123\021\347\331\263\054\056\166\056\241
\243\336\176\152\210\011\350\362\007\212\370\262\315\020\347\342
\163\100\223\273\010\321\077\341\374\013\224\263\045\357\174\246
\327\321\257\237\377\226\232\365\221\173\230\013\167\324\176\350
\007\322\142\265\225\071\343\363\361\155\017\016\145\204\212\143
\124\305\200\266\340\236\113\175\107\046\247\001\010\135\321\210
\236\327\303\062\104\372\202\112\012\150\124\177\070\123\003\314
\244\000\063\144\121\131\013\243\202\221\172\136\354\026\302\363
\052\346\142\332\052\333\131\142\020\045\112\052\201\013\107\007
\103\006\160\207\322\372\223\021\051\172\110\115\353\224\307\160
\115\257\147\325\121\261\200\040\001\001\264\172\010\246\220\177
\116\340\357\007\101\207\257\152\245\136\213\373\317\120\262\232
\124\257\303\211\272\130\055\365\060\230\261\066\162\071\176\111
\004\375\051\247\114\171\344\005\127\333\224\271\026\123\215\106

\263\035\225\141\127\126\177\257\360\026\133\141\130\157\066\120
\021\013\330\254\053\225\026\032\016\037\010\315\066\064\145\020
\142\146\325\200\137\024\040\137\055\014\240\170\012\150\326\054
\327\351\157\053\322\112\005\223\374\236\157\153\147\377\210\361
\116\245\151\112\122\067\005\352\306\026\215\322\304\231\321\202
\053\073\272\065\165\367\121\121\130\363\310\007\335\344\264\003
\177\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035
\016\004\026\004\024\331\164\072\344\060\075\015\367\022\334\176
\132\005\237\036\064\232\367\341\024\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\066\215
\227\314\102\025\144\051\067\233\046\054\326\373\256\025\151\054
\153\032\032\367\137\266\371\007\114\131\352\363\311\310\271\256
\314\272\056\172\334\300\365\260\055\300\073\257\237\160\005\021
\152\237\045\117\001\051\160\343\345\014\341\352\132\174\334\111
\273\301\036\052\201\365\026\113\162\221\310\242\061\271\252\332
\374\235\037\363\135\100\002\023\374\116\034\006\312\263\024\220
\124\027\031\022\032\361\037\327\014\151\132\366\161\170\364\224
\175\221\013\216\354\220\124\216\274\157\241\114\253\374\164\144
\375\161\232\370\101\007\241\315\221\344\074\232\340\233\062\071
\163\253\052\325\151\310\170\221\046\061\175\342\307\060\361\374
\024\170\167\022\016\023\364\335\026\224\277\113\147\173\160\123
\205\312\260\273\363\070\115\054\220\071\300\015\302\135\153\351
\342\345\325\210\215\326\054\277\253\033\276\265\050\207\022\027
\164\156\374\175\374\217\320\207\046\260\033\373\271\154\253\342
\236\075\025\301\073\056\147\002\130\221\237\357\370\102\037\054
\267\150\365\165\255\317\265\366\377\021\175\302\360\044\245\255
\323\372\240\074\251\372\135\334\245\240\357\104\244\276\326\350
\345\344\023\226\027\173\006\076\062\355\307\267\102\274\166\243
\330\145\070\053\070\065\121\041\016\016\157\056\064\023\100\341
\053\147\014\155\112\101\060\030\043\132\062\125\231\311\027\340
\074\336\366\354\171\255\053\130\031\242\255\054\042\032\225\216
\276\226\220\135\102\127\304\371\024\003\065\053\034\055\121\127
\010\247\072\336\077\344\310\264\003\163\302\301\046\200\273\013
\102\037\255\015\257\046\162\332\314\276\263\243\203\130\015\202
\305\037\106\121\343\234\030\314\215\233\215\354\111\353\165\120
\325\214\050\131\312\164\064\332\214\013\041\253\036\352\033\345
\307\375\025\076\300\027\252\373\043\156\046\106\313\372\371\261
\162\153\151\317\042\204\013\142\017\254\331\031\000\224\242\166
\074\324\055\232\355\004\236\055\006\142\020\067\122\034\205\162
\033\047\345\314\306\061\354\067\354\143\131\233\013\035\166\314
\176\062\232\210\225\010\066\122\273\336\166\137\166\111\111\255
\177\275\145\040\262\311\301\053\166\030\166\237\126\261

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "UCA Extended Validation Root"

Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN

Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60

Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN

Not Valid Before: Fri Mar 13 00:00:00 2015

Not Valid After : Fri Dec 31 00:00:00 2038

Fingerprint (SHA-256):

D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24

Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL

UTF8 "UCA Extended Validation Root"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\243\241\260\157\044\141\043\112\343\066\245\302\067\374\246\377
\335\360\327\072

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\241\363\137\103\306\064\233\332\277\214\176\005\123\255\226\342
END

CKA_ISSUER MULTILINE_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043
\160\140

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Certigna Root CA"

#

Issuer: CN=Certigna Root

CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1

Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

Not Valid Before: Tue Oct 01 08:32:27 2013


```
# Not Valid After : Sat Oct 01 08:32:27 2033
# Fingerprint (SHA-256):
D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68
# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304
\343\246\341
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\133\060\202\004\103\240\003\002\001\002\002\021\000
\312\351\033\211\361\125\003\015\243\346\101\155\304\343\246\341
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061\022
\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157\164
\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060\060
\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063\066
\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164\151
\147\156\141\040\122\157\157\164\040\103\101\060\036\027\015\061
\063\061\060\060\061\060\070\063\062\062\067\132\027\015\063\063
\061\060\060\061\060\070\063\062\062\067\132\060\132\061\013\060
\011\006\003\125\004\006\023\002\106\122\061\022\060\020\006\003
\125\004\012\014\011\104\150\151\155\171\157\164\151\163\061\034
\060\032\006\003\125\004\013\014\023\060\060\060\062\040\064\070
\061\064\066\063\060\070\061\060\060\060\063\066\061\031\060\027
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\006\003\125\004\003\014\020\103\145\162\164\151\147\156\141\040
\122\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\315\030\071\145\032\131\261\352
\144\026\016\214\224\044\225\174\203\323\305\071\046\334\014\357
\026\127\215\327\330\254\243\102\177\202\312\355\315\133\333\016
\267\055\355\105\010\027\262\331\263\313\326\027\122\162\050\333
\216\116\236\212\266\013\371\236\204\232\115\166\336\042\051\134
\322\263\322\006\076\060\071\251\164\243\222\126\034\241\157\114
\012\040\155\237\043\172\264\306\332\054\344\035\054\334\263\050
\320\023\362\114\116\002\111\241\124\100\236\346\345\005\240\055
\204\310\377\230\154\320\353\212\032\204\010\036\267\150\043\356
\043\325\160\316\155\121\151\020\356\241\172\302\321\042\061\302
\202\205\322\362\125\166\120\174\045\172\311\204\134\013\254\335
\102\116\053\347\202\242\044\211\313\220\262\320\356\043\272\146
\114\273\142\244\371\123\132\144\173\174\230\372\243\110\236\017
\225\256\247\030\364\152\354\056\003\105\257\360\164\370\052\315
\172\135\321\276\104\046\062\051\361\361\365\154\314\176\002\041
\013\237\157\244\077\276\235\123\342\317\175\251\054\174\130\032
\227\341\075\067\067\030\146\050\322\100\305\121\212\214\303\055
\316\123\210\044\130\144\060\026\305\252\340\326\012\246\100\337
\170\366\365\004\174\151\023\204\274\321\321\247\006\317\001\367
\150\300\250\127\273\072\141\255\004\214\223\343\255\374\360\333
\104\155\131\334\111\131\256\254\232\231\066\060\101\173\166\063
\042\207\243\302\222\206\156\371\160\356\256\207\207\225\033\304
\172\275\061\363\324\322\345\231\377\276\110\354\165\365\170\026
\035\246\160\301\177\074\033\241\222\373\317\310\074\326\305\223
\012\217\365\125\072\166\225\316\131\230\212\011\225\167\062\232
\203\272\054\004\072\227\275\324\057\276\327\154\233\242\312\175
\155\046\311\125\325\317\303\171\122\010\011\231\007\044\055\144
\045\153\246\041\151\233\152\335\164\115\153\227\172\101\275\253
\027\371\220\027\110\217\066\371\055\325\305\333\356\252\205\105
\101\372\315\072\105\261\150\346\066\114\233\220\127\354\043\271
\207\010\302\304\011\361\227\206\052\050\115\342\164\300\332\304
\214\333\337\342\241\027\131\316\044\131\164\061\332\177\375\060
\155\331\334\341\152\341\374\137\002\003\001\000\001\243\202\001
\032\060\202\001\026\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004
\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037\326
\341\342\171\176\053\060\037\006\003\125\035\043\004\030\060\026
\200\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037
\326\341\342\171\176\053\060\104\006\003\125\035\040\004\075\060
\073\060\071\006\004\125\035\040\000\060\061\060\057\006\010\053
\006\001\005\005\007\002\001\026\043\150\164\164\160\163\072\057
\057\167\167\167\167\056\143\145\162\164\151\147\156\141\056\146
\162\057\141\165\164\157\162\151\164\145\163\057\060\155\006\003
\125\035\037\004\146\060\144\060\057\240\055\240\053\206\051\150

\164\164\160\072\057\057\143\162\154\056\143\145\162\164\151\147
\156\141\056\146\162\057\143\145\162\164\151\147\156\141\162\157
\157\164\143\141\056\143\162\154\060\061\240\057\240\055\206\053
\150\164\164\160\072\057\057\143\162\154\056\144\150\151\155\171
\157\164\151\163\056\143\157\155\057\143\145\162\164\151\147\156
\141\162\157\157\164\143\141\056\143\162\154\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\224
\270\236\117\360\343\225\010\042\347\315\150\101\367\034\125\325
\174\000\342\055\072\211\135\150\070\057\121\042\013\112\215\313
\351\273\135\076\273\134\075\261\050\376\344\123\125\023\317\241
\220\033\002\035\137\146\106\011\063\050\341\015\044\227\160\323
\020\037\352\144\127\226\273\135\332\347\304\214\117\114\144\106
\035\134\207\343\131\336\102\321\233\250\176\246\211\335\217\034
\311\060\202\355\073\234\315\300\351\031\340\152\330\002\165\067
\253\367\064\050\050\221\362\004\012\117\065\343\140\046\001\372
\320\021\214\371\021\152\356\257\075\303\120\323\217\137\063\171
\074\206\250\163\105\220\214\040\266\162\163\027\043\276\007\145
\345\170\222\015\272\001\300\353\214\034\146\277\254\206\167\001
\224\015\234\346\351\071\215\037\246\121\214\231\014\071\167\341
\264\233\372\034\147\127\157\152\152\216\251\053\114\127\171\172
\127\042\317\315\137\143\106\215\134\131\072\206\370\062\107\142
\243\147\015\030\221\334\373\246\153\365\110\141\163\043\131\216
\002\247\274\104\352\364\111\235\361\124\130\371\140\257\332\030
\244\057\050\105\334\172\240\210\206\135\363\073\347\377\051\065
\200\374\144\103\224\346\343\034\157\276\255\016\052\143\231\053
\311\176\205\366\161\350\006\003\225\376\336\217\110\034\132\324
\222\350\053\356\347\061\333\272\004\152\207\230\347\305\137\357
\175\247\042\367\001\330\115\371\211\320\016\232\005\131\244\236
\230\331\157\053\312\160\276\144\302\125\243\364\351\257\303\222
\051\334\210\026\044\231\074\215\046\230\266\133\267\314\316\267
\067\007\375\046\331\230\205\044\377\131\043\003\232\355\235\235
\250\344\136\070\316\327\122\015\157\322\077\155\261\005\153\111
\316\212\221\106\163\364\366\057\360\250\163\167\016\145\254\241
\215\146\122\151\176\113\150\014\307\036\067\047\203\245\214\307
\002\344\024\315\111\001\260\163\263\375\306\220\072\157\322\154
\355\073\356\354\221\276\242\103\135\213\000\112\146\045\104\160
\336\100\017\370\174\025\367\242\316\074\327\136\023\214\201\027
\030\027\321\275\361\167\020\072\324\145\071\301\047\254\127\054
\045\124\377\242\332\117\212\141\071\136\256\075\112\214\275

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certigna Root CA"

Issuer: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1

```
# Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR
# Not Valid Before: Tue Oct 01 08:32:27 2013
# Not Valid After : Sat Oct 01 08:32:27 2033
# Fingerprint (SHA-256):
D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68
# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\055\015\122\024\377\236\255\231\044\001\164\040\107\156\154\205
\047\047\365\103
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\016\134\060\142\047\353\133\274\327\256\142\272\351\325\337\167
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304
\343\246\341
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign Root CA - G1"
#
# Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8
# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\012\061\365\344\142\014\154\130\355\326\330
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\224\060\202\002\174\240\003\002\001\002\002\012\061
\365\344\142\014\154\130\355\326\330\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\060\147\061\013\060\011\006\003
\125\004\006\023\002\111\116\061\023\060\021\006\003\125\004\013
\023\012\145\155\123\151\147\156\040\120\113\111\061\045\060\043
\006\003\125\004\012\023\034\145\115\165\144\150\162\141\040\124
\145\143\150\156\157\154\157\147\151\145\163\040\114\151\155\151
\164\145\144\061\034\060\032\006\003\125\004\003\023\023\145\155
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\107
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034
\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157
\147\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032
\006\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157
\157\164\040\103\101\040\055\040\107\061\060\202\001\042\060\015
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\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001
\017\000\060\202\001\012\002\202\001\001\000\223\113\273\351\146
\212\356\235\133\325\064\223\320\033\036\303\347\236\270\144\063
\177\143\170\150\264\315\056\161\165\327\233\040\306\115\051\274
\266\150\140\212\367\041\232\126\065\132\363\166\275\330\315\232
\377\223\126\113\245\131\006\241\223\064\051\335\026\064\165\116
\362\201\264\307\226\116\255\031\025\122\112\376\074\160\165\160
\315\257\053\253\025\232\063\074\252\263\213\252\315\103\375\365
\352\160\377\355\317\021\073\224\316\116\062\026\323\043\100\052
\167\263\257\074\001\054\154\355\231\054\213\331\116\151\230\262
\367\217\101\260\062\170\141\326\015\137\303\372\242\100\222\035
\134\027\346\160\076\065\347\242\267\302\142\342\253\244\070\114
\265\071\065\157\352\003\151\372\072\124\150\205\155\326\362\057
\103\125\036\221\015\016\330\325\152\244\226\321\023\074\054\170
\120\350\072\222\322\027\126\345\065\032\100\034\076\215\054\355
\071\337\102\340\203\101\164\337\243\315\302\206\140\110\150\343
\151\013\124\000\213\344\166\151\041\015\171\116\064\010\136\024
\302\314\261\267\255\327\174\160\212\307\205\002\003\001\000\001
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\373
\357\015\206\236\260\343\335\251\271\361\041\027\177\076\374\360
\167\053\032\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\001\001\000\131\377\362\214\365\207\175\161
\075\243\237\033\133\321\332\370\323\234\153\066\275\233\251\141
\353\336\026\054\164\075\236\346\165\332\327\272\247\274\102\027
\347\075\221\353\345\175\335\076\234\361\317\222\254\154\110\314
\302\042\077\151\073\305\266\025\057\243\065\306\150\052\034\127
\257\071\357\215\320\065\303\030\014\173\000\126\034\315\213\031
\164\336\276\017\022\340\320\252\241\077\002\064\261\160\316\235
\030\326\010\003\011\106\356\140\340\176\266\304\111\004\121\175
\160\140\274\252\262\377\171\162\172\246\035\075\137\052\370\312
\342\375\071\267\107\271\353\176\337\004\043\257\372\234\006\007
\351\373\143\223\200\100\265\306\154\012\061\050\316\014\237\317
\263\043\065\200\101\215\154\304\067\173\201\057\200\241\100\102
\205\351\331\070\215\350\241\123\315\001\277\151\350\132\006\362
\105\013\220\372\256\341\277\235\362\256\127\074\245\256\262\126
\364\213\145\100\351\375\061\201\054\364\071\011\330\356\153\247
\264\246\035\025\245\230\367\001\201\330\205\175\363\121\134\161
\210\336\272\314\037\200\176\112

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "emSign Root CA - G1"

Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

```

# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8
# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies
Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\212\307\255\217\163\254\116\301\265\165\115\245\100\364\374\317
\174\265\216\214
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\234\102\204\127\335\313\013\247\056\225\255\266\363\332\274\254
END
CKA_ISSUER MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\061\365\344\142\014\154\130\355\326\330
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign ECC Root CA - G3"
#
# Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84
# Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B

```

Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign ECC Root CA - G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\074\366\007\251\150\160\016\332\213\204

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\116\060\202\001\323\240\003\002\001\002\002\012\074
\366\007\251\150\160\016\332\213\204\060\012\006\010\052\206\110
\316\075\004\003\003\060\153\061\013\060\011\006\003\125\004\006
\023\002\111\116\061\023\060\021\006\003\125\004\013\023\012\145
\155\123\151\147\156\040\120\113\111\061\045\060\043\006\003\125
\004\012\023\034\145\115\165\144\150\162\141\040\124\145\143\150
\156\157\154\157\147\151\145\163\040\114\151\155\151\164\145\144
\061\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040
\107\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060
\060\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060
\060\132\060\153\061\013\060\011\006\003\125\004\006\023\002\111
\116\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151
\147\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023
\034\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154
\157\147\151\145\163\040\114\151\155\151\164\145\144\061\040\060


```
\036\006\003\125\004\003\023\027\145\155\123\151\147\156\040\105
\103\103\040\122\157\157\164\040\103\101\040\055\040\107\063\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\043\245\014\270\055\022\365\050\363
\261\262\335\342\002\022\200\236\071\137\111\115\237\311\045\064
\131\164\354\273\006\034\347\300\162\257\350\256\057\341\101\124
\207\024\250\112\262\350\174\202\346\133\152\265\334\263\165\316
\213\006\320\206\043\277\106\325\216\017\077\004\364\327\034\222
\176\366\245\143\302\365\137\216\056\117\241\030\031\002\053\062
\012\202\144\175\026\223\321\243\102\060\100\060\035\006\003\125
\035\016\004\026\004\024\174\135\002\204\023\324\314\212\233\201
\316\027\034\056\051\036\234\110\143\102\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\276
\363\141\317\002\020\035\144\225\007\270\030\156\210\205\005\057
\203\010\027\220\312\037\212\114\350\015\033\172\261\255\325\201
\011\107\357\073\254\010\004\174\134\231\261\355\107\007\322\002
\061\000\235\272\125\374\251\112\350\355\355\346\166\001\102\173
\310\370\140\331\215\121\213\125\073\373\214\173\353\145\011\303
\370\226\315\107\250\202\362\026\125\167\044\176\022\020\225\004
\054\243
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "emSign ECC Root CA - G3"

Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies
Limited,OU=emSign PKI,C=IN

Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84

Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

Not Valid Before: Sun Feb 18 18:30:00 2018

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B

Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign ECC Root CA - G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\060\103\372\117\362\127\334\240\303\200\356\056\130\352\170\262
\077\346\273\301
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\316\013\162\321\237\210\216\320\120\003\350\343\270\213\147\100

END

CKA_ISSUER MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145

\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147

\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006

\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103

\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\074\366\007\251\150\160\016\332\213\204

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "emSign Root CA - C1"

#

Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2

Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Not Valid Before: Sun Feb 18 18:30:00 2018

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F

#

Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign Root CA - C1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003

\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164

\040\103\101\040\055\040\103\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164
\040\103\101\040\055\040\103\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\013\000\256\317\000\272\304\317\062\370\103\262

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\163\060\202\002\133\240\003\002\001\002\002\013\000
\256\317\000\272\304\317\062\370\103\262\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\126\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\023\060\021\006\003\125\004
\013\023\012\145\155\123\151\147\156\040\120\113\111\061\024\060
\022\006\003\125\004\012\023\013\145\115\165\144\150\162\141\040
\111\156\143\061\034\060\032\006\003\125\004\003\023\023\145\155
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\103
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013
\145\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\103\061\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\317\353\251\271\361\231
\005\314\330\050\041\112\363\163\064\121\204\126\020\365\240\117
\054\022\343\372\023\232\047\320\317\371\171\032\164\137\035\171
\071\374\133\370\160\216\340\222\122\367\344\045\371\124\203\331
\035\323\310\132\205\077\136\307\266\007\356\076\300\316\232\257
\254\126\102\052\071\045\160\326\277\265\173\066\255\254\366\163
\334\315\327\035\212\203\245\373\053\220\025\067\153\034\046\107
\334\073\051\126\223\152\263\301\152\072\235\075\365\301\227\070
\130\005\213\034\021\343\344\264\270\135\205\035\203\376\170\137
\013\105\150\030\110\245\106\163\064\073\376\017\310\166\273\307
\030\363\005\321\206\363\205\355\347\271\331\062\255\125\210\316
\246\266\221\260\117\254\176\025\043\226\366\077\360\040\064\026
\336\012\306\304\004\105\171\177\247\375\276\322\251\245\257\234
\305\043\052\367\074\041\154\275\257\217\116\305\072\262\363\064
\022\374\337\200\032\111\244\324\251\225\367\236\211\136\242\211
\254\224\313\250\150\233\257\212\145\047\315\211\356\335\214\265
\153\051\160\103\240\151\013\344\271\017\002\003\001\000\001\243
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\376\241
\340\160\036\052\003\071\122\132\102\276\134\221\205\172\030\252

```
\115\265\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\302\112\126\372\025\041\173\050\242
\351\345\035\373\370\055\304\071\226\101\114\073\047\054\304\154
\030\025\200\306\254\257\107\131\057\046\013\343\066\260\357\073
\376\103\227\111\062\231\022\025\133\337\021\051\377\253\123\370
\273\301\170\017\254\234\123\257\127\275\150\214\075\151\063\360
\243\240\043\143\073\144\147\042\104\255\325\161\313\126\052\170
\222\243\117\022\061\066\066\342\336\376\000\304\243\140\017\047
\255\240\260\212\265\066\172\122\241\275\047\364\040\047\142\350
\115\224\044\023\344\012\004\351\074\253\056\310\103\011\112\306
\141\004\345\111\064\176\323\304\310\365\017\300\252\351\272\124
\136\363\143\053\117\117\120\324\376\271\173\231\214\075\300\056
\274\002\053\323\304\100\344\212\007\061\036\233\316\046\231\023
\373\021\352\232\042\014\021\031\307\136\033\201\120\060\310\226
\022\156\347\313\101\177\221\073\242\107\267\124\200\033\334\000
\314\232\220\352\303\303\120\006\142\014\060\300\025\110\247\250
\131\174\341\256\042\242\342\012\172\017\372\142\253\122\114\341
\361\337\312\276\203\015\102
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "emSign Root CA - C1"

Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2

Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Not Valid Before: Sun Feb 18 18:30:00 2018

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F

Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign Root CA - C1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\347\056\361\337\374\262\011\050\317\135\324\325\147\067\261\121

\313\206\117\001

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\330\343\135\001\041\372\170\132\260\337\272\322\356\052\137\150

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164
\040\103\101\040\055\040\103\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\000\256\317\000\272\304\317\062\370\103\262
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign ECC Root CA - C3"
#
# Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8
# Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3
#
Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:1F:60:15:0C:EE:48:66
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign ECC Root CA - C3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

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\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\173\161\266\202\126\270\022\174\234\250

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\053\060\202\001\261\240\003\002\001\002\002\012\173
\161\266\202\126\270\022\174\234\250\060\012\006\010\052\206\110
\316\075\004\003\003\060\132\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\023\060\021\006\003\125\004\013\023\012\145
\155\123\151\147\156\040\120\113\111\061\024\060\022\006\003\125
\004\012\023\013\145\115\165\144\150\162\141\040\111\156\143\061
\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147\156
\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040\103
\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013
\145\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\103\063\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\375\245\141\256\173\046\020\035\351\267\042
\060\256\006\364\201\263\261\102\161\225\071\274\323\122\343\257
\257\371\362\227\065\222\066\106\016\207\225\215\271\071\132\351
\273\337\320\376\310\007\101\074\273\125\157\203\243\152\373\142
\260\201\211\002\160\175\110\305\112\343\351\042\124\042\115\223
\273\102\014\257\167\234\043\246\175\327\141\021\316\145\307\370
\177\376\365\362\251\243\102\060\100\060\035\006\003\125\035\016
\004\026\004\024\373\132\110\320\200\040\100\362\250\351\000\007
\151\031\167\247\346\303\364\317\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001
\001\377\004\005\060\003\001\001\377\060\012\006\010\052\206\110
\316\075\004\003\003\003\150\000\060\145\002\061\000\264\330\057
\002\211\375\266\114\142\272\103\116\023\204\162\265\256\335\034
\336\326\265\334\126\217\130\100\132\055\336\040\114\042\203\312
\223\250\176\356\022\100\307\326\207\117\370\337\205\002\060\034
\024\144\344\174\226\203\021\234\260\321\132\141\113\246\017\111
\323\000\374\241\374\344\245\377\177\255\327\060\320\307\167\177
\276\201\007\125\060\120\040\024\365\127\070\012\250\061\121

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "emSign ECC Root CA - C3"

Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8

Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

Not Valid Before: Sun Feb 18 18:30:00 2018

#

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3

Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:1F:60:15:0C:EE:48:66

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign ECC Root CA - C3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\266\257\103\302\233\201\123\175\366\357\153\303\037\037\140\025

\014\356\110\146

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\076\123\263\243\201\356\327\020\370\323\260\035\027\222\365\325

END

CKA_ISSUER MULTILINE_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003

\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040

\122\157\157\164\040\103\101\040\055\040\103\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\173\161\266\202\126\270\022\174\234\250

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Hongkong Post Root CA 3"

#

Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4

Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Not Valid Before: Sat Jun 03 02:29:46 2017

```
# Not Valid After : Tue Jun 03 02:29:46 2042
# Fingerprint (SHA-256):
5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6
# Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\317\060\202\003\267\240\003\002\001\002\002\024\010
\026\137\212\114\245\354\000\311\223\100\337\304\306\256\043\270
\034\132\244\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\157\061\013\060\011\006\003\125\004\006\023\002\110
\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156\147
\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023\011
\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003\125
\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163
\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147
\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103
```


\101\040\063\060\036\027\015\061\067\060\066\060\063\060\062\062
\071\064\066\132\027\015\064\062\060\066\060\063\060\062\062\071
\064\066\132\060\157\061\013\060\011\006\003\125\004\006\023\002
\110\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156
\147\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023
\011\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003
\125\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157
\163\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156
\147\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040
\103\101\040\063\060\202\002\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012
\002\202\002\001\000\263\210\327\352\316\017\040\116\276\346\326
\003\155\356\131\374\302\127\337\051\150\241\203\016\076\150\307
\150\130\234\034\140\113\211\103\014\271\324\025\262\356\301\116
\165\351\265\247\357\345\351\065\231\344\314\034\347\113\137\215
\063\060\040\063\123\331\246\273\325\076\023\216\351\037\207\111
\255\120\055\120\312\030\276\001\130\242\023\160\226\273\211\210
\126\200\134\370\275\054\074\341\114\127\210\273\323\271\225\357
\313\307\366\332\061\164\050\246\346\124\211\365\101\061\312\345
\046\032\315\202\340\160\332\073\051\273\325\003\365\231\272\125
\365\144\321\140\016\263\211\111\270\212\057\005\322\204\105\050
\174\217\150\120\022\170\374\013\265\123\313\302\230\034\204\243
\236\260\276\043\244\332\334\310\053\036\332\156\105\036\211\230
\332\371\000\056\006\351\014\073\160\325\120\045\210\231\313\315
\163\140\367\325\377\065\147\305\241\274\136\253\315\112\270\105
\353\310\150\036\015\015\024\106\022\343\322\144\142\212\102\230
\274\264\306\010\010\370\375\250\114\144\234\166\001\275\057\251
\154\063\017\330\077\050\270\074\151\001\102\206\176\151\301\311
\006\312\345\172\106\145\351\302\326\120\101\056\077\267\344\355
\154\327\277\046\001\021\242\026\051\112\153\064\006\220\354\023
\322\266\373\152\166\322\074\355\360\326\055\335\341\025\354\243
\233\057\054\311\076\053\344\151\073\377\162\045\261\066\206\133
\307\177\153\213\125\033\112\305\040\141\075\256\313\120\341\010
\072\276\260\217\143\101\123\060\010\131\074\230\035\167\272\143
\221\172\312\020\120\140\277\360\327\274\225\207\217\227\305\376
\227\152\001\224\243\174\133\205\035\052\071\072\320\124\241\321
\071\161\235\375\041\371\265\173\360\342\340\002\217\156\226\044
\045\054\240\036\054\250\304\211\247\357\355\231\006\057\266\012
\114\117\333\242\314\067\032\257\107\205\055\212\137\304\064\064
\114\000\375\030\223\147\023\321\067\346\110\264\213\006\305\127
\173\031\206\012\171\313\000\311\122\257\102\377\067\217\341\243
\036\172\075\120\253\143\006\347\025\265\077\266\105\067\224\067
\261\176\362\110\303\177\305\165\376\227\215\105\217\032\247\032
\162\050\032\100\017\002\003\001\000\001\243\143\060\141\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\037\006\003\125\035\043\004\030\060\026\200\024\027\235\315\036
\213\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141

\060\035\006\003\125\035\016\004\026\004\024\027\235\315\036\213
\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\002\001\000\126\325\173\156\346\042\001\322\102\233\030\325\016
\327\146\043\134\343\376\240\307\222\322\351\224\255\113\242\306
\354\022\174\164\325\110\322\131\024\231\300\353\271\321\353\364
\110\060\133\255\247\127\163\231\251\323\345\267\321\056\131\044
\130\334\150\056\056\142\330\152\344\160\013\055\040\120\040\244
\062\225\321\000\230\273\323\375\367\062\362\111\256\306\172\340
\107\276\156\316\313\243\162\072\055\151\135\313\310\350\105\071
\324\372\102\301\021\114\167\135\222\373\152\377\130\104\345\353
\201\236\257\240\231\255\276\251\001\146\313\070\035\074\337\103
\037\364\115\156\264\272\027\106\374\175\375\207\201\171\152\015
\063\017\372\057\370\024\271\200\263\135\115\252\227\341\371\344
\030\305\370\325\070\214\046\074\375\362\050\342\356\132\111\210
\054\337\171\075\216\236\220\074\275\101\112\072\335\133\366\232
\264\316\077\045\060\177\062\175\242\003\224\320\334\172\241\122
\336\156\223\215\030\046\375\125\254\275\217\233\322\317\257\347
\206\054\313\037\011\157\243\157\251\204\324\163\277\115\241\164
\033\116\043\140\362\314\016\252\177\244\234\114\045\250\262\146
\073\070\377\331\224\060\366\162\204\276\150\125\020\017\306\163
\054\026\151\223\007\376\261\105\355\273\242\125\152\260\332\265
\112\002\045\047\205\327\267\267\206\104\026\211\154\200\053\076
\227\251\234\325\176\125\114\306\336\105\020\034\352\351\073\237
\003\123\356\356\172\001\002\026\170\324\350\302\276\106\166\210
\023\077\042\273\110\022\035\122\000\264\002\176\041\032\036\234
\045\364\363\075\136\036\322\034\371\263\055\266\367\067\134\306
\313\041\116\260\367\231\107\030\205\301\053\272\125\256\006\352
\320\007\262\334\253\320\202\226\165\316\322\120\376\231\347\317
\057\237\347\166\321\141\052\373\041\273\061\320\252\237\107\244
\262\042\312\026\072\120\127\304\133\103\147\305\145\142\003\111
\001\353\103\331\330\370\236\255\317\261\143\016\105\364\240\132
\054\233\055\305\246\300\255\250\107\364\047\114\070\015\056\033
\111\073\122\364\350\210\203\053\124\050\324\362\065\122\264\062
\203\142\151\144\014\221\234\237\227\352\164\026\375\037\021\006
\232\233\364

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hongkong Post Root CA 3"

Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4

Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Not Valid Before: Sat Jun 03 02:29:46 2017

Not Valid After : Tue Jun 03 02:29:46 2042

```

# Fingerprint (SHA-256):
5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6
#
Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\242\320\354\040\122\201\133\301\363\370\144\002\044\116\302
\216\002\113\002
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\021\374\237\275\163\060\002\212\375\077\363\130\271\313\040\360
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G4"
#
# Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58
# Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Wed May 27 11:11:16 2015
# Not Valid After : Sun Dec 27 11:41:16 2037
# Fingerprint (SHA-256):
DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88

```

#

Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority - G4"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125
\145\255\130

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\006\113\060\202\004\063\240\003\002\001\002\002\021\000
\331\265\103\177\257\251\071\017\000\000\000\000\125\145\255\130

\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165\163
\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004\013
\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165\163
\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162\155
\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051\040
\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111\156
\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162\151
\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060\060
\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107\064
\060\036\027\015\061\065\060\065\062\067\061\061\061\061\061\066
\132\027\015\063\067\061\062\062\067\061\061\064\061\061\066\132
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\261\354\054\102\356\342\321\060\377\245\222\107\342\055
\303\272\144\227\155\312\367\015\265\131\301\263\313\250\150\031
\330\257\204\155\060\160\135\176\363\056\322\123\231\341\376\037
\136\331\110\257\135\023\215\333\377\143\063\115\323\000\002\274
\304\370\321\006\010\224\171\130\212\025\336\051\263\375\375\304
\117\350\252\342\240\073\171\315\277\153\103\062\335\331\164\020
\271\367\364\150\324\273\320\207\325\252\113\212\052\157\052\004
\265\262\246\307\240\172\346\110\253\322\321\131\314\326\176\043
\346\227\154\360\102\345\334\121\113\025\101\355\111\112\311\336
\020\227\326\166\301\357\245\265\066\024\227\065\330\170\042\065
\122\357\103\275\333\047\333\141\126\202\064\334\313\210\140\014
\013\132\345\054\001\306\124\257\327\252\301\020\173\322\005\132
\270\100\236\206\247\303\220\206\002\126\122\011\172\234\322\047
\202\123\112\145\122\152\365\074\347\250\362\234\257\213\275\323
\016\324\324\136\156\207\236\152\075\105\035\321\135\033\364\351
\012\254\140\231\373\211\264\377\230\054\317\174\035\351\002\252
\004\232\036\270\334\210\156\045\263\154\146\367\074\220\363\127
\301\263\057\365\155\362\373\312\241\370\051\235\106\213\263\152
\366\346\147\007\276\054\147\012\052\037\132\262\076\127\304\323

\041\041\143\145\122\221\033\261\231\216\171\176\346\353\215\000
\331\132\252\352\163\350\244\202\002\107\226\376\133\216\124\141
\243\353\057\113\060\260\213\043\165\162\174\041\074\310\366\361
\164\324\034\173\243\005\125\356\273\115\073\062\276\232\167\146
\236\254\151\220\042\007\037\141\072\226\276\345\232\117\314\005
\074\050\131\323\301\014\124\250\131\141\275\310\162\114\350\334
\237\207\177\275\234\110\066\136\225\243\016\271\070\044\125\374
\165\146\353\002\343\010\064\051\112\306\343\053\057\063\240\332
\243\206\245\022\227\375\200\053\332\024\102\343\222\275\076\362
\135\136\147\164\056\034\210\107\051\064\137\342\062\250\234\045
\067\214\272\230\000\227\213\111\226\036\375\045\212\254\334\332
\330\135\164\156\146\260\377\104\337\241\030\306\276\110\057\067
\224\170\370\225\112\077\177\023\136\135\131\375\164\206\103\143
\163\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003
\125\035\016\004\026\004\024\237\070\304\126\043\303\071\350\240
\161\154\350\124\114\344\350\072\261\277\147\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\022
\345\102\246\173\213\017\014\344\106\245\266\140\100\207\214\045
\176\255\270\150\056\133\306\100\166\074\003\370\311\131\364\363
\253\142\316\020\215\264\132\144\214\150\300\260\162\103\064\322
\033\013\366\054\123\322\312\220\113\206\146\374\252\203\042\364
\213\032\157\046\110\254\166\167\010\277\305\230\134\364\046\211
\236\173\303\271\144\062\001\177\323\303\335\130\155\354\261\253
\204\125\164\167\204\004\047\122\153\206\114\316\335\271\145\377
\326\306\136\237\232\020\231\113\165\152\376\152\351\227\040\344
\344\166\172\306\320\044\252\220\315\040\220\272\107\144\373\177
\007\263\123\170\265\012\142\362\163\103\316\101\053\201\152\056
\205\026\224\123\324\153\137\162\042\253\121\055\102\325\000\234
\231\277\336\273\224\073\127\375\232\365\206\313\126\073\133\210
\001\345\174\050\113\003\371\111\203\174\262\177\174\343\355\216
\241\177\140\123\216\125\235\120\064\022\017\267\227\173\154\207
\112\104\347\365\155\354\200\067\360\130\031\156\112\150\166\360
\037\222\344\352\265\222\323\141\121\020\013\255\247\331\137\307
\137\334\037\243\134\214\241\176\233\267\236\323\126\157\146\136
\007\226\040\355\013\164\373\146\116\213\021\025\351\201\111\176
\157\260\324\120\177\042\327\137\145\002\015\246\364\205\036\330
\256\006\113\112\247\322\061\146\302\370\316\345\010\246\244\002
\226\104\150\127\304\325\063\317\031\057\024\304\224\034\173\244
\331\360\237\016\261\200\342\321\236\021\144\251\210\021\072\166
\202\345\142\302\200\330\244\203\355\223\357\174\057\220\260\062
\114\226\025\150\110\122\324\231\010\300\044\350\034\343\263\245
\041\016\222\300\220\037\317\040\137\312\073\070\307\267\155\072
\363\346\104\270\016\061\153\210\216\160\353\234\027\122\250\101
\224\056\207\266\347\246\022\305\165\337\133\300\012\156\173\244
\344\136\206\371\066\224\337\167\303\351\015\300\071\361\171\273
\106\216\253\103\131\047\267\040\273\043\351\126\100\041\354\061

```
\075\145\252\103\362\075\337\160\104\341\272\115\046\020\073\230
\237\363\310\216\033\070\126\041\152\121\223\323\221\312\106\332
\211\267\075\123\203\054\010\037\213\217\123\335\377\254\037
END
```

```
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
```

```
# Trust for "Entrust Root Certification Authority - G4"
```

```
# Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
```

```
# Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58
```

```
#
```

```
Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
```

```
# Not Valid Before: Wed May 27 11:11:16 2015
```

```
# Not Valid After : Sun Dec 27 11:41:16 2037
```

```
# Fingerprint (SHA-256):
```

```
DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88
```

```
# Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "Entrust Root Certification Authority - G4"
```

```
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
```

```
\024\210\116\206\046\067\260\046\257\131\142\134\100\167\354\065
\051\272\226\001
```

```
END
```

```
CKA_CERT_MD5_HASH MULTILINE_OCTAL
```

```
\211\123\361\203\043\267\174\216\005\361\214\161\070\116\037\210
END
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
```

```
END
```

```
CKA_SERIAL_NUMBER
```

```

MULTILINE_OCTAL
\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125
\145\255\130
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Microsoft ECC Root Certificate Authority 2017"
#
# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec
# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 23:06:45 2019
# Not Valid After : Fri Jul 18 23:16:04 2042
# Fingerprint (SHA-256):
35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02
# Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```


\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001
\302\354

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\131\060\202\001\337\240\003\002\001\002\002\020\146
\362\075\257\207\336\213\261\112\352\014\127\061\001\302\354\060
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\036\060\034\006\003
\125\004\012\023\025\115\151\143\162\157\163\157\146\164\040\103
\157\162\160\157\162\141\164\151\157\156\061\066\060\064\006\003
\125\004\003\023\055\115\151\143\162\157\163\157\146\164\040\105
\103\103\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\062\060
\061\067\060\036\027\015\061\071\061\062\061\070\062\063\060\066
\064\065\132\027\015\064\062\060\067\061\070\062\063\061\066\060
\064\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\036\060\034\006\003\125\004\012\023\025\115\151\143\162
\157\163\157\146\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\066\060\064\006\003\125\004\003\023\055\115\151\143\162
\157\163\157\146\164\040\105\103\103\040\122\157\157\164\040\103
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157
\162\151\164\171\040\062\060\061\067\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\324\274\075\002\102\165\101\023\043\315\200\004\206\002\121
\057\152\250\201\142\013\145\314\366\312\235\036\157\112\146\121
\242\003\331\235\221\372\266\026\261\214\156\336\174\315\333\171
\246\057\316\273\316\161\057\345\245\253\050\354\143\004\146\231
\370\372\362\223\020\005\341\201\050\102\343\306\150\364\346\033
\204\140\112\211\257\355\171\017\073\316\361\366\104\365\001\170
\300\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\310\313\231\162\160\122\014\370\346\276\262\004\127\051\052
\317\102\020\355\065\060\020\006\011\053\006\001\004\001\202\067
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\060\130\362\115\352\014\371
\137\136\356\140\051\313\072\362\333\326\062\204\031\077\174\325
\057\302\261\314\223\256\120\273\011\062\306\306\355\176\311\066
\224\022\344\150\205\006\242\033\320\057\002\061\000\231\351\026
\264\016\372\126\110\324\244\060\026\221\170\333\124\214\145\001
\212\347\120\146\302\061\267\071\272\270\032\042\007\116\374\153
\124\026\040\377\053\265\347\114\014\115\246\117\163

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "Microsoft ECC Root Certificate Authority 2017"
# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec
# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 23:06:45 2019
# Not Valid After : Fri Jul 18 23:16:04 2042
# Fingerprint (SHA-256):
35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02
#
Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\231\232\144\303\177\364\175\237\253\225\361\107\151\211\024\140
\356\304\303\305
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\335\241\003\346\112\223\020\321\277\360\031\102\313\376\355\147
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001
\302\354
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Microsoft RSA Root Certificate Authority 2017"
#
# Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3
# Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 22:51:22 2019

```

Not Valid After : Fri Jul 18 23:00:23 2042

Fingerprint (SHA-256):

C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0

Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL

CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\250\060\202\003\220\240\003\002\001\002\002\020\036
\323\227\011\137\330\264\263\107\160\036\252\276\177\105\263\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036\060
\034\006\003\125\004\012\023\025\115\151\143\162\157\163\157\146
\164\040\103\157\162\160\157\162\141\164\151\157\156\061\066\060
\064\006\003\125\004\003\023\055\115\151\143\162\157\163\157\146
\164\040\122\123\101\040\122\157\157\164\040\103\145\162\164\151
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\062\060\061\067\060\036\027\015\061\071\061\062\061\070\062
\062\065\061\062\062\132\027\015\064\062\060\067\061\070\062\063
\060\060\062\063\132\060\145\061\013\060\011\006\003\125\004\006

\023\002\125\123\061\036\060\034\006\003\125\004\012\023\025\115
\151\143\162\157\163\157\146\164\040\103\157\162\160\157\162\141
\164\151\157\156\061\066\060\064\006\003\125\004\003\023\055\115
\151\143\162\157\163\157\146\164\040\122\123\101\040\122\157\157
\164\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165
\164\150\157\162\151\164\171\040\062\060\061\067\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\133\276
\224\063\214\051\225\221\026\012\225\275\107\142\301\211\363\231
\066\337\106\220\311\245\355\170\152\157\107\221\150\370\047\147
\120\063\035\241\246\373\340\345\103\243\204\002\127\001\135\234
\110\100\202\123\020\274\277\307\073\150\220\266\202\055\345\364
\145\320\314\155\031\314\225\371\173\254\112\224\255\016\336\113
\103\035\207\007\222\023\220\200\203\144\065\071\004\374\345\351
\154\263\266\037\120\224\070\145\120\134\027\106\271\266\205\265
\034\265\027\350\326\105\235\330\262\046\260\312\304\160\112\256
\140\244\335\263\331\354\374\073\325\127\162\274\077\310\311\262
\336\113\153\370\043\154\003\300\005\275\225\307\315\163\073\146
\200\144\343\032\254\056\371\107\005\362\006\266\233\163\365\170
\063\133\307\241\373\047\052\241\264\232\221\214\221\323\072\202
\076\166\100\264\315\122\141\121\160\050\077\305\305\132\362\311
\214\111\273\024\133\115\310\377\147\115\114\022\226\255\365\376
\170\250\227\207\327\375\136\040\200\334\241\113\042\373\324\211
\255\272\316\107\227\107\125\173\217\105\310\147\050\204\225\034
\150\060\357\357\111\340\065\173\144\347\230\260\224\332\115\205
\073\076\125\304\050\257\127\363\236\023\333\106\047\237\036\242
\136\104\203\244\245\312\325\023\263\113\077\304\343\302\346\206
\141\244\122\060\271\172\040\117\157\017\070\123\313\063\014\023
\053\217\326\232\275\052\310\055\261\034\175\113\121\312\107\321
\110\047\162\135\207\353\325\105\346\110\145\235\257\122\220\272
\133\242\030\145\127\022\237\150\271\324\025\153\224\304\151\042
\230\364\063\340\355\371\121\216\101\120\311\064\117\166\220\254
\374\070\301\330\341\173\271\343\343\224\341\106\151\313\016\012
\120\153\023\272\254\017\067\132\267\022\265\220\201\036\126\256
\127\042\206\331\311\322\321\327\121\343\253\073\306\125\375\036
\016\323\164\012\321\332\252\352\151\270\227\050\217\110\304\007
\370\122\103\072\364\312\125\065\054\260\246\152\300\234\371\362
\201\341\022\152\300\105\331\147\263\316\377\043\242\211\012\124
\324\024\271\052\250\327\354\371\253\315\045\130\062\171\217\220
\133\230\071\304\010\006\301\254\177\016\075\000\245\002\003\001
\000\001\243\124\060\122\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\011\313\131\177\206\262\160\217\032\303\071\343\300\331
\351\277\273\115\262\043\060\020\006\011\053\006\001\004\001\202
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206
\367\015\001\001\014\005\000\003\202\002\001\000\254\257\076\135
\302\021\226\211\216\243\347\222\326\227\025\270\023\242\246\102

\056\002\315\026\005\131\047\312\040\350\272\270\350\032\354\115
\250\227\126\256\145\103\261\217\000\233\122\315\125\315\123\071
\155\142\114\213\015\133\174\056\104\277\203\020\217\363\123\202
\200\303\117\072\307\156\021\077\346\343\026\221\204\373\155\204
\177\064\164\255\211\247\316\271\327\327\237\204\144\222\276\225
\241\255\011\123\063\335\356\012\352\112\121\216\157\125\253\272
\265\224\106\256\214\177\330\242\120\045\145\140\200\106\333\063
\004\256\154\265\230\164\124\045\334\223\344\370\343\125\025\075
\270\155\303\012\244\022\301\151\205\156\337\144\361\123\231\341
\112\165\040\235\225\017\344\326\334\003\361\131\030\350\107\211
\262\127\132\224\266\251\330\027\053\027\111\345\166\313\301\126
\231\072\067\261\377\151\054\221\221\223\341\337\114\243\067\166
\115\241\237\370\155\036\035\323\372\354\373\364\105\035\023\155
\317\367\131\345\042\047\162\053\206\363\127\273\060\355\044\115
\334\175\126\273\243\263\370\064\171\211\301\340\362\002\141\367
\246\374\017\273\034\027\013\256\101\331\174\275\047\243\375\056
\072\321\223\224\261\163\035\044\213\257\133\040\211\255\267\147
\146\171\365\072\306\246\226\063\376\123\222\310\106\261\021\221
\306\231\177\217\311\326\146\061\040\101\020\207\055\014\326\301
\257\064\230\312\144\203\373\023\127\321\301\360\074\172\214\245
\301\375\225\041\240\161\301\223\147\161\022\352\217\210\012\151
\031\144\231\043\126\373\254\052\056\160\276\146\304\014\204\357
\345\213\363\223\001\370\152\220\223\147\113\262\150\243\265\142
\217\351\077\214\172\073\136\017\347\214\270\306\174\357\067\375
\164\342\310\117\063\162\341\224\071\155\275\022\257\276\014\116
\160\174\033\157\215\263\062\223\163\104\026\155\350\364\367\340
\225\200\217\226\135\070\244\364\253\336\012\060\207\223\330\115
\000\161\142\105\047\113\072\102\204\133\177\145\267\147\064\122
\055\234\026\153\252\250\330\173\243\102\114\161\307\014\312\076
\203\344\246\357\267\001\060\136\121\243\171\365\160\151\246\101
\104\017\206\260\054\221\306\075\352\256\017\204

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Microsoft RSA Root Certificate Authority 2017"

Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

Serial Number: 1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3

Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

Not Valid Before: Wed Dec 18 22:51:22 2019

Not Valid After : Fri Jul 18 23:00:23 2042

Fingerprint (SHA-256):

C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0

Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\163\245\346\112\073\377\203\026\377\016\334\314\141\212\220\156
\116\256\115\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\020\377\000\377\317\311\370\307\172\300\356\065\216\311\017\107
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "e-Szigno Root CA 2017"
#
# Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a
# Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Aug 22 12:07:06 2017
# Not Valid After : Fri Aug 22 12:07:06 2042
# Fingerprint (SHA-256):
BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99
# Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "e-Szigno Root CA 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\014\001\124\110\357\041\375\227\131\015\365\004\012

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\002\100\060\202\001\345\240\003\002\001\002\002\014\001
\124\110\357\041\375\227\131\015\365\004\012\060\012\006\010\052
\206\110\316\075\004\003\002\060\161\061\013\060\011\006\003\125
\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007\014
\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003\125
\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164\144
\056\061\027\060\025\006\003\125\004\141\014\016\126\101\124\110
\125\055\062\063\065\070\064\064\071\067\061\036\060\034\006\003
\125\004\003\014\025\145\055\123\172\151\147\156\157\040\122\157
\157\164\040\103\101\040\062\060\061\067\060\036\027\015\061\067
\060\070\062\062\061\062\060\067\060\066\132\027\015\064\062\060
\070\062\062\061\062\060\067\060\066\132\060\161\061\013\060\011
\006\003\125\004\006\023\002\110\125\061\021\060\017\006\003\125
\004\007\014\010\102\165\144\141\160\145\163\164\061\026\060\024
\006\003\125\004\012\014\015\115\151\143\162\157\163\145\143\040
\114\164\144\056\061\027\060\025\006\003\125\004\141\014\016\126
\101\124\110\125\055\062\063\065\070\064\064\071\067\061\036\060
\034\006\003\125\004\003\014\025\145\055\123\172\151\147\156\157
\040\122\157\157\164\040\103\101\040\062\060\061\067\060\131\060
\023\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316
\075\003\001\007\003\102\000\004\226\334\075\212\330\260\173\157
\306\047\276\104\220\261\263\126\025\173\216\103\044\175\032\204

```
\131\356\143\150\262\306\136\207\320\025\110\036\250\220\255\275
\123\242\332\336\072\220\246\140\137\150\062\265\206\101\337\207
\133\054\173\305\376\174\172\332\243\143\060\141\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006
\003\125\035\016\004\026\004\024\207\021\025\010\321\252\301\170
\014\261\257\316\306\311\220\357\277\060\004\300\060\037\006\003
\125\035\043\004\030\060\026\200\024\207\021\025\010\321\252\301
\170\014\261\257\316\306\311\220\357\277\060\004\300\060\012\006
\010\052\206\110\316\075\004\003\002\003\111\000\060\106\002\041
\000\265\127\335\327\212\125\013\066\341\206\104\372\324\331\150
\215\270\334\043\212\212\015\324\057\175\352\163\354\277\115\154
\250\002\041\000\313\245\264\022\372\347\265\350\317\176\223\374
\363\065\217\157\116\132\174\264\274\116\262\374\162\252\133\131
\371\347\334\061
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "e-Szigno Root CA 2017"

Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a

Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

Not Valid Before: Tue Aug 22 12:07:06 2017

Not Valid After : Fri Aug 22 12:07:06 2042

Fingerprint (SHA-256):

BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99

#

Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "e-Szigno Root CA 2017"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\211\324\203\003\117\236\232\110\200\137\162\067\324\251\246\357
\313\174\037\321
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\336\037\366\236\204\256\247\264\041\316\036\130\175\321\204\230
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
```



```
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\014\001\124\110\357\041\375\227\131\015\365\004\012
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "certSIGN Root CA G2"

#

Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

Serial Number:11:00:34:b6:4e:c6:36:2d:36

Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

Not Valid Before: Mon Feb 06 09:27:35 2017

Not Valid After : Thu Feb 06 09:27:35 2042

Fingerprint (SHA-256):

65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05

Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "certSIGN Root CA G2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT

MULTILINE_OCTAL

```
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\011\021\000\064\266\116\306\066\055\066

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\107\060\202\003\057\240\003\002\001\002\002\011\021
\000\064\266\116\306\066\055\066\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\101\061\013\060\011\006\003\125
\004\006\023\002\122\117\061\024\060\022\006\003\125\004\012\023
\013\103\105\122\124\123\111\107\116\040\123\101\061\034\060\032
\006\003\125\004\013\023\023\143\145\162\164\123\111\107\116\040
\122\117\117\124\040\103\101\040\107\062\060\036\027\015\061\067
\060\062\060\066\060\071\062\067\063\065\132\027\015\064\062\060
\062\060\066\060\071\062\067\063\065\132\060\101\061\013\060\011
\006\003\125\004\006\023\002\122\117\061\024\060\022\006\003\125
\004\012\023\013\103\105\122\124\123\111\107\116\040\123\101\061
\034\060\032\006\003\125\004\013\023\023\143\145\162\164\123\111
\107\116\040\122\117\117\124\040\103\101\040\107\062\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\300\305
\165\031\221\175\104\164\164\207\376\016\073\226\334\330\001\026
\314\356\143\221\347\013\157\316\073\012\151\032\174\302\343\257
\202\216\206\327\136\217\127\353\323\041\131\375\071\067\102\060
\276\120\352\266\017\251\210\330\056\055\151\041\347\321\067\030
\116\175\221\325\026\137\153\133\000\302\071\103\015\066\205\122
\271\123\145\017\035\102\345\217\317\005\323\356\334\014\032\331
\270\213\170\042\147\344\151\260\150\305\074\344\154\132\106\347
\315\307\372\357\304\354\113\275\152\244\254\375\314\050\121\357
\222\264\051\253\253\065\232\114\344\304\010\306\046\314\370\151
\237\344\234\360\051\323\134\371\306\026\045\236\043\303\040\301
\075\017\077\070\100\260\376\202\104\070\252\132\032\212\153\143
\130\070\264\025\323\266\021\151\173\036\124\356\214\032\042\254
\162\227\077\043\131\233\311\042\204\301\007\117\314\177\342\127
\312\022\160\273\246\145\363\151\165\143\275\225\373\033\227\315
\344\250\257\366\321\116\250\331\212\161\044\315\066\075\274\226
\304\361\154\251\256\345\317\015\156\050\015\260\016\265\312\121
\173\170\024\303\040\057\177\373\024\125\341\021\231\375\325\012
\241\236\002\343\142\137\353\065\113\054\270\162\350\076\075\117
\254\054\273\056\206\342\243\166\217\345\223\052\317\245\253\310
\134\215\113\006\377\022\106\254\170\313\024\007\065\340\251\337
\213\351\257\025\117\026\211\133\275\366\215\306\131\256\210\205
\016\301\211\353\037\147\305\105\216\377\155\067\066\053\170\146
\203\221\121\053\075\377\121\167\166\142\241\354\147\076\076\201
\203\340\126\251\120\037\037\172\231\253\143\277\204\027\167\361
\015\073\337\367\234\141\263\065\230\212\072\262\354\074\032\067
\077\176\217\222\317\331\022\024\144\332\020\002\025\101\377\117
\304\353\034\243\311\372\231\367\106\351\341\030\331\261\270\062
\055\313\024\014\120\330\203\145\203\356\271\134\317\313\005\132
\114\372\031\227\153\326\135\023\323\302\134\124\274\062\163\240
\170\365\361\155\036\313\237\245\246\237\042\334\321\121\236\202

\171\144\140\051\023\076\243\375\117\162\152\253\342\324\345\270
\044\125\054\104\113\212\210\104\234\312\204\323\052\073\002\003
\001\000\001\243\102\060\100\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\035\006\003\125\035\016\004
\026\004\024\202\041\055\146\306\327\240\340\025\353\316\114\011
\167\304\140\236\124\156\003\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\002\001\000\140\336\032\270\347
\362\140\202\325\003\063\201\313\006\212\361\042\111\351\350\352
\221\177\306\063\136\150\031\003\206\073\103\001\317\007\160\344
\010\036\145\205\221\346\021\042\267\365\002\043\216\256\271\036
\175\037\176\154\346\275\045\325\225\032\362\005\246\257\205\002
\157\256\370\326\061\377\045\311\112\310\307\212\251\331\237\113
\111\233\021\127\231\222\103\021\336\266\063\244\314\327\215\144
\175\324\315\074\050\054\264\232\226\352\115\365\304\104\304\045
\252\040\200\330\051\125\367\340\101\374\006\046\377\271\066\365
\103\024\003\146\170\341\021\261\332\040\137\106\000\170\000\041
\245\036\000\050\141\170\157\250\001\001\217\235\064\232\377\364
\070\220\373\270\321\263\162\006\311\161\346\201\305\171\355\013
\246\171\362\023\013\234\367\135\016\173\044\223\264\110\333\206
\137\336\120\206\170\347\100\346\061\250\220\166\160\141\257\234
\067\054\021\265\202\267\252\256\044\064\133\162\014\151\015\315
\131\237\366\161\257\234\013\321\012\070\371\006\042\203\123\045
\014\374\121\304\346\276\342\071\225\013\044\255\257\321\225\344
\226\327\164\144\153\161\116\002\074\252\205\363\040\243\103\071
\166\133\154\120\376\232\234\024\036\145\024\212\025\275\243\202
\105\132\111\126\152\322\234\261\143\062\345\141\340\123\042\016
\247\012\111\352\313\176\037\250\342\142\200\366\020\105\122\230
\006\030\336\245\315\057\177\252\324\351\076\010\162\354\043\003
\002\074\246\252\330\274\147\164\075\024\027\373\124\113\027\343
\323\171\075\155\153\111\311\050\016\056\164\120\277\014\331\106
\072\020\206\311\247\077\351\240\354\177\353\245\167\130\151\161
\346\203\012\067\362\206\111\152\276\171\010\220\366\002\026\144
\076\345\332\114\176\014\064\311\371\137\266\263\050\121\247\247
\053\252\111\372\215\145\051\116\343\153\023\247\224\243\055\121
\155\170\014\104\313\337\336\010\157\316\243\144\253\323\225\204
\324\271\122\124\162\173\226\045\314\274\151\343\110\156\015\320
\307\235\047\232\252\370\023\222\335\036\337\143\237\065\251\026
\066\354\214\270\203\364\075\211\217\315\264\027\136\327\263\027
\101\020\135\047\163\140\205\127\111\042\007

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "certSIGN Root CA G2"

Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

```

# Serial Number:11:00:34:b6:4e:c6:36:2d:36
# Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Not Valid Before: Mon Feb 06 09:27:35 2017
# Not Valid After : Thu Feb 06 09:27:35 2042
# Fingerprint (SHA-256):
65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05
# Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "certSIGN Root CA G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\046\371\223\264\355\075\050\047\260\271\113\247\351\025\035\243
\215\222\345\062
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\214\361\165\212\306\031\317\224\267\367\145\040\207\303\227\307
END
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\021\000\064\266\116\306\066\055\066
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global Certification Authority"
#
# Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
#
Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2
# Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:34:12 2017
# Not Valid After : Sat Aug 23 19:34:12 2042
# Fingerprint (SHA-256):
97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8

```

Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\014\005\367\016\206\332\111\363\106\065\056\272\262
```

END

CKA_VALUE

MULTILINE_OCTAL

```
\060\202\005\332\060\202\003\302\240\003\002\001\002\002\014\005
\367\016\206\332\111\363\106\065\056\272\262\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\060\201\210\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006\003
\125\004\010\014\010\111\154\154\151\156\157\151\163\061\020\060
\016\006\003\125\004\007\014\007\103\150\151\143\141\147\157\061
\041\060\037\006\003\125\004\012\014\030\124\162\165\163\164\167
\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\003\014\050\124\162\165
\163\164\167\141\166\145\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171\060\036\027\015\061\067\060\070\062\063\061
```

\071\063\064\061\062\132\027\015\064\062\060\070\062\063\061\071
\063\064\061\062\132\060\201\210\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\021\060\017\006\003\125\004\010\014\010
\111\154\154\151\156\157\151\163\061\020\060\016\006\003\125\004
\007\014\007\103\150\151\143\141\147\157\061\041\060\037\006\003
\125\004\012\014\030\124\162\165\163\164\167\141\166\145\040\110
\157\154\144\151\156\147\163\054\040\111\156\143\056\061\061\060
\057\006\003\125\004\003\014\050\124\162\165\163\164\167\141\166
\145\040\107\154\157\142\141\154\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\271\135\121\050\113\074\067\222\321\202\316\275\035\275\315
\335\270\253\317\012\076\341\135\345\334\252\011\271\127\002\076
\346\143\141\337\362\017\202\143\256\243\367\254\163\321\174\347
\263\013\257\010\000\011\131\177\315\051\052\210\223\207\027\030
\200\355\210\262\264\266\020\037\055\326\137\125\242\023\135\321
\306\353\006\126\211\210\376\254\062\235\375\134\303\005\307\156
\356\206\211\272\210\003\235\162\041\206\220\256\217\003\245\334
\237\210\050\313\243\222\111\017\354\320\017\342\155\104\117\200
\152\262\324\347\240\012\123\001\272\216\227\221\166\156\274\374
\325\153\066\346\100\210\326\173\057\137\005\350\054\155\021\363
\347\262\276\222\104\114\322\227\244\376\322\162\201\103\007\234
\351\021\076\365\213\032\131\175\037\150\130\335\004\000\054\226
\363\103\263\176\230\031\164\331\234\163\331\030\276\101\307\064
\171\331\364\142\302\103\271\263\047\260\042\313\371\075\122\307
\060\107\263\311\076\270\152\342\347\350\201\160\136\102\213\117
\046\245\376\072\302\040\156\273\370\026\216\315\014\251\264\033
\154\166\020\341\130\171\106\076\124\316\200\250\127\011\067\051
\033\231\023\217\014\310\326\054\034\373\005\350\010\225\075\145
\106\334\356\315\151\342\115\217\207\050\116\064\013\076\317\024
\331\273\335\266\120\232\255\167\324\031\326\332\032\210\310\116
\033\047\165\330\262\010\361\256\203\060\271\021\016\315\207\360
\204\215\025\162\174\241\357\314\362\210\141\272\364\151\273\014
\214\013\165\127\004\270\116\052\024\056\075\017\034\036\062\246
\142\066\356\146\342\042\270\005\100\143\020\042\363\063\035\164
\162\212\054\365\071\051\240\323\347\033\200\204\055\305\075\343
\115\261\375\032\157\272\145\007\073\130\354\102\105\046\373\330
\332\045\162\304\366\000\261\042\171\275\343\174\131\142\112\234
\005\157\075\316\346\326\107\143\231\306\044\157\162\022\310\254
\177\220\264\013\221\160\350\267\346\026\020\161\027\316\336\006
\117\110\101\175\065\112\243\211\362\311\113\173\101\021\155\147
\267\010\230\114\345\021\031\256\102\200\334\373\220\005\324\370
\120\312\276\344\255\307\302\224\327\026\235\346\027\217\257\066
\373\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\231\340\031\147\015\142\333\166\263\332
\075\270\133\350\375\102\322\061\016\207\060\016\006\003\125\035

\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\230\163
\160\342\260\323\355\071\354\114\140\331\251\022\206\027\036\226
\320\350\124\050\073\144\055\041\246\370\235\126\023\152\110\075
\117\307\076\051\333\155\130\203\124\075\207\175\043\005\324\344
\034\334\350\070\145\206\305\165\247\132\333\065\005\275\167\336
\273\051\067\100\005\007\303\224\122\237\312\144\335\361\033\053
\334\106\012\020\002\061\375\112\150\015\007\144\220\346\036\365
\052\241\250\273\074\135\371\243\010\013\021\014\361\077\055\020
\224\157\376\342\064\207\203\326\317\345\033\065\155\322\003\341
\260\015\250\240\252\106\047\202\066\247\025\266\010\246\102\124
\127\266\231\132\342\013\171\220\327\127\022\121\065\031\210\101
\150\045\324\067\027\204\025\373\001\162\334\225\336\122\046\040
\230\046\342\166\365\047\157\372\000\073\112\141\331\015\313\121
\223\052\375\026\006\226\247\043\232\043\110\376\121\275\266\304
\260\261\124\316\336\154\101\255\026\147\176\333\375\070\315\271
\070\116\262\301\140\313\235\027\337\130\236\172\142\262\046\217
\164\225\233\344\133\035\322\017\335\230\034\233\131\271\043\323
\061\240\246\377\070\335\317\040\117\351\130\126\072\147\303\321
\366\231\231\235\272\066\266\200\057\210\107\117\206\277\104\072
\200\344\067\034\246\272\352\227\230\021\320\204\142\107\144\036
\252\356\100\277\064\261\234\217\116\341\362\222\117\037\216\363
\236\227\336\363\246\171\152\211\161\117\113\047\027\110\376\354
\364\120\017\117\111\175\314\105\343\275\172\100\305\101\334\141
\126\047\006\151\345\162\101\201\323\266\001\211\240\057\072\162
\171\376\072\060\277\101\354\307\142\076\221\113\307\331\061\166
\102\371\367\074\143\354\046\214\163\014\175\032\035\352\250\174
\207\250\302\047\174\341\063\101\017\317\317\374\000\240\042\200
\236\112\247\157\000\260\101\105\267\042\312\150\110\305\102\242
\256\335\035\362\340\156\116\005\130\261\300\220\026\052\244\075
\020\100\276\217\142\143\203\251\234\202\175\055\002\351\203\060
\174\313\047\311\375\036\146\000\260\056\323\041\057\216\063\026
\154\230\355\020\250\007\326\314\223\317\333\321\151\034\344\312
\311\340\266\234\351\316\161\161\336\154\077\026\244\171

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Trustwave Global Certification Authority"

Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2

Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Not Valid Before: Wed Aug 23 19:34:12 2017

Not Valid After : Sat Aug 23 19:34:12 2042

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# Fingerprint (SHA-256):
97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8
# Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\057\217\066\117\341\130\227\104\041\131\207\245\052\232\320\151
\225\046\177\265
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\034\030\055\057\272\137\155\241\154\274\307\253\221\307\016
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\005\367\016\206\332\111\363\106\065\056\272\262
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P256 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d
# Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:35:10 2017
# Not Valid After : Sat Aug 23 19:35:10 2042
# Fingerprint (SHA-256):
94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4

```


Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Trustwave Global ECC P256 Certification Authority"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\014\015\152\137\010\077\050\134\076\121\225\337\135

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\140\060\202\002\007\240\003\002\001\002\002\014\015
\152\137\010\077\050\134\076\121\225\337\135\060\012\006\010\052
\206\110\316\075\004\003\002\060\201\221\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145
\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120

\062\065\066\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061
\067\060\070\062\063\061\071\063\065\061\060\132\027\015\064\062
\060\070\062\063\061\071\063\065\061\060\132\060\201\221\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164
\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105
\103\103\040\120\062\065\066\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060
\131\060\023\006\007\052\206\110\316\075\002\001\006\010\052\206
\110\316\075\003\001\007\003\102\000\004\176\373\154\346\043\343
\163\062\010\312\140\346\123\234\272\164\215\030\260\170\220\122
\200\335\070\300\112\035\321\250\314\223\244\227\006\070\312\015
\025\142\306\216\001\052\145\235\252\337\064\221\056\201\301\344
\063\222\061\304\375\011\072\246\077\255\243\103\060\101\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\017\006\003\125\035\017\001\001\377\004\005\003\003\007\006\000
\060\035\006\003\125\035\016\004\026\004\024\243\101\006\254\220
\155\321\112\353\165\245\112\020\231\263\261\241\213\112\367\060
\012\006\010\052\206\110\316\075\004\003\002\003\107\000\060\104
\002\040\007\346\124\332\016\240\132\262\256\021\237\207\305\266
\377\151\336\045\276\370\240\267\010\363\104\316\052\337\010\041
\014\067\002\040\055\046\003\240\005\275\153\321\366\134\370\145
\314\206\155\263\234\064\110\143\204\011\305\215\167\032\342\314
\234\341\164\173

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Trustwave Global ECC P256 Certification Authority"

Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d

Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Not Valid Before: Wed Aug 23 19:35:10 2017

Not Valid After : Sat Aug 23 19:35:10 2042

Fingerprint (SHA-256):

94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4

Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global
ECC P256 Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\264\220\202\335\105\014\276\213\133\261\146\323\342\244\010\046
\315\355\102\317
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\133\104\343\215\135\066\206\046\350\015\005\322\131\247\203\124
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\015\152\137\010\077\050\134\076\121\225\337\135
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P384 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b
# Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:36:43 2017
# Not Valid After : Sat Aug 23 19:36:43 2042
# Fingerprint (SHA-256):
55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97
# Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
  UTF8 "Trustwave Global ECC P384 Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
  MULTILINE_OCTAL
\002\014\010\275\205\227\154\231\047\244\200\150\107\073
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\235\060\202\002\044\240\003\002\001\002\002\014\010
\275\205\227\154\231\047\244\200\150\107\073\060\012\006\010\052
\206\110\316\075\004\003\003\060\201\221\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145
\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120
\063\070\064\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061
\067\060\070\062\063\061\071\063\066\064\063\132\027\015\064\062
\060\070\062\063\061\071\063\066\064\063\132\060\201\221\061\013
```

\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164
\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105
\103\103\040\120\063\070\064\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\153\332\015\165\065\010\061\107\005
\256\105\231\125\361\021\023\056\112\370\020\061\043\243\176\203
\323\177\050\010\072\046\032\072\317\227\202\037\200\267\047\011
\217\321\216\060\304\012\233\016\254\130\004\253\367\066\175\224
\043\244\233\012\212\213\253\353\375\071\045\146\361\136\376\214
\256\215\101\171\235\011\140\316\050\251\323\212\155\363\326\105
\324\362\230\204\070\145\240\243\103\060\101\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\017\006\003
\125\035\017\001\001\377\004\005\003\003\007\006\000\060\035\006
\003\125\035\016\004\026\004\024\125\251\204\211\322\301\062\275
\030\313\154\246\007\116\310\347\235\276\202\220\060\012\006\010
\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067
\001\222\227\105\022\176\240\363\076\255\031\072\162\335\364\120
\223\003\022\276\104\322\117\101\244\214\234\235\037\243\366\302
\222\347\110\024\376\116\233\245\221\127\256\306\067\162\273\002
\060\147\045\012\261\014\136\356\251\143\222\157\345\220\013\376
\146\042\312\107\375\212\061\367\203\376\172\277\020\276\030\053
\036\217\366\051\036\224\131\357\216\041\067\313\121\230\245\156
\113

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Trustwave Global ECC P384 Certification Authority"

Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings, Inc.",L=Chicago,ST=Illinois,C=US

Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b

Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings, Inc.",L=Chicago,ST=Illinois,C=US

Not Valid Before: Wed Aug 23 19:36:43 2017

Not Valid After : Sat Aug 23 19:36:43 2042

Fingerprint (SHA-256):

55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97

Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2

CKA_CLASS

```

CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global ECC P384 Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\347\363\243\310\317\157\303\004\056\155\016\147\062\305\236\150
\225\015\136\322
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\352\317\140\304\073\271\025\051\100\241\227\355\170\047\223\326
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\014\010\275\205\227\154\231\047\244\200\150\107\073
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "NAVER Global Root Certification Authority"
#
# Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d
# Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Not Valid Before: Fri Aug 18 08:58:42 2017
# Not Valid After : Tue Aug 18 23:59:59 2037
# Fingerprint (SHA-256):
88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65
# Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NAVER Global Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104
\161\370\326\120\115\015
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\242\060\202\003\212\240\003\002\001\002\002\024\001
\224\060\036\242\013\335\365\305\063\052\261\103\104\161\370\326
\120\115\015\060\015\006\011\052\206\110\206\367\015\001\001\014
\005\000\060\151\061\013\060\011\006\003\125\004\006\023\002\113
\122\061\046\060\044\006\003\125\004\012\014\035\116\101\126\105
\122\040\102\125\123\111\116\105\123\123\040\120\114\101\124\106
\117\122\115\040\103\157\162\160\056\061\062\060\060\006\003\125
\004\003\014\051\116\101\126\105\122\040\107\154\157\142\141\154
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036\027
\015\061\067\060\070\061\070\060\070\065\070\064\062\132\027\015
\063\067\060\070\061\070\062\063\065\071\065\071\132\060\151\061
\013\060\011\006\003\125\004\006\023\002\113\122\061\046\060\044
\006\003\125\004\012\014\035\116\101\126\105\122\040\102\125\123
\111\116\105\123\123\040\120\114\101\124\106\117\122\115\040\103
\157\162\160\056\061\062\060\060\006\003\125\004\003\014\051\116
\101\126\105\122\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
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\060\202\002\012\002\202\002\001\000\266\324\361\223\134\265\100
\211\012\253\015\220\133\120\143\256\220\224\164\027\105\162\326
\173\145\132\051\113\247\126\240\113\270\057\102\165\351\331\173
\044\132\061\145\253\027\027\321\063\072\331\021\334\100\066\207
\337\307\152\351\046\136\131\212\167\343\350\110\234\061\026\372
\076\221\261\312\311\243\342\237\316\041\123\243\002\066\060\313
\122\002\345\332\062\135\303\305\346\371\356\021\307\213\311\104
\036\204\223\030\112\264\237\345\022\144\151\320\046\205\142\001
\266\311\002\035\276\203\121\273\134\332\370\255\025\152\231\367
\222\124\367\064\133\351\277\352\051\201\022\324\123\221\226\263
\221\132\335\376\220\163\050\373\060\106\265\312\010\007\307\161
\162\311\146\323\064\227\366\214\364\030\112\341\320\075\132\105
\266\151\247\051\373\043\316\210\330\022\234\000\110\250\246\017
\263\073\222\215\161\016\164\305\213\310\114\371\364\233\216\270
\074\151\355\157\073\120\057\130\355\304\260\320\034\033\152\014
\342\274\104\252\330\315\024\135\224\170\141\277\016\156\332\052
\274\057\014\013\161\246\263\026\077\234\346\371\314\237\123\065
\342\003\240\240\030\277\273\361\276\364\326\214\207\015\102\367
\006\271\361\155\355\004\224\250\376\266\323\006\306\100\141\337
\235\235\363\124\166\316\123\072\001\246\222\101\354\004\243\217
\015\242\325\011\312\326\313\232\361\357\103\135\300\253\245\101
\317\134\123\160\160\311\210\246\055\324\153\141\163\120\046\206
\141\016\137\033\302\053\342\214\325\273\235\301\003\102\272\224
\332\137\251\260\312\314\115\012\357\107\151\003\057\042\373\361
\050\316\277\135\120\145\250\220\155\263\164\260\010\307\254\250
\321\353\076\234\374\135\032\203\056\053\313\265\363\104\235\072
\247\027\141\226\242\161\323\160\226\025\115\267\114\163\356\031
\134\305\133\076\101\376\254\165\140\073\033\143\316\000\335\332
\010\220\142\264\345\055\356\110\247\153\027\231\124\276\207\112
\343\251\136\004\114\353\020\155\124\326\357\361\350\362\142\026
\313\200\153\355\075\355\365\037\060\245\256\113\311\023\355\212
\001\001\311\270\121\130\300\146\072\261\146\113\304\325\061\002
\142\351\164\204\014\333\115\106\055\002\003\001\000\001\243\102
\060\100\060\035\006\003\125\035\016\004\026\004\024\322\237\210
\337\241\315\054\275\354\365\073\001\001\223\063\047\262\353\140
\113\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\015\006\011\052\206\110\206\367\015\001\001\014\005
\000\003\202\002\001\000\062\312\200\263\235\075\124\006\335\322
\322\056\360\244\001\041\013\147\110\312\155\216\340\310\252\015
\252\215\041\127\217\306\076\172\312\333\121\324\122\263\324\226
\204\245\130\140\177\345\013\216\037\365\334\012\025\201\345\073
\266\267\042\057\011\234\023\026\261\154\014\065\010\155\253\143
\162\355\334\276\354\307\127\346\060\040\161\326\327\020\301\023
\125\001\214\052\103\344\101\361\317\072\172\123\222\316\242\003
\005\015\070\337\002\273\020\056\331\073\322\233\172\300\241\246
\370\265\061\346\364\165\311\271\123\231\165\107\042\132\024\025
\307\170\033\266\235\351\014\370\033\166\361\205\204\336\241\332


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\022\357\244\342\020\227\172\170\336\014\121\227\250\041\100\213
\206\275\015\360\136\116\113\066\273\073\040\037\212\102\126\341
\013\032\277\173\320\042\103\054\104\214\373\345\052\264\154\034
\034\272\224\340\023\176\041\346\232\302\313\305\102\144\264\036
\224\173\010\045\310\161\314\207\105\127\205\323\237\051\142\042
\203\121\227\000\030\227\167\152\230\222\311\174\140\154\337\154
\175\112\344\160\114\302\236\270\035\367\320\064\307\017\314\373
\247\377\003\276\255\160\220\332\013\335\310\155\227\137\232\177
\011\062\101\375\315\242\314\132\155\114\362\252\111\376\146\370
\351\330\065\353\016\050\036\356\110\057\072\320\171\011\070\174
\246\042\202\223\225\320\003\276\276\002\240\005\335\040\042\343
\157\035\210\064\140\306\346\012\271\011\165\013\360\007\350\151
\226\065\307\373\043\201\216\070\071\270\105\053\103\170\242\321
\054\024\377\015\050\162\162\225\233\136\011\333\211\104\230\252
\241\111\273\161\122\362\277\366\377\047\241\066\257\270\266\167
\210\335\072\244\155\233\064\220\334\024\135\060\277\267\353\027
\344\207\267\161\320\241\327\167\025\324\102\327\362\363\061\231
\135\233\335\026\155\077\352\006\043\370\106\242\042\355\223\366
\335\232\346\052\207\261\230\124\361\042\367\153\105\343\342\216
\166\035\232\215\304\006\215\066\267\024\363\235\124\151\267\216
\074\325\244\155\223\201\267\255\366\275\144\173\302\311\150\071
\240\222\234\315\064\206\221\220\372\144\121\235\376\376\353\245
\365\165\336\211\367\162
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "NAVER Global Root Certification Authority"

Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d

Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

Not Valid Before: Fri Aug 18 08:58:42 2017

Not Valid After : Tue Aug 18 23:59:59 2037

Fingerprint (SHA-256):

88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65

Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "NAVER Global Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\217\153\362\251\047\112\332\024\240\304\364\216\141\047\371\300
\036\170\135\321
```

END

```

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\310\176\101\366\045\073\365\011\263\027\350\106\075\277\320\233
END
CKA_ISSUER MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104
\161\370\326\120\115\015
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
#
# Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95
# Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Not Valid Before: Thu Dec 20 09:37:33 2018
# Not Valid After : Sun Dec 20 09:37:33 2043
# Fingerprint (SHA-256):
55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB
# Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8
"AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052

```

```
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056
\235\225
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\156\060\202\001\363\240\003\002\001\002\002\020\142
\366\062\154\345\304\343\150\134\033\142\335\234\056\235\225\060
\012\006\010\052\206\110\316\075\004\003\003\060\170\061\013\060
\011\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003
\125\004\012\014\010\106\116\115\124\055\122\103\115\061\016\060
\014\006\003\125\004\013\014\005\103\145\162\145\163\061\030\060
\026\006\003\125\004\141\014\017\126\101\124\105\123\055\121\062
\070\062\066\060\060\064\112\061\054\060\052\006\003\125\004\003
\014\043\101\103\040\122\101\111\132\040\106\116\115\124\055\122
\103\115\040\123\105\122\126\111\104\117\122\105\123\040\123\105
\107\125\122\117\123\060\036\027\015\061\070\061\062\062\060\060
\071\063\067\063\063\132\027\015\064\063\061\062\062\060\060\071
\063\067\063\063\132\060\170\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\021\060\017\006\003\125\004\012\014\010\106
\116\115\124\055\122\103\115\061\016\060\014\006\003\125\004\013
\014\005\103\145\162\145\163\061\030\060\026\006\003\125\004\141
\014\017\126\101\124\105\123\055\121\062\070\062\066\060\060\064
\112\061\054\060\052\006\003\125\004\003\014\043\101\103\040\122
\101\111\132\040\106\116\115\124\055\122\103\115\040\123\105\122
\126\111\104\117\122\105\123\040\123\105\107\125\122\117\123\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\366\272\127\123\310\312\253\337\066
\112\122\041\344\227\322\203\147\236\360\145\121\320\136\207\307
\107\261\131\362\127\107\233\000\002\223\104\027\151\333\102\307
\261\262\072\030\016\264\135\214\263\146\135\241\064\371\066\054
\111\333\363\106\374\263\104\151\104\023\146\375\327\305\375\257
\066\115\316\003\115\007\161\317\257\152\005\322\242\103\132\012
```

```
\122\157\001\003\116\216\213\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003
\125\035\016\004\026\004\024\001\271\057\357\277\021\206\140\362
\117\320\101\156\253\163\037\347\322\156\111\060\012\006\010\052
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\256
\112\343\053\100\303\164\021\362\225\255\026\043\336\116\014\032
\346\135\245\044\136\153\104\173\374\070\342\117\313\234\105\027
\021\114\024\047\046\125\071\165\112\003\314\023\220\237\222\002
\061\000\372\112\154\140\210\163\363\356\270\230\142\251\316\053
\302\331\212\246\160\061\035\257\260\224\114\353\117\306\343\321
\363\142\247\074\377\223\056\007\134\111\001\147\151\022\002\162
\277\347
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AC

RAIZ FNMT-RCM SERVIDORES SEGUROS"

Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95

Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

Not Valid Before: Thu Dec 20 09:37:33 2018

Not Valid After : Sun Dec 20 09:37:33 2043

Fingerprint (SHA-256):

55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB

Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\142\377\331\236\300\145\015\003\316\165\223\322\355\077\055\062
\311\343\345\112
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\031\066\234\122\003\057\322\321\273\043\314\335\036\022\125\273
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
```

```
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056
\235\225
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "GlobalSign Secure Mail Root R45"

#

Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

Serial Number:76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc

#

Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

Not Valid Before: Wed Mar 18 00:00:00 2020

Not Valid After : Sat Mar 18 00:00:00 2045

Fingerprint (SHA-256):

31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74

Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Secure Mail Root R45"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
```

\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217
\127\334

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\160\060\202\003\130\240\003\002\001\002\002\020\166
\123\376\250\114\120\253\237\215\062\265\035\003\217\127\334\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\122
\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060
\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151
\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125\004
\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123\145
\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040\122
\064\065\060\036\027\015\062\060\060\063\061\070\060\060\060\060
\060\060\132\027\015\064\065\060\063\061\070\060\060\060\060\060
\060\132\060\122\061\013\060\011\006\003\125\004\006\023\002\102
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142
\141\154\123\151\147\156\040\156\166\055\163\141\061\050\060\046
\006\003\125\004\003\023\037\107\154\157\142\141\154\123\151\147
\156\040\123\145\143\165\162\145\040\115\141\151\154\040\122\157
\157\164\040\122\064\065\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\334\171\314\155\006\371\155\273\340
\126\004\154\177\340\165\314\055\005\111\350\113\334\124\354\133
\167\225\162\277\177\142\235\205\251\212\044\120\137\123\345\333
\164\157\244\051\133\023\052\011\255\232\305\057\302\367\166\073
\241\105\106\252\103\346\044\376\053\260\157\062\160\031\106\132
\171\046\057\374\075\175\137\144\313\127\314\141\141\250\331\225
\156\343\225\240\156\177\107\022\030\326\357\003\311\373\212\372
\232\275\202\025\251\125\167\113\021\117\131\340\153\303\161\363
\014\330\124\325\201\150\076\023\271\025\056\207\212\074\104\047
\066\142\044\156\370\054\005\162\060\141\275\102\221\043\304\235
\045\247\331\124\232\024\243\061\255\200\171\014\247\143\154\230
\243\254\127\107\063\037\145\226\341\320\322\065\332\371\161\367
\241\246\045\265\101\135\337\076\140\330\321\366\237\245\362\270
\314\023\252\217\371\262\156\341\203\055\223\335\076\205\032\335
\350\261\134\046\001\313\111\205\374\374\322\324\177\205\142\206
\164\371\313\354\065\042\242\014\060\217\073\253\171\353\126\362
\372\102\363\355\371\037\105\211\100\051\255\352\222\164\352\122
\375\126\264\053\332\242\355\165\302\156\253\316\122\220\113\366
\336\360\111\217\232\110\324\210\031\155\105\346\314\214\271\335
\144\140\140\002\100\370\271\317\274\130\353\075\205\271\306\012
\323\234\007\146\217\307\030\071\043\106\341\074\036\243\057\120
\141\222\013\075\053\154\361\243\107\070\127\221\253\015\217\306
\235\115\004\322\046\122\134\345\245\375\052\055\026\052\001\151

\347\251\175\341\066\267\261\052\305\331\261\215\275\271\213\316
\314\213\241\076\013\110\315\120\225\064\304\330\010\131\330\153
\046\364\276\365\324\042\027\000\127\311\256\233\004\060\063\237
\013\373\337\126\242\311\156\124\166\332\261\227\142\047\131\017
\021\212\042\033\144\226\077\250\361\267\044\112\215\074\123\174
\155\203\166\075\262\046\110\163\365\104\026\001\055\011\052\216
\026\226\120\320\163\006\135\273\042\110\202\114\012\106\132\077
\200\377\134\362\362\232\254\054\010\340\326\352\360\022\070\201
\117\246\020\355\106\253\314\026\234\013\317\144\246\231\002\205
\104\147\106\255\375\115\347\002\003\001\000\001\243\102\060\100
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\240\223\025\050
\156\356\217\010\262\065\306\236\142\171\164\247\261\016\053\173
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003
\202\002\001\000\105\012\370\321\134\254\142\201\320\004\327\266
\377\127\121\211\013\014\313\336\044\145\067\373\253\236\355\146
\364\352\014\031\151\211\270\031\261\060\126\264\331\366\367\276
\306\256\227\313\105\366\021\214\072\060\144\114\301\237\131\300
\106\102\010\006\107\144\027\170\340\225\007\006\326\214\242\254
\251\331\077\323\173\126\117\374\304\207\050\337\266\053\026\043
\300\237\037\133\343\326\104\136\042\117\043\004\214\065\026\265
\171\007\206\134\057\227\342\366\010\144\246\334\333\250\212\343
\244\173\167\015\321\051\223\050\040\264\123\243\113\116\137\336
\301\366\165\043\374\037\074\170\117\160\061\170\057\242\065\124
\161\004\254\310\304\155\303\366\221\261\376\315\356\104\156\201
\366\100\305\076\052\001\277\253\114\261\003\077\015\021\344\017
\322\044\343\042\210\233\237\137\107\075\121\111\340\011\067\176
\027\041\061\166\267\147\161\110\050\113\045\327\020\350\237\141
\131\026\305\076\062\116\037\014\316\243\314\017\344\307\021\007
\042\057\070\010\335\133\227\353\102\154\131\232\232\356\172\320
\235\337\305\333\011\103\056\012\252\031\075\153\350\152\060\172
\127\346\277\263\152\071\251\217\343\361\117\145\150\266\275\237
\050\217\241\026\132\011\120\072\062\056\035\057\104\021\102\246
\000\346\061\230\377\055\241\017\346\244\140\126\317\171\327\262
\116\327\260\372\156\014\127\043\307\316\037\245\261\114\155\031
\111\236\016\177\160\217\161\077\130\050\237\165\335\141\340\072
\267\071\266\356\227\324\065\121\373\213\111\140\310\074\146\256
\227\356\215\046\131\127\273\170\360\172\120\060\011\260\140\252
\237\116\334\311\076\036\072\334\142\223\063\260\072\124\164\157
\054\061\105\321\153\021\062\152\150\166\366\075\366\152\023\136
\044\230\347\352\035\232\317\170\202\007\140\367\115\020\323\201
\232\105\215\236\257\233\334\200\307\103\262\225\150\244\303\016
\350\012\107\025\277\124\063\334\001\347\325\246\036\163\330\172
\262\277\057\255\343\125\060\236\337\016\101\274\340\021\365\241
\014\250\042\341\343\000\243\116\160\174\222\343\004\321\172\102
\212\165\220\131\343\233\321\114\242\144\275\163\171\233\157\362
\263\301\366\074

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "GlobalSign Secure Mail Root R45"
# Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE
# Serial Number:76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc
# Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 18 00:00:00 2020
# Not Valid After : Sat Mar 18 00:00:00 2045
# Fingerprint (SHA-256):
31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74
# Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root R45"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\166\030\321\363\200\044\075\122\100\306\021\152\255\127\167\011
\175\201\060\240
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\223\304\173\263\016\124\107\034\103\054\213\276\160\205\142\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217
\127\334
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL
CK_FALSE

#
# Certificate "GlobalSign Secure Mail Root E45"

```



```

#
# Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE
# Serial Number:76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a
# Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 18 00:00:00 2020
# Not Valid After : Sat Mar 18 00:00:00 2045
# Fingerprint (SHA-256):
5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19
# Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root E45"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270
\220\012
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\041\060\202\001\247\240\003\002\001\002\002\020\166
\123\376\252\047\035\225\106\135\326\361\236\345\270\220\012\060
\012\006\010\052\206\110\316\075\004\003\003\060\122\061\013\060
\011\006\003\125\004\006\023\002\102\105\061\031\060\027\006\003
\125\004\012\023\020\107\154\157\142\141\154\123\151\147\156\040
\156\166\055\163\141\061\050\060\046\006\003\125\004\003\023\037
\107\154\157\142\141\154\123\151\147\156\040\123\145\143\165\162
\145\040\115\141\151\154\040\122\157\157\164\040\105\064\065\060
\036\027\015\062\060\060\063\061\070\060\060\060\060\060\132
\027\015\064\065\060\063\061\070\060\060\060\060\060\132\060

```

\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031
\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123
\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125
\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123
\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040
\105\064\065\060\166\060\020\006\007\052\206\110\316\075\002\001
\006\005\053\201\004\000\042\003\142\000\004\371\171\213\201\107
\067\211\226\077\105\111\120\177\032\046\013\223\062\176\056\300
\300\247\010\232\303\156\217\233\076\013\042\354\067\123\267\157
\212\260\274\047\067\113\155\251\106\073\331\037\377\245\241\104
\273\055\163\277\236\101\007\134\123\233\121\010\072\132\273\157
\070\307\026\221\170\302\112\023\151\035\202\337\132\057\000\210
\226\242\056\034\164\371\235\176\146\067\212\243\102\060\100\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\337\023\136\213\137
\302\100\002\375\126\267\224\114\266\036\325\246\261\024\226\060
\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060\145
\002\060\023\260\276\327\161\040\076\344\253\234\316\066\022\175
\137\114\037\052\265\151\105\063\137\323\055\132\262\344\210\307
\336\012\066\102\062\171\235\246\153\272\341\371\104\052\173\212
\303\022\002\061\000\240\146\034\116\207\235\207\311\355\231\114
\033\012\356\055\140\303\067\307\035\315\265\162\260\331\306\357
\274\362\377\077\360\122\335\010\347\252\144\171\303\344\151\127
\221\057\244\313\174

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Secure Mail Root E45"

Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

Serial Number:76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a

Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

Not Valid Before: Wed Mar 18 00:00:00 2020

Not Valid After : Sat Mar 18 00:00:00 2045

Fingerprint (SHA-256):

5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19

Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Secure Mail Root E45"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\030\056\037\062\117\211\337\276\376\210\211\360\223\302\304\240

```

\053\147\165\041
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\374\306\056\237\364\122\055\052\250\244\272\373\147\062\377
END
CKA_ISSUER
MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270
\220\012
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Root R46"
#
# Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Serial Number: 11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1
# Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not
  Valid After : Tue Mar 20 00:00:00 2046
# Fingerprint (SHA-256):
4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9
# Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root R46"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
END

```

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320
\337\045\147\321

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\132\060\202\003\102\240\003\002\001\002\002\022\021
\322\273\271\327\043\030\236\100\137\012\235\055\320\337\045\147
\321\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066\060\036\027\015\061\071\060\063
\062\060\060\060\060\060\060\060\132\027\015\064\066\060\063\062
\060\060\060\060\060\060\060\132\060\106\061\013\060\011\006\003
\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004\012
\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166\055
\163\141\061\034\060\032\006\003\125\004\003\023\023\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\122\064\066
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\254\254\164\062\350\263\145\345\272\355\103\046\035\246\211
\015\105\272\051\210\262\244\035\143\335\323\301\054\011\127\211
\071\241\125\351\147\064\167\014\156\344\125\035\122\045\322\023
\153\136\341\035\251\267\175\211\062\137\015\236\237\054\172\143
\140\100\037\246\260\266\170\217\231\124\226\010\130\256\344\006
\274\142\005\002\026\277\257\250\043\003\266\224\017\274\156\154
\302\313\325\246\273\014\351\366\301\002\373\041\336\146\335\027
\253\164\102\357\360\164\057\045\364\352\153\125\133\220\333\235
\337\136\207\012\100\373\255\031\153\373\367\312\140\210\336\332
\301\217\326\256\325\177\324\074\203\356\327\026\114\203\105\063
\153\047\320\206\320\034\055\153\363\253\175\361\205\251\365\050
\322\255\357\363\204\113\034\207\374\023\243\072\162\242\132\021
\053\326\047\161\047\355\201\055\155\146\201\222\207\264\033\130
\172\314\077\012\372\106\117\115\170\134\370\053\110\343\004\204
\313\135\366\264\152\263\145\374\102\236\121\046\043\040\313\075
\024\371\201\355\145\026\000\117\032\144\227\146\010\317\214\173
\343\053\300\235\371\024\362\033\361\126\152\026\277\054\205\205
\315\170\070\232\353\102\152\002\064\030\203\027\116\224\126\370

\266\202\265\363\226\335\075\363\276\177\040\167\076\173\031\043
\153\054\324\162\163\103\127\175\340\370\327\151\117\027\066\004
\371\300\220\140\067\105\336\346\014\330\164\215\256\234\242\155
\164\135\102\276\006\365\331\144\156\002\020\254\211\260\114\073
\007\115\100\176\044\305\212\230\202\171\216\244\247\202\040\215
\043\372\047\161\311\337\306\101\164\240\115\366\221\026\334\106
\214\137\051\143\061\131\161\014\330\157\302\266\062\175\373\346
\135\123\246\176\025\374\273\165\174\135\354\370\366\027\034\354
\307\153\031\313\363\173\360\053\007\245\331\154\171\124\166\154
\235\034\246\156\016\351\171\014\250\043\152\243\337\033\060\061
\237\261\124\173\376\152\313\146\252\334\145\320\242\236\112\232
\007\041\153\201\217\333\304\131\372\336\042\300\004\234\343\252
\133\066\223\350\075\275\172\241\235\013\166\261\013\307\235\375
\317\230\250\006\302\370\052\243\241\203\240\267\045\162\245\002
\343\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\003\134\253\163\201\207\250\314\260\246
\325\224\342\066\226\111\377\005\231\054\060\015\006\011\052\206
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\174\170
\354\366\002\054\273\133\176\222\053\135\071\334\276\330\035\242
\102\063\115\371\357\244\052\073\104\151\036\254\331\105\243\116
\074\247\330\044\121\262\124\034\223\116\304\357\173\223\205\140
\046\352\011\110\340\365\273\307\351\150\322\273\152\061\161\314
\171\256\021\250\360\231\375\345\037\274\057\250\314\127\353\166
\304\041\246\107\123\125\115\150\277\005\244\356\327\046\253\142
\332\103\067\113\342\306\265\345\262\203\031\072\307\323\333\115
\236\010\172\363\356\317\076\142\373\254\350\140\314\321\307\241
\134\203\105\304\105\314\363\027\153\024\311\004\002\076\322\044
\246\171\351\036\316\242\347\301\131\025\237\035\342\113\232\076
\237\166\010\055\153\330\272\127\024\332\203\352\376\214\125\351
\320\116\251\314\167\061\261\104\021\172\134\261\076\323\024\105
\025\030\142\044\023\322\313\115\316\134\203\301\066\362\020\265
\016\210\155\270\341\126\237\211\336\226\146\071\107\144\054\156
\115\256\142\173\277\140\164\031\270\126\254\222\254\026\062\355
\255\150\125\376\230\272\323\064\336\364\311\141\303\016\206\366
\113\204\140\356\015\173\265\062\130\171\221\125\054\201\103\263
\164\037\172\252\045\236\035\327\241\213\271\315\102\056\004\244
\146\203\115\211\065\266\154\250\066\112\171\041\170\042\320\102
\274\321\100\061\220\241\276\004\317\312\147\355\365\360\200\323
\140\311\203\052\042\005\320\007\073\122\277\014\236\252\053\371
\273\346\037\217\045\272\205\215\027\036\002\376\135\120\004\127
\317\376\055\274\357\134\300\032\253\266\237\044\306\337\163\150
\110\220\054\024\364\077\122\032\344\322\313\024\303\141\151\317
\342\371\030\305\272\063\237\024\243\004\135\271\161\367\265\224
\330\366\063\301\132\301\064\213\174\233\335\223\072\347\023\242
\160\141\237\257\217\353\330\305\165\370\063\146\324\164\147\072
\067\167\234\347\335\244\017\166\103\146\212\103\362\237\373\014

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\102\170\143\321\342\017\157\173\324\241\075\164\227\205\267\110
\071\101\326\040\374\320\072\263\372\350\157\304\212\272\161\067
\276\213\227\261\170\061\117\263\347\266\003\023\316\124\235\256
\045\131\314\177\065\137\010\367\100\105\061\170\052\172
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

#
Trust for "GlobalSign Root R46"
# Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Serial Number:11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1
# Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not Valid After : Tue Mar 20 00:00:00 2046
# Fingerprint (SHA-256):
4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9
# Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root R46"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\123\242\260\113\312\153\326\105\346\071\212\216\304\015\322\277
\167\303\242\220
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\304\024\060\344\372\146\103\224\052\152\033\044\137\031\320\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320
\337\045\147\321
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```

#
# Certificate "GlobalSign Root E46"
#
# Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE
# Serial Number:11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43
# Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not Valid After : Tue Mar 20 00:00:00 2046
# Fingerprint (SHA-256):
CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58
#
Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root E46"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\105\064\066
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\105\064\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204
\035\230\350\103
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\013\060\202\001\221\240\003\002\001\002\002\022\021
\322\273\272\063\156\324\274\346\044\150\305\015\204\035\230\350
\103\060\012\006\010\052\206\110\316\075\004\003\003\060\106\061
\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060\027
\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151\147
\156\040\156\166\055\163\141\061\034\060\032\006\003\125\004\003
\023\023\107\154\157\142\141\154\123\151\147\156\040\122\157\157
\164\040\105\064\066\060\036\027\015\061\071\060\063\062\060\060

```

```
\060\060\060\060\060\132\027\015\064\066\060\063\062\060\060\060
\060\060\060\060\132\060\106\061\013\060\011\006\003\125\004\006
\023\002\102\105\061\031\060\027\006\003\125\004\012\023\020\107
\154\157\142\141\154\123\151\147\156\040\156\166\055\163\141\061
\034\060\032\006\003\125\004\003\023\023\107\154\157\142\141\154
\123\151\147\156\040\122\157\157\164\040\105\064\066\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\234\016\261\317\267\350\236\122\167\165\064
\372\245\106\247\255\062\031\062\264\007\251\047\312\224\273\014
\322\012\020\307\332\211\260\227\014\160\023\011\001\216\330\352
\107\352\276\262\200\053\315\374\050\015\333\254\274\244\206\067
\355\160\010\000\165\352\223\013\173\056\122\234\043\150\043\006
\103\354\222\057\123\204\333\373\107\024\007\350\137\224\147\135
\311\172\201\074\040\243\102\060\100\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\061\012\220\217\266\306\235\322\104\113\200
\265\242\346\037\261\022\117\033\225\060\012\006\010\052\206\110
\316\075\004\003\003\003\150\000\060\145\002\061\000\337\124\220
\355\233\357\213\224\002\223\027\202\231\276\263\236\054\366\013
\221\214\237\112\024\261\366\144\274\273\150\121\023\014\003\367
\025\213\204\140\271\213\377\122\216\347\214\274\034\002\060\074
\371\021\324\214\116\300\301\141\302\025\114\252\253\035\013\061
\137\073\034\342\000\227\104\061\346\376\163\226\057\332\226\323
\376\010\007\263\064\211\274\005\237\367\036\206\356\213\160
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root E46"

Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

Serial Number: 11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43

Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

Not Valid Before: Wed Mar 20 00:00:00 2019

Not Valid After : Tue Mar 20 00:00:00 2046

Fingerprint (SHA-256):

CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58

Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL

CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Root E46"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\071\264\154\325\376\200\006\353\342\057\112\273\010\063\240\257
```



```

\333\271\335\204
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\265\270\146\355\336\010\203\343\311\342\001\064\006\254\121\157
END
CKA_ISSUER MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\105\064\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204
\035\230\350\103
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GLOBALTRUST
# 2020"
#
# Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5
# Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Not Valid Before: Mon Feb 10 00:00:00 2020
# Not Valid After : Sun Jun 10 00:00:00 2040
# Fingerprint (SHA-256):
9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A
# Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GLOBALTRUST 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060
END
CKA_ID

```

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\013\132\113\275\132\373\117\212\133\372\145\345

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\202\060\202\003\152\240\003\002\001\002\002\013\132
\113\275\132\373\117\212\133\372\145\345\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\115\061\013\060\011\006
\003\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004
\012\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157
\156\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060
\027\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122
\125\123\124\040\062\060\062\060\060\060\060\036\027\015\062\060\060\062
\061\060\060\060\060\060\060\060\132\027\015\064\060\060\066\061
\060\060\060\060\060\060\060\132\060\115\061\013\060\011\006\003
\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004\012
\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157\156
\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060\027
\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122\125
\123\124\040\062\060\062\060\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\256\056\126\255\033\034\357\366
\225\217\240\167\033\053\323\143\217\204\115\105\242\017\237\133
\105\253\131\173\121\064\371\354\213\212\170\305\335\153\257\275
\304\337\223\105\036\277\221\070\013\256\016\026\347\101\163\370
\333\273\321\270\121\340\313\203\073\163\070\156\167\212\017\131
\143\046\315\247\052\316\124\373\270\342\300\174\107\316\140\174
\077\262\163\362\300\031\266\212\222\207\065\015\220\050\242\344
\025\004\143\076\272\257\356\174\136\314\246\213\120\262\070\367
\101\143\312\316\377\151\217\150\016\225\066\345\314\271\214\011
\312\113\335\061\220\226\310\314\037\375\126\226\064\333\216\034
\352\054\276\205\056\143\335\252\251\225\323\375\051\225\023\360
\310\230\223\331\055\026\107\220\021\203\242\072\042\242\050\127
\242\353\376\300\214\050\240\246\175\347\052\102\073\202\200\143
\245\143\037\031\314\174\262\146\250\302\323\155\067\157\342\176
\006\121\331\105\204\037\022\316\044\122\144\205\013\110\200\116
\207\261\042\042\060\252\353\256\276\340\002\340\100\350\260\102
\200\003\121\252\264\176\252\104\327\103\141\363\242\153\026\211
\111\244\243\244\053\212\002\304\170\364\150\212\301\344\172\066
\261\157\033\226\033\167\111\215\324\311\006\162\217\317\123\343
\334\027\205\040\112\334\230\047\323\221\046\053\107\036\151\007

\257\336\242\344\344\324\153\013\263\136\174\324\044\200\107\051
\151\073\156\350\254\375\100\353\330\355\161\161\053\362\350\130
\035\353\101\227\042\305\037\324\071\320\047\217\207\343\030\364
\340\251\106\015\365\164\072\202\056\320\156\054\221\243\061\134
\073\106\352\173\004\020\126\136\200\035\365\245\145\350\202\374
\342\007\214\142\105\365\040\336\106\160\206\241\274\223\323\036
\164\246\154\260\054\367\003\014\210\014\313\324\162\123\206\274
\140\106\363\230\152\302\361\277\103\371\160\040\167\312\067\101
\171\125\122\143\215\133\022\237\305\150\304\210\235\254\362\060
\253\267\243\061\227\147\255\217\027\017\154\307\163\355\044\224
\153\310\203\232\320\232\067\111\004\253\261\026\310\154\111\111
\055\253\241\320\214\222\362\101\112\171\041\045\333\143\327\266
\234\247\176\102\151\373\072\143\002\003\001\000\001\243\143\060
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\035\006\003\125\035\016\004\026\004\024\334\056\037
\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150\234
\042\060\037\006\003\125\035\043\004\030\060\026\200\024\334\056
\037\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150
\234\042\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\003\202\002\001\000\221\360\102\002\150\100\356\303\150\300
\124\057\337\354\142\303\303\236\212\240\061\050\252\203\216\244
\126\226\022\020\206\126\272\227\162\322\124\060\174\255\031\325
\035\150\157\373\024\102\330\215\016\363\265\321\245\343\002\102
\136\334\350\106\130\007\065\002\060\340\274\164\112\301\103\052
\377\333\032\320\260\257\154\303\375\313\263\365\177\155\003\056
\131\126\235\055\055\065\214\262\326\103\027\054\222\012\313\135
\350\214\017\113\160\103\320\202\377\250\314\277\244\224\300\276
\207\275\212\343\223\173\306\217\233\026\235\047\145\274\172\305
\102\202\154\134\007\320\251\301\210\140\104\351\230\205\026\137
\370\217\312\001\020\316\045\303\371\140\033\240\305\227\303\323
\054\210\061\242\275\060\354\320\320\300\022\361\301\071\343\345
\365\370\326\112\335\064\315\373\157\301\117\343\000\213\126\342
\222\367\050\262\102\167\162\043\147\307\077\021\025\262\304\003
\005\276\273\021\173\012\277\250\156\347\377\130\103\317\233\147
\240\200\007\266\035\312\255\155\352\101\021\176\055\164\223\373
\302\274\276\121\104\305\357\150\045\047\200\343\310\240\324\022
\354\331\245\067\035\067\174\264\221\312\332\324\261\226\201\357
\150\134\166\020\111\257\176\245\067\200\261\034\122\275\063\201
\114\217\371\335\145\331\024\315\212\045\130\364\342\305\203\245
\011\220\324\154\024\143\265\100\337\353\300\374\304\130\176\015
\024\026\207\124\047\156\126\344\160\204\270\154\062\022\176\202
\061\103\276\327\335\174\241\255\256\326\253\040\022\357\012\303
\020\214\111\226\065\334\013\165\136\261\117\325\117\064\016\021
\040\007\165\103\105\351\243\021\332\254\243\231\302\266\171\047
\342\271\357\310\342\366\065\051\172\164\372\305\177\202\005\142
\246\012\352\150\262\171\107\006\156\362\127\250\025\063\306\367
\170\112\075\102\173\153\176\376\367\106\352\321\353\216\357\210

```
\150\133\350\301\331\161\176\375\144\357\377\147\107\210\130\045
\057\076\206\007\275\373\250\345\202\250\254\245\323\151\103\315
\061\210\111\204\123\222\300\261\071\033\071\203\001\060\304\362
\251\372\320\003\275\162\067\140\126\037\066\174\275\071\221\365
\155\015\277\173\327\222
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "GLOBALTRUST 2020"

Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5

Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

Not Valid Before: Mon Feb 10 00:00:00 2020

Not Valid After : Sun Jun 10 00:00:00 2040

Fingerprint (SHA-256):

9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A

Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE

CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GLOBALTRUST 2020"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\320\147\301\023\121\001\014\252\320\307\152\145\067\061\026\046
\117\123\161\242
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\212\307\157\313\155\343\314\242\361\174\203\372\016\170\327\350
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\013\132\113\275\132\373\117\212\133\372\145\345
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

#
# Certificate "ANF
Secure Server Root CA"
#
# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1
# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Not Valid Before: Wed Sep 04 10:00:38 2019
# Not Valid After : Tue Aug 30 10:00:38 2039
# Fingerprint (SHA-256):
FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99
# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ANF Secure Server Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\015\323\343\274\154\371\153\261
END

```

CKA_VALUE MULTILINE_OCTAL

\060\202\005\357\060\202\003\327\240\003\002\001\002\002\010\015
\323\343\274\154\371\153\261\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\204\061\022\060\020\006\003\125
\004\005\023\011\107\066\063\062\070\067\065\061\060\061\013\060
\011\006\003\125\004\006\023\002\105\123\061\047\060\045\006\003
\125\004\012\023\036\101\116\106\040\101\165\164\157\162\151\144
\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141\143
\151\157\156\061\024\060\022\006\003\125\004\013\023\013\101\116
\106\040\103\101\040\122\141\151\172\061\042\060\040\006\003\125
\004\003\023\031\101\116\106\040\123\145\143\165\162\145\040\123
\145\162\166\145\162\040\122\157\157\164\040\103\101\060\036\027
\015\061\071\060\071\060\064\061\060\060\060\063\070\132\027\015
\063\071\060\070\063\060\061\060\060\060\063\070\132\060\201\204
\061\022\060\020\006\003\125\004\005\023\011\107\066\063\062\070
\067\065\061\060\061\013\060\011\006\003\125\004\006\023\002\105
\123\061\047\060\045\006\003\125\004\012\023\036\101\116\106\040
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162
\164\151\146\151\143\141\143\151\157\156\061\024\060\022\006\003
\125\004\013\023\013\101\116\106\040\103\101\040\122\141\151\172
\061\042\060\040\006\003\125\004\003\023\031\101\116\106\040\123
\145\143\165\162\145\040\123\145\162\166\145\162\040\122\157\157
\164\040\103\101\060\202\002\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012
\002\202\002\001\000\333\353\153\053\346\144\124\225\202\220\243
\162\244\031\001\235\234\013\201\137\163\111\272\247\254\363\004
\116\173\226\013\354\021\340\133\246\034\316\033\322\015\203\034
\053\270\236\035\176\105\062\140\017\007\351\167\130\176\237\152
\310\141\116\266\046\301\114\215\377\114\357\064\262\037\145\330
\271\170\365\255\251\161\271\357\117\130\035\245\336\164\040\227
\241\355\150\114\336\222\027\113\274\253\377\145\232\236\373\107
\331\127\162\363\011\241\256\166\104\023\156\234\055\104\071\274
\371\307\073\244\130\075\101\275\264\302\111\243\310\015\322\227
\057\007\145\122\000\247\156\310\257\150\354\364\024\226\266\127
\037\126\303\071\237\053\155\344\363\076\366\065\144\332\014\034
\241\204\113\057\113\113\342\054\044\235\155\223\100\353\265\043
\216\062\312\157\105\323\250\211\173\036\317\036\372\133\103\213
\315\315\250\017\152\312\014\136\271\236\107\217\360\331\266\012
\013\130\145\027\063\271\043\344\167\031\175\313\112\056\222\173
\117\057\020\167\261\215\057\150\234\142\314\340\120\370\354\221
\247\124\114\127\011\325\166\143\305\350\145\036\356\155\152\317
\011\235\372\174\117\255\140\010\375\126\231\017\025\054\173\251
\200\253\214\141\217\112\007\166\102\336\075\364\335\262\044\063
\133\270\265\243\104\311\254\177\167\074\035\043\354\202\251\246
\342\310\006\114\002\376\254\134\231\231\013\057\020\212\246\364
\177\325\207\164\015\131\111\105\366\360\161\134\071\051\326\277
\112\043\213\365\137\001\143\322\207\163\050\265\113\012\365\370
\253\202\054\176\163\045\062\035\013\143\012\027\201\000\377\266

\166\136\347\264\261\100\312\041\273\325\200\121\345\110\122\147
\054\322\141\211\007\015\017\316\102\167\300\104\163\234\104\120
\240\333\020\012\055\225\034\201\257\344\034\345\024\036\361\066
\101\001\002\057\175\163\247\336\102\314\114\351\211\015\126\367
\237\221\324\003\306\154\311\217\333\330\034\340\100\230\135\146
\231\230\200\156\055\377\001\305\316\313\106\037\254\002\306\103
\346\256\242\204\074\305\116\036\075\155\311\024\114\343\056\101
\273\312\071\277\066\074\052\031\252\101\207\116\245\316\113\062
\171\335\220\111\177\002\003\001\000\001\243\143\060\141\060\037
\006\003\125\035\043\004\030\060\026\200\024\234\137\320\154\143
\243\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060
\035\006\003\125\035\016\004\026\004\024\234\137\320\154\143\243
\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\002\001\000\116\036\271\212\306\240\230\077\156\303\151\300\152
\134\111\122\254\313\053\135\170\070\301\325\124\204\237\223\360
\207\031\075\054\146\211\353\015\102\374\314\360\165\205\077\213
\364\200\135\171\345\027\147\275\065\202\342\362\074\216\175\133
\066\313\132\200\000\051\362\316\053\054\361\217\252\155\005\223
\154\162\307\126\353\337\120\043\050\345\105\020\075\350\147\243
\257\016\125\017\220\011\142\357\113\131\242\366\123\361\300\065
\344\057\301\044\275\171\057\116\040\042\073\375\032\040\260\244
\016\054\160\355\164\077\270\023\225\006\121\310\350\207\046\312
\244\133\152\026\041\222\335\163\140\236\020\030\336\074\201\352
\350\030\303\174\211\362\213\120\076\275\021\342\025\003\250\066
\175\063\001\154\110\025\327\210\220\231\004\305\314\346\007\364
\274\364\220\355\023\342\352\213\303\217\243\063\017\301\051\114
\023\116\332\025\126\161\163\162\202\120\366\232\063\174\242\261
\250\032\064\164\145\134\316\321\353\253\123\340\032\200\330\352
\072\111\344\046\060\233\345\034\212\250\251\025\062\206\231\222
\012\020\043\126\022\340\366\316\114\342\273\276\333\215\222\163
\001\146\057\142\076\262\162\047\105\066\355\115\126\343\227\231
\377\072\065\076\245\124\112\122\131\113\140\333\356\376\170\021
\177\112\334\024\171\140\266\153\144\003\333\025\203\341\242\276
\366\043\227\120\360\011\063\066\247\161\226\045\363\271\102\175
\333\070\077\054\130\254\350\102\341\016\330\323\073\114\056\202
\351\203\056\153\061\331\335\107\206\117\155\227\221\056\117\342
\050\161\065\026\321\362\163\376\045\053\007\107\044\143\047\310
\370\366\331\153\374\022\061\126\010\300\123\102\257\234\320\063
\176\374\006\360\061\104\003\024\361\130\352\362\152\015\251\021
\262\203\276\305\032\277\007\352\131\334\243\210\065\357\234\166
\062\074\115\006\042\316\025\345\335\236\330\217\332\336\322\304
\071\345\027\201\317\070\107\353\177\210\155\131\033\337\237\102
\024\256\176\317\250\260\146\145\332\067\257\237\252\075\352\050
\266\336\325\061\130\026\202\133\352\273\031\165\002\163\032\312
\110\032\041\223\220\012\216\223\204\247\175\073\043\030\222\211

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\240\215\254
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "ANF Secure Server Root CA"
# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1
# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Not Valid Before: Wed Sep 04 10:00:38 2019
# Not Valid After : Tue Aug 30 10:00:38 2039
# Fingerprint (SHA-256):
FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99
# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ANF Secure Server Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\133\156\150\320\314\025\266\240\137\036\301\137\256\002\374\153
\057\135\157\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\046\246\104\132\331\257\116\057\262\035\266\145\260\116\350\226
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\015\323\343\274\154\371\153\261
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

```


CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Certum EC-384 CA"

#

Issuer: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4

Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Not Valid Before: Mon Mar 26 07:24:54 2018

Not Valid After : Thu Mar 26 07:24:54 2043

Fingerprint (SHA-256):

6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6

Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum EC-384 CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272
\163\364

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\145\060\202\001\353\240\003\002\001\002\002\020\170
\217\047\134\201\022\122\040\245\004\320\055\335\272\163\364\060
\012\006\010\052\206\110\316\075\004\003\003\060\164\061\013\060
\011\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003
\125\004\012\023\030\101\163\163\145\143\157\040\104\141\164\141
\040\123\171\163\164\145\155\163\040\123\056\101\056\061\047\060
\045\006\003\125\004\013\023\036\103\145\162\164\165\155\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\061\031\060\027\006\003\125\004\003\023
\020\103\145\162\164\165\155\040\105\103\055\063\070\064\040\103
\101\060\036\027\015\061\070\060\063\062\066\060\067\062\064\065
\064\132\027\015\064\063\060\063\062\066\060\067\062\064\065\064
\132\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143
\157\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027
\006\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103
\055\063\070\064\040\103\101\060\166\060\020\006\007\052\206\110
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\304
\050\216\253\030\133\152\276\156\144\067\143\344\315\354\253\072
\367\314\241\270\016\202\111\327\206\051\237\241\224\362\343\140
\170\230\201\170\006\115\362\354\232\016\127\140\203\237\264\346
\027\057\032\263\135\002\133\211\043\074\302\021\005\052\247\210
\023\030\363\120\204\327\275\064\054\047\211\125\377\316\114\347
\337\246\037\050\304\360\124\303\271\174\267\123\255\353\302\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\215
\006\146\164\044\166\072\363\211\367\274\326\275\107\175\057\274
\020\137\113\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003
\150\000\060\145\002\060\003\125\055\246\346\030\304\174\357\311
\120\156\301\047\017\234\207\257\156\325\033\010\030\275\222\051
\301\357\224\221\170\322\072\034\125\211\142\345\033\011\036\272
\144\153\361\166\264\324\002\061\000\264\102\204\231\377\253\347
\236\373\221\227\047\135\334\260\133\060\161\316\136\070\032\152
\331\045\347\352\367\141\222\126\370\352\332\066\302\207\145\226
\056\162\045\057\177\337\303\023\311

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum EC-384 CA"

Issuer: CN=Certum EC-384

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CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4
# Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Mon Mar 26 07:24:54 2018
# Not Valid After : Thu Mar 26 07:24:54 2043
# Fingerprint (SHA-256):
6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6
# Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum EC-384 CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\363\076\170\074\254\337\364\242\314\254\147\125\151\126\327\345
\026\074\341\355
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\266\145\263\226\140\227\022\241\354\116\341\075\243\306\311\361
END
CKA_ISSUER MULTILINE_OCTAL
\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272
\163\364
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Trusted Root CA"
#
# Issuer: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Serial Number:1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed
# Subject: CN=Certum Trusted Root
CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Fri Mar 16 12:10:13 2018

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```
# Not Valid After : Mon Mar 16 12:10:13 2043
# Fingerprint (SHA-256):
FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD
# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117
\265\355
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\300\060\202\003\250\240\003\002\001\002\002\020\036
\277\131\120\270\311\200\067\114\006\367\353\125\117\265\355\060
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\172
\061\013\060\011\006\003\125\004\006\023\002\120\114\061\041\060
\037\006\003\125\004\012\023\030\101\163\163\145\143\157\040\104
\141\164\141\040\123\171\163\164\145\155\163\040\123\056\101\056
\061\047\060\045\006\003\125\004\013\023\036\103\145\162\164\165
\155\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\061\037\060\035\006\003\125
\004\003\023\026\103\145\162\164\165\155\040\124\162\165\163\164
\145\144\040\122\157\157\164\040\103\101\060\036\027\015\061\070
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\060\063\061\066\061\062\061\060\061\063\132\027\015\064\063\060
\063\061\066\061\062\061\060\061\063\132\060\172\061\013\060\011
\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003\125
\004\012\023\030\101\163\163\145\143\157\040\104\141\164\141\040
\123\171\163\164\145\155\163\040\123\056\101\056\061\047\060\045
\006\003\125\004\013\023\036\103\145\162\164\165\155\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171\061\037\060\035\006\003\125\004\003\023\026
\103\145\162\164\165\155\040\124\162\165\163\164\145\144\040\122
\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\321\055\216\273\267\066\352\155\067
\221\237\116\223\247\005\344\051\003\045\316\034\202\367\174\231
\237\101\006\315\355\243\272\300\333\011\054\301\174\337\051\176
\113\145\057\223\247\324\001\153\003\050\030\243\330\235\005\301
\052\330\105\361\221\336\337\073\320\200\002\214\317\070\017\352
\247\134\170\021\244\301\310\205\134\045\323\323\262\347\045\317
\021\124\227\253\065\300\036\166\034\357\000\123\237\071\334\024
\245\054\042\045\263\162\162\374\215\263\345\076\010\036\024\052
\067\013\210\074\312\260\364\310\302\241\256\274\301\276\051\147
\125\342\374\255\131\134\376\275\127\054\260\220\215\302\355\067
\266\174\231\210\265\325\003\232\075\025\015\075\072\250\250\105
\360\225\116\045\131\035\315\230\151\273\323\314\062\311\215\357
\201\376\255\175\211\273\272\140\023\312\145\225\147\240\363\031
\366\003\126\324\152\323\047\342\241\255\203\360\112\022\042\167
\034\005\163\342\031\161\102\300\354\165\106\232\220\130\340\152
\216\053\245\106\060\004\216\031\262\027\343\276\251\272\177\126
\361\044\003\327\262\041\050\166\016\066\060\114\171\325\101\232
\232\250\270\065\272\014\072\362\104\033\040\210\367\305\045\327
\075\306\343\076\103\335\207\376\304\352\365\123\076\114\145\377
\073\112\313\170\132\153\027\137\015\307\303\117\116\232\052\242
\355\127\115\042\342\106\232\077\017\221\064\044\175\125\343\214
\225\067\323\032\360\011\053\054\322\311\215\264\015\000\253\147
\051\050\330\001\365\031\004\266\035\276\166\376\162\134\304\205
\312\322\200\101\337\005\250\243\325\204\220\117\013\363\340\077
\233\031\322\067\211\077\362\173\122\034\214\366\341\367\074\007
\227\214\016\242\131\201\014\262\220\075\323\343\131\106\355\017
\251\247\336\200\153\132\252\007\266\031\313\274\127\363\227\041
\172\014\261\053\164\076\353\332\247\147\055\114\304\230\236\066
\011\166\146\146\374\032\077\352\110\124\034\276\060\275\200\120
\277\174\265\316\000\366\014\141\331\347\044\003\340\343\001\201
\016\275\330\205\064\210\275\262\066\250\173\134\010\345\104\200
\214\157\370\057\325\041\312\035\034\320\373\304\265\207\321\072
\116\307\166\265\065\110\265\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\214\373\034\165
\274\002\323\237\116\056\110\331\371\140\124\252\304\263\117\372
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006

\060\015\006\011\052\206\110\206\367\015\001\001\015\005\000\003
\202\002\001\000\110\242\325\000\013\056\320\077\274\034\325\265
\124\111\036\132\153\364\344\362\340\100\067\340\314\024\173\271
\311\372\065\265\165\027\223\152\005\151\205\234\315\117\031\170
\133\031\201\363\143\076\303\316\133\217\365\057\136\001\166\023
\077\054\000\271\315\226\122\071\111\155\004\116\305\351\017\206
\015\341\372\263\137\202\022\361\072\316\146\006\044\064\053\350
\314\312\347\151\334\207\235\302\064\327\171\321\323\167\270\252
\131\130\376\235\046\372\070\206\076\235\212\207\144\127\345\027
\072\342\371\215\271\343\063\170\301\220\330\270\335\267\203\121
\344\304\314\043\325\006\174\346\121\323\315\064\061\300\366\106
\273\013\255\374\075\020\005\052\073\112\221\045\356\214\324\204
\207\200\052\274\011\214\252\072\023\137\350\064\171\120\301\020
\031\371\323\050\036\324\321\121\060\051\263\256\220\147\326\037
\012\143\261\305\251\306\102\061\143\027\224\357\151\313\057\372
\214\024\175\304\103\030\211\331\360\062\100\346\200\342\106\137
\345\343\301\000\131\250\371\350\040\274\211\054\016\107\064\013
\352\127\302\123\066\374\247\324\257\061\315\376\002\345\165\372
\271\047\011\371\363\365\073\312\175\237\251\042\313\210\311\252
\321\107\075\066\167\250\131\144\153\047\317\357\047\301\343\044
\265\206\367\256\176\062\115\260\171\150\321\071\350\220\130\303
\203\274\017\054\326\227\353\316\014\341\040\307\332\267\076\303
\077\277\057\334\064\244\373\053\041\315\147\217\113\364\343\352
\324\077\347\117\272\271\245\223\105\034\146\037\041\372\144\136
\157\340\166\224\062\313\165\365\156\345\366\217\307\270\244\314
\250\226\175\144\373\044\132\112\003\154\153\070\306\350\003\103
\232\367\127\271\263\051\151\223\070\364\003\362\273\373\202\153
\007\040\321\122\037\232\144\002\173\230\146\333\134\115\132\017
\320\204\225\240\074\024\103\006\312\312\333\270\101\066\332\152
\104\147\207\257\257\343\105\021\025\151\010\262\276\026\071\227
\044\157\022\105\321\147\135\011\250\311\025\332\372\322\246\137
\023\141\037\277\205\254\264\255\255\005\224\010\203\036\165\027
\323\161\073\223\120\043\131\240\355\074\221\124\235\166\000\305
\303\270\070\333

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum Trusted Root CA"

Issuer: CN=Certum

Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Serial Number: 1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed

Subject: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Not Valid Before: Fri Mar 16 12:10:13 2018

Not Valid After : Mon Mar 16 12:10:13 2043

Fingerprint (SHA-256):

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FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD
# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\310\203\104\300\030\256\237\314\361\207\267\217\042\321\305\327
\105\204\272\345
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\121\341\302\347\376\114\204\257\131\016\057\364\124\157\352\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117
\265\355
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TunTrust Root CA"
#
# Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Serial Number:13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13
#
Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Not Valid Before: Fri Apr 26 08:57:56 2019
# Not Valid After : Tue Apr 26 08:57:56 2044
# Fingerprint (SHA-256):
2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41
# Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

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```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TunTrust Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164
\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\023\002\325\342\100\114\222\106\206\026\147\135\264\273
\273\262\153\076\374\023
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\263\060\202\003\233\240\003\002\001\002\002\024\023
\002\325\342\100\114\222\106\206\026\147\135\264\273\273\262\153
\076\374\023\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\141\061\013\060\011\006\003\125\004\006\023\002\124
\116\061\067\060\065\006\003\125\004\012\014\056\101\147\145\156
\143\145\040\116\141\164\151\157\156\141\154\145\040\144\145\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\105\154
\145\143\164\162\157\156\151\161\165\145\061\031\060\027\006\003
\125\004\003\014\020\124\165\156\124\162\165\163\164\040\122\157
\157\164\040\103\101\060\036\027\015\061\071\060\064\062\066\060
\070\065\067\065\066\132\027\015\064\064\060\064\062\066\060\070
\065\067\065\066\132\060\141\061\013\060\011\006\003\125\004\006
\023\002\124\116\061\067\060\065\006\003\125\004\012\014\056\101
\147\145\156\143\145\040\116\141\164\151\157\156\141\154\145\040
\144\145\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\105\154\145\143\164\162\157\156\151\161\165\145\061\031\060
\027\006\003\125\004\003\014\020\124\165\156\124\162\165\163\164
\040\122\157\157\164\040\103\101\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
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\060\202\002\012\002\202\002\001\000\303\315\323\374\275\004\123
\335\014\040\072\325\210\056\005\113\101\365\203\202\176\367\131
\237\236\236\143\350\163\332\366\006\251\117\037\264\371\013\037
\071\214\232\040\320\176\006\324\354\064\331\206\274\165\133\207
\210\360\322\331\324\243\012\262\154\033\353\111\054\076\254\135
\330\224\003\240\354\064\345\060\304\065\175\373\046\115\033\156
\060\124\330\365\200\105\234\071\255\234\311\045\004\115\232\220
\076\116\100\156\212\153\315\051\147\306\314\055\340\164\350\005
\127\012\110\120\372\172\103\332\176\354\133\232\016\142\166\376
\352\235\035\205\162\354\021\273\065\350\037\047\277\301\241\307
\273\110\026\335\126\327\314\116\240\341\271\254\333\325\203\031
\032\205\321\224\227\327\312\243\145\013\363\070\371\002\256\335
\366\147\317\311\077\365\212\054\107\032\231\157\005\015\375\320
\035\202\061\374\051\314\000\130\227\221\114\200\000\034\063\205
\226\057\313\101\302\213\020\204\303\011\044\211\037\265\017\331
\331\167\107\030\222\224\140\134\307\231\003\074\376\367\225\247
\175\120\241\200\302\251\203\255\130\226\125\041\333\206\131\324
\257\306\274\335\201\156\007\333\140\142\376\354\020\156\332\150
\001\364\203\033\251\076\242\133\043\327\144\306\337\334\242\175
\330\113\272\202\322\121\370\146\277\006\106\344\171\052\046\066
\171\217\037\116\231\035\262\217\014\016\034\377\311\135\300\375
\220\020\246\261\067\363\315\072\044\156\264\205\220\277\200\271
\014\214\325\233\326\310\361\126\077\032\200\211\172\251\342\033
\062\121\054\076\362\337\173\366\135\172\051\031\216\345\310\275
\066\161\213\135\114\302\035\077\255\130\242\317\075\160\115\246
\120\230\045\334\043\371\270\130\101\010\161\277\117\270\204\240
\217\000\124\025\374\221\155\130\247\226\073\353\113\226\047\315
\153\242\241\206\254\015\174\124\346\146\114\146\137\220\276\041
\232\002\106\055\344\203\302\200\271\317\113\076\350\177\074\001
\354\217\136\315\177\322\050\102\001\225\212\342\227\075\020\041
\175\366\235\034\305\064\241\354\054\016\012\122\054\022\125\160
\044\075\313\302\024\065\103\135\047\116\276\300\275\252\174\226
\347\374\236\141\255\104\323\000\227\002\003\001\000\001\243\143
\060\141\060\035\006\003\125\035\016\004\026\004\024\006\232\233
\037\123\175\361\365\244\310\323\206\076\241\163\131\264\367\104
\041\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024\006
\232\233\037\123\175\361\365\244\310\323\206\076\241\163\131\264
\367\104\041\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\002\001\000\252\005\156\266\335\025\311\277\263
\306\040\366\006\107\260\206\223\045\323\215\271\310\000\077\227
\365\122\047\210\161\311\164\375\353\312\144\333\133\357\036\135
\272\277\321\353\356\134\151\272\026\310\363\271\217\323\066\056
\100\111\007\015\131\336\213\020\260\111\005\342\377\221\077\113
\267\335\002\216\370\201\050\134\314\334\155\257\137\024\234\175
\130\170\015\366\200\011\271\351\016\227\051\031\270\267\353\370
\026\313\125\022\344\306\175\273\304\354\370\265\034\116\076\147

```
\277\305\137\033\155\155\107\050\252\004\130\141\326\166\277\042
\177\320\007\152\247\144\123\360\227\215\235\200\077\273\301\007
\333\145\257\346\233\062\232\303\124\223\304\034\010\303\104\373
\173\143\021\103\321\152\032\141\152\171\155\220\117\051\216\107
\005\301\022\151\151\326\306\066\061\341\374\372\200\272\134\117
\304\353\267\062\254\370\165\141\027\327\020\031\271\361\322\011
\357\172\102\235\133\132\013\324\306\225\116\052\316\377\007\327
\117\176\030\006\210\361\031\265\331\230\273\256\161\304\034\347
\164\131\130\357\014\211\317\213\037\165\223\032\004\024\222\110
\120\251\353\127\051\000\026\343\066\034\310\370\277\360\063\325
\101\017\304\314\074\335\351\063\103\001\221\020\053\036\321\271
\135\315\062\031\213\217\214\040\167\327\042\304\102\334\204\026
\233\045\155\350\264\125\161\177\260\174\263\323\161\111\271\317
\122\244\004\077\334\075\240\273\257\063\236\012\060\140\216\333
\235\135\224\250\275\140\347\142\200\166\201\203\014\214\314\060
\106\111\342\014\322\250\257\353\141\161\357\347\042\142\251\367
\134\144\154\237\026\214\147\066\047\105\365\011\173\277\366\020
\012\361\260\215\124\103\214\004\272\243\077\357\342\065\307\371
\164\340\157\064\101\320\277\163\145\127\040\371\233\147\172\146
\150\044\116\200\145\275\020\231\006\131\362\145\257\270\306\107
\273\375\220\170\213\101\163\056\257\125\037\334\073\222\162\156
\204\323\320\141\114\015\314\166\127\342\055\205\042\025\066\015
\353\001\235\353\330\353\304\204\231\373\300\014\314\062\350\343
\167\332\203\104\213\236\125\050\300\213\130\323\220\076\116\033
\000\361\025\255\203\053\232
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "TunTrust Root CA"

Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

Serial Number: 13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13

Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

#

Not Valid Before: Fri Apr 26 08:57:56 2019

Not Valid After : Tue Apr 26 08:57:56 2044

Fingerprint (SHA-256):

2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41

Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TunTrust Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\317\351\160\204\017\340\163\017\235\366\014\177\054\113\356\040
```

```

\106\064\234\273
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\205\023\271\220\133\066\134\266\136\270\132\370\340\061\127\264
END
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\023\002\325\342\100\114\222\106\206\026\147\135\264\273
\273\262\153\076\374\023
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA TLS RSA Root CA 2021"
#
# Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e
# Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 10:55:38 2021
# Not Valid After : Mon Feb 13 10:55:37 2045
# Fingerprint (SHA-256):
D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D
# Fingerprint
(SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS RSA Root CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004

```

```
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123
\101\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123
\101\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\071\312\223\034\357\103\363\306\216\223\307\364\144\211
\070\176
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\244\060\202\003\214\240\003\002\001\002\002\020\071
\312\223\034\357\103\363\306\216\223\307\364\144\211\070\176\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\154
\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067\060
\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151\143
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151
\157\156\163\040\103\101\061\044\060\042\006\003\125\004\003\014
\033\110\101\122\111\103\101\040\124\114\123\040\122\123\101\040
\122\157\157\164\040\103\101\040\062\060\062\061\060\036\027\015
\062\061\060\062\061\071\061\060\065\065\063\070\132\027\015\064
\065\060\062\061\063\061\060\065\065\063\067\132\060\154\061\013
\060\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006
\003\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101
\143\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145
\141\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156
\163\040\103\101\061\044\060\042\006\003\125\004\003\014\033\110
\101\122\111\103\101\040\124\114\123\040\122\123\101\040\122\157
\157\164\040\103\101\040\062\060\062\061\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\213\302\347\257\145
\233\005\147\226\311\015\044\271\320\016\144\374\316\342\044\030
\054\204\177\167\121\313\004\021\066\270\136\355\151\161\247\236
\344\045\011\227\147\301\107\302\317\221\026\066\142\075\070\004
\341\121\202\377\254\322\264\151\335\056\354\021\243\105\356\153
\153\073\114\277\214\215\244\036\235\021\271\351\070\371\172\016
\014\230\342\043\035\321\116\143\324\347\270\101\104\373\153\257
\153\332\037\323\305\221\210\133\244\211\222\321\201\346\214\071
\130\240\326\151\103\251\255\230\122\130\156\333\012\373\153\317
```

\150\372\343\244\136\072\105\163\230\007\352\137\002\162\336\014
\245\263\237\256\251\035\267\035\263\374\212\131\347\156\162\145
\255\365\060\224\043\007\363\202\026\113\065\230\234\123\273\057
\312\344\132\331\307\215\035\374\230\231\373\054\244\202\153\360
\052\037\216\013\137\161\134\134\256\102\173\051\211\201\313\003
\243\231\312\210\236\013\100\011\101\063\333\346\130\172\375\256
\231\160\300\132\017\326\023\206\161\057\166\151\374\220\335\333
\055\156\321\362\233\365\032\153\236\157\025\214\172\360\113\050
\240\042\070\200\044\154\066\244\073\362\060\221\363\170\023\317
\301\077\065\253\361\035\021\043\265\103\042\236\001\222\267\030
\002\345\021\321\202\333\025\000\314\141\067\301\052\174\232\341
\320\272\263\120\106\356\202\254\235\061\370\373\043\342\003\000
\110\160\243\011\046\171\025\123\140\363\070\134\255\070\352\201
\000\143\024\271\063\136\335\013\333\240\105\007\032\063\011\370
\115\264\247\002\246\151\364\302\131\005\210\145\205\126\256\113
\313\340\336\074\175\055\032\310\351\373\037\243\141\112\326\052
\023\255\167\114\032\030\233\221\017\130\330\006\124\305\227\370
\252\077\040\212\246\205\246\167\366\246\374\034\342\356\156\224
\063\052\203\120\204\012\345\117\206\370\120\105\170\000\201\353
\133\150\343\046\215\314\173\134\121\364\024\054\100\276\032\140
\035\172\162\141\035\037\143\055\210\252\316\242\105\220\010\374
\153\276\263\120\052\132\375\250\110\030\106\326\220\100\222\220
\012\204\136\150\061\370\353\355\015\323\035\306\175\231\030\125
\126\047\145\056\215\105\305\044\354\316\343\002\003\001\000\001
\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024
\012\110\043\246\140\244\222\012\063\352\223\133\305\127\352\045
\115\275\022\356\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\206\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\076\220\110\252\156\142\025\045
\146\173\014\325\214\213\211\235\327\355\116\007\357\234\320\024
\137\136\120\275\150\226\220\244\024\021\252\150\155\011\065\071
\100\011\332\364\011\054\064\245\173\131\204\111\051\227\164\310
\007\036\107\155\362\316\034\120\046\343\236\075\100\123\077\367
\177\226\166\020\305\106\245\320\040\113\120\364\065\073\030\364
\125\152\101\033\107\006\150\074\273\011\010\142\331\137\125\102
\252\254\123\205\254\225\126\066\126\253\344\005\214\305\250\332
\037\243\151\275\123\017\304\377\334\312\343\176\362\114\210\206
\107\106\032\363\000\365\200\221\242\334\103\102\224\233\040\360
\321\315\262\353\054\123\302\123\170\112\117\004\224\101\232\217
\047\062\301\345\111\031\277\361\362\302\213\250\012\071\061\050
\264\175\142\066\054\115\354\037\063\266\176\167\155\176\120\360
\237\016\327\021\217\317\030\305\343\047\376\046\357\005\235\317
\317\067\305\320\173\332\073\260\026\204\014\072\223\326\276\027
\333\017\076\016\031\170\011\307\251\002\162\042\113\367\067\166
\272\165\304\205\003\132\143\325\261\165\005\302\271\275\224\255
\214\025\231\247\223\175\366\305\363\252\164\317\004\205\224\230
\000\364\342\371\312\044\145\277\340\142\257\310\305\372\262\311

```
\236\126\110\332\171\375\226\166\025\276\243\216\126\304\263\064
\374\276\107\364\301\264\250\374\325\060\210\150\356\313\256\311
\143\304\166\276\254\070\030\341\136\134\317\256\072\042\121\353
\321\213\263\363\053\063\007\124\207\372\264\262\023\173\272\123
\004\142\001\235\361\300\117\356\341\072\324\213\040\020\372\002
\127\346\357\301\013\267\220\106\234\031\051\214\334\157\240\112
\151\151\224\267\044\145\240\377\254\077\316\001\373\041\056\375
\150\370\233\362\245\317\061\070\134\025\252\346\227\000\301\337
\132\245\247\071\252\351\204\177\074\121\250\072\331\224\133\214
\277\117\010\161\345\333\250\134\324\322\246\376\000\243\306\026
\307\017\350\200\316\034\050\144\164\031\010\323\102\343\316\000
\135\177\261\334\023\260\341\005\313\321\040\252\206\164\236\071
\347\221\375\377\133\326\367\255\246\057\003\013\155\343\127\124
\353\166\123\030\215\021\230\272
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "HARICA TLS RSA Root CA 2021"

Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e

Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Not Valid Before: Fri Feb 19 10:55:38 2021

Not Valid After : Mon Feb 13 10:55:37 2045

Fingerprint (SHA-256):

D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D

Fingerprint (SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "HARICA TLS RSA Root CA 2021"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\002\055\005\202\372\210\316\024\014\006\171\336\177\024\020\351
\105\327\245\155
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\145\107\233\130\206\335\054\360\374\242\204\037\036\226\304\221
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
```

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\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123
\101\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\071\312\223\034\357\103\363\306\216\223\307\364\144\211
\070\176
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA TLS ECC Root CA 2021"
#
# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce
# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:01:10 2021
# Not Valid After : Mon Feb 13 11:01:09 2045
# Fingerprint (SHA-256):
3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01
# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS ECC Root
CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103
\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103

```

\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342
\277\316
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\124\060\202\001\333\240\003\002\001\002\002\020\147
\164\235\215\167\330\073\152\333\042\364\377\131\342\277\316\060
\012\006\010\052\206\110\316\075\004\003\003\060\154\061\013\060
\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163
\040\103\101\061\044\060\042\006\003\125\004\003\014\033\110\101
\122\111\103\101\040\124\114\123\040\105\103\103\040\122\157\157
\164\040\103\101\040\062\060\062\061\060\036\027\015\062\061\060
\062\061\071\061\061\060\061\061\060\132\027\015\064\065\060\062
\061\063\061\061\060\061\060\071\132\060\154\061\013\060\011\006
\003\125\004\006\023\002\107\122\061\067\060\065\006\003\125\004
\012\014\056\110\145\154\154\145\156\151\143\040\101\143\141\144
\145\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143
\150\040\111\156\163\164\151\164\165\164\151\157\156\163\040\103
\101\061\044\060\042\006\003\125\004\003\014\033\110\101\122\111
\103\101\040\124\114\123\040\105\103\103\040\122\157\157\164\040
\103\101\040\062\060\062\061\060\166\060\020\006\007\052\206\110
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\070
\010\376\261\240\226\322\172\254\257\111\072\320\300\340\303\073
\050\252\361\162\155\145\000\107\210\204\374\232\046\153\252\113
\272\154\004\012\210\136\027\362\125\207\374\060\260\064\342\064
\130\127\032\204\123\351\060\331\251\362\226\164\303\121\037\130
\111\061\314\230\116\140\021\207\165\323\162\224\220\117\233\020
\045\052\250\170\055\276\220\101\130\220\025\162\247\241\267\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\311
\033\123\201\022\376\004\325\026\321\252\274\232\157\267\240\225
\031\156\312\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\206\060\012\006\010\052\206\110\316\075\004\003\003\003
\147\000\060\144\002\060\021\336\256\370\334\116\210\260\251\360
\042\255\302\121\100\357\140\161\055\356\217\002\304\135\003\160
\111\244\222\352\305\024\210\160\246\323\015\260\252\312\054\100
\234\373\351\202\156\232\002\060\053\107\232\007\306\321\302\201
\174\312\013\226\030\101\033\243\364\060\011\236\265\043\050\015
\237\024\266\074\123\242\114\006\151\175\372\154\221\306\052\111
\105\346\354\267\023\341\072\154
END
CKA_NSS_MOZILLA_CA_POLICY


```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "HARICA TLS ECC Root CA 2021"
# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce
# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic
  Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:01:10 2021
# Not Valid After : Mon Feb 13 11:01:09 2045
# Fingerprint (SHA-256):
3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01
# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS ECC Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\274\260\301\235\351\230\222\160\031\070\127\351\215\247\264\135
\156\356\001\110
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\256\367\114\345\146\065\321\267\233\214\042\223\164\323\113\260
END
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103
\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342
\277\316
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA Client RSA Root CA 2021"
#

```

```
# Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e
# Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 10:58:46 2021
# Not Valid After : Mon Feb 13 10:58:45 2045
# Fingerprint (SHA-256):
1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D
#
```

```
Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "HARICA Client RSA Root CA 2021"
```

```
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
```

```
CKA_SUBJECT MULTILINE_OCTAL
```

```
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
```

```
END
```

```
CKA_ID UTF8 "0"
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
```

```
END
```

```
CKA_SERIAL_NUMBER
```

```
MULTILINE_OCTAL
```

```
\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002
\050\076
```

```
END
```

```
CKA_VALUE MULTILINE_OCTAL
```

```
\060\202\005\252\060\202\003\222\240\003\002\001\002\002\020\125
\122\370\036\333\033\044\054\236\273\226\030\315\002\050\076\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\157
\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067\060
\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151\143
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145
```

\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151
\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003\014
\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040\122
\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061\060
\036\027\015\062\061\060\062\061\071\061\060\065\070\064\066\132
\027\015\064\065\060\062\061\063\061\060\065\070\064\065\132\060
\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067
\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151
\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122
\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164
\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003
\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040
\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\201\333\127\102\220\054\164\065\364\370\270\164\031\115\253
\011\132\167\105\201\163\142\260\065\237\370\320\267\063\000\207
\023\266\226\253\016\124\022\060\007\274\233\267\110\327\321\031
\203\256\216\330\251\361\251\000\204\260\214\136\236\350\014\217
\124\151\277\366\324\010\117\046\160\376\030\101\143\032\263\062
\213\100\370\007\253\127\061\360\306\026\166\147\232\264\335\057
\362\321\153\305\320\222\204\221\161\156\017\056\143\351\037\123
\244\335\122\023\314\011\203\051\201\014\305\123\165\104\261\016
\147\123\030\320\303\037\210\113\237\224\044\264\051\274\273\350
\116\375\157\322\025\035\111\334\215\160\362\021\032\040\121\125
\021\272\210\157\304\367\120\171\326\252\061\342\204\075\136\062
\310\167\052\120\161\345\013\057\351\266\352\357\253\012\063\071
\016\375\217\245\147\103\202\216\230\151\011\011\033\100\315\070
\147\107\352\311\354\227\161\022\336\044\365\162\074\321\367\103
\114\046\367\220\262\211\351\105\113\125\075\061\005\172\101\342
\225\272\103\300\027\305\266\205\075\031\215\144\160\363\133\254
\315\237\323\051\165\207\113\225\147\152\246\370\321\335\274\220
\206\211\103\051\251\067\133\365\135\260\046\132\123\102\166\220
\053\317\236\126\154\053\124\317\134\232\145\337\133\213\110\140
\070\174\373\305\013\317\166\004\143\002\063\052\175\365\203\147
\347\372\306\103\375\053\017\324\046\057\167\244\062\301\044\352
\144\235\277\263\070\161\061\104\362\107\270\242\146\101\241\373
\233\173\274\307\106\152\165\277\132\242\214\350\152\104\301\270
\226\265\300\062\010\055\173\164\065\163\262\312\306\376\257\021
\162\030\366\347\310\302\317\245\052\352\173\326\131\350\174\240
\262\152\100\011\151\016\245\226\333\321\000\271\361\210\156\066
\360\210\262\235\361\122\362\303\174\277\060\211\074\012\151\371
\042\244\145\341\233\340\164\306\261\205\227\226\054\256\224\217
\120\246\071\022\037\276\107\362\201\170\323\165\066\236\175\132
\040\227\342\122\256\231\237\306\174\233\146\363\376\330\317\356
\275\227\006\035\055\205\334\076\066\123\226\173\040\272\350\310
\341\255\226\142\076\021\174\263\000\204\236\247\114\161\253\112
\067\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035

\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\240\326\007\075\136\044\367\173\240\104
\056\044\122\015\031\252\053\004\221\247\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\015\107
\371\011\146\061\122\354\171\356\302\250\362\150\076\355\226\105
\313\072\246\230\143\077\352\053\115\116\003\320\034\202\341\313
\323\345\326\253\133\147\050\274\235\376\014\231\012\200\125\247
\316\033\043\141\015\260\127\360\376\340\312\276\346\220\333\203
\054\276\203\216\364\171\266\376\320\015\102\247\130\037\151\352
\201\365\005\245\376\106\150\353\154\170\311\340\352\347\346\336
\061\305\322\325\054\202\143\050\235\135\250\032\176\210\346\347
\053\361\054\325\320\005\236\334\055\275\067\146\324\004\242\247
\255\277\072\302\250\073\255\377\215\235\063\340\271\232\204\241
\207\037\166\364\202\164\327\016\371\060\110\076\133\210\076\252
\134\153\326\057\014\350\216\163\302\030\221\203\071\266\146\132
\320\037\140\047\135\115\343\366\072\015\146\120\234\170\173\253
\363\023\020\256\017\057\253\350\144\263\030\040\235\106\065\144
\045\163\352\233\020\134\130\065\211\261\106\110\247\364\254\324
\035\236\133\314\251\245\032\023\117\044\120\252\331\033\155\261
\100\373\235\335\130\164\304\302\157\024\162\354\333\065\237\270
\124\165\105\303\246\310\032\050\065\072\256\145\362\251\230\316
\257\133\311\070\214\061\073\177\314\334\226\375\342\133\326\320
\131\364\166\272\013\313\117\203\020\307\100\320\035\140\351\052
\345\110\130\167\014\105\151\276\031\161\004\044\342\343\044\037
\112\310\301\076\231\365\226\230\070\110\045\241\025\260\033\327
\342\204\030\133\366\161\065\232\150\173\100\314\030\134\014\044
\235\324\225\365\231\252\106\352\256\254\277\364\024\031\044\350
\214\354\343\365\274\006\150\212\052\014\005\137\012\227\165\247
\334\176\300\375\327\172\030\337\060\321\070\113\037\260\230\160
\277\314\174\163\360\156\304\061\245\244\227\035\254\277\316\154
\041\112\276\047\043\147\363\006\126\201\012\221\216\266\341\003
\005\063\054\332\064\010\115\116\120\043\255\037\245\305\324\172
\376\352\011\354\247\050\140\213\106\174\265\352\233\335\117\371
\347\153\025\306\210\317\103\333\345\047\334\004\126\156\157\106
\025\361\126\055\350\134\014\163\303\043\201\070\040\313\311\014
\151\317\054\253\073\204\140\063\031\122\375\151\024\063

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "HARICA Client RSA Root CA 2021"

Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e

Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Not Valid Before: Fri Feb 19 10:58:46 2021

```

# Not Valid After : Mon Feb 13 10:58:45 2045
# Fingerprint (SHA-256):
1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D
#
Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA Client RSA Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\106\306\220\012\167\072\266\274\364\145\255\254\374\343\367\007
\000\156\336\156
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\157\355\134\327\210\314\070\251\334\351\335\331\135\333\330\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002
\050\076
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA Client ECC Root CA 2021"
#
# Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0
# Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:03:34 2021
# Not Valid After : Mon Feb 13 11:03:33 2045
# Fingerprint (SHA-256):
8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B
# Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

```

```
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA Client ECC Root CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020
\175\360
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\132\060\202\001\341\240\003\002\001\002\002\020\061
\150\331\330\341\142\127\036\322\031\104\210\346\020\175\360\060
\012\006\010\052\206\110\316\075\004\003\003\060\157\061\013\060
\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163
\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110\101
\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103\040
\122\157\157\164\040\103\101\040\062\060\062\061\060\036\027\015
\062\061\060\062\061\071\061\061\060\063\063\064\132\027\015\064
\065\060\062\061\063\061\061\060\063\063\063\132\060\157\061\013
\060\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006
\003\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101
```

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\143\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145
\141\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156
\163\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110
\101\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103
\040\122\157\157\164\040\103\101\040\062\060\062\061\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\007\030\255\225\226\224\320\134\017\202\367
\052\100\372\002\311\311\075\066\246\243\004\152\301\155\225\001
\210\140\022\124\154\134\242\053\156\023\072\210\225\014\034\046
\206\066\112\211\031\267\030\336\073\350\250\120\037\312\337\133
\277\111\200\025\333\343\060\341\035\132\307\052\212\001\007\376
\155\054\064\357\050\050\227\274\301\371\127\206\225\213\065\317
\236\132\321\150\225\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\122\010\322\276\062\201\045\375\365\032\227
\354\116\137\032\273\123\315\220\255\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\012\006\010\052\206\110
\316\075\004\003\003\003\147\000\060\144\002\060\114\061\105\106
\117\250\346\276\303\167\262\032\030\113\055\210\173\130\346\253
\224\153\104\003\260\027\377\337\202\163\104\121\054\375\223\035
\006\173\024\322\211\354\100\014\357\041\001\056\002\060\057\311
\056\132\154\054\035\331\225\340\236\260\271\134\122\174\366\370
\070\312\056\361\324\035\362\242\111\242\225\370\301\130\136\117
\376\163\012\357\061\260\253\043\130\023\214\213\336\073
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "HARICA

Client ECC Root CA 2021"

Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0

Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Not Valid Before: Fri Feb 19 11:03:34 2021

Not Valid After : Mon Feb 13 11:03:33 2045

Fingerprint (SHA-256):

8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B

Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "HARICA Client ECC Root CA 2021"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\276\144\323\332\024\113\322\153\315\257\217\333\246\246\162\370
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```
\336\046\371\000
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\255\270\120\246\251\202\172\154\075\032\252\244\322\143\244\104
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020
\175\360
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"
#
# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Serial Number:1b:70:e9:d2:ff:ae:6c:71
#
Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Not Valid Before: Tue Sep 23 15:22:07 2014
# Not Valid After : Mon May 05 15:22:07 2036
# Fingerprint (SHA-256):
57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A
# Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064

```



```
\060\066\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\033\160\351\322\377\256\154\161
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\033
\160\351\322\377\256\154\161\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\121\061\013\060\011\006\003\125\004
\006\023\002\105\123\061\102\060\100\006\003\125\004\003\014\071
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162
\164\151\146\151\143\141\143\151\157\156\040\106\151\162\155\141
\160\162\157\146\145\163\151\157\156\141\154\040\103\111\106\040
\101\066\062\066\063\064\060\066\070\060\036\027\015\061\064\060
\071\062\063\061\065\062\062\060\067\132\027\015\063\066\060\065
\060\065\061\065\062\062\060\067\132\060\121\061\013\060\011\006
\003\125\004\006\023\002\105\123\061\102\060\100\006\003\125\004
\003\014\071\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\040\106\151
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\040\103
\111\106\040\101\066\062\066\063\064\060\066\070\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\226\153
\216\352\370\373\361\242\065\340\177\114\332\340\303\122\327\175
\266\020\310\002\136\263\103\052\304\117\152\262\312\034\135\050
\232\170\021\032\151\131\127\257\265\040\102\344\213\017\346\337
\133\246\003\222\057\365\021\344\142\327\062\161\070\331\004\014
\161\253\075\121\176\017\007\337\143\005\134\351\277\224\157\301
\051\202\300\264\332\121\260\301\074\273\255\067\112\134\312\361
\113\066\016\044\253\277\303\204\167\375\250\120\364\261\347\306
\057\322\055\131\215\172\012\116\226\151\122\002\252\066\230\354
\374\372\024\203\014\067\037\311\222\067\177\327\201\055\345\304
\271\340\076\064\376\147\364\076\146\321\323\364\100\317\136\142
\064\017\160\006\076\040\030\132\316\367\162\033\045\154\223\164
\024\223\243\163\261\016\252\207\020\043\131\137\040\005\031\107
\355\150\216\222\022\312\135\374\326\053\262\222\074\040\317\341
\137\257\040\276\240\166\177\166\345\354\032\206\141\063\076\347
\173\264\077\240\017\216\242\271\152\157\271\207\046\157\101\154
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\210\246\120\375\152\143\013\365\223\026\033\031\217\262\355\233
\233\311\220\365\001\014\337\031\075\017\076\070\043\311\057\217
\014\321\002\376\033\125\326\116\320\215\074\257\117\244\363\376
\257\052\323\005\235\171\010\241\313\127\061\264\234\310\220\262
\147\364\030\026\223\072\374\107\330\321\170\226\061\037\272\053
\014\137\135\231\255\143\211\132\044\040\166\330\337\375\253\116
\246\042\252\235\136\346\047\212\175\150\051\243\347\212\270\332
\021\273\027\055\231\235\023\044\106\367\305\342\330\237\216\177
\307\217\164\155\132\262\350\162\365\254\356\044\020\255\057\024
\332\377\055\232\106\161\107\276\102\337\273\001\333\364\177\323
\050\217\061\131\133\323\311\002\246\264\122\312\156\227\373\103
\305\010\046\157\212\364\273\375\237\050\252\015\325\105\363\023
\072\035\330\300\170\217\101\147\074\036\224\144\256\173\013\305
\350\331\001\210\071\032\227\206\144\101\325\073\207\014\156\372
\017\306\275\110\024\277\071\115\324\236\101\266\217\226\035\143
\226\223\331\225\006\170\061\150\236\067\006\073\200\211\105\141
\071\043\307\033\104\243\025\345\034\370\222\060\273\002\003\001
\000\001\243\201\357\060\201\354\060\035\006\003\125\035\016\004
\026\004\024\145\315\353\253\065\036\000\076\176\325\164\300\034
\264\163\107\016\032\144\057\060\022\006\003\125\035\023\001\001
\377\004\010\060\006\001\001\377\002\001\001\060\201\246\006\003
\125\035\040\004\201\236\060\201\233\060\201\230\006\004\125\035
\040\000\060\201\217\060\057\006\010\053\006\001\005\005\007\002
\001\026\043\150\164\164\160\072\057\057\167\167\167\056\146\151
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\056\143
\157\155\057\143\160\163\060\134\006\010\053\006\001\005\005\007
\002\002\060\120\036\116\000\120\000\141\000\163\000\145\000\157
\000\040\000\144\000\145\000\040\000\154\000\141\000\040\000\102
\000\157\000\156\000\141\000\156\000\157\000\166\000\141\000\040
\000\064\000\067\000\040\000\102\000\141\000\162\000\143\000\145
\000\154\000\157\000\156\000\141\000\040\000\060\000\070\000\060
\000\061\000\067\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\164\207\050\002\053\167\037\146
\211\144\355\217\164\056\106\034\273\250\370\370\013\035\203\266
\072\247\350\105\212\007\267\340\076\040\313\341\010\333\023\010
\370\050\241\065\262\200\263\013\121\300\323\126\232\215\063\105
\111\257\111\360\340\075\007\172\105\023\132\377\310\227\330\323
\030\054\175\226\370\335\242\145\103\160\223\220\025\272\220\337
\350\031\260\333\054\212\140\017\267\157\224\007\036\035\246\311
\205\366\275\064\370\100\170\142\020\160\072\276\175\113\071\201
\251\020\324\226\101\273\370\137\034\013\035\010\362\261\260\211
\172\362\367\240\340\304\217\213\170\265\073\130\245\043\216\117
\125\376\066\073\340\014\267\312\052\060\101\040\264\200\315\256
\374\166\146\163\250\256\156\341\174\332\003\350\224\040\346\042
\243\320\037\220\135\040\123\024\046\127\332\124\227\337\026\104
\020\001\036\210\146\217\162\070\223\335\040\267\064\276\327\361
\356\143\216\107\171\050\006\374\363\131\105\045\140\042\063\033

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\243\137\250\272\052\332\032\075\315\100\352\214\356\005\025\225
\325\245\054\040\057\247\230\050\356\105\374\361\270\210\000\054
\217\102\332\121\325\234\345\023\150\161\105\103\213\236\013\041
\074\113\134\005\334\032\237\230\216\332\275\042\236\162\315\255
\012\313\314\243\147\233\050\164\304\233\327\032\074\004\130\246
\202\235\255\307\173\157\377\200\226\351\370\215\152\275\030\220
\035\377\111\032\220\122\067\223\057\074\002\135\202\166\013\121
\347\026\307\127\370\070\371\247\315\233\042\124\357\143\260\025
\155\123\145\003\112\136\112\240\262\247\216\111\000\131\070\325
\307\364\200\144\365\156\225\120\270\021\176\025\160\070\112\260
\177\320\304\062\160\300\031\377\311\070\055\024\054\146\364\102
\104\346\125\166\033\200\025\127\377\300\247\247\252\071\252\330
\323\160\320\056\272\353\224\152\372\137\064\206\347\142\265\375
\212\360\060\205\224\311\257\044\002\057\157\326\335\147\376\343
\260\125\117\004\230\117\244\101\126\342\223\320\152\350\326\363
\373\145\340\316\165\304\061\131\014\356\202\310\014\140\063\112
\031\272\204\147\047\017\274\102\135\275\044\124\015\354\035\160
\006\137\244\274\372\040\174\125
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Autoridad de Certificacion

Firmaprofesional CIF A62634068"

Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Serial Number:1b:70:e9:d2:ff:ae:6c:71

Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Not Valid Before: Tue Sep 23 15:22:07 2014

Not Valid After : Mon May 05 15:22:07 2036

Fingerprint (SHA-256):

57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A

Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\013\276\302\047\042\111\313\071\252\333\065\134\123\343\214\256
\170\377\266\376
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\116\156\233\124\114\312\267\372\110\344\220\261\025\113\034\243
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
```

```
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\010\033\160\351\322\377\256\154\161
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "vTrus ECC Root CA"

#

Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:6d:1c:d6:da

Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

Not Valid Before: Tue Jul 31 07:26:44 2018

Not Valid After : Fri Jul 31 07:26:44 2043

Fingerprint (SHA-256):

30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3

#

Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "vTrus ECC Root CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103
\103\040\122\157\157\164\040\103\101
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103
\103\040\122\157\157\164\040\103\101
```

END

```
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244
\073\346\155\034\326\332
```

```
END
```

```
CKA_VALUE MULTILINE_OCTAL
\060\202\002\017\060\202\001\225\240\003\002\001\002\002\024\156
\152\274\131\252\123\276\230\071\147\242\322\153\244\073\346\155
\034\326\332\060\012\006\010\052\206\110\316\075\004\003\003\060
\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061\034
\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103\150
\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060\030
\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103\103
\040\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067
\063\061\060\067\062\066\064\064\132\027\015\064\063\060\067\063
\061\060\067\062\066\064\064\132\060\107\061\013\060\011\006\003
\125\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012
\023\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056
\054\114\164\144\056\061\032\060\030\006\003\125\004\003\023\021
\166\124\162\165\163\040\105\103\103\040\122\157\157\164\040\103
\101\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\145\120\112\256\214\171\226
\112\252\034\010\303\243\242\315\376\131\126\101\167\375\046\224
\102\273\035\315\010\333\163\262\133\165\363\317\234\116\202\364
\277\370\141\046\205\154\326\205\133\162\160\322\375\333\142\264
\337\123\213\275\261\104\130\142\102\011\307\372\177\133\020\347
\376\100\375\300\330\303\053\062\347\160\246\267\246\040\125\035
\173\200\135\113\217\147\114\361\020\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\230\071\315\276\330\262\214\367
\262\253\341\255\044\257\173\174\241\333\037\317\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060
\127\235\335\126\361\307\343\351\270\111\120\153\233\151\303\157
\354\303\175\045\344\127\225\023\100\233\122\323\073\363\100\031
\274\046\307\055\006\236\265\173\066\237\365\045\324\143\153\000
\002\061\000\351\323\306\236\126\232\052\314\241\332\077\310\146
\053\323\130\234\040\205\372\253\221\212\160\160\021\070\140\144
\013\142\011\221\130\000\371\115\373\064\150\332\011\255\041\006
\030\224\316
```

```
END
```

```
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
# Trust for "vTrus ECC Root CA"
# Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN
```

```

# Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:6d:1c:d6:da
# Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Not Valid Before: Tue Jul 31 07:26:44 2018
# Not Valid After : Fri Jul 31 07:26:44 2043
# Fingerprint (SHA-256):
30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3
# Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "vTrus ECC Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\366\234\333\260\374\366\002\023\266\122\062\246\243\221\077\026
\160\332\303\341
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\336\113\301\365\122\214\233\103\341\076\217\125\124\027\215\205
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103
\103\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244
\073\346\155\034\326\332
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "vTrus Root CA"
#
# Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45
# Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Not Valid Before: Tue Jul 31 07:24:05 2018
# Not Valid After : Fri Jul 31 07:24:05 2043
# Fingerprint (SHA-256):
8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87
# Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7

```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "vTrus Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\126\060\202\003\076\240\003\002\001\002\002\024\103
\343\161\023\330\263\131\024\135\267\316\214\375\065\375\157\274
\005\215\105\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\103\061\013\060\011\006\003\125\004\006\023\002\103
\116\061\034\060\032\006\003\125\004\012\023\023\151\124\162\165
\163\103\150\151\156\141\040\103\157\056\054\114\164\144\056\061
\026\060\024\006\003\125\004\003\023\015\166\124\162\165\163\040
\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067\063
\061\060\067\062\064\060\065\132\027\015\064\063\060\067\063\061
\060\067\062\064\060\065\132\060\103\061\013\060\011\006\003\125
\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012\023
\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056\054
\114\164\144\056\061\026\060\024\006\003\125\004\003\023\015\166
\124\162\165\163\040\122\157\157\164\040\103\101\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\275\125\174
\141\323\270\035\004\142\005\240\256\154\267\160\264\101\352\113
\003\136\020\077\220\132\034\213\073\260\146\213\154\110\246\034
\042\272\325\100\222\356\063\262\043\131\311\216\274\130\332\213
\236\320\031\362\057\131\306\214\143\132\272\237\243\013\260\263
\232\134\272\021\270\022\351\014\273\317\156\154\200\207\051\024
```

\003\054\215\044\232\310\144\203\265\152\254\023\054\063\361\237
\334\054\141\074\032\077\160\125\233\255\000\122\177\317\004\271
\376\066\372\234\300\026\256\142\376\226\114\103\176\125\024\276
\032\263\322\155\302\257\166\146\225\153\052\260\224\167\205\136
\004\017\142\035\143\165\367\153\347\313\133\232\160\354\076\147
\005\360\376\007\010\200\317\050\333\005\306\024\047\057\206\175
\360\047\336\377\346\176\063\110\347\013\036\130\321\047\053\123
\016\127\112\145\327\373\242\200\140\374\114\274\065\123\001\152
\227\162\202\257\361\035\160\350\234\365\357\136\302\154\307\107
\176\132\224\205\046\115\073\272\353\114\350\260\011\302\145\302
\235\235\011\233\116\265\227\005\254\365\006\240\367\066\005\176
\364\220\262\153\304\264\371\144\352\351\032\012\310\015\250\355
\047\311\324\347\263\271\253\202\042\220\047\075\052\350\174\220
\357\274\117\375\342\012\044\247\336\145\044\244\135\352\300\166
\060\323\167\120\370\015\004\233\224\066\001\163\312\006\130\246
\323\073\334\372\004\106\023\125\212\311\104\107\270\121\071\032
\056\350\064\342\171\313\131\112\012\177\274\246\357\037\003\147
\152\131\053\045\142\223\331\123\031\146\074\047\142\051\206\115
\244\153\356\377\324\116\272\325\264\342\216\110\132\000\031\011
\361\005\331\316\221\261\367\353\351\071\117\366\157\004\103\232
\125\365\076\005\024\275\277\263\131\264\330\216\063\204\243\220
\122\252\263\002\225\140\371\014\114\150\371\356\325\027\015\370
\161\127\265\045\344\051\356\145\135\257\321\356\074\027\013\132
\103\305\245\206\352\044\236\342\005\007\334\064\102\022\221\326
\071\164\256\114\101\202\333\362\246\110\321\263\233\363\063\252
\363\246\300\305\116\365\364\235\166\143\346\002\306\042\113\301
\225\077\120\144\054\124\345\266\360\074\051\317\127\002\003\001
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\124\142\160\143\361\165\204\103\130\216\321\026\040\261\306
\254\032\274\366\211\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\002\001\000\051\272\222\111\247\255
\360\361\160\303\344\227\360\237\251\045\325\153\236\064\376\346
\032\144\366\072\153\122\262\020\170\032\237\114\332\212\332\354
\034\067\122\340\102\113\373\154\166\312\044\013\071\022\025\235
\237\021\055\374\171\144\334\340\340\365\335\340\127\311\245\262
\166\160\120\244\376\267\012\160\325\240\064\361\165\327\115\111
\272\021\321\263\330\354\202\377\353\016\304\277\144\055\175\143
\156\027\170\354\135\174\210\310\353\216\127\166\331\131\004\372
\274\122\037\105\254\360\172\200\354\354\157\166\256\221\333\020
\216\004\334\222\337\240\366\346\256\111\323\301\154\022\033\314
\051\252\371\010\245\342\067\024\312\261\270\146\357\032\202\344
\360\370\361\247\026\151\267\333\251\141\074\237\365\061\313\344
\000\106\302\057\164\261\261\327\201\356\250\046\225\274\210\257
\114\065\007\052\002\312\170\024\155\107\053\100\126\351\313\052
\140\241\147\003\240\316\214\274\260\162\147\304\061\316\333\064
\345\045\003\140\045\173\161\230\344\300\033\053\137\164\102\322


```
\113\305\131\010\007\207\276\305\303\177\347\226\331\341\334\050
\227\326\217\005\343\365\233\116\312\035\120\107\005\123\260\312
\071\347\205\240\211\301\005\073\001\067\323\077\111\342\167\353
\043\310\210\146\073\075\071\166\041\106\361\354\137\043\270\353
\242\146\165\164\301\100\367\330\150\232\223\342\055\251\056\275
\034\243\036\310\164\306\244\055\172\040\253\073\270\260\106\375
\157\335\137\122\125\165\142\360\227\240\174\327\070\375\045\337
\315\240\233\020\317\213\270\070\136\136\305\264\246\002\066\241
\036\137\034\317\342\226\235\051\252\375\230\256\122\341\363\101
\122\373\251\056\162\226\237\047\343\252\163\175\370\032\043\146
\173\073\253\145\260\062\001\113\025\076\075\242\117\014\053\065
\242\306\331\147\022\065\060\315\166\056\026\263\231\236\115\117
\116\055\073\064\103\341\232\016\015\244\146\227\272\322\034\112
\114\054\052\213\213\201\117\161\032\251\335\134\173\173\010\305
\000\015\067\100\343\174\173\124\137\057\205\137\166\366\367\247
\260\034\127\126\301\162\350\255\242\257\215\063\111\272\037\212
\334\346\164\174\140\206\157\207\227\173
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "vTrus Root CA"

Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45

Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

Not Valid Before: Tue Jul 31 07:24:05 2018

Not Valid After : Fri Jul 31 07:24:05 2043

Fingerprint (SHA-256):

8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87

Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "vTrus Root CA"

CKA_CERT_SHA1_HASH

MULTILINE_OCTAL

```
\204\032\151\373\365\315\032\045\064\023\075\343\370\374\270\231
\320\311\024\267
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\270\311\067\337\372\153\061\204\144\305\352\021\152\033\165\374
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
```

```
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "ISRG Root X2"

#

Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US

Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52

#

Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US

Not Valid Before: Fri Sep 04 00:00:00 2020

Not Valid After : Mon Sep 17 16:00:00 2040

Fingerprint (SHA-256):

69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70

Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ISRG Root X2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
```

END

CKA_ID UTF8 "0"

CKA_ISSUER

MULTILINE_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057
\207\122

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\033\060\202\001\241\240\003\002\001\002\002\020\101
\322\235\321\162\352\356\247\200\301\054\154\351\057\207\122\060
\012\006\010\052\206\110\316\075\004\003\003\060\117\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006\003
\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123\145
\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150\040
\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023\014
\111\123\122\107\040\122\157\157\164\040\130\062\060\036\027\015
\062\060\060\071\060\064\060\060\060\060\060\132\027\015\064
\060\060\071\061\067\061\066\060\060\060\060\132\060\117\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006
\003\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123
\145\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150
\040\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023
\014\111\123\122\107\040\122\157\157\164\040\130\062\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\315\233\325\237\200\203\012\354\011\112\363
\026\112\076\134\317\167\254\336\147\005\015\035\007\266\334\026
\373\132\213\024\333\342\161\140\304\272\105\225\021\211\216\352
\006\337\367\052\026\034\244\271\305\305\062\340\003\340\036\202
\030\070\213\327\105\330\012\152\156\346\000\167\373\002\121\175
\042\330\012\156\232\133\167\337\360\372\101\354\071\334\165\312
\150\007\014\037\352\243\102\060\100\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\174\102\226\256\336\113\110\073\372\222\370
\236\214\317\155\213\251\162\067\225\060\012\006\010\052\206\110
\316\075\004\003\003\003\150\000\060\145\002\060\173\171\116\106
\120\204\302\104\207\106\033\105\160\377\130\231\336\364\375\244
\322\125\246\040\055\164\326\064\274\101\243\120\137\001\047\126
\264\276\047\165\006\257\022\056\165\230\215\374\002\061\000\213
\365\167\154\324\310\145\252\340\013\054\356\024\235\047\067\244
\371\123\245\121\344\051\203\327\370\220\061\133\102\237\012\365
\376\256\000\150\347\214\111\017\266\157\133\133\025\362\347

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "ISRG Root X2"

Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US

```

# Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52
#
Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US
# Not Valid Before: Fri Sep 04 00:00:00 2020
# Not Valid After : Mon Sep 17 16:00:00 2040
# Fingerprint (SHA-256):
69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70
# Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\275\261\271\074\325\227\215\105\306\046\024\125\370\333\225\307
\132\321\123\257
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\323\236\304\036\043\074\246\337\317\243\176\155\340\024\346\345
END
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057
\207\122
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HiPKI Root CA - G1"
#
# Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW
# Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60
# Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW
# Not Valid Before: Fri Feb 22 09:46:04 2019
# Not Valid After : Thu Dec 31 15:59:59 2037
# Fingerprint (SHA-256):
F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC

```

Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60

```
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HiPKI Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152
\136\140
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\055
\335\254\316\142\227\224\241\103\350\260\315\166\152\136\140\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\117
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151\120
\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061\060
\036\027\015\061\071\060\062\062\062\060\071\064\066\060\064\132
\027\015\063\067\061\062\063\061\061\065\065\071\065\071\132\060
\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043
\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167
\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114
\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151
\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
```

\000\364\036\177\122\163\062\014\163\344\275\023\164\243\324\060
\250\320\256\113\330\266\337\165\107\146\364\174\347\071\004\036
\152\160\040\322\132\107\162\147\125\364\245\350\235\325\036\041
\241\360\147\272\314\041\150\276\104\123\277\215\371\342\334\057
\125\310\067\077\037\244\300\234\263\344\167\134\240\106\376\167
\372\032\240\070\352\355\232\162\336\053\275\224\127\072\272\354
\171\347\137\175\102\144\071\172\046\066\367\044\360\325\057\272
\225\230\021\146\255\227\065\326\165\001\200\340\257\364\204\141
\214\015\036\137\174\207\226\136\101\257\353\207\352\370\135\361
\056\210\005\076\114\042\273\332\037\052\335\122\106\144\071\363
\102\316\331\236\014\263\260\167\227\144\234\300\364\243\056\037
\225\007\260\027\337\060\333\000\030\226\114\241\201\113\335\004
\155\123\243\075\374\007\254\324\305\067\202\353\344\225\010\031
\050\202\322\102\072\243\330\123\354\171\211\140\110\140\310\162
\222\120\334\003\217\203\077\262\102\127\132\333\152\351\021\227
\335\205\050\274\060\114\253\343\302\261\105\104\107\037\340\212
\026\007\226\322\041\017\123\300\355\251\176\324\116\354\233\011
\354\257\102\254\060\326\277\321\020\105\340\246\026\262\245\305
\323\117\163\224\063\161\002\241\152\243\326\063\227\117\041\143
\036\133\217\331\301\136\105\161\167\017\201\135\137\041\232\255
\203\314\372\136\326\215\043\137\033\075\101\257\040\165\146\132
\112\366\237\373\253\030\367\161\300\266\035\061\354\073\040\353
\313\342\270\365\256\222\262\367\341\204\113\362\242\362\223\232
\042\236\323\024\157\066\124\275\037\136\131\025\271\163\250\301
\174\157\173\142\351\026\154\107\132\145\363\016\021\233\106\331
\375\155\334\326\234\300\264\175\245\260\335\077\126\157\241\371
\366\344\022\110\375\006\177\022\127\266\251\043\117\133\003\303
\340\161\052\043\267\367\260\261\073\274\230\275\326\230\250\014
\153\366\216\022\147\246\362\262\130\344\002\011\023\074\251\273
\020\264\322\060\105\361\354\367\000\021\337\145\370\334\053\103
\125\277\026\227\304\017\325\054\141\204\252\162\206\376\346\072
\176\302\077\175\356\374\057\024\076\346\205\335\120\157\267\111
\355\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\362\167\027\372\136\250\376\366\075\161
\325\150\272\311\106\014\070\330\257\260\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\120\121
\360\165\334\160\004\343\377\252\165\324\161\242\313\236\217\250
\251\323\257\165\307\124\317\072\034\004\231\042\254\304\021\342
\357\063\112\246\043\035\016\015\107\330\067\307\157\257\064\177
\117\201\153\065\117\351\162\245\061\342\170\347\367\116\224\030
\133\100\175\317\153\041\124\206\346\225\172\373\306\312\352\234
\110\116\127\011\135\057\254\364\245\264\227\063\130\325\254\171
\251\314\137\371\205\372\122\305\215\370\221\024\353\072\015\027
\320\122\302\173\343\302\163\216\106\170\006\070\054\350\134\332
\146\304\364\244\360\126\031\063\051\132\145\222\005\107\106\112
\253\204\303\036\047\241\037\021\222\231\047\165\223\017\274\066

\073\227\127\217\046\133\014\273\234\017\324\156\060\007\324\334
\137\066\150\146\071\203\226\047\046\212\310\304\071\376\232\041
\157\325\162\206\351\177\142\345\227\116\320\044\320\100\260\320
\165\010\216\275\150\356\010\327\156\174\020\160\106\033\174\340
\210\262\236\162\206\231\001\343\277\237\111\031\264\045\276\126
\145\256\027\143\345\036\337\350\377\107\245\277\341\046\005\204
\344\260\300\257\347\010\231\250\014\136\046\200\105\324\370\150
\057\226\217\256\342\112\034\234\026\014\023\157\070\207\366\273
\310\064\137\222\003\121\171\160\246\337\313\365\231\115\171\315
\116\274\127\237\103\116\153\056\053\030\370\152\163\214\272\305
\065\357\071\152\101\036\317\161\250\242\262\206\007\133\072\311
\341\357\077\145\004\200\107\062\104\160\225\116\061\147\152\164
\133\020\105\165\352\260\237\320\346\065\376\116\237\213\314\053
\222\105\133\156\045\140\205\106\315\321\252\260\166\146\223\167
\226\276\203\276\070\266\044\116\046\013\314\355\172\126\032\340
\351\132\306\144\255\114\172\000\110\104\057\271\100\273\023\076
\276\025\170\235\205\201\112\052\127\336\325\031\103\332\333\312
\133\107\206\203\013\077\266\015\166\170\163\171\042\136\261\200
\037\317\276\321\077\126\020\230\053\225\207\241\037\235\144\024
\140\071\054\263\000\125\056\344\365\263\016\127\304\221\101\000
\234\077\350\245\337\352\366\377\310\360\255\155\122\250\027\253
\233\141\374\022\121\065\344\045\375\257\252\152\206\071

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "HiPKI Root CA - G1"

Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60

#

Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

Not Valid Before: Fri Feb 22 09:46:04 2019

Not Valid After : Thu Dec 31 15:59:59 2037

Fingerprint (SHA-256):

F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC

Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "HiPKI Root CA - G1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\152\222\344\250\356\033\354\226\105\067\343\051\127\111\315\226
\343\345\322\140

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```

\151\105\337\026\145\113\350\150\232\217\166\137\377\200\236\323
END
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152
\136\140
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign ECC Root CA - R4"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2
# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL

```


\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\334\060\202\001\203\240\003\002\001\002\002\015\002
\003\345\176\365\077\223\375\245\011\041\262\246\060\012\006\010
\052\206\110\316\075\004\003\002\060\120\061\044\060\042\006\003
\125\004\013\023\033\107\154\157\142\141\154\123\151\147\156\040
\105\103\103\040\122\157\157\164\040\103\101\040\055\040\122\064
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\062
\061\061\061\063\060\060\060\060\060\060\132\027\015\063\070\060
\061\061\071\060\063\061\064\060\067\132\060\120\061\044\060\042
\006\003\125\004\013\023\033\107\154\157\142\141\154\123\151\147
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040
\122\064\061\023\060\021\006\003\125\004\012\023\012\107\154\157
\142\141\154\123\151\147\156\061\023\060\021\006\003\125\004\003
\023\012\107\154\157\142\141\154\123\151\147\156\060\131\060\023
\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316\075
\003\001\007\003\102\000\004\270\306\171\323\217\154\045\016\237
\056\071\031\034\003\244\256\232\345\071\007\011\026\312\143\261
\271\206\370\212\127\301\127\316\102\372\163\241\367\145\102\377
\036\301\000\262\156\163\016\377\307\041\345\030\244\252\331\161
\077\250\324\271\316\214\035\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\124\260\173\255\105\270\342\100\177
\373\012\156\373\276\063\311\074\243\204\325\060\012\006\010\052
\206\110\316\075\004\003\002\003\107\000\060\104\002\040\042\117
\164\162\271\140\257\361\346\234\240\026\005\120\137\303\136\073
\156\141\164\357\276\001\304\276\030\110\131\141\202\062\002\040
\046\235\124\143\100\336\067\140\120\317\310\330\355\235\202\256
\067\230\274\243\217\114\114\251\064\053\154\357\373\225\233\046

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "GlobalSign ECC Root CA - R4"
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2
# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\153\240\260\230\341\161\357\132\255\376\110\025\200\167\020\364
\275\157\013\050
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\046\051\370\155\341\210\277\242\145\177\252\304\315\017\177\374
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R1"
#
# Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17
# Subject: CN=GTS Root R1,O=Google Trust
Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):

```

D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF
Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002
\003\345\223\157\061\260\023\111\210\153\242\027\060\015\006\011
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157
\164\040\122\061\060\036\027\015\061\066\060\066\062\062\060\060
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003
\023\013\107\124\123\040\122\157\157\164\040\122\061\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\266\021
\002\213\036\343\241\167\233\073\334\277\224\076\267\225\247\100
\074\241\375\202\371\175\062\006\202\161\366\366\214\177\373\350
\333\274\152\056\227\227\243\214\113\371\053\366\261\371\316\204
\035\261\371\305\227\336\357\271\362\243\351\274\022\211\136\247

\252\122\253\370\043\047\313\244\261\234\143\333\327\231\176\360
\012\136\353\150\246\364\306\132\107\015\115\020\063\343\116\261
\023\243\310\030\154\113\354\374\011\220\337\235\144\051\045\043
\007\241\264\322\075\056\140\340\317\322\011\207\273\315\110\360
\115\302\302\172\210\212\273\272\317\131\031\326\257\217\260\007
\260\236\061\361\202\301\300\337\056\246\155\154\031\016\265\330
\176\046\032\105\003\075\260\171\244\224\050\255\017\177\046\345
\250\010\376\226\350\074\150\224\123\356\203\072\210\053\025\226
\011\262\340\172\214\056\165\326\234\353\247\126\144\217\226\117
\150\256\075\227\302\204\217\300\274\100\300\013\134\275\366\207
\263\065\154\254\030\120\177\204\340\114\315\222\323\040\351\063
\274\122\231\257\062\265\051\263\045\052\264\110\371\162\341\312
\144\367\346\202\020\215\350\235\302\212\210\372\070\146\212\374
\143\371\001\371\170\375\173\134\167\372\166\207\372\354\337\261
\016\171\225\127\264\275\046\357\326\001\321\353\026\012\273\216
\013\265\305\305\212\125\253\323\254\352\221\113\051\314\031\244
\062\045\116\052\361\145\104\320\002\316\252\316\111\264\352\237
\174\203\260\100\173\347\103\253\247\154\243\217\175\211\201\372
\114\245\377\325\216\303\316\113\340\265\330\263\216\105\317\166
\300\355\100\053\375\123\017\260\247\325\073\015\261\212\242\003
\336\061\255\314\167\352\157\173\076\326\337\221\042\022\346\276
\372\330\062\374\020\143\024\121\162\336\135\326\026\223\275\051
\150\063\357\072\146\354\007\212\046\337\023\327\127\145\170\047
\336\136\111\024\000\242\000\177\232\250\041\266\251\261\225\260
\245\271\015\026\021\332\307\154\110\074\100\340\176\015\132\315
\126\074\321\227\005\271\313\113\355\071\113\234\304\077\322\125
\023\156\044\260\326\161\372\364\301\272\314\355\033\365\376\201
\101\330\000\230\075\072\310\256\172\230\067\030\005\225\002\003
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004
\026\004\024\344\257\053\046\161\032\053\110\047\205\057\122\146
\054\357\360\211\023\161\076\060\015\006\011\052\206\110\206\367
\015\001\001\014\005\000\003\202\002\001\000\237\252\102\046\333
\013\233\276\377\036\226\222\056\076\242\145\112\152\230\272\042
\313\175\301\072\330\202\012\006\306\366\245\336\300\116\207\146
\171\241\371\246\130\234\252\371\265\346\140\347\340\350\261\036
\102\101\063\013\067\075\316\211\160\025\312\265\044\250\317\153
\265\322\100\041\230\317\042\064\317\073\305\042\204\340\305\016
\212\174\135\210\344\065\044\316\233\076\032\124\036\156\333\262
\207\247\374\363\372\201\125\024\142\012\131\251\042\005\061\076
\202\326\356\333\127\064\274\063\225\323\027\033\350\047\242\213
\173\116\046\032\172\132\144\266\321\254\067\361\375\240\363\070
\354\162\360\021\165\235\313\064\122\215\346\166\153\027\306\337
\206\253\047\216\111\053\165\146\201\020\041\246\352\076\364\256
\045\377\174\025\336\316\214\045\077\312\142\160\012\367\057\011
\146\007\310\077\034\374\360\333\105\060\337\142\210\301\265\017
\235\303\237\112\336\131\131\107\305\207\042\066\346\202\247\355

```
\012\271\342\007\240\215\173\172\112\074\161\322\342\003\241\037
\062\007\335\033\344\102\316\014\000\105\141\200\265\013\040\131
\051\170\275\371\125\313\143\305\074\114\364\266\377\333\152\137
\061\153\231\236\054\301\153\120\244\327\346\030\024\275\205\077
\147\253\106\237\240\377\102\247\072\177\134\313\135\260\160\035
\053\064\365\324\166\011\014\353\170\114\131\005\363\063\102\303
\141\025\020\033\167\115\316\042\214\324\205\362\105\175\267\123
\352\357\100\132\224\012\134\040\137\116\100\135\142\042\166\337
\377\316\141\275\214\043\170\322\067\002\340\216\336\321\021\067
\211\366\277\355\111\007\142\256\222\354\100\032\257\024\011\331
\320\116\262\242\367\276\356\356\330\377\334\032\055\336\270\066
\161\342\374\171\267\224\045\321\110\163\133\241\065\347\263\231
\147\165\301\031\072\053\107\116\323\102\216\375\061\310\026\146
\332\322\014\074\333\263\216\311\241\015\200\017\173\026\167\024
\277\377\333\011\224\262\223\274\040\130\025\351\333\161\103\363
\336\020\303\000\334\250\052\225\266\302\326\077\220\153\166\333
\154\376\214\274\362\160\065\014\334\231\031\065\334\327\310\106
\143\325\066\161\256\127\373\267\202\155\334
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "GTS Root R1"

Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17

Subject: CN=GTS Root R1,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF

Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\345\214\034\304\221\073\070\143\113\351\020\156\343\255\216\153
\235\331\201\112
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\005\376\320\277\161\250\243\166\143\332\001\340\330\122\334\100
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "GTS Root R2"

#

Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa

Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8

Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002
\003\345\256\305\215\004\045\032\253\021\045\252\060\015\006\011
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157
\164\040\122\062\060\036\027\015\061\066\060\066\062\062\060\060
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003
\023\013\107\124\123\040\122\157\157\164\040\122\062\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\316\336
\375\246\373\354\354\024\064\074\007\006\132\154\131\367\031\065
\335\367\301\235\125\252\323\315\073\244\223\162\357\012\372\155
\235\366\360\205\200\133\241\110\122\237\071\305\267\356\050\254
\357\313\166\150\024\271\337\255\001\154\231\037\304\042\035\237
\376\162\167\340\054\133\257\344\004\277\117\162\240\032\064\230
\350\071\150\354\225\045\173\166\241\346\151\271\205\031\275\211
\214\376\255\355\066\352\163\274\377\203\342\313\175\301\322\316
\112\263\215\005\236\213\111\223\337\301\133\320\156\136\360\056
\060\056\202\374\372\274\264\027\012\110\345\210\233\305\233\153
\336\260\312\264\003\360\332\364\220\270\145\144\367\134\114\255
\350\176\146\136\231\327\270\302\076\310\320\023\235\255\356\344
\105\173\211\125\367\212\037\142\122\204\022\263\302\100\227\343
\212\037\107\221\246\164\132\322\370\261\143\050\020\270\263\011
\270\126\167\100\242\046\230\171\306\376\337\045\356\076\345\240
\177\324\141\017\121\113\074\077\214\332\341\160\164\330\302\150
\241\371\301\014\351\241\342\177\273\125\074\166\006\356\152\116
\314\222\210\060\115\232\275\117\013\110\232\204\265\230\243\325
\373\163\301\127\141\335\050\126\165\023\256\207\216\347\014\121
\011\020\165\210\114\274\215\371\173\074\324\042\110\037\052\334
\353\153\273\104\261\313\063\161\062\106\257\255\112\361\214\350
\164\072\254\347\032\042\163\200\322\060\367\045\102\307\042\073
\073\022\255\226\056\306\303\166\007\252\040\267\065\111\127\351
\222\111\350\166\026\162\061\147\053\226\176\212\243\307\224\126
\042\277\152\113\176\001\041\262\043\062\337\344\232\104\155\131
\133\135\365\000\240\034\233\306\170\227\215\220\377\233\310\252
\264\257\021\121\071\136\331\373\147\255\325\133\021\235\062\232
\033\275\325\272\133\245\311\313\045\151\123\125\047\134\340\312
\066\313\210\141\373\036\267\320\313\356\026\373\323\246\114\336

\222\245\324\342\337\365\006\124\336\056\235\113\264\223\060\252
\201\316\335\032\334\121\163\015\117\160\351\345\266\026\041\031
\171\262\346\211\013\165\144\312\325\253\274\011\301\030\241\377
\324\124\241\205\074\375\024\044\003\262\207\323\244\267\002\003
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004
\026\004\024\273\377\312\216\043\237\117\231\312\333\342\150\246
\245\025\047\027\036\331\016\060\015\006\011\052\206\110\206\367
\015\001\001\014\005\000\003\202\002\001\000\037\312\316\335\307
\276\241\237\331\047\114\013\334\027\230\021\152\210\336\075\346
\161\126\162\262\236\032\116\234\325\053\230\044\135\233\153\173
\260\063\202\011\275\337\045\106\352\230\236\266\033\376\203\074
\322\142\141\301\004\355\316\340\305\311\310\023\023\125\347\250
\143\255\214\173\001\376\167\060\341\316\150\233\005\370\022\356
\171\061\240\101\105\065\050\012\161\244\044\117\214\334\074\202
\007\137\146\334\175\020\376\014\141\263\005\225\356\341\256\201
\017\250\370\307\217\115\250\043\002\046\153\035\203\122\125\316
\265\057\000\312\200\100\340\341\164\254\140\365\207\200\235\256
\066\144\221\135\260\150\030\352\212\141\311\167\250\227\304\311
\307\245\374\125\113\363\360\177\271\145\075\047\150\320\314\153
\372\123\235\341\221\032\311\135\032\226\155\062\207\355\003\040
\310\002\316\132\276\331\352\375\262\115\304\057\033\337\137\172
\365\370\213\306\356\061\072\045\121\125\147\215\144\062\173\351
\236\303\202\272\052\055\351\036\264\340\110\006\242\374\147\257
\037\042\002\163\373\040\012\257\235\124\113\241\315\377\140\107
\260\077\135\357\033\126\275\227\041\226\055\012\321\136\235\070
\002\107\154\271\364\366\043\045\270\240\152\232\053\167\010\372
\304\261\050\220\046\130\010\074\342\176\252\327\075\157\272\061
\210\012\005\353\047\265\241\111\356\240\105\124\173\346\047\145
\231\040\041\250\243\274\373\030\226\273\122\157\014\355\203\121
\114\351\131\342\040\140\305\302\145\222\202\214\363\020\037\016
\212\227\276\167\202\155\077\217\035\135\274\111\047\275\314\117
\017\341\316\166\206\004\043\305\300\214\022\133\375\333\204\240
\044\361\110\377\144\174\320\276\134\026\321\357\231\255\300\037
\373\313\256\274\070\042\006\046\144\332\332\227\016\077\050\025
\104\250\117\000\312\360\232\314\317\164\152\264\076\074\353\225
\354\265\323\132\330\201\231\351\103\030\067\353\263\273\321\130
\142\101\363\146\322\217\252\170\225\124\040\303\132\056\164\053
\325\321\276\030\151\300\254\325\244\317\071\272\121\204\003\145
\351\142\300\142\376\330\115\125\226\342\320\021\372\110\064\021
\354\236\355\005\035\344\310\326\035\206\313

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE


```

# Trust for "GTS Root R2"
# Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa
# Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed
Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8
# Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\232\104\111\166\062\333\336\372\320\274\373\132\173\027\275\236
\126\011\044\224
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\036\071\300\123\346\036\051\202\013\312\122\125\066\135\127\334
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R3"
#
# Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66
# Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48

```

Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE

CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002
\003\345\270\202\353\040\370\045\047\155\075\146\060\012\006\010
\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122
\063\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107
\124\123\040\122\157\157\164\040\122\063\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\037\117\063\207\063\051\212\241\204\336\313\307\041\130
\101\211\352\126\235\053\113\205\306\035\114\047\274\177\046\121
\162\157\342\237\326\243\312\314\105\024\106\213\255\357\176\206
\214\354\261\176\057\377\251\161\235\030\204\105\004\101\125\156
\053\352\046\177\273\220\001\343\113\031\272\344\124\226\105\011
\261\325\154\221\104\255\204\023\216\232\214\015\200\014\062\366

```
\340\047\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\301\361\046\272\240\055\256\205\201\317\323\361\052\022
\275\270\012\147\375\274\060\012\006\010\052\206\110\316\075\004
\003\003\003\151\000\060\146\002\061\000\366\341\040\225\024\173
\124\243\220\026\021\277\204\310\352\157\153\027\236\036\106\230
\040\233\237\323\015\331\254\323\057\315\174\370\133\056\125\273
\277\335\222\367\244\014\334\061\341\242\002\061\000\374\227\146
\146\345\103\026\023\203\335\307\337\057\276\024\070\355\001\316
\261\027\032\021\165\351\275\003\217\046\176\204\345\311\140\246
\225\327\124\131\267\347\021\054\211\324\271\356\027
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GTS Root R3"

Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66

Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48

Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\355\345\161\200\053\310\222\271\133\203\074\322\062\150\077\011
\315\240\036\106
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\076\347\235\130\002\224\106\121\224\345\340\042\112\213\347\163
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R4"
#
# Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52
# Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D
#
Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002
\003\345\300\150\357\143\032\234\162\220\120\122\060\012\006\010

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\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122
\064\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107
\124\123\040\122\157\157\164\040\122\064\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\363\164\163\247\150\213\140\256\103\270\065\305\201\060
\173\113\111\235\373\301\141\316\346\336\106\275\153\325\141\030
\065\256\100\335\163\367\211\221\060\132\353\074\356\205\174\242
\100\166\073\251\306\270\107\330\052\347\222\221\152\163\351\261
\162\071\237\051\237\242\230\323\137\136\130\206\145\017\241\204
\145\006\321\334\213\311\307\163\310\214\152\057\345\304\253\321
\035\212\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\200\114\326\353\164\377\111\066\243\325\330\374\265\076
\305\152\360\224\035\214\060\012\006\010\052\206\110\316\075\004
\003\003\003\151\000\060\146\002\061\000\350\100\377\203\336\003
\364\237\256\035\172\247\056\271\257\117\366\203\035\016\055\205
\001\035\321\331\152\354\017\302\257\307\136\126\136\134\325\034
\130\042\050\013\367\060\266\057\261\174\002\061\000\360\141\074
\247\364\240\202\343\041\325\204\035\163\206\234\055\257\312\064
\233\361\237\271\043\066\342\274\140\003\235\200\263\232\126\310
\341\342\273\024\171\312\315\041\324\224\265\111\103

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GTS Root R4"

Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52

Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D

Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "GTS Root R4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\167\323\003\147\265\340\014\025\366\014\070\141\337\174\341\073
\222\106\115\107
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\103\226\203\167\031\115\166\263\235\145\122\344\035\042\245\350
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Telia Root CA v2"
#
# Issuer: CN=Telia Root CA v2,O=Telia Finland
Oyj,C=FI
# Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e
# Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI
# Not Valid Before: Thu Nov 29 11:55:54 2018
# Not Valid After : Sun Nov 29 11:55:54 2043
# Fingerprint (SHA-256):
24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C
# Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Telia Root CA v2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006

```

\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005
\236
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\017\001
\147\137\047\326\376\172\343\344\254\276\011\133\005\236\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\060\104\061
\013\060\011\006\003\125\004\006\023\002\106\111\061\032\060\030
\006\003\125\004\012\014\021\124\145\154\151\141\040\106\151\156
\154\141\156\144\040\117\171\152\061\031\060\027\006\003\125\004
\003\014\020\124\145\154\151\141\040\122\157\157\164\040\103\101
\040\166\062\060\036\027\015\061\070\061\061\062\071\061\061\065
\065\065\064\132\027\015\064\063\061\061\062\071\061\061\065\065
\065\064\132\060\104\061\013\060\011\006\003\125\004\006\023\002
\106\111\061\032\060\030\006\003\125\004\012\014\021\124\145\154
\151\141\040\106\151\156\154\141\156\144\040\117\171\152\061\031
\060\027\006\003\125\004\003\014\020\124\145\154\151\141\040\122
\157\157\164\040\103\101\040\166\062\060\202\002\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017
\000\060\202\002\012\002\202\002\001\000\262\320\077\007\274\342
\173\320\153\231\370\342\167\151\347\316\235\244\003\274\202\155
\241\376\201\145\037\114\047\254\216\000\272\026\173\353\060\152
\000\300\263\164\150\176\262\257\307\325\142\263\172\077\120\312
\214\066\104\044\143\322\066\351\014\205\366\103\166\325\114\241
\140\162\147\342\050\063\245\313\061\270\072\042\043\064\270\175
\275\126\042\100\235\352\364\173\003\255\150\374\262\201\117\230
\320\164\352\215\345\175\315\143\303\243\366\336\222\302\130\031
\340\226\273\305\304\251\075\245\164\226\376\257\371\211\252\275
\225\027\124\330\170\104\361\014\167\025\222\340\230\102\247\244
\326\252\040\222\315\301\240\263\226\262\072\204\102\215\175\325
\225\344\326\333\351\142\304\130\263\171\305\214\323\065\063\203
\237\165\241\122\047\141\070\361\131\075\216\120\340\275\171\074
\347\154\226\376\136\331\002\145\264\216\134\320\021\064\337\135
\277\122\247\201\000\303\177\231\105\231\025\325\027\310\012\123
\354\143\363\231\175\314\151\022\206\302\027\360\001\236\277\204

\274\321\122\313\033\222\146\316\244\123\345\241\277\304\333\011
\326\346\211\126\053\310\343\174\336\343\377\211\345\065\156\050
\350\154\013\043\121\251\045\005\353\110\370\335\261\312\372\154
\010\121\357\267\030\154\104\312\046\341\163\306\211\006\201\345
\212\254\260\342\051\306\271\044\263\153\104\021\364\245\103\302
\114\103\345\160\066\214\266\063\127\172\225\056\202\240\364\134
\020\263\141\203\366\002\005\206\056\174\055\154\334\003\106\156
\065\223\325\172\225\057\336\040\330\133\176\224\220\004\152\272
\131\075\004\005\165\235\067\242\016\056\075\353\301\244\122\203
\376\320\153\324\146\216\334\306\351\022\116\035\052\127\252\020
\274\174\136\202\175\246\246\311\362\055\271\365\027\047\255\321
\016\211\124\053\225\372\300\255\035\230\024\170\063\102\206\012
\251\163\265\373\164\015\267\033\060\031\304\132\016\034\047\267
\332\030\320\377\212\310\005\272\361\252\034\242\067\267\346\110
\244\106\054\224\352\250\166\142\107\213\020\123\007\110\127\154
\342\222\115\266\256\005\313\334\301\112\136\217\254\075\031\116
\302\355\140\165\053\333\301\312\102\325\002\003\001\000\001\243
\143\060\141\060\037\006\003\125\035\043\004\030\060\026\200\024
\162\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057
\206\330\044\071\060\035\006\003\125\035\016\004\026\004\024\162
\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057\206
\330\044\071\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\240\073\131\247\011\224\076\066
\204\322\176\057\071\245\226\227\372\021\255\374\147\363\161\011
\362\262\211\204\147\104\257\271\357\355\226\354\234\144\333\062
\060\157\147\232\254\176\137\262\253\001\066\176\201\372\344\204
\136\322\254\066\340\153\142\305\175\113\016\202\155\322\166\142
\321\376\227\370\237\060\174\030\371\264\122\167\202\035\166\333
\323\035\251\360\301\232\000\275\155\165\330\175\347\372\307\070
\243\234\160\350\106\171\003\257\056\164\333\165\370\156\123\014
\003\310\231\032\211\065\031\074\323\311\124\174\250\360\054\346
\156\007\171\157\152\341\346\352\221\202\151\012\035\303\176\131
\242\236\153\106\025\230\133\323\257\106\035\142\310\316\200\122
\111\021\077\311\004\022\303\023\174\077\073\212\226\333\074\240
\036\012\264\213\124\262\044\147\015\357\202\313\276\074\175\321
\342\177\256\026\326\126\130\271\332\040\261\203\025\241\357\212
\115\062\157\101\057\023\122\202\224\327\032\301\170\242\121\335
\053\160\155\267\032\371\367\260\340\147\227\126\333\174\141\123
\011\003\050\002\100\307\263\330\375\234\160\152\306\050\303\205
\351\342\355\032\223\240\336\113\230\242\204\076\005\167\001\226
\075\373\264\040\017\234\162\002\172\022\057\325\243\272\121\170
\257\052\053\104\145\116\265\375\012\350\301\315\171\207\141\053
\336\200\127\105\277\147\361\233\221\136\245\244\354\131\110\020
\015\070\307\260\372\303\104\155\004\365\170\120\034\222\226\133
\332\365\270\056\272\133\317\345\360\152\235\113\057\130\163\055
\117\055\304\034\076\364\263\077\253\025\016\073\031\101\212\244


```
\301\127\022\146\161\114\372\123\343\127\353\142\225\011\236\124
\335\321\302\074\127\074\275\070\255\230\144\267\270\003\232\123
\126\140\135\263\330\102\033\134\113\022\212\034\353\353\175\306
\172\151\307\047\177\244\370\213\362\344\224\146\207\113\351\224
\007\011\022\171\212\262\353\164\004\334\316\364\104\131\340\026
\312\305\054\130\327\074\173\317\142\206\152\120\175\065\066\146
\247\373\067\347\050\307\330\320\255\245\151\224\217\350\301\337
\044\370\033\007\061\207\201\330\135\366\350\050\330\112\122\200
\254\023\356\120\024\036\230\307
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Telia Root CA v2"

Issuer: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI

Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e

Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI

Not Valid Before: Thu Nov 29 11:55:54 2018

Not Valid After : Sun Nov 29 11:55:54 2043

Fingerprint (SHA-256):

24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C

Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Telia Root CA v2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\271\231\315\321\163\120\212\304\107\005\010\234\214\210\373\276
\240\053\100\315
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\016\217\254\252\202\337\205\261\364\334\020\034\374\231\331\110
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005
\236
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "D-TRUST BR Root CA 1 2020"

#

Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE

Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96

Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust

GmbH,C=DE

Not Valid Before: Tue Feb 11 09:45:00 2020

Not Valid After : Sun Feb 11 09:44:59 2035

Fingerprint (SHA-256):

E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44

Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "D-TRUST BR Root CA 1 2020"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113
\115\226

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\174
\311\217\053\204\327\337\352\017\311\145\232\323\113\115\226\060
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003

\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122
\125\123\124\040\102\122\040\122\157\157\164\040\103\101\040\061
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\060
\071\064\065\060\060\132\027\015\063\065\060\062\061\061\060\071
\064\064\065\071\132\060\110\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\102\122
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\306\313\307\050\321\373\204\365\232
\357\102\024\040\341\103\153\156\165\255\374\053\003\204\324\166
\223\045\327\131\073\101\145\153\036\346\064\052\273\164\366\022
\316\350\155\347\253\344\074\116\077\104\010\213\315\026\161\313
\277\222\231\364\244\327\074\120\124\122\220\205\203\170\224\147
\147\243\034\011\031\075\165\064\205\336\355\140\175\307\014\264
\101\122\271\156\345\356\102\243\202\001\015\060\202\001\011\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\163\221\020\253\377
\125\263\132\174\011\045\325\262\272\010\240\153\253\037\155\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057
\144\055\164\162\165\163\164\137\142\162\137\162\157\157\164\137
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\102
\122\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316
\075\004\003\003\003\151\000\060\146\002\061\000\224\220\055\023
\372\341\143\370\141\143\350\255\205\170\124\221\234\270\223\070
\076\032\101\332\100\026\123\102\010\312\057\216\361\076\201\126
\300\252\330\355\030\304\260\256\364\076\372\046\002\061\000\363
\050\342\306\333\053\231\373\267\121\270\044\243\244\224\172\032
\077\346\066\342\003\127\063\212\060\313\202\307\326\024\021\325
\165\143\133\024\225\234\037\001\317\330\325\162\247\017\073

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

```

# Trust for "D-TRUST BR Root CA 1 2020"
# Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96
# Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Not Valid Before: Tue Feb 11 09:45:00 2020
# Not Valid After : Sun Feb 11 09:44:59 2035
# Fingerprint (SHA-256):
E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44
# Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST BR Root CA 1 2020"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\133\230\360\343\265\367\164\074\355\346\260\066\175\062\315
\364\011\101\147
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\265\252\113\325\355\367\343\125\056\217\162\012\363\165\270\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113
\115\226
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST EV Root CA 1 2020"
#
# Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0
# Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Not Valid Before: Tue Feb 11 10:00:00 2020
# Not Valid After : Sun Feb 11 09:59:59 2035
# Fingerprint (SHA-256):

```

```
08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB
# Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST EV Root CA 1 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373
\377\320
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\137
\002\101\327\172\207\174\114\003\243\254\226\215\373\377\320\060
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003
\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122
\125\123\124\040\105\126\040\122\157\157\164\040\103\101\040\061
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\061
\060\060\060\060\060\132\027\015\063\065\060\062\061\061\060\071
\065\071\065\071\132\060\110\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\105\126
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\361\013\335\206\103\040\031\337\227
\205\350\042\112\233\317\235\230\277\264\005\046\311\313\343\246
\322\217\305\236\170\173\061\211\251\211\255\047\074\145\020\202
\374\337\303\235\116\360\063\043\304\322\062\365\034\260\337\063
```

\027\135\305\360\261\212\371\357\271\267\024\312\051\112\302\017
\251\177\165\145\111\052\060\147\364\144\367\326\032\167\332\303
\302\227\141\102\173\111\255\243\202\001\015\060\202\001\011\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\177\020\001\026\067
\072\244\050\344\120\370\244\367\354\153\062\266\376\351\213\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057
\144\055\164\162\165\163\164\137\145\166\137\162\157\157\164\137
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\105
\126\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316
\075\004\003\003\003\151\000\060\146\002\061\000\312\074\306\052
\165\302\136\165\142\071\066\000\140\132\213\301\223\231\314\331
\333\101\073\073\207\231\027\073\325\314\117\312\042\367\240\200
\313\371\264\261\033\126\365\162\322\374\031\321\002\061\000\221
\367\060\223\077\020\106\053\161\244\320\073\104\233\300\051\002
\005\262\101\167\121\363\171\132\236\216\024\240\116\102\322\133
\201\363\064\152\003\347\042\070\120\133\355\031\117\103\026

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "D-TRUST EV Root CA 1 2020"

Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0

Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

Not Valid Before: Tue

Feb 11 10:00:00 2020

Not Valid After : Sun Feb 11 09:59:59 2035

Fingerprint (SHA-256):

08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB

Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "D-TRUST EV Root CA 1 2020"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\141\333\214\041\131\151\003\220\330\174\234\022\206\124\317\235
\075\364\335\007
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\214\055\235\160\237\110\231\021\006\021\373\351\313\060\300\156
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373
\377\320
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert TLS ECC P384 Root G5"
#
# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3
# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05
# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS ECC P384 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065

```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052
\056\363

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\031\060\202\001\237\240\003\002\001\002\002\020\011
\340\223\145\254\367\331\310\271\076\034\013\004\052\056\363\060
\012\006\010\052\206\110\316\075\004\003\003\060\116\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120
\063\070\064\040\122\157\157\164\040\107\065\060\036\027\015\062
\061\060\061\061\065\060\060\060\060\060\060\132\027\015\064\066
\060\061\061\064\062\063\065\071\065\071\132\060\116\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120
\063\070\064\040\122\157\157\164\040\107\065\060\166\060\020\006
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003
\142\000\004\301\104\241\317\021\227\120\232\336\043\202\065\007
\315\320\313\030\235\322\361\177\167\065\117\073\335\224\162\122
\355\302\073\370\354\372\173\153\130\040\354\231\256\311\374\150
\263\165\271\333\011\354\310\023\365\116\306\012\035\146\060\114
\273\037\107\012\074\141\020\102\051\174\245\010\016\340\042\351
\323\065\150\316\233\143\237\204\265\231\115\130\240\216\365\124
\347\225\311\243\102\060\100\060\035\006\003\125\035\016\004\026
\004\024\301\121\105\120\131\253\076\347\054\132\372\040\042\022
\007\200\210\174\021\152\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\061\000\211\152\215\107\347
\354\374\156\125\003\331\147\154\046\116\203\306\375\311\373\053
\023\274\267\172\214\264\145\322\151\151\143\023\143\073\046\120
\056\001\241\171\006\221\235\110\277\302\276\002\060\107\303\025
\173\261\240\221\231\111\223\250\074\174\350\106\006\213\054\362
\061\000\224\235\142\310\211\275\031\204\024\351\245\373\001\270
\015\166\103\214\056\123\313\174\337\014\027\226\120


```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert TLS ECC P384 Root G5"
# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3
# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05
# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert
  TLS ECC P384 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\027\363\336\136\237\017\031\351\216\366\037\062\046\156\040\304
\007\256\060\356
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\323\161\004\152\103\034\333\246\131\341\250\243\252\305\161\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052
\056\363
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert TLS RSA4096 Root G5"
#
# Issuer:

```

```
CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a
# Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75
# Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS RSA4096 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174
\317\212
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\010
\371\264\170\250\372\176\332\152\063\067\211\336\174\317\212\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060
\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164
\054\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023
\034\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123
\101\064\060\071\066\040\122\157\157\164\040\107\065\060\036\027
\015\062\061\060\061\061\065\060\060\060\060\060\060\132\027\015
\064\066\060\061\061\064\062\063\065\071\065\071\132\060\115\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054
\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023\034
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\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123\101
\064\060\071\066\040\122\157\157\164\040\107\065\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\263\320\364
\311\171\021\235\375\374\146\201\347\314\325\344\274\354\201\076
\152\065\216\056\267\347\336\257\371\007\115\317\060\235\352\011
\013\231\275\154\127\332\030\112\270\170\254\072\071\250\246\110
\254\056\162\345\275\353\361\032\315\347\244\003\251\077\021\264
\330\057\211\026\373\224\001\075\273\057\370\023\005\241\170\034
\216\050\340\105\340\203\364\131\033\225\263\256\176\003\105\345
\276\302\102\376\356\362\074\266\205\023\230\062\235\026\250\051
\302\013\034\070\334\237\061\167\134\277\047\243\374\047\254\267
\053\275\164\233\027\055\362\201\332\135\260\341\043\027\076\210
\112\022\043\320\352\317\235\336\003\027\261\102\112\240\026\114
\244\155\223\351\077\072\356\072\174\235\130\235\364\116\217\374
\073\043\310\155\270\342\005\332\314\353\354\303\061\364\327\247
\051\124\200\317\104\133\114\157\060\236\363\314\335\037\224\103
\235\115\177\160\160\015\324\072\321\067\360\154\235\233\300\024
\223\130\357\315\101\070\165\274\023\003\225\174\177\343\134\351
\325\015\325\342\174\020\142\252\153\360\075\166\363\077\243\350
\260\301\375\357\252\127\115\254\206\247\030\264\051\301\054\016
\277\144\276\051\214\330\002\055\315\134\057\362\177\357\025\364
\014\025\254\012\260\361\323\015\117\152\115\167\227\001\240\361
\146\267\267\316\357\316\354\354\245\165\312\254\343\341\143\367
\270\241\004\310\274\173\077\135\055\026\042\126\355\110\111\376
\247\057\171\060\045\233\272\153\055\077\235\073\304\027\347\035
\056\373\362\317\246\374\343\024\054\226\230\041\214\264\221\351
\031\140\203\362\060\053\006\163\120\325\230\073\006\351\307\212
\014\140\214\050\370\122\233\156\341\366\115\273\006\044\233\327
\053\046\077\375\052\057\161\365\326\044\276\177\061\236\017\155
\350\217\117\115\243\077\377\065\352\337\111\136\101\217\206\371
\361\167\171\113\033\264\243\136\057\373\106\002\320\146\023\136
\136\205\117\316\330\160\210\173\316\001\265\226\227\327\315\175
\375\202\370\302\044\301\312\001\071\117\215\242\301\024\100\037
\234\146\325\014\011\106\326\362\320\321\110\166\126\072\103\313
\266\012\021\071\272\214\023\154\006\265\236\317\353\002\003\001
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\121\063\034\355\066\100\257\027\323\045\315\151\150\362\257
\116\043\076\263\101\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367\015
\001\001\014\005\000\003\202\002\001\000\140\246\257\133\137\127
\332\211\333\113\120\251\304\043\065\041\377\320\141\060\204\221
\267\077\020\317\045\216\311\277\106\064\331\301\041\046\034\160
\031\162\036\243\311\207\376\251\103\144\226\072\310\123\004\012
\266\101\273\304\107\000\331\237\030\030\073\262\016\363\064\352
\044\367\335\257\040\140\256\222\050\137\066\347\135\344\336\307
\074\333\120\071\255\273\075\050\115\226\174\166\306\133\364\301

\333\024\245\253\031\142\007\030\100\137\227\221\334\234\307\253
\265\121\015\346\151\123\125\314\071\175\332\305\021\125\162\305
\073\213\211\370\064\055\244\027\345\027\346\231\175\060\210\041
\067\315\060\027\075\270\362\274\250\165\240\103\334\076\211\113
\220\256\155\003\340\034\243\240\226\011\273\175\243\267\052\020
\104\113\106\007\064\143\355\061\271\004\356\243\233\232\256\346
\061\170\364\352\044\141\073\253\130\144\377\273\207\047\142\045
\201\337\334\241\057\366\355\247\377\172\217\121\056\060\370\244
\001\322\205\071\137\001\231\226\157\132\133\160\031\106\376\206
\140\076\255\200\020\011\335\071\045\057\130\177\273\322\164\360
\367\106\037\106\071\112\330\123\320\363\056\073\161\245\324\157
\374\363\147\344\007\217\335\046\031\341\215\133\372\243\223\021
\233\351\310\072\303\125\150\232\222\341\122\166\070\350\341\272
\275\373\117\325\357\263\347\110\203\061\360\202\041\343\266\276
\247\253\157\357\237\337\114\317\001\270\142\152\043\075\347\011
\115\200\033\173\060\244\303\335\007\177\064\276\244\046\262\366
\101\350\011\035\343\040\230\252\067\117\377\367\361\342\051\160
\061\107\077\164\320\024\026\372\041\212\002\325\212\011\224\167
\056\362\131\050\213\174\120\222\012\146\170\070\203\165\304\265
\132\250\021\306\345\301\235\146\125\317\123\304\257\327\165\205
\251\102\023\126\354\041\167\201\223\132\014\352\226\331\111\312
\241\010\362\227\073\155\233\004\030\044\104\216\174\001\362\334
\045\330\136\206\232\261\071\333\365\221\062\152\321\246\160\212
\242\367\336\244\105\205\046\250\036\214\135\051\133\310\113\330
\232\152\003\136\160\362\205\117\154\113\150\057\312\124\366\214
\332\062\376\303\153\203\077\070\306\176

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert TLS RSA4096 Root G5"

Issuer: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a

Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

Not Valid Before: Fri Jan 15 00:00:00 2021

Not Valid After : Sun Jan 14 23:59:59 2046

Fingerprint (SHA-256):

37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75

Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL

UTF8 "DigiCert TLS RSA4096 Root G5"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\247\210\111\334\135\174\165\214\214\336\071\230\126\263\252\320

\262\245\161\065

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\254\376\367\064\226\251\362\263\264\022\113\344\047\101\157\341

END

CKA_ISSUER MULTILINE_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145

\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004

\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040

\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174

\317\212

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DigiCert SMIME ECC

P384 Root G5"

#

Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef

Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

Not Valid Before: Fri Jan 15 00:00:00 2021

Not Valid After : Sun Jan 14 23:59:59 2046

Fingerprint (SHA-256):

E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B

Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145

\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004

\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115

\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040

\107\065

END

CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243
\326\357

END

CKA_VALUE MULTILINE_OCTAL
\060\202\002\034\060\202\001\243\240\003\002\001\002\002\020\005
\077\156\240\006\001\162\175\355\077\303\243\266\243\326\357\060
\012\006\010\052\206\110\316\075\004\003\003\060\120\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111
\156\143\056\061\050\060\046\006\003\125\004\003\023\037\104\151
\147\151\103\145\162\164\040\123\115\111\115\105\040\105\103\103
\040\120\063\070\064\040\122\157\157\164\040\107\065\060\036\027
\015\062\061\060\061\061\065\060\060\060\060\060\060\132\027\015
\064\066\060\061\061\064\062\063\065\071\065\071\132\060\120\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054
\040\111\156\143\056\061\050\060\046\006\003\125\004\003\023\037
\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040\105
\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\026\235\125\345\266\324\373\373\147
\153\032\324\241\252\322\167\225\076\210\345\007\237\266\160\146
\040\050\244\210\354\160\065\257\263\062\377\067\023\112\236\274
\001\003\336\204\301\270\306\346\145\107\211\362\023\125\277\315
\245\036\010\140\177\255\177\350\141\222\051\317\011\107\136\013
\034\300\037\244\277\362\133\274\230\357\231\114\314\160\153\266
\272\320\050\035\277\276\004\243\102\060\100\060\035\006\003\125
\035\016\004\026\004\024\163\172\153\226\333\102\007\213\122\146
\302\144\062\027\376\340\147\220\056\255\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052
\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067\104
\365\062\200\343\161\353\364\155\317\174\314\221\232\303\156\161
\330\322\043\135\222\115\202\102\155\134\141\225\366\221\365\247
\010\366\152\227\351\234\224\055\230\160\375\063\266\011\002\060
\007\074\057\271\130\202\136\017\243\142\250\223\147\360\040\303
\151\277\003\054\073\120\247\073\257\101\070\311\122\110\221\326

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\016\373\274\140\060\174\144\077\022\036\105\177\121\076\364\246
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert
SMIME ECC P384 Root G5"
# Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef
# Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B
# Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\034\270\247\010\311\015\040\171\001\240\262\066\177\360\225\145
\344\123\044\376
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\246\376\364\122\066\104\330\356\015\267\003\013\357\164\263\003
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243
\326\357
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

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# Certificate "DigiCert SMIME RSA4096 Root G5"
#
# Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55
# Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A
#
Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272
\034\125
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\005
\366\272\004\043\203\106\313\175\134\346\271\133\272\034\125\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\117
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060
\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164
\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003\023
\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065\060

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\036\027\015\062\061\060\061\061\065\060\060\060\060\060\060\132
\027\015\064\066\060\061\061\064\062\063\065\071\065\071\132\060
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027
\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162
\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003
\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105
\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\340\152\133\331\370\371\175\354\265\173\357\137\335\134\064
\330\332\135\321\313\145\165\253\041\174\133\000\324\202\157\105
\205\101\212\251\022\002\162\062\360\024\365\003\165\273\143\227
\111\017\100\231\013\032\036\126\247\322\320\341\253\335\345\004
\033\343\037\024\022\002\210\365\240\200\011\366\047\232\120\360
\272\343\242\340\254\152\024\221\265\153\070\020\172\242\061\341
\221\033\267\271\360\053\133\310\167\011\166\267\121\304\066\012
\231\123\124\104\045\267\011\065\206\027\005\126\223\075\101\267
\002\327\142\037\212\222\021\207\352\021\155\352\010\021\334\261
\170\110\111\222\366\264\121\200\170\043\330\376\341\126\032\072
\220\023\126\064\211\325\342\225\213\137\336\262\314\373\077\070
\267\205\367\352\236\277\056\241\056\057\115\175\152\021\056\066
\240\377\021\010\004\225\125\340\033\073\147\223\251\224\125\352
\062\355\006\072\177\302\177\343\255\023\047\321\064\101\263\060
\303\277\264\210\370\003\202\244\337\076\253\170\167\240\131\223
\161\347\335\353\000\004\173\314\110\071\050\340\036\243\025\151
\310\066\262\241\013\227\337\125\326\357\221\234\244\366\026\367
\121\012\356\003\043\221\334\004\377\340\335\070\366\042\003\000
\302\007\161\032\022\311\327\106\052\224\033\315\326\273\033\356
\277\276\115\120\130\260\013\315\060\166\051\365\317\345\266\152
\057\166\260\260\151\152\320\155\145\030\065\176\223\274\162\027
\301\125\102\315\057\302\045\273\364\375\035\241\144\042\124\135
\342\236\162\101\204\156\161\226\352\105\007\266\136\172\112\206
\235\163\144\167\070\003\322\017\123\245\125\040\304\115\377\150
\157\125\251\352\335\161\344\117\331\205\243\174\116\051\002\236
\013\011\362\032\123\314\000\246\335\321\064\366\015\301\060\261
\234\002\144\254\065\355\245\260\051\261\322\225\063\017\322\040
\063\275\354\043\113\362\031\371\332\230\144\344\054\061\037\056
\341\215\034\004\225\050\115\214\130\315\113\345\163\202\206\214
\354\250\326\171\134\373\144\273\334\014\114\050\366\027\257\342
\150\326\026\206\230\333\374\001\334\061\272\370\234\016\371\050
\106\112\341\375\226\006\105\171\021\150\027\145\134\213\046\207
\133\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035
\016\004\026\004\024\321\243\324\127\035\117\125\333\165\114\134
\102\236\143\026\316\264\306\073\037\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\007\247
\012\336\123\273\232\353\160\277\262\066\220\315\344\247\270\361

\014\344\135\132\035\170\145\374\311\270\036\043\021\127\174\151
\065\155\001\377\123\120\277\007\016\272\307\001\077\130\052\224
\165\003\253\034\013\043\334\033\212\036\067\075\035\130\217\163
\331\263\052\157\337\020\240\133\014\247\312\260\177\271\044\242
\001\065\062\345\136\106\101\353\330\177\163\347\102\351\244\121
\046\167\201\012\250\353\017\012\120\235\176\212\040\147\374\013
\216\072\021\323\305\214\140\030\331\113\261\374\324\361\264\111
\116\256\207\341\321\373\166\241\137\363\006\317\227\226\014\351
\236\165\201\134\123\015\042\374\066\346\111\156\164\333\000\205
\215\174\042\240\216\373\020\114\324\142\023\133\357\113\162\046
\213\374\116\212\217\376\227\020\123\305\170\213\102\144\033\137
\340\211\375\273\011\177\120\340\124\205\046\021\152\035\145\371
\111\051\334\174\066\337\373\075\367\322\254\356\062\215\156\246
\175\071\234\105\304\312\015\365\073\264\171\123\245\057\126\307
\121\305\212\114\144\135\220\103\043\216\153\114\027\170\314\350
\277\365\073\344\250\110\317\255\233\014\337\062\112\323\331\022
\216\043\170\015\055\257\237\257\236\074\011\302\227\000\355\072
\151\034\161\077\071\337\323\217\304\146\365\357\066\224\017\363
\335\222\266\226\137\220\246\335\163\252\246\040\224\224\045\152
\011\014\162\344\023\043\140\114\243\312\027\056\173\147\000\333
\320\315\352\172\037\071\046\127\211\060\167\313\116\345\225\105
\117\137\373\066\134\075\371\040\265\072\020\045\117\223\062\132
\356\301\226\350\351\126\004\260\111\141\115\354\170\250\235\030
\301\377\330\352\057\126\357\225\053\173\004\136\147\343\125\100
\355\071\004\371\013\171\365\152\214\134\017\211\232\220\307\315
\213\336\333\046\065\241\156\315\263\102\362\242\017\073\014\216
\223\377\024\317\374\367\223\367\344\101\010\156\031\122\021\017
\123\031\163\170\014\317\330\205\201\370\255\125\310\260\236\106
\143\257\234\122\356\134\277\360\300\133\067\036\011\040\322\076
\043\306\241\025\112\016\066\176\060\305\171\152\274\042\210\331
\014\122\100\037\335\116\017\147\046\026\322\255\027\034

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert SMIME RSA4096 Root G5"

Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55

Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

Not Valid Before: Fri Jan 15 00:00:00 2021

Not Valid After : Sun Jan 14 23:59:59 2046

Fingerprint (SHA-256):

90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A

Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\133\305\255\342\232\247\124\332\204\211\123\245\376\327\133\106
\206\320\127\010
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\321\173\340\265\077\065\162\237\175\276\013\245\244\035\251\156
END
CKA_ISSUER
MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272
\034\125
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certainly Root R1"
#
# Issuer: CN=Certainly Root R1,O=Certainly,C=US
# Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0
# Subject: CN=Certainly Root R1,O=Certainly,C=US
# Not Valid Before: Thu Apr 01 00:00:00 2021
# Not Valid After : Sun Apr 01 00:00:00 2046
#
Fingerprint (SHA-256):
77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0
# Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certainly Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104
\071\267\340

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\107\060\202\003\057\240\003\002\001\002\002\021\000
\216\017\371\113\220\161\150\145\063\124\364\324\104\071\267\340
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022
\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156
\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162
\164\141\151\156\154\171\040\122\157\157\164\040\122\061\060\036
\027\015\062\061\060\064\060\061\060\060\060\060\060\060\132\027
\015\064\066\060\064\060\061\060\060\060\060\060\060\132\060\075
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156\154
\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162\164
\141\151\156\154\171\040\122\157\157\164\040\122\061\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\320\066
\324\037\352\335\253\344\321\266\346\373\042\300\335\023\015\152
\173\042\023\034\227\074\150\143\146\062\234\003\265\215\244\201
\203\332\170\060\021\317\334\262\053\276\222\277\216\344\304\023
\276\244\150\114\332\002\150\026\164\276\262\335\004\344\153\052
\335\067\037\140\054\333\365\367\241\174\225\267\014\160\206\056
\361\072\357\122\367\314\323\233\371\213\276\016\337\061\267\235
\150\134\222\246\365\345\363\012\064\265\377\173\242\344\207\241
\306\257\027\000\357\003\221\355\251\034\116\161\075\322\213\154
\211\364\170\206\346\152\111\240\316\265\322\260\253\233\366\364
\324\056\343\162\371\066\306\353\025\267\045\214\072\374\045\015
\263\042\163\041\164\310\112\226\141\222\365\057\013\030\245\364
\255\342\356\101\275\001\171\372\226\214\215\027\002\060\264\371
\257\170\032\214\264\066\020\020\007\005\160\320\364\061\220\212
\121\305\206\046\171\262\021\210\136\305\360\012\124\315\111\246
\277\002\234\322\104\247\355\343\170\357\106\136\155\161\321\171

\160\034\106\137\121\351\311\067\334\137\176\151\173\101\337\064
\105\340\073\204\364\241\212\012\066\236\067\314\142\122\341\211
\015\050\371\172\043\261\015\075\075\232\375\235\201\357\054\220
\300\173\104\116\273\111\340\016\112\126\222\274\313\265\335\171
\027\211\221\336\141\211\164\222\250\343\062\205\276\116\205\244
\113\131\313\053\305\170\216\161\124\320\002\067\231\214\345\111
\352\340\124\162\244\021\006\057\013\214\301\133\276\265\241\260
\123\156\234\270\140\221\037\131\153\371\055\364\224\012\227\265
\354\305\166\003\124\033\145\122\272\114\222\126\121\065\240\100
\330\051\333\256\122\166\073\055\060\100\233\212\320\102\126\264
\267\210\001\244\207\073\123\226\315\243\026\217\363\146\252\027
\261\307\140\340\301\103\005\014\356\233\133\140\157\006\134\207
\133\047\371\100\021\236\234\063\301\267\345\065\127\005\177\047
\316\027\040\214\034\374\361\373\332\061\051\111\355\365\013\204
\247\117\301\366\116\302\050\234\372\356\340\257\007\373\063\021
\172\041\117\013\041\020\266\100\072\253\042\072\004\234\213\233
\204\206\162\232\322\247\245\304\264\165\221\251\053\043\002\003
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004
\026\004\024\340\252\077\045\215\237\104\134\301\072\350\056\256
\167\114\204\076\147\014\364\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\002\001\000\271\127\257\270\022
\332\127\203\217\150\013\063\035\003\123\125\364\225\160\344\053
\075\260\071\353\372\211\142\375\367\326\030\004\057\041\064\335
\361\150\360\325\226\132\336\302\200\243\301\215\306\152\367\131
\167\256\025\144\317\133\171\005\167\146\352\214\323\153\015\335
\361\131\054\301\063\245\060\200\025\105\007\105\032\061\042\266
\222\000\253\231\115\072\217\167\257\251\042\312\057\143\312\025
\326\307\306\360\075\154\374\034\015\230\020\141\236\021\242\042
\327\012\362\221\172\153\071\016\057\060\303\066\111\237\340\351
\017\002\104\120\067\224\125\175\352\237\366\073\272\224\245\114
\351\274\076\121\264\350\312\222\066\124\155\134\045\050\332\335
\255\024\375\323\356\342\042\005\353\320\362\267\150\022\327\132
\212\101\032\306\222\245\132\073\143\105\117\277\341\072\167\042
\057\134\277\106\371\132\003\205\023\102\137\312\336\123\327\142
\265\246\065\004\302\107\377\231\375\204\337\134\316\351\136\200
\050\101\362\175\347\036\220\330\117\166\076\202\074\015\374\245
\003\372\173\032\331\105\036\140\332\304\216\371\374\053\311\173
\225\305\052\377\252\211\337\202\061\017\162\377\014\047\327\012
\036\126\000\120\036\014\220\301\226\265\330\024\205\273\247\015
\026\301\370\007\044\033\272\205\241\032\005\011\200\272\225\143
\311\072\354\045\237\177\235\272\244\107\025\233\104\160\361\152
\113\326\070\136\103\363\030\176\120\156\351\132\050\346\145\346
\167\033\072\375\035\276\003\046\243\333\324\341\273\176\226\047
\053\035\356\244\373\332\045\124\023\003\336\071\306\303\037\115
\220\354\217\033\112\322\034\355\205\225\070\120\171\106\326\301
\220\120\061\251\134\232\156\035\365\063\126\213\247\231\322\362

```
\310\054\063\223\222\060\307\116\214\145\063\020\144\027\375\044
\027\226\321\215\302\072\152\053\353\023\213\104\362\041\363\112
\032\267\167\137\327\355\210\244\162\345\071\037\225\235\276\147
\301\160\021\075\273\364\370\111\267\343\046\227\072\237\322\137
\174\373\300\231\174\071\051\340\173\035\277\015\247\217\322\051
\064\156\044\025\313\336\220\136\277\032\304\146\352\302\346\272
\071\137\212\231\251\101\131\007\260\054\257
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certainly Root R1"

Issuer: CN=Certainly Root R1,O=Certainly,C=US

Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0

Subject: CN=Certainly Root R1,O=Certainly,C=US

Not

Valid Before: Thu Apr 01 00:00:00 2021

Not Valid After : Sun Apr 01 00:00:00 2046

Fingerprint (SHA-256):

77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0

Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certainly Root R1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\240\120\356\017\050\161\364\047\262\022\155\157\120\226\045\272
\314\206\102\257
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\007\160\324\076\202\207\240\372\063\066\023\364\372\063\347\022
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104
\071\267\340
```

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Certainly Root E1"

#

Issuer: CN=Certainly Root E1,O=Certainly,C=US

Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8

Subject: CN=Certainly Root E1,O=Certainly,C=US

Not Valid Before: Thu Apr 01 00:00:00 2021

Not Valid After : Sun Apr 01 00:00:00 2046

Fingerprint (SHA-256):

B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2

Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certainly Root E1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE

CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\06\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151

\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145

\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\06\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151

\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145

\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277

\314\370

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\367\060\202\001\175\240\003\002\001\002\002\020\006

\045\063\261\107\003\063\047\134\371\215\232\271\277\314\370\060

\012\006\010\052\206\110\316\075\004\003\003\060\075\061\013\060

\011\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003

\125\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032

\060\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156

\154\171\040\122\157\157\164\040\105\061\060\036\027\015\062\061

\060\064\060\061\060\060\060\060\060\060\132\027\015\064\066\060

\064\060\061\060\060\060\060\060\060\132\060\075\061\013\060\011

```
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125
\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032\060
\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156\154
\171\040\122\157\157\164\040\105\061\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\336\157\370\177\034\337\355\371\107\207\206\261\244\300\212
\370\202\227\200\352\217\310\112\136\052\175\210\150\247\001\142
\024\221\044\172\134\236\243\027\175\212\206\041\064\030\120\033
\020\336\320\067\113\046\307\031\140\200\351\064\275\140\031\066
\100\326\051\207\011\074\221\172\366\274\023\043\335\131\116\004
\136\317\310\002\034\030\123\301\061\330\332\040\351\104\215\344
\166\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\363\050\030\313\144\165\356\051\052\353\355\256\043\130\070
\205\353\310\042\007\060\012\006\010\052\206\110\316\075\004\003
\003\003\150\000\060\145\002\061\000\261\216\132\040\303\262\031
\142\115\336\260\117\337\156\322\160\212\361\237\176\152\214\346
\272\336\203\151\312\151\263\251\005\265\226\222\027\207\302\322
\352\320\173\316\330\101\133\174\256\002\060\106\336\352\313\135
\232\354\062\302\145\026\260\114\060\134\060\363\332\116\163\206
\006\330\316\211\004\110\067\067\370\335\063\121\235\160\257\173
\125\330\001\056\175\005\144\016\206\270\221
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certainly Root E1"

Issuer: CN=Certainly

Root E1,O=Certainly,C=US

Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8

Subject: CN=Certainly Root E1,O=Certainly,C=US

Not Valid Before: Thu Apr 01 00:00:00 2021

Not Valid After : Sun Apr 01 00:00:00 2046

Fingerprint (SHA-256):

B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2

Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certainly Root E1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\371\341\155\334\001\211\317\325\202\105\143\076\305\067\175\302
```

```
\353\223\157\053
```

END


```

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\012\236\312\315\076\122\120\306\066\363\113\243\355\247\123\351
END
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277
\314\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Global Root CA RSA v3"
#
# Issuer: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR
# Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34
# Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Not Valid Before: Wed Mar 18 09:07:17 2020
# Not Valid After : Sun Mar 12 09:07:17 2045
# Fingerprint (SHA-256):
EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2
# Fingerprint (SHA1):
E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Global Root CA RSA v3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063

```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025
\006\064\373\171\020\064

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\363\060\202\003\333\240\003\002\001\002\002\024\015
\115\305\315\026\042\225\226\010\176\270\013\177\025\006\064\373
\171\020\064\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\201\200\061\013\060\011\006\003\125\004\006\023\002
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\122
\123\101\040\166\063\060\036\027\015\062\060\060\063\061\070\060
\071\060\067\061\067\132\027\015\064\065\060\063\061\062\060\071
\060\067\061\067\132\060\201\200\061\013\060\011\006\003\125\004
\006\023\002\124\122\061\017\060\015\006\003\125\004\007\023\006
\101\156\153\141\162\141\061\031\060\027\006\003\125\004\012\023
\020\105\055\124\165\147\162\141\040\105\102\107\040\101\056\123
\056\061\035\060\033\006\003\125\004\013\023\024\105\055\124\165
\147\162\141\040\124\162\165\163\164\040\103\145\156\164\145\162
\061\046\060\044\006\003\125\004\003\023\035\105\055\124\165\147
\162\141\040\107\154\157\142\141\154\040\122\157\157\164\040\103
\101\040\122\123\101\040\166\063\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\242\146\360\211\267\162\173
\356\011\311\143\322\323\103\335\136\303\246\204\070\112\361\215
\201\273\024\275\107\350\100\027\363\075\303\170\105\162\246\056
\220\336\232\072\324\040\161\312\274\237\035\113\227\012\307\061
\272\076\327\376\045\251\052\216\066\364\321\057\307\267\251\135
\063\334\060\160\370\100\154\113\262\246\061\141\321\064\074\075

\061\172\307\257\304\247\247\204\341\227\244\350\113\366\027\174
\356\074\007\355\342\212\127\334\266\373\370\103\045\120\352\047
\201\250\206\274\217\122\112\226\072\140\032\226\273\375\163\364
\205\375\203\375\177\204\155\064\154\177\152\267\113\001\003\277
\255\151\267\327\062\331\365\127\152\351\206\202\076\245\146\061
\263\026\075\302\363\046\140\062\323\122\036\260\154\244\067\076
\364\365\257\353\341\337\200\006\317\052\101\347\146\011\341\113
\227\347\167\275\041\155\051\266\147\303\055\176\355\326\171\145
\321\317\072\266\321\261\136\126\141\120\172\132\316\116\120\061
\200\003\230\107\347\344\030\174\104\132\306\244\263\073\306\306
\303\072\360\154\303\213\310\244\221\005\363\365\331\266\252\006
\241\267\253\344\261\352\041\024\134\203\244\374\377\266\120\323
\214\022\046\231\166\160\351\300\017\246\164\374\273\320\033\170
\316\162\222\342\050\234\274\346\351\011\330\072\323\211\346\276
\056\167\337\001\012\157\226\366\345\215\074\115\122\166\032\126
\341\163\176\027\254\075\255\154\243\122\022\030\160\346\200\116
\063\362\176\046\062\254\005\215\070\244\346\166\074\237\020\151
\016\155\235\322\301\171\040\153\133\317\063\215\321\224\166\065
\347\135\125\307\267\254\050\253\106\314\347\073\041\265\012\012
\344\112\131\334\201\065\113\104\225\022\012\147\245\241\377\133
\000\007\322\300\314\371\077\374\237\063\362\000\370\214\154\207
\235\006\055\361\357\343\346\006\372\305\146\023\133\374\120\007
\236\161\206\262\332\157\164\060\317\223\123\350\334\042\326\336
\040\037\141\215\243\056\243\170\062\220\154\334\254\062\265\005
\344\365\074\063\015\326\340\207\167\027\114\235\260\330\011\250
\015\127\367\104\205\360\310\004\276\134\135\132\343\027\216\124
\143\151\177\111\164\144\005\214\243\002\003\001\000\001\243\143
\060\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024
\262\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123
\041\320\110\357\060\035\006\003\125\035\016\004\026\004\024\262
\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123\041
\320\110\357\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\002\001\000\211\250\162\177\214\353\316\056\030
\304\020\200\055\020\014\377\373\024\315\004\340\024\074\116\232
\373\237\051\277\042\236\127\271\202\163\022\143\046\265\314\220
\351\322\052\051\356\234\055\314\054\231\276\105\047\344\261\161
\355\344\070\225\061\101\362\175\172\143\170\337\312\066\026\057
\202\210\237\274\021\107\117\166\115\310\055\216\353\337\055\174
\116\073\332\256\366\343\332\135\024\246\256\350\205\104\235\006
\156\216\373\357\172\112\152\055\053\050\030\376\277\220\054\165
\026\237\017\352\226\175\005\356\233\023\245\104\154\370\003\320
\335\043\341\375\003\022\022\010\364\030\064\263\340\067\013\167
\021\001\110\277\141\264\265\370\031\331\313\115\352\243\214\357
\375\360\006\265\155\222\364\112\141\120\204\355\354\111\323\344
\276\150\346\056\343\061\013\124\013\032\222\326\202\330\266\242
\145\074\146\004\371\125\332\154\373\333\265\024\146\115\224\203

```
\073\315\036\246\053\262\376\167\100\206\253\347\337\012\311\375
\366\335\207\126\030\330\260\054\125\140\226\372\010\176\122\220
\365\113\246\056\207\174\313\040\333\006\076\240\135\003\167\175
\242\074\023\033\051\242\023\125\240\075\024\042\257\157\270\320
\232\033\162\335\005\001\215\206\140\277\244\147\356\265\245\015
\321\177\346\032\053\142\146\303\007\272\347\240\110\034\070\303
\351\105\373\247\177\374\355\002\150\032\312\167\022\167\246\000
\125\050\024\354\326\307\022\242\033\145\102\351\221\350\313\076
\207\211\124\135\331\257\235\227\234\151\347\012\377\017\132\170
\213\143\052\114\175\107\224\077\336\113\351\123\320\060\361\305
\366\236\111\337\073\240\221\243\243\376\315\130\314\352\337\257
\157\050\073\240\151\233\217\354\254\256\053\124\235\233\004\261
\107\040\257\226\022\076\143\224\035\004\347\056\273\206\307\014
\232\210\277\166\107\357\367\260\013\227\146\322\104\317\140\122
\007\341\325\054\112\072\047\141\167\312\327\217\347\207\016\060
\377\014\273\004\342\141\303\242\310\227\141\216\264\060\152\074
\155\302\007\137\112\163\057\077\371\026\212\001\146\357\272\221
\312\122\127\173\256\324\346\017\335\013\172\177\213\236\046\040
\317\073\357\201\161\203\131
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "E-Tugra Global Root CA RSA v3"

Issuer: CN=E-Tugra

Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34

Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

Not Valid Before: Wed Mar 18 09:07:17 2020

Not Valid After : Sun Mar 12 09:07:17 2045

Fingerprint (SHA-256):

EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2

Fingerprint (SHA1): E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Global Root CA RSA v3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\351\250\135\042\024\122\034\133\252\012\264\276\044\152\043\212
\311\272\342\251
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\042\276\020\366\302\370\003\210\163\137\063\051\107\050\107\244
```

END

```
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025
\006\064\373\171\020\064
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "E-Tugra Global Root CA ECC v3"

#

Issuer: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR

Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1

Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR

Not Valid Before: Wed Mar 18 09:46:58 2020

Not Valid After : Sun Mar 12 09:46:58 2045

Fingerprint (SHA-256):

87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13

Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Global Root CA ECC v3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
```

```
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206
\346\324\227\210\042\301
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\245\060\202\002\052\240\003\002\001\002\002\024\046
\106\031\167\061\341\117\157\050\066\336\071\121\206\346\324\227
\210\042\301\060\012\006\010\052\206\110\316\075\004\003\003\060
\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122\061
\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162\141
\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165\147
\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033\006
\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124\162
\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006\003
\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154\157
\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103\040
\166\063\060\036\027\015\062\060\060\063\061\070\060\071\064\066
\065\070\132\027\015\064\065\060\063\061\062\060\071\064\066\065
\070\132\060\201\200\061\013\060\011\006\003\125\004\006\023\002
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\105
\103\103\040\166\063\060\166\060\020\006\007\052\206\110\316\075
\002\001\006\005\053\201\004\000\042\003\142\000\004\216\230\051
\277\307\020\036\047\333\253\003\314\050\054\330\136\110\031\020
\051\314\313\131\201\314\214\270\222\027\211\203\052\222\366\303
\244\035\114\142\325\237\326\240\106\334\034\274\166\301\343\107
```

```
\320\133\023\332\347\245\263\146\110\347\041\232\112\117\206\012
\175\154\352\115\062\200\012\262\172\011\233\151\113\230\201\342
\056\354\002\160\226\037\375\365\106\316\312\334\202\243\143\060
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024\377
\202\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245
\220\314\365\060\035\006\003\125\035\016\004\026\004\024\377\202
\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245\220
\314\365\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003\151
\000\060\146\002\061\000\346\005\130\151\141\345\055\312\015\313
\361\031\010\275\326\375\121\222\032\176\143\124\004\220\221\232
\065\221\071\231\372\007\251\146\223\272\310\150\324\212\077\372
\355\156\026\002\047\267\002\061\000\335\132\027\053\166\035\145
\102\226\246\254\135\212\171\126\330\212\033\337\232\336\137\307
\120\217\261\133\161\014\046\337\152\100\000\354\063\221\041\161
\276\150\344\043\244\331\255\241\067
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "E-Tugra Global Root CA ECC v3"

Issuer: CN=E-Tugra Global

Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1

Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR

Not Valid Before: Wed Mar 18 09:46:58 2020

Not Valid After : Sun Mar 12 09:46:58 2045

Fingerprint (SHA-256):

87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13

Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Global Root CA ECC v3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\212\057\257\127\123\261\260\346\241\004\354\133\152\151\161\155
\366\034\342\204
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\106\274\201\273\361\265\036\367\113\226\274\024\342\347\047\144
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
```

```
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206
\346\324\227\210\042\301
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DIGITALSIGN GLOBAL ROOT RSA CA"

#

Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Serial

Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87

Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Not Valid Before: Thu Jan 21 10:50:34 2021

Not Valid After : Mon Jan 15 10:50:34 2046

Fingerprint (SHA-256):

82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95

Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004
\152\377\305\324\225\207

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\265\060\202\003\235\240\003\002\001\002\002\024\135
\131\310\312\253\011\127\365\346\265\332\051\224\004\152\377\305
\324\225\207\060\015\006\011\052\206\110\206\367\015\001\001\015
\005\000\060\142\061\013\060\011\006\003\125\004\006\023\002\120
\124\061\052\060\050\006\003\125\004\012\014\041\104\151\147\151
\164\141\154\123\151\147\156\040\103\145\162\164\151\146\151\143
\141\144\157\162\141\040\104\151\147\151\164\141\154\061\047\060
\045\006\003\125\004\003\014\036\104\111\107\111\124\101\114\123
\111\107\116\040\107\114\117\102\101\114\040\122\117\117\124\040
\122\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061
\061\060\065\060\063\064\132\027\015\064\066\060\061\061\065\061
\060\065\060\063\064\132\060\142\061\013\060\011\006\003\125\004
\006\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041
\104\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164
\151\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141
\154\061\047\060\045\006\003\125\004\003\014\036\104\111\107\111
\124\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122
\117\117\124\040\122\123\101\040\103\101\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\310\207\266\070\323
\034\360\336\022\370\203\307\304\212\342\211\270\264\042\172\170
\370\014\146\121\150\166\067\012\325\117\302\132\010\270\026\134
\367\162\001\011\067\204\201\052\124\153\327\222\320\154\372\250
\247\103\022\064\353\016\333\067\017\051\376\212\061\121\102\350
\113\234\220\250\310\054\021\323\375\240\051\176\316\336\224\366
\202\340\130\264\116\105\045\361\042\362\075\323\017\173\124\032
\334\062\266\326\121\116\176\101\264\127\270\054\306\271\016\056
\312\127\361\325\310\323\130\347\245\351\102\021\256\323\040\045
\224\151\327\217\312\242\015\303\323\237\007\150\077\025\322\147
\056\123\375\166\202\233\013\163\251\051\015\236\021\223\024\010
\230\354\236\124\022\112\126\242\006\025\354\153\154\056\222\140
\056\206\015\256\202\037\121\115\343\262\007\327\020\031\127\042
\366\251\151\104\204\363\331\075\240\006\277\314\210\176\177\365

\316\133\245\302\052\152\164\102\352\157\246\377\371\150\261\320
\137\275\221\322\125\157\063\127\114\036\235\344\342\213\301\205
\145\240\340\152\234\000\000\210\222\335\130\010\026\362\160\061
\250\034\341\336\275\116\161\351\326\276\176\265\241\132\303\115
\367\277\233\275\224\244\375\365\252\123\223\106\311\046\001\004
\160\304\240\161\272\316\045\146\373\221\176\125\160\356\111\012
\115\142\177\302\120\232\162\362\030\147\235\351\105\250\064\204
\350\370\201\366\321\132\042\036\007\117\073\263\177\335\021\245
\163\334\276\251\031\072\151\251\155\033\062\342\211\252\245\047
\013\132\176\164\342\017\144\071\135\176\134\271\301\027\374\307
\215\136\311\354\044\355\322\362\077\172\204\105\067\002\276\076
\153\131\304\346\133\026\155\300\252\236\252\265\131\056\054\160
\125\234\314\231\226\230\044\124\321\216\332\312\264\021\264\267
\160\103\037\157\220\013\040\240\250\166\023\145\333\333\043\132
\165\113\241\013\061\167\012\356\175\150\141\032\023\214\352\121
\176\134\126\243\127\114\135\241\353\023\145\277\124\024\314\363
\356\334\327\354\074\227\362\170\126\270\337\162\134\160\374\316
\006\335\237\322\007\061\357\347\122\221\236\315\272\327\300\030
\104\007\061\145\111\062\151\023\112\353\217\002\003\001\000\001
\243\143\060\141\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\037\006\003\125\035\043\004\030\060\026
\200\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024
\332\223\045\025\326\206\060\035\006\003\125\035\016\004\026\004
\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024\332
\223\045\025\326\206\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001
\001\015\005\000\003\202\002\001\000\024\373\061\045\070\061\370
\312\010\262\043\166\070\255\370\323\131\365\314\264\127\045\341
\104\276\176\374\026\354\256\372\046\237\117\147\026\112\126\360
\375\355\307\031\001\064\216\220\132\055\326\200\134\354\161\322
\201\045\202\036\000\161\337\232\321\325\035\042\273\321\245\363
\142\017\264\353\334\044\163\376\246\126\315\232\024\305\004\065
\026\061\242\007\353\245\000\342\266\370\137\162\375\077\141\111
\216\336\176\115\070\327\172\036\164\067\154\121\334\276\000\004
\270\070\024\363\040\301\355\233\247\043\375\015\102\204\035\177
\362\163\303\320\170\143\361\237\354\327\133\351\361\276\154\240
\113\003\236\215\151\341\024\332\210\020\201\043\123\377\332\124
\053\013\306\271\226\225\004\030\106\363\173\250\227\330\133\150
\244\344\070\034\016\105\345\230\323\011\256\232\136\354\263\171
\015\071\162\362\364\224\235\016\236\140\042\346\250\366\114\205
\315\007\202\072\150\071\315\075\137\343\070\364\266\257\073\153
\112\237\140\121\105\242\100\002\345\252\014\343\076\321\170\324
\242\164\234\046\272\005\232\050\160\112\076\246\013\320\035\111
\360\272\370\256\101\020\176\244\007\022\275\250\317\051\075\127
\273\307\361\103\107\000\076\256\160\030\132\040\173\011\313\072
\072\160\200\345\114\140\230\301\025\301\035\112\367\310\360\233
\341\162\255\347\135\150\130\013\004\261\214\274\237\267\373\156
\213\133\004\125\373\353\043\125\327\170\120\332\045\313\276\047

```
\066\273\044\032\171\034\121\321\376\023\273\377\170\054\334\244
\276\057\366\305\113\123\317\247\114\231\136\160\254\131\210\004
\256\144\004\277\173\246\172\115\323\350\167\275\241\176\120\025
\363\357\111\060\205\115\041\127\252\333\054\165\227\255\201\001
\207\242\261\160\235\036\006\132\003\140\261\077\246\155\202\054
\324\024\261\201\245\350\075\210\035\264\162\054\130\067\212\216
\070\224\270\163\335\251\340\270\366\167\242\263\174\130\336\256
\151\072\265\213\245\032\273\362\330\164\006\234\375\142\163\040
\041\166\261\176\160\236\031\324\353\027\142\031\070\231\315\066
\053\107\376\061\313\337\271\344\254\010\323\330\246\353\324\236
\176\113\144\244\125\135\053\027\311
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DIGITALSIGN GLOBAL ROOT RSA CA"

Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Serial Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87

#

Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Not Valid Before: Thu Jan 21 10:50:34 2021

Not Valid After : Mon Jan 15 10:50:34 2046

Fingerprint (SHA-256):

82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95

Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\271\202\007\227\256\122\245\150\157\106\007\337\375\003\162\075
\222\206\210\055
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\033\032\275\032\171\306\333\264\355\263\207\314\251\323\116\170
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004
\152\377\305\324\225\207
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DIGITALSIGN GLOBAL ROOT ECDSA CA"
#
# Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1
# Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Not Valid Before: Thu Jan 21 11:07:50 2021
# Not Valid After : Mon Jan 15 11:07:50 2046
# Fingerprint
(SHA-256):
26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE
# Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL

\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055
\344\353\372\235\266\341

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\152\060\202\001\360\240\003\002\001\002\002\024\066
\055\217\162\210\242\050\047\344\000\377\044\306\055\344\353\372
\235\266\341\060\012\006\010\052\206\110\316\075\004\003\003\060
\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061\052
\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141\154
\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144\157
\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006\003
\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107\116
\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103\104
\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061\061
\061\060\067\065\060\132\027\015\064\066\060\061\061\065\061\061
\060\067\065\060\132\060\144\061\013\060\011\006\003\125\004\006
\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041\104
\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164\151
\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141\154
\061\051\060\047\006\003\125\004\003\014\040\104\111\107\111\124
\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122\117
\117\124\040\105\103\104\123\101\040\103\101\060\166\060\020\006
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003
\142\000\004\156\013\243\253\063\115\034\352\112\350\374\004\215
\024\240\175\360\010\054\137\203\253\223\321\322\173\272\327\111
\175\217\354\022\120\137\324\271\313\345\360\371\063\143\037\311
\127\354\100\330\021\013\227\350\122\026\314\051\216\364\006\206
\036\070\334\075\127\304\356\252\275\310\124\004\046\132\047\023
\121\107\075\037\037\032\216\250\225\244\063\320\314\107\314\155
\270\374\110\243\143\060\141\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\037\006\003\125\035\043\004
\030\060\026\200\024\316\257\112\213\032\165\342\361\070\347\002
\360\026\255\136\352\144\325\173\264\060\035\006\003\125\035\016
\004\026\004\024\316\257\112\213\032\165\342\361\070\347\002\360
\026\255\136\352\144\325\173\264\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\012\006\010\052\206\110\316
\075\004\003\003\003\150\000\060\145\002\060\012\210\304\161\234
\104\003\115\215\264\307\274\250\256\331\060\047\065\152\153\026
\143\327\374\347\131\341\247\211\033\114\061\232\043\125\104\346
\363\103\041\325\107\047\157\155\127\001\252\002\061\000\373\262
\352\342\227\177\121\265\237\110\353\274\157\065\211\250\144\160
\253\127\166\315\300\306\024\140\312\177\342\202\000\163\367\314
\065\352\216\044\233\345\010\131\307\004\214\163\170\376

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DIGITALSIGN GLOBAL ROOT ECDSA CA"

Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1

Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

Not Valid Before: Thu Jan 21 11:07:50 2021

Not Valid After : Mon Jan 15 11:07:50 2046

Fingerprint (SHA-256):

26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE

Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\147\250\010\353\217\210\365\200\154\005\105\033\027\363\327\000
\057\322\112\212

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

\252\055\241\316\377\041\302\210\313\132\036\214\341\311\222\217
END

CKA_ISSUER MULTILINE_OCTAL

\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055
\344\353\372\235\266\341

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Security Communication RootCA3"

#

#

Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number:00:e1:7c:37:40:fd:1b:fe:67

```
# Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Thu Jun 16 06:17:16 2016
# Not Valid After : Mon Jan 18 06:17:16 2038
# Fingerprint (SHA-256):
24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94
# Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\341\174\067\100\375\033\376\147
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\177\060\202\003\147\240\003\002\001\002\002\011\000
\341\174\067\100\375\033\376\147\060\015\006\011\052\206\110\206
\367\015\001\001\014\005\000\060\135\061\013\060\011\006\003\125
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060
\045\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122
\157\157\164\103\101\063\060\036\027\015\061\066\060\066\061\066
\060\066\061\067\061\066\132\027\015\063\070\060\061\061\070\060
\066\061\067\061\066\132\060\135\061\013\060\011\006\003\125\004
\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023\034
\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163\164
\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060\045
```

\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171\040
\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122\157
\157\164\103\101\063\060\202\002\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002
\012\002\202\002\001\000\343\311\162\111\367\060\336\011\174\251
\100\201\130\323\264\072\335\272\141\017\223\120\156\151\074\065
\302\356\133\163\220\033\147\114\041\354\137\065\273\071\076\053
\012\140\357\273\155\053\206\373\161\242\310\254\344\126\224\371
\311\257\261\162\324\040\254\164\322\270\025\255\121\376\205\164
\241\271\020\376\005\200\371\122\223\263\100\075\165\020\254\300
\226\267\247\176\166\274\343\033\122\031\316\021\037\013\004\064
\365\330\365\151\074\167\363\144\364\015\252\205\336\340\011\120
\004\027\226\204\267\310\212\274\115\162\374\034\273\317\363\006
\115\371\237\144\367\176\246\146\206\065\161\310\021\200\114\301
\161\100\130\036\276\240\163\366\374\076\120\341\340\057\046\075
\176\134\043\265\171\160\336\372\340\321\245\326\014\101\161\173
\367\352\214\034\210\307\354\213\365\321\057\125\226\106\174\132
\073\130\073\373\272\330\055\265\045\332\172\116\317\104\256\041
\246\236\230\312\040\156\174\273\210\205\133\373\300\020\142\273
\362\371\047\107\357\321\211\071\103\304\337\336\341\101\277\124
\163\040\227\055\154\332\363\324\007\243\346\271\330\157\256\374
\214\031\056\323\147\147\053\225\333\130\134\265\152\002\363\270
\203\136\264\153\276\101\176\127\011\165\104\120\125\315\132\021
\141\041\012\141\302\251\210\375\023\274\055\211\057\315\141\340
\225\276\312\265\173\341\173\064\147\013\037\266\014\307\174\036
\031\123\312\247\261\112\025\040\126\024\160\075\053\202\054\017
\235\025\035\107\200\107\377\170\231\016\061\257\157\076\217\355
\206\151\036\173\030\210\024\262\302\374\202\063\056\234\113\055
\373\160\073\161\252\053\173\046\047\363\032\302\334\373\027\270
\241\352\313\240\264\256\323\224\176\172\320\253\303\354\070\055
\021\056\210\277\324\077\255\022\073\102\254\217\002\156\175\314
\321\137\141\276\241\274\072\152\110\352\046\125\042\026\135\137
\015\377\047\063\237\030\003\164\212\133\122\040\107\153\105\115
\042\167\214\125\047\360\257\036\214\311\203\042\124\267\232\320
\117\331\316\374\331\056\034\226\050\261\002\323\003\275\045\122
\034\064\146\117\043\253\364\167\202\226\035\321\127\060\010\021
\005\375\127\321\331\307\002\003\001\000\001\243\102\060\100\060
\035\006\003\125\035\016\004\026\004\024\144\024\174\374\130\162
\026\246\012\051\064\025\157\052\313\274\374\257\250\253\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003\202
\002\001\000\334\002\043\010\342\357\041\072\307\015\267\046\322
\142\223\247\245\043\162\007\040\202\140\337\030\327\124\255\151
\045\222\236\331\024\317\231\271\122\201\317\256\154\212\073\132
\071\310\154\001\103\302\042\155\002\360\142\315\116\143\103\300
\024\332\364\143\360\352\364\161\356\116\207\343\161\251\364\311
\127\345\056\137\034\171\273\043\252\207\104\127\351\275\065\115

\101\273\113\050\243\230\262\033\331\013\027\007\345\367\352\235
\365\166\327\277\304\266\201\130\377\310\377\144\151\142\171\255
\156\016\037\177\356\035\151\345\267\162\161\263\376\245\001\065
\224\124\053\300\122\155\217\125\304\311\322\270\313\312\064\010
\121\205\240\365\274\264\027\130\352\012\134\172\275\143\306\072
\057\377\226\111\031\204\352\147\330\004\261\141\364\000\133\112
\267\234\161\067\031\205\171\277\201\260\307\023\016\166\161\076
\072\200\006\256\006\026\247\215\265\302\304\313\377\100\245\134
\215\245\311\072\355\162\201\312\134\230\074\322\064\003\167\010
\375\360\051\131\135\041\010\307\140\277\244\161\173\270\331\036
\202\276\011\257\145\157\050\253\277\113\265\356\076\010\107\047
\240\017\157\017\213\077\254\225\030\363\271\016\334\147\125\156
\142\236\106\016\321\004\170\312\162\256\166\331\245\370\262\337
\210\011\141\213\357\044\116\321\131\077\132\324\075\311\223\074
\053\144\365\201\015\026\226\367\222\303\376\061\157\350\052\062
\164\016\364\114\230\112\030\016\060\124\325\305\353\274\305\025
\236\350\231\041\353\047\053\011\012\333\361\346\160\030\126\273
\014\344\276\371\350\020\244\023\222\270\034\340\333\147\035\123
\003\244\042\247\334\135\222\020\074\352\377\374\033\020\032\303
\330\320\234\235\145\313\320\053\047\061\003\036\066\341\075\166
\165\014\377\105\046\271\335\121\274\043\307\137\330\330\207\020
\100\022\015\075\070\067\347\104\074\030\300\123\011\144\217\377
\325\232\246\174\160\056\163\125\041\350\337\377\203\271\035\076
\062\036\326\246\175\054\361\146\351\134\035\247\243\316\136\045
\062\053\343\225\254\052\007\316\264\050\170\206\074\055\246\235
\115\322\164\060\335\144\121\025\333\203\203\121\327\257\375\063
\235\115\146

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Security Communication RootCA3"

Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number:00:e1:7c:37:40:fd:1b:fe:67

Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

Not Valid Before: Thu Jun 16 06:17:16 2016

Not Valid After : Mon Jan 18 06:17:16 2038

Fingerprint (SHA-256):

24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94

#

Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Security Communication RootCA3"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\303\003\310\042\164\222\345\141\242\234\137\171\221\053\036\104
\023\221\060\072
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\034\232\026\377\236\134\340\115\212\024\001\364\065\135\051\046
END
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\341\174\067\100\375\033\376\147
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication ECC RootCA1"
#
# Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number:00:d6:5d:9b:b3:78:81:2e:eb
# Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Thu Jun 16 05:15:28 2016
# Not Valid After : Mon Jan 18 05:15:28 2038
# Fingerprint (SHA-256):
E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11
# Fingerprint (SHA1): B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication ECC RootCA1"
CKA_CERTIFICATE_TYPE
CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156

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```
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\326\135\233\263\170\201\056\353
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\070\060\202\001\276\240\003\002\001\002\002\011\000
\326\135\233\263\170\201\056\353\060\012\006\010\052\206\110\316
\075\004\003\003\060\141\061\013\060\011\006\003\125\004\006\023
\002\112\120\061\045\060\043\006\003\125\004\012\023\034\123\105
\103\117\115\040\124\162\165\163\164\040\123\171\163\164\145\155
\163\040\103\117\056\054\114\124\104\056\061\053\060\051\006\003
\125\004\003\023\042\123\145\143\165\162\151\164\171\040\103\157
\155\155\165\156\151\143\141\164\151\157\156\040\105\103\103\040
\122\157\157\164\103\101\061\060\036\027\015\061\066\060\066\061
\066\060\065\061\065\062\070\132\027\015\063\070\060\061\061\070
\060\065\061\065\062\070\132\060\141\061\013\060\011\006\003\125
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\053\060
\051\006\003\125\004\003\023\042\123\145\143\165\162\151\164\171
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\105
\103\103\040\122\157\157\164\103\101\061\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\244\245\157\140\003\003\303\275\061\364\323\027\234\053
\204\165\254\345\375\075\127\156\327\143\277\346\004\211\222\216
\201\234\343\351\107\156\312\220\022\310\023\340\247\235\367\145
\164\037\154\020\262\350\344\351\357\155\205\062\231\104\261\136
\375\314\166\020\330\133\275\242\306\371\326\102\344\127\166\334
\220\302\065\251\113\210\074\022\107\155\134\377\111\117\032\112
\120\261\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\206\034\347\376\055\245\112\213\010\376\050\021\372\276\243
\146\370\140\131\057\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075\004
\003\003\003\150\000\060\145\002\060\025\135\102\075\374\266\356
```

```
\367\073\261\066\350\236\366\304\106\050\111\063\320\130\103\052
\143\051\314\115\261\264\172\242\271\015\070\245\135\110\052\375
\313\262\163\135\243\210\010\307\014\002\061\000\300\253\055\016
\155\355\030\242\333\123\351\045\333\125\010\340\120\314\337\104
\141\026\202\253\111\260\262\201\354\163\207\170\264\114\262\142
\033\022\372\026\115\045\113\143\275\036\067\331
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Security Communication ECC RootCA1"

Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number:00:d6:5d:9b:b3:78:81:2e:eb

Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

Not Valid Before: Thu Jun 16 05:15:28 2016

Not Valid After : Mon Jan 18 05:15:28 2038

Fingerprint (SHA-256):

E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11

Fingerprint (SHA1):

B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Security Communication ECC RootCA1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\016\046\251\277\322\262\073\300\357\106\311\272\307\273\366
\035\015\101\101
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\176\103\260\222\150\354\005\103\114\230\253\135\065\056\176\206
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\011\000\326\135\233\263\170\201\056\353
```

END

CKA_TRUST_SERVER_AUTH

```

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "BJCA Global Root CA1"
#
# Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20
# Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Not Valid Before: Thu Dec 19 03:16:17 2019
# Not Valid After : Mon Dec 12 03:16:17 2044
# Fingerprint (SHA-256):
F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE
# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300
\154\040
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\020\125
\157\145\343\264\331\220\152\033\011\321\154\076\300\154\040\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\124

```

\061\013\060\011\006\003\125\004\006\023\002\103\116\061\046\060
\044\006\003\125\004\012\014\035\102\105\111\112\111\116\107\040
\103\105\122\124\111\106\111\103\101\124\105\040\101\125\124\110
\117\122\111\124\131\061\035\060\033\006\003\125\004\003\014\024
\102\112\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101\061\060\036\027\015\061\071\061\062\061\071\060\063
\061\066\061\067\132\027\015\064\064\061\062\061\062\060\063\061
\066\061\067\132\060\124\061\013\060\011\006\003\125\004\006\023
\002\103\116\061\046\060\044\006\003\125\004\012\014\035\102\105
\111\112\111\116\107\040\103\105\122\124\111\106\111\103\101\124
\105\040\101\125\124\110\117\122\111\124\131\061\035\060\033\006
\003\125\004\003\014\024\102\112\103\101\040\107\154\157\142\141
\154\040\122\157\157\164\040\103\101\061\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\361\146\010\275\331
\305\025\141\313\204\004\101\245\151\067\167\035\301\260\173\372
\303\167\110\220\023\162\144\321\270\174\220\065\235\030\171\210
\343\227\001\074\107\201\362\016\242\230\015\236\077\067\340\031
\262\220\362\106\034\222\261\072\141\316\372\267\106\236\003\206
\327\063\156\355\367\105\214\166\067\336\156\226\221\367\327\176
\053\207\027\325\213\065\356\204\221\162\127\334\140\303\303\271
\347\307\147\044\043\117\143\012\143\366\146\175\113\125\247\077
\170\144\111\151\022\227\340\114\015\323\011\240\062\060\072\372
\237\300\362\234\305\022\052\056\034\265\004\063\332\244\070\021
\152\336\306\030\366\107\072\042\101\207\042\374\304\211\050\124
\330\214\245\060\012\370\027\026\312\254\067\375\171\247\221\027
\170\070\231\255\130\355\262\336\314\211\175\003\234\263\211\145
\347\343\073\261\042\206\217\006\155\170\007\375\221\022\177\260
\153\034\211\015\371\270\313\164\133\007\302\310\364\065\321\144
\143\172\351\156\232\050\326\060\275\346\033\335\025\257\204\352
\234\307\312\365\016\352\362\135\051\207\217\151\163\071\276\056
\044\157\105\041\254\305\324\151\045\006\203\255\172\110\205\023
\054\015\006\270\154\171\126\374\243\147\062\201\365\127\245\312
\127\102\151\351\134\044\141\357\342\060\030\116\104\230\125\157
\172\302\223\330\031\266\336\174\107\212\021\116\111\107\333\050
\224\002\013\224\112\054\371\022\320\117\350\061\176\154\172\277
\246\077\233\071\075\002\026\243\030\263\147\254\133\077\054\203
\053\147\071\201\134\271\176\224\325\144\335\236\217\156\256\350
\174\133\264\327\152\107\110\327\176\263\324\055\216\126\166\116
\317\151\361\156\104\154\324\044\352\215\044\241\030\277\275\127
\376\251\231\065\265\333\020\167\270\075\110\272\326\301\347\361
\043\076\327\337\205\235\047\074\324\100\275\012\014\275\365\347
\215\045\326\201\164\207\106\324\051\165\242\102\154\367\163\211
\347\175\277\172\112\037\323\042\311\025\125\317\337\157\174\125
\320\244\213\007\021\067\137\203\246\046\127\246\001\133\176\376
\130\150\007\251\351\172\331\271\350\377\120\037\253\302\264\300
\316\350\352\375\017\275\215\115\270\274\161\002\003\001\000\001
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\305

\357\355\314\330\215\041\306\110\344\343\327\024\056\247\026\223
\345\230\001\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\122\202\254\041\064\037\043\362
\242\330\371\270\257\067\066\040\211\321\067\003\326\151\237\270
\141\020\272\242\061\230\131\107\350\321\015\045\036\025\101\014
\340\052\125\325\127\122\313\370\344\307\151\243\035\115\161\002
\136\137\041\105\140\110\134\011\216\111\020\301\004\334\251\142
\153\002\360\103\310\116\235\070\111\164\311\062\160\124\155\301
\107\374\216\264\066\236\324\234\275\335\040\326\123\311\030\251
\265\126\271\166\213\225\147\146\356\275\230\376\256\357\276\156
\373\140\366\375\131\306\052\033\077\043\112\224\044\060\047\310
\211\274\353\104\044\232\313\075\276\117\325\172\316\216\027\313
\142\301\331\336\036\016\172\377\103\206\064\122\274\141\077\074
\137\273\331\166\264\123\274\227\263\376\212\114\022\056\053\363
\327\316\341\242\377\335\173\160\373\073\241\115\244\143\002\375
\070\227\225\077\005\160\240\153\337\142\201\103\213\264\131\015
\112\214\124\234\305\273\201\237\315\175\245\357\013\045\036\072
\040\333\034\374\037\230\147\002\012\324\163\104\023\333\121\204
\032\125\003\126\340\000\176\164\006\377\070\304\162\035\323\250
\077\150\061\135\323\011\307\056\214\133\143\340\350\334\036\322
\354\141\036\362\336\345\357\366\231\166\140\055\036\224\162\161
\306\013\052\062\307\222\116\325\106\327\035\371\251\031\012\310
\372\225\316\155\043\230\252\013\070\255\232\126\015\157\215\361
\061\000\210\301\027\234\315\031\066\065\376\125\123\240\340\074
\063\137\226\136\342\062\351\337\063\273\006\112\251\330\204\163
\316\167\322\306\254\161\341\134\243\035\014\273\012\337\137\342
\243\161\330\332\067\132\240\170\053\364\324\175\353\166\355\362
\141\160\245\145\232\323\211\064\030\253\373\162\076\327\264\075
\171\134\330\037\241\063\173\331\202\120\014\223\027\252\154\334
\302\202\273\002\127\066\257\230\047\052\071\120\341\260\211\365
\045\227\176\107\150\020\264\354\163\312\263\227\321\044\334\366
\142\240\050\323\265\243\270\144\267\210\142\102\317\235\123\315
\231\276\144\150\217\117\036\022\110\367\322\051\303\230\050\312
\362\062\013\223\214\051\117\074\140\062\315\005\226\141\354\362
\257\376\263\160\054\056\246\362

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "BJCA Global Root CA1"

Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20

Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Not Valid Before: Thu Dec 19 03:16:17

```

2019
# Not Valid After : Mon Dec 12 03:16:17 2044
# Fingerprint (SHA-256):
F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE
# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\325\354\215\173\114\272\171\364\347\350\313\235\153\256\167\203
\020\003\041\152
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\102\062\231\166\103\063\066\044\065\007\202\233\050\371\320\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300
\154\040
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "BJCA Global Root CA2"
#
# Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb
# Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Not Valid Before: Thu Dec 19 03:18:21 2019
# Not Valid After : Mon Dec 12 03:18:21 2044
# Fingerprint (SHA-256):
57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82
# Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```



```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264
\112\353
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\045\060\202\001\253\240\003\002\001\002\002\020\054
\027\010\175\144\052\300\376\205\030\131\006\317\264\112\353\060
\012\006\010\052\206\110\316\075\004\003\003\060\124\061\013\060
\011\006\003\125\004\006\023\002\103\116\061\046\060\044\006\003
\125\004\012\014\035\102\105\111\112\111\116\107\040\103\105\122
\124\111\106\111\103\101\124\105\040\101\125\124\110\117\122\111
\124\131\061\035\060\033\006\003\125\004\003\014\024\102\112\103
\101\040\107\154\157\142\141\154\040\122\157\157\164\040\103\101
\062\060\036\027\015\061\071\061\062\061\071\060\063\061\070\062
\061\132\027\015\064\064\061\062\061\062\060\063\061\070\062\061
\132\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116
\061\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111
\116\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101
\125\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004
\003\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\101\062\060\166\060\020\006\007\052\206\110
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\235
\313\200\221\215\123\147\265\271\120\261\003\370\345\111\037\101
\042\011\260\121\122\130\326\053\064\217\305\022\106\024\305\213
\057\054\204\377\054\156\250\325\361\011\343\003\041\024\304\103
```

```
\075\174\301\054\304\113\152\112\315\351\207\340\175\366\042\276
\372\112\121\270\060\212\375\341\336\030\022\012\366\107\267\347
\027\277\047\212\324\101\114\226\074\140\226\301\375\025\034\243
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\322\112
\261\121\177\006\360\321\202\037\116\156\137\253\203\374\110\324
\260\221\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003
\150\000\060\145\002\060\032\274\133\327\376\251\322\124\016\112
\135\322\155\261\100\334\364\103\325\322\112\231\031\022\126\200
\367\203\064\341\065\116\110\155\004\017\127\061\060\060\055\261
\252\235\003\070\333\006\002\061\000\313\314\207\123\313\172\337
\040\121\163\220\300\250\133\141\320\305\120\071\375\205\376\301
\343\170\370\246\326\113\275\233\207\217\017\345\326\123\226\253
\074\310\100\332\141\367\123\243\367
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "BJCA Global Root CA2"

Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb

Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Not Valid Before: Thu Dec 19 03:18:21 2019

Not Valid After : Mon Dec 12 03:18:21 2044

Fingerprint (SHA-256):

57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82

Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN

CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "BJCA Global Root CA2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\364\047\206\353\156\270\155\210\061\147\002\373\272\146\244\123
\000\252\172\246
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\136\012\366\107\137\246\024\350\021\001\225\077\115\001\353\074
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
```

```
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264
\112\353
END
```

```
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST
CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

Found in path(s):

```
* /opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/certdata.txt
```

No license file was found, but licenses were detected in source scan.

```
#!/usr/bin/env perl
```

```
# *****
```

```
# *
# *          - - - - -
# * Project    _||| _\|
# *          / _||| |)
# *          | ( _|| | _ < | _
# *          \_|||_| \_|||_|
```

```
# *
# * Copyright (C) 1998 - 2020, Daniel Stenberg, <daniel@haxx.se>, et al.
```

```
# *
# * This software is licensed as described in the file COPYING, which
# * you should have received as part of this distribution. The terms
# * are also available at https://curl.haxx.se/docs/copyright.html.
```

```
# *
# * You may opt to use, copy, modify, merge, publish, distribute and/or sell
# * copies of the Software, and permit persons to whom the Software is
# * furnished to do so, under the terms of the COPYING file.
```

```
# *
# * This software is distributed on an "AS IS" basis, WITHOUT
# * WARRANTY OF ANY
# * KIND, either express or implied.
```

```
# *
# *****
```

```
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
# These are then processed with the OpenSSL commandline tool to produce the
# final ca-bundle.crt file.
```

```
# The script is based on the parse-certs script written by Roland Krikava.
```

```
# This Perl script works on almost any platform since its only external
```

```

# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
$MOD_SHA";
if ($@) {
$MOD_SHA = "Digest::SHA::PurePerl";
eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
'nss' =>
'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
'central' =>
'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'beta' =>
'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'release' =>
'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)
my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels
= "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . " ." . $default_mozilla_trust_levels;

```

```

my @valid_mozilla_trust_purposes = (
    "DIGITAL_SIGNATURE",
    "NON_REPUDIATION",
    "KEY_ENCIPHERMENT",
    "DATA_ENCIPHERMENT",
    "KEY_AGREEMENT",
    "KEY_CERT_SIGN",
    "CRL_SIGN",
    "SERVER_AUTH",
    "CLIENT_AUTH",
    "CODE_SIGNING",
    "EMAIL_PROTECTION",
    "IPSEC_END_SYSTEM",
    "IPSEC_TUNNEL",
    "IPSEC_USER",
    "TIME_STAMPING",
    "STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
    "TRUSTED_DELEGATOR", # CAs
    "NOT_TRUSTED",      # Don't trust these certs.
    "MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
                        # should tell the app to ignore any other sources that claim this is a CA.
    "TRUSTED"          # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
    "MD5",
    "SHA1",
    "SHA256",
    "SHA384",
    "SHA512"
);

$0 =~ s@.*(/\@;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work
    $opt_d = 'release';
}

# Use predefined URL or else custom URL specified on command line.
my $url;

```

```

if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\//i) {
        die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
    }
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

if ($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version      : $version\n";
    print "Perl Version           : $]\n";
    print "Operating System Name    : $^O\n";
    print "Getopt::Std.pm Version    : ${Getopt::Std::VERSION}\n";
    print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
    print "MIME::Base64.pm Version    : ${MIME::Base64::VERSION}\n";
    print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
    print "LWP.pm Version      : ${LWP::VERSION}\n" if($LWP::VERSION);
    print "Digest::SHA.pm Version      : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
    print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
    print ("=" x 78 . "\n");
}

sub warning_message() {
    if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
        print "Warning: Use of this script may pose some risk:\n";
        print "\n";
        print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
        print " 2) Default to 'release', but more recent updates may be found in other trees\n";
        print " 3) certdata.txt file format may change, lag time to update this script\n";
        print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
        print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
        print " 6) Use of this script will make a security engineer grind his teeth and\n";
        print "    swear at you. ;)\n";
        exit;
    } else { # Short Form Warning
        print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
    }
}

sub HELP_MESSAGE() {

```

```

print "Usage:\t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-v] [-w<l>] [<outputfile>]\n";
print "\t-b\tbackup an existing version of ca-bundle.crt\n";
print "\t-d\tspecify Mozilla tree to pull certdata.txt or custom URL\n";
print "\t\t Valid names are:\n";
print "\t\t ", join( ", ", map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ), "\n";
print "\t-f\tforce rebuild even if certdata.txt is current\n";
print "\t-i\tprint version info about used modules\n";
print "\t-k\tallow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
print "\t-l\tprint license info
about certdata.txt\n";
print "\t-m\tinclude meta data in output\n";
print "\t-n\tno download of certdata.txt (to use existing)\n";
print wrap("\t\t", "\t\t", "-p\tlist of Mozilla trust purposes and levels for certificates to include in output. Takes the
form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default:
$default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n");
print "\t\t Valid purposes are:\n";
print wrap("\t\t\t", "\t\t\t", join( ", ", "ALL", @valid_mozilla_trust_purposes ) ), "\n";
print "\t\t Valid levels are:\n";
print wrap("\t\t\t", "\t\t\t", join( ", ", "ALL", @valid_mozilla_trust_levels ) ), "\n";
print "\t-q\tbe really quiet (no progress output at all)\n";
print wrap("\t\t", "\t\t", "-s\tcomma separated list of certificate signatures/hashes to output in plain text mode. (default:
$default_signature_algorithms)\n");
print "\t\t Valid signature algorithms are:\n";
print wrap("\t\t\t", "\t\t\t",
\t\t\t", join( ", ", "ALL", @valid_signature_algorithms ) ), "\n";
print "\t-t\tinclude plain text listing of certificates\n";
print "\t-u\tunlink (remove) certdata.txt after processing\n";
print "\t-v\tbe verbose and print out processed CAs\n";
print "\t-w <l>\twrap base64 output lines after <l> chars (default: ${opt_w})\n";
exit;
}

sub VERSION_MESSAGE() {
print "${0} version ${version} running Perl ${} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps:/i);
HELP_MESSAGE() if ($opt_h);

sub report($@) {
my $output = shift;

print STDERR $output . "\n" unless $opt_q;
}

sub is_in_list($@) {
my $target = shift;

```

```

return defined(List::Util::first { $target eq $_ } @_);
}

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
    my $description = shift;
    my $param_string = shift;
    my @valid_values = @_;

    my @values = map {
        s/^\s+//; # strip leading spaces
        s/\s+$//; # strip trailing spaces
        uc $_ # return the modified string as upper case
    } split( ',', $param_string );

    # Find all values which are not in the list of valid values or "ALL"
    my @invalid = grep { !is_in_list($_, "ALL", @valid_values) } @values;

    if ( scalar(@invalid) > 0 ) {
        # Tell the user which parameters were invalid and print the standard help message which will exit
        print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " : " : "s: ", join( ", ", map { "\"$_\""} @invalid ),
        "\n";
        HELP_MESSAGE();
    }

    @values = @valid_values if ( is_in_list("ALL", @values) );

    return @values;
}

sub sha256 {
    my $result;
    if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
        open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
        binmode(FILE);
        $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
        close(FILE);
    } else {
        # Use OpenSSL command if Perl Digest::SHA modules not available
        $result = `"$openssl" dgst -r -sha256 "$_[0]"`;
        $result =~ s/^[0-9a-f]{64}) .+$/1/is;
    }
    return $result;
}

```



```

sub oldhash {
    my $hash = "";
    open(C, "<$_[0]>" || return 0;
    while(<C>) {
        chomp;
        if($_ =~ /^#\# SHA256: (.*)/) {
            $hash = $1;
            last;
        }
    }
    close(C);
    return $hash;
}

if ( $opt_p !~ m:/ ) {
    print "Error: Mozilla trust identifier list must include both purposes and levels\n";
    HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split( ':', $opt_p );
my @included_mozilla_trust_purposes = parse_csv_param( "trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes );
my @included_mozilla_trust_levels = parse_csv_param( "trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels );

my @included_signature_algorithms = parse_csv_param( "signature algorithm", $opt_s,
@valid_signature_algorithms );

sub should_output_cert(%) {
    my
    %trust_purposes_by_level = @_;

    foreach my $level (@included_mozilla_trust_levels) {
        # for each level we want to output, see if any of our desired purposes are included
        return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{ $trust_purposes_by_level{ $level } } ) );
    }

    return 0;
}

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(.*\|?.*)@@g;

my $stdout = $crt eq '-';
my $resp;
my $fetched;

```

```

my $oldhash = oldhash($crt);

report "SHA256 of old file: $oldhash";

if(!$opt_n) {
    report "Downloading $txt ...";

    # If we have an HTTPS URL then use curl
    if($url =~ /^https:\//i) {
        if($curl) {
            if($curl =~ /^Protocols:.* https(|$)/m) {
                report "Get certdata with curl!";
                my $proto = !$opt_k ? "--proto =https" : "";
                my $quiet = $opt_q ? "-s" : "";
                my @out = `curl -w %{response_code} $proto $quiet -o "$txt" "$url"`;
                if(! $? && @out && $out[0] == 200) {
                    $fetched = 1;
                    report "Downloaded $txt";
                }
            }
            else {
                report "Failed downloading via HTTPS with curl";
                if(-e $txt && !unlink($txt)) {
                    report "Failed to remove '$txt': $!";
                }
            }
        }
        else {
            report "curl lacks https support";
        }
    }
    else {
        report "curl not found";
    }
}

# If nothing was fetched then use LWP
if(!$fetched) {
    if($url =~ /^https:\//i) {
        report "Falling back to HTTP";
        $url =~ s/^https:\//http:\//i;
    }
    if(!$opt_k) {
        report "URLs other than HTTPS are disabled by default, to enable use -k";
        exit 1;
    }
    report "Get certdata with LWP!";
    if(!defined($LWP::UserAgent::VERSION)) {
        report "LWP is not available (LWP::UserAgent not found)";
    }
}

```

```

    exit 1;
}
my $sua = new LWP::UserAgent(agent => "$0/$version");
$sua->env_proxy();
$resp = $sua->mirror($url, $txt);
if($resp && $resp->code eq '304') {
    report "Not modified";
    exit 0 if -e $crt && !$opt_f;
}
else {
    $fetched = 1;
    report "Downloaded $txt";
}
if(!$resp || $resp->code !~ /^(?:200|304)$/) {
    report "Unable to download latest data: "
        . ($resp? $resp->code . ' - ' . $resp->message : "LWP failed");
    exit 1 if -e $crt || ! -r $txt;
}
}
}

my $filedate = $resp ? $resp->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

my $format = $opt_t ? "plain text and " : "";
if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
}

```

```

} else {
    open(CRT,">$cert.~") or die "Couldn't open $cert.~: $!\n";
}
print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:
## ${url}
##
## It contains the certificates in ${format}PEM format and therefore
## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCACertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

EOT

report "Processing '$txt' ...";
my $cname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $cka_value;
my $valid = 1;

open(TXT,"$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
    if (/^*\*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*\*/) {
        print CRT;
        print if ($opt_1);
        while (<TXT>) {
            print CRT;
            print if ($opt_1);
            last if (/^*\*\*\*\* END LICENSE BLOCK \*\*\*\*\*);
        }
    }
}
elsif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \((MD5\)|Fingerprint
\((SHA1\))):/) {

```

```

push @precert, $_;
$valid = 1;
next;
}
elseif(/^#\^\s*$/) {
    undef @precert;
    next;
}
chomp;

# Example:
# CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL
# \062\060\060\066\061\067\060\060\060\060\060\060\132
# END

if (/^CKA_NSS_SERVER_DISTRICT_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
    if($1 eq "MULTILINE_OCTAL") {
        my @timestamp;
        while (<TXT>) {
            last if (/^END/);
            chomp;
            my @octets = split(\\);
            shift @octets;
            for (@octets) {
                push
@timestamp, chr(oct);
            }
        }
        # A trailing Z in the timestamp signifies UTC
        if($timestamp[12] ne "Z") {
            report "distrust date stamp is not using UTC";
        }
        # Example date: 200617000000Z
        # Means 2020-06-17 00:00:00 UTC
        my $distrustat =
            timegm($timestamp[10] . $timestamp[11], # second
                $timestamp[8] . $timestamp[9], # minute
                $timestamp[6] . $timestamp[7], # hour
                $timestamp[4] . $timestamp[5], # day
                ($timestamp[2] . $timestamp[3]) - 1, # month
                "20" . $timestamp[0] . $timestamp[1]); # year
        if(time >= $distrustat) {
            # not trusted anymore
            $skipnum++;
            report "Skipping: $scaname is not trusted anymore" if ($opt_v);
            $valid = 0;
        }
    }
    else {

```

```

        # still trusted
    }
}
next;
}

# this
is a match for the start of a certificate
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
    $start_of_cert = 1
}
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
    $scaname = $1;
}
my %trust_purposes_by_level;
if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $ska_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(/\//);
        shift @octets;
        for (@octets) {
            $ska_value .= chr(oct);
        }
    }
}
if(/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_]+)\s+CK_TRUST\s+CKT_NSS_([A-Z_]+)\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } elsif ( !is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }
}

if ( !should_output_cert(%trust_purposes_by_level) ) {
    $skipnum ++;
    report "Skipping: $scaname" if ($opt_v);
} else {
    my $data = $ska_value;
}

```

```

$cka_value = "";
my $encoded = MIME::Base64::encode_base64($data, "");
$encoded =~ s/(.{1,${opt_w}})/$1\n/g;
my $pem = "-----BEGIN CERTIFICATE-----\n"
    . $encoded
    . "-----END CERTIFICATE-----\n";
print CRT "\n$scaname\n";
print CRT @precert if($opt_m);
my $maxLength = length(decode('UTF-8', $scaname, Encode::FB_CROAK | Encode::LEAVE_SRC));
if ($opt_t) {
    foreach my $key (keys %trust_purposes_by_level) {
        my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});
        $maxLength = List::Util::max( length($string), $maxLength );
    };
    print CRT $string . "\n";
}
print CRT ("=" x $maxLength . "\n");
if (!$opt_t) {
    print CRT $pem;
} else {
    my $pipe = "";
    foreach my $hash (@included_signature_algorithms) {
        $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
        if (!$stdout) {
            $pipe .= " >> $crt.~";
            close(CRT) or die "Couldn't close $crt.~: $!";
        }
        open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
        print TMP $pem;
        close(TMP) or die "Couldn't close openssl pipe: $!";
        if (!$stdout) {
            open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
        }
    }
    $pipe = "|$openssl x509 -text -inform PEM";
    if (!$stdout) {
        $pipe .= " >> $crt.~";
        close(CRT) or die "Couldn't close $crt.~: $!";
    }
    open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
    print TMP
    $pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
}
}

```

```

report "Parsing: $cname" if ($opt_v);
$certnum ++;
$start_of_cert = 0;
}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close $cert.~: $!\n";
unless( $stdout ) {
if ($opt_b && -e $cert) {
my $bk = 1;
while (-e "$cert.~{$bk}~") {
$bk++;
}
rename $cert, "$cert.~{$bk}~" or die "Failed to create backup $cert.~{$bk}~: $!\n";
} elsif( -e $cert ) {
unlink( $cert ) or die "Failed to remove $cert: $!\n";
}
rename "$cert.~", $cert or die "Failed to rename $cert.~ to $cert: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
report "Failed to remove $txt: $!\n";
}
report "Done ($certnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```
* /opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl
```

1.205 kafka-clients 3.5.0

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1.206 leveldb 1.5

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1.207 jetty-util-ajax 9.4.54.v20240208

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The following artifacts are EPL.

* org.eclipse.jetty.orbit:org.eclipse.jdt.core

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- * org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.

- * org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

- * javax.servlet:javax.servlet-api
- * javax.annotation:javax.annotation-api
- * javax.transaction:javax.transaction-api
- * javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

- * java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.

<http://openjdk.java.net/legal/gplv2+ce.html>

OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of <http://asm.ow2.org/license.html>

- org.ow2.asm:asm-commons
- org.ow2.asm:asm

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies.

1.208 jetty-security 9.4.54.v20240208

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

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* javax.servlet:javax.servlet-api

- * javax.annotation:javax.annotation-api
- * javax.transaction:javax.transaction-api
- * javax.websocket:javax.websocket-api

Oracle OpenJDK

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- * java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.

<http://openjdk.java.net/legal/gplv2+ce.html>

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- org.ow2.asm:asm

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- org.mortbay.jasper:apache-jsp
- org.apache.tomcat:tomcat-jasper
- org.apache.tomcat:tomcat-juli

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org.apache.tomcat:tomcat-util-scan
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org.eclipse.jetty.toolchain:jetty-schemas

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org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
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The following artifacts are EPL.

* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.

* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.

* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

* javax.servlet:javax.servlet-api

* javax.annotation:javax.annotation-api

* javax.transaction:javax.transaction-api

* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.

<http://openjdk.java.net/legal/gplv2+ce.html>

OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of <http://asm.ow2.org/license.html>

org.ow2.asm:asm-commons

org.ow2.asm:asm

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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1.211 jetty-webapp 9.4.54.v20240208

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

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<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

* javax.servlet:javax.servlet-api

- * javax.annotation:javax.annotation-api
- * javax.transaction:javax.transaction-api
- * javax.websocket:javax.websocket-api

Oracle OpenJDK

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- * java.sun.security.ssl

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<http://openjdk.java.net/legal/gplv2+ce.html>

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- org.ow2.asm:asm

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- org.apache.taglibs:taglibs-standard-impl

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- org.mortbay.jasper:apache-jsp
- org.apache.tomcat:tomcat-jasper
- org.apache.tomcat:tomcat-juli

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org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

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org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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* javax.servlet:javax.servlet-api

* javax.annotation:javax.annotation-api

* javax.transaction:javax.transaction-api

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org.apache.tomcat:tomcat-jsp-api

org.apache.tomcat:tomcat-el-api

org.apache.tomcat:tomcat-jasper-el

org.apache.tomcat:tomcat-api

org.apache.tomcat:tomcat-util-scan

org.apache.tomcat:tomcat-util

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The following artifacts are EPL.

* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.

* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.

* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

* javax.servlet:javax.servlet-api

* javax.annotation:javax.annotation-api

* javax.transaction:javax.transaction-api

* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.

<http://openjdk.java.net/legal/gplv2+ce.html>

OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of <http://asm.ow2.org/license.html>

org.ow2.asm:asm-commons

org.ow2.asm:asm

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies.

1.214 jetty-jmx 9.4.54.v20240208

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

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* javax.servlet:javax.servlet-api

- * javax.annotation:javax.annotation-api
- * javax.transaction:javax.transaction-api
- * javax.websocket:javax.websocket-api

Oracle OpenJDK

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- * java.sun.security.ssl

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- org.mortbay.jasper:apache-jsp
- org.apache.tomcat:tomcat-jasper
- org.apache.tomcat:tomcat-juli

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org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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* javax.annotation:javax.annotation-api

* javax.transaction:javax.transaction-api

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org.apache.tomcat:tomcat-el-api

org.apache.tomcat:tomcat-jasper-el

org.apache.tomcat:tomcat-api

org.apache.tomcat:tomcat-util-scan

org.apache.tomcat:tomcat-util

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The following artifacts are EPL.

* org.eclipse.jetty.orbit:org.eclipse.jdt.core

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

* javax.servlet:javax.servlet-api

* javax.annotation:javax.annotation-api

* javax.transaction:javax.transaction-api

* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.

<http://openjdk.java.net/legal/gplv2+ce.html>

OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of <http://asm.ow2.org/license.html>

org.ow2.asm:asm-commons

org.ow2.asm:asm

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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The following artifacts are CDDL + GPLv2 with classpath exception.

<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville.

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1.217 zookeeper 3.9.2

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jar/org/apache/zookeeper/server/quorum/MultipleAddresses.java
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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/util/RequestPathMetricsCollector.java

*

/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/admin/StreamOutputter.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/util/RateLimiter.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/SnapshotFormatter.java

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*

/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/RequestRecord.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/Request.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/ByteBufferRequestRecord.java

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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/cli/GetAclCommand.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/cli/SyncCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/cli/VersionCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/cli/GetEphemeralsCommand.java
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jar/org/apache/zookeeper/server/watch/WatchesReport.java
```

```
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperServerConf.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/CommandResponse.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/Op.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/OpResult.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/MultiResponse.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/Transaction.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatchesSummary.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/MultiOperationRecord.java
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*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatchesPathReport.java
```

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jar/org/apache/zookeeper/common/PathTrie.java

*

/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/PathUtils.java

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jar/org/apache/zookeeper/util/CircularBlockingQueue.java

*

/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/embedded/ZooKeeperServerEmbedded.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/controller/CommandClient.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/PathParentIterator.java

```
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/controller/ControllerServerConfig.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/controller/ControllableConnectionFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/BCFKSFileLoader.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/SnapshotComparer.java
*
```

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/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatcherMode.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/TxnLogEntry.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/controller/ControlCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/embedded/ExitHandler.java
```

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```
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/package.html
```

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jar/org/apache/zookeeper/server/controller/ControllerService.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/MessageTracker.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/controller/CommandListener.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/CircularBuffer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/controller/ControllableConnection.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/controller/ZooKeeperServerController.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/SnapshotRecursiveSummary.java
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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/EphemeralType.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/EphemeralTypeEmulate353.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ContainerManager.java
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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/META-
INF/maven/org.apache.zookeeper/zookeeper/pom.xml
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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/ServerWatcher.java
*

/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/quorum/flexible/QuorumVerifier.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/persistence/Util.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/auth/KeyAuthenticationProvider.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/quorum/RemotePeerBean.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/Stats.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/quorum/LearnerHandlerBean.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/admin/GetCommand.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/Quotas.java
*

/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/util/BitHashSet.java

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-jar/org/apache/zookeeper/server/command/IsroCommand.java

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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LeaderElectionBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/DeleteContainerRequest.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatchManagerFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/SnapShot.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperServerMain.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/Vote.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ZooKeeper.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/ConfCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/DigestCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/WatchedEvent.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ExpiryQueue.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerZooKeeperServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/SerializeUtils.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/DataTreeBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/CreateOptions.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LeaderSessionTracker.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperSaslServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/RateLogger.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/RequestThrottler.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ExitCode.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ClientCnxnSocketNIO.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerHandler.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-

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jar/org/apache/zookeeper/server/auth/WrappedAuthenticationProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/DigestLoginModule.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/ProviderRegistry.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/Summary.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/PrependableSocket.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ServerBean.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/client/HostProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/KeeperException.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/CloseCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/metric/AvgMinMaxPercentileCounterSet.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ReadOnlyRequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/client/ZooKeeperSaslClient.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/CommandFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/SyncThrottleException.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/MetricsProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumPeerMain.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/IOUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/FileKeyStoreLoader.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/MetricsContext.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/NodeHashMap.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerMaster.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/NIOServerCnxn.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/WhoAmICommand.java

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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ObserverMaster.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ClientCnxnLimitException.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/SecretUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/StatResetCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/StatsTrack.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/client/ZKClientConfig.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/KeyStoreLoader.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerHandlerMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/CliCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerSessionTracker.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/impl/MetricsProviderBootstrap.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/impl/DefaultMetricsProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/WatchCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/SyncRequestProcessor.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/X509Util.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ZKWatchManager.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/IWatchManager.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ServerConfig.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/ZKConfig.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/IPAuthenticationProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ObserverRequestProcessor.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ServerStats.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-

```

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jar/org/apache/zookeeper/server/util/JvmPauseMonitor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LeaderRequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/SendAckRequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/FollowerRequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/ReconfigCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/AdminServerFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/Environment.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/metric/SimpleCounterSet.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/StatPrinter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/CommandOutputter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumCnxManager.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/QuotaMetricsUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/AuthRequest.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZKDatabase.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/NetUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ZookeeperBanner.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/ReadAheadEndpoint.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/jmx/ZKMBeanInfo.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumPeer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/UpgradeableSessionTracker.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/SummarySet.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/PEMFileLoader.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/CommandBase.java

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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/StatCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/metric/AvgMinMaxPercentileCounter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/DatadirCleanupManager.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/FileChangeWatcher.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/TxnLogProposalIterator.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ReadOnlyBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/UnimplementedRequestProcessor.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/UnifiedConnectionFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/SaslClientCallbackHandler.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ReadOnlyZooKeeperServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/audit/Slf4jAuditLogger.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LocalPeerMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ServerMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/DigestAuthenticationProvider.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/ListQuotaCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/EnsembleAuthenticationProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/audit/AuditLogger.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/FollowerBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ProposalRequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/client/FourLetterWordMain.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/auth/NullQuorumAuthLearner.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/metric/AvgMinMaxCounterSet.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-

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jar/org/apache/zookeeper/server/DumbWatcher.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/KeyStoreFileType.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/WorkerService.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/audit/ZKAuditProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/client/ConnectionStringParser.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ReferenceCountedACLCache.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/JsonOutputter.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/QuorumX509Util.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/OSMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/NIOServerCnxnFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/SetCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/BufferStats.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/RemoveWatchesCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/auth/QuorumAuth.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/CreateCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/TraceFormatter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerSyncRequest.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/metric/SimpleCounter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/MalformedCommandException.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumZooKeeperServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LeaderElectionMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/client/StaticHostProvider.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/FinalRequestProcessor.java

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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/DigestWatcher.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/PurgeTxnLog.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/JLineZNodeCompleter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ByteBufferInputStream.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatchStats.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/Login.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/AuthenticationProvider.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/util/PemReader.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/version/Info.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/GaugeSet.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ServerCnxnFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/util/SecurityUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/RemotePeerMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/AddWatchMode.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperServer.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperServerListener.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/auth/SaslQuorumServerCallbackHandler.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/SaslServerPrincipal.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/CommandNotFoundException.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/auth/SaslQuorumAuthLearner.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/Election.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ConnectionMXBean.java
*

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/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/jmx/ManagedUtil.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/admin/ZooKeeperAdmin.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/quorum/CommitProcessor.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/ObserverBean.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/ZooKeeperServerListenerImpl.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/ResponseCache.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/quorum/Leader.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/version/VersionInfoMain.java
 *
 /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/common/NettyUtils.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/quorum/LearnerSyncThrottler.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/quorum/Learner.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/admin/PostCommand.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/common/AtomicFileWritingIdiom.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/AsyncCallback.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/Testable.java
 *
 /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/quorum/FollowerZooKeeperServer.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/common/ZKHostnameVerifier.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/admin/AdminServer.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/cli/AddAuthCommand.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/ZooKeeperTestable.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/persistence/TxnLog.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/command/RuokCommand.java
 * /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
 jar/org/apache/zookeeper/server/quorum/auth/QuorumAuthServer.java

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*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/flexible/QuorumHierarchical.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/SyncedLearnerTracker.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/Time.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/MetricsProviderLifeCycleException.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/Shell.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/flexible/QuorumMaj.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/TraceMaskCommand.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ConnectionBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ServerCnxn.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/ClientX509Util.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/KerberosUtil.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/CliWrapperException.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/GetConfigCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/PKCS12FileLoader.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/FileTxnSnapLog.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperCriticalThread.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ServerMetrics.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/DataTree.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/metric/AvgMinMaxCounter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/jmx/MBeanRegistry.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumPeerConfig.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/audit/AuditHelper.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-

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```

jar/org/apache/zookeeper/cli/CliParseException.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/NettyServerCnxnFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ZooKeeperMain.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/SnapStream.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/JKSFileLoader.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/MalformedPathException.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/NopCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/WatchDeregistration.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/ZxidUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/DirsCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/AuthUtil.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LeaderZooKeeperServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/auth/NullQuorumAuthServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/FileTxnLog.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/DeleteAllCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/Follower.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LocalPeerBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/JettyAdminServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/ServerAuthenticationProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/SASLAuthenticationProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperThread.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ClientCnxnSocket.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/StateSummary.java

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*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/SSLContextAndOptions.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/audit/AuditEvent.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/SessionTrackerImpl.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/EnvCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/DigestCalculator.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/DummyAdminServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/AbstractFourLetterCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/GetCommand.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/X509Exception.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/MonitorCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/Commands.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/VerifyingFileFactory.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/DataTreeMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/admin/Command.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/Watcher.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatcherCleaner.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/CounterSet.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/audit/AuditConstants.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/Gauge.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/SetTraceMaskCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ClientCnxn.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/DelQuotaCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-

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```

jar/org/apache/zookeeper/server/auth/KerberosName.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperServerMXBean.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperServerBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatchManager.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/AclParser.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/BitMap.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ServerAdminClient.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/StandardTypeFileKeyStoreLoader.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/flexible/QuorumOracleMaj.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/LogChopper.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ClientCnxnSocketNetty.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/BlueThrottle.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatchManagerOptimized.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/auth/SaslQuorumAuthServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/WatcherOrBitSet.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/AckRequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/compat/ProtocolManager.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/SnapshotInfo.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/CreateMode.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/SaslServerCallbackHandler.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/CnxnStatResetCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerSender.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/FollowerMXBean.java

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* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/Version.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/util/ServiceUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/FileSnap.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/TxnLogToolkit.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/ConfigUtils.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/auth/X509AuthenticationProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/FileKeyStoreLoaderBuilderProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/NettyServerCnxn.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooTrace.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/auth/QuorumAuthLearner.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/RequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/SetQuotaCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/metric/Metric.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ZooKeeperServerShutdownHandler.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/Observer.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/AtomicFileOutputStream.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/common/ZKTrustManager.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/CommandExecutor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/impl/NullMetricsProvider.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/DumpCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/SessionTracker.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-

```



```

jar/org/apache/zookeeper/server/command/ConsCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/util/AdHash.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/StatCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ZooDefs.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ClientWatchManager.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/PrepRequestProcessor.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ByteBufferOutputStream.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/ServerCnxnHelper.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LeaderBean.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/ZKUtil.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/persistence/FilePadding.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LeaderMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/DeleteCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/NodeHashMapImpl.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumStats.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/FastLeaderElection.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/DataNode.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/UnifiedServerSocket.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ObserverZooKeeperServer.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/metrics/Counter.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/ObserverMXBean.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/AddWatchCommand.java

```

```

* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/command/FourLetterCommands.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/AuthenticationHelper.java
*
/opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LocalSessionTracker.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/SetAclCommand.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/server/watch/IDeadWatcherListener.java
* /opt/cola/permits/1941304025_1710947376.6570852/0/zookeeper-3-9-2-sources-
jar/org/apache/zookeeper/cli/CliException.java

```

1.218 zookeeper-jute 3.9.2

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```

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```

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/META-
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Found in path(s):

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/SimpleCharStream.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/RccTokenManager.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/RccConstants.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/rcc.jj
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/TokenMgrError.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/ParseException.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/Rcc.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/generated/Token.java

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Found in path(s):

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/generated/package.html

*

/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/package.html

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/package.html

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Found in path(s):

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/DeleteTxn.java

*

/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/data/Stat.java

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/CreateResponse.java

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/MultiHeader.java

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/DeleteRequest.java

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/data/StatPersisted.java

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/GetDataRequest.java

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/GetSASLRequest.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/SetDataRequest.java
 *
 /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/data/ClientInfo.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/WhoAmIResponse.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/ConnectRequest.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/GetChildren2Request.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/server/quorum/QuorumPacket.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/txn/TxnHeader.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/GetChildrenRequest.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/txn/CreateTxnV0.java
 *
 /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/RemoveWatchesRequest.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/txn/ErrorTxn.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/CreateTTLRequest.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/SetDataResponse.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/ExistsResponse.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/txn/CheckVersionTxn.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/SyncRequest.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/CheckVersionRequest.java
 *
 /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/SetMaxChildrenRequest.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/ConnectResponse.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/SetWatches2.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
 jar/org/apache/zookeeper/proto/SetWatches.java
 * /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-

```

jar/org/apache/zookeeper/proto/SetACLRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/txn/SetACLTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/data/ACL.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/CreateRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/GetMaxChildrenResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/RequestHeader.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/SetSASLResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/ExistsRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/SyncResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/GetACLRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/WatcherEvent.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/txn/MultiTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/GetEphemeralsRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/Create2Response.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/GetChildren2Response.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/AuthPacket.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/SetSASLRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/LearnerInfo.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/GetEphemeralsResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/server/quorum/QuorumAuthPacket.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/txn/CloseSessionTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/txn/TxnDigest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/zookeeper/proto/GetACLResponse.java

```

* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/server/persistence/FileHeader.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/CreateSessionTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/CheckWatchesRequest.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/CreateTTLTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/ErrorResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/SetACLResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/AddWatchRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/ReplyHeader.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/GetChildrenResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/CreateContainerTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/CreateTxn.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/GetDataResponse.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/ReconfigRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/GetMaxChildrenRequest.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/Txn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/SetMaxChildrenTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/txn/SetDataTxn.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/GetAllChildrenNumberRequest.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/data/Id.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/zookeeper/proto/GetAllChildrenNumberResponse.java
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* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JCompType.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/Record.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JDouble.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JType.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/CGenerator.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/BinaryInputArchive.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JInt.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/CSharpGenerator.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JVector.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/Index.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JavaGenerator.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JFile.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/RecordReader.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JMap.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/JString.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/compiler/CppGenerator.java


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* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/RecordWriter.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/JFloat.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-jar/org/apache/jute/Utils.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/OutputArchive.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/JField.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/JBuffer.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/ToStringOutputArchive.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/JBoolean.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/JLong.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/JRecord.java
*
/opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/compiler/JByte.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/InputArchive.java
* /opt/cola/permits/1941304047_1710947381.185432/0/zookeeper-jute-3-9-2-sources-
jar/org/apache/jute/BinaryOutputArchive.java
```

1.219 netty-codec 4.1.108.Final

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```

```

*/
/**
 * A decoder that splits the received {@link ByteBuf}s dynamically by the
 * value of the length field in the message. It is particularly useful when you
 * decode a binary message which has an integer header field that represents the
 * length of the message body or the whole message.
 *
 *
 * <p>
 * {@link LengthFieldBasedFrameDecoder} has many configuration parameters so
 * that it can decode any message with a length field, which is often seen in
 * proprietary client-server protocols. Here are some example that will give
 * you the basic idea on which option does what.
 *
 *
 * <h3>2 bytes length field at offset 0, do not strip header</h3>
 *
 * The value of the length field in this example is <tt>12 (0x0C)</tt> which
 * represents the length of "HELLO, WORLD". By default, the decoder assumes
 * that the length field represents the number of the bytes that follows the
 * length field. Therefore, it can be decoded with the simplistic parameter
 * combination.
 *
 * <pre>
 * <b>lengthFieldOffset</b> = <b>0</b>
 * <b>lengthFieldLength</b> = <b>2</b>
 * lengthAdjustment = 0
 * initialBytesToStrip = 0 (= do not strip header)
 *
 * BEFORE DECODE (14 bytes)      AFTER DECODE (14 bytes)
 * +-----+-----+ +-----+-----+
 * | Length | Actual Content
 * |---->| Length | Actual Content |
 * | 0x000C | "HELLO, WORLD" | | 0x000C | "HELLO, WORLD" |
 * +-----+-----+ +-----+-----+
 * </pre>
 *
 *
 * <h3>2 bytes length field at offset 0, strip header</h3>
 *
 *
 * Because we can get the length of the content by calling
 * {@link ByteBuf#readableBytes()}, you might want to strip the length
 * field by specifying <tt>initialBytesToStrip</tt>. In this example, we
 * specified <tt>2</tt>, that is same with the length of the length field, to
 * strip the first two bytes.
 *
 * <pre>
 * lengthFieldOffset = 0
 * lengthFieldLength = 2
 * lengthAdjustment = 0
 * <b>initialBytesToStrip</b> = <b>2</b> (= the length of the Length field)
 *
 * BEFORE DECODE (14 bytes)      AFTER DECODE (12 bytes)

```

```

* +-----+-----+ +-----+
* | Length | Actual Content |---->| Actual Content |
* | 0x000C | "HELLO, WORLD" | | "HELLO, WORLD" |
* +-----+-----+ +-----+
* </pre>
*
* <h3>2 bytes length field at offset 0, do not strip header, the length field
* represents the length of the whole message</h3>
*
* In most cases, the length field represents the length of the message body
* only, as shown in the previous examples. However, in some protocols, the
* length field represents the length of the whole message, including the
* message header. In such a case, we specify a non-zero
* <tt>lengthAdjustment</tt>. Because the length value in this example message
* is always greater than the body length by <tt>2</tt>, we specify <tt>-2</tt>
* as <tt>lengthAdjustment</tt> for compensation.

```

```

* <pre>
* lengthFieldOffset = 0
* lengthFieldLength = 2
* <b>lengthAdjustment</b> = <b>-2</b> (= the length of the Length field)
* initialBytesToStrip = 0
*

```

```

* BEFORE DECODE (14 bytes)      AFTER DECODE (14 bytes)
* +-----+-----+ +-----+
* | Length | Actual Content |---->| Length | Actual
* Content |
* | 0x000E | "HELLO, WORLD" | | 0x000E | "HELLO, WORLD" |
* +-----+-----+ +-----+
* </pre>
*

```

```

* <h3>3 bytes length field at the end of 5 bytes header, do not strip header</h3>
*
* The following message is a simple variation of the first example. An extra
* header value is prepended to the message. <tt>lengthAdjustment</tt> is zero
* again because the decoder always takes the length of the prepended data into
* account during frame length calculation.

```

```

* <pre>
* <b>lengthFieldOffset</b> = <b>2</b> (= the length of Header 1)
* <b>lengthFieldLength</b> = <b>3</b>
* lengthAdjustment = 0
* initialBytesToStrip = 0
*
* BEFORE DECODE (17 bytes)      AFTER DECODE (17 bytes)
* +-----+-----+ +-----+
* | Header 1 | Length | Actual Content |---->| Header 1 | Length | Actual Content |
* | 0xCAFE | 0x00000C | "HELLO, WORLD" |
* | 0xCAFE | 0x00000C | "HELLO, WORLD" |
* +-----+-----+ +-----+

```

```

* </pre>
*
* <h3>3 bytes length field at the beginning of 5 bytes header, do not strip header</h3>
*
* This is an advanced example that shows the case where there is an extra
* header between the length field and the message body. You have to specify a
* positive <tt>lengthAdjustment</tt> so that the decoder counts the extra
* header into the frame length calculation.
* <pre>
* lengthFieldOffset = 0
* lengthFieldLength = 3
* <b>lengthAdjustment</b> = <b>2</b> (= the length of Header 1)
* initialBytesToStrip = 0
*
* BEFORE DECODE (17 bytes)          AFTER DECODE (17 bytes)
* +-----+-----+-----+-----+ +-----+-----+-----+-----+
* | Length | Header 1 | Actual Content |---->| Length | Header 1 | Actual Content |
* | 0x00000C | 0xCAFE | "HELLO, WORLD" |    | 0x00000C | 0xCAFE | "HELLO,
* WORLD" |
* +-----+-----+-----+-----+ +-----+-----+-----+-----+
* </pre>
*
* <h3>2 bytes length field at offset 1 in the middle of 4 bytes header,
* strip the first header field and the length field</h3>
*
* This is a combination of all the examples above. There are the prepended
* header before the length field and the extra header after the length field.
* The prepended header affects the <tt>lengthFieldOffset</tt> and the extra
* header affects the <tt>lengthAdjustment</tt>. We also specified a non-zero
* <tt>initialBytesToStrip</tt> to strip the length field and the prepended
* header from the frame. If you don't want to strip the prepended header, you
* could specify <tt>0</tt> for <tt>initialBytesToSkip</tt>.
* <pre>
* lengthFieldOffset = 1 (= the length of HDR1)
* lengthFieldLength = 2
* <b>lengthAdjustment</b> = <b>1</b> (= the length of HDR2)
* <b>initialBytesToStrip</b> = <b>3</b> (= the length of HDR1 +
* LEN)
*
* BEFORE DECODE (16 bytes)          AFTER DECODE (13 bytes)
* +-----+-----+-----+-----+ +-----+-----+-----+-----+
* | HDR1 | Length | HDR2 | Actual Content |---->| HDR2 | Actual Content |
* | 0xCA | 0x000C | 0xFE | "HELLO, WORLD" |    | 0xFE | "HELLO, WORLD" |
* +-----+-----+-----+-----+ +-----+-----+-----+-----+
* </pre>
*
* <h3>2 bytes length field at offset 1 in the middle of 4 bytes header,
* strip the first header field and the length field, the length field

```

```

* represents the length of the whole message</h3>
*
* Let's give another twist to the previous example. The only difference from
* the previous example is that the length field represents the length of the
* whole message instead of the message body, just like the third example.
* We have to count the length of HDR1 and Length into <tt>lengthAdjustment</tt>.
* Please note that we don't need to take the length of HDR2 into account
* because
the length field already includes the whole header length.
* <pre>
* lengthFieldOffset = 1
* lengthFieldLength = 2
* <b>lengthAdjustment</b> = <b>-3</b> (= the length of HDR1 + LEN, negative)
* <b>initialBytesToStrip</b> = <b> 3</b>
*
* BEFORE DECODE (16 bytes)          AFTER DECODE (13 bytes)
* +-----+-----+-----+-----+ +-----+-----+
* | HDR1 | Length | HDR2 | Actual Content |----->| HDR2 | Actual Content |
* | 0xCA | 0x0010 | 0xFE | "HELLO, WORLD" | | 0xFE | "HELLO, WORLD" |
* +-----+-----+-----+-----+ +-----+-----+
* </pre>
* @see LengthFieldPrepender
*/

```

Found in path(s):

```

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/LengthFieldBasedFrameDecoder.java

```

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*/
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* Written by Robert Harder and released to the public domain, as explained at
* https://creativecommons.org/licenses/publicdomain
*/

```

```
/**
 * Utility class for { @link ByteBuf } that encodes and decodes to and from
 * <a href="https://en.wikipedia.org/wiki/Base64">Base64</a> notation.
 * <p>
 * The encoding and decoding algorithm in this class has been derived from
 * <a href="http://iharder.sourceforge.net/current/java/base64/">Robert Harder's Public Domain
 * Base64 Encoder/Decoder</a>.
 */
```

Found in path(s):

```
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/base64/Base64.java
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```
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/xml/XmlFrameDecoder.java
```

```
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/JdkZlibDecoder.java
```

```
*
 * /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Crc32c.java
```

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- */

Found in path(s):

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/ZlibUtil.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/ClassResolvers.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/package-info.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/ObjectEncoderOutputStream.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/JdkZlibEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/DecoderException.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/CompatibleObjectEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/ZlibCodecFactory.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/protobuf/package-info.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/DefaultUnmarshallerProvider.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/FixedLengthFrameDecoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/bytes/ByteArrayDecoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/package-info.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/MarshallingEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/MessageToMessageEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/ChannelBufferByteInput.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/package-info.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/MarshallerProvider.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/ThreadLocalUnmarshallerProvider.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/CompactObjectInputStream.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/TooLongFrameException.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/xml/package-info.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/LengthFieldPrepender.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/bytes/ByteArrayEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/UnmarshallerProvider.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/ClassLoaderClassResolver.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/ByteToMessageCodec.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/PrematureChannelClosureException.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/string/StringDecoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/WeakReferenceMap.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/ObjectDecoderInputStream.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/CompatibleMarshallingEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/string/StringEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/LimitingByteInput.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/MarshallingDecoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/CodecException.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/package-info.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/CompressionException.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/base64/Base64Decoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/ClassResolver.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-


```

jar/io/netty/handler/codec/compression/JZlibEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/ReplayingDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/SnappyFrameDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/ByteToMessageDecoder.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/marshalling/ChannelBufferByteOutput.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/MessageToMessageDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/ZlibDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/base64/Base64Encoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/serialization/ObjectDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/marshalling/ThreadLocalMarshallerProvider.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/MessageToByteEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/serialization/CompactObjectOutputStream.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/MessageAggregator.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/serialization/ObjectEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/MessageToMessageCodec.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/DecoderResult.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/string/package-info.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/ZlibWrapper.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/DecompressionException.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/serialization/SoftReferenceMap.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/LineBasedFrameDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/DelimiterBasedFrameDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/JZlibDecoder.java

```

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/ReferenceMap.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/ContextBoundUnmarshallerProvider.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/DefaultMarshallerProvider.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/base64/package-info.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/UnsupportedMessageTypeException.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/ReplayingDecoderByteBuf.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/Snappy.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/marshalling/CompatibleMarshallingDecoder.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/Delimiters.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/ZlibEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/bytes/package-info.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/EncoderException.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/CorruptedFrameException.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/SnappyFrameEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/serialization/CachingClassResolver.java
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* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/HeadersUtils.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/UnsupportedValueConverter.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufVarint32LengthFieldPrepender.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufEncoder.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/ProtocolDetectionState.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufDecoderNano.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufEncoderNano.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/ProtocolDetectionResult.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufDecoder.java

*

/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufVarint32FrameDecoder.java

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* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/ZstdOptions.java

* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/compression/StandardCompressionOptions.java

```
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Brotli.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/ZstdConstants.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Zstd.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/BrotliDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/ZstdEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/DeflateOptions.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/GzipOptions.java
```

```
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/BrotliEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/BrotliOptions.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
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jar/io/netty/handler/codec/DateFormatter.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/string/LineEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/DatagramPacketEncoder.java
*
```

```
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/string/LineSeparator.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/CompressionUtil.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/DatagramPacketDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/CodecOutputList.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/ByteBufChecksum.java
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jar/io/netty/handler/codec/compression/EncoderUtil.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
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* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/DefaultHeaders.java

```
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/EmptyHeaders.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/Headers.java
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jar/io/netty/handler/codec/compression/Bzip2BitReader.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2HuffmanAllocator.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2MoveToFrontTable.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2Constants.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2Decoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Lz4FrameEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2BitWriter.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2Rand.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2BlockDecompressor.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/LzmaFrameEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/MessageAggregationException.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
```

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jar/io/netty/handler/codec/json/package-info.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Lz4FrameDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/FastLzFrameDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2HuffmanStageDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/AsciiHeadersEncoder.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2DivSufSort.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2Encoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/FastLzFrameEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/FastLz.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/SnappyFramedEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Crc32.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Lz4Constants.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/LzfEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2MTFAndRLE2StageEncoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/SnappyFramedDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/LzfDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/json/JsonObjectDecoder.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/DecoderResultProvider.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2HuffmanStageEncoder.java
*
/opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-
jar/io/netty/handler/codec/compression/Bzip2BlockCompressor.java
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* <p>

* The internal lookup tables in this class has been derived from

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* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/ValueConverter.java
* /opt/cola/permits/1953127415_1711641257.7875633/0/netty-codec-4-1-108-final-sources-jar/io/netty/handler/codec/CharSequenceValueConverter.java

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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v4/AbstractSocks4Message.java
*
/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5CommandResponseDecoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v4/package-info.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5Message.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/package-info.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/AbstractSocksMessage.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/AbstractSocks5Message.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v4/Socks4ClientEncoder.java
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/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5CommandRequestDecoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v4/Socks4Message.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5InitialRequestDecoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v4/Socks4ServerEncoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5ClientEncoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5PasswordAuthRequestDecoder.java
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/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5ServerEncoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5PasswordAuthResponseDecoder.java

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jar/io/netty/handler/codec/socksx/v5/DefaultSocks5PasswordAuthRequest.java  
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
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jar/io/netty/handler/codec/socksx/v4/DefaultSocks4CommandRequest.java  
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
jar/io/netty/handler/codec/socks/package-info.java  
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/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
jar/io/netty/handler/codec/socks/SocksCmdResponse.java  
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-  
jar/io/netty/handler/codec/socksx/v5/DefaultSocks5PasswordAuthResponse.java  
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
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jar/io/netty/handler/codec/socks/SocksResponse.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/UnknownSocksResponse.java
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jar/io/netty/handler/codec/socks/SocksAuthResponse.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v4/Socks4ServerDecoder.java
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jar/io/netty/handler/codec/socks/SocksCmdResponseDecoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/package-info.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/SocksMessage.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/DefaultSocks5InitialRequest.java
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/DefaultSocks5CommandResponse.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksInitResponse.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksInitRequest.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksAuthResponseDecoder.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/DefaultSocks5CommandRequest.java
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/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksCommonUtils.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v4/Socks4CommandType.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/UnknownSocksRequest.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v4/Socks4CommandStatus.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksCmdRequest.java
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/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksCmdRequestDecoder.java
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jar/io/netty/handler/codec/socks/SocksResponseType.java
* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksAuthScheme.java

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/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksAuthStatus.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksRequestType.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksSubnegotiationVersion.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksProtocolVersion.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/SocksVersion.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/Socks5CommandType.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksAddressType.java

*

/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/Socks5CommandStatus.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksCmdStatus.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksMessageType.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/Socks5AuthMethod.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/Socks5AddressType.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socksx/v5/Socks5PasswordAuthStatus.java

* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-
jar/io/netty/handler/codec/socks/SocksCmdType.java

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* /opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/SocksPortUnificationServerHandler.java
*
/opt/cola/permits/1953127478_1711641240.1591651/0/netty-codec-socks-4-1-108-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5AddressDecoder.java

1.221 netty-handler 4.1.108.Final

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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/PemPrivateKey.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/PemValue.java

*

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jar/io/netty/handler/flush/FlushConsolidationHandler.java

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jar/io/netty/handler/flow/package-info.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/ReferenceCountedOpenSslClientContext.java

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jar/io/netty/handler/ssl/ReferenceCountedOpenSslContext.java

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jar/io/netty/handler/ssl/PemEncoded.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/ReferenceCountedOpenSslEngine.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/util/X509TrustManagerWrapper.java

*

/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/flush/package-info.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/OpenSslCertificateException.java

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jar/io/netty/handler/ssl/DelegatingSslContext.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/OpenSslKeyMaterialManager.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/Java8SslUtils.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/ReferenceCountedOpenSslServerContext.java

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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/ssl/SslClosedEngineException.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/ssl/util/FingerprintTrustManagerFactoryBuilder.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/ipfilter/IpSubnetFilter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/address/ResolveAddressHandler.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/ipfilter/IpSubnetFilterRuleComparator.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/logging/ByteBufFormat.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/ssl/SslHandshakeTimeoutException.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/traffic/package-info.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/traffic/ChannelTrafficShapingHandler.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/traffic/TrafficCounter.java

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/traffic/GlobalTrafficShapingHandler.java
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jar/io/netty/handler/ssl/SniCompletionEvent.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/OptionalSslHandler.java
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/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/JdkAlpnSslUtils.java
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```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/ocsp/OcspClientHandler.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/SslClientHelloHandler.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/Conscrypt.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/JdkAlpnSslEngine.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/SslCloseCompletionEvent.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/ocsp/package-info.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/SslCompletionEvent.java
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/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/ConscryptAlpnSslEngine.java
```

```
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-  
jar/io/netty/handler/ssl/AbstractSniHandler.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslKeyMaterialProvider.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslCachingKeyMaterialProvider.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/DefaultOpenSslKeyMaterial.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslSession.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslCachingX509KeyManagerFactory.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslX509KeyManagerFactory.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslKeyMaterial.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ExtendedOpenSslSession.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SignatureAlgorithmConverter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslX509TrustManagerWrapper.java
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- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/address/package-info.java
- *
- /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/SimpleKeyManagerFactory.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/PseudoRandomFunction.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/KeyManagerFactoryWrapper.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslPrivateKeyMethod.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/X509KeyManagerWrapper.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/TrustManagerFactoryWrapper.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslMasterKeyHandler.java

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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslSessionStats.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslProvider.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/InsecureTrustManagerFactory.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ApplicationProtocolConfig.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/FingerprintTrustManagerFactory.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/SimpleTrustManagerFactory.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ipfilter/AbstractRemoteAddressFilter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslApplicationProtocolNegotiator.java
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/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/CipherSuiteFilter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JdkBaseApplicationProtocolNegotiator.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/LazyX509Certificate.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslSessionContext.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ipfilter/IpFilterRuleType.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/Java7SslParametersUtils.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslEngine.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SupportedCipherSuiteFilter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ipfilter/package-info.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JdkApplicationProtocolNegotiator.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslEngineMap.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/OpenJdkSelfSignedCertGenerator.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslNpnApplicationProtocolNegotiator.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslServerContext.java
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/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/IdentityCipherSuiteFilter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JdkAlpnApplicationProtocolNegotiator.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslUtils.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JdkDefaultApplicationProtocolNegotiator.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ApplicationProtocolNegotiator.java
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/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/traffic/GlobalChannelTrafficCounter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JettyNpnSslEngine.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslServerSessionContext.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JdkSslClientContext.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/BouncyCastleSelfSignedCertGenerator.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ApplicationProtocolUtil.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JdkSslServerContext.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/JdkSslEngine.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslDefaultApplicationProtocolNegotiator.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslClientContext.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-

jar/io/netty/handler/ssl/OpenSsl.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/ThreadLocalInsecureRandom.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ipfilter/RuleBasedIpFilter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/PemReader.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslContext.java
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*/

Found in path(s):

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ClientAuth.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ApplicationProtocolNames.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslSessionTicketKey.java

*

/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/LazyJavaxX509Certificate.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslContextBuilder.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ApplicationProtocolAccessor.java

* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/ApplicationProtocolNegotiationHandler.java

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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/traffic/AbstractTrafficShapingHandler.java

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- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/logging/LoggingHandler.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/IdleState.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/TimeoutException.java
- *
- /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/stream/ChunkedWriteHandler.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/IdleStateHandler.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/package-info.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/stream/ChunkedNioStream.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/stream/ChunkedNioFile.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/logging/LogLevel.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/package-info.java
- *
- /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/util/package-info.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/IdleStateEvent.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/stream/ChunkedInput.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/stream/ChunkedStream.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/WriteTimeoutException.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/ReadTimeoutHandler.java
- * /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/NotSslRecordException.java
- *

/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslHandler.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/stream/package-info.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/WriteTimeoutHandler.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/stream/ChunkedFile.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/timeout/ReadTimeoutException.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/logging/package-info.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslHandshakeCompletionEvent.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/pcap/State.java

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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/META-INF/maven/io.netty/netty-handler/pom.xml

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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/pcap/TCPpacket.java

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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/pcap/PcapWriteHandler.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/pcap/package-info.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/pcap/PcapWriter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/pcap/EthernetPacket.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/pcap/UDPPacket.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/pcap/IPPacket.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/pcap/PcapHeaders.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/ssl/BouncyCastlePemReader.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-
jar/io/netty/handler/ssl/OpenSslCertificateCompressionAlgorithm.java
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* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslProtocols.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/SslContextOption.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/BouncyCastleAlpnSslUtils.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/GroupsConverter.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslSessionId.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslAsyncPrivateKeyMethod.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/AsyncRunnable.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslClientSessionCache.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslContextOption.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/Ciphers.java
*
/opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/OpenSslSessionCache.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/BouncyCastleAlpnSslEngine.java
* /opt/cola/permits/1953127647_1711641260.2460043/0/netty-handler-4-1-108-final-sources-jar/io/netty/handler/ssl/BouncyCastle.java

1.222 netty-handler-proxy 4.1.108.Final

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* /opt/cola/permits/1953127606_1711641228.5046391/0/netty-handler-proxy-4-1-108-final-sources-jar/io/netty/handler/proxy/ProxyConnectionEvent.java

* /opt/cola/permits/1953127606_1711641228.5046391/0/netty-handler-proxy-4-1-108-final-sources-jar/io/netty/handler/proxy/ProxyHandler.java

*

/opt/cola/permits/1953127606_1711641228.5046391/0/netty-handler-proxy-4-1-108-final-sources-jar/io/netty/handler/proxy/Socks5ProxyHandler.java

* /opt/cola/permits/1953127606_1711641228.5046391/0/netty-handler-proxy-4-1-108-final-sources-jar/io/netty/handler/proxy/Socks4ProxyHandler.java

* /opt/cola/permits/1953127606_1711641228.5046391/0/netty-handler-proxy-4-1-108-final-sources-jar/io/netty/handler/proxy/ProxyConnectException.java

* /opt/cola/permits/1953127606_1711641228.5046391/0/netty-handler-proxy-4-1-108-final-sources-jar/io/netty/handler/proxy/HttpProxyHandler.java

* /opt/cola/permits/1953127606_1711641228.5046391/0/netty-handler-proxy-4-1-108-final-sources-

1.223 netty-codec-dns 4.1.108.Final

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*/opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/TcpDnsResponseEncoder.java
*/opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/TcpDnsQueryDecoder.java
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jar/io/netty/handler/codec/dns/DnsResponse.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DatagramDnsResponseEncoder.java
*
/opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DefaultDnsRecordDecoder.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/AbstractDnsRecord.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DnsMessage.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DnsOpCode.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DnsResponseCode.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DatagramDnsResponseDecoder.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DatagramDnsQueryDecoder.java
*
/opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/package-info.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DatagramDnsQueryEncoder.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DatagramDnsResponse.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DnsSection.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DnsMessageUtil.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DnsRecordDecoder.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DefaultDnsQuery.java
*
/opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DefaultDnsResponse.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DefaultDnsRawRecord.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DefaultDnsQuestion.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DefaultDnsRecordEncoder.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/DatagramDnsQuery.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-
jar/io/netty/handler/codec/dns/AbstractDnsMessage.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

```

jar/io/netty/handler/codec/dns/DnsRecord.java

*

/opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

jar/io/netty/handler/codec/dns/DnsRecordEncoder.java

* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

jar/io/netty/handler/codec/dns/DnsQuery.java

* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

jar/io/netty/handler/codec/dns/DnsRecordType.java

* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

jar/io/netty/handler/codec/dns/DnsQuestion.java

* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

jar/io/netty/handler/codec/dns/DnsRawRecord.java

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jar/io/netty/handler/codec/dns/DnsQueryEncoder.java

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jar/io/netty/handler/codec/dns/DnsCodecUtil.java

* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

jar/io/netty/handler/codec/dns/DnsResponseDecoder.java

* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-

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* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-jar/io/netty/handler/codec/dns/DnsOptPseudoRecord.java
*
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-jar/io/netty/handler/codec/dns/DefaultDnsOptEcsRecord.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-jar/io/netty/handler/codec/dns/AbstractDnsOptPseudoRrRecord.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-jar/io/netty/handler/codec/dns/DefaultDnsPtrRecord.java
* /opt/cola/permits/1953127607_1711641221.246175/0/netty-codec-dns-4-1-108-final-sources-jar/io/netty/handler/codec/dns/DnsPtrRecord.java

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1.224 netty-transport-native-unix-common

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* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/IovArray.java
*
```

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/opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/package-info.java
* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/Unix.java
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* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/DomainSocketAddress.java
* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/ServerDomainSocketChannel.java
* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/UnixChannel.java
* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/DomainSocketReadMode.java
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* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/FileDescriptor.java
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* /opt/cola/permits/1953127491_1711641245.6693923/0/netty-transport-native-unix-common-4-1-108-final-sources-jar/io/netty/channel/unix/DomainDatagramPacket.java

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Found in path(s):

* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-jar/io/netty/resolver/RoundRobinInetAddressResolver.java
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```
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/HostsFileEntriesProvider.java
```

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```
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/AbstractAddressResolver.java
```

```
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/AddressResolver.java
```

```
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/DefaultHostsFileEntriesResolver.java
```

```
*
```

```
/opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/InetAddressResolver.java
```

```
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
```

```
jar/io/netty/resolver/HostsFileParser.java
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/InetSocketAddressResolver.java
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/HostsFileEntriesResolver.java
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/CompositeNameResolver.java
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/DefaultAddressResolverGroup.java
* /opt/cola/permits/1953127466_1711641225.1184177/0/netty-resolver-4-1-108-final-sources-
jar/io/netty/resolver/DefaultNameResolver.java
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1.226 netty-resolver-dns 4.1.108.Final

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-
jar/io/netty/resolver/dns/UnixResolverOptions.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-
jar/io/netty/resolver/dns/LoggingDnsQueryLifeCycleObserverFactory.java
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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/PreferredAddressTypeComparator.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DatagramDnsQueryContext.java
*

/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/TcpDnsQueryContext.java

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsNameResolver.java
*

/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsAddressResolverGroup.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/package-info.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsQueryContext.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-

jar/io/netty/resolver/dns/DnsServerAddresses.java

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/META-INF/native-image/io.netty/netty-resolver-dns/native-image.properties
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```

```
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsNameResolverException.java
```

```
*
```

```
/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/RotationalDnsServerAddresses.java
```

```
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DefaultDnsServerAddresses.java
```

```
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsQueryContextManager.java
```

```
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsServerAddressStream.java
```

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsNameResolverBuilder.java
```

```
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/ShuffledDnsServerAddressStream.java
```

```
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-
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jar/io/netty/resolver/dns/SingletonDnsServerAddresses.java

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jar/io/netty/resolver/dns/DnsServerResponseFeedbackAddressStream.java

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-

jar/io/netty/resolver/dns/BiDnsQueryLifecycleObserverFactory.java

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jar/io/netty/resolver/dns/BiDnsQueryLifecycleObserver.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DefaultDnsServerAddressStreamProvider.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsServerAddressStreamProvider.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsServerAddressStreamProviders.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsNameResolverTimeoutException.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/LoggingDnsQueryLifecycleObserver.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsQueryLifecycleObserver.java
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/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/NoopDnsQueryLifecycleObserverFactory.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/SequentialDnsServerAddressStreamProvider.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/UniSequentialDnsServerAddressStreamProvider.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/MultiDnsServerAddressStreamProvider.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/SingletonDnsServerAddressStreamProvider.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsCacheEntry.java
*

/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/UnixResolverDnsServerAddressStreamProvider.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/NoopDnsQueryLifecycleObserver.java
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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/AuthoritativeDnsServerCacheAdapter.java

*

/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DefaultAuthoritativeDnsServerCache.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsCnameCache.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/Cache.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/AuthoritativeDnsServerCache.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/NameServerComparator.java

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/NoopDnsCnameCache.java

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/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DefaultDnsCnameCache.java

* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DirContextUtils.java

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/DnsRecordResolveContext.java

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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-
jar/io/netty/resolver/dns/RoundRobinDnsAddressResolverGroup.java
*
/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-
jar/io/netty/resolver/dns/NoopDnsCache.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-
jar/io/netty/resolver/dns/DnsCache.java
* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-
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* /opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/ResolvConf.java

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/opt/cola/permits/1953127591_1711641243.1775641/0/netty-resolver-dns-4-1-108-final-sources-jar/io/netty/resolver/dns/ThreadLocalNameServerAddressStream.java

1.227 netty-codec-http 4.1.108.Final

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```
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/Utf8Validator.java
```

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- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/CorruptedWebSocketFrameException.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerHandshaker13.java
- *

- /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerProtocolConfig.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerHandshaker07.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketExtensionFilter.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerHandshakerFactory.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketCloseStatus.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketDecoderConfig.java
- *

- /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerHandshaker.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerProtocolHandshakeHandler.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerHandshaker00.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerHandshaker08.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketClientProtocolConfig.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketExtensionFilterProvider.java
- *

- /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/CloseWebSocketFrame.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerProtocolHandler.java
- * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocket00FrameDecoder.java

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpRequest.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketClientHandshaker08.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpObjectDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/InterfaceHttpPostRequestDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpObject.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/DefaultHttpResponse.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspObjectEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/DefaultSpdySettingsFrame.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpMethod.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyHttpResponseStreamIdHandler.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/FileUpload.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/HttpPostRequestEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/PongWebSocketFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspRequestDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/CookieDecoder.java

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/MemoryFileUpload.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketVersion.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpResponse.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/CaseIgnoringComparator.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspRequestEncoder.java
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/HttpData.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/HttpPostBodyUtil.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketClientHandshaker00.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/package-info.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/TextWebSocketFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpObjectAggregator.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketClientHandshakerFactory.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspMethods.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/HttpDataFactory.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketUtil.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpContentDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocket00FrameEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpResponseStatus.java
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/PingWebSocketFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/MixedAttribute.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/HttpPostRequestDecoder.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/package-info.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HTTPHeaderDateFormat.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/ContinuationWebSocketFrame.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspResponseEncoder.java
 *
 /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/DiskFileUpload.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpResponseEncoder.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpHeaders.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/HttpPostMultipartRequestDecoder.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/InternalAttribute.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/AbstractMemoryHttpData.java
 *
 /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpMessage.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/DefaultHttpContent.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketClientHandshaker07.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspHeaders.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/Attribute.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpClientCodec.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/DiskAttribute.java
 *
 /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/InterfaceHttpData.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpObjectEncoder.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/DefaultHttpRequest.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspResponseDecoder.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpResponseDecoder.java
 * /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-

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jar/io/netty/handler/codec/http/HttpContentCompressor.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdySession.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/DefaultHttpHeaders.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/Cookie.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/multipart/AbstractHttpData.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/LastHttpContent.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/rtsp/RtspVersions.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/DefaultHttpMessage.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/multipart/DefaultHttpDataFactory.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/rtsp/RtspResponseStatuses.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHttpHeaders.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/HttpServerCodec.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/DefaultHttpObject.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketHandshakeException.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/HttpContent.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHttpEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/package-info.java
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspObjectDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/MemoryAttribute.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/QueryStringDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/AbstractDiskHttpData.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpConstants.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/HttpPostStandardRequestDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpContentEncoder.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/DefaultLastHttpContent.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/package-info.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpRequestDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/BinaryWebSocketFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/QueryStringEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpContentDecompressor.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/multipart/package-info.java
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jar/io/netty/handler/codec/http/websocketx/WebSocketClientHandshakeException.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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jar/io/netty/handler/codec/spdy/SpdySessionHandler.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHttpDecoder.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyCodecUtil.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/DefaultFullHttpRequest.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyStreamFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyWindowUpdateFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdySynReplyFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdySynStreamFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/cors/package-info.java
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyVersion.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketClientProtocolHandshakeHandler.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/FullHttpRequest.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyPingFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/ComposedLastHttpContent.java
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdySessionStatus.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyStreamStatus.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/FullHttpResponse.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdySynReplyFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketFrameAggregator.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHeaderBlockRawEncoder.java
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/FullHttpRequest.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHeaderBlockZlibEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyRstStreamFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdyHeaders.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHeaders.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketFrameEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdyDataFrame.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdyGoAwayFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHeaderBlockEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdyPingFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdyRstStreamFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdySynStreamFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketClientProtocolHandler.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyGoAwayFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/DefaultFullHttpResponse.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdyHeadersFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocketProtocolHandler.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdySettingsFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyDataFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/DefaultSpdyStreamFrame.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyHeaderBlockJZlibEncoder.java

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jar/io/netty/handler/codec/spdy/SpdyHeadersFrame.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/spdy/SpdyFrame.java
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
jar/io/netty/handler/codec/http/DefaultHttpHeadersFactory.java
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jar/io/netty/handler/codec/http/websocketx/WebSocket07FrameDecoder.java
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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jar/io/netty/handler/codec/http/ReadOnlyHttpHeaders.java
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketExtensionDecoder.java
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketClientExtensionHandshaker.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/DeflateFrameServerExtensionHandshaker.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/package-info.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpHeaderValues.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketExtensionEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpMessageUtil.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/PerMessageDeflateDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyFrameEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/WebSocketClientCompressionHandler.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/ClientCookieEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpHeaderNames.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpHeadersEncoder.java
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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/DeflateDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/ServerCookieEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/Utf8FrameValidator.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyFrameDecoderDelegate.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketExtension.java
*
/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/PerMessageDeflateEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/PerFrameDeflateEncoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspHeaderNames.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyHeaderBlockDecoder.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/DeflateFrameClientExtensionHandshaker.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyHeaderBlockRawDecoder.java
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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketClientExtension.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/PerMessageDeflateClientExtensionHandshaker.j

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspHeaderValues.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketServerExtension.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyProtocolException.java
* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketServerExtensionHandshaker.java
*

/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketServerExtensionHandler.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketClientExtensionHandler.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpStatusClass.java

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/package-info.java

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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyFrameDecoder.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketExtensionUtil.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/compression/WebSocketServerCompressionHandler.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyFrameCodec.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/spdy/SpdyHeaderBlockZlibDecoder.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpChunkedInput.java

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*

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/cookie/CookieUtil.java

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/cookie/ServerCookieEncoder.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/CookieUtil.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/rtsp/RtspEncoder.java

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/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpScheme.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/EmptyHttpHeaders.java

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/HttpExpectationFailedEvent.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/cookie/ClientCookieEncoder.java

* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/cookie/CookieEncoder.java

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*

/opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/CombinedHttpHeaders.java

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* /opt/cola/permits/1953127627_1711641232.066499/0/netty-codec-http-4-1-108-final-sources-jar/io/netty/handler/codec/http/cookie/package-info.java

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*
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jar/io/netty/handler/codec/http/HttpServerKeepAliveHandler.java
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```

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jar/io/netty/util/concurrent/EventExecutorGroup.java
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jar/io/netty/util/concurrent/GlobalEventExecutor.java
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jar/io/netty/util/concurrent/SucceededFuture.java
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jar/io/netty/util/internal/logging/JdkLoggerFactory.java
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jar/io/netty/util/concurrent/DefaultEventExecutorGroup.java
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jar/io/netty/util/internal/logging/Slf4JLogger.java
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jar/io/netty/util/Constant.java
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jar/io/netty/util/internal/PlatformDependent.java
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jar/io/netty/util/internal/logging/InternalLogLevel.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/MultithreadEventExecutorGroup.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/CharsetUtil.java
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jar/io/netty/util/internal/logging/Slf4JLoggerFactory.java
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jar/io/netty/util/DefaultAttributeMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/FailedFuture.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/TimerTask.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/DefaultEventExecutor.java
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jar/io/netty/util/AttributeMap.java
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/BlockingOperationException.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/HashedWheelTimer.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/IllegalReferenceCountException.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/AbstractConstant.java
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/NetUtilSubstitutions.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/DomainWildcardMappingBuilder.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/NetUtilInitializations.java

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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/LongCounter.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/concurrent/AbstractScheduledEventExecutor.java

*

/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/concurrent/ThreadProperties.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/DefaultPriorityQueue.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/DomainMappingBuilder.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/AsyncMapping.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/PriorityQueueNode.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/HashingStrategy.java

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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/collection/CharCollections.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/collection/IntObjectHashMap.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/ObjectUtil.java

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/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/ByteObjectHashMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/IntCollections.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/ShortObjectHashMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/LongObjectMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/CharObjectHashMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/ShortCollections.java
*
```

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/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/LongObjectHashMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/CharObjectMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/IntObjectMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/collection/ByteObjectMap.java
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xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">
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  <artifactId>jctools-core</artifactId>
  <groupId>org.jctools</groupId>
  <version>3.1.0</version>
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  <description>Java Concurrency Tools Core Library</description>
  <packaging>bundle</packaging>
```

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  <groupId>junit</groupId>
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  <groupId>com.google.guava</groupId>
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</build>

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    <name>jctools-jctools</name>
    <url>https://api.bintray.com/maven/jctools/jctools/jctools-core/?publish=1</url>
  </repository>
</distributionManagement>

<url>https://github.com/JCTools</url>
<inceptionYear>2013</inceptionYear>

<licenses>
  <license>
    <name>Apache
    License, Version 2.0</name>
    <url>http://www.apache.org/licenses/LICENSE-2.0.txt</url>
    <distribution>repo</distribution>
  </license>
</licenses>

<scm>
  <url>https://github.com/JCTools/JCTools</url>
  <connection>scm:git:https://github.com/JCTools/JCTools</connection>

```

```

<tag>HEAD</tag>
</scm>

<developers>
<developer>
  <url>https://github.com/nitsanw</url>
</developer>
<developer>
  <url>https://github.com/mjpt777</url>
</developer>
<developer>
  <url>https://github.com/RichardWarburton</url>
</developer>
<developer>
  <url>https://github.com/kay</url>
</developer>
<developer>
  <url>https://github.com/franz1981</url>
</developer>
</developers>

<prerequisites>
<maven>3.5.0</maven>
</prerequisites>

<properties>
<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
<java.version>1.6</java.version>
<java.test.version>1.8</java.test.version>

<maven.compiler.source>${java.version}</maven.compiler.source>
<maven.compiler.target>${java.version}</maven.compiler.target>
<maven.compiler.testSource>${java.test.version}</maven.compiler.testSource>
<maven.compiler.testTarget>${java.test.version}</maven.compiler.testTarget>

<hamcrest.version>1.3</hamcrest.version>
<junit.version>4.12</junit.version>
<guava-testlib.version>21.0</guava-testlib.version>
</properties>
</project>

```

Found

in path(s):

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/META-INF/maven/org.jctools/jctools-core/pom.xml

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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/DomainNameMapping.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/AsciiString.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/concurrent/PromiseAggregator.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/InternalThreadLocalMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/UnpaddedInternalThreadLocalMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/ResourceLeakHint.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/Mapping.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/ThreadDeathWatcher.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/NativeLibraryLoader.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/IntegerHolder.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/concurrent/PromiseNotifier.java
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jar/io/netty/util/ByteProcessor.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/MathUtil.java
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jar/io/netty/util/concurrent/FastThreadLocalThread.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/CleanerJava6.java
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/DomainNameMappingBuilder.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/concurrent/NonStickyEventExecutorGroup.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/logging/Log4J2Logger.java
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/concurrent/RejectedExecutionHandler.java
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/logging/JdkLogger.java

*

/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/logging/CommonsLogger.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/logging/InternalLogger.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/logging/Log4JLogger.java

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Found in path(s):

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/ResourceLeak.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/Promise.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/ThreadPoolExecutor.java

*

/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/DefaultProgressivePromise.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-

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jar/io/netty/util/internal/NoOpTypeParameterMatcher.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/DefaultThreadFactory.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/AbstractEventExecutorGroup.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/ImmediateExecutor.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/GenericProgressiveFutureListener.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/ConcurrentSet.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/AbstractEventExecutor.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/AbstractReferenceCounted.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/ProgressivePromise.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/TypeParameterMatcher.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/ScheduledFutureTask.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/CompleteFuture.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/package-info.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/PlatformDependent0.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/PromiseTask.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/logging/package-info.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/EmptyArrays.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/FutureListener.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/ReferenceCounted.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/Version.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/Recycler.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/ResourceLeakException.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/DefaultPromise.java

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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/Future.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/ProgressiveFuture.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/AppendableCharSequence.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/ScheduledFuture.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/ImmediateEventExecutor.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/RecyclableArrayList.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/PendingWrite.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/ReadOnlyIterator.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/DefaultFutureListeners.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/GenericFutureListener.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/ReferenceCountUtil.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/concurrent/AbstractFuture.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/ConstantPool.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/ResourceLeakDetector.java
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jar/io/netty/util/internal/shaded/org/jctools/queues/MpscChunkedArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/util/PortableJvmInfo.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/MpscLinkedQueue.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/MpscBlockingConsumerArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/SpscLinkedQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/MpmcAtomicArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/MpscLinkedAtomicQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/spec/Preference.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/util/UnsafeJvmInfo.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/MpscCompoundQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/util/UnsafeRefArrayAccess.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/maps/NonBlockingSetInt.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/util/UnsafeLongArrayAccess.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/QueueFactory.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/maps/NonBlockingHashMapLong.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/SpscLinkedAtomicQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/MpscUnboundedArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/SpscGrowArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
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jar/io/netty/util/internal/shaded/org/jctools/maps/NonBlockingHashMap.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/BaseMpscLinkedAtomicArrayQueue.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/BaseSpscLinkedArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-

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jar/io/netty/util/internal/shaded/org/jctools/queues/SpSCArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/IndexedQueueSizeUtil.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/SpSCUnboundedArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/SpSCAtomicArrayQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/util/Pow2.java
*
/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/MessagePassingQueueUtil.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
jar/io/netty/util/internal/shaded/org/jctools/queues/spec/Ordering.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/shaded/org/jctools/maps/AbstractEntry.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/BaseLinkedAtomicQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/ConcurrentSequencedCircularArrayQueue.java

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jar/io/netty/util/internal/SuppressJava6Requirement.java
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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/META-
INF/native-image/io.netty/netty-common/native-image.properties
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io.netty.util.internal.Hidden$NettyBlockHoundIntegration
```

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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/EmptyPriorityQueue.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/ObjectCleaner.java

*

/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/NettyRuntime.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/logging/LocationAwareSlf4JLogger.java

* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/LongAdderCounter.java

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* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/Hidden.java
*

/opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/svm/PlatformDependentSubstitution.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/svm/CleanerJava6Substitution.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/svm/package-info.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/ReferenceCountUpdater.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/svm/UnsafeRefArrayAccessSubstitution.java
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-jar/io/netty/util/internal/ObjectPool.java
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```
* /opt/cola/permits/1953127479_1711641254.162382/0/netty-common-4-1-108-final-sources-  
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jar/io/netty/util/internal/logging/MessageFormatter.java
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1.229 netty-transport-classes-epoll

4.1.108.Final

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/opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-jar/io/netty/channel/epoll/EpollRecvByteAllocatorHandle.java

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jar/io/netty/channel/epoll/AbstractEpollStreamChannel.java

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jar/io/netty/channel/epoll/EpollSocketChannel.java
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/opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-
jar/io/netty/channel/epoll/EpollChannelOption.java
* /opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-
jar/io/netty/channel/epoll/EpollServerSocketChannel.java
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jar/io/netty/channel/epoll/EpollTcpInfo.java
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jar/io/netty/channel/epoll/EpollDatagramChannel.java
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jar/io/netty/channel/epoll/Epoll.java
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jar/io/netty/channel/epoll/AbstractEpollChannel.java
*
/opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-
jar/io/netty/channel/epoll/NativeDatagramPacketArray.java
* /opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-
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*/
/**
* Set the {@code TCP_MD5SIG} option on the socket. See {@code linux/tcp.h} for more details.
* Keys can only be set on, not read to prevent a potential leak, as they are confidential.
* Allowing them being read would mean anyone with access to the channel could get them.

*/
/**
* Set the {@code TCP_QUICKACK} option on the socket.
* See [TCP_QUICKACK](https://linux.die.net/man/7/tcp)
* for more details.
*/

Found in path(s):

* /opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-jar/io/netty/channel/epoll/EpollSocketChannelConfig.java
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*/
/**
 * Set the {@code TCP_MD5SIG} option on the socket. See {@code linux/tcp.h} for more details.
 * Keys can only be set on, not read to prevent a potential leak, as they are confidential.
 * Allowing them being read would mean anyone with access to the channel could get them.
*/
```

Found in path(s):

```
* /opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-
jar/io/netty/channel/epoll/EpollServerSocketChannelConfig.java
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Found in path(s):

```
* /opt/cola/permits/1953127443_1711641219.3405714/0/netty-transport-classes-epoll-4-1-108-final-sources-
jar/META-INF/maven/io.netty/netty-transport-classes-epoll/pom.xml
```

1.230 netty-transport 4.1.108.Final

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* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ReflectiveChannelFactory.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/PendingWriteQueue.java
*
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/AbstractEventLoop.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/embedded/EmbeddedChannelId.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelFactory.java

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Found in path(s):

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/bootstrap/ChannelInitializerExtensions.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/bootstrap/ChannelInitializerExtension.java

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Found in path(s):

```
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/DefaultChannelHandlerContext.java
```

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*/
/**
* Handles an I/O event or intercepts an I/O operation, and forwards it to its next handler in
* its { @link ChannelPipeline }.
*
* <h3>Sub-types</h3>
* <p>
* { @link ChannelHandler } itself does not provide many methods, but you usually have to implement one of its
subtypes:
* <ul>
* <li>{ @link
ChannelInboundHandler } to handle inbound I/O events, and</li>
* <li>{ @link ChannelOutboundHandler } to handle outbound I/O operations.</li>
* </ul>
*/
```

```

* </p>
* <p>
* Alternatively, the following adapter classes are provided for your convenience:
* <ul>
* <li>{ @link ChannelInboundHandlerAdapter } to handle inbound I/O events,</li>
* <li>{ @link ChannelOutboundHandlerAdapter } to handle outbound I/O operations, and</li>
* <li>{ @link ChannelDuplexHandler } to handle both inbound and outbound events</li>
* </ul>
* </p>
* <p>
* For more information, please refer to the documentation of each subtype.
* </p>
*
* <h3>The context object</h3>
* <p>
* A { @link ChannelHandler } is provided with a { @link ChannelHandlerContext }
* object. A { @link ChannelHandler } is supposed to interact with the
* { @link ChannelPipeline } it belongs to via a context object. Using the
* context object, the { @link ChannelHandler } can pass events upstream or
* downstream, modify the pipeline dynamically,
* or store the information
* (using { @link AttributeKey }s) which is specific to the handler.
*
* <h3>State management</h3>
*
* A { @link ChannelHandler } often needs to store some stateful information.
* The simplest and recommended approach is to use member variables:
* <pre>
* public interface Message {
*     // your methods here
* }
*
* public class DataServerHandler extends { @link SimpleChannelInboundHandler } &lt;Message &gt; {
*
*     <b>private boolean loggedIn;</b>
*
*     { @code @Override }
*     public void channelRead0({ @link ChannelHandlerContext } ctx, Message message) {
*         if (message instanceof LoginMessage) {
*             authenticate((LoginMessage) message);
*             <b>loggedIn = true;</b>
*         } else (message instanceof GetDataMessage) {
*             if (<b>loggedIn</b>) {
*                 ctx.writeAndFlush(fetchSecret((GetDataMessage) message));
*             } else {
*                 fail();
*             }
*         }
*     }
* }
*

```

```

}
* }
* ...
* }
* </pre>
* Because the handler instance has a state variable which is dedicated to
* one connection, you have to create a new handler instance for each new
* channel to avoid a race condition where an unauthenticated client can get
* the confidential information:
* <pre>
* // Create a new handler instance per channel.
* // See {@link ChannelInitializer#initChannel(Channel)}.
* public class DataServerInitializer extends {@link ChannelInitializer}&lt;{@link Channel}&gt; {
*     {@code @Override}
*     public void initChannel({@link Channel} channel) {
*         channel.pipeline().addLast("handler", <b>new DataServerHandler()</b>);
*     }
* }
*
* </pre>
*
* <h4>Using {@link AttributeKey}s</h4>
*
* Although it's recommended to use member variables to store the state of a
* handler, for some reason you might not want to create many handler instances.
* In such a case, you can use {@link AttributeKey}s which is provided by
* {@link ChannelHandlerContext}:
* <pre>
* public interface Message {
*     // your methods here
* }
*
* {@code @Sharable}
* public class DataServerHandler extends {@link SimpleChannelInboundHandler}&lt;Message&gt; {
*     private final {@link AttributeKey}&lt;{@link Boolean}&gt; auth =
*         {@link AttributeKey#valueOf(String) AttributeKey.valueOf("auth")};
*
*     {@code @Override}
*     public void channelRead({@link ChannelHandlerContext} ctx, Message message) {
*         {@link Attribute}&lt;{@link Boolean}&gt; attr = ctx.attr(auth);
*         if (message instanceof LoginMessage) {
*             authenticate((LoginMessage) o);
*             <b>attr.set(true)</b>;
*         } else (message instanceof GetDataMessage) {
*             if (<b>Boolean.TRUE.equals(attr.get())</b>) {
*                 ctx.writeAndFlush(fetchSecret((GetDataMessage) o));
*             } else {
*                 fail();

```

```

*     }
*   }
* }
* ...
* }
* </pre>
* Now that the
state of the handler is attached to the { @link ChannelHandlerContext}, you can add the
* same handler instance to different pipelines:
* <pre>
* public class DataServerInitializer extends { @link ChannelInitializer}&It;{ @link Channel}&gt; {
*
*   private static final DataServerHandler <b>SHARED</b> = new DataServerHandler();
*
*   { @code @Override}
*   public void initChannel({ @link Channel} channel) {
*     channel.pipeline().addLast("handler", <b>SHARED</b>);
*   }
* }
* </pre>
*
*
* <h4>The { @code @Sharable} annotation</h4>
* <p>
* In the example above which used an { @link AttributeKey},
* you might have noticed the { @code @Sharable} annotation.
* <p>
* If a { @link ChannelHandler} is annotated with the { @code @Sharable}
* annotation, it means you can create an instance of the handler just once and
* add it to one or more { @link ChannelPipeline}s multiple times without
* a race condition.
* <p>
* If this annotation is not specified, you have to create
a new handler
* instance every time you add it to a pipeline because it has unshared state
* such as member variables.
* <p>
* This annotation is provided for documentation purpose, just like
* <a href="http://www.javaconcurrencyinpractice.com/annotations/doc/">the JCIP annotations</a>.
*
* <h3>Additional resources worth reading</h3>
* <p>
* Please refer to the { @link ChannelHandler}, and
* { @link ChannelPipeline} to find out more about inbound and outbound operations,
* what fundamental differences they have, how they flow in a pipeline, and how to handle
* the operation in your application.
*/

```

Found in path(s):

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelHandler.java

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* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelMetadata.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/bootstrap/ServerBootstrap.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/AbstractChannelHandlerContext.java

*

/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/oio/OioEventLoopGroup.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/EventLoopGroup.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/embedded/EmbeddedChannel.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ThreadPerChannelEventLoop.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelPromise.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/DatagramChannelConfig.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/DatagramPacket.java

*

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* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/group/ChannelGroupFuture.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/DefaultEventLoopGroup.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/nio/package-info.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/DefaultDatagramChannelConfig.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/nio/NioEventLoop.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/nio/NioServerSocketChannel.java

*

/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/FixedRecvByteBufAllocator.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/local/LocalChannel.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/package-info.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/bootstrap/AbstractBootstrap.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/EventLoopException.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelFlushPromiseNotifier.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelOutboundHandler.java

*

/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/DefaultChannelPipeline.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelOption.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ServerChannel.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelPromiseAggregator.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/DefaultSocketChannelConfig.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelException.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/ChannelInputShutdownEvent.java

*

/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/oio/OioSocketChannel.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/DefaultServerSocketChannelConfig.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/oio/OioDatagramChannel.java

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jar/io/netty/channel/socket/ServerSocketChannelConfig.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/group/CombinedIterator.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/nio/NioTask.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/DefaultChannelConfig.java
*
/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/oio/AbstractOioMessageChannel.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/VoidChannelPromise.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/nio/AbstractNioByteChannel.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/local/LocalServerChannel.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/RecvByteBufAllocator.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/CombinedChannelDuplexHandler.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/local/package-info.java
*
/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/socket/SocketChannelConfig.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/oio/package-info.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/bootstrap/Bootstrap.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/embedded/EmbeddedEventLoop.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/nio/package-info.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/MultithreadEventLoopGroup.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/FailedChannelFuture.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/bootstrap/package-info.java
*
/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/ChannelPipeline.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/ChannelPipelineException.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/ChannelOutboundHandlerAdapter.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/CompleteChannelFuture.java

```


* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/oio/AbstractOioByteChannel.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelPromiseNotifier.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/oio/OioServerSocketChannel.java

*

/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelInboundHandler.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelHandlerContext.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ThreadPerChannelEventLoopGroup.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/local/LocalChannelRegistry.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/nio/NioDatagramChannelConfig.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/nio/NioSocketChannel.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/package-info.java

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/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/ChannelInitializer.java

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jar/io/netty/channel/SingleThreadEventLoop.java
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jar/io/netty/channel/ChannelFutureListener.java
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jar/io/netty/channel/AbstractChannel.java
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jar/io/netty/channel/ChannelDuplexHandler.java
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jar/io/netty/channel/Channel.java
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jar/io/netty/channel/ChannelFuture.java
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jar/io/netty/channel/DefaultChannelPromise.java
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jar/io/netty/channel/group/ChannelGroupFutureListener.java
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jar/io/netty/channel/embedded/EmbeddedSocketAddress.java
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* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/ChannelInboundHandlerAdapter.java
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jar/io/netty/channel/socket/DatagramChannel.java
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jar/io/netty/channel/AdaptiveRecvByteBufAllocator.java
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jar/io/netty/channel/DefaultChannelProgressivePromise.java
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jar/io/netty/channel/ChannelId.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
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* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/DefaultMessageSizeEstimator.java
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jar/io/netty/channel/ChannelProgressiveFutureListener.java
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jar/io/netty/channel/nio/SelectedSelectionKeySet.java
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jar/io/netty/channel/DefaultAddressedEnvelope.java
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jar/io/netty/channel/AbstractEventLoopGroup.java
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jar/io/netty/channel/MessageSizeEstimator.java
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jar/io/netty/channel/group/DefaultChannelGroup.java
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jar/io/netty/channel/socket/oio/DefaultOioServerSocketChannelConfig.java
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jar/io/netty/channel/ConnectTimeoutException.java
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jar/io/netty/channel/socket/ChannelOutputShutdownEvent.java
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jar/io/netty/channel/PendingBytesTracker.java
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jar/io/netty/bootstrap/FailedChannel.java
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jar/io/netty/channel/DelegatingChannelPromiseNotifier.java
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```
Found in path(s):
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/ServerChannelRecvByteBufAllocator.java
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```

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Found in path(s):

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/socket/nio/SelectorProviderUtil.java

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Found in path(s):

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/META-INF/maven/io.netty/netty-transport/pom.xml

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Found in path(s):

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/MaxBytesRecvByteBufAllocator.java

* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-jar/io/netty/channel/DefaultMaxMessagesRecvByteBufAllocator.java

```

*
/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/MaxMessagesRecvByteBufAllocator.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/ChannelPoolHandler.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/package-info.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/AbstractChannelPoolHandler.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/SimpleChannelPool.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/ChannelPoolMap.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/AbstractChannelPoolMap.java
*
/opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/DefaultMaxBytesRecvByteBufAllocator.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/ChannelHealthChecker.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/FixedChannelPool.java
* /opt/cola/permits/1953127635_1711641250.3471298/0/netty-transport-4-1-108-final-sources-
jar/io/netty/channel/pool/ChannelPool.java

```

1.231 netty-transport-classes-kqueue

4.1.108.Final

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Found in path(s):

* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-jar/io/netty/channel/kqueue/KQueueDomainDatagramChannelConfig.java

* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-jar/io/netty/channel/kqueue/KQueueDomainDatagramChannel.java

*

/opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-jar/io/netty/channel/kqueue/AbstractKQueueDatagramChannel.java

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* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-jar/META-INF/maven/io.netty/netty-transport-classes-kqueue/pom.xml

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```
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueChannelOption.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/BsdSocket.java
*
/opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueDomainSocketChannelConfig.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueSocketChannel.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueServerChannelConfig.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueEventArray.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/NativeLongArray.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueServerSocketChannelConfig.java
*
/opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueEventLoopGroup.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/AbstractKQueueStreamChannel.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/AcceptFilter.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueDatagramChannelConfig.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueDatagramChannel.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/package-info.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueChannelConfig.java
*
/opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/Native.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueServerSocketChannel.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueServerDomainSocketChannel.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/AbstractKQueueChannel.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueEventLoop.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueRecvByteAllocatorHandle.java
*
```

```
/opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueSocketChannelConfig.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueStaticallyReferencedJniMethods.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueueDomainSocketChannel.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/KQueue.java
* /opt/cola/permits/1953130134_1711641360.7101705/0/netty-transport-classes-kqueue-4-1-108-final-sources-
jar/io/netty/channel/kqueue/AbstractKQueueServerChannel.java
```

1.232 netty-resolver-dns-classes-macos

4.1.108.Final

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```
* /opt/cola/permits/1953130214_1711641353.398333/0/netty-resolver-dns-classes-macos-4-1-108-final-sources-
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* /opt/cola/permits/1953130214_1711641353.398333/0/netty-resolver-dns-classes-macos-4-1-108-final-sources-jar/io/netty/resolver/dns/macos/DnsResolver.java
* /opt/cola/permits/1953130214_1711641353.398333/0/netty-resolver-dns-classes-macos-4-1-108-final-sources-jar/io/netty/resolver/dns/macos/package-info.java
*
* /opt/cola/permits/1953130214_1711641353.398333/0/netty-resolver-dns-classes-macos-4-1-108-final-sources-jar/io/netty/resolver/dns/macos/MacOSDnsServerAddressStreamProvider.java

1.233 netty-transport-sctp 4.1.108.Final

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* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/channel/sctp/SctpServerChannelConfig.java

*

/opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/com/sun/nio/sctp/SendFailedNotification.java

* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/channel/sctp/SctpChannelConfig.java

* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/com/sun/nio/sctp/HandlerResult.java

* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/com/sun/nio/sctp/MessageInfo.java

* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-

jar/io/netty/channel/sctp/DefaultSctpChannelConfig.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/io/netty/channel/sctp/SctpMessage.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/ShutdownNotification.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/NotificationHandler.java
*
/opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/SctpChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/io/netty/channel/sctp/nio/NioSctpChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/io/netty/channel/sctp/nio/NioSctpServerChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/AssociationChangeNotification.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/io/netty/channel/sctp/SctpServerChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/io/netty/channel/sctp/SctpNotificationHandler.java
*
/opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/SctpServerChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/io/netty/channel/sctp/SctpChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/AbstractNotificationHandler.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/SctpStandardSocketOptions.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/Association.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/Notification.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/SctpSocketOption.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/UnsupportedOperationException.java
*
/opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-
jar/com/sun/nio/sctp/PeerAddressChangeNotification.java
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* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/handler/codec/sctp/SctpInboundByteStreamHandler.java
*

/opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/handler/codec/sctp/package-info.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/handler/codec/sctp/SctpMessageCompletionHandler.java

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* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/META-INF/maven/io.netty/netty-transport-sctp/pom.xml

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* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/channel/sctp/oio/OioSctpChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/channel/sctp/nio/package-info.java
*
/opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/channel/sctp/oio/package-info.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/channel/sctp/package-info.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/channel/sctp/oio/OioSctpServerChannel.java
* /opt/cola/permits/1953130080_1711641363.2140813/0/netty-transport-sctp-4-1-108-final-sources-jar/io/netty/handler/codec/sctp/SctpOutboundByteStreamHandler.java

1.234 netty-codec-xml 4.1.108.Final

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* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/META-INF/maven/io.netty/netty-codec-xml/pom.xml

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* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlCharacters.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlAttribute.java

*

/opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlDocumentEnd.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlProcessingInstruction.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlDecoder.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlElementEnd.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlSpace.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlDTD.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/package-info.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlContent.java

*

/opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlComment.java

* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-jar/io/netty/handler/codec/xml/XmlDocumentStart.java

```
* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-
jar/io/netty/handler/codec/xml/XmlEntityReference.java
* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-
jar/io/netty/handler/codec/xml/XmlElement.java
* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-
jar/io/netty/handler/codec/xml/XmlNamespace.java
* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-
jar/io/netty/handler/codec/xml/XmlCdata.java
* /opt/cola/permits/1953130136_1711641375.361799/0/netty-codec-xml-4-1-108-final-sources-
jar/io/netty/handler/codec/xml/XmlElementStart.java
```

1.235 netty-codec-redis 4.1.108.Final

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* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-
jar/io/netty/handler/codec/redis/InlineCommandRedisMessage.java
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* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/RedisEncoder.java

*

/opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/AbstractStringRedisMessage.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/IntegerRedisMessage.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/DefaultLastBulkStringRedisContent.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/ArrayHeaderRedisMessage.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/RedisMessage.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/LastBulkStringRedisContent.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/BulkStringRedisContent.java

*

/opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/RedisDecoder.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/RedisCodecException.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/RedisConstants.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/package-info.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/FullBulkStringRedisMessage.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/FixedRedisMessagePool.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/RedisMessagePool.java

*

/opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/ArrayRedisMessage.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/RedisBulkStringAggregator.java

* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/io/netty/handler/codec/redis/ErrorRedisMessage.java

```
* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-
jar/io/netty/handler/codec/redis/RedisMessageType.java
* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-
jar/io/netty/handler/codec/redis/RedisArrayAggregator.java
* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-
jar/io/netty/handler/codec/redis/BulkStringHeaderRedisMessage.java
*
/opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-
jar/io/netty/handler/codec/redis/RedisCodecUtil.java
* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-
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* /opt/cola/permits/1953130207_1711641355.1522775/0/netty-codec-redis-4-1-108-final-sources-jar/META-
INF/maven/io.netty/netty-codec-redis/pom.xml
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1.236 netty-handler-ssl-ocsp 4.1.108.Final

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* /opt/cola/permits/1953130187_1711641373.5130057/0/netty-handler-ssl-ocsp-4-1-108-final-sources-jar/io/netty/handler/ssl/ocsp/IoTransport.java
* /opt/cola/permits/1953130187_1711641373.5130057/0/netty-handler-ssl-ocsp-4-1-108-final-sources-jar/io/netty/handler/ssl/ocsp/OcspClient.java
*

/opt/cola/permits/1953130187_1711641373.5130057/0/netty-handler-ssl-ocsp-4-1-108-final-sources-jar/io/netty/handler/ssl/ocsp/OcspServerCertificateValidator.java
* /opt/cola/permits/1953130187_1711641373.5130057/0/netty-handler-ssl-ocsp-4-1-108-final-sources-jar/io/netty/handler/ssl/ocsp/OcspResponse.java
* /opt/cola/permits/1953130187_1711641373.5130057/0/netty-handler-ssl-ocsp-4-1-108-final-sources-jar/io/netty/handler/ssl/ocsp/OcspHttpHandler.java
* /opt/cola/permits/1953130187_1711641373.5130057/0/netty-handler-ssl-ocsp-4-1-108-final-sources-jar/io/netty/handler/ssl/ocsp/OcspValidationEvent.java
* /opt/cola/permits/1953130187_1711641373.5130057/0/netty-handler-ssl-ocsp-4-1-108-final-sources-jar/io/netty/handler/ssl/ocsp/package-info.java

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1.237 netty-transport-rxtx 4.1.108.Final

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jar/io/netty/channel/rxtx/RxtxChannelConfig.java
* /opt/cola/permits/1953130094_1711641356.836004/0/netty-transport-rxtx-4-1-108-final-sources-
jar/io/netty/channel/rxtx/RxtxChannelOption.java
*
/opt/cola/permits/1953130094_1711641356.836004/0/netty-transport-rxtx-4-1-108-final-sources-
jar/io/netty/channel/rxtx/RxtxChannel.java
* /opt/cola/permits/1953130094_1711641356.836004/0/netty-transport-rxtx-4-1-108-final-sources-
jar/io/netty/channel/rxtx/package-info.java
* /opt/cola/permits/1953130094_1711641356.836004/0/netty-transport-rxtx-4-1-108-final-sources-
jar/io/netty/channel/rxtx/RxtxDeviceAddress.java
* /opt/cola/permits/1953130094_1711641356.836004/0/netty-transport-rxtx-4-1-108-final-sources-
jar/io/netty/channel/rxtx/DefaultRxtxChannelConfig.java
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1.238 netty-codec-smtp 4.1.108.Final

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- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/SntpRequest.java
- *
- /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/SntpUtils.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/DefaultLastSntpContent.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/LastSntpContent.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/DefaultSntpResponse.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/SntpRequests.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/DefaultSntpRequest.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/SntpResponseDecoder.java
- *
- /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/SntpCommand.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/SntpContent.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/SntpRequestEncoder.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/package-info.java
- * /opt/cola/permits/1953130156_1711641358.717098/0/netty-codec-smtp-4-1-108-final-sources-jar/io/netty/handler/codec/smtp/DefaultSntpContent.java

1.239 netty-codec-stomp 4.1.108.Final

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* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/DefaultStompHeaders.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompSubframeDecoder.java
*
/opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompSubframeAggregator.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/DefaultStompHeadersSubframe.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompHeaders.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompFrame.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompSubframe.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompContentSubframe.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompSubframeEncoder.java
*
/opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/package-info.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/LastStompContentSubframe.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompHeadersSubframe.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/DefaultStompContentSubframe.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/StompConstants.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/DefaultLastStompContentSubframe.java
* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/io/netty/handler/codec/stomp/DefaultStompFrame.java
*

```
/opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-  
jar/io/netty/handler/codec/stomp/StompCommand.java
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* /opt/cola/permits/1953130163_1711641369.8328333/0/netty-codec-stomp-4-1-108-final-sources-jar/META-  
INF/maven/io.netty/netty-codec-stomp/pom.xml
```

1.240 netty-codec-memcache 4.1.108.Final

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* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/META-
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INF/maven/io.netty/netty-codec-memcache/pom.xml

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* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/MemcacheContent.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/AbstractMemcacheObjectEncoder.java

*

/opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheClientCodec.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/DefaultMemcacheContent.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheResponseEncoder.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/AbstractMemcacheObjectDecoder.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/binary/AbstractBinaryMemcacheDecoder.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/binary/DefaultBinaryMemcacheRequest.java

*

/opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/MemcacheMessage.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/AbstractMemcacheObject.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/binary/FullBinaryMemcacheRequest.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/binary/FullBinaryMemcacheResponse.java

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheRequestEncoder.java

```

* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheMessage.java
*
/opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheOpcodes.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/AbstractBinaryMemcacheMessage.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheResponse.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/package-info.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheServerCodec.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/LastMemcacheContent.java
*
/opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheResponseStatus.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/DefaultLastMemcacheContent.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/AbstractMemcacheObjectAggregator.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheObjectAggregator.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/DefaultFullBinaryMemcacheRequest.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/AbstractBinaryMemcacheEncoder.java
*
/opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/MemcacheObject.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheResponseDecoder.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheRequest.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/DefaultFullBinaryMemcacheResponse.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/FullMemcacheMessage.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/BinaryMemcacheRequestDecoder.java
*
/opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/binary/DefaultBinaryMemcacheResponse.java
* /opt/cola/permits/1953130186_1711641351.415133/0/netty-codec-memcache-4-1-108-final-sources-
jar/io/netty/handler/codec/memcache/package-info.java

```

1.241 netty-codec-haproxy 4.1.108.Final

1.241.1 Available under license :

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* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/package-info.java
* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxyMessageDecoder.java
*
/opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxyCommand.java
* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxyProtocolVersion.java
* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxyMessage.java
* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxyProxiedProtocol.java
* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxyProtocolException.java
* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxyConstants.java
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jar/io/netty/handler/codec/haproxy/HAProxyTLV.java
* /opt/cola/permits/1953130147_1711641371.6465805/0/netty-codec-haproxy-4-1-108-final-sources-
jar/io/netty/handler/codec/haproxy/HAProxySSLTLV.java
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jar/io/netty/handler/codec/haproxy/HAProxyMessageEncoder.java
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1.242 netty-codec-mqtt 4.1.108.Final

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*/opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttQoS.java
*/opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
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* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io.netty.handler.codec.mqtt/MqttReasonCodes.java

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* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttConstant.java

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* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttPublishMessage.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttMessageIdVariableHeader.java

*

/opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttSubAckMessage.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttSubAckPayload.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttConnectReturnCode.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttEncoder.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttSubscribeMessage.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttConnAckVariableHeader.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttVersion.java

*

/opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttConnectMessage.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-jar/io/netty/handler/codec/mqtt/MqttConnectVariableHeader.java

* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-

```
jar/io/netty/handler/codec/mqtt/MqttMessageType.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttUnsubscribeMessage.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttConnAckMessage.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttUnsubscribePayload.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttConnectPayload.java
*
/opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttSubscribePayload.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttDecoder.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttCodecUtil.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttTopicSubscription.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttPublishVariableHeader.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttIdentifierRejectedException.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttFixedHeader.java
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jar/io/netty/handler/codec/mqtt/MqttUnsubAckMessage.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttUnacceptableProtocolVersionException.java
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jar/io/netty/handler/codec/mqtt/MqttMessage.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttPubAckMessage.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
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jar/io/netty/handler/codec/mqtt/MqttSubscriptionOption.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttPubReplyMessageVariableHeader.java
*

/opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttProperties.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttMessageIdAndPropertiesVariableHeader.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
jar/io/netty/handler/codec/mqtt/MqttReasonCodeAndPropertiesVariableHeader.java
* /opt/cola/permits/1953130089_1711641350.061019/0/netty-codec-mqtt-4-1-108-final-sources-
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1.243 netty-transport-udt 4.1.108.Final

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* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/nio/NioUdtByteConnectorChannel.java
*
/opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/nio/NioUdtAcceptorChannel.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/nio/NioUdtProvider.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/nio/NioUdtByteRendezvousChannel.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/nio/NioUdtByteAcceptorChannel.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/nio/NioUdtMessageRendezvousChannel.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/nio/NioUdtMessageAcceptorChannel.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-jar/io/netty/channel/udt/UdtChannel.java

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jar/io/netty/channel/udt/UdtServerChannelConfig.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-
jar/io/netty/channel/udt/UdtChannelOption.java
*
/opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-
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jar/io/netty/channel/udt/DefaultUdtChannelConfig.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-
jar/io/netty/channel/udt/package-info.java
*
/opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-
jar/io/netty/channel/udt/UdtMessage.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-
jar/io/netty/channel/udt/nio/package-info.java
* /opt/cola/permits/1953130176_1711641367.8561072/0/netty-transport-udt-4-1-108-final-sources-
jar/io/netty/channel/udt/UdtChannelConfig.java
```

1.244 activation 1.2.2

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1.247 apk-tools 2.14.4-r0

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1.248 ca-certificates-bundle 20240226-r0

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```
#!/usr/bin/env perl
# *****
# *
# *      _ _ _ _ _
# * Project  _||| | _\||
# *          / _||| | |
# *          | ( _|| | _ < | _
# *          \_||| | | \_|||
# *
# * Copyright (C) 1998 - 2020, Daniel Stenberg, <daniel@haxx.se>, et al.
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# *****
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
```

```

# then parses certdata.txt and extracts CA Root Certificates into PEM format.
# These are then processed with the OpenSSL commandline tool to produce the
# final ca-bundle.crt file.
# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
$MOD_SHA";
if ($@) {
$MOD_SHA = "Digest::SHA::PurePerl";
eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
'nss' =>
'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
'central' =>
'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'beta' =>
'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'release' =>
'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)

```

```

my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels
= "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . ":" . $default_mozilla_trust_levels;

my @valid_mozilla_trust_purposes = (
"DIGITAL_SIGNATURE",
"NON_REPUDIATION",
"KEY_ENCIPHERMENT",
"DATA_ENCIPHERMENT",
"KEY_AGREEMENT",
"KEY_CERT_SIGN",
"CRL_SIGN",
"SERVER_AUTH",
"CLIENT_AUTH",
"CODE_SIGNING",
"EMAIL_PROTECTION",
"IPSEC_END_SYSTEM",
"IPSEC_TUNNEL",
"IPSEC_USER",
"TIME_STAMPING",
"STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
"TRUSTED_DELEGATOR", # CAs
"NOT_TRUSTED",      # Don't trust these certs.
"MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
                    # should tell the app to ignore any other sources that claim this is a CA.
"TRUSTED"           # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
"MD5",
"SHA1",
"SHA256",
"SHA384",
"SHA512"
);

$0 =~ s@.*(//\)\)@@;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work

```

```

    $opt_d = 'release';
}

# Use predefined URL or else custom URL specified on command line.
my $url;
if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\//i) {
        die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
    }
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

if ($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version          : $version\n";
    print "Perl Version              : $]\n";
    print "Operating System Name       : $^O\n";
    print "Getopt::Std.pm Version      : ${Getopt::Std::VERSION}\n";
    print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
    print "MIME::Base64.pm Version     : ${MIME::Base64::VERSION}\n";
    print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
    print "LWP.pm Version          : ${LWP::VERSION}\n" if($LWP::VERSION);
    print "Digest::SHA.pm Version  : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
    print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
    print ("=" x 78 . "\n");
}

sub warning_message() {
    if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
        print "Warning: Use of this script may pose some risk:\n";
        print "\n";
        print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
        print " 2) Default to 'release', but more recent updates may be found in other trees\n";
        print " 3) certdata.txt file format may change, lag time to update this script\n";
        print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
        print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
        print " 6) Use of this script will make a security engineer grind his teeth and\n";
        print "    swear at you. :)\n";
        exit;
    } else { # Short Form Warning

```

```

    print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
}
}

sub HELP_MESSAGE() {
    print "Usage:\t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-v] [-w<l>] [<outputfile>]\n";
    print "\t-b\tbackup an existing version of ca-bundle.crt\n";
    print "\t-d\tspecify Mozilla tree to pull certdata.txt or custom URL\n";
    print "\t\t Valid names are:\n";
    print "\t\t ", join( ", ", map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ), "\n";
    print "\t-f\tforce rebuild even if certdata.txt is current\n";
    print "\t-i\tprint version info about used modules\n";
    print "\t-k\tallow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
    print "\t-l\tprint license info about certdata.txt\n";
    print "\t-m\tinclude meta data in output\n";
    print "\t-n\tno download of certdata.txt (to use existing)\n";
    print wrap("\t\t", "\t\t", "-s\tlist of Mozilla trust purposes and levels for certificates to include in output. Takes the form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default: $default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n");
    print "\t\t Valid purposes are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_mozilla_trust_purposes ), "\n");
    print "\t\t Valid levels are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_mozilla_trust_levels ), "\n");
    print "\t-q\tbe really quiet (no progress output at all)\n";
    print wrap("\t\t", "\t\t", "-s\tcomma separated list of certificate signatures/ hashes to output in plain text mode. (default: $default_signature_algorithms)\n");
    print "\t\t Valid signature algorithms are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_signature_algorithms ), "\n");
    print "\t-t\tinclude plain text listing of certificates\n";
    print "\t-u\tunlink (remove) certdata.txt after processing\n";
    print "\t-v\tbe verbose and print out processed CAs\n";
    print "\t-w <l>\twrap base64 output lines after <l> chars (default: ${opt_w})\n";
    exit;
}

sub VERSION_MESSAGE() {
    print "${0} version ${version} running Perl ${} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps/i );
HELP_MESSAGE() if ($opt_h);

sub report($@) {
    my $output = shift;

```

```

print STDERR $output . "\n" unless $opt_q;
}

sub is_in_list($@) {
my $target = shift;

return defined(List::Util::first { $target eq $_ } @_);
}

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
my $description = shift;
my $param_string = shift;
my @valid_values = @_;

my @values = map {
    s/^\s+//; # strip leading spaces
    s/\s+$//; # strip trailing spaces
    uc $_     # return the modified string as upper case
} split( ',', $param_string );

# Find all values which are not in the list of valid values or "ALL"
my @invalid = grep { !is_in_list($_,"ALL",@valid_values) } @values;

if ( scalar(@invalid) > 0 ) {
    # Tell the user which parameters were invalid and print the standard help message which will exit
    print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " ": "s: ", join( ", ", map { "\"$_\"" } @invalid ),
"\n";
    HELP_MESSAGE();
}

@values = @valid_values if ( is_in_list("ALL",@values) );

return @values;
}

sub sha256 {
my $result;
if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
    open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
    binmode(FILE);
    $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
    close(FILE);
} else {
    # Use OpenSSL command if Perl Digest::SHA modules not available
    $result = `"$openssl" dgst -r -sha256 "$_[0]"`;
    $result =~ s/^\{[0-9a-f]{64}\} .+/$1/is;
}
}

```

```

}
return $result;
}

sub oldhash {
my $hash = "";
open(C, "<$_[0]>" || return 0;
while(<C>) {
    chomp;
    if($_ =~ /^#\# SHA256: (.*)/) {
        $hash = $1;
        last;
    }
}
close(C);
return $hash;
}

if ( $opt_p !~ m:/) {
print "Error: Mozilla trust identifier list must include both purposes and levels\n";
HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split( ':', $opt_p );
my @included_mozilla_trust_purposes = parse_csv_param( "trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes );
my @included_mozilla_trust_levels = parse_csv_param( "trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels );

my @included_signature_algorithms = parse_csv_param( "signature algorithm", $opt_s,
@valid_signature_algorithms );

sub should_output_cert(%) {
my
%trust_purposes_by_level = @_;

foreach my $level (@included_mozilla_trust_levels) {
    # for each level we want to output, see if any of our desired purposes are included
    return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{ $trust_purposes_by_level{ $level } } ) );
}

return 0;
}

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(.*/|\?.*)@@g;

```



```

my $stdout = $crt eq '-';
my $resp;
my $fetched;

my $oldhash = oldhash($crt);

report "SHA256 of old file: $oldhash";

if(!$opt_n) {
report "Downloading $txt ...";

# If we have an HTTPS URL then use curl
if($url =~ /^https:\//i) {
if($curl) {
if($curl =~ /^Protocols:.* https(|$)/m) {
report "Get certdata with curl!";
my $proto = !$opt_k ? "--proto=https" : "";
my $quiet = $opt_q ? "-s" : "";
my @out = `curl -w % {response_code} $proto $quiet -o "$txt" "$url"`;
if(! $? && @out && $out[0] == 200) {
$fetched = 1;
report "Downloaded $txt";
}
else {
report "Failed downloading via HTTPS with curl!";
if(-e $txt && !unlink($txt)) {
report "Failed to remove '$txt': $!";
}
}
}
else {
report "curl lacks https support";
}
}
else {
report "curl not found";
}
}

# If nothing was fetched then use LWP
if(!$fetched) {
if($url =~ /^https:\//i) {
report "Falling back to HTTP";
$url =~ s/^https:\//http:\//i;
}
if(!$opt_k) {
report "URLs other than HTTPS are disabled by default, to enable use -k";
}
}

```

```

    exit 1;
}
report "Get certdata with LWP!";
if(!defined(${LWP::UserAgent::VERSION})) {
    report "LWP is not available (LWP::UserAgent not found)";
    exit 1;
}
my $sua = new LWP::UserAgent(agent => "$0/$version");
$sua->env_proxy();
$response = $sua->mirror($url, $txt);
if($response && $response->code eq '304') {
    report "Not modified";
    exit 0 if -e $crt && !$opt_f;
}
else {
    $fetched = 1;
    report "Downloaded $txt";
}
if(!$response || $response->code !~ /^(?:200|304)$/) {
    report "Unable to download latest data: "
        . ($response? $response->code . ' - ' . $response->message : "LWP failed");
    exit 1 if -e $crt || !-r $txt;
}
}
}

my $filedate = $response ? $response->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

```

```

my $format = $opt_t ? "plain text and " : "";
if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
} else {
    open(CRT, ">$crt.~") or die "Couldn't open $crt.~: $!\n";
}
print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:
## ${url}
##
## It contains the certificates in ${format}PEM format and therefore
## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCACertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

```

EOT

```

report "Processing '$txt' ...";
my $cname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $cka_value;
my $valid = 1;

open(TXT, "$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
if (/^*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*$/) {
    print CRT;
    print if ($opt_l);
    while (<TXT>) {
        print CRT;
        print if ($opt_l);
    }
}
}

```

```

    last if (/^*\|*\|*\|*\|* END LICENSE BLOCK \|*\|*\|*\|*);
  }
}
elseif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \((MD5)\)|Fingerprint
\((SHA1)\):/) {
    push @precert, $_;
    $valid = 1;
    next;
}
elseif(/^#\^s*$/) {
    undef @precert;
    next;
}
}
chomp;

```

Example:

```

# CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL
# \062\060\060\066\061\067\060\060\060\060\060\060\132
# END

```

```

if (/^CKA_NSS_SERVER_DISTRICT_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
    if ($1 eq "MULTILINE_OCTAL") {
        my @timestamp;
        while (<TXT>) {
            last if (/^END/);
            chomp;
            my @octets = split(/\\);
            shift @octets;
            for (@octets) {
                push
@timestamp, chr(oct);
            }
        }
        # A trailing Z in the timestamp signifies UTC
        if ($timestamp[12] ne "Z") {
            report "distrust date stamp is not using UTC";
        }
        # Example date: 200617000000Z
        # Means 2020-06-17 00:00:00 UTC
        my $distrustat =
            timegm($timestamp[10] . $timestamp[11], # second
                $timestamp[8] . $timestamp[9], # minute
                $timestamp[6] . $timestamp[7], # hour
                $timestamp[4] . $timestamp[5], # day
                ($timestamp[2] . $timestamp[3]) - 1, # month
                "20" . $timestamp[0] . $timestamp[1]); # year
        if (time >= $distrustat) {
            # not trusted anymore

```

```

    $skipnum++;
    report "Skipping: $scaname is not trusted anymore" if ($opt_v);
    $valid = 0;
}
else {
    # still trusted
}
}
next;
}

# this
is a match for the start of a certificate
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
    $start_of_cert = 1
}
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
    $scaname = $1;
}
my %trust_purposes_by_level;
if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $ska_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(/\//);
        shift @octets;
        for (@octets) {
            $ska_value .= chr(oct);
        }
    }
}
if(/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_]+)\s+CK_TRUST\s+CKT_NSS_([A-Z_]+)\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } elsif ( !is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }
}
}

```

```

if ( !should_output_cert(%trust_purposes_by_level) ) {
    $skipnum ++;
    report "Skipping: $scaname" if ($opt_v);
} else {
    my $data = $cka_value;
    $cka_value = "";
    my $encoded = MIME::Base64::encode_base64($data, "");
    $encoded =~ s/(.{1,$opt_w})/$1\n/g;
    my $pem = "-----BEGIN CERTIFICATE-----\n"
        . $encoded
        . "-----END CERTIFICATE-----\n";
    print CRT "\n$scaname\n";
    print CRT @precert if($opt_m);
    my $maxLength = length(decode('UTF-8', $scaname, Encode::FB_CROAK | Encode::LEAVE_SRC));
    if ($opt_t) {
        foreach my $key (keys %trust_purposes_by_level) {
            my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});
            $maxLength = List::Util::max( length($string), $maxLength );
        }
        print CRT $string . "\n";
    }
    print CRT ("=" x $maxLength . "\n");
    if (!$opt_t) {
        print CRT $pem;
    } else {
        my $pipe = "";
        foreach my $hash (@included_signature_algorithms) {
            $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
            if (!$stdout) {
                $pipe .= " >> $crt.~";
                close(CRT) or die "Couldn't close $crt.~: $!";
            }
            open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
            print TMP $pem;
            close(TMP) or die "Couldn't close openssl pipe: $!";
            if (!$stdout) {
                open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
            }
        }
        $pipe = "|$openssl x509 -text -inform PEM";
        if (!$stdout) {
            $pipe .= " >> $crt.~";
            close(CRT) or die "Couldn't close $crt.~: $!";
        }
        open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
        print TMP

```

```

$pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
}
report "Parsing: $aname" if ($opt_v);
$certnum ++;
$start_of_cert = 0;
}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close $crt.~: $!\n";
unless( $stdout ) {
    if ($opt_b && -e $crt) {
        my $bk = 1;
        while (-e "$crt.~${bk}~") {
            $bk++;
        }
        rename $crt, "$crt.~${bk}~" or die "Failed to create backup $crt.~$bk}~: $!\n";
    } elsif( -e $crt ) {
        unlink( $crt ) or die "Failed to remove $crt: $!\n";
    }
    rename "$crt.~", $crt or die "Failed to rename $crt.~ to $crt: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
    report "Failed to remove $txt: $!\n";
}
report "Done ($certnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```

* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl

```

No license file was found, but licenses were detected in source scan.

```

/* c_rehash.c - Create hash symlinks for certificates
* C implementation based on the original Perl and shell versions
*
* Copyright (c) 2013-2014 Timo Teräs <timo.teras@iki.fi>
* All rights reserved.
*
* This software is licensed under the MIT License.
* Full license available at: http://opensource.org/licenses/MIT
*/

```

Found in path(s):

```
* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-  
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/c_rehash.c
```

No license file was found, but licenses were detected in source scan.

#

```
# This Source Code Form is subject to the terms of the Mozilla Public  
# License, v. 2.0. If a copy of the MPL was not distributed with this  
# file, You can obtain one at http://mozilla.org/MPL/2.0/.
```

#

```
# certdata.txt
```

#

```
# This file contains the object definitions for the certs and other  
# information "built into" NSS.
```

#

```
# Object definitions:
```

#

```
# Certificates
```

#

```
# -- Attribute --      -- type --      -- value --
```

```
# CKA_CLASS            CK_OBJECT_CLASS  CKO_CERTIFICATE
```

```
# CKA_TOKEN            CK_BBOOL        CK_TRUE
```

```
# CKA_PRIVATE          CK_BBOOL        CK_FALSE
```

```
# CKA_MODIFIABLE       CK_BBOOL        CK_FALSE
```

```
# CKA_LABEL            UTF8            (varies)
```

```
# CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
```

```
# CKA_SUBJECT          DER+base64      (varies)
```

```
# CKA_ID               byte array      (varies)
```

#

```
    CKA_ISSUER          DER+base64      (varies)
```

```
# CKA_SERIAL_NUMBER    DER+base64      (varies)
```

```
# CKA_VALUE            DER+base64      (varies)
```

```
# CKA_NSS_EMAIL        ASCII7          (unused here)
```

```
# CKA_NSS_SERVER_DISTRUST_AFTER DER+base64      (varies)
```

```
# CKA_NSS_EMAIL_DISTRUST_AFTER DER+base64      (varies)
```

#

```
# Trust
```

#

```
# -- Attribute --      -- type --      -- value --
```

```
# CKA_CLASS            CK_OBJECT_CLASS  CKO_TRUST
```

```
# CKA_TOKEN            CK_BBOOL        CK_TRUE
```

```
# CKA_PRIVATE          CK_BBOOL        CK_FALSE
```

```
# CKA_MODIFIABLE       CK_BBOOL        CK_FALSE
```

```
# CKA_LABEL            UTF8            (varies)
```

```
# CKA_ISSUER          DER+base64      (varies)
```

```
# CKA_SERIAL_NUMBER    DER+base64      (varies)
```

```
# CKA_CERT_HASH        binary+base64   (varies)
```



```

# CKA_EXPIRES          CK_DATE
(not used here)
# CKA_TRUST_DIGITAL_SIGNATURE CK_TRUST      (varies)
# CKA_TRUST_NON_REPUDIATION  CK_TRUST      (varies)
# CKA_TRUST_KEY_ENCIPHERMENT CK_TRUST      (varies)
# CKA_TRUST_DATA_ENCIPHERMENT CK_TRUST      (varies)
# CKA_TRUST_KEY_AGREEMENT    CK_TRUST      (varies)
# CKA_TRUST_KEY_CERT_SIGN    CK_TRUST      (varies)
# CKA_TRUST_CRL_SIGN         CK_TRUST      (varies)
# CKA_TRUST_SERVER_AUTH      CK_TRUST      (varies)
# CKA_TRUST_CLIENT_AUTH      CK_TRUST      (varies)
# CKA_TRUST_CODE_SIGNING     CK_TRUST      (varies)
# CKA_TRUST_EMAIL_PROTECTION CK_TRUST      (varies)
# CKA_TRUST_IPSEC_END_SYSTEM CK_TRUST      (varies)
# CKA_TRUST_IPSEC_TUNNEL     CK_TRUST      (varies)
# CKA_TRUST_IPSEC_USER       CK_TRUST      (varies)
# CKA_TRUST_TIME_STAMPING    CK_TRUST      (varies)
# CKA_TRUST_STEP_UP_APPROVED CK_BBOOL      (varies)
# (other
trust attributes can be defined)
#

#

# The object to tell NSS that this is a root list and we don't
# have to go looking for others.
#
BEGINDATA
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_BUILTIN_ROOT_LIST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Mozilla Builtin Roots"

#

# Certificate "GlobalSign Root CA"
#
# Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Serial Number:04:00:00:00:00:01:15:4b:5a:c3:94
# Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Tue Sep 01 12:00:00 1998
# Not Valid After : Fri Jan 28 12:00:00 2028
# Fingerprint (SHA-256):
EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99
# Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

```
CKA_LABEL UTF8 "GlobalSign
Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\025\113\132\303\224
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\165\060\202\002\135\240\003\002\001\002\002\013\004
\000\000\000\000\001\025\113\132\303\224\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\060\127\061\013\060\011\006
\003\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004
\012\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166
\055\163\141\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\033\060\031\006\003\125\004\003\023\022
\107\154\157\142\141\154\123\151\147\156\040\122\157\157\164\040
\103\101\060\036\027\015\071\070\060\071\060\061\061\062\060\060
\060\060\132\027\015\062\070\060\061\062\070\061\062\060\060\060
\060\132\060\127\061\013\060\011\006\003\125\004\006\023\002\102
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142
\141\154\123\151\147\156\040\156\166\055\163\141\061\020\060\016
\006\003\125\004\013\023\007\122\157\157\164\040\103\101\061\033
\060\031\006\003\125\004\003\023\022\107\154\157\142\141\154\123
\151\147\156\040\122\157\157\164\040\103\101\060\202\001\042\060
\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202
\001\017\000\060\202\001\012\002\202\001\001\000\332\016\346\231
\215\316\243\343\117\212\176\373\361\213\203\045\153\352\110\037
\361\052\260\271\225\021\004\275\360\143\321\342\147\146\317\034
\335\317\033\110\053\356\215\211\216\232\257\051\200\145\253\351
\307\055\022\313\253\034\114\160\007\241\075\012\060\315\025\215
\117\370\335\324\214\120\025\034\357\120\356\304\056\367\374\351
\122\362\221\175\340\155\325\065\060\216\136\103\163\362\101\351
```

\325\152\343\262\211\072\126\071\070\157\006\074\210\151\133\052
\115\305\247\124\270\154\211\314\233\371\074\312\345\375\211\365
\022\074\222\170\226\326\334\164\156\223\104\141\321\215\307\106
\262\165\016\206\350\031\212\325\155\154\325\170\026\225\242\351
\310\012\070\353\362\044\023\117\163\124\223\023\205\072\033\274
\036\064\265\213\005\214\271\167\213\261\333\037\040\221\253\011
\123\156\220\316\173\067\164\271\160\107\221\042\121\143\026\171
\256\261\256\101\046\010\310\031\053\321\106\252\110\326\144\052
\327\203\064\377\054\052\301\154\031\103\112\007\205\347\323\174
\366\041\150\357\352\362\122\237\177\223\220\317\002\003\001\000
\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\140\173\146\032\105\015\227\312\211\120\057\175\004\315\064
\250\377\374\375\113\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\003\202\001\001\000\326\163\347\174\117\166\320
\215\277\354\272\242\276\064\305\050\062\265\174\374\154\234\054
\053\275\011\236\123\277\153\136\252\021\110\266\345\010\243\263
\312\075\141\115\323\106\011\263\076\303\240\343\143\125\033\362
\272\357\255\071\341\103\271\070\243\346\057\212\046\073\357\240
\120\126\371\306\012\375\070\315\304\013\160\121\224\227\230\004
\337\303\137\224\325\025\311\024\101\234\304\135\165\144\025\015
\377\125\060\354\206\217\377\015\357\054\271\143\106\366\252\374
\337\274\151\375\056\022\110\144\232\340\225\360\246\357\051\217
\001\261\025\265\014\035\245\376\151\054\151\044\170\036\263\247
\034\161\142\356\312\310\227\254\027\135\212\302\370\107\206\156
\052\304\126\061\225\320\147\211\205\053\371\154\246\135\106\235
\014\252\202\344\231\121\335\160\267\333\126\075\141\344\152\341
\134\326\366\376\075\336\101\314\007\256\143\122\277\123\123\364
\053\351\307\375\266\367\202\137\205\322\101\030\333\201\263\004
\034\305\037\244\200\157\025\040\311\336\014\210\012\035\326\146
\125\342\374\110\311\051\046\151\340

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root CA"

Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE

Serial Number:04:00:00:00:01:15:4b:5a:c3:94

Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE

Not Valid Before: Tue Sep 01 12:00:00 1998

#

Not Valid After : Fri Jan 28 12:00:00 2028

Fingerprint (SHA-256):

EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99

Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C

```

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\261\274\226\213\324\364\235\142\052\250\232\201\362\025\001\122
\244\035\202\234
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\076\105\122\025\011\121\222\341\267\135\067\237\261\207\051\212
END
CKA_ISSUER MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\025\113\132\303\224
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Verisign Class 1 Public Primary Certification Authority - G3"
#
# Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4
# Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65
#
Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"

```

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\021\000\213\133\165\126\204\124\205\013\000\317\257\070\110
\316\261\244

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\032\060\202\003\002\002\021\000\213\133\165\126\204
\124\205\013\000\317\257\070\110\316\261\244\060\015\006\011\052
\206\110\206\367\015\001\001\005\005\000\060\201\312\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\126\145\162\151\123\151\147\156\054\040\111
\156\143\056\061\037\060\035\006\003\125\004\013\023\026\126\145
\162\151\123\151\147\156\040\124\162\165\163\164\040\116\145\164
\167\157\162\153\061\072\060\070\006\003\125\004\013\023\061\050
\143\051\040\061\071\071\071\040\126\145\162\151\123\151\147\156

\054\040\111\156\143\056\040\055\040\106\157\162\040\141\165\164
\150\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171
\061\105\060\103\006\003\125\004\003\023\074\126\145\162\151\123
\151\147\156\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\063\060\036\027\015\071\071\061\060\060
\061\060\060\060\060\060\060\132\027\015\063\066\060\067\061\066
\062\063\065\071\065\071\132\060\201\312\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\027\060\025\006\003\125\004\012
\023\016\126\145\162\151\123\151\147\156\054\040\111\156\143\056
\061\037\060\035\006\003\125\004\013\023\026\126\145\162\151\123
\151\147\156\040\124\162\165\163\164\040\116\145\164\167\157\162
\153\061\072\060\070\006\003\125\004\013\023\061\050\143\051\040
\061\071\071\071\040\126\145\162\151\123\151\147\156\054\040\111
\156\143\056\040\055\040\106\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\105\060
\103\006\003\125\004\003\023\074\126\145\162\151\123\151\147\156
\040\103\154\141\163\163\040\061\040\120\165\142\154\151\143\040
\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040
\055\040\107\063\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\335\204\324\271\264\371\247\330\363\004\170
\234\336\075\334\154\023\026\331\172\335\044\121\146\300\307\046
\131\015\254\006\010\302\224\321\063\037\360\203\065\037\156\033
\310\336\252\156\025\116\124\047\357\304\155\032\354\013\343\016
\360\104\245\127\307\100\130\036\243\107\037\161\354\140\366\155
\224\310\030\071\355\376\102\030\126\337\344\114\111\020\170\116
\001\166\065\143\022\066\335\146\274\001\004\066\243\125\150\325
\242\066\011\254\253\041\046\124\006\255\077\312\024\340\254\312
\255\006\035\225\342\370\235\361\340\140\377\302\177\165\053\114
\314\332\376\207\231\041\352\272\376\076\124\327\322\131\170\333
\074\156\317\240\023\000\032\270\047\241\344\276\147\226\312\240
\305\263\234\335\311\165\236\353\060\232\137\243\315\331\256\170
\031\077\043\351\134\333\051\275\255\125\310\033\124\214\143\366
\350\246\352\307\067\022\134\243\051\036\002\331\333\037\073\264
\327\017\126\107\201\025\004\112\257\203\047\321\305\130\210\301
\335\366\252\247\243\030\332\150\252\155\021\121\341\277\145\153
\237\226\166\321\075\002\003\001\000\001\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\253\146
\215\327\263\272\307\232\266\346\125\320\005\361\237\061\215\132
\252\331\252\106\046\017\161\355\245\255\123\126\142\001\107\052
\104\351\376\077\164\013\023\233\271\364\115\033\262\321\137\262
\266\322\210\134\263\237\315\313\324\247\331\140\225\204\072\370
\301\067\035\141\312\347\260\305\345\221\332\124\246\254\061\201
\256\227\336\315\010\254\270\300\227\200\177\156\162\244\347\151
\023\225\145\037\304\223\074\375\171\217\004\324\076\117\352\367

```
\236\316\315\147\174\117\145\002\377\221\205\124\163\307\377\066
\367\206\055\354\320\136\117\377\021\237\162\006\326\270\032\361
\114\015\046\145\342\104\200\036\307\237\343\335\350\012\332\354
\245\040\200\151\150\241\117\176\341\153\317\007\101\372\203\216
\274\070\335\260\056\021\261\153\262\102\314\232\274\371\110\042
\171\112\031\017\262\034\076\040\164\331\152\303\276\362\050\170
\023\126\171\117\155\120\352\033\260\265\127\261\067\146\130\043
\363\334\017\337\012\207\304\357\206\005\325\070\024\140\231\243
\113\336\006\226\161\054\362\333\266\037\244\357\077\356
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA_NSS_EMAIL_DISTRUST_AFTER MULTILINE_OCTAL

```
\062\062\060\070\063\061\060\060\060\060\060\060\132
```

END

Trust for "Verisign Class 1 Public Primary Certification Authority - G3"

Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4

Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Not Valid Before: Fri Oct 01 00:00:00 1999

Not Valid After : Wed Jul 16 23:59:59 2036

Fingerprint (SHA-256):

```
CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65
```

Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\040\102\205\334\367\353\166\101\225\127\216\023\153\324\267\321
\351\216\106\245
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\261\107\274\030\127\321\030\240\170\055\354\161\350\052\225\163
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
```

```
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063
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END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

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\002\021\000\213\133\165\126\204\124\205\013\000\317\257\070\110
\316\261\244
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END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Verisign Class 2 Public Primary Certification Authority - G3"

#

Issuer: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a

Subject: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

Not Valid Before: Fri Oct 01 00:00:00 1999

Not Valid After : Wed Jul 16 23:59:59 2036

Fingerprint (SHA-256):

92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB

Fingerprint (SHA1): 61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Verisign Class 2 Public Primary Certification Authority - G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
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\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\141\160\313\111\214\137\230\105\051\347\260\246\331\120
\133\172

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\031\060\202\003\001\002\020\141\160\313\111\214\137
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\110\206\367\015\001\001\005\005\000\060\201\312\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003\125
\004\012\023\016\126\145\162\151\123\151\147\156\054\040\111\156
\143\056\061\037\060\035\006\003\125\004\013\023\026\126\145\162
\151\123\151\147\156\040\124\162\165\163\164\040\116\145\164\167
\157\162\153\061\072\060\070\006\003\125\004\013\023\061\050\143
\051\040\061\071\071\071\040\126\145\162\151\123\151\147\156\054
\040\111\156\143\056\040\055\040\106\157\162\040\141\165\164\150
\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171\061
\105\060\103\006\003\125\004\003\023\074\126\145\162\151\123\151
\147\156\040\103\154\141\163\163\040\062\040\120\165\142\154\151
\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\063\060\036\027\015\071\071\061\060\060\061
\060\060\060\060\060\060\132\027\015\063\066\060\067\061\066\062
\063\065\071\065\071\132\060\201\312\061\013\060\011\006\003\125
\004\006\023\002\125\123\061\027\060\025\006\003\125\004\012\023

\016\126\145\162\151\123\151\147\156\054\040\111\156\143\056\061
\037\060\035\006\003\125\004\013\023\026\126\145\162\151\123\151
\147\156\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\072\060\070\006\003\125\004\013\023\061\050\143\051\040\061
\071\071\071\040\126\145\162\151\123\151\147\156\054\040\111\156
\143\056\040\055\040\106\157\162\040\141\165\164\150\157\162\151
\172\145\144\040\165\163\145\040\157\156\154\171\061\105\060\103
\006\003\125\004\003\023\074\126\145\162\151\123\151\147\156\040
\103\154\141\163\163\040\062\040\120\165\142\154\151\143\040\120
\162\151\155\141\162\171\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\055
\040\107\063\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\257\012\015\302\325\054\333\147\271\055\345\224
\047\335\245\276\340\260\115\217\263\141\126\074\326\174\303\364
\315\076\206\313\242\210\342\341\330\244\151\305\265\342\277\301
\246\107\120\136\106\071\213\325\226\272\265\157\024\277\020\316
\047\023\236\005\107\233\061\172\023\330\037\331\323\002\067\213
\255\054\107\360\216\201\006\247\015\060\014\353\367\074\017\040
\035\334\162\106\356\245\002\310\133\303\311\126\151\114\305\030
\301\221\173\013\325\023\000\233\274\357\303\110\076\106\140\040
\205\052\325\220\266\315\213\240\314\062\335\267\375\100\125\262
\120\034\126\256\314\215\167\115\307\040\115\247\061\166\357\150
\222\212\220\036\010\201\126\262\255\151\243\122\320\313\034\304
\043\075\037\231\376\114\350\026\143\216\306\010\216\366\061\366
\322\372\345\166\335\265\034\222\243\111\315\315\001\315\150\315
\251\151\272\243\353\035\015\234\244\040\246\301\240\305\321\106
\114\027\155\322\254\146\077\226\214\340\204\324\066\377\042\131
\305\371\021\140\250\137\004\175\362\032\366\045\102\141\017\304
\112\270\076\211\002\003\001\000\001\060\015\006\011\052\206\110
\206\367\015\001\001\005\005\000\003\202\001\001\000\064\046\025
\074\300\215\115\103\111\035\275\351\041\222\327\146\234\267\336
\305\270\320\344\135\137\166\042\300\046\371\204\072\072\371\214
\265\373\354\140\361\350\316\004\260\310\335\247\003\217\060\363
\230\337\244\346\244\061\337\323\034\013\106\334\162\040\077\256
\356\005\074\244\063\077\013\071\254\160\170\163\113\231\053\337
\060\302\124\260\250\073\125\241\376\026\050\315\102\275\164\156
\200\333\047\104\247\316\104\135\324\033\220\230\015\036\102\224
\261\000\054\004\320\164\243\002\005\042\143\143\315\203\265\373
\301\155\142\153\151\165\375\135\160\101\271\365\277\174\337\276
\301\062\163\042\041\213\130\201\173\025\221\172\272\343\144\110
\260\177\373\066\045\332\225\320\361\044\024\027\335\030\200\153
\106\043\071\124\365\216\142\011\004\035\224\220\246\233\346\045
\342\102\105\252\270\220\255\276\010\217\251\013\102\030\224\317
\162\071\341\261\103\340\050\317\267\347\132\154\023\153\111\263
\377\343\030\174\211\213\063\135\254\063\327\247\371\332\072\125
\311\130\020\371\252\357\132\266\317\113\113\337\052

END

```
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
# For Email Distrust After: Wed Aug 31 00:00:00 2022
CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL
\062\062\060\070\063\061\060\060\060\060\060\060\132
END

# Trust for "Verisign Class 2 Public Primary Certification Authority - G3"
# Issuer: CN=Verisign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=Verisign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a
#
Subject: CN=Verisign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=Verisign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB
# Fingerprint (SHA1): 61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 2 Public Primary Certification Authority - G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\141\357\103\327\177\312\324\141\121\274\230\340\303\131\022\257
\237\353\143\021
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\276\304\143\042\311\250\106\164\213\270\035\036\112\053\366
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063
END
CKA_SERIAL_NUMBER
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MULTILINE_OCTAL
\002\020\141\160\313\111\214\137\230\105\051\347\260\246\331\120
\133\172
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust.net Premium 2048 Secure Server CA"
#
# Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Serial Number: 946069240 (0x3863def8)
# Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Not Valid Before: Fri Dec 24 17:50:51 1999
# Not Valid After : Tue Jul 24 14:15:12 2029
# Fingerprint (SHA-256):
6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77
# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "Entrust.net Premium 2048 Secure Server CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051
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CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125

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\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\004\070\143\336\370

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\052\060\202\003\022\240\003\002\001\002\002\004\070
\143\336\370\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\060\201\264\061\024\060\022\006\003\125\004\012\023\013
\105\156\164\162\165\163\164\056\156\145\164\061\100\060\076\006
\003\125\004\013\024\067\167\167\167\056\145\156\164\162\165\163
\164\056\156\145\164\057\103\120\123\137\062\060\064\070\040\151
\156\143\157\162\160\056\040\142\171\040\162\145\146\056\040\050
\154\151\155\151\164\163\040\154\151\141\142\056\051\061\045\060
\043\006\003\125\004\013\023\034\050\143\051\040\061\071\071\071
\040\105\156\164\162\165\163\164\056\156\145\164\040\114\151\155
\151\164\145\144\061\063\060\061\006\003\125\004\003\023\052\105
\156\164\162\165\163\164\056\156\145\164\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
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\062\062\064\061\067\065\060\065\061\132\027\015\062\071\060\067
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\145\164\061\100\060\076\006\003\125\004\013\024\067\167\167\167
\056\145\156\164\162\165\163\164\056\156\145\164\057\103\120\123
\137\062\060\064\070\040\151\156\143\157\162\160\056\040\142\171
\040\162\145\146\056\040\050\154\151\155\151\164\163\040\154\151
\141\142\056\051\061\045\060\043\006\003\125\004\013\023\034\050
\143\051\040\061\071\071\071\040\105\156\164\162\165\163\164\056
\156\145\164\040\114\151\155\151\164\145\144\061\063\060\061\006
\003\125\004\003\023\052\105\156\164\162\165\163\164\056\156\145
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\040\050\062\060\064\070\051
\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001
\000\255\115\113\251\022\206\262\352\243\040\007\025\026\144\052
\053\113\321\277\013\112\115\216\355\200\166\245\147\267\170\100
\300\163\102\310\150\300\333\123\053\335\136\270\166\230\065\223

\213\032\235\174\023\072\016\037\133\267\036\317\345\044\024\036
\261\201\251\215\175\270\314\153\113\003\361\002\014\334\253\245
\100\044\000\177\164\224\241\235\010\051\263\210\013\365\207\167
\235\125\315\344\303\176\327\152\144\253\205\024\206\225\133\227
\062\120\157\075\310\272\146\014\343\374\275\270\111\301\166\211
\111\031\375\300\250\275\211\243\147\057\306\237\274\161\031\140
\270\055\351\054\311\220\166\146\173\224\342\257\170\326\145\123
\135\074\326\234\262\317\051\003\371\057\244\120\262\324\110\316
\005\062\125\212\375\262\144\114\016\344\230\007\165\333\177\337
\271\010\125\140\205\060\051\371\173\110\244\151\206\343\065\077
\036\206\135\172\172\025\275\357\000\216\025\042\124\027\000\220
\046\223\274\016\111\150\221\277\370\107\323\235\225\102\301\016
\115\337\157\046\317\303\030\041\142\146\103\160\326\325\300\007
\341\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\125\344\201\321\021\200\276\330\211\271
\010\243\061\371\241\044\011\026\271\160\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\073\233
\217\126\233\060\347\123\231\174\172\171\247\115\227\327\031\225
\220\373\006\037\312\063\174\106\143\217\226\146\044\372\100\033
\041\047\312\346\162\163\362\117\376\061\231\375\310\014\114\150
\123\306\200\202\023\230\372\266\255\332\135\075\361\316\156\366
\025\021\224\202\014\356\077\225\257\021\253\017\327\057\336\037
\003\217\127\054\036\311\273\232\032\104\225\353\030\117\246\037
\315\175\127\020\057\233\004\011\132\204\265\156\330\035\072\341
\326\236\321\154\171\136\171\034\024\305\343\320\114\223\073\145
\074\355\337\075\276\246\345\225\032\303\265\031\303\275\136\133
\273\377\043\357\150\031\313\022\223\047\134\003\055\157\060\320
\036\266\032\254\336\132\367\321\252\250\047\246\376\171\201\304
\171\231\063\127\272\022\260\251\340\102\154\223\312\126\336\376
\155\204\013\010\213\176\215\352\327\230\041\306\363\347\074\171
\057\136\234\321\114\025\215\341\354\042\067\314\232\103\013\227
\334\200\220\215\263\147\233\157\110\010\025\126\317\277\361\053
\174\136\232\166\351\131\220\305\174\203\065\021\145\121

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Entrust.net Premium 2048 Secure Server CA"

Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net

Serial Number: 946069240 (0x3863def8)

Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net

Not Valid Before: Fri Dec 24 17:50:51 1999

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# Not Valid After : Tue Jul 24 14:15:12 2029
# Fingerprint (SHA-256):
6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77
# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust.net Premium 2048 Secure Server CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\120\060\006\011\035\227\324\365\256\071\367\313\347\222\175\175
\145\055\064\061
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\356\051\061\274\062\176\232\346\350\265\367\121\264\064\161\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\070\143\336\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Baltimore CyberTrust Root"
#
# Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Serial Number: 33554617 (0x20000b9)
# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Not Valid Before: Fri May 12 18:46:00 2000
# Not Valid After : Mon May 12 23:59:00 2025

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# Fingerprint (SHA-256):
16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB
# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\002\000\000\271
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\004\002
\000\000\271\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\111
\105\061\022\060\020\006\003\125\004\012\023\011\102\141\154\164
\151\155\157\162\145\061\023\060\021\006\003\125\004\013\023\012
\103\171\142\145\162\124\162\165\163\164\061\042\060\040\006\003
\125\004\003\023\031\102\141\154\164\151\155\157\162\145\040\103
\171\142\145\162\124\162\165\163\164\040\122\157\157\164\060\036
\027\015\060\060\060\065\061\062\061\070\064\066\060\060\132\027
\015\062\065\060\065\061\062\062\063\065\071\060\060\132\060\132
\061\013\060\011\006\003\125\004\006\023\002\111\105\061\022\060
\020\006\003\125\004\012\023\011\102\141\154\164\151\155\157\162
\145\061\023\060\021\006\003\125\004\013\023\012\103\171\142\145
\162\124\162\165\163\164\061\042\060\040\006\003\125\004\003\023
\031\102\141\154\164\151\155\157\162\145\040\103\171\142\145\162
\124\162\165\163\164\040\122\157\157\164\060\202\001\042\060\015

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\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001
\017\000\060\202\001\012\002\202\001\001\000\243\004\273\042\253
\230\075\127\350\046\162\232\265\171\324\051\342\341\350\225\200
\261\260\343\133\216\053\051\232\144\337\241\135\355\260\011\005
\155\333\050\056\316\142\242\142\376\264\210\332\022\353\070\353
\041\235\300\101\053\001\122\173\210\167\323\034\217\307\272\271
\210\265\152\011\347\163\350\021\100\247\321\314\312\142\215\055
\345\217\013\246\120\322\250\120\303\050\352\365\253\045\207\212
\232\226\034\251\147\270\077\014\325\367\371\122\023\057\302\033
\325\160\160\360\217\300\022\312\006\313\232\341\331\312\063\172
\167\326\370\354\271\361\150\104\102\110\023\322\300\302\244\256
\136\140\376\266\246\005\374\264\335\007\131\002\324\131\030\230
\143\365\245\143\340\220\014\175\135\262\006\172\363\205\352\353
\324\003\256\136\204\076\137\377\025\355\151\274\371\071\066\162
\165\317\167\122\115\363\311\220\054\271\075\345\311\043\123\077
\037\044\230\041\134\007\231\051\275\306\072\354\347\156\206\072
\153\227\164\143\063\275\150\030\061\360\170\215\166\277\374\236
\216\135\052\206\247\115\220\334\047\032\071\002\003\001\000\001
\243\105\060\103\060\035\006\003\125\035\016\004\026\004\024\345
\235\131\060\202\107\130\314\254\372\010\124\066\206\173\072\265
\004\115\360\060\022\006\003\125\035\023\001\001\377\004\010\060
\006\001\001\377\002\001\003\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\003\202\001\001\000\205\014\135\216\344
\157\121\150\102\005\240\335\273\117\047\045\204\003\275\367\144
\375\055\327\060\343\244\020\027\353\332\051\051\266\171\077\166
\366\031\023\043\270\020\012\371\130\244\324\141\160\275\004\141
\152\022\212\027\325\012\275\305\274\060\174\326\351\014\045\215
\206\100\117\354\314\243\176\070\306\067\021\117\355\335\150\061
\216\114\322\263\001\164\356\276\165\136\007\110\032\177\160\377
\026\134\204\300\171\205\270\005\375\177\276\145\021\243\017\300
\002\264\370\122\067\071\004\325\251\061\172\030\277\240\052\364
\022\231\367\243\105\202\343\074\136\365\235\236\265\310\236\174
\056\310\244\236\116\010\024\113\155\375\160\155\153\032\143\275
\144\346\037\267\316\360\362\237\056\273\033\267\362\120\210\163
\222\302\342\343\026\215\232\062\002\253\216\030\335\351\020\021
\356\176\065\253\220\257\076\060\224\172\320\063\075\247\145\017
\365\374\216\236\142\317\107\104\054\001\135\273\035\265\062\322
\107\322\070\056\320\376\201\334\062\152\036\265\356\074\325\374
\347\201\035\031\303\044\102\352\143\071\251

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Baltimore CyberTrust Root"

Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE

```

# Serial Number: 33554617
(0x20000b9)
# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Not Valid Before: Fri May 12 18:46:00 2000
# Not Valid After : Mon May 12 23:59:00 2025
# Fingerprint (SHA-256):
16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB
# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\324\336\040\320\136\146\374\123\376\032\120\210\054\170\333\050
\122\312\344\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\254\266\224\245\234\027\340\327\221\122\233\261\227\006\246\344
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\002\000\000\271
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority"
#
# Issuer: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is
incorporated by reference,O="Entrust, Inc.",C=US
# Serial Number: 1164660820 (0x456b5054)
# Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is
incorporated by reference,O="Entrust, Inc.",C=US
# Not Valid Before: Mon Nov 27 20:23:42 2006
# Not Valid After : Fri Nov 27 20:53:42 2026
# Fingerprint (SHA-256):

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73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C

#

Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\004\105\153\120\124

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\004\221\060\202\003\171\240\003\002\001\002\002\004\105
\153\120\124\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\060\201\260\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156\164

\162\165\163\164\054\040\111\156\143\056\061\071\060\067\006\003
\125\004\013\023\060\167\167\167\056\145\156\164\162\165\163\164
\056\156\145\164\057\103\120\123\040\151\163\040\151\156\143\157
\162\160\157\162\141\164\145\144\040\142\171\040\162\145\146\145
\162\145\156\143\145\061\037\060\035\006\003\125\004\013\023\026
\050\143\051\040\062\060\060\066\040\105\156\164\162\165\163\164
\054\040\111\156\143\056\061\055\060\053\006\003\125\004\003\023
\044\105\156\164\162\165\163\164\040\122\157\157\164\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171\060\036\027\015\060\066\061\061\062\067\062\060
\060\062\063\064\062\132\027\015\062\066\061\061\062\067\062\060
\065\063\064\062\132\060\201\260\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\026\060\024\006\003\125\004\012\023\015
\105\156\164\162\165\163\164\054\040\111\156\143\056\061\071\060
\067\006\003\125\004\013\023\060\167\167\167\056\145\156\164\162
\165\163\164\056\156\145\164\057\103\120\123\040\151\163\040\151
\156\143\157\162\160\157\162\141\164\145\144\040\142\171\040\162
\145\146\145\162\145\156\143\145\061\037\060\035\006\003\125\004
\013\023\026\050\143\051\040\062\060\060\066\040\105\156\164\162
\165\163\164\054\040\111\156\143\056\061\055\060\053\006\003\125
\004\003\023\044\105\156\164\162\165\163\164\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\266\225\266\103\102\372\306
\155\052\157\110\337\224\114\071\127\005\356\303\171\021\101\150
\066\355\354\376\232\001\217\241\070\050\374\367\020\106\146\056
\115\036\032\261\032\116\306\321\300\225\210\260\311\377\061\213
\063\003\333\267\203\173\076\040\204\136\355\262\126\050\247\370
\340\271\100\161\067\305\313\107\016\227\052\150\300\042\225\142
\025\333\107\331\365\320\053\377\202\113\311\255\076\336\114\333
\220\200\120\077\011\212\204\000\354\060\012\075\030\315\373\375
\052\131\232\043\225\027\054\105\236\037\156\103\171\155\014\134
\230\376\110\247\305\043\107\134\136\375\156\347\036\264\366\150
\105\321\206\203\133\242\212\215\261\343\051\200\376\045\161\210
\255\276\274\217\254\122\226\113\252\121\215\344\023\061\031\350
\116\115\237\333\254\263\152\325\274\071\124\161\312\172\172\177
\220\335\175\035\200\331\201\273\131\046\302\021\376\346\223\342
\367\200\344\145\373\064\067\016\051\200\160\115\257\070\206\056
\236\177\127\257\236\027\256\353\034\313\050\041\137\266\034\330
\347\242\004\042\371\323\332\330\313\002\003\001\000\001\243\201
\260\060\201\255\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\053\006\003\125\035\020\004\044\060\042
\200\017\062\060\060\066\061\061\062\067\062\060\062\063\064\062
\132\201\017\062\060\062\066\061\061\062\067\062\060\065\063\064
\062\132\060\037\006\003\125\035\043\004\030\060\026\200\024\150
\220\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373

```
\204\275\155\060\035\006\003\125\035\016\004\026\004\024\150\220
\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373\204
\275\155\060\035\006\011\052\206\110\206\366\175\007\101\000\004
\020\060\016\033\010\126\067\056\061\072\064\056\060\003\002\004
\220\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\003\202\001\001\000\223\324\060\260\327\003\040\052\320\371\143
\350\221\014\005\040\251\137\031\312\173\162\116\324\261\333\320
\226\373\124\132\031\054\014\010\367\262\274\205\250\235\177\155
\073\122\263\052\333\347\324\204\214\143\366\017\313\046\001\221
\120\154\364\137\024\342\223\164\300\023\236\060\072\120\343\264
\140\305\034\360\042\104\215\161\107\254\310\032\311\351\233\232
\000\140\023\377\160\176\137\021\115\111\033\263\025\122\173\311
\124\332\277\235\225\257\153\232\330\236\351\361\344\103\215\342
\021\104\072\277\257\275\203\102\163\122\213\252\273\247\051\317
\365\144\034\012\115\321\274\252\254\237\052\320\377\177\177\332
\175\352\261\355\060\045\301\204\332\064\322\133\170\203\126\354
\234\066\303\046\342\021\366\147\111\035\222\253\214\373\353\377
\172\356\205\112\247\120\200\360\247\134\112\224\056\137\005\231
\074\122\101\340\315\264\143\317\001\103\272\234\203\334\217\140
\073\363\132\264\264\173\256\332\013\220\070\165\357\201\035\146
\322\367\127\160\066\263\277\374\050\257\161\045\205\133\023\376
\036\177\132\264\074
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Entrust Root Certification Authority"

Issuer: CN=Entrust

Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by reference,O="Entrust, Inc.",C=US

Serial Number: 1164660820 (0x456b5054)

Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by reference,O="Entrust, Inc.",C=US

Not Valid Before: Mon Nov 27 20:23:42 2006

Not Valid After : Fri Nov 27 20:53:42 2026

Fingerprint (SHA-256):

73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C

Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\263\036\261\267\100\343\154\204\002\332\334\067\324\115\365\324
\147\111\122\371
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\326\245\303\355\135\335\076\000\301\075\207\222\037\035\077\344
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\004\105\153\120\124
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST
CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Root CA"
#
# Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
# Serial Number: 65568 (0x10020)
# Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
# Not Valid Before: Tue Jun 11 10:46:39 2002
# Not Valid After : Fri Jun 11 10:46:39 2027
# Fingerprint (SHA-256):
D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24
# Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164

```

```
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\001\000\040
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\014\060\202\001\364\240\003\002\001\002\002\003\001
\000\040\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103
\101\060\036\027\015\060\062\060\066\061\061\061\060\064\066\063
\071\132\027\015\062\067\060\066\061\061\061\060\064\066\063\071
\132\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\316\261\301\056\323\117\174\315\045\316\030\076\117\304
\214\157\200\152\163\310\133\121\370\233\322\334\273\000\134\261
\240\374\165\003\356\201\360\210\356\043\122\351\346\025\063\215
\254\055\011\305\166\371\053\071\200\211\344\227\113\220\245\250
\170\370\163\103\173\244\141\260\330\130\314\341\154\146\176\234
\363\011\136\125\143\204\325\250\357\363\261\056\060\150\263\304
\074\330\254\156\215\231\132\220\116\064\334\066\232\217\201\210
\120\267\155\226\102\011\363\327\225\203\015\101\113\260\152\153
\370\374\017\176\142\237\147\304\355\046\137\020\046\017\010\117
\360\244\127\050\316\217\270\355\105\366\156\356\045\135\252\156
\071\276\344\223\057\331\107\240\162\353\372\246\133\257\312\123
\077\342\016\306\226\126\021\156\367\351\146\251\046\330\177\225
\123\355\012\205\210\272\117\051\245\102\214\136\266\374\205\040
\000\252\150\013\241\032\205\001\234\304\106\143\202\210\266\042
\261\356\376\252\106\131\176\317\065\054\325\266\332\135\367\110
\063\024\124\266\353\331\157\316\315\210\326\253\033\332\226\073
\035\131\002\003\001\000\001\243\023\060\021\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
```

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\270\215\316\357\347\024\272\317\356\260\104\222\154\264\071\076
\242\204\156\255\270\041\167\322\324\167\202\207\346\040\101\201
\356\342\370\021\267\143\321\027\067\276\031\166\044\034\004\032
\114\353\075\252\147\157\055\324\315\376\145\061\160\305\033\246
\002\012\272\140\173\155\130\302\232\111\376\143\062\013\153\343
\072\300\254\253\073\260\350\323\011\121\214\020\203\306\064\340
\305\053\340\032\266\140\024\047\154\062\167\214\274\262\162\230
\317\315\314\077\271\310\044\102\024\326\127\374\346\046\103\251
\035\345\200\220\316\003\124\050\076\367\077\323\370\115\355\152
\012\072\223\023\233\073\024\043\023\143\234\077\321\207\047\171
\345\114\121\343\001\255\205\135\032\073\261\325\163\020\244\323
\362\274\156\144\365\132\126\220\250\307\016\114\164\017\056\161
\073\367\310\107\364\151\157\025\362\021\136\203\036\234\174\122
\256\375\002\332\022\250\131\147\030\333\274\160\335\233\261\151
\355\200\316\211\100\110\152\016\065\312\051\146\025\041\224\054
\350\140\052\233\205\112\100\363\153\212\044\354\006\026\054\163
END
```

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum Root CA"

Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

Serial Number: 65568 (0x10020)

Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

Not Valid Before: Tue Jun 11 10:46:39 2002

Not Valid After : Fri Jun 11

10:46:39 2027

Fingerprint (SHA-256):

D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24

Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\142\122\334\100\367\021\103\242\057\336\236\367\064\216\006\102
\121\261\201\030
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\054\217\237\146\035\030\220\261\107\046\235\216\206\202\214\251
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
```



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\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\001\000\040
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Comodo AAA Services root"
#
# Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB
# Serial Number: 1 (0x1)
# Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB
# Not Valid Before: Thu Jan 01 00:00:00 2004
# Not Valid After : Sun Dec 31 23:59:59 2028
# Fingerprint (SHA-256):
D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4
# Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Comodo AAA Services root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151
\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151

```

\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\062\060\202\003\032\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033
\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145\162
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006
\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032\060
\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040\103
\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003\125
\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151\143
\141\164\145\040\123\145\162\166\151\143\145\163\060\036\027\015
\060\064\060\061\060\061\060\060\060\060\060\132\027\015\062
\070\061\062\063\061\062\063\065\071\065\071\132\060\173\061\013
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006
\003\125\004\010\014\022\107\162\145\141\164\145\162\040\115\141
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004
\007\014\007\123\141\154\146\157\162\144\061\032\060\030\006\003
\125\004\012\014\021\103\157\155\157\144\157\040\103\101\040\114
\151\155\151\164\145\144\061\041\060\037\006\003\125\004\003\014
\030\101\101\101\040\103\145\162\164\151\146\151\143\141\164\145
\040\123\145\162\166\151\143\145\163\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\276\100\235\364\156\341
\352\166\207\034\115\105\104\216\276\106\310\203\006\235\301\052
\376\030\037\216\344\002\372\363\253\135\120\212\026\061\013\232
\006\320\305\160\042\315\111\055\124\143\314\266\156\150\106\013
\123\352\313\114\044\300\274\162\116\352\361\025\256\364\124\232
\022\012\303\172\262\063\140\342\332\211\125\363\042\130\363\336
\334\317\357\203\206\242\214\224\117\237\150\362\230\220\106\204
\047\307\166\277\343\314\065\054\213\136\007\144\145\202\300\110
\260\250\221\371\141\237\166\040\120\250\221\307\146\265\353\170
\142\003\126\360\212\032\023\352\061\243\036\240\231\375\070\366
\366\047\062\130\157\007\365\153\270\373\024\053\257\267\252\314
\326\143\137\163\214\332\005\231\250\070\250\313\027\170\066\121
\254\351\236\364\170\072\215\317\017\331\102\342\230\014\253\057
\237\016\001\336\357\237\231\111\361\055\337\254\164\115\033\230
\265\107\305\345\051\321\371\220\030\307\142\234\276\203\307\046
\173\076\212\045\307\300\335\235\346\065\150\020\040\235\217\330
\336\322\303\204\234\015\136\350\057\311\002\003\001\000\001\243
\201\300\060\201\275\060\035\006\003\125\035\016\004\026\004\024
\240\021\012\043\076\226\361\007\354\342\257\051\357\202\245\177
\320\060\244\264\060\016\006\003\125\035\017\001\001\377\004\004

\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\173\006\003\125\035\037\004\164\060\162
\060\070\240\066\240\064\206\062\150\164\164\160\072\057\057\143
\162\154\056\143\157\155\157\144\157\143\141\056\143\157\155\057
\101\101\101\103\145\162\164\151\146\151\143\141\164\145\123\145
\162\166\151\143\145\163\056\143\162\154\060\066\240\064\240\062
\206\060\150\164\164\160\072\057\057\143\162\154\056\143\157\155
\157\144\157\056\156\145\164\057\101\101\101\103\145\162\164\151
\146\151\143\141\164\145\123\145\162\166\151\143\145\163\056\143
\162\154\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\003\202\001\001\000\010\126\374\002\360\233\350\377\244\372
\326\173\306\104\200\316\117\304\305\366\000\130\314\246\266\274
\024\111\150\004\166\350\346\356\135\354\002\017\140\326\215\120
\030\117\046\116\001\343\346\260\245\356\277\274\164\124\101\277
\375\374\022\270\307\117\132\364\211\140\005\177\140\267\005\112
\363\366\361\302\277\304\271\164\206\266\055\175\153\314\322\363
\106\335\057\306\340\152\303\303\064\003\054\175\226\335\132\302
\016\247\012\231\301\005\213\253\014\057\363\134\072\317\154\067
\125\011\207\336\123\100\154\130\357\374\266\253\145\156\004\366
\033\334\074\340\132\025\306\236\331\361\131\110\060\041\145\003
\154\354\351\041\163\354\233\003\241\340\067\255\240\025\030\217
\372\272\002\316\247\054\251\020\023\054\324\345\010\046\253\042
\227\140\370\220\136\164\324\242\232\123\275\362\251\150\340\242
\156\302\327\154\261\243\017\236\277\353\150\347\126\362\256\362
\343\053\070\072\011\201\265\153\205\327\276\055\355\077\032\267
\262\143\342\365\142\054\202\324\152\000\101\120\361\071\203\237
\225\351\066\226\230\156

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Comodo AAA Services root"

Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number: 1 (0x1)

Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Thu Jan 01 00:00:00 2004

Not Valid After : Sun Dec 31 23:59:59 2028

Fingerprint

(SHA-256):

D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4

Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Comodo AAA Services root"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\321\353\043\244\155\027\326\217\331\045\144\302\361\361\140\027
\144\330\343\111
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\111\171\004\260\353\207\031\254\107\260\274\021\121\233\164\320
END
CKA_ISSUER MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151
\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 2"
#
# Issuer: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM
# Serial Number: 1289 (0x509)
# Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 18:27:00 2006
# Not Valid After : Mon Nov 24 18:23:33 2031
# Fingerprint (SHA-256):
85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86
# Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003

```

```
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\005\011
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\267\060\202\003\237\240\003\002\001\002\002\002\005
\011\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\060\036\027\015\060\066\061\061\062
\064\061\070\062\067\060\060\132\027\015\063\061\061\061\062\064
\061\070\062\063\063\063\132\060\105\061\013\060\011\006\003\125
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126
\141\144\151\163\040\122\157\157\164\040\103\101\040\062\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\232
\030\312\113\224\015\000\055\257\003\051\212\360\017\201\310\256
\114\031\205\035\010\237\253\051\104\205\363\057\201\255\062\036
\220\106\277\243\206\046\032\036\376\176\034\030\072\134\234\140
\027\052\072\164\203\063\060\175\141\124\021\313\355\253\340\346
\322\242\176\365\153\157\030\267\012\013\055\375\351\076\357\012
\306\263\020\351\334\302\106\027\370\135\375\244\332\377\236\111
\132\234\346\063\346\044\226\367\077\272\133\053\034\172\065\302
\326\147\376\253\146\120\213\155\050\140\053\357\327\140\303\307
\223\274\215\066\221\363\177\370\333\021\023\304\234\167\166\301
\256\267\002\152\201\172\251\105\203\342\005\346\271\126\301\224
\067\217\110\161\143\042\354\027\145\007\225\212\113\337\217\306
\132\012\345\260\343\137\136\153\021\253\014\371\205\353\104\351
\370\004\163\362\351\376\134\230\214\365\163\257\153\264\176\315
\324\134\002\053\114\071\341\262\225\225\055\102\207\327\325\263
\220\103\267\154\023\361\336\335\366\304\370\211\077\321\165\365
\222\303\221\325\212\210\320\220\354\334\155\336\211\302\145\161
\226\213\015\003\375\234\277\133\026\254\222\333\352\376\171\174
\255\353\257\367\026\313\333\315\045\053\345\037\373\232\237\342
```

\121\314\072\123\014\110\346\016\275\311\264\166\006\122\346\021
\023\205\162\143\003\004\340\004\066\053\040\031\002\350\164\247
\037\266\311\126\146\360\165\045\334\147\301\016\141\140\210\263
\076\321\250\374\243\332\035\260\321\261\043\124\337\104\166\155
\355\101\330\301\262\042\266\123\034\337\065\035\334\241\167\052
\061\344\055\365\345\345\333\310\340\377\345\200\327\013\143\240
\377\063\241\017\272\054\025\025\352\227\263\322\242\265\276\362
\214\226\036\032\217\035\154\244\141\067\271\206\163\063\327\227
\226\236\043\175\202\244\114\201\342\241\321\272\147\137\225\007
\243\047\021\356\026\020\173\274\105\112\114\262\004\322\253\357
\325\375\014\121\316\120\152\010\061\371\221\332\014\217\144\134
\003\303\072\213\040\077\156\215\147\075\072\326\376\175\133\210
\311\136\373\314\141\334\213\063\167\323\104\062\065\011\142\004
\222\026\020\330\236\047\107\373\073\041\343\370\353\035\133\002
\003\001\000\001\243\201\260\060\201\255\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003\125
\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016\004
\026\004\024\032\204\142\274\110\114\063\045\004\324\356\320\366
\003\304\031\106\321\224\153\060\156\006\003\125\035\043\004\147
\060\145\200\024\032\204\142\274\110\114\063\045\004\324\356\320
\366\003\304\031\106\321\224\153\241\111\244\107\060\105\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\033\060\031\006\003\125\004\003\023
\022\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\062\202\002\005\011\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\003\202\002\001\000\076\012\026\115\237
\006\133\250\256\161\135\057\005\057\147\346\023\105\203\304\066
\366\363\300\046\014\015\265\107\144\135\370\264\162\311\106\245
\003\030\047\125\211\170\175\166\352\226\064\200\027\040\334\347
\203\370\215\374\007\270\332\137\115\056\147\262\204\375\331\104
\374\167\120\201\346\174\264\311\015\013\162\123\370\166\007\007
\101\107\226\014\373\340\202\046\223\125\214\376\042\037\140\145
\174\137\347\046\263\367\062\220\230\120\324\067\161\125\366\222
\041\170\367\225\171\372\370\055\046\207\146\126\060\167\246\067
\170\063\122\020\130\256\077\141\216\362\152\261\357\030\176\112
\131\143\312\215\242\126\325\247\057\274\126\037\317\071\301\342
\373\012\250\025\054\175\115\172\143\306\154\227\104\074\322\157
\303\112\027\012\370\220\322\127\242\031\121\245\055\227\101\332
\007\117\251\120\332\220\215\224\106\341\076\360\224\375\020\000
\070\365\073\350\100\341\264\156\126\032\040\314\157\130\215\355
\056\105\217\326\351\223\077\347\261\054\337\072\326\042\214\334
\204\273\042\157\320\370\344\306\071\351\004\210\074\303\272\353
\125\172\155\200\231\044\365\154\001\373\370\227\260\224\133\353
\375\322\157\361\167\150\015\065\144\043\254\270\125\241\003\321
\115\102\031\334\370\165\131\126\243\371\250\111\171\370\257\016
\271\021\240\174\267\152\355\064\320\266\046\142\070\032\207\014
\370\350\375\056\323\220\177\007\221\052\035\326\176\134\205\203

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\231\260\070\010\077\351\136\371\065\007\344\311\142\156\127\177
\247\120\225\367\272\310\233\346\216\242\001\305\326\146\277\171
\141\363\074\034\341\271\202\134\135\240\303\351\330\110\275\031
\242\021\024\031\156\262\206\033\150\076\110\067\032\210\267\135
\226\136\234\307\357\047\142\010\342\221\031\134\322\361\041\335
\272\027\102\202\227\161\201\123\061\251\237\366\175\142\277\162
\341\243\223\035\314\212\046\132\011\070\320\316\327\015\200\026
\264\170\245\072\207\114\215\212\245\325\106\227\362\054\020\271
\274\124\042\300\001\120\151\103\236\364\262\357\155\370\354\332
\361\343\261\357\337\221\217\124\052\013\045\301\046\031\304\122
\020\005\145\325\202\020\352\302\061\315\056
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "QuoVadis Root CA 2"

Issuer: CN=QuoVadis Root

CA 2,O=QuoVadis Limited,C=BM

Serial Number: 1289 (0x509)

Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM

Not Valid Before: Fri Nov 24 18:27:00 2006

Not Valid After : Mon Nov 24 18:23:33 2031

Fingerprint (SHA-256):

85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86

Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\312\072\373\317\022\100\066\113\104\262\026\040\210\200\110\071
\031\223\174\367
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\136\071\173\335\370\272\354\202\351\254\142\272\014\124\000\053
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\002\005\011
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3"
#
# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Serial Number: 1478 (0x5c6)
# Subject: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 19:11:23 2006
# Not Valid After : Mon Nov 24 19:06:44 2031
# Fingerprint (SHA-256):
18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35
# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "QuoVadis Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\005\306
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\235\060\202\004\205\240\003\002\001\002\002\002\005
\306\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061

```


\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\060\036\027\015\060\066\061\061\062
\064\061\071\061\061\062\063\132\027\015\063\061\061\061\062\064
\061\071\060\066\064\064\132\060\105\061\013\060\011\006\003\125
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126
\141\144\151\163\040\122\157\157\164\040\103\101\040\063\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\314
\127\102\026\124\234\346\230\323\323\115\356\376\355\307\237\103
\071\112\145\263\350\026\210\064\333\015\131\221\164\317\222\270
\004\100\255\002\113\061\253\274\215\221\150\330\040\016\032\001
\342\032\173\116\027\135\342\212\267\077\231\032\315\353\141\253
\302\145\246\037\267\267\275\267\217\374\375\160\217\013\240\147
\276\001\242\131\317\161\346\017\051\166\377\261\126\171\105\053
\037\236\172\124\350\243\051\065\150\244\001\117\017\244\056\067
\357\033\277\343\217\020\250\162\253\130\127\347\124\206\310\311
\363\133\332\054\332\135\216\156\074\243\076\332\373\202\345\335
\362\134\262\005\063\157\212\066\316\320\023\116\377\277\112\014
\064\114\246\303\041\275\120\004\125\353\261\273\235\373\105\036
\144\025\336\125\001\214\002\166\265\313\241\077\102\151\274\057
\275\150\103\026\126\211\052\067\141\221\375\246\256\116\300\313
\024\145\224\067\113\222\006\357\004\320\310\234\210\333\013\173
\201\257\261\075\052\304\145\072\170\266\356\334\200\261\322\323
\231\234\072\356\153\132\153\263\215\267\325\316\234\302\276\245
\113\057\026\261\236\150\073\006\157\256\175\237\370\336\354\314
\051\247\230\243\045\103\057\357\361\137\046\341\210\115\370\136
\156\327\331\024\156\031\063\151\247\073\204\211\223\304\123\125
\023\241\121\170\100\370\270\311\242\356\173\272\122\102\203\236
\024\355\005\122\132\131\126\247\227\374\235\077\012\051\330\334
\117\221\016\023\274\336\225\244\337\213\231\276\254\233\063\210
\357\265\201\257\033\306\042\123\310\366\307\356\227\024\260\305
\174\170\122\310\360\316\156\167\140\204\246\351\052\166\040\355
\130\001\027\060\223\351\032\213\340\163\143\331\152\222\224\111
\116\264\255\112\205\304\243\042\060\374\011\355\150\042\163\246
\210\014\125\041\130\305\341\072\237\052\335\312\341\220\340\331
\163\253\154\200\270\350\013\144\223\240\234\214\031\377\263\322
\014\354\221\046\207\212\263\242\341\160\217\054\012\345\315\155
\150\121\353\332\077\005\177\213\062\346\023\134\153\376\137\100
\342\042\310\264\264\144\117\326\272\175\110\076\250\151\014\327
\273\206\161\311\163\270\077\073\235\045\113\332\377\100\353\002
\003\001\000\001\243\202\001\225\060\202\001\221\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\201\341
\006\003\125\035\040\004\201\331\060\201\326\060\201\323\006\011
\053\006\001\004\001\276\130\000\003\060\201\305\060\201\223\006

\010\053\006\001\005\005\007\002\002\060\201\206\032\201\203\101
\156\171\040\165\163\145\040\157\146\040\164\150\151\163\040\103
\145\162\164\151\146\151\143\141\164\145\040\143\157\156\163\164
\151\164\165\164\145\163\040\141\143\143\145\160\164\141\156\143
\145\040\157\146\040\164\150\145\040\121\165\157\126\141\144\151
\163\040\122\157\157\164\040\103\101\040\063\040\103\145\162\164
\151\146\151\143\141\164\145\040\120\157\154\151\143\171\040\057
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\120
\162\141\143\164\151\143\145\040\123\164\141\164\145\155\145\156
\164\056\060\055\006\010\053\006\001\005\005\007\002\001\026\041
\150\164\164\160\072\057\057\167\167\167\056\161\165\157\166\141
\144\151\163\147\154\157\142\141\154\056\143\157\155\057\143\160
\163\060\013\006\003\125\035\017\004\004\003\002\001\006\060\035
\006\003\125\035\016\004\026\004\024\362\300\023\340\202\103\076
\373\356\057\147\062\226\065\134\333\270\313\002\320\060\156\006
\003\125\035\043\004\147\060\145\200\024\362\300\023\340\202\103
\076\373\356\057\147\062\226\065\134\333\270\313\002\320\241\111
\244\107\060\105\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\033\060\031
\006\003\125\004\003\023\022\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\063\202\002\005\306\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\002\001
\000\117\255\240\054\114\372\300\362\157\367\146\125\253\043\064
\356\347\051\332\303\133\266\260\203\331\320\320\342\041\373\363
\140\247\073\135\140\123\047\242\233\366\010\042\052\347\277\240
\162\345\234\044\152\061\261\220\172\047\333\204\021\211\047\246
\167\132\070\327\277\254\206\374\356\135\203\274\006\306\321\167
\153\017\155\044\057\113\172\154\247\007\226\312\343\204\237\255
\210\213\035\253\026\215\133\146\027\331\026\364\213\200\322\335
\370\262\166\303\374\070\023\252\014\336\102\151\053\156\363\074
\353\200\047\333\365\246\104\015\237\132\125\131\013\325\015\122
\110\305\256\237\362\057\200\305\352\062\120\065\022\227\056\301
\341\377\361\043\210\121\070\237\362\146\126\166\347\017\121\227
\245\122\014\115\111\121\225\066\075\277\242\113\014\020\035\206
\231\114\252\363\162\021\223\344\352\366\233\332\250\135\247\115
\267\236\002\256\163\000\310\332\043\003\350\371\352\031\164\142
\000\224\313\042\040\276\224\247\131\265\202\152\276\231\171\172
\251\362\112\044\122\367\164\375\272\116\346\250\035\002\156\261
\015\200\104\301\256\323\043\067\137\273\205\174\053\222\056\350
\176\245\213\335\231\341\277\047\157\055\135\252\173\207\376\012
\335\113\374\216\365\046\344\156\160\102\156\063\354\061\236\173
\223\301\344\311\151\032\075\300\153\116\042\155\356\253\130\115
\306\320\101\301\053\352\117\022\207\136\353\105\330\154\365\230
\002\323\240\330\125\212\006\231\031\242\240\167\321\060\236\254
\314\165\356\203\365\260\142\071\317\154\127\342\114\322\221\013
\016\165\050\033\232\277\375\032\103\361\312\167\373\073\217\141
\270\151\050\026\102\004\136\160\052\034\041\330\217\341\275\043

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\133\055\164\100\222\331\143\031\015\163\335\151\274\142\107\274
\340\164\053\262\353\175\276\101\033\265\300\106\305\241\042\313
\137\116\301\050\222\336\030\272\325\052\050\273\021\213\027\223
\230\231\140\224\134\043\317\132\047\227\136\013\005\006\223\067
\036\073\151\066\353\251\236\141\035\217\062\332\216\014\326\164
\076\173\011\044\332\001\167\107\304\073\315\064\214\231\365\312
\341\045\141\063\262\131\033\342\156\327\067\127\266\015\251\022
\332
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "QuoVadis Root CA 3"
# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Serial Number: 1478 (0x5c6)
# Subject:
  CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 19:11:23 2006
# Not Valid After : Mon Nov 24 19:06:44 2031
# Fingerprint (SHA-256):
18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35
# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\111\024\367\330\164\225\035\335\256\002\300\276\375\072\055
\202\165\121\205
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\061\205\074\142\224\227\143\271\252\375\211\116\257\157\340\317
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\005\306
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

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CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication Root CA"
#
# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Not Valid Before: Tue Sep 30 04:20:49 2003
# Not Valid After : Sat Sep 30 04:20:49 2023
# Fingerprint (SHA-256):
E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C
# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication
Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\132\060\202\002\102\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061\030
\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040\124
\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125\004

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\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155\155
\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103\101
\061\060\036\027\015\060\063\060\071\063\060\060\064\062\060\064
\071\132\027\015\062\063\060\071\063\060\060\064\062\060\064\071
\132\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120
\061\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115
\040\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003
\125\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157
\155\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164
\103\101\061\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\263\263\376\177\323\155\261\357\026\174\127\245
\014\155\166\212\057\113\277\144\373\114\356\212\360\363\051\174
\365\377\356\052\340\351\351\272\133\144\042\232\232\157\054\072
\046\151\121\005\231\046\334\325\034\152\161\306\232\175\036\235
\335\174\154\306\214\147\147\112\076\370\161\260\031\047\251\011
\014\246\225\277\113\214\014\372\125\230\073\330\350\042\241\113
\161\070\171\254\227\222\151\263\211\176\352\041\150\006\230\024
\226\207\322\141\066\274\155\047\126\236\127\356\300\300\126\375
\062\317\244\331\216\302\043\327\215\250\363\330\045\254\227\344
\160\070\364\266\072\264\235\073\227\046\103\243\241\274\111\131
\162\114\043\060\207\001\130\366\116\276\034\150\126\146\257\315
\101\135\310\263\115\052\125\106\253\037\332\036\342\100\075\333
\315\175\271\222\200\234\067\335\014\226\144\235\334\042\367\144
\213\337\141\336\025\224\122\025\240\175\122\311\113\250\041\311
\306\261\355\313\303\225\140\321\017\360\253\160\370\337\313\115
\176\354\326\372\253\331\275\177\124\362\245\351\171\372\331\326
\166\044\050\163\002\003\001\000\001\243\077\060\075\060\035\006
\003\125\035\016\004\026\004\024\240\163\111\231\150\334\205\133
\145\343\233\050\057\127\237\275\063\274\007\110\060\013\006\003
\125\035\017\004\004\003\002\001\006\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\150\100
\251\250\273\344\117\135\171\263\005\265\027\263\140\023\353\306
\222\135\340\321\323\152\376\373\276\233\155\277\307\005\155\131
\040\304\034\360\267\332\204\130\002\143\372\110\026\357\117\245
\013\367\112\230\362\077\236\033\255\107\153\143\316\010\107\353
\122\077\170\234\257\115\256\370\325\117\317\232\230\052\020\101
\071\122\304\335\331\233\016\357\223\001\256\262\056\312\150\102
\044\102\154\260\263\072\076\315\351\332\110\304\025\313\351\371
\007\017\222\120\111\212\335\061\227\137\311\351\067\252\073\131
\145\227\224\062\311\263\237\076\072\142\130\305\111\255\142\016
\161\245\062\252\057\306\211\166\103\100\023\023\147\075\242\124
\045\020\313\361\072\362\331\372\333\111\126\273\246\376\247\101
\065\303\340\210\141\311\210\307\337\066\020\042\230\131\352\260
\112\373\126\026\163\156\254\115\367\042\241\117\255\035\172\055
\105\047\345\060\301\136\362\332\023\313\045\102\121\225\107\003
\214\154\041\314\164\102\355\123\377\063\213\217\017\127\001\026

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\057\317\246\356\311\160\042\024\275\375\276\154\013\003
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Security Communication Root CA"
# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Not Valid Before: Tue Sep 30 04:20:49 2003
# Not Valid After : Sat Sep 30 04:20:49 2023
# Fingerprint (SHA-256):
E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C
# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\066\261\053\111\371\201\236\327\114\236\274\070\017\306\126\217
\135\254\262\367
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\361\274\143\152\124\340\265\047\365\315\347\032\343\115\156\112
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Camerfirma Chambers of Commerce Root"

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#
# Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Serial Number: 0 (0x0)
# Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Not Valid Before: Tue Sep 30 16:13:43 2003
# Not Valid After : Wed Sep 30 16:13:44 2037
# Fingerprint (SHA-256):
0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3
# Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Camerfirma Chambers of Commerce Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
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END
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UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\275\060\202\003\245\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060

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\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061\047
\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155\145
\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101\070
\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004\013
\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150\141
\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060\040
\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163\040
\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157\164
\060\036\027\015\060\063\060\071\063\060\061\066\061\063\064\063
\132\027\015\063\067\060\071\063\060\061\066\061\063\064\064\132
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164\060\202\001\040\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\015\000\060\202\001\010\002\202\001
\001\000\267\066\125\345\245\135\030\060\340\332\211\124\221\374
\310\307\122\370\057\120\331\357\261\165\163\145\107\175\033\133
\272\165\305\374\241\210\044\372\057\355\312\010\112\071\124\304
\121\172\265\332\140\352\070\074\201\262\313\361\273\331\221\043
\077\110\001\160\165\251\005\052\255\037\161\363\311\124\075\035
\006\152\100\076\263\014\205\356\134\033\171\302\142\304\270\066
\216\065\135\001\014\043\004\107\065\252\233\140\116\240\146\075
\313\046\012\234\100\241\364\135\230\277\161\253\245\000\150\052
\355\203\172\017\242\024\265\324\042\263\200\260\074\014\132\121
\151\055\130\030\217\355\231\236\361\256\342\225\346\366\107\250
\326\014\017\260\130\130\333\303\146\067\236\233\221\124\063\067
\322\224\034\152\110\311\311\362\245\332\245\014\043\367\043\016
\234\062\125\136\161\234\204\005\121\232\055\375\346\116\052\064
\132\336\312\100\067\147\014\124\041\125\167\332\012\014\314\227
\256\200\334\224\066\112\364\076\316\066\023\036\123\344\254\116
\072\005\354\333\256\162\234\070\213\320\071\073\211\012\076\167
\376\165\002\001\003\243\202\001\104\060\202\001\100\060\022\006
\003\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001
\014\060\074\006\003\125\035\037\004\065\060\063\060\061\240\057
\240\055\206\053\150\164\164\160\072\057\057\143\162\154\056\143
\150\141\155\142\145\162\163\151\147\156\056\157\162\147\057\143
\150\141\155\142\145\162\163\162\157\157\164\056\143\162\154\060
\035\006\003\125\035\016\004\026\004\024\343\224\365\261\115\351
\333\241\051\133\127\213\115\166\006\166\341\321\242\212\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\021
\006\011\140\206\110\001\206\370\102\001\001\004\004\003\002\000
\007\060\047\006\003\125\035\021\004\040\060\036\201\034\143\150
\141\155\142\145\162\163\162\157\157\164\100\143\150\141\155\142

\145\162\163\151\147\156\056\157\162\147\060\047\006\003\125\035
\022\004\040\060\036\201\034\143\150\141\155\142\145\162\163\162
\157\157\164\100\143\150\141\155\142\145\162\163\151\147\156\056
\157\162\147\060\130\006\003\125\035\040\004\121\060\117\060\115
\006\013\053\006\001\004\001\201\207\056\012\003\001\060\076\060
\074\006\010\053\006\001\005\005\007\002\001\026\060\150\164\164
\160\072\057\057\143\160\163\056\143\150\141\155\142\145\162\163
\151\147\156\056\157\162\147\057\143\160\163\057\143\150\141\155
\142\145\162\163\162\157\157\164\056\150\164\155\154\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001
\000\014\101\227\302\032\206\300\042\174\237\373\220\363\032\321
\003\261\357\023\371\041\137\004\234\332\311\245\215\047\154\226
\207\221\276\101\220\001\162\223\347\036\175\137\366\211\306\135
\247\100\011\075\254\111\105\105\334\056\215\060\150\262\011\272
\373\303\057\314\272\013\337\077\167\173\106\175\072\022\044\216
\226\217\074\005\012\157\322\224\050\035\155\014\300\056\210\042
\325\330\317\035\023\307\360\110\327\327\005\247\317\307\107\236
\073\074\064\310\200\117\324\024\273\374\015\120\367\372\263\354
\102\137\251\335\155\310\364\165\317\173\301\162\046\261\001\034
\134\054\375\172\116\264\001\305\005\127\271\347\074\252\005\331
\210\351\007\106\101\316\357\101\201\256\130\337\203\242\256\312
\327\167\037\347\000\074\235\157\216\344\062\011\035\115\170\064
\170\064\074\224\233\046\355\117\161\306\031\172\275\040\042\110
\132\376\113\175\003\267\347\130\276\306\062\116\164\036\150\335
\250\150\133\263\076\356\142\175\331\200\350\012\165\172\267\356
\264\145\232\041\220\340\252\320\230\274\070\265\163\074\213\370
\334

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

For Email Distrust After: Mon Mar 01 00:00:00 2021

CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL

\062\061\060\063\060\061\060\060\060\060\060\060\132

END

Trust for "Camerfirma Chambers of Commerce Root"

Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU

Serial Number: 0 (0x0)

Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU

Not Valid Before: Tue Sep 30 16:13:43 2003

Not Valid After : Wed Sep 30 16:13:44 2037

Fingerprint (SHA-256):

0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3

Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Camerfirma Chambers of Commerce Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\156\072\125\244\031\014\031\134\223\204\074\300\333\162\056\061
\060\141\360\261
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\260\001\356\024\331\257\051\030\224\166\216\361\151\063\052\204
END
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "XRamp Global CA Root"
#
# Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US
# Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad
# Subject: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US
# Not Valid Before: Mon Nov 01 17:14:04 2004
# Not Valid After : Mon Jan 01 05:37:19 2035
# Fingerprint (SHA-256):
CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2
# Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "XRamp Global CA Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217
\240\255
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\060\060\202\003\030\240\003\002\001\002\002\020\120
\224\154\354\030\352\325\234\115\325\227\357\165\217\240\255\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\202\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036
\060\034\006\003\125\004\013\023\025\167\167\167\056\170\162\141
\155\160\163\145\143\165\162\151\164\171\056\143\157\155\061\044
\060\042\006\003\125\004\012\023\033\130\122\141\155\160\040\123
\145\143\165\162\151\164\171\040\123\145\162\166\151\143\145\163
\040\111\156\143\061\055\060\053\006\003\125\004\003\023\044\130
\122\141\155\160\040\107\154\157\142\141\154\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\060\036\027\015\060\064\061\061\060\061\061\067\061
\064\060\064\132\027\015\063\065\060\061\060\061\060\065\063\067
\061\071\132\060\201\202\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\036\060\034\006\003\125\004\013\023\025\167\167
```

\167\056\170\162\141\155\160\163\145\143\165\162\151\164\171\056
\143\157\155\061\044\060\042\006\003\125\004\012\023\033\130\122
\141\155\160\040\123\145\143\165\162\151\164\171\040\123\145\162
\166\151\143\145\163\040\111\156\143\061\055\060\053\006\003\125
\004\003\023\044\130\122\141\155\160\040\107\154\157\142\141\154
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\230\044\036\275\025\264\272
\337\307\214\245\047\266\070\013\151\363\266\116\250\054\056\041
\035\134\104\337\041\135\176\043\164\376\136\176\264\112\267\246
\255\037\256\340\006\026\342\233\133\331\147\164\153\135\200\217
\051\235\206\033\331\234\015\230\155\166\020\050\130\344\145\260
\177\112\230\171\237\340\303\061\176\200\053\265\214\300\100\073
\021\206\320\313\242\206\066\140\244\325\060\202\155\331\156\320
\017\022\004\063\227\137\117\141\132\360\344\371\221\253\347\035
\073\274\350\317\364\153\055\064\174\342\110\141\034\216\363\141
\104\314\157\240\112\251\224\260\115\332\347\251\064\172\162\070
\250\101\314\074\224\021\175\353\310\246\214\267\206\313\312\063
\073\331\075\067\213\373\172\076\206\054\347\163\327\012\127\254
\144\233\031\353\364\017\004\010\212\254\003\027\031\144\364\132
\045\042\215\064\054\262\366\150\035\022\155\323\212\036\024\332
\304\217\246\342\043\205\325\172\015\275\152\340\351\354\354\027
\273\102\033\147\252\045\355\105\203\041\374\301\311\174\325\142
\076\372\362\305\055\323\375\324\145\002\003\001\000\001\243\201
\237\060\201\234\060\023\006\011\053\006\001\004\001\202\067\024
\002\004\006\036\004\000\103\000\101\060\013\006\003\125\035\017
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\306\117\242\075\006\143\204\011\234\316\142\344\004\254
\215\134\265\351\266\033\060\066\006\003\125\035\037\004\057\060
\055\060\053\240\051\240\047\206\045\150\164\164\160\072\057\057
\143\162\154\056\170\162\141\155\160\163\145\143\165\162\151\164
\171\056\143\157\155\057\130\107\103\101\056\143\162\154\060\020
\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\001\001\000\221\025\071\003\001\033\147\373\112\034\371\012
\140\133\241\332\115\227\142\371\044\123\047\327\202\144\116\220
\056\303\111\033\053\232\334\374\250\170\147\065\361\035\360\021
\275\267\110\343\020\366\015\337\077\322\311\266\252\125\244\110
\272\002\333\336\131\056\025\133\073\235\026\175\107\327\067\352
\137\115\166\022\066\273\037\327\241\201\004\106\040\243\054\155
\251\236\001\176\077\051\316\000\223\337\375\311\222\163\211\211
\144\236\347\053\344\034\221\054\322\271\316\175\316\157\061\231
\323\346\276\322\036\220\360\011\024\171\134\043\253\115\322\332
\041\037\115\231\171\235\341\317\047\237\020\233\034\210\015\260
\212\144\101\061\270\016\154\220\044\244\233\134\161\217\272\273
\176\034\033\333\152\200\017\041\274\351\333\246\267\100\364\262

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\213\251\261\344\357\232\032\320\075\151\231\356\250\050\243\341
\074\263\360\262\021\234\317\174\100\346\335\347\103\175\242\330
\072\265\251\215\362\064\231\304\324\020\341\006\375\011\204\020
\073\356\304\114\364\354\047\174\102\302\164\174\202\212\011\311
\264\003\045\274
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "XRamp Global CA Root"

Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US

Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad

Subject: CN=XRamp

Global Certification Authority,O=XRamp Security Services Inc,OU=www.xrampsecurity.com,C=US

Not Valid Before: Mon Nov 01 17:14:04 2004

Not Valid After : Mon Jan 01 05:37:19 2035

Fingerprint (SHA-256):

CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2

Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "XRamp Global CA Root"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\001\206\321\353\234\206\245\101\004\317\060\124\363\114\122
\267\345\130\306
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\241\013\104\263\312\020\330\000\156\235\017\330\017\222\012\321
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217
```

```

\240\255
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Go Daddy Class 2 CA"
#
# Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US
# Serial Number: 0 (0x0)
# Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US
# Not Valid Before: Tue Jun 29 17:06:20 2004
# Not Valid After : Thu Jun
29 17:06:20 2034
# Fingerprint (SHA-256):
C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4
# Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Go Daddy Class 2 CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END

```

CKA_VALUE MULTILINE_OCTAL

\060\202\004\000\060\202\002\350\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061\041
\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157\040
\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156\143
\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040\104
\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\060\036\027\015\060\064\060\066\062\071\061\067
\060\066\062\060\132\027\015\063\064\060\066\062\071\061\067\060
\066\062\060\132\060\143\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\041\060\037\006\003\125\004\012\023\030\124\150
\145\040\107\157\040\104\141\144\144\171\040\107\162\157\165\160
\054\040\111\156\143\056\061\061\060\057\006\003\125\004\013\023
\050\107\157\040\104\141\144\144\171\040\103\154\141\163\163\040
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\060\202\001\040\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\015
\000\060\202\001\010\002\202\001\001\000\336\235\327\352\127\030
\111\241\133\353\327\137\110\206\352\276\335\377\344\357\147\034
\364\145\150\263\127\161\240\136\167\273\355\233\111\351\160\200
\075\126\030\143\010\157\332\362\314\320\077\177\002\124\042\124
\020\330\262\201\324\300\165\075\113\177\307\167\303\076\170\253
\032\003\265\040\153\057\152\053\261\305\210\176\304\273\036\260
\301\330\105\047\157\252\067\130\367\207\046\327\330\055\366\251
\027\267\037\162\066\116\246\027\077\145\230\222\333\052\156\135
\242\376\210\340\013\336\177\345\215\025\341\353\313\072\325\342
\022\242\023\055\330\216\257\137\022\075\240\010\005\010\266\134
\245\145\070\004\105\231\036\243\140\140\164\305\101\245\162\142
\033\142\305\037\157\137\032\102\276\002\121\145\250\256\043\030
\152\374\170\003\251\115\177\200\303\372\253\132\374\241\100\244
\312\031\026\376\262\310\357\136\163\015\356\167\275\232\366\171
\230\274\261\007\147\242\025\015\335\240\130\306\104\173\012\076
\142\050\137\272\101\007\123\130\317\021\176\070\164\305\370\377
\265\151\220\217\204\164\352\227\033\257\002\001\003\243\201\300
\060\201\275\060\035\006\003\125\035\016\004\026\004\024\322\304
\260\322\221\324\114\021\161\263\141\313\075\241\376\335\250\152
\324\343\060\201\215\006\003\125\035\043\004\201\205\060\201\202
\200\024\322\304\260\322\221\324\114\021\161\263\141\313\075\241
\376\335\250\152\324\343\241\147\244\145\060\143\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\041\060\037\006\003\125
\004\012\023\030\124\150\145\040\107\157\040\104\141\144\144\171
\040\107\162\157\165\160\054\040\111\156\143\056\061\061\060\057
\006\003\125\004\013\023\050\107\157\040\104\141\144\144\171\040
\103\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202
\001\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377

```
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\001\001\000\062\113\363\262\312\076\221\374\022\306\241\007
\214\216\167\240\063\006\024\134\220\036\030\367\010\246\075\012
\031\371\207\200\021\156\151\344\226\027\060\377\064\221\143\162
\070\356\314\034\001\243\035\224\050\244\061\366\172\304\124\327
\366\345\061\130\003\242\314\316\142\333\224\105\163\265\277\105
\311\044\265\325\202\002\255\043\171\151\215\270\266\115\316\317
\114\312\063\043\350\034\210\252\235\213\101\156\026\311\040\345
\211\236\315\073\332\160\367\176\231\046\040\024\124\045\253\156
\163\205\346\233\041\235\012\154\202\016\250\370\302\014\372\020
\036\154\226\357\207\015\304\017\141\213\255\356\203\053\225\370
\216\222\204\162\071\353\040\352\203\355\203\315\227\156\010\274
\353\116\046\266\163\053\344\323\366\114\376\046\161\342\141\021
\164\112\377\127\032\207\017\165\110\056\317\121\151\027\240\002
\022\141\225\325\321\100\262\020\114\356\304\254\020\103\246\245
\236\012\325\225\142\232\015\317\210\202\305\062\014\344\053\237
\105\346\015\237\050\234\261\271\052\132\127\255\067\017\257\035
\177\333\275\237
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Go Daddy Class 2 CA"

Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

Serial Number: 0 (0x0)

Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

Not Valid Before: Tue

Jun 29 17:06:20 2004

Not Valid After : Thu Jun 29 17:06:20 2034

Fingerprint (SHA-256):

C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4

Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Go Daddy Class 2 CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\047\226\272\346\077\030\001\342\167\046\033\240\327\167\160\002
\217\040\356\344
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\221\336\006\045\253\332\375\062\027\014\273\045\027\052\204\147
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```



```
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\001\000
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Starfield Class 2 CA"

#

Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Serial Number: 0 (0x0)

Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Not Valid Before: Tue Jun 29 17:39:16 2004

Not Valid After : Thu Jun 29 17:39:16 2034

Fingerprint (SHA-256):

14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58

Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE

CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Starfield Class 2 CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
```

\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\017\060\202\002\367\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061\045
\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151\145
\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163\054
\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023\051
\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163\040
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\060\036\027\015\060\064\060
\066\062\071\061\067\063\071\061\066\132\027\015\063\064\060\066
\062\071\061\067\063\071\061\066\132\060\150\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\045\060\043\006\003\125\004
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143
\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061
\062\060\060\006\003\125\004\013\023\051\123\164\141\162\146\151
\145\154\144\040\103\154\141\163\163\040\062\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\060\202\001\040\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\015\000\060\202\001\010\002
\202\001\001\000\267\062\310\376\351\161\246\004\205\255\014\021
\144\337\316\115\357\310\003\030\207\077\241\253\373\074\246\237
\360\303\241\332\324\330\156\053\123\220\373\044\244\076\204\360
\236\350\137\354\345\047\104\365\050\246\077\173\336\340\052\360
\310\257\123\057\236\312\005\001\223\036\217\146\034\071\247\115
\372\132\266\163\004\045\146\353\167\177\347\131\306\112\231\045
\024\124\353\046\307\363\177\031\325\060\160\217\257\260\106\052
\377\255\353\051\355\327\237\252\004\207\243\324\371\211\245\064
\137\333\103\221\202\066\331\146\074\261\270\271\202\375\234\072
\076\020\310\073\357\006\145\146\172\233\031\030\075\377\161\121
\074\060\056\137\276\075\167\163\262\135\006\154\303\043\126\232
\053\205\046\222\034\247\002\263\344\077\015\257\010\171\202\270
\066\075\352\234\323\065\263\274\151\312\365\314\235\350\375\144
\215\027\200\063\156\136\112\135\231\311\036\207\264\235\032\300
\325\156\023\065\043\136\337\233\137\075\357\326\367\166\302\352
\076\273\170\015\034\102\147\153\004\330\370\326\332\157\213\362
\104\240\001\253\002\001\003\243\201\305\060\201\302\060\035\006
\003\125\035\016\004\026\004\024\277\137\267\321\316\335\037\206
\364\133\125\254\334\327\020\302\016\251\210\347\060\201\222\006

\003\125\035\043\004\201\212\060\201\207\200\024\277\137\267\321
\316\335\037\206\364\133\125\254\334\327\020\302\016\251\210\347
\241\154\244\152\060\150\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\045\060\043\006\003\125\004\012\023\034\123\164
\141\162\146\151\145\154\144\040\124\145\143\150\156\157\154\157
\147\151\145\163\054\040\111\156\143\056\061\062\060\060\006\003
\125\004\013\023\051\123\164\141\162\146\151\145\154\144\040\103
\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202\001
\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202
\001\001\000\005\235\077\210\235\321\311\032\125\241\254\151\363
\363\131\332\233\001\207\032\117\127\251\241\171\011\052\333\367
\057\262\036\314\307\136\152\330\203\207\241\227\357\111\065\076
\167\006\101\130\142\277\216\130\270\012\147\077\354\263\335\041
\146\037\311\124\372\162\314\075\114\100\330\201\257\167\236\203
\172\273\242\307\365\064\027\216\331\021\100\364\374\054\052\115
\025\177\247\142\135\056\045\323\000\013\040\032\035\150\371\027
\270\364\275\213\355\050\131\335\115\026\213\027\203\310\262\145
\307\055\172\245\252\274\123\206\155\335\127\244\312\370\040\101
\013\150\360\364\373\164\276\126\135\172\171\365\371\035\205\343
\055\225\276\365\161\220\103\314\215\037\232\000\012\207\051\351
\125\042\130\000\043\352\343\022\103\051\133\107\010\335\214\101
\152\145\006\250\345\041\252\101\264\225\041\225\271\175\321\064
\253\023\326\255\274\334\342\075\071\315\275\076\165\160\241\030
\131\003\311\042\264\217\234\325\136\052\327\245\266\324\012\155
\370\267\100\021\106\232\037\171\016\142\277\017\227\354\340\057
\037\027\224

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Starfield Class 2 CA"

Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Serial Number: 0 (0x0)

Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

Not Valid Before: Tue Jun 29 17:39:16 2004

Not Valid After : Thu Jun 29 17:39:16 2034

Fingerprint (SHA-256):

14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58

#

Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

CKA_LABEL UTF8 "Starfield Class 2 CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\255\176\034\050\260\144\357\217\140\003\100\040\024\303\320\343
\067\016\265\212
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\062\112\113\273\310\143\151\233\276\164\232\306\335\035\106\044
END
CKA_ISSUER MULTILINE_OCTAL
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Assured ID Root CA"
#
# Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39
# Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C
# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT
MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023

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\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360
\060\071

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\003\267\060\202\002\237\240\003\002\001\002\002\020\014
\347\340\345\027\330\106\376\217\345\140\374\033\360\060\071\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157
\157\164\040\103\101\060\036\027\015\060\066\061\061\061\060\060
\060\060\060\060\060\132\027\015\063\061\061\061\061\060\060\060
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145
\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145
\144\040\111\104\040\122\157\157\164\040\103\101\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\255\016\025
\316\344\103\200\134\261\207\363\267\140\371\161\022\245\256\334
\046\224\210\252\364\316\365\040\071\050\130\140\014\370\200\332
\251\025\225\062\141\074\265\261\050\204\212\212\334\237\012\014
\203\027\172\217\220\254\212\347\171\123\134\061\204\052\366\017
\230\062\066\166\314\336\335\074\250\242\357\152\373\041\362\122
\141\337\237\040\327\037\342\261\331\376\030\144\322\022\133\137
\371\130\030\065\274\107\315\241\066\371\153\177\324\260\070\076

\301\033\303\214\063\331\330\057\030\376\050\017\263\247\203\326
\303\156\104\300\141\065\226\026\376\131\234\213\166\155\327\361
\242\113\015\053\377\013\162\332\236\140\320\216\220\065\306\170
\125\207\040\241\317\345\155\012\310\111\174\061\230\063\154\042
\351\207\320\062\132\242\272\023\202\021\355\071\027\235\231\072
\162\241\346\372\244\331\325\027\061\165\256\205\175\042\256\077
\001\106\206\366\050\171\310\261\332\344\127\027\304\176\034\016
\260\264\222\246\126\263\275\262\227\355\252\247\360\267\305\250
\077\225\026\320\377\241\226\353\010\137\030\167\117\002\003\001
\000\001\243\143\060\141\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\105\353\242\257\364\222\313\202\061\055\121\213\247\247
\041\235\363\155\310\017\060\037\006\003\125\035\043\004\030\060
\026\200\024\105\353\242\257\364\222\313\202\061\055\121\213\247
\247\041\235\363\155\310\017\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\003\202\001\001\000\242\016\274\337\342
\355\360\343\162\163\172\144\224\277\367\162\146\330\062\344\102
\165\142\256\207\353\362\325\331\336\126\263\237\314\316\024\050
\271\015\227\140\134\022\114\130\344\323\075\203\111\105\130\227
\065\151\032\250\107\352\126\306\171\253\022\330\147\201\204\337
\177\011\074\224\346\270\046\054\040\275\075\263\050\211\367\137
\377\042\342\227\204\037\351\145\357\207\340\337\301\147\111\263
\135\353\262\011\052\353\046\355\170\276\175\077\053\363\267\046
\065\155\137\211\001\266\111\133\237\001\005\233\253\075\045\301
\314\266\177\302\361\157\206\306\372\144\150\353\201\055\224\353
\102\267\372\214\036\335\142\361\276\120\147\267\154\275\363\361
\037\153\014\066\007\026\177\067\174\251\133\155\172\361\022\106
\140\203\327\047\004\276\113\316\227\276\303\147\052\150\021\337
\200\347\014\063\146\277\023\015\024\156\363\177\037\143\020\036
\372\215\033\045\155\154\217\245\267\141\001\261\322\243\046\241
\020\161\235\255\342\303\371\303\231\121\267\053\007\010\316\056
\346\120\262\247\372\012\105\057\242\360\362

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Assured ID Root CA"

Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39

Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Fri Nov 10 00:00:00 2006

Not Valid After : Mon Nov 10 00:00:00 2031

Fingerprint (SHA-256):

3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C

```

# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\005\143\270\143\015\142\327\132\273\310\253\036\113\337\265\250
\231\262\115\103
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\207\316\013\173\052\016\111\000\341\130\161\233\067\250\223\162
END
CKA_ISSUER
MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360
\060\071
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root CA"
#
# Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a
#
Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61
# Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

```
CKA_LABEL UTF8 "DigiCert Global Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221
\307\112
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\257\060\202\002\227\240\003\002\001\002\002\020\010
\073\340\126\220\102\106\261\241\165\152\311\131\221\307\112\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\103
\101\060\036\027\015\060\066\061\061\061\060\060\060\060\060\060
\060\132\027\015\063\061\061\061\061\060\060\060\060\060\060\060
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103
\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013
\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157
\164\040\103\101\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\342\073\341\021\162\336\250\244\323\243\127
\252\120\242\217\013\167\220\311\242\245\356\022\316\226\133\001
```


\011\040\314\001\223\247\116\060\267\123\367\103\304\151\000\127
\235\342\215\042\335\207\006\100\000\201\011\316\316\033\203\277
\337\315\073\161\106\342\326\146\307\005\263\166\047\026\217\173
\236\036\225\175\356\267\110\243\010\332\326\257\172\014\071\006
\145\177\112\135\037\274\027\370\253\276\356\050\327\164\177\172
\170\231\131\205\150\156\134\043\062\113\277\116\300\350\132\155
\343\160\277\167\020\277\374\001\366\205\331\250\104\020\130\062
\251\165\030\325\321\242\276\107\342\047\152\364\232\063\370\111
\010\140\213\324\137\264\072\204\277\241\252\112\114\175\076\317
\117\137\154\166\136\240\113\067\221\236\334\042\346\155\316\024
\032\216\152\313\376\315\263\024\144\027\307\133\051\236\062\277
\362\356\372\323\013\102\324\253\267\101\062\332\014\324\357\370
\201\325\273\215\130\077\265\033\350\111\050\242\160\332\061\004
\335\367\262\026\362\114\012\116\007\250\355\112\075\136\265\177
\243\220\303\257\047\002\003\001\000\001\243\143\060\141\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\035\006\003\125\035\016\004\026\004\024\003\336\120\065\126\321
\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060\037
\006\003\125\035\043\004\030\060\026\200\024\003\336\120\065\126
\321\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202
\001\001\000\313\234\067\252\110\023\022\012\372\335\104\234\117
\122\260\364\337\256\004\365\171\171\010\243\044\030\374\113\053
\204\300\055\271\325\307\376\364\301\037\130\313\270\155\234\172
\164\347\230\051\253\021\265\343\160\240\241\315\114\210\231\223
\214\221\160\342\253\017\034\276\223\251\377\143\325\344\007\140
\323\243\277\235\133\011\361\325\216\343\123\364\216\143\372\077
\247\333\264\146\337\142\146\326\321\156\101\215\362\055\265\352
\167\112\237\235\130\342\053\131\300\100\043\355\055\050\202\105
\076\171\124\222\046\230\340\200\110\250\067\357\360\326\171\140
\026\336\254\350\016\315\156\254\104\027\070\057\111\332\341\105
\076\052\271\066\123\317\072\120\006\367\056\350\304\127\111\154
\141\041\030\325\004\255\170\074\054\072\200\153\247\353\257\025
\024\351\330\211\301\271\070\154\342\221\154\212\377\144\271\167
\045\127\060\300\033\044\243\341\334\351\337\107\174\265\264\044
\010\005\060\354\055\275\013\277\105\277\120\271\251\363\353\230
\001\022\255\310\210\306\230\064\137\215\012\074\306\351\325\225
\225\155\336

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Global Root CA"

Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a

```

# Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61
#
Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\250\230\135\072\145\345\345\304\262\327\326\155\100\306\335\057
\261\234\124\066
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\171\344\251\204\015\175\072\226\327\300\117\342\103\114\211\056
END
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221
\307\112
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert High Assurance EV Root CA"
#
# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77
# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF

```

Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert High Assurance EV Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106
\045\167
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\305\060\202\002\255\240\003\002\001\002\002\020\002
\254\134\046\152\013\100\233\217\013\171\362\256\106\045\167\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\154
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\053\060\051\006\003\125\004\003\023\042\104\151\147\151\103\145
\162\164\040\110\151\147\150\040\101\163\163\165\162\141\156\143
\145\040\105\126\040\122\157\157\164\040\103\101\060\036\027\015
\060\066\061\061\061\060\060\060\060\060\060\060\132\027\015\063
\061\061\061\061\060\060\060\060\060\060\060\132\060\154\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006
\003\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111
\156\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167
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\056\144\151\147\151\143\145\162\164\056\143\157\155\061\053\060
\051\006\003\125\004\003\023\042\104\151\147\151\103\145\162\164
\040\110\151\147\150\040\101\163\163\165\162\141\156\143\145\040
\105\126\040\122\157\157\164\040\103\101\060\202\001\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001
\017\000\060\202\001\012\002\202\001\001\000\306\314\345\163\346
\373\324\273\345\055\055\062\246\337\345\201\077\311\315\045\111
\266\161\052\303\325\224\064\147\242\012\034\260\137\151\246\100
\261\304\267\262\217\320\230\244\251\101\131\072\323\334\224\326
\074\333\164\070\244\112\314\115\045\202\367\112\245\123\022\070
\356\363\111\155\161\221\176\143\266\253\246\137\303\244\204\370
\117\142\121\276\370\305\354\333\070\222\343\006\345\010\221\014
\304\050\101\125\373\313\132\211\025\176\161\350\065\277\115\162
\011\075\276\072\070\120\133\167\061\033\215\263\307\044\105\232
\247\254\155\000\024\132\004\267\272\023\353\121\012\230\101\101
\042\116\145\141\207\201\101\120\246\171\134\211\336\031\112\127
\325\056\346\135\034\123\054\176\230\315\032\006\026\244\150\163
\320\064\004\023\134\241\161\323\132\174\125\333\136\144\341\067
\207\060\126\004\345\021\264\051\200\022\361\171\071\210\242\002
\021\174\047\146\267\210\267\170\362\312\012\250\070\253\012\144
\302\277\146\135\225\204\301\241\045\036\207\135\032\120\013\040
\022\314\101\273\156\013\121\070\270\113\313\002\003\001\000\001
\243\143\060\141\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024
\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002\357
\143\144\053\303\060\037\006\003\125\035\043\004\030\060\026\200
\024\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002
\357\143\144\053\303\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\003\202\001\001\000\034\032\006\227\334\327\234
\237\074\210\146\006\010\127\041\333\041\107\370\052\147\252\277
\030\062\166\100\020\127\301\212\363\172\331\021\145\216\065\372
\236\374\105\265\236\331\114\061\113\270\221\350\103\054\216\263
\170\316\333\343\123\171\161\326\345\041\224\001\332\125\207\232
\044\144\366\212\146\314\336\234\067\315\250\064\261\151\233\043
\310\236\170\042\053\160\103\343\125\107\061\141\031\357\130\305
\205\057\116\060\366\240\061\026\043\310\347\342\145\026\063\313
\277\032\033\240\075\370\312\136\213\061\213\140\010\211\055\014
\006\134\122\267\304\371\012\230\321\025\137\237\022\276\174\066
\143\070\275\104\244\177\344\046\053\012\304\227\151\015\351\214
\342\300\020\127\270\310\166\022\221\125\362\110\151\330\274\052
\002\133\017\104\324\040\061\333\364\272\160\046\135\220\140\236
\274\113\027\011\057\264\313\036\103\150\311\007\047\301\322\134
\367\352\041\271\150\022\234\074\234\277\236\374\200\134\233\143
\315\354\107\252\045\047\147\240\067\363\000\202\175\124\327\251
\370\351\056\023\243\167\350\037\112

END

CKA_NSS_MOZILLA_CA_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert High Assurance EV Root CA"
# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77
# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF
# Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert High Assurance EV Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\137\267\356\006\063\342\131\333\255\014\114\232\346\323\217\032
\141\307\334\045
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\324\164\336\127\134\071\262\323\234\205\203\305\300\145\111\212
END
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106
\045\167
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Gold CA - G2"
#

```

```
# Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Serial Number:00:bb:40:1c:43:f5:5e:4f:b0
# Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:30:35 2006
# Not Valid After : Sat Oct 25 08:30:35 2036
# Fingerprint (SHA-256):
62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95
# Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Gold CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\272\060\202\003\242\240\003\002\001\002\002\011\000
\273\100\034\103\365\136\117\260\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\105\061\013\060\011\006\003\125
\004\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023
\014\123\167\151\163\163\123\151\147\156\040\101\107\061\037\060
\035\006\003\125\004\003\023\026\123\167\151\163\163\123\151\147
\156\040\107\157\154\144\040\103\101\040\055\040\107\062\060\036
\027\015\060\066\061\060\062\065\060\070\063\060\063\065\132\027
\015\063\066\061\060\062\065\060\070\063\060\063\065\132\060\105
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025\060
\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151\147
\156\040\101\107\061\037\060\035\006\003\125\004\003\023\026\123
\167\151\163\163\123\151\147\156\040\107\157\154\144\040\103\101
\040\055\040\107\062\060\202\002\042\060\015\006\011\052\206\110
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\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002
\012\002\202\002\001\000\257\344\356\176\213\044\016\022\156\251
\120\055\026\104\073\222\222\134\312\270\135\204\222\102\023\052
\274\145\127\202\100\076\127\044\315\120\213\045\052\267\157\374
\357\242\320\300\037\002\044\112\023\226\217\043\023\346\050\130
\000\243\107\307\006\247\204\043\053\273\275\226\053\177\125\314
\213\301\127\037\016\142\145\017\335\075\126\212\163\332\256\176
\155\272\201\034\176\102\214\040\065\331\103\115\204\372\204\333
\122\054\363\016\047\167\013\153\277\021\057\162\170\237\056\330
\076\346\030\067\132\052\162\371\332\142\220\222\225\312\037\234
\351\263\074\053\313\363\001\023\277\132\317\301\265\012\140\275
\335\265\231\144\123\270\240\226\263\157\342\046\167\221\214\340
\142\020\002\237\064\017\244\325\222\063\121\336\276\215\272\204
\172\140\074\152\333\237\053\354\336\336\001\077\156\115\345\120
\206\313\264\257\355\104\100\305\312\132\214\332\322\053\174\250
\356\276\246\345\012\252\016\245\337\005\122\267\125\307\042\135
\062\152\227\227\143\023\333\311\333\171\066\173\205\072\112\305
\122\211\371\044\347\235\167\251\202\377\125\034\245\161\151\053
\321\002\044\362\263\046\324\153\332\004\125\345\301\012\307\155
\060\067\220\052\344\236\024\063\136\026\027\125\305\133\265\313
\064\211\222\361\235\046\217\241\007\324\306\262\170\120\333\014
\014\013\174\013\214\101\327\271\351\335\214\210\367\243\115\262
\062\314\330\027\332\315\267\316\146\235\324\375\136\377\275\227
\076\051\165\347\176\247\142\130\257\045\064\245\101\307\075\274
\015\120\312\003\003\017\010\132\037\225\163\170\142\277\257\162
\024\151\016\245\345\003\016\170\216\046\050\102\360\007\013\142
\040\020\147\071\106\372\251\003\314\004\070\172\146\357\040\203
\265\214\112\126\216\221\000\374\216\134\202\336\210\240\303\342
\150\156\175\215\357\074\335\145\364\135\254\121\357\044\200\256
\252\126\227\157\371\255\175\332\141\077\230\167\074\245\221\266
\034\214\046\332\145\242\011\155\301\342\124\343\271\312\114\114
\200\217\167\173\140\232\036\337\266\362\110\036\016\272\116\124
\155\230\340\341\242\032\242\167\120\317\304\143\222\354\107\031
\235\353\346\153\316\301\002\003\001\000\001\243\201\254\060\201
\251\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\035\006\003\125\035\016\004\026\004\024\133\045\173
\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347\360
\356\060\037\006\003\125\035\043\004\030\060\026\200\024\133\045
\173\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347
\360\356\060\106\006\003\125\035\040\004\077\060\075\060\073\006
\011\140\205\164\001\131\001\002\001\001\060\056\060\054\006\010
\053\006\001\005\005\007\002\001\026\040\150\164\164\160\072\057
\057\162\145\160\157\163\151\164\157\162\171\056\163\167\151\163
\163\163\151\147\156\056\143\157\155\057\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\047\272
\343\224\174\361\256\300\336\027\346\345\330\325\365\124\260\203
\364\273\315\136\005\173\117\237\165\146\257\074\350\126\176\374

\162\170\070\003\331\053\142\033\000\271\370\351\140\315\314\316
\121\212\307\120\061\156\341\112\176\030\057\151\131\266\075\144
\201\053\343\203\204\346\042\207\216\175\340\356\002\231\141\270
\036\364\270\053\210\022\026\204\302\061\223\070\226\061\246\271
\073\123\077\303\044\223\126\133\151\222\354\305\301\273\070\000
\343\354\027\251\270\334\307\174\001\203\237\062\107\272\122\042
\064\035\062\172\011\126\247\174\045\066\251\075\113\332\300\202
\157\012\273\022\310\207\113\047\021\371\036\055\307\223\077\236
\333\137\046\153\122\331\056\212\361\024\306\104\215\025\251\267
\277\275\336\246\032\356\256\055\373\110\167\027\376\273\354\257
\030\365\052\121\360\071\204\227\225\154\156\033\303\053\304\164
\140\171\045\260\012\047\337\337\136\322\071\317\105\175\102\113
\337\263\054\036\305\306\135\312\125\072\240\234\151\232\217\332
\357\262\260\074\237\207\154\022\053\145\160\025\122\061\032\044
\317\157\061\043\120\037\214\117\217\043\303\164\101\143\034\125
\250\024\335\076\340\121\120\317\361\033\060\126\016\222\260\202
\205\330\203\313\042\144\274\055\270\045\325\124\242\270\006\352
\255\222\244\044\240\301\206\265\112\023\152\107\317\056\013\126
\225\124\313\316\232\333\152\264\246\262\333\101\010\206\047\167
\367\152\240\102\154\013\070\316\327\165\120\062\222\302\337\053
\060\042\110\320\325\101\070\045\135\244\351\135\237\306\224\165
\320\105\375\060\227\103\217\220\253\012\307\206\163\140\112\151
\055\336\245\170\327\006\332\152\236\113\076\167\072\040\023\042
\001\320\277\150\236\143\140\153\065\115\013\155\272\241\075\300
\223\340\177\043\263\125\255\162\045\116\106\371\322\026\357\260
\144\301\001\236\351\312\240\152\230\016\317\330\140\362\057\111
\270\344\102\341\070\065\026\364\310\156\117\367\201\126\350\272
\243\276\043\257\256\375\157\003\340\002\073\060\166\372\033\155
\101\317\001\261\351\270\311\146\364\333\046\363\072\244\164\362
\111\044\133\311\260\320\127\301\372\076\172\341\227\311

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SwissSign Gold CA - G2"

Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

Serial Number:00:bb:40:1c:43:f5:5e:4f:b0

Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

Not Valid Before: Wed Oct 25 08:30:35 2006

Not Valid

After : Sat Oct 25 08:30:35 2036

Fingerprint (SHA-256):

62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95

Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE


```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Gold CA - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\330\305\070\212\267\060\033\033\156\324\172\346\105\045\072\157
\237\032\047\141
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\044\167\331\250\221\321\073\372\210\055\302\377\370\315\063\223
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Silver CA - G2"
#
# Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Serial Number:4f:1b:d4:2f:54:bb:2f:4b
# Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:32:46 2006
# Not Valid After : Sat Oct 25 08:32:46 2036
# Fingerprint (SHA-256):
BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5
# Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Silver CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145

```

```
\162\040\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\117\033\324\057\124\273\057\113
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\275\060\202\003\245\240\003\002\001\002\002\010\117
\033\324\057\124\273\057\113\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\107\061\013\060\011\006\003\125\004
\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023\014
\123\167\151\163\163\123\151\147\156\040\101\107\061\041\060\037
\006\003\125\004\003\023\030\123\167\151\163\163\123\151\147\156
\040\123\151\154\166\145\162\040\103\101\040\055\040\107\062\060
\036\027\015\060\066\061\060\062\065\060\070\063\062\064\066\132
\027\015\063\066\061\060\062\065\060\070\063\062\064\066\132\060
\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025
\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151
\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023\030
\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145\162
\040\103\101\040\055\040\107\062\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\304\361\207\177\323\170\061
\367\070\311\370\303\231\103\274\307\367\274\067\347\116\161\272
\113\217\245\163\035\134\156\230\256\003\127\256\070\067\103\057
\027\075\037\310\316\150\020\301\170\256\031\003\053\020\372\054
\171\203\366\350\271\150\271\125\362\004\104\247\071\371\374\004
\213\036\361\242\115\047\371\141\173\272\267\345\242\023\266\353
\141\076\320\154\321\346\373\372\136\355\035\264\236\240\065\133
\241\222\313\360\111\222\376\205\012\005\076\346\331\013\342\117
\273\334\225\067\374\221\351\062\065\042\321\037\072\116\047\205
\235\260\025\224\062\332\141\015\107\115\140\102\256\222\107\350
\203\132\120\130\351\212\213\271\135\241\334\335\231\112\037\066
\147\273\110\344\203\266\067\353\110\072\257\017\147\217\027\007
\350\004\312\357\152\061\207\324\300\266\371\224\161\173\147\144
\270\266\221\112\102\173\145\056\060\152\014\365\220\356\225\346
\362\315\202\354\331\241\112\354\366\262\113\345\105\205\346\155
\170\223\004\056\234\202\155\066\251\304\061\144\037\206\203\013
\052\364\065\012\170\311\125\317\101\260\107\351\060\237\231\276
\141\250\006\204\271\050\172\137\070\331\033\251\070\260\203\177
```

\163\301\303\073\110\052\202\017\041\233\270\314\250\065\303\204
\033\203\263\076\276\244\225\151\001\072\211\000\170\004\331\311
\364\231\031\253\126\176\133\213\206\071\025\221\244\020\054\011
\062\200\140\263\223\300\052\266\030\013\235\176\215\111\362\020
\112\177\371\325\106\057\031\222\243\231\247\046\254\273\214\074
\346\016\274\107\007\334\163\121\361\160\144\057\010\371\264\107
\035\060\154\104\352\051\067\205\222\150\146\274\203\070\376\173
\071\056\323\120\360\037\373\136\140\266\251\246\372\047\101\361
\233\030\162\362\365\204\164\112\311\147\304\124\256\110\144\337
\214\321\156\260\035\341\007\217\010\036\231\234\161\351\114\330
\245\367\107\022\037\164\321\121\236\206\363\302\242\043\100\013
\163\333\113\246\347\163\006\214\301\240\351\301\131\254\106\372
\346\057\370\317\161\234\106\155\271\304\025\215\070\171\003\105
\110\357\304\135\327\010\356\207\071\042\206\262\015\017\130\103
\367\161\251\110\056\375\352\326\037\002\003\001\000\001\243\201
\254\060\201\251\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024
\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034\302
\230\372\206\130\060\037\006\003\125\035\043\004\030\060\026\200
\024\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034
\302\230\372\206\130\060\106\006\003\125\035\040\004\077\060\075
\060\073\006\011\140\205\164\001\131\001\003\001\001\060\056\060
\054\006\010\053\006\001\005\005\007\002\001\026\040\150\164\164
\160\072\057\057\162\145\160\157\163\151\164\157\162\171\056\163
\167\151\163\163\163\151\147\156\056\143\157\155\057\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\002\001
\000\163\306\201\340\047\322\055\017\340\225\060\342\232\101\177
\120\054\137\137\142\141\251\206\152\151\030\014\164\111\326\135
\204\352\101\122\030\157\130\255\120\126\040\152\306\275\050\151
\130\221\334\221\021\065\251\072\035\274\032\245\140\236\330\037
\177\105\221\151\331\176\273\170\162\301\006\017\052\316\217\205
\160\141\254\240\315\013\270\071\051\126\204\062\116\206\273\075
\304\052\331\327\037\162\356\376\121\241\042\101\261\161\002\143
\032\202\260\142\253\136\127\022\037\337\313\335\165\240\300\135
\171\220\214\033\340\120\346\336\061\376\230\173\160\137\245\220
\330\255\370\002\266\157\323\140\335\100\113\042\305\075\255\072
\172\237\032\032\107\221\171\063\272\202\334\062\151\003\226\156
\037\113\360\161\376\343\147\162\240\261\277\134\213\344\372\231
\042\307\204\271\033\215\043\227\077\355\045\340\317\145\273\365
\141\004\357\335\036\262\132\101\042\132\241\237\135\054\350\133
\311\155\251\014\014\170\252\140\306\126\217\001\132\014\150\274
\151\031\171\304\037\176\227\005\277\305\351\044\121\136\324\325
\113\123\355\331\043\132\066\003\145\243\301\003\255\101\060\363
\106\033\205\220\257\145\265\325\261\344\026\133\170\165\035\227
\172\155\131\251\052\217\173\336\303\207\211\020\231\111\163\170
\310\075\275\121\065\164\052\325\361\176\151\033\052\273\073\275
\045\270\232\132\075\162\141\220\146\207\356\014\326\115\324\021

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\164\013\152\376\013\003\374\243\125\127\211\376\112\313\256\133
\027\005\310\362\215\043\061\123\070\322\055\152\077\202\271\215
\010\152\367\136\101\164\156\303\021\176\007\254\051\140\221\077
\070\312\127\020\015\275\060\057\307\245\346\101\240\332\256\005
\207\232\240\244\145\154\114\011\014\211\272\270\323\271\300\223
\212\060\372\215\345\232\153\025\001\116\147\252\332\142\126\076
\204\010\146\322\304\066\175\247\076\020\374\210\340\324\200\345
\000\275\252\363\116\006\243\172\152\371\142\162\343\011\117\353
\233\016\001\043\361\237\273\174\334\334\154\021\227\045\262\362
\264\143\024\322\006\052\147\214\203\365\316\352\007\330\232\152
\036\354\344\012\273\052\114\353\011\140\071\316\312\142\330\056
\156
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SwissSign Silver CA - G2"

Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH

Serial Number:4f:1b:d4:2f:54:bb:2f:4b

#

Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH

Not Valid Before: Wed Oct 25 08:32:46 2006

Not Valid After : Sat Oct 25 08:32:46 2036

Fingerprint (SHA-256):

BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5

Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SwissSign Silver CA - G2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\233\252\345\237\126\356\041\313\103\132\276\045\223\337\247\360
\100\321\035\313
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\340\006\241\311\175\317\311\374\015\300\126\165\226\330\142\023
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\010\117\033\324\057\124\273\057\113
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureTrust CA"
#
# Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0
# Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:31:18 2006
# Not Valid After : Mon Dec 31 19:40:55 2029
# Fingerprint (SHA-256):
F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73
# Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureTrust CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030
\131\320
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\270\060\202\002\240\240\003\002\001\002\002\020\014
\360\216\134\010\026\245\255\102\177\360\353\047\030\131\320\060

```

\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\110
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\027\060\025\006\003\125\004\003\023\016\123\145\143\165\162\145
\124\162\165\163\164\040\103\101\060\036\027\015\060\066\061\061
\060\067\061\071\063\061\061\070\132\027\015\062\071\061\062\063
\061\061\071\064\060\065\065\132\060\110\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\040\060\036\006\003\125\004\012
\023\027\123\145\143\165\162\145\124\162\165\163\164\040\103\157
\162\160\157\162\141\164\151\157\156\061\027\060\025\006\003\125
\004\003\023\016\123\145\143\165\162\145\124\162\165\163\164\040
\103\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\253\244\201\345\225\315\365\366\024\216\302\117\312
\324\342\170\225\130\234\101\341\015\231\100\044\027\071\221\063
\146\351\276\341\203\257\142\134\211\321\374\044\133\141\263\340
\021\021\101\034\035\156\360\270\273\370\336\247\201\272\246\110
\306\237\035\275\276\216\251\101\076\270\224\355\051\032\324\216
\322\003\035\003\357\155\015\147\034\127\327\006\255\312\310\365
\376\016\257\146\045\110\004\226\013\135\243\272\026\303\010\117
\321\106\370\024\134\362\310\136\001\231\155\375\210\314\206\250
\301\157\061\102\154\122\076\150\313\363\031\064\337\273\207\030
\126\200\046\304\320\334\300\157\337\336\240\302\221\026\240\144
\021\113\104\274\036\366\347\372\143\336\146\254\166\244\161\243
\354\066\224\150\172\167\244\261\347\016\057\201\172\342\265\162
\206\357\242\153\213\360\017\333\323\131\077\272\162\274\104\044
\234\343\163\263\367\257\127\057\102\046\235\251\164\272\000\122
\362\113\315\123\174\107\013\066\205\016\146\251\010\227\026\064
\127\301\146\367\200\343\355\160\124\307\223\340\056\050\025\131
\207\272\273\002\003\001\000\001\243\201\235\060\201\232\060\023
\006\011\053\006\001\004\001\202\067\024\002\004\006\036\004\000
\103\000\101\060\013\006\003\125\035\017\004\004\003\002\001\206
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\102\062\266\026
\372\004\375\376\135\113\172\303\375\367\114\100\035\132\103\257
\060\064\006\003\125\035\037\004\055\060\053\060\051\240\047\240
\045\206\043\150\164\164\160\072\057\057\143\162\154\056\163\145
\143\165\162\145\164\162\165\163\164\056\143\157\155\057\123\124
\103\101\056\143\162\154\060\020\006\011\053\006\001\004\001\202
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\001\001\000\060\355\117\112
\341\130\072\122\162\133\265\246\243\145\030\246\273\121\073\167
\351\235\352\323\237\134\340\105\145\173\015\312\133\342\160\120
\262\224\005\024\256\111\307\215\101\007\022\163\224\176\014\043
\041\375\274\020\177\140\020\132\162\365\230\016\254\354\271\177
\335\172\157\135\323\034\364\377\210\005\151\102\251\005\161\310
\267\254\046\350\056\264\214\152\377\161\334\270\261\337\231\274

```
\174\041\124\053\344\130\242\273\127\051\256\236\251\243\031\046
\017\231\056\010\260\357\375\151\317\231\032\011\215\343\247\237
\053\311\066\064\173\044\263\170\114\225\027\244\006\046\036\266
\144\122\066\137\140\147\331\234\305\005\164\013\347\147\043\322
\010\374\210\351\256\213\177\341\060\364\067\176\375\306\062\332
\055\236\104\060\060\154\356\007\336\322\064\374\322\377\100\366
\113\364\146\106\006\124\246\362\062\012\143\046\060\153\233\321
\334\213\107\272\341\271\325\142\320\242\240\364\147\005\170\051
\143\032\157\004\326\370\306\114\243\232\261\067\264\215\345\050
\113\035\236\054\302\270\150\274\355\002\356\061
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SecureTrust CA"

#

Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US

Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0

Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US

Not Valid Before: Tue Nov 07 19:31:18 2006

Not Valid After : Mon Dec 31 19:40:55 2029

Fingerprint (SHA-256):

F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73

Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SecureTrust CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\207\202\306\303\004\065\073\317\322\226\222\322\131\076\175\104
\331\064\377\021
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\334\062\303\247\155\045\127\307\150\011\235\352\055\251\242\321
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030
```

```

\131\320
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Secure Global CA"
#
# Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5
# Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:42:28 2006
# Not Valid After : Mon Dec 31 19:52:06 2029
# Fingerprint (SHA-256):
42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69
# Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Secure Global CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370
\352\245
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\003\274\060\202\002\244\240\003\002\001\002\002\020\007
\126\042\244\350\324\212\211\115\364\023\310\360\370\352\245\060

```


\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\112
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\031\060\027\006\003\125\004\003\023\020\123\145\143\165\162\145
\040\107\154\157\142\141\154\040\103\101\060\036\027\015\060\066
\061\061\060\067\061\071\064\062\062\070\132\027\015\062\071\061
\062\063\061\061\071\065\062\060\066\132\060\112\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\040\060\036\006\003\125
\004\012\023\027\123\145\143\165\162\145\124\162\165\163\164\040
\103\157\162\160\157\162\141\164\151\157\156\061\031\060\027\006
\003\125\004\003\023\020\123\145\143\165\162\145\040\107\154\157
\142\141\154\040\103\101\060\202\001\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202
\001\012\002\202\001\001\000\257\065\056\330\254\154\125\151\006
\161\345\023\150\044\263\117\330\314\041\107\370\361\140\070\211
\211\003\351\275\352\136\106\123\011\334\134\365\132\350\367\105
\052\002\353\061\141\327\051\063\114\316\307\174\012\067\176\017
\272\062\230\341\035\227\257\217\307\334\311\070\226\363\333\032
\374\121\355\150\306\320\156\244\174\044\321\256\102\310\226\120
\143\056\340\376\165\376\230\247\137\111\056\225\343\071\063\144
\216\036\244\137\220\322\147\074\262\331\376\101\271\125\247\011
\216\162\005\036\213\335\104\205\202\102\320\111\300\035\140\360
\321\027\054\225\353\366\245\301\222\243\305\302\247\010\140\015
\140\004\020\226\171\236\026\064\346\251\266\372\045\105\071\310
\036\145\371\223\365\252\361\122\334\231\230\075\245\206\032\014
\065\063\372\113\245\004\006\025\034\061\200\357\252\030\153\302
\173\327\332\316\371\063\040\325\365\275\152\063\055\201\004\373
\260\134\324\234\243\342\134\035\343\251\102\165\136\173\324\167
\357\071\124\272\311\012\030\033\022\231\111\057\210\113\375\120
\142\321\163\347\217\172\103\002\003\001\000\001\243\201\235\060
\201\232\060\023\006\011\053\006\001\004\001\202\067\024\002\004
\006\036\004\000\103\000\101\060\013\006\003\125\035\017\004\004
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024
\257\104\004\302\101\176\110\203\333\116\071\002\354\354\204\172
\346\316\311\244\060\064\006\003\125\035\037\004\055\060\053\060
\051\240\047\240\045\206\043\150\164\164\160\072\057\057\143\162
\154\056\163\145\143\165\162\145\164\162\165\163\164\056\143\157
\155\057\123\107\103\101\056\143\162\154\060\020\006\011\053\006
\001\004\001\202\067\025\001\004\003\002\001\000\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
\143\032\010\100\175\244\136\123\015\167\330\172\256\037\015\013
\121\026\003\357\030\174\310\343\257\152\130\223\024\140\221\262
\204\334\210\116\276\071\212\072\363\346\202\211\135\001\067\263
\253\044\244\025\016\222\065\132\112\104\136\116\127\372\165\316
\037\110\316\146\364\074\100\046\222\230\154\033\356\044\106\014
\027\263\122\245\333\245\221\221\317\067\323\157\347\047\010\072

```
\116\031\037\072\247\130\134\027\317\171\077\213\344\247\323\046
\043\235\046\017\130\151\374\107\176\262\320\215\213\223\277\051
\117\103\151\164\166\147\113\317\007\214\346\002\367\265\341\264
\103\265\113\055\024\237\371\334\046\015\277\246\107\164\006\330
\210\321\072\051\060\204\316\322\071\200\142\033\250\307\127\111
\274\152\125\121\147\025\112\276\065\007\344\325\165\230\067\171
\060\024\333\051\235\154\305\151\314\107\125\242\060\367\314\134
\177\302\303\230\034\153\116\026\200\353\172\170\145\105\242\000
\032\257\014\015\125\144\064\110\270\222\271\361\264\120\051\362
\117\043\037\332\154\254\037\104\341\335\043\170\121\133\307\026
END
```

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Secure Global CA"

Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US

Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5

Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US

Not Valid Before: Tue Nov 07 19:42:28 2006

Not Valid After : Mon Dec 31 19:52:06 2029

Fingerprint (SHA-256):

42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69

Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Secure Global CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\072\104\163\132\345\201\220\037\044\206\141\106\036\073\234\304
\137\365\072\033
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\317\364\047\015\324\355\334\145\026\111\155\075\332\277\156\336
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370
\352\245
```

```

END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO Certification Authority"
#
# Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d
# Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Fri Dec 01 00:00:00 2006
# Not Valid After : Mon Dec 31 23:59:59 2029
# Fingerprint (SHA-256):
0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66
# Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171

```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106
\345\075

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\035\060\202\003\005\240\003\002\001\002\002\020\116
\201\055\212\202\145\340\013\002\356\076\065\002\106\345\075\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\201\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033
\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103
\101\040\114\151\155\151\164\145\144\061\047\060\045\006\003\125
\004\003\023\036\103\117\115\117\104\117\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\060\036\027\015\060\066\061\062\060\061\060\060\060\060
\060\060\132\027\015\062\071\061\062\063\061\062\063\065\071\065
\071\132\060\201\201\061\013\060\011\006\003\125\004\006\023\002
\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162\145
\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162\061
\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157\162
\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115\117
\104\117\040\103\101\040\114\151\155\151\164\145\144\061\047\060
\045\006\003\125\004\003\023\036\103\117\115\117\104\117\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\060\202\001\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202
\001\012\002\202\001\001\000\320\100\213\213\162\343\221\033\367
\121\301\033\124\004\230\323\251\277\301\346\212\135\073\207\373
\273\210\316\015\343\057\077\006\226\360\242\051\120\231\256\333
\073\241\127\260\164\121\161\315\355\102\221\115\101\376\251\310
\330\152\206\167\104\273\131\146\227\120\136\264\324\054\160\104
\317\332\067\225\102\151\074\060\304\161\263\122\360\041\115\241
\330\272\071\174\034\236\243\044\235\362\203\026\230\252\026\174
\103\233\025\133\267\256\064\221\376\324\142\046\030\106\232\077
\353\301\371\361\220\127\353\254\172\015\213\333\162\060\152\146
\325\340\106\243\160\334\150\331\377\004\110\211\167\336\265\351
\373\147\155\101\351\274\071\275\062\331\142\002\361\261\250\075
\156\067\234\342\057\342\323\242\046\213\306\270\125\103\210\341
\043\076\245\322\044\071\152\107\253\000\324\241\263\251\045\376
\015\077\247\035\272\323\121\301\013\244\332\254\070\357\125\120
\044\005\145\106\223\064\117\055\215\255\306\324\041\031\322\216
\312\005\141\161\007\163\107\345\212\031\022\275\004\115\316\116
\234\245\110\254\273\046\367\002\003\001\000\001\243\201\216\060
\201\213\060\035\006\003\125\035\016\004\026\004\024\013\130\345
\213\306\114\025\067\244\100\251\060\251\041\276\107\066\132\126

\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\111\006\003\125\035\037\004\102\060\100\060\076\240
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056
\143\157\155\157\144\157\143\141\056\143\157\155\057\103\117\115
\117\104\117\103\145\162\164\151\146\151\143\141\164\151\157\156
\101\165\164\150\157\162\151\164\171\056\143\162\154\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001
\000\076\230\236\233\366\033\351\327\071\267\170\256\035\162\030
\111\323\207\344\103\202\353\077\311\252\365\250\265\357\125\174
\041\122\145\371\325\015\341\154\364\076\214\223\163\221\056\002
\304\116\007\161\157\300\217\070\141\010\250\036\201\012\300\057
\040\057\101\213\221\334\110\105\274\361\306\336\272\166\153\063
\310\000\055\061\106\114\355\347\235\317\210\224\377\063\300\126
\350\044\206\046\270\330\070\070\337\052\153\335\022\314\307\077
\107\027\114\242\302\006\226\011\326\333\376\077\074\106\101\337
\130\342\126\017\074\073\301\034\223\065\331\070\122\254\356\310
\354\056\060\116\224\065\264\044\037\113\170\151\332\362\002\070
\314\225\122\223\360\160\045\131\234\040\147\304\356\371\213\127
\141\364\222\166\175\077\204\215\125\267\350\345\254\325\361\365
\031\126\246\132\373\220\034\257\223\353\345\034\324\147\227\135
\004\016\276\013\203\246\027\203\271\060\022\240\305\063\025\005
\271\015\373\307\005\166\343\330\112\215\374\064\027\243\306\041
\050\276\060\105\061\036\307\170\276\130\141\070\254\073\342\001
\145

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "COMODO Certification Authority"

Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d

Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Fri Dec 01 00:00:00 2006

Not Valid After : Mon Dec 31 23:59:59 2029

Fingerprint (SHA-256):

0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66

Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "COMODO Certification Authority"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\146\061\277\236\367\117\236\266\311\325\246\014\272\152\276\321
\367\275\357\173
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\134\110\334\367\102\162\354\126\224\155\034\314\161\065\200\165
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106
\345\075
END
CKA_TRUST_SERVER_AUTH CK_TRUST
CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO ECC Certification Authority"
#
# Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number: 1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a
# Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Thu Mar 06 00:00:00 2008
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7
# Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO ECC Certification Authority"
CKA_CERTIFICATE_TYPE

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CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143
\231\052

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\211\060\202\002\017\240\003\002\001\002\002\020\037
\107\257\252\142\000\160\120\124\114\001\236\233\143\231\052\060
\012\006\010\052\206\110\316\075\004\003\003\060\201\205\061\013
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006
\003\125\004\010\023\022\107\162\145\141\164\145\162\040\115\141
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004
\007\023\007\123\141\154\146\157\162\144\061\032\060\030\006\003
\125\004\012\023\021\103\117\115\117\104\117\040\103\101\040\114
\151\155\151\164\145\144\061\053\060\051\006\003\125\004\003\023
\042\103\117\115\117\104\117\040\105\103\103\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\060\036\027\015\060\070\060\061\061\070\062\063\065\071
\060\060\060\132\027\015\063\070\060\061\061\070\062\063\065\071
\065\071\132\060\201\205\061\013\060\011\006\003\125\004\006\023
\002\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162
\145\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162
\061\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157
\162\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115

\117\104\117\040\103\101\040\114\151\155\151\164\145\144\061\053
\060\051\006\003\125\004\003\023\042\103\117\115\117\104\117\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\166\060\020\006
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003
\142\000\004\003\107\173\057\165\311\202\025\205\373\165\344\221
\026\324\253\142\231\365\076\122\013\006\316\101\000\177\227\341
\012\044\074\035\001\004\356\075\322\215\011\227\014\340\165\344
\372\373\167\212\052\365\003\140\113\066\213\026\043\026\255\011
\161\364\112\364\050\120\264\376\210\034\156\077\154\057\057\011
\131\133\245\133\013\063\231\342\303\075\211\371\152\054\357\262
\323\006\351\243\102\060\100\060\035\006\003\125\035\016\004\026
\004\024\165\161\247\031\110\031\274\235\235\352\101\107\337\224
\304\110\167\231\323\171\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\061\000\357\003\133\172\254
\267\170\012\162\267\210\337\377\265\106\024\011\012\372\240\346
\175\010\306\032\207\275\030\250\163\275\046\312\140\014\235\316
\231\237\317\134\017\060\341\276\024\061\352\002\060\024\364\223
\074\111\247\063\172\220\106\107\263\143\175\023\233\116\267\157
\030\067\200\123\376\335\040\340\065\232\066\321\307\001\271\346
\334\335\363\377\035\054\072\026\127\331\222\071\326

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "COMODO ECC Certification Authority"

Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number:1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a

Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Thu Mar 06 00:00:00 2008

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7

Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "COMODO ECC Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE OCTAL

\237\164\116\237\053\115\272\354\017\061\054\120\266\126\073\216

\055\223\303\021


```

END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\174\142\377\164\235\061\123\136\150\112\325\170\252\036\277\043
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143
\231\052
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "OISTE WISeKey Global Root GA CA"
#
# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a
# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Not Valid Before: Sun Dec 11 16:03:44 2005
# Not Valid After : Fri Dec 11 16:09:51 2037
# Fingerprint (SHA-256):
41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5
# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GA CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113

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\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124
\337\232

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\361\060\202\002\331\240\003\002\001\002\002\020\101
\075\162\307\364\153\037\201\103\175\361\322\050\124\337\232\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\212\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020
\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171
\061\033\060\031\006\003\125\004\013\023\022\103\157\160\171\162
\151\147\150\164\040\050\143\051\040\062\060\060\065\061\042\060
\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157
\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145
\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124
\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154
\040\122\157\157\164\040\107\101\040\103\101\060\036\027\015\060
\065\061\062\061\061\061\066\060\063\064\064\132\027\015\063\067
\061\062\061\061\061\066\060\071\065\061\132\060\201\212\061\013
\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006
\003\125\004\012\023\007\127\111\123\145\113\145\171\061\033\060
\031\006\003\125\004\013\023\022\103\157\160\171\162\151\147\150
\164\040\050\143\051\040\062\060\060\065\061\042\060\040\006\003
\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156\144
\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061\050
\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040\127

\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122\157
\157\164\040\107\101\040\103\101\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\313\117\263\000\233\075\066
\335\371\321\111\152\153\020\111\037\354\330\053\262\306\370\062
\201\051\103\225\114\232\031\043\041\025\105\336\343\310\034\121
\125\133\256\223\350\067\377\053\153\351\324\352\276\052\335\250
\121\053\327\146\303\141\134\140\002\310\365\316\162\173\073\270
\362\116\145\010\232\315\244\152\031\301\001\273\163\246\327\366
\303\335\315\274\244\213\265\231\141\270\001\242\243\324\115\324
\005\075\221\255\370\264\010\161\144\257\160\361\034\153\176\366
\303\167\235\044\163\173\344\014\214\341\331\066\341\231\213\005
\231\013\355\105\061\011\312\302\000\333\367\162\240\226\252\225
\207\320\216\307\266\141\163\015\166\146\214\334\033\264\143\242
\237\177\223\023\060\361\241\047\333\331\377\054\125\210\221\240
\340\117\007\260\050\126\214\030\033\227\104\216\211\335\340\027
\156\347\052\357\217\071\012\061\204\202\330\100\024\111\056\172
\101\344\247\376\343\144\314\301\131\161\113\054\041\247\133\175
\340\035\321\056\201\233\303\330\150\367\275\226\033\254\160\261
\026\024\013\333\140\271\046\001\005\002\003\001\000\001\243\121
\060\117\060\013\006\003\125\035\017\004\004\003\002\001\206\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\263\003\176\256\066
\274\260\171\321\334\224\046\266\021\276\041\262\151\206\224\060
\020\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001
\000\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\003\202\001\001\000\113\241\377\013\207\156\263\371\301\103\261
\110\363\050\300\035\056\311\011\101\372\224\000\034\244\244\253
\111\117\217\075\036\357\115\157\275\274\244\366\362\046\060\311
\020\312\035\210\373\164\031\037\205\105\275\260\154\121\371\066
\176\333\365\114\062\072\101\117\133\107\317\350\013\055\266\304
\031\235\164\305\107\306\073\152\017\254\024\333\074\364\163\234
\251\005\337\000\334\164\170\372\370\065\140\131\002\023\030\174
\274\373\115\260\040\155\103\273\140\060\172\147\063\134\305\231
\321\370\055\071\122\163\373\214\252\227\045\134\162\331\010\036
\253\116\074\343\201\061\237\003\246\373\300\376\051\210\125\332
\204\325\120\003\266\342\204\243\246\066\252\021\072\001\341\030
\113\326\104\150\263\075\371\123\164\204\263\106\221\106\226\000
\267\200\054\266\341\343\020\342\333\242\347\050\217\001\226\142
\026\076\000\343\034\245\066\201\030\242\114\122\166\300\021\243
\156\346\035\272\343\132\276\066\123\305\076\165\217\206\151\051
\130\123\265\234\273\157\237\134\305\030\354\335\057\341\230\311
\374\276\337\012\015

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "OISTE WISeKey Global Root GA CA"
# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a
# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Not Valid Before: Sun Dec 11 16:03:44 2005
# Not Valid After : Fri
Dec 11 16:09:51 2037
# Fingerprint (SHA-256):
41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5
# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GA CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\131\042\241\341\132\352\026\065\041\370\230\071\152\106\106\260
\104\033\017\251
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\274\154\121\063\247\351\323\146\143\124\025\162\033\041\222\223
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124
\337\232
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certigna"

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#
# Issuer: CN=Certigna,O=Dhimyotis,C=FR
# Serial Number:00:fe:dc:e3:01:0f:c9:48:ff
# Subject: CN=Certigna,O=Dhimyotis,C=FR
# Not Valid Before: Fri Jun 29 15:13:05 2007
# Not Valid After : Tue Jun 29 15:13:05 2027
# Fingerprint (SHA-256):
E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D
# Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\376\334\343\001\017\311\110\377
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\250\060\202\002\220\240\003\002\001\002\002\011\000
\376\334\343\001\017\311\110\377\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\064\061\013\060\011\006\003\125
\004\006\023\002\106\122\061\022\060\020\006\003\125\004\012\014
\011\104\150\151\155\171\157\164\151\163\061\021\060\017\006\003
\125\004\003\014\010\103\145\162\164\151\147\156\141\060\036\027
\015\060\067\060\066\062\071\061\065\061\063\060\065\132\027\015
\062\067\060\066\062\071\061\065\061\063\060\065\132\060\064\061
\013\060\011\006\003\125\004\006\023\002\106\122\061\022\060\020
\006\003\125\004\012\014\011\104\150\151\155\171\157\164\151\163
\061\021\060\017\006\003\125\004\003\014\010\103\145\162\164\151
\147\156\141\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\310\150\361\311\326\326\263\064\165\046\202\036
\354\264\276\352\134\341\046\355\021\107\141\341\242\174\026\170

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\100\041\344\140\236\132\310\143\341\304\261\226\222\377\030\155
\151\043\341\053\142\367\335\342\066\057\221\007\271\110\317\016
\354\171\266\054\347\064\113\160\010\045\243\074\207\033\031\362
\201\007\017\070\220\031\323\021\376\206\264\362\321\136\036\036
\226\315\200\154\316\073\061\223\266\362\240\320\251\225\022\175
\245\232\314\153\310\204\126\212\063\251\347\042\025\123\026\360
\314\027\354\127\137\351\242\012\230\011\336\343\137\234\157\334
\110\343\205\013\025\132\246\272\237\254\110\343\011\262\367\364
\062\336\136\064\276\034\170\135\102\133\316\016\042\217\115\220
\327\175\062\030\263\013\054\152\277\216\077\024\021\211\040\016
\167\024\265\075\224\010\207\367\045\036\325\262\140\000\354\157
\052\050\045\156\052\076\030\143\027\045\077\076\104\040\026\366
\046\310\045\256\005\112\264\347\143\054\363\214\026\123\176\134
\373\021\032\010\301\106\142\237\042\270\361\302\215\151\334\372
\072\130\006\337\002\003\001\000\001\243\201\274\060\201\271\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\032\355\376\101\071
\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021\060
\144\006\003\125\035\043\004\135\060\133\200\024\032\355\376\101
\071\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021
\241\070\244\066\060\064\061\013\060\011\006\003\125\004\006\023
\002\106\122\061\022\060\020\006\003\125\004\012\014\011\104\150
\151\155\171\157\164\151\163\061\021\060\017\006\003\125\004\003
\014\010\103\145\162\164\151\147\156\141\202\011\000\376\334\343
\001\017\311\110\377\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\021\006\011\140\206\110\001\206\370\102
\001\001\004\004\003\002\000\007\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\001\001\000\205\003\036\222
\161\366\102\257\341\243\141\236\353\363\300\017\362\245\324\332
\225\346\326\276\150\066\075\176\156\037\114\212\357\321\017\041
\155\136\245\122\143\316\022\370\357\052\332\157\353\067\376\023
\002\307\313\073\076\042\153\332\141\056\177\324\162\075\335\060
\341\036\114\100\031\214\017\327\234\321\203\060\173\230\131\334
\175\306\271\014\051\114\241\063\242\353\147\072\145\204\323\226
\342\355\166\105\160\217\265\053\336\371\043\326\111\156\074\024
\265\306\237\065\036\120\320\301\217\152\160\104\002\142\313\256
\035\150\101\247\252\127\350\123\252\007\322\006\366\325\024\006
\013\221\003\165\054\154\162\265\141\225\232\015\213\271\015\347
\365\337\124\315\336\346\330\326\011\010\227\143\345\301\056\260
\267\104\046\300\046\300\257\125\060\236\073\325\066\052\031\004
\364\134\036\377\317\054\267\377\320\375\207\100\021\325\021\043
\273\110\300\041\251\244\050\055\375\025\370\260\116\053\364\060
\133\041\374\021\221\064\276\101\357\173\235\227\165\377\227\225
\300\226\130\057\352\273\106\327\273\344\331\056

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certigna"

Issuer: CN=Certigna,O=Dhimyotis,C=FR

Serial Number:00:fe:dc:e3:01:0f:c9:48:ff

Subject: CN=Certigna,O=Dhimyotis,C=FR

Not Valid Before: Fri Jun 29 15:13:05 2007

#

Not Valid After : Tue Jun 29 15:13:05 2027

Fingerprint (SHA-256):

E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D

Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certigna"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\261\056\023\143\105\206\244\157\032\262\140\150\067\130\055\304

\254\375\224\227

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\253\127\246\133\175\102\202\031\265\330\130\046\050\136\375\377

END

CKA_ISSUER MULTILINE_OCTAL

\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061

\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157

\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145

\162\164\151\147\156\141

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\011\000\376\334\343\001\017\311\110\377

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "ePKI Root Certification Authority"

#

Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Serial Number: 15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d

Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Not Valid Before: Mon Dec 20 02:31:27 2004

Not Valid After : Wed Dec 20 02:31:27 2034

Fingerprint (SHA-256):

C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5

Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ePKI Root Certification Authority"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT

MULTILINE_OCTAL

\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322
\274\235

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\260\060\202\003\230\240\003\002\001\002\002\020\025
\310\275\145\107\134\257\270\227\000\136\344\006\322\274\235\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\136
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036
\027\015\060\064\061\062\062\060\060\062\063\061\062\067\132\027
\015\063\064\061\062\062\060\060\062\063\061\062\067\132\060\136
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\202

\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\341
\045\017\356\215\333\210\063\165\147\315\255\037\175\072\116\155
\235\323\057\024\363\143\164\313\001\041\152\067\352\204\120\007
\113\046\133\011\103\154\041\236\152\310\325\003\365\140\151\217
\314\360\042\344\037\347\367\152\042\061\267\054\025\362\340\376
\000\152\103\377\207\145\306\265\032\301\247\114\155\042\160\041
\212\061\362\227\164\211\011\022\046\034\236\312\331\022\242\225
\074\332\351\147\277\010\240\144\343\326\102\267\105\357\227\364
\366\365\327\265\112\025\002\130\175\230\130\113\140\274\315\327
\015\232\023\063\123\321\141\371\172\325\327\170\263\232\063\367
\000\206\316\035\115\224\070\257\250\354\170\121\160\212\134\020
\203\121\041\367\021\075\064\206\136\345\110\315\227\201\202\065
\114\031\354\145\366\153\305\005\241\356\107\023\326\263\041\047
\224\020\012\331\044\073\272\276\104\023\106\060\077\227\074\330
\327\327\152\356\073\070\343\053\324\227\016\271\033\347\007\111
\177\067\052\371\167\170\317\124\355\133\106\235\243\200\016\221
\103\301\326\133\137\024\272\237\246\215\044\107\100\131\277\162
\070\262\066\154\067\377\231\321\135\016\131\012\253\151\367\300
\262\004\105\172\124\000\256\276\123\366\265\347\341\370\074\243
\061\322\251\376\041\122\144\305\246\147\360\165\007\006\224\024
\201\125\306\047\344\001\217\027\301\152\161\327\276\113\373\224
\130\175\176\021\063\261\102\367\142\154\030\326\317\011\150\076
\177\154\366\036\217\142\255\245\143\333\011\247\037\042\102\101
\036\157\231\212\076\327\371\077\100\172\171\260\245\001\222\322
\235\075\010\025\245\020\001\055\263\062\166\250\225\015\263\172
\232\373\007\020\170\021\157\341\217\307\272\017\045\032\164\052
\345\034\230\101\231\337\041\207\350\225\006\152\012\263\152\107
\166\145\366\072\317\217\142\027\031\173\012\050\315\032\322\203
\036\041\307\054\277\276\377\141\150\267\147\033\273\170\115\215
\316\147\345\344\301\216\267\043\146\342\235\220\165\064\230\251
\066\053\212\232\224\271\235\354\314\212\261\370\045\211\134\132
\266\057\214\037\155\171\044\247\122\150\303\204\065\342\146\215
\143\016\045\115\325\031\262\346\171\067\247\042\235\124\061\002
\003\001\000\001\243\152\060\150\060\035\006\003\125\035\016\004
\026\004\024\036\014\367\266\147\362\341\222\046\011\105\300\125
\071\056\167\077\102\112\242\060\014\006\003\125\035\023\004\005
\060\003\001\001\377\060\071\006\004\147\052\007\000\004\061\060
\057\060\055\002\001\000\060\011\006\005\053\016\003\002\032\005
\000\060\007\006\005\147\052\003\000\000\004\024\105\260\302\307
\012\126\174\356\133\170\014\225\371\030\123\301\246\034\330\020
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\002\001\000\011\263\203\123\131\001\076\225\111\271\361\201
\272\371\166\040\043\265\047\140\164\324\152\231\064\136\154\000
\123\331\237\362\246\261\044\007\104\152\052\306\245\216\170\022
\350\107\331\130\033\023\052\136\171\233\237\012\052\147\246\045
\077\006\151\126\163\303\212\146\110\373\051\201\127\164\006\312
\234\352\050\350\070\147\046\053\361\325\265\077\145\223\370\066

\135\216\215\215\100\040\207\031\352\357\047\300\075\264\071\017
\045\173\150\120\164\125\234\014\131\175\132\075\101\224\045\122
\010\340\107\054\025\061\031\325\277\007\125\306\273\022\265\227
\364\137\203\205\272\161\301\331\154\201\021\166\012\012\260\277
\202\227\367\352\075\372\372\354\055\251\050\224\073\126\335\322
\121\056\256\300\275\010\025\214\167\122\064\226\326\233\254\323
\035\216\141\017\065\173\233\256\071\151\013\142\140\100\040\066
\217\257\373\066\356\055\010\112\035\270\277\233\134\370\352\245
\033\240\163\246\330\370\156\340\063\004\137\150\252\047\207\355
\331\301\220\234\355\275\343\152\065\257\143\337\253\030\331\272
\346\351\112\352\120\212\017\141\223\036\342\055\031\342\060\224
\065\222\135\016\266\007\257\031\200\217\107\220\121\113\056\115
\335\205\342\322\012\122\012\027\232\374\032\260\120\002\345\001
\243\143\067\041\114\104\304\233\121\231\021\016\163\234\006\217
\124\056\247\050\136\104\071\207\126\055\067\275\205\104\224\341
\014\113\054\234\303\222\205\064\141\313\017\270\233\112\103\122
\376\064\072\175\270\351\051\334\166\251\310\060\370\024\161\200
\306\036\066\110\164\042\101\134\207\202\350\030\161\213\101\211
\104\347\176\130\133\250\270\215\023\351\247\154\303\107\355\263
\032\235\142\256\215\202\352\224\236\335\131\020\303\255\335\342
\115\343\061\325\307\354\350\362\260\376\222\036\026\012\032\374
\331\363\370\047\266\311\276\035\264\154\144\220\177\364\344\304
\133\327\067\256\102\016\335\244\032\157\174\210\124\305\026\156
\341\172\150\056\370\072\277\015\244\074\211\073\170\247\116\143
\203\004\041\010\147\215\362\202\111\320\133\375\261\315\017\203
\204\324\076\040\205\367\112\075\053\234\375\052\012\011\115\352
\201\370\021\234

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "ePKI Root Certification Authority"

Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Serial Number:15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d

Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

Not Valid Before: Mon Dec 20 02:31:27 2004

Not Valid After : Wed Dec 20 02:31:27 2034

Fingerprint (SHA-256):

C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5

Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ePKI Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\147\145\015\361\176\216\176\133\202\100\244\364\126\113\317\342
\075\151\306\360

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\033\056\000\312\046\006\220\075\255\376\157\025\150\323\153\263

END

CKA_ISSUER
MULTILINE_OCTAL
\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322
\274\235

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "certSIGN ROOT CA"

#

Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Serial Number:20:06:05:16:70:02

Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Not Valid Before: Tue Jul 04 17:20:04

2006

Not Valid After : Fri Jul 04 17:20:04 2031

Fingerprint (SHA-256):

EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB

Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "certSIGN ROOT CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\006\040\006\005\026\160\002

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\070\060\202\002\040\240\003\002\001\002\002\006\040
\006\005\026\160\002\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\060\073\061\013\060\011\006\003\125\004\006\023
\002\122\117\061\021\060\017\006\003\125\004\012\023\010\143\145
\162\164\123\111\107\116\061\031\060\027\006\003\125\004\013\023
\020\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103
\101\060\036\027\015\060\066\060\067\060\064\061\067\062\060\060
\064\132\027\015\063\061\060\067\060\064\061\067\062\060\060\064
\132\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117
\061\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123
\111\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145
\162\164\123\111\107\116\040\122\117\117\124\040\103\101\060\202
\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000\267
\063\271\176\310\045\112\216\265\333\264\050\033\252\127\220\350
\321\042\323\144\272\323\223\350\324\254\206\141\100\152\140\127
\150\124\204\115\274\152\124\002\005\377\337\233\232\052\256\135
\007\217\112\303\050\177\357\373\053\372\171\361\307\255\360\020
\123\044\220\213\146\311\250\210\253\257\132\243\000\351\276\272
\106\356\133\163\173\054\027\202\201\136\142\054\241\002\145\263
\275\305\053\000\176\304\374\003\063\127\015\355\342\372\316\135
\105\326\070\315\065\266\262\301\320\234\201\112\252\344\262\001
\134\035\217\137\231\304\261\255\333\210\041\353\220\010\202\200
\363\060\243\103\346\220\202\256\125\050\111\355\133\327\251\020
\070\016\376\217\114\133\233\106\352\101\365\260\010\164\303\320
\210\063\266\174\327\164\337\334\204\321\103\016\165\071\241\045
\100\050\352\170\313\016\054\056\071\235\214\213\156\026\034\057
\046\202\020\342\343\145\224\012\004\300\136\367\135\133\370\020
\342\320\272\172\113\373\336\067\000\000\032\133\050\343\322\234
\163\076\062\207\230\241\311\121\057\327\336\254\063\263\117\002
\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023\001
\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\306\060\035\006\003\125\035\016
\004\026\004\024\340\214\233\333\045\111\263\361\174\206\326\262
\102\207\013\320\153\240\331\344\060\015\006\011\052\206\110\206

```
\367\015\001\001\005\005\000\003\202\001\001\000\076\322\034\211
\056\065\374\370\165\335\346\177\145\210\364\162\114\311\054\327
\062\116\363\335\031\171\107\275\216\073\133\223\017\120\111\044
\023\153\024\006\162\357\011\323\241\241\343\100\204\311\347\030
\062\164\074\110\156\017\237\113\324\367\036\323\223\206\144\124
\227\143\162\120\325\125\317\372\040\223\002\242\233\303\043\223
\116\026\125\166\240\160\171\155\315\041\037\317\057\055\274\031
\343\210\061\370\131\032\201\011\310\227\246\164\307\140\304\133
\314\127\216\262\165\375\033\002\011\333\131\157\162\223\151\367
\061\101\326\210\070\277\207\262\275\026\171\371\252\344\276\210
\045\335\141\047\043\034\265\061\007\004\066\264\032\220\275\240
\164\161\120\211\155\274\024\343\017\206\256\361\253\076\307\240
\011\314\243\110\321\340\333\144\347\222\265\317\257\162\103\160
\213\371\303\204\074\023\252\176\222\233\127\123\223\372\160\302
\221\016\061\371\233\147\135\351\226\070\136\137\263\163\116\210
\025\147\336\236\166\020\142\040\276\125\151\225\103\000\071\115
\366\356\260\132\116\111\104\124\130\137\102\203
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "certSIGN ROOT CA"

Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Serial Number:20:06:05:16:70:02

Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO

Not Valid Before: Tue Jul 04 17:20:04 2006

Not Valid After : Fri Jul 04 17:20:04 2031

Fingerprint (SHA-256):

EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB

#

Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "certSIGN ROOT CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\372\267\356\066\227\046\142\373\055\260\052\366\277\003\375\350
\174\113\057\233
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\030\230\300\326\351\072\374\371\260\365\014\367\113\001\104\027
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
```

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\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\006\040\006\005\026\160\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "NetLock Arany (Class Gold) Ftanúsítvány"
#
# Issuer: CN=NetLock Arany (Class Gold) F..tan...s..tv...ny,OU=Tan...s..tv...nykiad..k (Certification
Services),O=NetLock Kft.,L=Budapest,C=HU
# Serial Number:49:41:2c:e4:00:10
# Subject: CN=NetLock Arany (Class Gold) F..tan...s..tv...ny,OU=Tan...s..tv...nykiad..k (Certification
Services),O=NetLock Kft.,L=Budapest,C=HU
# Not Valid Before: Thu Dec 11 15:08:21 2008
# Not Valid After : Wed Dec 06 15:08:21 2028
# Fingerprint (SHA-256):
6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98
# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125

```

\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\006\111\101\054\344\000\020

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\025\060\202\002\375\240\003\002\001\002\002\006\111
\101\054\344\000\020\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\060\201\247\061\013\060\011\006\003\125\004\006
\023\002\110\125\061\021\060\017\006\003\125\004\007\014\010\102
\165\144\141\160\145\163\164\061\025\060\023\006\003\125\004\012
\014\014\116\145\164\114\157\143\153\040\113\146\164\056\061\067
\060\065\006\003\125\004\013\014\056\124\141\156\303\272\163\303
\255\164\166\303\241\156\171\153\151\141\144\303\263\153\040\050
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\051\061\065\060\063\006\003\125\004\003
\014\054\116\145\164\114\157\143\153\040\101\162\141\156\171\040
\050\103\154\141\163\163\040\107\157\154\144\051\040\106\305\221
\164\141\156\303\272\163\303\255\164\166\303\241\156\171\060\036
\027\015\060\070\061\062\061\061\061\065\060\070\062\061\132\027
\015\062\070\061\062\060\066\061\065\060\070\062\061\132\060\201
\247\061\013\060\011\006\003\125\004\006\023\002\110\125\061\021
\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145\163
\164\061\025\060\023\006\003\125\004\012\014\014\116\145\164\114
\157\143\153\040\113\146\164\056\061\067\060\065\006\003\125\004
\013\014\056\124\141\156\303\272\163\303\255\164\166\303\241\156
\171\153\151\141\144\303\263\153\040\050\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163
\051\061\065\060\063\006\003\125\004\003\014\054\116\145\164\114
\157\143\153\040\101\162\141\156\171\040\050\103\154\141\163\163
\040\107\157\154\144\051\040\106\305\221\164\141\156\303\272\163
\303\255\164\166\303\241\156\171\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\304\044\136\163\276\113\155
\024\303\241\364\343\227\220\156\322\060\105\036\074\356\147\331
\144\340\032\212\177\312\060\312\203\343\040\301\343\364\072\323
\224\137\032\174\133\155\277\060\117\204\047\366\237\037\111\274
\306\231\012\220\362\017\365\177\103\204\067\143\121\213\172\245

\160\374\172\130\315\216\233\355\303\106\154\204\160\135\332\363
\001\220\043\374\116\060\251\176\341\047\143\347\355\144\074\240
\270\311\063\143\376\026\220\377\260\270\375\327\250\300\300\224
\103\013\266\325\131\246\236\126\320\044\037\160\171\257\333\071
\124\015\145\165\331\025\101\224\001\257\136\354\366\215\361\377
\255\144\376\040\232\327\134\353\376\246\037\010\144\243\213\166
\125\255\036\073\050\140\056\207\045\350\252\257\037\306\144\106
\040\267\160\177\074\336\110\333\226\123\267\071\167\344\032\342
\307\026\204\166\227\133\057\273\031\025\205\370\151\205\365\231
\247\251\362\064\247\251\266\246\003\374\157\206\075\124\174\166
\004\233\153\371\100\135\000\064\307\056\231\165\235\345\210\003
\252\115\370\003\322\102\166\300\033\002\003\000\250\213\243\105
\060\103\060\022\006\003\125\035\023\001\001\377\004\010\060\006
\001\001\377\002\001\004\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004
\024\314\372\147\223\360\266\270\320\245\300\036\363\123\375\214
\123\337\203\327\226\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\003\202\001\001\000\253\177\356\034\026\251\234
\074\121\000\240\300\021\010\005\247\231\346\157\001\210\124\141
\156\361\271\030\255\112\255\376\201\100\043\224\057\373\165\174
\057\050\113\142\044\201\202\013\365\141\361\034\156\270\141\070
\353\201\372\142\241\073\132\142\323\224\145\304\341\346\155\202
\370\057\045\160\262\041\046\301\162\121\037\214\054\303\204\220
\303\132\217\272\317\364\247\145\245\353\230\321\373\005\262\106
\165\025\043\152\157\205\143\060\200\360\325\236\037\051\034\302
\154\260\120\131\135\220\133\073\250\015\060\317\277\175\177\316
\361\235\203\275\311\106\156\040\246\371\141\121\272\041\057\173
\276\245\025\143\241\324\225\207\361\236\271\363\211\363\075\205
\270\270\333\276\265\271\051\371\332\067\005\000\111\224\003\204
\104\347\277\103\061\317\165\213\045\321\364\246\144\365\222\366
\253\005\353\075\351\245\013\066\142\332\314\006\137\066\213\266
\136\061\270\052\373\136\366\161\337\104\046\236\304\346\015\221
\264\056\165\225\200\121\152\113\060\246\260\142\241\223\361\233
\330\316\304\143\165\077\131\107\261

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "NetLock Arany (Class Gold) Ftanúsítvány"

Issuer:

CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

Serial Number:49:41:2c:e4:00:10

Subject: CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

Not Valid Before: Thu Dec 11 15:08:21 2008


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# Not Valid After : Wed Dec 06 15:08:21 2028
# Fingerprint (SHA-256):
6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98
# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\006\010\077\131\077\025\241\004\240\151\244\153\251\003\320\006
\267\227\011\221
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\241\267\377\163\335\326\327\064\062\030\337\374\074\255\210
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\006\111\101\054\344\000\020
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Hongkong Post Root CA 1"
#
# Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Serial Number: 1000 (0x3e8)
# Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Not Valid Before: Thu May 15 05:13:14 2003
# Not Valid After : Mon May 15 04:52:29 2023
# Fingerprint (SHA-256):

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F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2
# Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\003\350
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\060\060\202\002\030\240\003\002\001\002\002\002\003
\350\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061\060\036\027\015\060\063\060
\065\061\065\060\065\061\063\061\064\132\027\015\062\063\060\065
\061\065\060\064\065\062\062\071\132\060\107\061\013\060\011\006
\003\125\004\006\023\002\110\113\061\026\060\024\006\003\125\004
\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164
\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153
\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101
\040\061\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\254\377\070\266\351\146\002\111\343\242\264\341\220
\371\100\217\171\371\342\275\171\376\002\275\356\044\222\035\042
\366\332\205\162\151\376\327\077\011\324\335\221\265\002\234\320
\215\132\341\125\303\120\206\271\051\046\302\343\331\240\361\151
\003\050\040\200\105\042\055\126\247\073\124\225\126\042\131\037
```

\050\337\037\040\075\155\242\066\276\043\240\261\156\265\261\047
\077\071\123\011\352\253\152\350\164\262\302\145\134\216\277\174
\303\170\204\315\236\026\374\365\056\117\040\052\010\237\167\363
\305\036\304\232\122\146\036\110\136\343\020\006\217\042\230\341
\145\216\033\135\043\146\073\270\245\062\121\310\206\252\241\251
\236\177\166\224\302\246\154\267\101\360\325\310\006\070\346\324
\014\342\363\073\114\155\120\214\304\203\047\301\023\204\131\075
\236\165\164\266\330\002\136\072\220\172\300\102\066\162\354\152
\115\334\357\304\000\337\023\030\127\137\046\170\310\326\012\171
\167\277\367\257\267\166\271\245\013\204\027\135\020\352\157\341
\253\225\021\137\155\074\243\134\115\203\133\362\263\031\212\200
\213\013\207\002\003\001\000\001\243\046\060\044\060\022\006\003
\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001\003
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\306
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\001\001\000\016\106\325\074\256\342\207\331\136\201\213\002
\230\101\010\214\114\274\332\333\356\047\033\202\347\152\105\354
\026\213\117\205\240\363\262\160\275\132\226\272\312\156\155\356
\106\213\156\347\052\056\226\263\031\063\353\264\237\250\262\067
\356\230\250\227\266\056\266\147\047\324\246\111\375\034\223\145
\166\236\102\057\334\042\154\232\117\362\132\025\071\261\161\327
\053\121\350\155\034\230\300\331\052\364\241\202\173\325\311\101
\242\043\001\164\070\125\213\017\271\056\147\242\040\004\067\332
\234\013\323\027\041\340\217\227\171\064\157\204\110\002\040\063
\033\346\064\104\237\221\160\364\200\136\204\103\302\051\322\154
\022\024\344\141\215\254\020\220\236\204\120\273\360\226\157\105
\237\212\363\312\154\117\372\021\072\025\025\106\303\315\037\203
\133\055\101\022\355\120\147\101\023\075\041\253\224\212\252\116
\174\301\261\373\247\326\265\047\057\227\253\156\340\035\342\321
\034\054\037\104\342\374\276\221\241\234\373\326\051\123\163\206
\237\123\330\103\016\135\326\143\202\161\035\200\164\312\366\342
\002\153\331\132

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hongkong Post Root CA

1"

Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK

Serial Number: 1000 (0x3e8)

Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK

Not Valid Before: Thu May 15 05:13:14 2003

Not Valid After : Mon May 15 04:52:29 2023

Fingerprint (SHA-256):

F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2

Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58

```

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\326\332\250\040\215\011\322\025\115\044\265\057\313\064\156\262
\130\262\212\130
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\250\015\157\071\170\271\103\155\167\102\155\230\132\314\043\312
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\003\350
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureSign RootCA11"
#
# Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Serial Number: 1 (0x1)
# Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Not Valid Before: Wed Apr 08 04:56:47 2009
# Not Valid After : Sun Apr 08 04:56:47 2029
# Fingerprint (SHA-256):
BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12
# Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureSign RootCA11"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061

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\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\155\060\202\002\125\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061\053
\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145\162
\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032\006
\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147\156
\040\122\157\157\164\103\101\061\061\060\036\027\015\060\071\060
\064\060\070\060\064\065\066\064\067\132\027\015\062\071\060\064
\060\070\060\064\065\066\064\067\132\060\130\061\013\060\011\006
\003\125\004\006\023\002\112\120\061\053\060\051\006\003\125\004
\012\023\042\112\141\160\141\156\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163\054
\040\111\156\143\056\061\034\060\032\006\003\125\004\003\023\023
\123\145\143\165\162\145\123\151\147\156\040\122\157\157\164\103
\101\061\061\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\375\167\252\245\034\220\005\073\313\114\233\063
\213\132\024\105\244\347\220\026\321\337\127\322\041\020\244\027
\375\337\254\326\037\247\344\333\174\367\354\337\270\003\332\224
\130\375\135\162\174\214\077\137\001\147\164\025\226\343\002\074
\207\333\256\313\001\216\302\363\146\306\205\105\364\002\306\072
\265\142\262\257\372\234\277\244\346\324\200\060\230\363\015\266
\223\217\251\324\330\066\362\260\374\212\312\054\241\025\063\225
\061\332\300\033\362\356\142\231\206\143\077\277\335\223\052\203
\250\166\271\023\037\267\316\116\102\205\217\042\347\056\032\362
\225\011\262\005\265\104\116\167\241\040\275\251\362\116\012\175
\120\255\365\005\015\105\117\106\161\375\050\076\123\373\004\330

\055\327\145\035\112\033\372\317\073\260\061\232\065\156\310\213
\006\323\000\221\362\224\010\145\114\261\064\006\000\172\211\342
\360\307\003\131\317\325\326\350\247\062\263\346\230\100\206\305
\315\047\022\213\314\173\316\267\021\074\142\140\007\043\076\053
\100\156\224\200\011\155\266\263\157\167\157\065\010\120\373\002
\207\305\076\211\002\003\001\000\001\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\133\370\115\117\262\245\206\324
\072\322\361\143\232\240\276\011\366\127\267\336\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001
\000\240\241\070\026\146\056\247\126\037\041\234\006\372\035\355
\271\042\305\070\046\330\116\117\354\243\177\171\336\106\041\241
\207\167\217\007\010\232\262\244\305\257\017\062\230\013\174\146
\051\266\233\175\045\122\111\103\253\114\056\053\156\172\160\257
\026\016\343\002\154\373\102\346\030\235\105\330\125\310\350\073
\335\347\341\364\056\013\034\064\134\154\130\112\373\214\210\120
\137\225\034\277\355\253\042\265\145\263\205\272\236\017\270\255
\345\172\033\212\120\072\035\275\015\274\173\124\120\013\271\102
\257\125\240\030\201\255\145\231\357\276\344\234\277\304\205\253
\101\262\124\157\334\045\315\355\170\342\216\014\215\011\111\335
\143\173\132\151\226\002\041\250\275\122\131\351\175\065\313\310
\122\312\177\201\376\331\153\323\367\021\355\045\337\370\347\371
\244\372\162\227\204\123\015\245\320\062\030\121\166\131\024\154
\017\353\354\137\200\214\165\103\203\303\205\230\377\114\236\055
\015\344\167\203\223\116\265\226\007\213\050\023\233\214\031\215
\101\047\111\100\356\336\346\043\104\071\334\241\042\326\272\003
\362

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SecureSign RootCA11"

Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

Serial Number: 1 (0x1)

Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

#

Not Valid Before: Wed Apr 08 04:56:47 2009

Not Valid After : Sun Apr 08 04:56:47 2029

Fingerprint (SHA-256):

BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12

Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

CKA_LABEL UTF8 "SecureSign RootCA11"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\073\304\237\110\370\363\163\240\234\036\275\370\133\261\303\145
\307\330\021\263
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\267\122\164\342\222\264\200\223\362\165\344\314\327\362\352\046
END
CKA_ISSUER MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Microsec e-Szigno Root CA 2009"
#
# Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:00:c2:7e:43:04:4e:47:3f:19
# Subject: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Jun 16 11:30:18 2009
# Not Valid After : Sun Dec 30 11:30:18 2029
# Fingerprint (SHA-256):
3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78
# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006

```

\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\011\000\302\176\103\004\116\107\077\031

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\012\060\202\002\362\240\003\002\001\002\002\011\000
\302\176\103\004\116\107\077\031\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003
\125\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007
\014\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003
\125\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164
\144\056\061\047\060\045\006\003\125\004\003\014\036\115\151\143
\162\157\163\145\143\040\145\055\123\172\151\147\156\157\040\122
\157\157\164\040\103\101\040\062\060\060\071\061\037\060\035\006
\011\052\206\110\206\367\015\001\011\001\026\020\151\156\146\157
\100\145\055\163\172\151\147\156\157\056\150\165\060\036\027\015
\060\071\060\066\061\066\061\061\063\060\061\070\132\027\015\062
\071\061\062\063\060\061\061\063\060\061\070\132\060\201\202\061
\013\060\011\006\003\125\004\006\023\002\110\125\061\021\060\017
\006\003\125\004\007\014\010\102\165\144\141\160\145\163\164\061
\026\060\024\006\003\125\004\012\014\015\115\151\143\162\157\163
\145\143\040\114\164\144\056\061\047\060\045\006\003\125\004\003
\014\036\115\151\143\162\157\163\145\143\040\145\055\123\172\151
\147\156\157\040\122\157\157\164\040\103\101\040\062\060\060\071
\061\037\060\035\006\011\052\206\110\206\367\015\001\011\001\026
\020\151\156\146\157\100\145\055\163\172\151\147\156\157\056\150
\165\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\351\370\217\363\143\255\332\206\330\247\340\102\373\317
\221\336\246\046\370\231\245\143\160\255\233\256\312\063\100\175

\155\226\156\241\016\104\356\341\023\235\224\102\122\232\275\165
\205\164\054\250\016\035\223\266\030\267\214\054\250\317\373\134
\161\271\332\354\376\350\176\217\344\057\035\262\250\165\207\330
\267\241\345\073\317\231\112\106\320\203\031\175\300\241\022\034
\225\155\112\364\330\307\245\115\063\056\205\071\100\165\176\024
\174\200\022\230\120\307\101\147\270\240\200\141\124\246\154\116
\037\340\235\016\007\351\311\272\063\347\376\300\125\050\054\002
\200\247\031\365\236\334\125\123\003\227\173\007\110\377\231\373
\067\212\044\304\131\314\120\020\143\216\252\251\032\260\204\032
\206\371\137\273\261\120\156\244\321\012\314\325\161\176\037\247
\033\174\365\123\156\042\137\313\053\346\324\174\135\256\326\302
\306\114\345\005\001\331\355\127\374\301\043\171\374\372\310\044
\203\225\363\265\152\121\001\320\167\326\351\022\241\371\032\203
\373\202\033\271\260\227\364\166\006\063\103\111\240\377\013\265
\372\265\002\003\001\000\001\243\201\200\060\176\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006
\003\125\035\016\004\026\004\024\313\017\306\337\102\103\314\075
\313\265\110\043\241\032\172\246\052\273\064\150\060\037\006\003
\125\035\043\004\030\060\026\200\024\313\017\306\337\102\103\314
\075\313\265\110\043\241\032\172\246\052\273\064\150\060\033\006
\003\125\035\021\004\024\060\022\201\020\151\156\146\157\100\145
\055\163\172\151\147\156\157\056\150\165\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\001\001\000\311\321
\016\136\056\325\314\263\174\076\313\374\075\377\015\050\225\223
\004\310\277\332\315\171\270\103\220\360\244\276\357\362\357\041
\230\274\324\324\135\006\366\356\102\354\060\154\240\252\251\312
\361\257\212\372\077\013\163\152\076\352\056\100\176\037\256\124
\141\171\353\056\010\067\327\043\363\214\237\276\035\261\341\244
\165\333\240\342\124\024\261\272\034\051\244\030\366\022\272\242
\024\024\343\061\065\310\100\377\267\340\005\166\127\301\034\131
\362\370\277\344\355\045\142\134\204\360\176\176\037\263\276\371
\267\041\021\314\003\001\126\160\247\020\222\036\033\064\201\036
\255\234\032\303\004\074\355\002\141\326\036\006\363\137\072\207
\362\053\361\105\207\345\075\254\321\307\127\204\275\153\256\334
\330\371\266\033\142\160\013\075\066\311\102\362\062\327\172\141
\346\322\333\075\317\310\251\311\233\334\333\130\104\327\157\070
\257\177\170\323\243\255\032\165\272\034\301\066\174\217\036\155
\034\303\165\106\256\065\005\246\366\134\075\041\356\126\360\311
\202\042\055\172\124\253\160\303\175\042\145\202\160\226

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Microsec e-Szigno Root CA 2009"

Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU

```

# Serial Number:00:c2:7e:43:04:4e:47:3f:19
# Subject: E=info@e-szigno.hu,CN=Microsec
e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Jun 16 11:30:18 2009
# Not Valid After : Sun Dec 30 11:30:18 2029
# Fingerprint (SHA-256):
3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78
# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\211\337\164\376\134\364\017\112\200\371\343\067\175\124\332\221
\341\001\061\216
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\111\364\003\274\104\055\203\276\110\151\175\051\144\374\261
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\302\176\103\004\116\107\077\031
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Root CA - R3"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Serial Number:04:00:00:00:00:01:21:58:53:08:a2
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Not Valid Before: Wed Mar 18 10:00:00 2009
# Not Valid After : Sun Mar 18 10:00:00 2029

```

Fingerprint (SHA-256):

CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B

#

Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Root CA - R3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\013\004\000\000\000\000\001\041\130\123\010\242

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\137\060\202\002\107\240\003\002\001\002\002\013\004
\000\000\000\000\001\041\130\123\010\242\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\114\061\040\060\036\006
\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147\156
\040\122\157\157\164\040\103\101\040\055\040\122\063\061\023\060
\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123\151
\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154\157
\142\141\154\123\151\147\156\060\036\027\015\060\071\060\063\061
\070\061\060\060\060\060\060\132\027\015\062\071\060\063\061\070
\061\060\060\060\060\060\132\060\114\061\040\060\036\006\003\125
\004\013\023\027\107\154\157\142\141\154\123\151\147\156\040\122
\157\157\164\040\103\101\040\055\040\122\063\061\023\060\021\006
\003\125\004\012\023\012\107\154\157\142\141\154\123\151\147\156
\061\023\060\021\006\003\125\004\003\023\012\107\154\157\142\141
\154\123\151\147\156\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\314\045\166\220\171\006\170\042\026\365
\300\203\266\204\312\050\236\375\005\166\021\305\255\210\162\374

\106\002\103\307\262\212\235\004\137\044\313\056\113\341\140\202
\106\341\122\253\014\201\107\160\154\335\144\321\353\365\054\243
\017\202\075\014\053\256\227\327\266\024\206\020\171\273\073\023
\200\167\214\010\341\111\322\152\142\057\037\136\372\226\150\337
\211\047\225\070\237\006\327\076\311\313\046\131\015\163\336\260
\310\351\046\016\203\025\306\357\133\213\322\004\140\312\111\246
\050\366\151\073\366\313\310\050\221\345\235\212\141\127\067\254
\164\024\334\164\340\072\356\162\057\056\234\373\320\273\277\365
\075\000\341\006\063\350\202\053\256\123\246\072\026\163\214\335
\101\016\040\072\300\264\247\241\351\262\117\220\056\062\140\351
\127\313\271\004\222\150\150\345\070\046\140\165\262\237\167\377
\221\024\357\256\040\111\374\255\100\025\110\321\002\061\141\031
\136\270\227\357\255\167\267\144\232\172\277\137\301\023\357\233
\142\373\015\154\340\124\151\026\251\003\332\156\351\203\223\161
\166\306\151\205\202\027\002\003\001\000\001\243\102\060\100\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\217\360\113\177\250
\056\105\044\256\115\120\372\143\232\213\336\342\335\033\274\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\001\001\000\113\100\333\300\120\252\376\310\014\357\367\226\124
\105\111\273\226\000\011\101\254\263\023\206\206\050\007\063\312
\153\346\164\271\272\000\055\256\244\012\323\365\361\361\017\212
\277\163\147\112\203\307\104\173\170\340\257\156\154\157\003\051
\216\063\071\105\303\216\344\271\127\154\252\374\022\226\354\123
\306\055\344\044\154\271\224\143\373\334\123\150\147\126\076\203
\270\317\065\041\303\311\150\376\316\332\302\123\252\314\220\212
\351\360\135\106\214\225\335\172\130\050\032\057\035\336\315\000
\067\101\217\355\104\155\327\123\050\227\176\363\147\004\036\025
\327\212\226\264\323\336\114\047\244\114\033\163\163\166\364\027
\231\302\037\172\016\343\055\010\255\012\034\054\377\074\253\125
\016\017\221\176\066\353\303\127\111\276\341\056\055\174\140\213
\303\101\121\023\043\235\316\367\062\153\224\001\250\231\347\054
\063\037\072\073\045\322\206\100\316\073\054\206\170\311\141\057
\024\272\356\333\125\157\337\204\356\005\011\115\275\050\330\162
\316\323\142\120\145\036\353\222\227\203\061\331\263\265\312\107
\130\077\137

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root CA - R3"

Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3

Serial Number:04:00:00:00:00:01:21:58:53:08:a2

#

```
Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Not Valid Before: Wed Mar 18 10:00:00 2009
# Not Valid After : Sun Mar 18 10:00:00 2029
# Fingerprint (SHA-256):
CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B
# Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\326\233\126\021\110\360\034\167\305\105\170\301\011\046\337\133
\205\151\166\255
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\337\270\111\312\005\023\125\356\055\272\032\303\076\260\050
END
CKA_ISSUER MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\041\130\123\010\242
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"
#
# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Serial Number:53:ec:3b:ee:fb:b2:48:5f
# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Not Valid Before: Wed May 20 08:38:15 2009
# Not Valid After : Tue Dec 31 08:38:15 2030
# Fingerprint (SHA-256):
04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF
# Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\123\354\073\356\373\262\110\137
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\123
\354\073\356\373\262\110\137\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\121\061\013\060\011\006\003\125\004
\006\023\002\105\123\061\102\060\100\006\003\125\004\003\014\071
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162
\164\151\146\151\143\141\143\151\157\156\040\106\151\162\155\141
\160\162\157\146\145\163\151\157\156\141\154\040\103\111\106\040
\101\066\062\066\063\064\060\066\070\060\036\027\015\060\071\060
\065\062\060\060\070\063\070\061\065\132\027\015\063\060\061\062
\063\061\060\070\063\070\061\065\132\060\121\061\013\060\011\006
\003\125\004\006\023\002\105\123\061\102\060\100\006\003\125\004
\003\014\071\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\040\106\151
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\040\103
\111\106\040\101\066\062\066\063\064\060\066\070\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\226\153
\216\352\370\373\361\242\065\340\177\114\332\340\303\122\327\175
\266\020\310\002\136\263\103\052\304\117\152\262\312\034\135\050
\232\170\021\032\151\131\127\257\265\040\102\344\213\017\346\337
\133\246\003\222\057\365\021\344\142\327\062\161\070\331\004\014
\161\253\075\121\176\017\007\337\143\005\134\351\277\224\157\301
```

\051\202\300\264\332\121\260\301\074\273\255\067\112\134\312\361
\113\066\016\044\253\277\303\204\167\375\250\120\364\261\347\306
\057\322\055\131\215\172\012\116\226\151\122\002\252\066\230\354
\374\372\024\203\014\067\037\311\222\067\177\327\201\055\345\304
\271\340\076\064\376\147\364\076\146\321\323\364\100\317\136\142
\064\017\160\006\076\040\030\132\316\367\162\033\045\154\223\164
\024\223\243\163\261\016\252\207\020\043\131\137\040\005\031\107
\355\150\216\222\022\312\135\374\326\053\262\222\074\040\317\341
\137\257\040\276\240\166\177\166\345\354\032\206\141\063\076\347
\173\264\077\240\017\216\242\271\152\157\271\207\046\157\101\154
\210\246\120\375\152\143\013\365\223\026\033\031\217\262\355\233
\233\311\220\365\001\014\337\031\075\017\076\070\043\311\057\217
\014\321\002\376\033\125\326\116\320\215\074\257\117\244\363\376
\257\052\323\005\235\171\010\241\313\127\061\264\234\310\220\262
\147\364\030\026\223\072\374\107\330\321\170\226\061\037\272\053
\014\137\135\231\255\143\211\132\044\040\166\330\337\375\253\116
\246\042\252\235\136\346\047\212\175\150\051\243\347\212\270\332
\021\273\027\055\231\235\023\044\106\367\305\342\330\237\216\177
\307\217\164\155\132\262\350\162\365\254\356\044\020\255\057\024
\332\377\055\232\106\161\107\276\102\337\273\001\333\364\177\323
\050\217\061\131\133\323\311\002\246\264\122\312\156\227\373\103
\305\010\046\157\212\364\273\375\237\050\252\015\325\105\363\023
\072\035\330\300\170\217\101\147\074\036\224\144\256\173\013\305
\350\331\001\210\071\032\227\206\144\101\325\073\207\014\156\372
\017\306\275\110\024\277\071\115\324\236\101\266\217\226\035\143
\226\223\331\225\006\170\061\150\236\067\006\073\200\211\105\141
\071\043\307\033\104\243\025\345\034\370\222\060\273\002\003\001
\000\001\243\201\357\060\201\354\060\022\006\003\125\035\023\001
\001\377\004\010\060\006\001\001\377\002\001\001\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003
\125\035\016\004\026\004\024\145\315\353\253\065\036\000\076\176
\325\164\300\034\264\163\107\016\032\144\057\060\201\246\006\003
\125\035\040\004\201\236\060\201\233\060\201\230\006\004\125\035
\040\000\060\201\217\060\057\006\010\053\006\001\005\005\007\002
\001\026\043\150\164\164\160\072\057\057\167\167\167\056\146\151
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\056\143
\157\155\057\143\160\163\060\134\006\010\053\006\001\005\005\007
\002\002\060\120\036\116\000\120\000\141\000\163\000\145\000\157
\000\040\000\144\000\145\000\040\000\154\000\141\000\040\000\102
\000\157\000\156\000\141\000\156\000\157\000\166\000\141\000\040
\000\064\000\067\000\040\000\102\000\141\000\162\000\143\000\145
\000\154\000\157\000\156\000\141\000\040\000\060\000\070\000\060
\000\061\000\067\060\015\006\011\052\206\110\206\367\015\001\001
\005\005\000\003\202\002\001\000\027\175\240\371\264\335\305\305
\353\255\113\044\265\241\002\253\335\245\210\112\262\017\125\113
\053\127\214\073\345\061\335\376\304\062\361\347\133\144\226\066
\062\030\354\245\062\167\327\343\104\266\300\021\052\200\271\075
\152\156\174\233\323\255\374\303\326\243\346\144\051\174\321\341

\070\036\202\053\377\047\145\257\373\026\025\304\056\161\204\345
\265\377\372\244\107\275\144\062\273\366\045\204\242\047\102\365
\040\260\302\023\020\021\315\020\025\272\102\220\052\322\104\341
\226\046\353\061\110\022\375\052\332\311\006\317\164\036\251\113
\325\207\050\371\171\064\222\076\056\104\350\366\217\117\217\065
\077\045\263\071\334\143\052\220\153\040\137\304\122\022\116\227
\054\052\254\235\227\336\110\362\243\146\333\302\322\203\225\246
\146\247\236\045\017\351\013\063\221\145\012\132\303\331\124\022
\335\257\303\116\016\037\046\136\015\334\263\215\354\325\201\160
\336\322\117\044\005\363\154\116\365\114\111\146\215\321\377\322
\013\045\101\110\376\121\204\306\102\257\200\004\317\320\176\144
\111\344\362\337\242\354\261\114\300\052\035\347\264\261\145\242
\304\274\361\230\364\252\160\007\143\264\270\332\073\114\372\100
\042\060\133\021\246\360\005\016\306\002\003\110\253\206\233\205
\335\333\335\352\242\166\200\163\175\365\234\004\304\105\215\347
\271\034\213\236\352\327\165\321\162\261\336\165\104\347\102\175
\342\127\153\175\334\231\274\075\203\050\352\200\223\215\305\114
\145\301\160\201\270\070\374\103\061\262\366\003\064\107\262\254
\373\042\006\313\036\335\027\107\034\137\146\271\323\032\242\332
\021\261\244\274\043\311\344\276\207\377\271\224\266\370\135\040
\112\324\137\347\275\150\173\145\362\025\036\322\072\251\055\351
\330\153\044\254\227\130\104\107\255\131\030\361\041\145\160\336
\316\064\140\250\100\361\363\074\244\303\050\043\214\376\047\063
\103\100\240\027\074\353\352\073\260\162\246\243\271\112\113\136
\026\110\364\262\274\310\214\222\305\235\237\254\162\066\274\064
\200\064\153\251\213\222\300\270\027\355\354\166\123\365\044\001
\214\263\042\350\113\174\125\306\235\372\243\024\273\145\205\156
\156\117\022\176\012\074\235\225

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Autoridad de Certificacion Firmaprofesional CIF A62634068"

Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Serial Number:53:ec:3b:ee:fb:b2:48:5f

Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Not Valid Before: Wed May 20 08:38:15 2009

Not Valid After : Tue Dec 31 08:38:15 2030

Fingerprint (SHA-256):

04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF

#

Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE


```

CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\256\305\373\077\310\341\277\304\345\117\003\007\132\232\350\000
\267\367\266\372
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\163\072\164\172\354\273\243\226\246\302\344\342\310\233\300\303
END
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\123\354\073\356\373\262\110\137
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Izenpe.com"
#
# Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES
# Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d
# Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES
# Not Valid Before: Thu Dec 13 13:08:28 2007
# Not Valid After : Sun Dec 13 08:27:25 2037
# Fingerprint (SHA-256):
25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F
# Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Izenpe.com"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\070\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\024\060\022\006\003\125\004\012\014\013\111\132\105\116\120\105
\040\123\056\101\056\061\023\060\021\006\003\125\004\003\014\012
\111\172\145\156\160\145\056\143\157\155
END

```

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\070\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\024\060\022\006\003\125\004\012\014\013\111\132\105\116\120\105
\040\123\056\101\056\061\023\060\021\006\003\125\004\003\014\012
\111\172\145\156\160\145\056\143\157\155

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\000\260\267\132\026\110\137\277\341\313\365\213\327\031
\346\175

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\361\060\202\003\331\240\003\002\001\002\002\020\000
\260\267\132\026\110\137\277\341\313\365\213\327\031\346\175\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\070
\061\013\060\011\006\003\125\004\006\023\002\105\123\061\024\060
\022\006\003\125\004\012\014\013\111\132\105\116\120\105\040\123
\056\101\056\061\023\060\021\006\003\125\004\003\014\012\111\172
\145\156\160\145\056\143\157\155\060\036\027\015\060\067\061\062
\061\063\061\063\060\070\062\070\132\027\015\063\067\061\062\061
\063\060\070\062\067\062\065\132\060\070\061\013\060\011\006\003
\125\004\006\023\002\105\123\061\024\060\022\006\003\125\004\012
\014\013\111\132\105\116\120\105\040\123\056\101\056\061\023\060
\021\006\003\125\004\003\014\012\111\172\145\156\160\145\056\143
\157\155\060\202\002\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202
\002\001\000\311\323\172\312\017\036\254\247\206\350\026\145\152
\261\302\033\105\062\161\225\331\376\020\133\314\257\347\245\171
\001\217\211\303\312\362\125\161\367\167\276\167\224\363\162\244
\054\104\330\236\222\233\024\072\241\347\044\220\012\012\126\216
\305\330\046\224\341\331\110\341\055\076\332\012\162\335\243\231
\025\332\201\242\207\364\173\156\046\167\211\130\255\326\353\014
\262\101\172\163\156\155\333\172\170\101\351\010\210\022\176\207
\056\146\021\143\154\124\373\074\235\162\300\274\056\377\302\267
\335\015\166\343\072\327\367\264\150\276\242\365\343\201\156\301
\106\157\135\215\340\115\306\124\125\211\032\063\061\012\261\127
\271\243\212\230\303\354\073\064\305\225\101\151\176\165\302\074
\040\305\141\272\121\107\240\040\220\223\241\220\113\363\116\174
\205\105\124\232\321\005\046\101\260\265\115\035\063\276\304\003
\310\045\174\301\160\333\073\364\011\055\124\047\110\254\057\341
\304\254\076\310\313\222\114\123\071\067\043\354\323\001\371\340
\011\104\115\115\144\300\341\015\132\207\042\274\255\033\243\376
\046\265\025\363\247\374\204\031\351\354\241\210\264\104\151\204
\203\363\211\321\164\006\251\314\013\326\302\336\047\205\120\046
\312\027\270\311\172\207\126\054\032\001\036\154\276\023\255\020
\254\265\044\365\070\221\241\326\113\332\361\273\322\336\107\265
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CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Izenpe.com"

#

Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES

Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d

Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES

Not Valid Before: Thu Dec 13 13:08:28 2007

Not Valid After : Sun Dec 13 08:27:25 2037

Fingerprint (SHA-256):

25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F

Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Izenpe.com"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

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END

CKA_ISSUER MULTILINE_OCTAL

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END

CKA_SERIAL_NUMBER

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MULTILINE_OCTAL
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CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Chambers of Commerce Root - 2008"
#
# Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Serial Number:00:a3:da:42:7e:a4:b1:ae:da
# Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:29:50 2008
# Not Valid After : Sat Jul 31 12:29:50 2038
# Fingerprint (SHA-256):
06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0
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Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Chambers of Commerce Root - 2008"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
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UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
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END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

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END

CKA_VALUE MULTILINE_OCTAL

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\011\121\074\262\154\025\360\245\043\327\203\164\344\345\056\311
\376\230\047\102\306\253\306\236\260\320\133\070\245\233\120\336
\176\030\230\265\105\073\366\171\264\350\367\032\173\006\203\373
\320\213\332\273\307\275\030\253\010\157\074\200\153\100\077\031
\031\272\145\212\346\276\325\134\323\066\327\357\100\122\044\140
\070\147\004\061\354\217\363\202\306\336\271\125\363\073\061\221
\132\334\265\010\025\255\166\045\012\015\173\056\207\342\014\246
\006\274\046\020\155\067\235\354\335\170\214\174\200\305\360\331
\167\110\320

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Chambers of Commerce Root - 2008"

Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU

Serial Number:00:a3:da:42:7e:a4:b1:ae:da

#


```
Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:29:50 2008
# Not Valid After : Sat Jul 31 12:29:50 2038
# Fingerprint (SHA-256):
06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0
# Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Chambers of Commerce Root - 2008"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\170\152\164\254\166\253\024\177\234\152\060\120\272\236\250\176
\376\232\316\074
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\136\200\236\204\132\016\145\013\027\002\363\125\030\052\076\327
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\243\332\102\176\244\261\256\332
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Global Chambersign Root - 2008"
#
# Issuer: CN=Global Chambersign
Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at
www.camerfirma.com/address),C=EU
```

```
# Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce
# Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:31:40 2008
# Not Valid After : Sat Jul 31 12:31:40 2038
# Fingerprint (SHA-256):
13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA
# Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Global Chambersign Root - 2008"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\311\315\323\351\325\175\043\316
END
CKA_VALUE MULTILINE_OCTAL
\060\202\007\111\060\202\005\061\240\003\002\001\002\002\011\000
```

\311\315\323\351\325\175\043\316\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\201\254\061\013\060\011\006\003
\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007
\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165
\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164
\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056
\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020
\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067
\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141
\155\145\162\146\151\162\155\141\040\123\056\101\056\061\047\060
\045\006\003\125\004\003\023\036\107\154\157\142\141\154\040\103
\150\141\155\142\145\162\163\151\147\156\040\122\157\157\164\040
\055\040\062\060\060\070\060\036\027\015\060\070\060\070\060\061
\061\062\063\061\064\060\132\027\015\063\070\060\067\063\061\061
\062\063\061\064\060\132\060\201\254\061\013\060\011\006\003\125
\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007\023
\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165\162
\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164\040
\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056\143
\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020\006
\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067\061
\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\056\101\056\061\047\060\045
\006\003\125\004\003\023\036\107\154\157\142\141\154\040\103\150
\141\155\142\145\162\163\151\147\156\040\122\157\157\164\040\055
\040\062\060\060\070\060\202\002\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002
\012\002\202\002\001\000\300\337\126\323\344\072\233\166\105\264
\023\333\377\301\266\031\213\067\101\030\225\122\107\353\027\235
\051\210\216\065\154\006\062\056\107\142\363\111\004\277\175\104
\066\261\161\314\275\132\011\163\325\331\205\104\377\221\127\045
\337\136\066\216\160\321\134\161\103\035\331\332\357\134\322\373
\033\275\072\265\313\255\243\314\104\247\015\256\041\025\077\271
\172\133\222\165\330\244\022\070\211\031\212\267\200\322\342\062
\157\126\234\221\326\210\020\013\263\164\144\222\164\140\363\366
\317\030\117\140\262\043\320\307\073\316\141\113\231\217\302\014
\320\100\262\230\334\015\250\116\243\271\012\256\140\240\255\105
\122\143\272\146\275\150\340\371\276\032\250\201\273\036\101\170
\165\323\301\376\000\125\260\207\124\350\047\220\065\035\114\063
\255\227\374\227\056\230\204\277\054\311\243\277\321\230\021\024
\355\143\370\312\230\210\130\027\231\355\105\003\227\176\074\206
\036\210\214\276\362\221\204\217\145\064\330\000\114\175\267\061
\027\132\051\172\012\030\044\060\243\067\265\172\251\001\175\046
\326\371\016\216\131\361\375\033\063\265\051\073\027\073\101\266
\041\335\324\300\075\245\237\237\037\103\120\311\273\274\154\172
\227\230\356\315\214\037\373\234\121\256\213\160\275\047\237\161
\300\153\254\175\220\146\350\327\135\072\015\260\325\302\215\325
\310\235\235\301\155\320\320\277\121\344\343\370\303\070\066\256

\326\247\165\346\257\204\103\135\223\222\014\152\007\336\073\035
\230\042\326\254\301\065\333\243\240\045\377\162\265\166\035\336
\155\351\054\146\054\122\204\320\105\222\316\034\345\345\063\035
\334\007\123\124\243\252\202\073\232\067\057\334\335\240\144\351
\346\335\275\256\374\144\205\035\074\247\311\006\336\204\377\153
\350\153\032\074\305\242\263\102\373\213\011\076\137\010\122\307
\142\304\324\005\161\277\304\144\344\370\241\203\350\076\022\233
\250\036\324\066\115\057\161\366\215\050\366\203\251\023\322\141
\301\221\273\110\300\064\217\101\214\113\114\333\151\022\377\120
\224\234\040\203\131\163\355\174\241\362\361\375\335\367\111\323
\103\130\240\126\143\312\075\075\345\065\126\131\351\016\312\040
\314\053\113\223\051\017\002\003\001\000\001\243\202\001\152\060
\202\001\146\060\022\006\003\125\035\023\001\001\377\004\010\060
\006\001\001\377\002\001\014\060\035\006\003\125\035\016\004\026
\004\024\271\011\312\234\036\333\323\154\072\153\256\355\124\361
\133\223\006\065\056\136\060\201\341\006\003\125\035\043\004\201
\331\060\201\326\200\024\271\011\312\234\036\333\323\154\072\153
\256\355\124\361\133\223\006\065\056\136\241\201\262\244\201\257
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070\202
\011\000\311\315\323\351\325\175\043\316\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\075\006\003\125\035
\040\004\066\060\064\060\062\006\004\125\035\040\000\060\052\060
\050\006\010\053\006\001\005\005\007\002\001\026\034\150\164\164
\160\072\057\057\160\157\154\151\143\171\056\143\141\155\145\162
\146\151\162\155\141\056\143\157\155\060\015\006\011\052\206\110
\206\367\015\001\001\005\005\000\003\202\002\001\000\200\210\177
\160\336\222\050\331\005\224\106\377\220\127\251\361\057\337\032
\015\153\372\174\016\034\111\044\171\047\330\106\252\157\051\131
\122\210\160\022\352\335\075\365\233\123\124\157\341\140\242\250
\011\271\354\353\131\174\306\065\361\334\030\351\361\147\345\257
\272\105\340\011\336\312\104\017\302\027\016\167\221\105\172\063
\137\137\226\054\150\213\301\107\217\230\233\075\300\354\313\365
\325\202\222\204\065\321\276\066\070\126\162\061\133\107\055\252
\027\244\143\121\353\012\001\255\177\354\165\236\313\241\037\361
\177\022\261\271\344\144\177\147\326\043\052\364\270\071\135\230
\350\041\247\341\275\075\102\032\164\232\160\257\150\154\120\135
\111\317\377\373\016\135\346\054\107\327\201\072\131\000\265\163
\153\143\040\366\061\105\010\071\016\364\160\176\100\160\132\077

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\320\153\102\251\164\075\050\057\002\155\165\162\225\011\215\110
\143\306\306\043\127\222\223\136\065\301\215\371\012\367\054\235
\142\034\366\255\174\335\246\061\036\266\261\307\176\205\046\372
\244\152\265\332\143\060\321\357\223\067\262\146\057\175\005\367
\347\267\113\230\224\065\300\331\072\051\301\235\262\120\063\035
\112\251\132\246\311\003\357\355\364\347\250\156\212\264\127\204
\353\244\077\320\356\252\252\207\133\143\350\223\342\153\250\324
\270\162\170\153\033\355\071\344\135\313\233\252\207\325\117\116
\000\376\331\152\237\074\061\017\050\002\001\175\230\350\247\260
\242\144\236\171\370\110\362\025\251\314\346\310\104\353\077\170
\231\362\173\161\076\074\361\230\247\305\030\022\077\346\273\050
\063\102\351\105\012\174\155\362\206\171\057\305\202\031\175\011
\211\174\262\124\166\210\256\336\301\363\314\341\156\333\061\326
\223\256\231\240\357\045\152\163\230\211\133\072\056\023\210\036
\277\300\222\224\064\033\343\047\267\213\036\157\102\377\347\351
\067\233\120\035\055\242\371\002\356\313\130\130\072\161\274\150
\343\252\301\257\034\050\037\242\334\043\145\077\201\352\256\231
\323\330\060\317\023\015\117\025\311\204\274\247\110\055\370\060
\043\167\330\106\113\171\155\366\214\355\072\177\140\021\170\364
\351\233\256\325\124\300\164\200\321\013\102\237\301
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Global Chambersign Root - 2008"

Issuer: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at www.camerfirma.com/address),C=EU

Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce

Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at www.camerfirma.com/address),C=EU

Not Valid Before: Fri Aug 01 12:31:40 2008

Not Valid After : Sat Jul 31 12:31:40 2038

Fingerprint (SHA-256):

13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA

Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL

CK_FALSE

CKA_LABEL UTF8 "Global Chambersign Root - 2008"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\112\275\356\354\225\015\065\234\211\256\307\122\241\054\133\051
\366\326\252\014
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\236\200\377\170\001\014\056\301\066\275\376\226\220\156\010\363

END

CKA_ISSUER MULTILINE_OCTAL

\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\011\000\311\315\323\351\325\175\043\316

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Go Daddy Root Certificate Authority - G2"

#

Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com,
Inc.",L=Scottsdale,ST=Arizona,C=US

Not Valid Before: Tue Sep 01 00:00:00 2009

Not Valid After : Thu Dec 31 23:59:59 2037

Fingerprint (SHA-256):

45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA

Fingerprint (SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE

CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012

\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\305\060\202\002\255\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164
\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012\023
\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157\040
\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164\151
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\062\060\036\027\015\060\071\060\071\060\061\060
\060\060\060\060\060\132\027\015\063\067\061\062\063\061\062\063
\065\071\065\071\132\060\201\203\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\020\060\016\006\003\125\004\010\023\007
\101\162\151\172\157\156\141\061\023\060\021\006\003\125\004\007
\023\012\123\143\157\164\164\163\144\141\154\145\061\032\060\030
\006\003\125\004\012\023\021\107\157\104\141\144\144\171\056\143
\157\155\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\023\050\107\157\040\104\141\144\144\171\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062\060\202\001\042\060
\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202
\001\017\000\060\202\001\012\002\202\001\001\000\277\161\142\010
\361\372\131\064\367\033\311\030\243\367\200\111\130\351\042\203
\023\246\305\040\103\001\073\204\361\346\205\111\237\047\352\366

\204\033\116\240\264\333\160\230\307\062\001\261\005\076\007\116
\356\364\372\117\057\131\060\042\347\253\031\126\153\342\200\007
\374\363\026\165\200\071\121\173\345\371\065\266\164\116\251\215
\202\023\344\266\077\251\003\203\372\242\276\212\025\152\177\336
\013\303\266\031\024\005\312\352\303\250\004\224\073\106\174\062
\015\363\000\146\042\310\215\151\155\066\214\021\030\267\323\262
\034\140\264\070\372\002\214\316\323\335\106\007\336\012\076\353
\135\174\310\174\373\260\053\123\244\222\142\151\121\045\005\141
\032\104\201\214\054\251\103\226\043\337\254\072\201\232\016\051
\305\034\251\351\135\036\266\236\236\060\012\071\316\361\210\200
\373\113\135\314\062\354\205\142\103\045\064\002\126\047\001\221
\264\073\160\052\077\156\261\350\234\210\001\175\237\324\371\333
\123\155\140\235\277\054\347\130\253\270\137\106\374\316\304\033
\003\074\011\353\111\061\134\151\106\263\340\107\002\003\001\000
\001\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004
\024\072\232\205\007\020\147\050\266\357\366\275\005\101\156\040
\301\224\332\017\336\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\003\202\001\001\000\231\333\135\171\325\371\227
\131\147\003\141\361\176\073\006\061\165\055\241\040\216\117\145
\207\264\367\246\234\274\330\351\057\320\333\132\356\317\164\214
\163\264\070\102\332\005\173\370\002\165\270\375\245\261\327\256
\366\327\336\023\313\123\020\176\212\106\321\227\372\267\056\053
\021\253\220\260\047\200\371\350\237\132\351\067\237\253\344\337
\154\263\205\027\235\075\331\044\117\171\221\065\326\137\004\353
\200\203\253\232\002\055\265\020\364\330\220\307\004\163\100\355
\162\045\240\251\237\354\236\253\150\022\231\127\306\217\022\072
\011\244\275\104\375\006\025\067\301\233\344\062\243\355\070\350
\330\144\363\054\176\024\374\002\352\237\315\377\007\150\027\333
\042\220\070\055\172\215\321\124\361\151\343\137\063\312\172\075
\173\012\343\312\177\137\071\345\342\165\272\305\166\030\063\316
\054\360\057\114\255\367\261\347\316\117\250\304\233\112\124\006
\305\177\175\325\010\017\342\034\376\176\027\270\254\136\366\324
\026\262\103\011\014\115\366\247\153\264\231\204\145\312\172\210
\342\342\104\276\134\367\352\034\365

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Go Daddy Root Certificate Authority - G2"

Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com,
Inc.",L=Scottsdale,ST=Arizona,C=US

Not Valid Before: Tue Sep 01 00:00:00 2009


```

# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA
# Fingerprint
(SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\107\276\253\311\042\352\350\016\170\170\064\142\247\237\105\302
\124\375\346\213
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\200\072\274\042\301\346\373\215\233\073\047\112\062\033\232\001
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Starfield Root Certificate Authority - G2"
#
# Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before: Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):

```

```
2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5
# Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\335\060\202\002\305\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062\060
\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145\154
```

\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062\060\036\027\015\060\071\060\071\060\061\060\060\060\060\060
\060\132\027\015\063\067\061\062\063\061\062\063\065\071\065\071
\132\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172
\157\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143
\157\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143
\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061
\062\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151
\145\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055
\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\275\355\301\003\374\366\217\374\002\261\157\133
\237\110\331\235\171\342\242\267\003\141\126\030\303\107\266\327
\312\075\065\056\211\103\367\241\151\233\336\212\032\375\023\040
\234\264\111\167\062\051\126\375\271\354\214\335\042\372\162\334
\047\141\227\356\366\132\204\354\156\031\271\211\054\334\204\133
\325\164\373\153\137\305\211\245\020\122\211\106\125\364\270\165
\034\346\177\344\124\256\113\370\125\162\127\002\031\370\027\161
\131\353\036\050\007\164\305\235\110\276\154\264\364\244\260\363
\144\067\171\222\300\354\106\136\177\341\155\123\114\142\257\315
\037\013\143\273\072\235\373\374\171\000\230\141\164\317\046\202
\100\143\363\262\162\152\031\015\231\312\324\016\165\314\067\373
\213\211\301\131\361\142\177\137\263\137\145\060\370\247\267\115
\166\132\036\166\136\064\300\350\226\126\231\212\263\360\177\244
\315\275\334\062\061\174\221\317\340\137\021\370\153\252\111\134
\321\231\224\321\242\343\143\133\011\166\265\126\142\341\113\164
\035\226\324\046\324\010\004\131\320\230\016\016\346\336\374\303
\354\037\220\361\002\003\001\000\001\243\102\060\100\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035
\006\003\125\035\016\004\026\004\024\174\014\062\037\247\331\060
\177\304\175\150\243\142\250\241\316\253\007\133\047\060\015\006
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001
\000\021\131\372\045\117\003\157\224\231\073\232\037\202\205\071
\324\166\005\224\136\341\050\223\155\142\135\011\302\240\250\324
\260\165\070\361\064\152\235\344\237\212\206\046\121\346\054\321
\306\055\156\225\040\112\222\001\354\270\212\147\173\061\342\147
\056\214\225\003\046\056\103\235\112\061\366\016\265\014\273\267
\342\067\177\042\272\000\243\016\173\122\373\153\273\073\304\323
\171\121\116\315\220\364\147\007\031\310\074\106\172\015\001\175
\305\130\347\155\346\205\060\027\232\044\304\020\340\004\367\340
\362\177\324\252\012\377\102\035\067\355\224\345\144\131\022\040
\167\070\323\062\076\070\201\165\226\163\372\150\217\261\313\316
\037\305\354\372\234\176\317\176\261\361\007\055\266\374\277\312

```
\244\277\320\227\005\112\274\352\030\050\002\220\275\124\170\011
\041\161\323\321\175\035\331\026\260\251\141\075\320\012\000\042
\374\307\173\313\011\144\105\013\073\100\201\367\175\174\062\365
\230\312\130\216\175\052\356\220\131\163\144\371\066\164\136\045
\241\365\146\005\056\177\071\025\251\052\373\120\213\216\205\151
\364
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Starfield Root Certificate Authority - G2"

Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

#

Not Valid Before: Tue Sep 01 00:00:00 2009

Not Valid After : Thu Dec 31 23:59:59 2037

Fingerprint (SHA-256):

2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5

Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Starfield Root Certificate Authority - G2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\265\034\006\174\356\053\014\075\370\125\253\055\222\364\376\071
\324\347\017\016
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\326\071\201\306\122\176\226\151\374\374\312\146\355\005\362\226
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Starfield Services Root Certificate Authority - G2"
#
# Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before:
Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5
# Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Services Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012

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\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\357\060\202\002\327\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073\060
\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145\154
\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164\040
\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150
\157\162\151\164\171\040\055\040\107\062\060\036\027\015\060\071
\060\071\060\061\060\060\060\060\060\060\132\027\015\063\067\061
\062\063\061\062\063\065\071\065\071\132\060\201\230\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\020\060\016\006\003
\125\004\010\023\007\101\162\151\172\157\156\141\061\023\060\021
\006\003\125\004\007\023\012\123\143\157\164\164\163\144\141\154
\145\061\045\060\043\006\003\125\004\012\023\034\123\164\141\162
\146\151\145\154\144\040\124\145\143\150\156\157\154\157\147\151
\145\163\054\040\111\156\143\056\061\073\060\071\006\003\125\004
\003\023\062\123\164\141\162\146\151\145\154\144\040\123\145\162
\166\151\143\145\163\040\122\157\157\164\040\103\145\162\164\151
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\325\014\072\304\052\371\116\342\365\276
\031\227\137\216\210\123\261\037\077\313\317\237\040\023\155\051
\072\310\017\175\074\367\153\166\070\143\331\066\140\250\233\136
\134\000\200\262\057\131\177\366\207\371\045\103\206\347\151\033
\122\232\220\341\161\343\330\055\015\116\157\366\310\111\331\266
\363\032\126\256\053\266\164\024\353\317\373\046\343\032\272\035
\226\056\152\073\130\224\211\107\126\377\045\240\223\160\123\203
\332\204\164\024\303\147\236\004\150\072\337\216\100\132\035\112
\116\317\103\221\073\347\126\326\000\160\313\122\356\173\175\256
\072\347\274\061\371\105\366\302\140\317\023\131\002\053\200\314
\064\107\337\271\336\220\145\155\002\317\054\221\246\246\347\336
\205\030\111\174\146\116\243\072\155\251\265\356\064\056\272\015

\003\270\063\337\107\353\261\153\215\045\331\233\316\201\321\105
\106\062\226\160\207\336\002\016\111\103\205\266\154\163\273\144
\352\141\101\254\311\324\124\337\207\057\307\042\262\046\314\237
\131\124\150\237\374\276\052\057\304\125\034\165\100\140\027\205
\002\125\071\213\177\005\002\003\001\000\001\243\102\060\100\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006
\060\035\006\003\125\035\016\004\026\004\024\234\137\000\337\252
\001\327\060\053\070\210\242\270\155\112\234\362\021\221\203\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\001\001\000\113\066\246\204\167\151\335\073\031\237\147\043\010
\157\016\141\311\375\204\334\137\330\066\201\315\330\033\101\055
\237\140\335\307\032\150\331\321\156\206\341\210\043\317\023\336
\103\317\342\064\263\004\235\037\051\325\277\370\136\310\325\301
\275\356\222\157\062\164\362\221\202\057\275\202\102\172\255\052
\267\040\175\115\274\172\125\022\302\025\352\275\367\152\225\056
\154\164\237\317\034\264\362\305\001\243\205\320\162\076\255\163
\253\013\233\165\014\155\105\267\216\224\254\226\067\265\240\320
\217\025\107\016\343\350\203\335\217\375\357\101\001\167\314\047
\251\142\205\063\362\067\010\357\161\317\167\006\336\310\031\035
\210\100\317\175\106\035\377\036\307\341\316\377\043\333\306\372
\215\125\116\251\002\347\107\021\106\076\364\375\275\173\051\046
\273\251\141\142\067\050\266\055\052\366\020\206\144\311\160\247
\322\255\267\051\160\171\352\074\332\143\045\237\375\150\267\060
\354\160\373\165\212\267\155\140\147\262\036\310\271\351\330\250
\157\002\213\147\015\115\046\127\161\332\040\374\301\112\120\215
\261\050\272

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Starfield Services Root Certificate Authority - G2"

Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

Serial Number: 0 (0x0)

Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US

Not Valid Before: Tue Sep 01 00:00:00 2009

Not Valid After : Thu Dec 31 23:59:59 2037

Fingerprint (SHA-256):

56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5

Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

CKA_LABEL UTF8 "Starfield Services Root
Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\222\132\217\215\054\155\004\340\146\137\131\152\377\042\330\143
\350\045\157\077
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\027\065\164\257\173\141\034\353\364\371\074\342\356\100\371\242
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Commercial"
#
# Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US
# Serial Number:77:77:06:27:26:a9:b1:7c
# Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:06:06 2010
# Not Valid After : Tue Dec 31 14:06:06 2030
# Fingerprint (SHA-256):
03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7
# Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Commercial"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```


\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\010\167\167\006\047\046\251\261\174

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\167
\167\006\047\046\251\261\174\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\104\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163
\164\040\103\157\155\155\145\162\143\151\141\154\060\036\027\015
\061\060\060\061\062\071\061\064\060\066\060\066\132\027\015\063
\060\061\062\063\061\061\064\060\066\060\066\132\060\104\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151
\162\155\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\366\033\117\147\007\053\241\025\365\006\042\313\037
\001\262\343\163\105\006\104\111\054\273\111\045\024\326\316\303
\267\253\054\117\306\101\062\224\127\372\022\247\133\016\342\217
\037\036\206\031\247\252\265\055\271\137\015\212\302\257\205\065
\171\062\055\273\034\142\067\362\261\133\112\075\312\315\161\137
\351\102\276\224\350\310\336\371\042\110\144\306\345\253\306\053
\155\255\005\360\372\325\013\317\232\345\360\120\244\213\073\107
\245\043\133\172\172\370\063\077\270\357\231\227\343\040\301\326
\050\211\317\224\373\271\105\355\343\100\027\021\324\164\360\013
\061\342\053\046\152\233\114\127\256\254\040\076\272\105\172\005
\363\275\233\151\025\256\175\116\040\143\304\065\166\072\007\002
\311\067\375\307\107\356\350\361\166\035\163\025\362\227\244\265
\310\172\171\331\102\252\053\177\134\376\316\046\117\243\146\201
\065\257\104\272\124\036\034\060\062\145\235\346\074\223\136\120

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\116\172\343\072\324\156\314\032\373\371\322\067\256\044\052\253
\127\003\042\050\015\111\165\177\267\050\332\165\277\216\343\334
\016\171\061\002\003\001\000\001\243\102\060\100\060\035\006\003
\125\035\016\004\026\004\024\235\223\306\123\213\136\312\257\077
\237\036\017\345\231\225\274\044\366\224\217\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011
\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001\000
\130\254\364\004\016\315\300\015\377\012\375\324\272\026\137\051
\275\173\150\231\130\111\322\264\035\067\115\177\047\175\106\006
\135\103\306\206\056\076\163\262\046\175\117\223\251\266\304\052
\232\253\041\227\024\261\336\214\323\253\211\025\330\153\044\324
\361\026\256\330\244\134\324\177\121\216\355\030\001\261\223\143
\275\274\370\141\200\232\236\261\316\102\160\342\251\175\006\045
\175\047\241\376\157\354\263\036\044\332\343\113\125\032\000\073
\065\264\073\331\327\135\060\375\201\023\211\362\302\006\053\355
\147\304\216\311\103\262\134\153\025\211\002\274\142\374\116\362
\265\063\252\262\157\323\012\242\120\343\366\073\350\056\104\302
\333\146\070\251\063\126\110\361\155\033\063\215\015\214\077\140
\067\235\323\312\155\176\064\176\015\237\162\166\213\033\237\162
\375\122\065\101\105\002\226\057\034\262\232\163\111\041\261\111
\107\105\107\264\357\152\064\021\311\115\232\314\131\267\326\002
\236\132\116\145\265\224\256\033\337\051\260\026\361\277\000\236
\007\072\027\144\265\004\265\043\041\231\012\225\073\227\174\357
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AffirmTrust Commercial"

Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

Serial Number:77:77:06:27:26:a9:b1:7c

Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

Not Valid Before: Fri Jan 29 14:06:06 2010

Not Valid After : Tue Dec 31 14:06:06 2030

Fingerprint (SHA-256):

03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7

Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "AffirmTrust Commercial"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\371\265\266\062\105\137\234\276\354\127\137\200\334\351\156\054
\307\262\170\267
```

END

```

CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\202\222\272\133\357\315\212\157\246\075\125\371\204\366\326\267
END
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\167\167\006\047\046\251\261\174
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Networking"
#
# Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Serial Number:7c:4f:04:39:1c:d4:99:2d
# Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:08:24 2010
# Not Valid After : Tue Dec
31 14:08:24 2030
# Fingerprint (SHA-256):
0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B
# Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Networking"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155

```

\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\174
\117\004\071\034\324\231\055\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\104\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163
\164\040\116\145\164\167\157\162\153\151\156\147\060\036\027\015
\061\060\060\061\062\071\061\064\060\070\062\064\132\027\015\063
\060\061\062\063\061\061\064\060\070\062\064\132\060\104\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151
\162\155\124\162\165\163\164\040\116\145\164\167\157\162\153\151
\156\147\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\264\204\314\063\027\056\153\224\154\153\141\122\240
\353\243\317\171\224\114\345\224\200\231\313\125\144\104\145\217
\147\144\342\006\343\134\067\111\366\057\233\204\204\036\055\362
\140\235\060\116\314\204\205\342\054\317\036\236\376\066\253\063
\167\065\104\330\065\226\032\075\066\350\172\016\330\325\107\241
\152\151\213\331\374\273\072\256\171\132\325\364\326\161\273\232
\220\043\153\232\267\210\164\207\014\036\137\271\236\055\372\253
\123\053\334\273\166\076\223\114\010\010\214\036\242\043\034\324
\152\255\042\272\231\001\056\155\145\313\276\044\146\125\044\113
\100\104\261\033\327\341\302\205\300\336\020\077\075\355\270\374
\361\361\043\123\334\277\145\227\157\331\371\100\161\215\175\275
\225\324\316\276\240\136\047\043\336\375\246\320\046\016\000\051
\353\074\106\360\075\140\277\077\120\322\334\046\101\121\236\024
\067\102\004\243\160\127\250\033\207\355\055\372\173\356\214\012
\343\251\146\211\031\313\101\371\335\104\066\141\317\342\167\106
\310\175\366\364\222\201\066\375\333\064\361\162\176\363\014\026
\275\264\025\002\003\001\000\001\243\102\060\100\060\035\006\003
\125\035\016\004\026\004\024\007\037\322\347\234\332\302\156\242
\100\264\260\172\120\020\120\164\304\310\275\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
\211\127\262\026\172\250\302\375\326\331\233\233\064\302\234\264
\062\024\115\247\244\337\354\276\247\276\370\103\333\221\067\316

```
\264\062\056\120\125\032\065\116\166\103\161\040\357\223\167\116
\025\160\056\207\303\301\035\155\334\313\265\047\324\054\126\321
\122\123\072\104\322\163\310\304\033\005\145\132\142\222\234\356
\101\215\061\333\347\064\352\131\041\325\001\172\327\144\270\144
\071\315\311\355\257\355\113\003\110\247\240\231\001\200\334\145
\243\066\256\145\131\110\117\202\113\310\145\361\127\035\345\131
\056\012\077\154\330\321\365\345\011\264\154\124\000\012\340\025
\115\207\165\155\267\130\226\132\335\155\322\000\240\364\233\110
\276\303\067\244\272\066\340\174\207\205\227\032\025\242\336\056
\242\133\275\257\030\371\220\120\315\160\131\370\047\147\107\313
\307\240\007\072\175\321\054\135\154\031\072\146\265\175\375\221
\157\202\261\276\010\223\333\024\107\361\242\067\307\105\236\074
\307\167\257\144\250\223\337\366\151\203\202\140\362\111\102\064
\355\132\000\124\205\034\026\066\222\014\134\372\246\255\277\333
END
```

```
CKA_NSS_MOZILLA_CA_POLICY
```

```
CK_BBOOL CK_TRUE
```

```
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
# Trust for "AffirmTrust Networking"
```

```
# Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US
```

```
# Serial Number:7c:4f:04:39:1c:d4:99:2d
```

```
# Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US
```

```
# Not Valid Before: Fri Jan
```

```
29 14:08:24 2010
```

```
# Not Valid After : Tue Dec 31 14:08:24 2030
```

```
# Fingerprint (SHA-256):
```

```
0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B
```

```
# Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "AffirmTrust Networking"
```

```
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
```

```
\051\066\041\002\213\040\355\002\365\146\305\062\321\326\355\220
\237\105\000\057
```

```
END
```

```
CKA_CERT_MD5_HASH MULTILINE_OCTAL
```

```
\102\145\312\276\001\232\232\114\251\214\101\111\315\300\325\177
END
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
```

```

END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Premium"
#
# Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Serial Number:6d:8c:14:46:b1:a6:0a:ee
# Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:10:36 2010
# Not Valid After : Mon Dec 31 14:10:36 2040
# Fingerprint (SHA-256):
70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A
# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\155\214\024\106\261\246\012\356
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\106\060\202\003\056\240\003\002\001\002\002\010\155

```

\214\024\106\261\246\012\356\060\015\006\011\052\206\110\206\367
\015\001\001\014\005\000\060\101\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\034\060\032\006
\003\125\004\003\014\023\101\146\146\151\162\155\124\162\165\163
\164\040\120\162\145\155\151\165\155\060\036\027\015\061\060\060
\061\062\071\061\064\061\060\063\066\132\027\015\064\060\061\062
\063\061\061\064\061\060\063\066\132\060\101\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125\004
\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061\034
\060\032\006\003\125\004\003\014\023\101\146\146\151\162\155\124
\162\165\163\164\040\120\162\145\155\151\165\155\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\304\022\337
\251\137\376\101\335\335\365\237\212\343\366\254\341\074\170\232
\274\330\360\177\172\240\063\052\334\215\040\133\256\055\157\347
\223\331\066\160\152\150\317\216\121\243\205\133\147\004\240\020
\044\157\135\050\202\301\227\127\330\110\051\023\266\341\276\221
\115\337\205\014\123\030\232\036\044\242\117\217\360\242\205\013
\313\364\051\177\322\244\130\356\046\115\311\252\250\173\232\331
\372\070\336\104\127\025\345\370\214\310\331\110\342\015\026\047
\035\036\310\203\205\045\267\272\252\125\101\314\003\042\113\055
\221\215\213\346\211\257\146\307\351\377\053\351\074\254\332\322
\263\303\341\150\234\211\370\172\000\126\336\364\125\225\154\373
\272\144\335\142\213\337\013\167\062\353\142\314\046\232\233\273
\252\142\203\114\264\006\172\060\310\051\277\355\006\115\227\271
\034\304\061\053\325\137\274\123\022\027\234\231\127\051\146\167
\141\041\061\007\056\045\111\235\030\362\356\363\053\161\214\265
\272\071\007\111\167\374\357\056\222\220\005\215\055\057\167\173
\357\103\277\065\273\232\330\371\163\247\054\362\320\127\356\050
\116\046\137\217\220\150\011\057\270\370\334\006\351\056\232\076
\121\247\321\042\304\012\247\070\110\154\263\371\377\175\253\206
\127\343\272\326\205\170\167\272\103\352\110\177\366\330\276\043
\155\036\277\321\066\154\130\134\361\356\244\031\124\032\365\003
\322\166\346\341\214\275\074\263\323\110\113\342\310\370\177\222
\250\166\106\234\102\145\076\244\036\301\007\003\132\106\055\270
\227\363\267\325\262\125\041\357\272\334\114\000\227\373\024\225
\047\063\277\350\103\107\106\322\010\231\026\140\073\232\176\322
\346\355\070\352\354\001\036\074\110\126\111\011\307\114\067\000
\236\210\016\300\163\341\157\146\351\162\107\060\076\020\345\013
\003\311\232\102\000\154\305\224\176\141\304\212\337\177\202\032
\013\131\304\131\062\167\263\274\140\151\126\071\375\264\006\173
\054\326\144\066\331\275\110\355\204\037\176\245\042\217\052\270
\102\364\202\267\324\123\220\170\116\055\032\375\201\157\104\327
\073\001\164\226\102\340\000\342\056\153\352\305\356\162\254\273
\277\376\352\252\250\370\334\366\262\171\212\266\147\002\003\001
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\235\300\147\246\014\042\331\046\365\105\253\246\145\122\021

\047\330\105\254\143\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015
\001\001\014\005\000\003\202\002\001\000\263\127\115\020\142\116
\072\344\254\352\270\034\257\062\043\310\263\111\132\121\234\166
\050\215\171\252\127\106\027\325\365\122\366\267\104\350\010\104
\277\030\204\322\013\200\315\305\022\375\000\125\005\141\207\101
\334\265\044\236\074\304\330\310\373\160\236\057\170\226\203\040
\066\336\174\017\151\023\210\245\165\066\230\010\246\306\337\254
\316\343\130\326\267\076\336\272\363\353\064\100\330\242\201\365
\170\077\057\325\245\374\331\242\324\136\004\016\027\255\376\101
\360\345\262\162\372\104\202\063\102\350\055\130\367\126\214\142
\077\272\102\260\234\014\134\176\056\145\046\134\123\117\000\262
\170\176\241\015\231\055\215\270\035\216\242\304\260\375\140\320
\060\244\216\310\004\142\251\304\355\065\336\172\227\355\016\070
\136\222\057\223\160\245\251\234\157\247\175\023\035\176\306\010
\110\261\136\147\353\121\010\045\351\346\045\153\122\051\221\234
\322\071\163\010\127\336\231\006\264\133\235\020\006\341\302\000
\250\270\034\112\002\012\024\320\301\101\312\373\214\065\041\175
\202\070\362\251\124\221\031\065\223\224\155\152\072\305\262\320
\273\211\206\223\350\233\311\017\072\247\172\270\241\360\170\106
\372\374\067\057\345\212\204\363\337\376\004\331\241\150\240\057
\044\342\011\225\006\325\225\312\341\044\226\353\174\366\223\005
\273\355\163\351\055\321\165\071\327\347\044\333\330\116\137\103
\217\236\320\024\071\277\125\160\110\231\127\061\264\234\356\112
\230\003\226\060\037\140\006\356\033\043\376\201\140\043\032\107
\142\205\245\314\031\064\200\157\263\254\032\343\237\360\173\110
\255\325\001\331\147\266\251\162\223\352\055\146\265\262\270\344
\075\074\262\357\114\214\352\353\007\277\253\065\232\125\206\274
\030\246\265\250\136\264\203\154\153\151\100\323\237\334\361\303
\151\153\271\341\155\011\364\361\252\120\166\012\172\175\172\027
\241\125\226\102\231\061\011\335\140\021\215\005\060\176\346\216
\106\321\235\024\332\307\027\344\005\226\214\304\044\265\033\317
\024\007\262\100\370\243\236\101\206\274\004\320\153\226\310\052
\200\064\375\277\357\006\243\335\130\305\205\075\076\217\376\236
\051\340\266\270\011\150\031\034\030\103

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AffirmTrust Premium"

Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US

Serial Number:6d:8c:14:46:b1:a6:0a:ee

Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US

Not Valid Before: Fri Jan 29 14:10:36 2010

Not Valid After : Mon Dec 31 14:10:36 2040


```

# Fingerprint (SHA-256):
70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A
# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium"
CKA_CERT_SHA1_HASH
MULTILINE_OCTAL
\330\246\063\054\340\003\157\261\205\366\143\117\175\152\006\145
\046\062\050\047
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\304\135\016\110\266\254\050\060\116\012\274\371\070\026\207\127
END
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\155\214\024\106\261\246\012\356
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Premium ECC"
#
# Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
# Serial Number:74:97:25:8a:c7:3f:7a:54
# Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
#
Not Valid Before: Fri Jan 29 14:20:24 2010
# Not Valid After : Mon Dec 31 14:20:24 2040
# Fingerprint (SHA-256):
BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23
# Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium ECC"

```

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\164\227\045\212\307\077\172\124

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\376\060\202\001\205\240\003\002\001\002\002\010\164
\227\045\212\307\077\172\124\060\012\006\010\052\206\110\316\075
\004\003\003\060\105\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\024\060\022\006\003\125\004\012\014\013\101\146\146
\151\162\155\124\162\165\163\164\061\040\060\036\006\003\125\004
\003\014\027\101\146\146\151\162\155\124\162\165\163\164\040\120
\162\145\155\151\165\155\040\105\103\103\060\036\027\015\061\060
\060\061\062\071\061\064\062\060\062\064\132\027\015\064\060\061
\062\063\061\061\064\062\060\062\064\132\060\105\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125
\004\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061
\040\060\036\006\003\125\004\003\014\027\101\146\146\151\162\155
\124\162\165\163\164\040\120\162\145\155\151\165\155\040\105\103
\103\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\015\060\136\033\025\235\003
\320\241\171\065\267\072\074\222\172\312\025\034\315\142\363\234
\046\134\007\075\345\124\372\243\326\314\022\352\364\024\137\350
\216\031\253\057\056\110\346\254\030\103\170\254\320\067\303\275
\262\315\054\346\107\342\032\346\143\270\075\056\057\170\304\117
\333\364\017\244\150\114\125\162\153\225\035\116\030\102\225\170
\314\067\074\221\342\233\145\053\051\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\232\257\051\172\300\021\065\065
\046\121\060\000\303\152\376\100\325\256\326\074\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006
\010\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060
\027\011\363\207\210\120\132\257\310\300\102\277\107\137\365\154

```
\152\206\340\304\047\164\344\070\123\327\005\177\033\064\343\306
\057\263\312\011\074\067\235\327\347\270\106\361\375\241\342\161
\002\060\102\131\207\103\324\121\337\272\323\011\062\132\316\210
\176\127\075\234\137\102\153\365\007\055\265\360\202\223\371\131
\157\256\144\372\130\345\213\036\343\143\276\265\201\315\157\002
\214\171
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AffirmTrust Premium ECC"

Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US

Serial Number:74:97:25:8a:c7:3f:7a:54

Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US

Not Valid Before: Fri Jan 29 14:20:24 2010

Not Valid After : Mon Dec 31 14:20:24 2040

Fingerprint (SHA-256):

BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23

Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "AffirmTrust Premium ECC"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\043\153\000\057\035\026\206\123\001\125\154\021\244\067\312
\353\377\303\273
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\144\260\011\125\317\261\325\231\342\276\023\253\246\135\352\115
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\010\164\227\045\212\307\077\172\124
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED

CK_BBOOL CK_FALSE

#

Certificate "Certum Trusted Network CA"

#

Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Serial Number: 279744 (0x444c0)

Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Not Valid Before: Wed Oct 22 12:07:37 2008

Not Valid After : Mon Dec 31 12:07:37 2029

Fingerprint (SHA-256):

5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E

Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Trusted Network CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\003\004\104\300

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\003\273\060\202\002\243\240\003\002\001\002\002\003\004
\104\300\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\060\036\027\015\060\070\061\060\062\062\061\062\060\067\063
\067\132\027\015\062\071\061\062\063\061\061\062\060\067\063\067
\132\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\343\373\175\243\162\272\302\360\311\024\207\365\153\001
\116\341\156\100\007\272\155\047\135\177\367\133\055\263\132\307
\121\137\253\244\062\246\141\207\266\156\017\206\322\060\002\227
\370\327\151\127\241\030\071\135\152\144\171\306\001\131\254\074
\061\112\070\174\322\004\322\113\050\350\040\137\073\007\242\314
\115\163\333\363\256\117\307\126\325\132\247\226\211\372\363\253
\150\324\043\206\131\047\317\011\047\274\254\156\162\203\034\060
\162\337\340\242\351\322\341\164\165\031\275\052\236\173\025\124
\004\033\327\103\071\255\125\050\305\342\032\273\364\300\344\256
\070\111\063\314\166\205\237\071\105\322\244\236\362\022\214\121
\370\174\344\055\177\365\254\137\353\026\237\261\055\321\272\314
\221\102\167\114\045\311\220\070\157\333\360\314\373\216\036\227
\131\076\325\140\116\346\005\050\355\111\171\023\113\272\110\333
\057\371\162\323\071\312\376\037\330\064\162\365\264\100\317\061
\001\303\354\336\021\055\027\135\037\270\120\321\136\031\247\151
\336\007\063\050\312\120\225\371\247\124\313\124\206\120\105\251
\371\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\010\166\315\313\007\377\044\366\305
\315\355\273\220\274\342\204\067\106\165\367\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\246
\250\255\042\316\001\075\246\243\377\142\320\110\235\213\136\162
\260\170\104\343\334\034\257\011\375\043\110\372\275\052\304\271
\125\004\265\020\243\215\047\336\013\202\143\320\356\336\014\067

```
\171\101\133\042\262\260\232\101\134\246\160\340\324\320\167\313
\043\323\000\340\154\126\057\341\151\015\015\331\252\277\041\201
\120\331\006\245\250\377\225\067\320\252\376\342\263\365\231\055
\105\204\212\345\102\011\327\164\002\057\367\211\330\231\351\274
\047\324\107\215\272\015\106\034\167\317\024\244\034\271\244\061
\304\234\050\164\003\064\377\063\031\046\245\351\015\164\267\076
\227\306\166\350\047\226\243\146\335\341\256\362\101\133\312\230
\126\203\163\160\344\206\032\322\061\101\272\057\276\055\023\132
\166\157\116\350\116\201\016\077\133\003\042\240\022\276\146\130
\021\112\313\003\304\264\052\052\055\226\027\340\071\124\274\110
\323\166\047\235\232\055\006\246\311\354\071\322\253\333\237\232
\013\047\002\065\051\261\100\225\347\371\350\234\125\210\031\106
\326\267\064\365\176\316\071\232\331\070\361\121\367\117\054
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum Trusted Network CA"

Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL

Serial Number: 279744 (0x444c0)

Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL

Not Valid Before: Wed Oct 22 12:07:37 2008

Not Valid After : Mon Dec 31 12:07:37 2029

Fingerprint (SHA-256):

5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E

Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Trusted Network CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\007\340\062\340\040\267\054\077\031\057\006\050\242\131\072\031
\247\017\006\236
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\325\351\201\100\305\030\151\374\106\054\211\165\142\017\252\170
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
```

```
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END
```

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
```

```
\002\003\004\104\300
```

```
END
```

```
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
```

```
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
```

```
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
```

```
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
```

```
# Certificate "TWCA Root Certification Authority"
```

```
#
```

```
# Issuer: CN=TWCA Root Certification Authority,OU=Root
```

```
CA,O=TAIWAN-CA,C=TW
```

```
# Serial Number: 1 (0x1)
```

```
# Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW
```

```
# Not Valid Before: Thu Aug 28 07:24:33 2008
```

```
# Not Valid After : Tue Dec 31 15:59:59 2030
```

```
# Fingerprint (SHA-256):
```

```
BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44
```

```
# Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "TWCA Root Certification Authority"
```

```
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
```

```
CKA_SUBJECT MULTILINE_OCTAL
```

```
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
```

```
END
```

```
CKA_ID
```

```
UTF8 "0"
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
```

\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\001
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\173\060\202\002\143\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061\022
\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116\055
\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157\157
\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041\124
\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\060\036\027\015\060\070\060\070\062\070\060\067\062\064\063\063
\132\027\015\063\060\061\062\063\061\061\065\065\071\065\071\132
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\260\176\162\270\244\003\224\346\247\336\011\070\221\112
\021\100\207\247\174\131\144\024\173\265\021\020\335\376\277\325
\300\273\126\342\205\045\364\065\162\017\370\123\320\101\341\104
\001\302\264\034\303\061\102\026\107\205\063\042\166\262\012\157
\017\345\045\120\117\205\206\276\277\230\056\020\147\036\276\021
\005\206\005\220\304\131\320\174\170\020\260\200\134\267\341\307
\053\165\313\174\237\256\265\321\235\043\067\143\247\334\102\242
\055\222\004\033\120\301\173\270\076\033\311\126\004\213\057\122
\233\255\251\126\351\301\377\255\251\130\207\060\266\201\367\227
\105\374\031\127\073\053\157\344\107\364\231\105\376\035\361\370
\227\243\210\035\067\034\134\217\340\166\045\232\120\370\240\124
\377\104\220\166\043\322\062\306\303\253\006\277\374\373\277\363
\255\175\222\142\002\133\051\323\065\243\223\232\103\144\140\135
\262\372\062\377\073\004\257\115\100\152\371\307\343\357\043\375
\153\313\345\017\213\070\015\356\012\374\376\017\230\237\060\061
\335\154\122\145\371\213\201\276\042\341\034\130\003\272\221\033
\211\007\002\003\001\000\001\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\152\070\133\046\215\336\213\132\362
\117\172\124\203\031\030\343\010\065\246\272\060\015\006\011\052
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\074


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\325\167\075\332\337\211\272\207\014\010\124\152\040\120\222\276
\260\101\075\271\046\144\203\012\057\350\100\300\227\050\047\202
\060\112\311\223\377\152\347\246\000\177\211\102\232\326\021\345
\123\316\057\314\362\332\005\304\376\342\120\304\072\206\175\314
\332\176\020\011\073\222\065\052\123\262\376\353\053\005\331\154
\135\346\320\357\323\152\146\236\025\050\205\172\350\202\000\254
\036\247\011\151\126\102\323\150\121\030\276\124\232\277\104\101
\272\111\276\040\272\151\134\356\270\167\315\316\154\037\255\203
\226\030\175\016\265\024\071\204\361\050\351\055\243\236\173\036
\172\162\132\203\263\171\157\357\264\374\320\012\245\130\117\106
\337\373\155\171\131\362\204\042\122\256\017\314\373\174\073\347
\152\312\107\141\303\172\370\323\222\004\037\270\040\204\341\066
\124\026\307\100\336\073\212\163\334\337\306\011\114\337\354\332
\377\324\123\102\241\311\362\142\035\042\203\074\227\305\371\031
\142\047\254\145\042\327\323\074\306\345\216\262\123\314\111\316
\274\060\376\173\016\063\220\373\355\322\024\221\037\007\257
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "TWCA Root Certification Authority"

Issuer: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

Serial Number: 1 (0x1)

Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

Not Valid Before: Thu Aug 28 07:24:33 2008

Not Valid After : Tue Dec 31 15:59:59 2030

Fingerprint (SHA-256):

BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44

Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TWCA Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\317\236\207\155\323\353\374\102\046\227\243\265\243\172\240\166
\251\006\043\110
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\252\010\217\366\371\173\267\362\261\247\036\233\352\352\275\171
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
```

```

\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
#
Certificate "Explicitly Distrust DigiNotar Root CA"
#
# Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL
# Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff
# Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL
# Not Valid Before: Fri Jul 27 17:19:37 2007
# Not Valid After : Mon Mar 31 18:19:22 2025
# Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E
# Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156
\154
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156

```

\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377\377
\377\377
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\212\060\202\003\162\240\003\002\001\002\002\020\017
\377\377\377\377\377\377\377\377\377\377\377\377\377\377\377\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\137
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022\060
\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164\141
\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147\151
\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040\060
\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151\156
\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154\060
\036\027\015\060\067\060\067\062\067\061\067\061\071\063\067\132
\027\015\062\065\060\063\063\061\061\070\061\071\062\062\132\060
\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022
\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164
\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147
\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040
\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151
\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\254\260\130\301\000\275\330\041\010\013\053\232\376\156\126
\060\005\237\033\167\220\020\101\134\303\015\207\021\167\216\201
\361\312\174\351\214\152\355\070\164\065\273\332\337\371\273\300
\011\067\264\226\163\201\175\063\032\230\071\367\223\157\225\177
\075\271\261\165\207\272\121\110\350\213\160\076\225\004\305\330
\266\303\026\331\210\260\261\207\035\160\332\206\264\017\024\213
\172\317\020\321\164\066\242\022\173\167\206\112\171\346\173\337
\002\021\150\245\116\206\256\064\130\233\044\023\170\126\042\045
\036\001\213\113\121\161\373\202\314\131\226\151\210\132\150\123
\305\271\015\002\067\313\113\274\146\112\220\176\052\013\005\007
\355\026\137\125\220\165\330\106\311\033\203\342\010\276\361\043
\314\231\035\326\052\017\203\040\025\130\047\202\056\372\342\042
\302\111\261\271\001\201\152\235\155\235\100\167\150\166\116\041
\052\155\204\100\205\116\166\231\174\202\363\363\267\002\131\324
\046\001\033\216\337\255\123\006\321\256\030\335\342\262\072\313
\327\210\070\216\254\133\051\271\031\323\230\371\030\003\317\110
\202\206\146\013\033\151\017\311\353\070\210\172\046\032\005\114
\222\327\044\324\226\362\254\122\055\243\107\325\122\366\077\376
\316\204\006\160\246\252\076\242\362\266\126\064\030\127\242\344
\201\155\347\312\360\152\323\307\221\153\002\203\101\174\025\357
\153\232\144\136\343\320\074\345\261\353\173\135\206\373\313\346
\167\111\315\243\145\334\367\271\234\270\344\013\137\223\317\314

\060\032\062\034\316\034\143\225\245\371\352\341\164\213\236\351
\053\251\060\173\240\030\037\016\030\013\345\133\251\323\321\154
\036\007\147\217\221\113\251\212\274\322\146\252\223\001\210\262
\221\372\061\134\325\246\301\122\010\011\315\012\143\242\323\042
\246\350\241\331\071\006\227\365\156\215\002\220\214\024\173\077
\200\315\033\234\272\304\130\162\043\257\266\126\237\306\172\102
\063\051\007\077\202\311\346\037\005\015\315\114\050\066\213\323
\310\076\034\306\210\357\136\356\211\144\351\035\353\332\211\176
\062\246\151\321\335\314\210\237\321\320\311\146\041\334\006\147
\305\224\172\232\155\142\114\175\314\340\144\200\262\236\107\216
\243\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125
\035\016\004\026\004\024\210\150\277\340\216\065\304\073\070\153
\142\367\050\073\204\201\310\014\327\115\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\073\002
\215\313\074\060\350\156\240\255\362\163\263\137\236\045\023\004
\005\323\366\343\213\273\013\171\316\123\336\344\226\305\321\257
\163\274\325\303\320\100\125\174\100\177\315\033\137\011\325\362
\174\237\150\035\273\135\316\172\071\302\214\326\230\173\305\203
\125\250\325\175\100\312\340\036\367\211\136\143\135\241\023\302
\135\212\266\212\174\000\363\043\303\355\205\137\161\166\360\150
\143\252\105\041\071\110\141\170\066\334\361\103\223\324\045\307
\362\200\145\341\123\002\165\121\374\172\072\357\067\253\204\050
\127\014\330\324\324\231\126\154\343\242\376\131\204\264\061\350
\063\370\144\224\224\121\227\253\071\305\113\355\332\335\200\013
\157\174\051\015\304\216\212\162\015\347\123\024\262\140\101\075
\204\221\061\150\075\047\104\333\345\336\364\372\143\105\310\114
\076\230\365\077\101\272\116\313\067\015\272\146\230\361\335\313
\237\134\367\124\066\202\153\054\274\023\141\227\102\370\170\273
\314\310\242\237\312\360\150\275\153\035\262\337\215\157\007\235
\332\216\147\307\107\036\312\271\277\052\102\221\267\143\123\146
\361\102\243\341\364\132\115\130\153\265\344\244\063\255\134\160
\035\334\340\362\353\163\024\221\232\003\301\352\000\145\274\007
\374\317\022\021\042\054\256\240\275\072\340\242\052\330\131\351
\051\323\030\065\244\254\021\137\031\265\265\033\377\042\112\134
\306\172\344\027\357\040\251\247\364\077\255\212\247\232\004\045
\235\016\312\067\346\120\375\214\102\051\004\232\354\271\317\113
\162\275\342\010\066\257\043\057\142\345\312\001\323\160\333\174
\202\043\054\026\061\014\306\066\007\220\172\261\037\147\130\304
\073\130\131\211\260\214\214\120\263\330\206\313\150\243\304\012
\347\151\113\040\316\301\036\126\113\225\251\043\150\330\060\330
\303\353\260\125\121\315\345\375\053\270\365\273\021\237\123\124
\366\064\031\214\171\011\066\312\141\027\045\027\013\202\230\163
\014\167\164\303\325\015\307\250\022\114\307\247\124\161\107\056
\054\032\175\311\343\053\073\110\336\047\204\247\143\066\263\175
\217\240\144\071\044\015\075\173\207\257\146\134\164\033\113\163
\262\345\214\360\206\231\270\345\305\337\204\301\267\353

END

#

Trust for Certificate "Explicitly Distrust DigiNotar Root CA"

Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff

Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

Not Valid Before: Fri Jul 27 17:19:37 2007

Not Valid After : Mon Mar 31 18:19:22 2025

Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E

Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\301\167\313\113\340\264\046\216\365\307\317\105\231\042\271\260

\316\272\041\057

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\012\244\325\314\272\264\373\243\131\343\346\001\335\123\331\116

END

CKA_ISSUER MULTILINE_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061

\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157

\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151

\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061

\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021

\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156

\154

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377\377

\377\377

END

CKA_TRUST_SERVER_AUTH CK_TRUST

CKT_NSS_NOT_TRUSTED

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_NOT_TRUSTED

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_NOT_TRUSTED

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Security Communication RootCA2"

#

Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number: 0 (0x0)

```
# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Fri May 29 05:00:39 2009
# Not Valid After : Tue May 29 05:00:39 2029
# Fingerprint (SHA-256):
51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6
# Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045
\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124
\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056
\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036
\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151
\143\141\164\151\157\156\040\122\157\157\164\103\101\062\060\036
\027\015\060\071\060\065\062\071\060\065\060\060\063\071\132\027
\015\062\071\060\065\062\071\060\065\060\060\063\071\132\060\135
\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045\060
\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124\162
\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056\054
\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036\123
```

\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151\143
\141\164\151\157\156\040\122\157\157\164\103\101\062\060\202\001
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\001\017\000\060\202\001\012\002\202\001\001\000\320\025
\071\122\261\122\263\272\305\131\202\304\135\122\256\072\103\145
\200\113\307\362\226\274\333\066\227\326\246\144\214\250\136\360
\343\012\034\367\337\227\075\113\256\366\135\354\041\265\101\253
\315\271\176\166\237\276\371\076\066\064\240\073\301\366\061\021
\105\164\223\075\127\200\305\371\211\231\312\345\253\152\324\265
\332\101\220\020\301\326\326\102\211\302\277\364\070\022\225\114
\124\005\367\066\344\105\203\173\024\145\326\334\014\115\321\336
\176\014\253\073\304\025\276\072\126\246\132\157\166\151\122\251
\172\271\310\353\152\232\135\122\320\055\012\153\065\026\011\020
\204\320\152\312\072\006\000\067\107\344\176\127\117\077\213\353
\147\270\210\252\305\276\123\125\262\221\304\175\271\260\205\031
\006\170\056\333\141\032\372\205\365\112\221\241\347\026\325\216
\242\071\337\224\270\160\037\050\077\213\374\100\136\143\203\074
\203\052\032\231\153\317\336\131\152\073\374\157\026\327\037\375
\112\020\353\116\202\026\072\254\047\014\123\361\255\325\044\260
\153\003\120\301\055\074\026\335\104\064\047\032\165\373\002\003
\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026
\004\024\012\205\251\167\145\005\230\174\100\201\370\017\227\054
\070\361\012\354\074\317\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\001\001\000\114\072\243\104\254
\271\105\261\307\223\176\310\013\012\102\337\144\352\034\356\131
\154\010\272\211\137\152\312\112\225\236\172\217\007\305\332\105
\162\202\161\016\072\322\314\157\247\264\241\043\273\366\044\237
\313\027\376\214\246\316\302\322\333\314\215\374\161\374\003\051
\301\154\135\063\137\144\266\145\073\211\157\030\166\170\365\334
\242\110\037\031\077\216\223\353\361\372\027\356\315\116\343\004
\022\125\326\345\344\335\373\076\005\174\342\035\136\306\247\274
\227\117\150\072\365\351\056\012\103\266\257\127\134\142\150\174
\267\375\243\212\204\240\254\142\276\053\011\207\064\360\152\001
\273\233\051\126\074\376\000\067\317\043\154\361\116\252\266\164
\106\022\154\221\356\064\325\354\232\221\347\104\276\220\061\162
\325\111\002\366\002\345\364\037\353\174\331\226\125\251\377\354
\212\371\231\107\377\065\132\002\252\004\313\212\133\207\161\051
\221\275\244\264\172\015\275\232\365\127\043\000\007\041\027\077
\112\071\321\005\111\013\247\266\067\201\245\135\214\252\063\136
\201\050\174\247\175\047\353\000\256\215\067

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "Security Communication RootCA2"
# Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Fri May 29 05:00:39 2009
# Not Valid After : Tue May 29 05:00:39 2029
# Fingerprint (SHA-256):
51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6
#
Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\137\073\214\362\370\020\263\175\170\264\316\354\031\031\303\163
\064\271\307\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\154\071\175\244\016\125\131\262\077\326\101\261\022\120\336\103
END
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Actalis Authentication Root CA"
#
# Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Serial Number:57:0a:11:97:42:c4:e3:cc
# Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Not Valid Before: Thu Sep 22 11:22:02 2011
# Not Valid After : Sun Sep 22 11:22:02 2030
# Fingerprint (SHA-256):

```


55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66

Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Actalis Authentication Root CA"

CKA_CERTIFICATE_TYPE

CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\127\012\021\227\102\304\343\314

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\273\060\202\003\243\240\003\002\001\002\002\010\127
\012\021\227\102\304\343\314\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\153\061\013\060\011\006\003\125\004
\006\023\002\111\124\061\016\060\014\006\003\125\004\007\014\005
\115\151\154\141\156\061\043\060\041\006\003\125\004\012\014\032
\101\143\164\141\154\151\163\040\123\056\160\056\101\056\057\060
\063\063\065\070\065\062\060\071\066\067\061\047\060\045\006\003
\125\004\003\014\036\101\143\164\141\154\151\163\040\101\165\164
\150\145\156\164\151\143\141\164\151\157\156\040\122\157\157\164
\040\103\101\060\036\027\015\061\061\060\071\062\062\061\061\062
\062\060\062\132\027\015\063\060\060\071\062\062\061\061\062\062
\060\062\132\060\153\061\013\060\011\006\003\125\004\006\023\002
\111\124\061\016\060\014\006\003\125\004\007\014\005\115\151\154
\141\156\061\043\060\041\006\003\125\004\012\014\032\101\143\164
\141\154\151\163\040\123\056\160\056\101\056\057\060\063\063\065

\070\065\062\060\071\066\067\061\047\060\045\006\003\125\004\003
\014\036\101\143\164\141\154\151\163\040\101\165\164\150\145\156
\164\151\143\141\164\151\157\156\040\122\157\157\164\040\103\101
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\247\306\304\245\051\244\054\357\345\030\305\260\120\243\157
\121\073\237\012\132\311\302\110\070\012\302\034\240\030\177\221
\265\207\271\100\077\335\035\150\037\010\203\325\055\036\210\240
\370\217\126\217\155\231\002\222\220\026\325\137\010\154\211\327
\341\254\274\040\302\261\340\203\121\212\151\115\000\226\132\157
\057\300\104\176\243\016\344\221\315\130\356\334\373\307\036\105
\107\335\047\271\010\001\237\246\041\035\365\101\055\057\114\375
\050\255\340\212\255\042\264\126\145\216\206\124\217\223\103\051
\336\071\106\170\243\060\043\272\315\360\175\023\127\300\135\322
\203\153\110\114\304\253\237\200\132\133\072\275\311\247\042\077
\200\047\063\133\016\267\212\014\135\007\067\010\313\154\322\172
\107\042\104\065\305\314\314\056\216\335\052\355\267\175\146\015
\137\141\121\042\125\033\343\106\343\343\075\320\065\142\232\333
\257\024\310\133\241\314\211\033\341\060\046\374\240\233\037\201
\247\107\037\004\353\243\071\222\006\237\231\323\277\323\352\117
\120\234\031\376\226\207\036\074\145\366\243\030\044\203\206\020
\347\124\076\250\072\166\044\117\201\041\305\343\017\002\370\223
\224\107\040\273\376\324\016\323\150\271\335\304\172\204\202\343
\123\124\171\335\333\234\322\362\007\233\056\266\274\076\355\205
\155\357\045\021\362\227\032\102\141\367\112\227\350\213\261\020
\007\372\145\201\262\242\071\317\367\074\377\030\373\306\361\132
\213\131\342\002\254\173\222\320\116\024\117\131\105\366\014\136
\050\137\260\350\077\105\317\317\257\233\157\373\204\323\167\132
\225\157\254\224\204\236\356\274\300\112\217\112\223\370\104\041
\342\061\105\141\120\116\020\330\343\065\174\114\031\264\336\005
\277\243\006\237\310\265\315\344\037\327\027\006\015\172\225\164
\125\015\150\032\374\020\033\142\144\235\155\340\225\240\303\224
\007\127\015\024\346\275\005\373\270\237\346\337\213\342\306\347
\176\226\366\123\305\200\064\120\050\130\360\022\120\161\027\060
\272\346\170\143\274\364\262\255\233\053\262\376\341\071\214\136
\272\013\040\224\336\173\203\270\377\343\126\215\267\021\351\073
\214\362\261\301\135\235\244\013\114\053\331\262\030\365\265\237
\113\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035
\016\004\026\004\024\122\330\210\072\310\237\170\146\355\211\363
\173\070\160\224\311\002\002\066\320\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035
\043\004\030\060\026\200\024\122\330\210\072\310\237\170\146\355
\211\363\173\070\160\224\311\002\002\066\320\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\013
\173\162\207\300\140\246\111\114\210\130\346\035\210\367\024\144
\110\246\330\130\012\016\117\023\065\337\065\035\324\355\006\061
\310\201\076\152\325\335\073\032\062\356\220\075\021\322\056\364

\216\303\143\056\043\146\260\147\276\157\266\300\023\071\140\252
\242\064\045\223\165\122\336\247\235\255\016\207\211\122\161\152
\026\074\031\035\203\370\232\051\145\276\364\077\232\331\360\363
\132\207\041\161\200\115\313\340\070\233\077\273\372\340\060\115
\317\206\323\145\020\031\030\321\227\002\261\053\162\102\150\254
\240\275\116\132\332\030\277\153\230\201\320\375\232\276\136\025
\110\315\021\025\271\300\051\134\264\350\210\367\076\066\256\267
\142\375\036\142\336\160\170\020\034\110\133\332\274\244\070\272
\147\355\125\076\136\127\337\324\003\100\114\201\244\322\117\143
\247\011\102\011\024\374\000\251\302\200\163\117\056\300\100\331
\021\173\110\352\172\002\300\323\353\050\001\046\130\164\301\300
\163\042\155\223\225\375\071\175\273\052\343\366\202\343\054\227
\137\116\037\221\224\372\376\054\243\330\166\032\270\115\262\070
\117\233\372\035\110\140\171\046\342\363\375\251\320\232\350\160
\217\111\172\326\345\275\012\016\333\055\363\215\277\353\343\244
\175\313\307\225\161\350\332\243\174\305\302\370\164\222\004\033
\206\254\244\042\123\100\266\254\376\114\166\317\373\224\062\300
\065\237\166\077\156\345\220\156\240\246\046\242\270\054\276\321
\053\205\375\247\150\310\272\001\053\261\154\164\035\270\163\225
\347\356\267\307\045\360\000\114\000\262\176\266\013\213\034\363
\300\120\236\045\271\340\010\336\066\146\377\067\245\321\273\124
\144\054\311\047\265\113\222\176\145\377\323\055\341\271\116\274
\177\244\101\041\220\101\167\246\071\037\352\236\343\237\320\146
\157\005\354\252\166\176\277\153\026\240\353\265\307\374\222\124
\057\053\021\047\045\067\170\114\121\152\260\363\314\130\135\024
\361\152\110\025\377\302\007\266\261\215\017\216\134\120\106\263
\075\277\001\230\117\262\131\124\107\076\064\173\170\155\126\223
\056\163\352\146\050\170\315\035\024\277\240\217\057\056\270\056
\216\362\024\212\314\351\265\174\373\154\235\014\245\341\226

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Actalis Authentication Root CA"

Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

Serial Number:57:0a:11:97:42:c4:e3:cc

Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

Not Valid Before: Thu Sep 22 11:22:02 2011

Not Valid After : Sun Sep 22 11:22:02 2030

Fingerprint (SHA-256):

55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66

Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

CKA_LABEL UTF8 "Actalis Authentication Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\363\163\263\207\006\132\050\204\212\362\363\112\316\031\053\335
\307\216\234\254
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\151\301\015\117\007\243\033\303\376\126\075\004\274\021\366\246
END
CKA_ISSUER MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\127\012\021\227\102\304\343\314
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Buypass Class 2 Root
CA"
#
# Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:38:03 2010
# Not Valid After : Fri Oct 26 08:38:03 2040
# Fingerprint (SHA-256):
9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48
# Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Buypass Class 2 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040

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\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060
\036\027\015\061\060\061\060\062\066\060\070\063\070\060\063\132
\027\015\064\060\061\060\062\066\060\070\063\070\060\063\132\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\327\307\136\367\301\007\324\167\373\103\041\364\364\365\151\344
\356\062\001\333\243\206\037\344\131\015\272\347\165\203\122\353
\352\034\141\025\110\273\035\007\312\214\256\260\334\226\235\352
\303\140\222\206\202\050\163\234\126\006\377\113\144\360\014\052
\067\111\265\345\317\014\174\356\361\112\273\163\060\145\363\325
\057\203\266\176\343\347\365\236\253\140\371\323\361\235\222\164
\212\344\034\226\254\133\200\351\265\364\061\207\243\121\374\307
\176\241\157\216\123\167\324\227\301\125\063\222\076\030\057\165
\324\255\206\111\313\225\257\124\006\154\330\006\023\215\133\377
\341\046\031\131\300\044\272\201\161\171\220\104\120\150\044\224
\137\270\263\021\361\051\101\141\243\101\313\043\066\325\301\361
\062\120\020\116\177\364\206\223\354\204\323\216\274\113\277\134
\001\116\007\075\334\024\212\224\012\244\352\163\373\013\121\350
\023\007\030\372\016\361\053\321\124\025\175\074\341\367\264\031
\102\147\142\136\167\340\242\125\354\266\331\151\027\325\072\257
\104\355\112\305\236\344\172\047\174\345\165\327\252\313\045\347
```

\337\153\012\333\017\115\223\116\250\240\315\173\056\362\131\001
\152\267\015\270\007\201\176\213\070\033\070\346\012\127\231\075
\356\041\350\243\365\014\026\335\213\354\064\216\234\052\034\000
\025\027\215\150\203\322\160\237\030\010\315\021\150\325\311\153
\122\315\304\106\217\334\265\363\330\127\163\036\351\224\071\004
\277\323\336\070\336\264\123\354\151\034\242\176\304\217\344\033
\160\255\362\242\371\373\367\026\144\146\151\237\111\121\242\342
\025\030\147\006\112\177\325\154\265\115\263\063\340\141\353\135
\276\351\230\017\062\327\035\113\074\056\132\001\122\221\011\362
\337\352\215\330\006\100\143\252\021\344\376\303\067\236\024\122
\077\364\342\314\362\141\223\321\375\147\153\327\122\256\277\150
\253\100\103\240\127\065\123\170\360\123\370\141\102\007\144\306
\327\157\233\114\070\015\143\254\142\257\066\213\242\163\012\015
\365\041\275\164\252\115\352\162\003\111\333\307\137\035\142\143
\307\375\335\221\354\063\356\365\155\264\156\060\150\336\310\326
\046\260\165\136\173\264\007\040\230\241\166\062\270\115\154\117
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\311\200\167\340\142\222\202\365\106\234\363
\272\367\114\303\336\270\243\255\071\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\003\202\002\001\000\123\137\041
\365\272\260\072\122\071\054\222\260\154\000\311\357\316\040\357
\006\362\226\236\351\244\164\177\172\026\374\267\365\266\373\025
\033\077\253\246\300\162\135\020\261\161\356\274\117\343\255\254
\003\155\056\161\056\257\304\343\255\243\275\014\021\247\264\377
\112\262\173\020\020\037\247\127\101\262\300\256\364\054\131\326
\107\020\210\363\041\121\051\060\312\140\206\257\106\253\035\355
\072\133\260\224\336\104\343\101\010\242\301\354\035\326\375\117
\266\326\107\320\024\013\312\346\312\265\173\167\176\101\037\136
\203\307\266\214\071\226\260\077\226\201\101\157\140\220\342\350
\371\373\042\161\331\175\263\075\106\277\264\204\257\220\034\017
\217\022\152\257\357\356\036\172\256\002\112\212\027\053\166\376
\254\124\211\044\054\117\077\266\262\247\116\214\250\221\227\373
\051\306\173\134\055\271\313\146\266\267\250\133\022\121\205\265
\011\176\142\170\160\376\251\152\140\266\035\016\171\014\375\312
\352\044\200\162\303\227\077\362\167\253\103\042\012\307\353\266
\014\204\202\054\200\153\101\212\010\300\353\245\153\337\231\022
\313\212\325\136\200\014\221\340\046\010\066\110\305\372\070\021
\065\377\045\203\055\362\172\277\332\375\216\376\245\313\105\054
\037\304\210\123\256\167\016\331\232\166\305\216\054\035\243\272
\325\354\062\256\300\252\254\367\321\172\115\353\324\007\342\110
\367\042\216\260\244\237\152\316\216\262\262\140\364\243\042\320
\043\353\224\132\172\151\335\017\277\100\127\254\153\131\120\331
\243\231\341\156\376\215\001\171\047\043\025\336\222\235\173\011
\115\132\347\113\110\060\132\030\346\012\155\346\217\340\322\273
\346\337\174\156\041\202\301\150\071\115\264\230\130\146\142\314
\112\220\136\303\372\047\004\261\171\025\164\231\314\276\255\040

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\336\046\140\034\353\126\121\246\243\352\344\243\077\247\377\141
\334\361\132\115\154\062\043\103\356\254\250\356\356\112\022\011
\074\135\161\302\276\171\372\302\207\150\035\013\375\134\151\314
\006\320\232\175\124\231\052\311\071\032\031\257\113\052\103\363
\143\135\132\130\342\057\343\035\344\251\326\320\012\320\236\277
\327\201\011\361\311\307\046\015\254\230\026\126\240
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Buypass Class 2 Root CA"

Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO

Serial Number: 2 (0x2)

Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO

Not Valid Before: Tue Oct 26 08:38:03 2010

Not Valid After : Fri Oct 26 08:38:03 2040

Fingerprint (SHA-256):

9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48

Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Buypass Class 2 Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\111\012\165\164\336\207\012\107\376\130\356\366\307\153\353\306
\013\022\100\231
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\106\247\322\376\105\373\144\132\250\131\220\233\170\104\233\051
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\001\002
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

#
# Certificate "Buypass Class 3 Root CA"
#
# Issuer: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:28:58 2010
# Not Valid After : Fri Oct 26 08:28:58
2040
# Fingerprint (SHA-256):
ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D
# Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Buypass Class 3 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060
\036\027\015\061\060\061\060\062\066\060\070\062\070\065\070\132
\027\015\064\060\061\060\062\066\060\070\062\070\065\070\132\060

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\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\245\332\012\225\026\120\343\225\362\136\235\166\061\006\062\172
\233\361\020\166\270\000\232\265\122\066\315\044\107\260\237\030
\144\274\232\366\372\325\171\330\220\142\114\042\057\336\070\075
\326\340\250\351\034\054\333\170\021\351\216\150\121\025\162\307
\363\063\207\344\240\135\013\134\340\127\007\052\060\365\315\304
\067\167\050\115\030\221\346\277\325\122\375\161\055\160\076\347
\306\304\212\343\360\050\013\364\166\230\241\213\207\125\262\072
\023\374\267\076\047\067\216\042\343\250\117\052\357\140\273\075
\267\071\303\016\001\107\231\135\022\117\333\103\372\127\241\355
\371\235\276\021\107\046\133\023\230\253\135\026\212\260\067\034
\127\235\105\377\210\226\066\277\273\312\007\173\157\207\143\327
\320\062\152\326\135\154\014\361\263\156\071\342\153\061\056\071
\000\047\024\336\070\300\354\031\146\206\022\350\235\162\026\023
\144\122\307\251\067\034\375\202\060\355\204\030\035\364\256\134
\377\160\023\000\353\261\365\063\172\113\326\125\370\005\215\113
\151\260\365\263\050\066\134\024\304\121\163\115\153\013\361\064
\007\333\027\071\327\334\050\173\153\365\237\363\056\301\117\027
\052\020\363\314\312\350\353\375\153\253\056\232\237\055\202\156
\004\324\122\001\223\055\075\206\374\176\374\337\357\102\035\246
\153\357\271\040\306\367\275\240\247\225\375\247\346\211\044\330
\314\214\064\154\342\043\057\331\022\032\041\271\125\221\157\013
\221\171\031\014\255\100\210\013\160\342\172\322\016\330\150\110
\273\202\023\071\020\130\351\330\052\007\306\022\333\130\333\322
\073\125\020\107\005\025\147\142\176\030\143\246\106\077\011\016
\124\062\136\277\015\142\172\047\357\200\350\333\331\113\006\132
\067\132\045\320\010\022\167\324\157\011\120\227\075\310\035\303
\337\214\105\060\126\306\323\144\253\146\363\300\136\226\234\303
\304\357\303\174\153\213\072\171\177\263\111\317\075\342\211\237
\240\060\113\205\271\234\224\044\171\217\175\153\251\105\150\017
\053\320\361\332\034\313\151\270\312\111\142\155\310\320\143\142
\335\140\017\130\252\217\241\274\005\245\146\242\317\033\166\262
\204\144\261\114\071\122\300\060\272\360\214\113\002\260\266\267
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\107\270\315\377\345\157\356\370\262\354\057
\116\016\371\045\260\216\074\153\303\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\003\202\002\001\000\000\040\043
\101\065\004\220\302\100\142\140\357\342\065\114\327\077\254\342
\064\220\270\241\157\166\372\026\026\244\110\067\054\351\220\302
\362\074\370\012\237\330\201\345\273\133\332\045\054\244\247\125

\161\044\062\366\310\013\362\274\152\370\223\254\262\007\302\137
\237\333\314\310\212\252\276\152\157\341\111\020\314\061\327\200
\273\273\310\330\242\016\144\127\352\242\365\302\251\061\025\322
\040\152\354\374\042\001\050\317\206\270\200\036\251\314\021\245
\074\362\026\263\107\235\374\322\200\041\304\313\320\107\160\101
\241\312\203\031\010\054\155\362\135\167\234\212\024\023\324\066
\034\222\360\345\006\067\334\246\346\220\233\070\217\134\153\033
\106\206\103\102\137\076\001\007\123\124\135\145\175\367\212\163
\241\232\124\132\037\051\103\024\047\302\205\017\265\210\173\032
\073\224\267\035\140\247\265\234\347\051\151\127\132\233\223\172
\103\060\033\003\327\142\310\100\246\252\374\144\344\112\327\221
\123\001\250\040\210\156\234\137\104\271\313\140\201\064\354\157
\323\175\332\110\137\353\264\220\274\055\251\034\013\254\034\325
\242\150\040\200\004\326\374\261\217\057\273\112\061\015\112\206
\034\353\342\066\051\046\365\332\330\304\362\165\141\317\176\256
\166\143\112\172\100\145\223\207\370\036\200\214\206\345\206\326
\217\016\374\123\054\140\350\026\141\032\242\076\103\173\315\071
\140\124\152\365\362\211\046\001\150\203\110\242\063\350\311\004
\221\262\021\064\021\076\352\320\103\031\037\003\223\220\014\377
\121\075\127\364\101\156\341\313\240\276\353\311\143\315\155\314
\344\370\066\252\150\235\355\275\135\227\160\104\015\266\016\065
\334\341\014\135\273\240\121\224\313\176\026\353\021\057\243\222
\105\310\114\161\331\274\311\231\122\127\106\057\120\317\275\065
\151\364\075\025\316\006\245\054\017\076\366\201\272\224\273\303
\273\277\145\170\322\206\171\377\111\073\032\203\014\360\336\170
\354\310\362\115\114\032\336\202\051\370\301\132\332\355\356\346
\047\136\350\105\320\235\034\121\250\150\253\104\343\320\213\152
\343\370\073\273\334\115\327\144\362\121\276\346\252\253\132\351
\061\356\006\274\163\277\023\142\012\237\307\271\227

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Bypass Class 3 Root CA"

#

Issuer: CN=Bypass Class 3 Root CA,O=Bypass AS-983163327,C=NO

Serial Number: 2 (0x2)

Subject: CN=Bypass Class 3 Root CA,O=Bypass AS-983163327,C=NO

Not Valid Before: Tue Oct 26 08:28:58 2010

Not Valid After : Fri Oct 26 08:28:58 2040

Fingerprint (SHA-256):

ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D

Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Bypass Class 3 Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\332\372\367\372\146\204\354\006\217\024\120\275\307\302\201\245
\274\251\144\127
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\075\073\030\236\054\144\132\350\325\210\316\016\371\067\302\354
END
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "T-TeleSec GlobalRoot Class 3"
#
# Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Serial Number: 1 (0x1)
# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Not Valid Before: Wed Oct 01 10:29:56 2008
# Not Valid After : Sat Oct 01 23:59:59 2033
# Fingerprint (SHA-256):
FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD
# Fingerprint (SHA1):
55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163

```

\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141
\163\163\040\063\060\036\027\015\060\070\061\060\060\061\061\060
\062\071\065\066\132\027\015\063\063\061\060\060\061\062\063\065
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171
\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157
\164\040\103\154\141\163\163\040\063\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\275\165\223\360\142\042

\157\044\256\340\172\166\254\175\275\331\044\325\270\267\374\315
\360\102\340\353\170\210\126\136\233\232\124\035\115\014\212\366
\323\317\160\364\122\265\330\223\004\343\106\206\161\101\112\053
\360\052\054\125\003\326\110\303\340\071\070\355\362\134\074\077
\104\274\223\075\141\253\116\315\015\276\360\040\047\130\016\104
\177\004\032\207\245\327\226\024\066\220\320\111\173\241\165\373
\032\153\163\261\370\316\251\011\054\362\123\325\303\024\104\270
\206\245\366\213\053\071\332\243\063\124\331\372\162\032\367\042
\025\034\210\221\153\177\146\345\303\152\200\260\044\363\337\206
\105\210\375\031\177\165\207\037\037\261\033\012\163\044\133\271
\145\340\054\124\310\140\323\146\027\077\341\314\124\063\163\221
\002\072\246\177\173\166\071\242\037\226\266\070\256\265\310\223
\164\035\236\271\264\345\140\235\057\126\321\340\353\136\133\114
\022\160\014\154\104\040\253\021\330\364\031\366\322\234\122\067
\347\372\266\302\061\073\112\324\024\231\255\307\032\365\135\137
\372\007\270\174\015\037\326\203\036\263\002\003\001\000\001\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\265
\003\367\166\073\141\202\152\022\252\030\123\353\003\041\224\277
\376\316\312\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\126\075\357\224\325\275\332\163\262
\130\276\256\220\255\230\047\227\376\001\261\260\122\000\270\115
\344\033\041\164\033\176\300\356\136\151\052\045\257\134\326\035
\332\322\171\311\363\227\051\340\206\207\336\004\131\017\361\131
\324\144\205\113\231\257\045\004\036\311\106\251\227\336\202\262
\033\160\237\234\366\257\161\061\335\173\005\245\054\323\271\312
\107\366\312\362\366\347\255\271\110\077\274\026\267\301\155\364
\352\011\257\354\363\265\347\005\236\246\036\212\123\121\326\223
\201\314\164\223\366\271\332\246\045\005\164\171\132\176\100\076
\202\113\046\021\060\156\341\077\101\307\107\000\065\325\365\323
\367\124\076\201\075\332\111\152\232\263\357\020\075\346\353\157
\321\310\042\107\313\314\317\001\061\222\331\030\343\042\276\011
\036\032\076\132\262\344\153\014\124\172\175\103\116\270\211\245
\173\327\242\075\226\206\314\362\046\064\055\152\222\235\232\032
\320\060\342\135\116\004\260\137\213\040\176\167\301\075\225\202
\321\106\232\073\074\170\270\157\241\320\015\144\242\170\036\051
\116\223\303\244\124\024\133

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "T-TeleSec GlobalRoot Class 3"

Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Serial Number: 1 (0x1)

```

# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Not Valid Before: Wed Oct 01 10:29:56 2008
# Not Valid After : Sat Oct 01 23:59:59 2033
# Fingerprint (SHA-256):
FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD
# Fingerprint (SHA1): 55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\125\246\162\076\313\362\354\315\303\043\164\160\031\235\052\276
\021\343\201\321
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\312\373\100\250\116\071\222\212\035\376\216\057\304\047\352\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root Class 3 CA 2 2009"
#
# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623603 (0x983f3)
# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:35:58 2009
# Not Valid After : Mon Nov 05 08:35:58 2029
# Fingerprint (SHA-256):

```

49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1
Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\363
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\063\060\202\003\033\240\003\002\001\002\002\003\011
\203\363\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003
\014\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\154\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
\060\036\027\015\060\071\061\061\060\065\060\070\063\065\065\070
\132\027\015\062\071\061\061\060\065\060\070\063\065\065\070\132
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071\060
\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000
\323\262\112\317\172\107\357\165\233\043\372\072\057\326\120\105
\211\065\072\306\153\333\376\333\000\150\250\340\003\021\035\067
\120\010\237\115\112\150\224\065\263\123\321\224\143\247\040\126
\257\336\121\170\354\052\075\363\110\110\120\076\012\337\106\125

\213\047\155\303\020\115\015\221\122\103\330\207\340\135\116\066
\265\041\312\137\071\100\004\137\133\176\314\243\306\053\251\100
\036\331\066\204\326\110\363\222\036\064\106\040\044\301\244\121
\216\112\032\357\120\077\151\135\031\177\105\303\307\001\217\121
\311\043\350\162\256\264\274\126\011\177\022\313\034\261\257\051
\220\012\311\125\314\017\323\264\032\355\107\065\132\112\355\234
\163\004\041\320\252\275\014\023\265\000\312\046\154\304\153\014
\224\132\225\224\332\120\232\361\377\245\053\146\061\244\311\070
\240\337\035\037\270\011\056\363\247\350\147\122\253\225\037\340
\106\076\330\244\303\312\132\305\061\200\350\110\232\237\224\151
\376\031\335\330\163\174\201\312\226\336\216\355\263\062\005\145
\204\064\346\346\375\127\020\265\137\166\277\057\260\020\015\305
\002\003\001\000\001\243\202\001\032\060\202\001\026\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035
\006\003\125\035\016\004\026\004\024\375\332\024\304\237\060\336
\041\275\036\102\071\374\253\143\043\111\340\361\204\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\323
\006\003\125\035\037\004\201\313\060\201\310\060\201\200\240\176
\240\174\206\172\154\144\141\160\072\057\057\144\151\162\145\143
\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164
\057\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157
\157\164\045\062\060\103\154\141\163\163\045\062\060\063\045\062
\060\103\101\045\062\060\062\045\062\060\062\060\060\071\054\117
\075\104\055\124\162\165\163\164\045\062\060\107\155\142\110\054
\103\075\104\105\077\143\145\162\164\151\146\151\143\141\164\145
\162\145\166\157\143\141\164\151\157\156\154\151\163\164\060\103
\240\101\240\077\206\075\150\164\164\160\072\057\057\167\167\167
\056\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154
\057\144\055\164\162\165\163\164\137\162\157\157\164\137\143\154
\141\163\163\137\063\137\143\141\137\062\137\062\060\060\071\056
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\177\227\333\060\310\337\244\234\175
\041\172\200\160\316\024\022\151\210\024\225\140\104\001\254\262
\351\060\117\233\120\302\146\330\176\215\060\265\160\061\351\342
\151\307\363\160\333\040\025\206\320\015\360\276\254\001\165\204
\316\176\237\115\277\267\140\073\234\363\312\035\342\136\150\330
\243\235\227\345\100\140\322\066\041\376\320\264\270\027\332\164
\243\177\324\337\260\230\002\254\157\153\153\054\045\044\162\241
\145\356\045\132\345\346\062\347\362\337\253\111\372\363\220\151
\043\333\004\331\347\134\130\374\145\324\227\276\314\374\056\012
\314\045\052\065\004\370\140\221\025\165\075\101\377\043\037\031
\310\154\353\202\123\004\246\344\114\042\115\215\214\272\316\133
\163\354\144\124\120\155\321\234\125\373\151\303\066\303\214\274
\074\205\246\153\012\046\015\340\223\230\140\256\176\306\044\227
\212\141\137\221\216\146\222\011\207\066\315\213\233\055\076\366
\121\324\120\324\131\050\275\203\362\314\050\173\123\206\155\330
\046\210\160\327\352\221\315\076\271\312\300\220\156\132\306\136
\164\145\327\134\376\243\342


```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "D-TRUST Root Class 3 CA 2 2009"
# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623603 (0x983f3)
# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:35:58 2009
# Not Valid After : Mon Nov 05 08:35:58 2029
# Fingerprint (SHA-256):
49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1
# Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\350\253\260\066\025\063\373\200\367\233\033\155\051\323\377
\215\137\000\360
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\315\340\045\151\215\107\254\234\211\065\220\367\375\121\075\057
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\363
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root Class 3 CA 2 EV 2009"
#
# Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

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```
# Serial Number: 623604 (0x983f4)
# Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:50:46 2009
# Not Valid After : Mon Nov 05 08:50:46 2029
# Fingerprint (SHA-256):
EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81
# Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\364
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\103\060\202\003\053\240\003\002\001\002\002\003\011
\203\364\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003
\014\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\154\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062
\060\060\071\060\036\027\015\060\071\061\061\060\065\060\070\065
\060\064\066\132\027\015\062\071\061\061\060\065\060\070\065\060
\064\066\132\060\120\061\013\060\011\006\003\125\004\006\023\002
\104\105\061\025\060\023\006\003\125\004\012\014\014\104\055\124
\162\165\163\164\040\107\155\142\110\061\052\060\050\006\003\125
\004\003\014\041\104\055\124\122\125\123\124\040\122\157\157\164
```

\040\103\154\141\163\163\040\063\040\103\101\040\062\040\105\126
\040\062\060\060\071\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\231\361\204\064\160\272\057\267\060\240
\216\275\174\004\317\276\142\274\231\375\202\227\322\172\012\147
\226\070\011\366\020\116\225\042\163\231\215\332\025\055\347\005
\374\031\163\042\267\216\230\000\274\074\075\254\241\154\373\326
\171\045\113\255\360\314\144\332\210\076\051\270\017\011\323\064
\335\063\365\142\321\341\315\031\351\356\030\117\114\130\256\342
\036\326\014\133\025\132\330\072\270\304\030\144\036\343\063\262
\265\211\167\116\014\277\331\224\153\023\227\157\022\243\376\231
\251\004\314\025\354\140\150\066\355\010\173\267\365\277\223\355
\146\061\203\214\306\161\064\207\116\027\352\257\213\221\215\034
\126\101\256\042\067\136\067\362\035\331\321\055\015\057\151\121
\247\276\146\246\212\072\052\275\307\032\261\341\024\360\276\072
\035\271\317\133\261\152\376\264\261\106\040\242\373\036\073\160
\357\223\230\175\214\163\226\362\305\357\205\160\255\051\046\374
\036\004\076\034\240\330\017\313\122\203\142\174\356\213\123\225
\220\251\127\242\352\141\005\330\371\115\304\047\372\156\255\355
\371\327\121\367\153\245\002\003\001\000\001\243\202\001\044\060
\202\001\040\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\323
\224\212\114\142\023\052\031\056\314\257\162\212\175\066\327\232
\034\334\147\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\201\335\006\003\125\035\037\004\201\325\060\201
\322\060\201\207\240\201\204\240\201\201\206\177\154\144\141\160
\072\057\057\144\151\162\145\143\164\157\162\171\056\144\055\164
\162\165\163\164\056\156\145\164\057\103\116\075\104\055\124\122
\125\123\124\045\062\060\122\157\157\164\045\062\060\103\154\141
\163\163\045\062\060\063\045\062\060\103\101\045\062\060\062\045
\062\060\105\126\045\062\060\062\060\060\071\054\117\075\104\055
\124\162\165\163\164\045\062\060\107\155\142\110\054\103\075\104
\105\077\143\145\162\164\151\146\151\143\141\164\145\162\145\166
\157\143\141\164\151\157\156\154\151\163\164\060\106\240\104\240
\102\206\100\150\164\164\160\072\057\057\167\167\167\056\144\055
\164\162\165\163\164\056\156\145\164\057\143\162\154\057\144\055
\164\162\165\163\164\137\162\157\157\164\137\143\154\141\163\163
\137\063\137\143\141\137\062\137\145\166\137\062\060\060\071\056
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\064\355\173\132\074\244\224\210\357
\032\021\165\007\057\263\376\074\372\036\121\046\353\207\366\051
\336\340\361\324\306\044\011\351\301\317\125\033\264\060\331\316
\032\376\006\121\246\025\244\055\357\262\113\277\040\050\045\111
\321\246\066\167\064\350\144\337\122\261\021\307\163\172\315\071
\236\302\255\214\161\041\362\132\153\257\337\074\116\125\257\262
\204\145\024\211\271\167\313\052\061\276\317\243\155\317\157\110
\224\062\106\157\347\161\214\240\246\204\031\067\007\362\003\105
\011\053\206\165\174\337\137\151\127\000\333\156\330\246\162\042

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\113\120\324\165\230\126\337\267\030\377\103\103\120\256\172\104
\173\360\171\121\327\103\075\247\323\201\323\360\311\117\271\332
\306\227\206\320\202\303\344\102\155\376\260\342\144\116\016\046
\347\100\064\046\265\010\211\327\010\143\143\070\047\165\036\063
\352\156\250\335\237\231\117\164\115\201\211\200\113\335\232\227
\051\134\057\276\201\101\271\214\377\352\175\140\006\236\315\327
\075\323\056\243\025\274\250\346\046\345\157\303\334\270\003\041
\352\237\026\361\054\124\265
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "D-TRUST Root Class 3 CA 2 EV 2009"

Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

Serial Number: 623604 (0x983f4)

Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

Not Valid Before: Thu Nov 05 08:50:46 2009

Not Valid After : Mon Nov 05 08:50:46 2029

Fingerprint (SHA-256):

EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81

Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\226\311\033\013\225\264\020\230\102\372\320\330\042\171\376\140
\372\271\026\203
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\252\306\103\054\136\055\315\304\064\300\120\117\021\002\117\266
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\003\011\203\364
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

```

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "CA Disig Root R2"
#
# Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
# Serial Number:00:92:b8:88:db:b0:8a:c1:63
# Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
# Not Valid Before: Thu
    Jul 19 09:15:30 2012
# Not Valid After : Sat Jul 19 09:15:30 2042
# Fingerprint (SHA-256):
E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03
# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CA Disig Root R2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\222\270\210\333\260\212\301\143
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\151\060\202\003\121\240\003\002\001\002\002\011\000
\222\270\210\333\260\212\301\143\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\122\061\013\060\011\006\003\125
\004\006\023\002\123\113\061\023\060\021\006\003\125\004\007\023

```

\012\102\162\141\164\151\163\154\141\166\141\061\023\060\021\006
\003\125\004\012\023\012\104\151\163\151\147\040\141\056\163\056
\061\031\060\027\006\003\125\004\003\023\020\103\101\040\104\151
\163\151\147\040\122\157\157\164\040\122\062\060\036\027\015\061
\062\060\067\061\071\060\071\061\065\063\060\132\027\015\064\062
\060\067\061\071\060\071\061\065\063\060\132\060\122\061\013\060
\011\006\003\125\004\006\023\002\123\113\061\023\060\021\006\003
\125\004\007\023\012\102\162\141\164\151\163\154\141\166\141\061
\023\060\021\006\003\125\004\012\023\012\104\151\163\151\147\040
\141\056\163\056\061\031\060\027\006\003\125\004\003\023\020\103
\101\040\104\151\163\151\147\040\122\157\157\164\040\122\062\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\242\243\304\000\011\326\205\135\055\155\024\366\302\303\163\236
\065\302\161\125\176\201\373\253\106\120\340\301\174\111\170\346
\253\171\130\074\332\377\174\034\237\330\227\002\170\076\153\101
\004\351\101\275\276\003\054\105\366\057\144\324\253\135\243\107
\075\144\233\351\150\232\306\314\033\077\272\276\262\213\064\002
\056\230\125\031\374\214\157\252\137\332\114\316\115\003\041\243
\330\322\064\223\126\226\313\114\014\000\026\074\137\032\315\310
\307\154\246\255\323\061\247\274\350\345\341\146\326\322\373\003
\264\101\145\311\020\256\016\005\143\306\200\152\151\060\375\322
\356\220\357\015\047\337\237\225\163\364\341\045\332\154\026\336
\101\070\064\352\213\374\321\350\004\024\141\055\101\176\254\307
\167\116\313\121\124\373\136\222\030\033\004\132\150\306\311\304
\372\267\023\240\230\267\021\053\267\326\127\314\174\236\027\321
\313\045\376\206\116\044\056\126\014\170\115\236\001\022\246\053
\247\001\145\156\174\142\035\204\204\337\352\300\153\265\245\052
\225\203\303\123\021\014\163\035\013\262\106\220\321\102\072\316
\100\156\225\255\377\306\224\255\156\227\204\216\175\157\236\212
\200\015\111\155\163\342\173\222\036\303\363\301\363\353\056\005
\157\331\033\317\067\166\004\310\264\132\344\027\247\313\335\166
\037\320\031\166\350\054\005\263\326\234\064\330\226\334\141\207
\221\005\344\104\010\063\301\332\271\010\145\324\256\262\066\015
\353\272\070\272\014\345\233\236\353\215\146\335\231\317\326\211
\101\366\004\222\212\051\051\155\153\072\034\347\165\175\002\161
\016\363\300\347\275\313\031\335\235\140\262\302\146\140\266\261
\004\356\311\346\206\271\232\146\100\250\347\021\355\201\105\003
\213\366\147\131\350\301\006\021\275\335\317\200\002\117\145\100
\170\134\107\120\310\233\346\037\201\173\344\104\250\133\205\232
\342\336\132\325\307\371\072\104\146\113\344\062\124\174\344\154
\234\263\016\075\027\242\262\064\022\326\176\262\250\111\273\321
\172\050\100\276\242\026\037\337\344\067\037\021\163\373\220\012
\145\103\242\015\174\370\006\001\125\063\175\260\015\270\364\365
\256\245\102\127\174\066\021\214\173\136\304\003\235\214\171\235
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125\035

\016\004\026\004\024\265\231\370\257\260\224\365\343\040\326\012
\255\316\116\126\244\056\156\102\355\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\003\202\002\001\000\046\006\136
\160\347\145\063\310\202\156\331\234\027\072\033\172\146\262\001
\366\170\073\151\136\057\352\377\116\371\050\303\230\052\141\114
\264\044\022\212\175\155\021\024\367\234\265\312\346\274\236\047
\216\114\031\310\251\275\172\300\327\066\016\155\205\162\156\250
\306\242\155\366\372\163\143\177\274\156\171\010\034\235\212\237
\032\212\123\246\330\273\331\065\125\261\021\305\251\003\263\126
\073\271\204\223\042\136\176\301\366\022\122\213\352\054\147\274
\376\066\114\365\270\317\321\263\111\222\073\323\051\016\231\033
\226\367\141\270\073\304\053\266\170\154\264\043\157\360\375\323
\262\136\165\037\231\225\250\254\366\332\341\305\061\173\373\321
\106\263\322\274\147\264\142\124\272\011\367\143\260\223\242\232
\371\351\122\056\213\140\022\253\374\365\140\126\357\020\134\213
\304\032\102\334\203\133\144\016\313\265\274\326\117\301\174\074
\156\215\023\155\373\173\353\060\320\334\115\257\305\325\266\245
\114\133\161\311\350\061\276\350\070\006\110\241\032\342\352\322
\336\022\071\130\032\377\200\016\202\165\346\267\311\007\154\016
\357\377\070\361\230\161\304\267\177\016\025\320\045\151\275\042
\235\053\355\005\366\106\107\254\355\300\360\324\073\342\354\356
\226\133\220\023\116\036\126\072\353\260\357\226\273\226\043\021
\272\362\103\206\164\144\225\310\050\165\337\035\065\272\322\067
\203\070\123\070\066\073\317\154\351\371\153\016\320\373\004\350
\117\167\327\145\001\170\206\014\172\076\041\142\361\177\143\161
\014\311\237\104\333\250\047\242\165\276\156\201\076\327\300\353
\033\230\017\160\134\064\262\212\314\300\205\030\353\156\172\263
\367\132\241\007\277\251\102\222\363\140\042\227\344\024\241\007
\233\116\166\300\216\175\375\244\045\307\107\355\377\037\163\254
\314\303\245\351\157\012\216\233\145\302\120\205\265\243\240\123
\022\314\125\207\141\363\201\256\020\106\141\275\104\041\270\302
\075\164\317\176\044\065\372\034\007\016\233\075\042\312\357\061
\057\214\254\022\275\357\100\050\374\051\147\237\262\023\117\146
\044\304\123\031\351\036\051\025\357\346\155\260\177\055\147\375
\363\154\033\165\106\243\345\112\027\351\244\327\013

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "CA Disig Root R2"

Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK

Serial Number:00:92:b8:88:db:b0:8a:c1:63

Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK

Not Valid Before: Thu Jul 19 09:15:30 2012

Not Valid After : Sat Jul 19 09:15:30 2042

Fingerprint (SHA-256):

```

E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03
# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CA Disig Root R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\265\141\353\352\244\336\344\045\113\151\032\230\245\127\107\302
\064\307\331\161
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\046\001\373\330\047\247\027\232\105\124\070\032\103\001\073\003
END
CKA_ISSUER
MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\222\270\210\333\260\212\301\143
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ACCVRAIZ1"
#
# Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Serial Number:5e:c3:b7:a6:43:7f:a4:e0
# Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Not Valid Before: Thu May 05 09:37:37 2011
# Not Valid After : Tue Dec 31 09:37:37 2030
# Fingerprint (SHA-256):
9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13
#
Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ACCVRAIZ1"

```


CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\136\303\267\246\103\177\244\340

END

CKA_VALUE MULTILINE_OCTAL

\060\202\007\323\060\202\005\273\240\003\002\001\002\002\010\136
\303\267\246\103\177\244\340\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\102\061\022\060\020\006\003\125\004
\003\014\011\101\103\103\126\122\101\111\132\061\061\020\060\016
\006\003\125\004\013\014\007\120\113\111\101\103\103\126\061\015
\060\013\006\003\125\004\012\014\004\101\103\103\126\061\013\060
\011\006\003\125\004\006\023\002\105\123\060\036\027\015\061\061
\060\065\060\065\060\071\063\067\063\067\132\027\015\063\060\061
\062\063\061\060\071\063\067\063\067\132\060\102\061\022\060\020
\006\003\125\004\003\014\011\101\103\103\126\122\101\111\132\061
\061\020\060\016\006\003\125\004\013\014\007\120\113\111\101\103
\103\126\061\015\060\013\006\003\125\004\012\014\004\101\103\103
\126\061\013\060\011\006\003\125\004\006\023\002\105\123\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\233
\251\253\277\141\112\227\257\057\227\146\232\164\137\320\331\226
\375\317\342\344\146\357\037\037\107\063\302\104\243\337\232\336
\037\265\124\335\025\174\151\065\021\157\273\310\014\216\152\030
\036\330\217\331\026\274\020\110\066\134\360\143\263\220\132\134
\044\067\327\243\326\313\011\161\271\361\001\162\204\260\175\333
\115\200\315\374\323\157\311\370\332\266\016\202\322\105\205\250
\033\150\250\075\350\364\104\154\275\241\302\313\003\276\214\076
\023\000\204\337\112\110\300\343\042\012\350\351\067\247\030\114
\261\011\015\043\126\177\004\115\331\027\204\030\245\310\332\100
\224\163\353\316\016\127\074\003\201\072\235\012\241\127\103\151
\254\127\155\171\220\170\345\265\264\073\330\274\114\215\050\241
\247\243\247\272\002\116\045\321\052\256\355\256\003\042\270\153

\040\017\060\050\124\225\177\340\356\316\012\146\235\321\100\055
\156\042\257\235\032\301\005\031\322\157\300\362\237\370\173\263
\002\102\373\120\251\035\055\223\017\043\253\306\301\017\222\377
\320\242\025\365\123\011\161\034\377\105\023\204\346\046\136\370
\340\210\034\012\374\026\266\250\163\006\270\360\143\204\002\240
\306\132\354\347\164\337\160\256\243\203\045\352\326\307\227\207
\223\247\306\212\212\063\227\140\067\020\076\227\076\156\051\025
\326\241\017\321\210\054\022\237\157\252\244\306\102\353\101\242
\343\225\103\323\001\205\155\216\273\073\363\043\066\307\376\073
\340\241\045\007\110\253\311\211\164\377\010\217\200\277\300\226
\145\363\356\354\113\150\275\235\210\303\061\263\100\361\350\317
\366\070\273\234\344\321\177\324\345\130\233\174\372\324\363\016
\233\165\221\344\272\122\056\031\176\321\365\315\132\031\374\272
\006\366\373\122\250\113\231\004\335\370\371\264\213\120\243\116
\142\211\360\207\044\372\203\102\301\207\372\325\055\051\052\132
\161\172\144\152\327\047\140\143\015\333\316\111\365\215\037\220
\211\062\027\370\163\103\270\322\132\223\206\141\326\341\165\012
\352\171\146\166\210\117\161\353\004\045\326\012\132\172\223\345
\271\113\027\100\017\261\266\271\365\336\117\334\340\263\254\073
\021\160\140\204\112\103\156\231\040\300\051\161\012\300\145\002
\003\001\000\001\243\202\002\313\060\202\002\307\060\175\006\010
\053\006\001\005\005\007\001\001\004\161\060\157\060\114\006\010
\053\006\001\005\005\007\060\002\206\100\150\164\164\160\072\057
\057\167\167\167\056\141\143\143\166\056\145\163\057\146\151\154
\145\141\144\155\151\156\057\101\162\143\150\151\166\157\163\057
\143\145\162\164\151\146\151\143\141\144\157\163\057\162\141\151
\172\141\143\143\166\061\056\143\162\164\060\037\006\010\053\006
\001\005\005\007\060\001\206\023\150\164\164\160\072\057\057\157
\143\163\160\056\141\143\143\166\056\145\163\060\035\006\003\125
\035\016\004\026\004\024\322\207\264\343\337\067\047\223\125\366
\126\352\201\345\066\314\214\036\077\275\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125
\035\043\004\030\060\026\200\024\322\207\264\343\337\067\047\223
\125\366\126\352\201\345\066\314\214\036\077\275\060\202\001\163
\006\003\125\035\040\004\202\001\152\060\202\001\146\060\202\001
\142\006\004\125\035\040\000\060\202\001\130\060\202\001\042\006
\010\053\006\001\005\005\007\002\002\060\202\001\024\036\202\001
\020\000\101\000\165\000\164\000\157\000\162\000\151\000\144\000
\141\000\144\000\040\000\144\000\145\000\040\000\103\000\145\000
\162\000\164\000\151\000\146\000\151\000\143\000\141\000\143\000
\151\000\363\000\156\000\040\000\122\000\141\000\355\000\172\000
\040\000\144\000\145\000\040\000\154\000\141\000\040\000\101\000
\103\000\103\000\126\000\040\000\050\000\101\000\147\000\145\000
\156\000\143\000\151\000\141\000\040\000\144\000\145\000\040\000
\124\000\145\000\143\000\156\000\157\000\154\000\157\000\147\000
\355\000\141\000\040\000\171\000\040\000\103\000\145\000\162\000
\164\000\151\000\146\000\151\000\143\000\141\000\143\000\151\000
\363\000\156\000\040\000\105\000\154\000\145\000\143\000\164\000

\162\000\363\000\156\000\151\000\143\000\141\000\054\000\040\000
\103\000\111\000\106\000\040\000\121\000\064\000\066\000\060\000
\061\000\061\000\065\000\066\000\105\000\051\000\056\000\040\000
\103\000\120\000\123\000\040\000\145\000\156\000\040\000\150\000
\164\000\164\000\160\000\072\000\057\000\057\000\167\000\167\000
\167\000\056\000\141\000\143\000\143\000\166\000\056\000\145\000
\163\060\060\006\010\053\006\001\005\005\007\002\001\026\044\150
\164\164\160\072\057\057\167\167\167\056\141\143\143\166\056\145
\163\057\154\145\147\151\163\154\141\143\151\157\156\137\143\056
\150\164\155\060\125\006\003\125\035\037\004\116\060\114\060\112
\240\110\240\106\206\104\150\164\164\160\072\057\057\167\167\167
\056\141\143\143\166\056\145\163\057\146\151\154\145\141\144\155
\151\156\057\101\162\143\150\151\166\157\163\057\143\145\162\164
\151\146\151\143\141\144\157\163\057\162\141\151\172\141\143\143
\166\061\137\144\145\162\056\143\162\154\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\027\006\003\125\035
\021\004\020\060\016\201\014\141\143\143\166\100\141\143\143\166
\056\145\163\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\003\202\002\001\000\227\061\002\237\347\375\103\147\110
\104\024\344\051\207\355\114\050\146\320\217\065\332\115\141\267
\112\227\115\265\333\220\340\005\056\016\306\171\320\362\227\151
\017\275\004\107\331\276\333\265\051\332\233\331\256\251\231\325
\323\074\060\223\365\215\241\250\374\006\215\104\364\312\026\225
\174\063\334\142\213\250\067\370\047\330\011\055\033\357\310\024
\047\040\251\144\104\377\056\326\165\252\154\115\140\100\031\111
\103\124\143\332\342\314\272\146\345\117\104\172\133\331\152\201
\053\100\325\177\371\001\047\130\054\310\355\110\221\174\077\246
\000\317\304\051\163\021\066\336\206\031\076\235\356\031\212\033
\325\260\355\216\075\234\052\300\015\330\075\146\343\074\015\275
\325\224\134\342\342\247\065\033\004\000\366\077\132\215\352\103
\275\137\211\035\251\301\260\314\231\342\115\000\012\332\311\047
\133\347\023\220\134\344\365\063\242\125\155\334\340\011\115\057
\261\046\133\047\165\000\011\304\142\167\051\010\137\236\131\254
\266\176\255\237\124\060\042\003\301\036\161\144\376\371\070\012
\226\030\335\002\024\254\043\313\006\034\036\244\175\215\015\336
\047\101\350\255\332\025\267\260\043\335\053\250\323\332\045\207
\355\350\125\104\115\210\364\066\176\204\232\170\254\367\016\126
\111\016\326\063\045\326\204\120\102\154\040\022\035\052\325\276
\274\362\160\201\244\160\140\276\005\265\233\236\004\104\276\141
\043\254\351\245\044\214\021\200\224\132\242\242\271\111\322\301
\334\321\247\355\061\021\054\236\031\246\356\341\125\341\300\352
\317\015\204\344\027\267\242\174\245\336\125\045\006\356\314\300
\207\134\100\332\314\225\077\125\340\065\307\270\204\276\264\135
\315\172\203\001\162\356\207\346\137\035\256\265\205\306\046\337
\346\301\232\351\036\002\107\237\052\250\155\251\133\317\354\105
\167\177\230\047\232\062\135\052\343\204\356\305\230\146\057\226
\040\035\335\330\303\047\327\260\371\376\331\175\315\320\237\217
\013\024\130\121\237\057\213\303\070\055\336\350\217\326\215\207

\244\365\126\103\026\231\054\364\244\126\264\064\270\141\067\311
\302\130\200\033\240\227\241\374\131\215\351\021\366\321\017\113
\125\064\106\052\213\206\073

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "ACCVRAIZ1"

Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

Serial Number:5e:c3:b7:a6:43:7f:a4:e0

Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

Not Valid Before: Thu May 05 09:37:37 2011

Not Valid After : Tue Dec 31 09:37:37 2030

Fingerprint (SHA-256):

9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13

Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8

"ACCVRAIZ1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\223\005\172\210\025\306\117\316\210\057\372\221\026\122\050\170
\274\123\144\027

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\320\240\132\356\005\266\011\224\041\241\175\361\262\051\202\002

END

CKA_ISSUER MULTILINE_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\010\136\303\267\246\103\177\244\340

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "TWCA Global Root CA"

```
#
# Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW
# Serial Number: 3262 (0xcbe)
# Subject: CN=TWCA Global
  Root CA,OU=Root CA,O=TAIWAN-CA,C=TW
# Not Valid Before: Wed Jun 27 06:28:33 2012
# Not Valid After : Tue Dec 31 15:59:59 2030
# Fingerprint (SHA-256):
59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B
# Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TWCA Global Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\014\276
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\101\060\202\003\051\240\003\002\001\002\002\002\014
\276\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101\060\036\027\015\061\062\060\066\062\067\060\066\062
\070\063\063\132\027\015\063\060\061\062\063\061\061\065\065\071
\065\071\132\060\121\061\013\060\011\006\003\125\004\006\023\002
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\124\127\061\022\060\020\006\003\125\004\012\023\011\124\101\111
\127\101\116\055\103\101\061\020\060\016\006\003\125\004\013\023
\007\122\157\157\164\040\103\101\061\034\060\032\006\003\125\004
\003\023\023\124\127\103\101\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\260\005\333\310\353\214\304\156\212
\041\357\216\115\234\161\012\037\122\160\355\155\202\234\227\305
\327\114\116\105\111\313\100\102\265\022\064\154\031\302\164\244
\061\137\205\002\227\354\103\063\012\123\322\234\214\216\267\270
\171\333\053\325\152\362\216\146\304\356\053\001\007\222\324\263
\320\002\337\120\366\125\257\146\016\313\340\107\140\057\053\062
\071\065\122\072\050\203\370\173\026\306\030\270\142\326\107\045
\221\316\360\031\022\115\255\143\365\323\077\165\137\051\360\241
\060\034\052\240\230\246\025\275\356\375\031\066\360\342\221\103
\217\372\312\326\020\047\111\114\357\335\301\361\205\160\233\312
\352\250\132\103\374\155\206\157\163\351\067\105\251\360\066\307
\314\210\165\036\273\154\006\377\233\153\076\027\354\141\252\161
\174\306\035\242\367\111\351\025\265\074\326\241\141\365\021\367
\005\157\035\375\021\276\320\060\007\302\051\260\011\116\046\334
\343\242\250\221\152\037\302\221\105\210\134\345\230\270\161\245
\025\031\311\174\165\021\314\160\164\117\055\233\035\221\104\375
\126\050\240\376\273\206\152\310\372\134\013\130\334\306\113\166
\310\253\042\331\163\017\245\364\132\002\211\077\117\236\042\202
\356\242\164\123\052\075\123\047\151\035\154\216\062\054\144\000
\046\143\141\066\116\243\106\267\077\175\263\055\254\155\220\242
\225\242\316\317\332\202\347\007\064\031\226\351\270\041\252\051
\176\246\070\276\216\051\112\041\146\171\037\263\303\265\011\147
\336\326\324\007\106\363\052\332\346\042\067\140\313\201\266\017
\240\017\351\310\225\177\277\125\221\005\172\317\075\025\300\157
\336\011\224\001\203\327\064\033\314\100\245\360\270\233\147\325
\230\221\073\247\204\170\225\046\244\132\010\370\053\164\264\000
\004\074\337\270\024\216\350\337\251\215\154\147\222\063\035\300
\267\322\354\222\310\276\011\277\054\051\005\157\002\153\236\357
\274\277\052\274\133\300\120\217\101\160\161\207\262\115\267\004
\251\204\243\062\257\256\356\153\027\213\262\261\376\154\341\220
\214\210\250\227\110\316\310\115\313\363\006\317\137\152\012\102
\261\036\036\167\057\216\240\346\222\016\006\374\005\042\322\046
\341\061\121\175\062\334\017\002\003\001\000\001\243\043\060\041
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000
\003\202\002\001\000\137\064\201\166\357\226\035\325\345\265\331
\002\143\204\026\301\256\240\160\121\247\367\114\107\065\310\013
\327\050\075\211\161\331\252\063\101\352\024\033\154\041\000\300
\154\102\031\176\237\151\133\040\102\337\242\322\332\304\174\227
\113\215\260\350\254\310\356\245\151\004\231\012\222\246\253\047
\056\032\115\201\277\204\324\160\036\255\107\376\375\112\235\063

\340\362\271\304\105\010\041\012\332\151\151\163\162\015\276\064
\376\224\213\255\303\036\065\327\242\203\357\345\070\307\245\205
\037\253\317\064\354\077\050\376\014\361\127\206\116\311\125\367
\034\324\330\245\175\006\172\157\325\337\020\337\201\116\041\145
\261\266\341\027\171\225\105\006\316\137\314\334\106\211\143\150
\104\215\223\364\144\160\240\075\235\050\005\303\071\160\270\142
\173\040\375\344\333\351\010\241\270\236\075\011\307\117\373\054
\370\223\166\101\336\122\340\341\127\322\235\003\274\167\236\376
\236\051\136\367\301\121\140\037\336\332\013\262\055\165\267\103
\110\223\347\366\171\306\204\135\200\131\140\224\374\170\230\217
\074\223\121\355\100\220\007\337\144\143\044\313\116\161\005\241
\327\224\032\210\062\361\042\164\042\256\245\246\330\022\151\114
\140\243\002\356\053\354\324\143\222\013\136\276\057\166\153\243
\266\046\274\217\003\330\012\362\114\144\106\275\071\142\345\226
\353\064\143\021\050\314\225\361\255\357\357\334\200\130\110\351
\113\270\352\145\254\351\374\200\265\265\310\105\371\254\301\237
\331\271\352\142\210\216\304\361\113\203\022\255\346\213\204\326
\236\302\353\203\030\237\152\273\033\044\140\063\160\314\354\367
\062\363\134\331\171\175\357\236\244\376\311\043\303\044\356\025
\222\261\075\221\117\046\206\275\146\163\044\023\352\244\256\143
\301\255\175\204\003\074\020\170\206\033\171\343\304\363\362\004
\225\040\256\043\202\304\263\072\000\142\277\346\066\044\341\127
\272\307\036\220\165\325\137\077\225\141\053\301\073\315\345\263
\150\141\320\106\046\251\041\122\151\055\353\056\307\353\167\316
\246\072\265\003\063\117\166\321\347\134\124\001\135\313\170\364
\311\014\277\317\022\216\027\055\043\150\224\347\253\376\251\262
\053\006\320\004\315

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL

CK_FALSE

Trust for "TWCA Global Root CA"

Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

Serial Number: 3262 (0xcbe)

Subject: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

Not Valid Before: Wed Jun 27 06:28:33 2012

Not Valid After : Tue Dec 31 15:59:59 2030

Fingerprint (SHA-256):

59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B

Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TWCA Global Root CA"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\234\273\110\123\366\244\366\323\122\244\350\062\122\125\140\023
\365\255\257\145
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\371\003\176\317\346\236\074\163\172\052\220\007\151\377\053\226
END
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\014\276
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TeliaSonera Root CA v1"
#
# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96
# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Not Valid Before: Thu Oct 18 12:00:50 2007
# Not Valid After : Mon Oct 18 12:00:50 2032
# Fingerprint (SHA-256):
DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89
# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TeliaSonera Root CA v1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
END

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CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372
\213\315\226

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\070\060\202\003\040\240\003\002\001\002\002\021\000
\225\276\026\240\367\056\106\361\173\071\202\162\372\213\315\226
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154\151
\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004\003
\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122\157
\157\164\040\103\101\040\166\061\060\036\027\015\060\067\061\060
\061\070\061\062\060\060\065\060\132\027\015\063\062\061\060\061
\070\061\062\060\060\065\060\132\060\067\061\024\060\022\006\003
\125\004\012\014\013\124\145\154\151\141\123\157\156\145\162\141
\061\037\060\035\006\003\125\004\003\014\026\124\145\154\151\141
\123\157\156\145\162\141\040\122\157\157\164\040\103\101\040\166
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\302\276\353\047\360\041\243\363\151\046\125\176\235\305
\125\026\221\134\375\357\041\277\123\200\172\055\322\221\214\143
\061\360\354\044\360\303\245\322\162\174\020\155\364\067\267\345
\346\174\171\352\214\265\202\213\256\110\266\254\000\334\145\165
\354\052\115\137\301\207\365\040\145\053\201\250\107\076\211\043
\225\060\026\220\177\350\127\007\110\347\031\256\277\105\147\261
\067\033\006\052\376\336\371\254\175\203\373\136\272\344\217\227
\147\276\113\216\215\144\007\127\070\125\151\064\066\075\023\110
\357\117\342\323\146\036\244\317\032\267\136\066\063\324\264\006
\275\030\001\375\167\204\120\000\105\365\214\135\350\043\274\176
\376\065\341\355\120\173\251\060\215\031\323\011\216\150\147\135
\277\074\227\030\123\273\051\142\305\312\136\162\301\307\226\324
\333\055\240\264\037\151\003\354\352\342\120\361\014\074\360\254
\363\123\055\360\034\365\355\154\071\071\163\200\026\310\122\260
\043\315\340\076\334\335\074\107\240\273\065\212\342\230\150\213
\276\345\277\162\356\322\372\245\355\022\355\374\230\030\251\046
\166\334\050\113\020\040\034\323\177\026\167\055\355\157\200\367
\111\273\123\005\273\135\150\307\324\310\165\026\077\211\132\213
\367\027\107\324\114\361\322\211\171\076\115\075\230\250\141\336
\072\036\322\370\136\003\340\301\311\034\214\323\215\115\323\225
\066\263\067\137\143\143\233\063\024\360\055\046\153\123\174\211
\214\062\302\156\354\075\041\000\071\311\241\150\342\120\203\056

\260\072\053\363\066\240\254\057\344\157\141\302\121\011\071\076
\213\123\271\273\147\332\334\123\271\166\131\066\235\103\345\040
\340\075\062\140\205\042\121\267\307\063\273\335\025\057\244\170
\246\007\173\201\106\066\004\206\335\171\065\307\225\054\073\260
\243\027\065\345\163\037\264\134\131\357\332\352\020\145\173\172
\320\177\237\263\264\052\067\073\160\213\233\133\271\053\267\354
\262\121\022\227\123\051\132\324\360\022\020\334\117\002\273\022
\222\057\142\324\077\151\103\174\015\326\374\130\165\001\210\235
\130\026\113\336\272\220\377\107\001\211\006\152\366\137\262\220
\152\263\002\246\002\210\277\263\107\176\052\331\325\372\150\170
\065\115\002\003\001\000\001\243\077\060\075\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003
\125\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016
\004\026\004\024\360\217\131\070\000\263\365\217\232\226\014\325
\353\372\173\252\027\350\023\022\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\002\001\000\276\344\134\142
\116\044\364\014\010\377\360\323\014\150\344\223\111\042\077\104
\047\157\273\155\336\203\146\316\250\314\015\374\365\232\006\345
\167\024\221\353\235\101\173\231\052\204\345\377\374\041\301\135
\360\344\037\127\267\165\251\241\137\002\046\377\327\307\367\116
\336\117\370\367\034\106\300\172\117\100\054\042\065\360\031\261
\320\153\147\054\260\250\340\300\100\067\065\366\204\134\134\343
\257\102\170\376\247\311\015\120\352\015\204\166\366\121\357\203
\123\306\172\377\016\126\111\056\217\172\326\014\346\047\124\343
\115\012\140\162\142\315\221\007\326\245\277\310\231\153\355\304
\031\346\253\114\021\070\305\157\061\342\156\111\310\077\166\200
\046\003\046\051\340\066\366\366\040\123\343\027\160\064\027\235
\143\150\036\153\354\303\115\206\270\023\060\057\135\106\015\107
\103\325\033\252\131\016\271\134\215\006\110\255\164\207\137\307
\374\061\124\101\023\342\307\041\016\236\340\036\015\341\300\173
\103\205\220\305\212\130\306\145\012\170\127\362\306\043\017\001
\331\040\113\336\017\373\222\205\165\052\134\163\215\155\173\045
\221\312\356\105\256\006\113\000\314\323\261\131\120\332\072\210
\073\051\103\106\136\227\053\124\316\123\157\215\112\347\226\372
\277\161\016\102\213\174\375\050\240\320\110\312\332\304\201\114
\273\242\163\223\046\310\353\014\326\046\210\266\300\044\317\273
\275\133\353\165\175\351\010\216\206\063\054\171\167\011\151\245
\211\374\263\160\220\207\166\217\323\042\273\102\316\275\163\013
\040\046\052\320\233\075\160\036\044\154\315\207\166\251\027\226
\267\317\015\222\373\216\030\251\230\111\321\236\376\140\104\162
\041\271\031\355\302\365\061\361\071\110\210\220\044\165\124\026
\255\316\364\370\151\024\144\071\373\243\270\272\160\100\307\047
\034\277\304\126\123\372\143\145\320\363\034\016\026\365\153\206
\130\115\030\324\344\015\216\245\235\133\221\334\166\044\120\077
\306\052\373\331\267\234\265\326\346\320\331\350\031\213\025\161
\110\255\267\352\330\131\210\324\220\277\026\263\331\351\254\131
\141\124\310\034\272\312\301\312\341\271\040\114\217\072\223\211
\245\240\314\277\323\366\165\244\165\226\155\126

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "TeliaSonera Root CA v1"
# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96
# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Not Valid Before: Thu Oct 18 12:00:50 2007
# Not Valid After : Mon Oct 18 12:00:50 2032
# Fingerprint (SHA-256):
DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89
# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TeliaSonera Root CA v1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\103\023\273\226\361\325\206\233\301\116\152\222\366\317\366\064
\151\207\202\067
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\067\101\111\033\030\126\232\046\365\255\302\146\373\100\245\114
END
CKA_ISSUER MULTILINE_OCTAL
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372
\213\315\226
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Certification Authority"
#
# Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im

```

```
Teknolojileri ve Hizmetleri A...,L=Ankara,C=TR
# Serial Number:6a:68:3e:9c:51:9b:cb:53
# Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A...,L=Ankara,C=TR
# Not Valid Before: Tue Mar 05 12:09:48 2013
# Not Valid After : Fri Mar 03 12:09:48 2023
# Fingerprint (SHA-256):
B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C
# Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\152\150\076\234\121\233\313\123
```

END

CKA_VALUE MULTILINE_OCTAL

\060\202\006\113\060\202\004\063\240\003\002\001\002\002\010\152
\150\076\234\121\233\313\123\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\262\061\013\060\011\006\003\125
\004\006\023\002\124\122\061\017\060\015\006\003\125\004\007\014
\006\101\156\153\141\162\141\061\100\060\076\006\003\125\004\012
\014\067\105\055\124\165\304\237\162\141\040\105\102\107\040\102
\151\154\151\305\237\151\155\040\124\145\153\156\157\154\157\152
\151\154\145\162\151\040\166\145\040\110\151\172\155\145\164\154
\145\162\151\040\101\056\305\236\056\061\046\060\044\006\003\125
\004\013\014\035\105\055\124\165\147\162\141\040\123\145\162\164
\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145\172
\151\061\050\060\046\006\003\125\004\003\014\037\105\055\124\165
\147\162\141\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061
\063\060\063\060\065\061\062\060\071\064\070\132\027\015\062\063
\060\063\060\063\061\062\060\071\064\070\132\060\201\262\061\013
\060\011\006\003\125\004\006\023\002\124\122\061\017\060\015\006
\003\125\004\007\014\006\101\156\153\141\162\141\061\100\060\076
\006\003\125\004\012\014\067\105\055\124\165\304\237\162\141\040
\105\102\107\040\102\151\154\151\305\237\151\155\040\124\145\153
\156\157\154\157\152\151\154\145\162\151\040\166\145\040\110\151
\172\155\145\164\154\145\162\151\040\101\056\305\236\056\061\046
\060\044\006\003\125\004\013\014\035\105\055\124\165\147\162\141
\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040\115
\145\162\153\145\172\151\061\050\060\046\006\003\125\004\003\014
\037\105\055\124\165\147\162\141\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\342\365\077\223\005\121\036\205\142\124\136\172\013\365\030
\007\203\256\176\257\174\367\324\212\153\245\143\103\071\271\113
\367\303\306\144\211\075\224\056\124\200\122\071\071\007\113\113
\335\205\007\166\207\314\277\057\225\114\314\175\247\075\274\107
\017\230\160\370\214\205\036\164\216\222\155\033\100\321\231\015
\273\165\156\310\251\153\232\300\204\061\257\312\103\313\353\053
\064\350\217\227\153\001\233\325\016\112\010\252\133\222\164\205
\103\323\200\256\241\210\133\256\263\352\136\313\026\232\167\104
\310\241\366\124\150\316\336\217\227\053\272\133\100\002\014\144
\027\300\265\223\315\341\361\023\146\316\014\171\357\321\221\050
\253\137\240\022\122\060\163\031\216\217\341\214\007\242\303\273
\112\360\352\037\025\250\356\045\314\244\106\370\033\042\357\263
\016\103\272\054\044\270\305\054\134\324\034\370\135\144\275\303
\223\136\050\247\077\047\361\216\036\323\052\120\005\243\125\331
\313\347\071\123\300\230\236\214\124\142\213\046\260\367\175\215
\174\344\306\236\146\102\125\202\107\347\262\130\215\146\367\007
\174\056\066\346\120\034\077\333\103\044\305\277\206\107\171\263

\171\034\367\132\364\023\354\154\370\077\342\131\037\225\356\102
\076\271\255\250\062\205\111\227\106\376\113\061\217\132\313\255
\164\107\037\351\221\267\337\050\004\042\240\324\017\135\342\171
\117\352\154\205\206\275\250\246\316\344\372\303\341\263\256\336
\074\121\356\313\023\174\001\177\204\016\135\121\224\236\023\014
\266\056\245\114\371\071\160\066\157\226\312\056\014\104\125\305
\312\372\135\002\243\337\326\144\214\132\263\001\012\251\265\012
\107\027\377\357\221\100\052\216\241\106\072\061\230\345\021\374
\314\273\111\126\212\374\271\320\141\232\157\145\154\346\303\313
\076\165\111\376\217\247\342\211\305\147\327\235\106\023\116\061
\166\073\044\263\236\021\145\206\253\177\357\035\324\370\274\347
\254\132\134\267\132\107\134\125\316\125\264\042\161\133\133\013
\360\317\334\240\141\144\352\251\327\150\012\143\247\340\015\077
\240\257\323\252\322\176\357\121\240\346\121\053\125\222\025\027
\123\313\267\146\016\146\114\370\371\165\114\220\347\022\160\307
\105\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035
\016\004\026\004\024\056\343\333\262\111\320\234\124\171\134\372
\047\052\376\314\116\322\350\116\124\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035
\043\004\030\060\026\200\024\056\343\333\262\111\320\234\124\171
\134\372\047\052\376\314\116\322\350\116\124\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\005
\067\072\364\115\267\105\342\105\165\044\217\266\167\122\350\034
\330\020\223\145\363\362\131\006\244\076\036\051\354\135\321\320
\253\174\340\012\220\110\170\355\116\230\003\231\376\050\140\221
\035\060\035\270\143\174\250\346\065\265\372\323\141\166\346\326
\007\113\312\151\232\262\204\172\167\223\105\027\025\237\044\320
\230\023\022\377\273\240\056\375\116\114\207\370\316\134\252\230
\033\005\340\000\106\112\202\200\245\063\213\050\334\355\070\323
\337\345\076\351\376\373\131\335\141\204\117\322\124\226\023\141
\023\076\217\200\151\276\223\107\265\065\103\322\132\273\075\134
\357\263\102\107\315\073\125\023\006\260\011\333\375\143\366\072
\210\012\231\157\176\341\316\033\123\152\104\146\043\121\010\173
\274\133\122\242\375\006\067\070\100\141\217\112\226\270\220\067
\370\146\307\170\220\000\025\056\213\255\121\065\123\007\250\153
\150\256\371\116\074\007\046\315\010\005\160\314\071\077\166\275
\245\323\147\046\001\206\246\123\322\140\073\174\103\177\125\212
\274\225\032\301\050\071\114\037\103\322\221\364\162\131\212\271
\126\374\077\264\235\332\160\234\166\132\214\103\120\356\216\060
\162\115\337\377\111\367\306\251\147\331\155\254\002\021\342\072
\026\045\247\130\010\313\157\123\101\234\110\070\107\150\063\321
\327\307\217\324\164\041\324\303\005\220\172\377\316\226\210\261
\025\051\135\043\253\320\140\241\022\117\336\364\027\315\062\345
\311\277\310\103\255\375\056\216\361\257\342\364\230\372\022\037
\040\330\300\247\014\205\305\220\364\073\055\226\046\261\054\276
\114\253\353\261\322\212\311\333\170\023\017\036\011\235\155\217
\000\237\002\332\301\372\037\172\172\011\304\112\346\210\052\227

```
\237\211\213\375\067\137\137\072\316\070\131\206\113\257\161\013
\264\330\362\160\117\237\062\023\343\260\247\127\345\332\332\103
\313\204\064\362\050\304\352\155\364\052\357\301\153\166\332\373
\176\273\205\074\322\123\302\115\276\161\341\105\321\375\043\147
\015\023\165\373\317\145\147\042\235\256\260\011\321\011\377\035
\064\277\376\043\227\067\322\071\372\075\015\006\013\264\333\073
\243\253\157\134\035\266\176\350\263\202\064\355\006\134\044
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "E-Tugra Certification Authority"

Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

Serial Number:6a:68:3e:9c:51:9b:cb:53

Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

Not Valid Before: Tue Mar 05 12:09:48 2013

Not Valid After : Fri Mar 03 12:09:48 2023

Fingerprint (SHA-256):

B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C

Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39

CKA_CLASS CK_OBJECT_CLASS

CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\121\306\347\010\111\006\156\363\222\324\134\240\015\155\243\142
\217\303\122\071
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\270\241\003\143\260\275\041\161\160\212\157\023\072\273\171\111
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
```

\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150

\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\152\150\076\234\121\233\313\123

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "T-TeleSec GlobalRoot Class 2"

#

Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Serial Number: 1 (0x1)

Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Not Valid Before: Wed Oct 01 10:40:14 2008

Not Valid After : Sat Oct 01 23:59:59 2033

Fingerprint (SHA-256):

91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52

Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105

\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163

\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040

\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060

\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155

\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045

\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123

\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154

\141\163\163\040\062

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105

\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163

\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040

\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141
\163\163\040\062\060\036\027\015\060\070\061\060\060\061\061\060
\064\060\061\064\132\027\015\063\063\061\060\060\061\062\063\065
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171
\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157
\164\040\103\154\141\163\163\040\062\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\252\137\332\033\137\350
\163\221\345\332\134\364\242\346\107\345\363\150\125\140\005\035
\002\244\263\233\131\363\036\212\257\064\255\374\015\302\331\110
\031\356\151\217\311\040\374\041\252\007\031\355\260\134\254\145
\307\137\355\002\174\173\174\055\033\326\272\271\200\302\030\202
\026\204\372\146\260\010\306\124\043\201\344\315\271\111\077\366
\117\156\067\110\050\070\017\305\276\347\150\160\375\071\227\115
\322\307\230\221\120\252\304\104\263\043\175\071\107\351\122\142
\326\022\223\136\267\061\226\102\005\373\166\247\036\243\365\302
\374\351\172\305\154\251\161\117\352\313\170\274\140\257\307\336
\364\331\313\276\176\063\245\156\224\203\360\064\372\041\253\352
\216\162\240\077\244\336\060\133\357\206\115\152\225\133\103\104
\250\020\025\034\345\001\127\305\230\361\346\006\050\221\252\040
\305\267\123\046\121\103\262\013\021\225\130\341\300\017\166\331

\300\215\174\201\363\162\160\236\157\376\032\216\331\137\065\306
\262\157\064\174\276\110\117\342\132\071\327\330\235\170\236\237
\206\076\003\136\031\213\104\242\325\307\002\003\001\000\001\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\277
\131\040\066\000\171\240\240\042\153\214\325\362\141\322\270\054
\313\202\112\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\061\003\242\141\013\037\164\350\162
\066\306\155\371\115\236\372\042\250\341\201\126\317\315\273\237
\352\253\221\031\070\257\252\174\025\115\363\266\243\215\245\364
\216\366\104\251\247\350\041\225\255\076\000\142\026\210\360\002
\272\374\141\043\346\063\233\060\172\153\066\142\173\255\004\043
\204\130\145\342\333\053\212\347\045\123\067\142\123\137\274\332
\001\142\051\242\246\047\161\346\072\042\176\301\157\035\225\160
\040\112\007\064\337\352\377\025\200\345\272\327\172\330\133\165
\174\005\172\051\107\176\100\250\061\023\167\315\100\073\264\121
\107\172\056\021\343\107\021\336\235\146\320\213\325\124\146\372
\203\125\352\174\302\051\211\033\351\157\263\316\342\005\204\311
\057\076\170\205\142\156\311\137\301\170\143\164\130\300\110\030
\014\231\071\353\244\314\032\265\171\132\215\025\234\330\024\015
\366\172\007\127\307\042\203\005\055\074\233\045\046\075\030\263
\251\103\174\310\310\253\144\217\016\243\277\234\033\235\060\333
\332\320\031\056\252\074\361\373\063\200\166\344\315\255\031\117
\005\047\216\023\241\156\302

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "T-TeleSec GlobalRoot Class 2"

Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Serial Number: 1 (0x1)

Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

Not Valid Before: Wed Oct 01 10:40:14 2008

Not Valid After : Sat Oct 01 23:59:59 2033

Fingerprint (SHA-256):

91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52

#

Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\131\015\055\175\210\117\100\056\141\176\245\142\062\027\145\317
\027\330\224\351
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\053\233\236\344\173\154\037\000\162\032\314\301\167\171\337\152
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Atos TrustedRoot 2011"
#
# Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011
# Serial Number:5c:33:cb:62:2c:5f:b3:32
# Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011
# Not Valid Before: Thu Jul 07 14:58:30 2011
# Not Valid After : Tue Dec 31 23:59:59 2030
# Fingerprint (SHA-256):
F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74
# Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Atos TrustedRoot 2011"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060

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\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
\163\061\013\060\011\006\003\125\004\006\023\002\104\105
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
\163\061\013\060\011\006\003\125\004\006\023\002\104\105
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\134\063\313\142\054\137\263\062
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\010\134
\063\313\142\054\137\263\062\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\074\061\036\060\034\006\003\125\004
\003\014\025\101\164\157\163\040\124\162\165\163\164\145\144\122
\157\157\164\040\062\060\061\061\061\015\060\013\006\003\125\004
\012\014\004\101\164\157\163\061\013\060\011\006\003\125\004\006
\023\002\104\105\060\036\027\015\061\061\060\067\060\067\061\064
\065\070\063\060\132\027\015\063\060\061\062\063\061\062\063\065
\071\065\071\132\060\074\061\036\060\034\006\003\125\004\003\014
\025\101\164\157\163\040\124\162\165\163\164\145\144\122\157\157
\164\040\062\060\061\061\061\015\060\013\006\003\125\004\012\014
\004\101\164\157\163\061\013\060\011\006\003\125\004\006\023\002
\104\105\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\225\205\073\227\157\052\073\056\073\317\246\363\051
\065\276\317\030\254\076\252\331\370\115\240\076\032\107\271\274
\232\337\362\376\314\076\107\350\172\226\302\044\216\065\364\251
\014\374\202\375\155\301\162\142\047\275\352\153\353\347\212\314
\124\076\220\120\317\200\324\225\373\350\265\202\324\024\305\266
\251\125\045\127\333\261\120\366\260\140\144\131\172\151\317\003
\267\157\015\276\312\076\157\164\162\352\252\060\052\163\142\276
\111\221\141\310\021\376\016\003\052\367\152\040\334\002\025\015
\136\025\152\374\343\202\301\265\305\235\144\011\154\243\131\230
\007\047\307\033\226\053\141\164\161\154\103\361\367\065\211\020
\340\236\354\125\241\067\042\242\207\004\005\054\107\175\264\034
\271\142\051\146\050\312\267\341\223\365\244\224\003\231\271\160
\205\265\346\110\352\215\120\374\331\336\314\157\007\016\335\013
\162\235\200\060\026\007\225\077\050\016\375\305\165\117\123\326
\164\232\264\044\056\216\002\221\317\166\305\233\036\125\164\234
\170\041\261\360\055\361\013\237\302\325\226\030\037\360\124\042
\172\214\007\002\003\001\000\001\243\175\060\173\060\035\006\003
\125\035\016\004\026\004\024\247\245\006\261\054\246\011\140\356
\321\227\351\160\256\274\073\031\154\333\041\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003

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\125\035\043\004\030\060\026\200\024\247\245\006\261\054\246\011
\140\356\321\227\351\160\256\274\073\031\154\333\041\060\030\006
\003\125\035\040\004\021\060\017\060\015\006\013\053\006\001\004
\001\260\055\003\004\001\001\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\001\001\000\046\167\064\333\224
\110\206\052\101\235\054\076\006\220\140\304\214\254\013\124\270
\037\271\173\323\007\071\344\372\076\173\262\075\116\355\237\043
\275\227\363\153\134\357\356\375\100\246\337\241\223\241\012\206
\254\357\040\320\171\001\275\170\367\031\330\044\061\064\004\001
\246\272\025\232\303\047\334\330\117\017\314\030\143\377\231\017
\016\221\153\165\026\341\041\374\330\046\307\107\267\246\317\130
\162\161\176\272\341\115\225\107\073\311\257\155\241\264\301\354
\211\366\264\017\070\265\342\144\334\045\317\246\333\353\232\134
\231\241\305\010\336\375\346\332\325\326\132\105\014\304\267\302
\265\024\357\264\021\377\016\025\265\365\365\333\306\275\353\132
\247\360\126\042\251\074\145\124\306\025\250\275\206\236\315\203
\226\150\172\161\201\211\341\013\341\352\021\033\150\010\314\151
\236\354\236\101\236\104\062\046\172\342\207\012\161\075\353\344
\132\244\322\333\305\315\306\336\140\177\271\363\117\104\222\357
\052\267\030\076\247\031\331\013\175\261\067\101\102\260\272\140
\035\362\376\011\021\260\360\207\173\247\235
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Atos TrustedRoot 2011"

Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011

Serial Number:5c:33:cb:62:2c:5f:b3:32

Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011

Not Valid Before: Thu Jul 07 14:58:30 2011

Not Valid After : Tue Dec 31 23:59:59 2030

Fingerprint (SHA-256):

F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74

Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Atos TrustedRoot 2011"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\053\261\365\076\125\014\035\305\361\324\346\267\152\106\113\125
\006\002\254\041
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\256\271\304\062\113\254\177\135\146\314\167\224\273\052\167\126

END

CKA_ISSUER MULTILINE_OCTAL

\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157

\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060

\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157

\163\061\013\060\011\006\003\125\004\006\023\002\104\105

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\010\134\063\313\142\054\137\263\062

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate

"QuoVadis Root CA 1 G3"

#

Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93

Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

Not Valid Before: Thu Jan 12 17:27:44 2012

Not Valid After : Sun Jan 12 17:27:44 2042

Fingerprint (SHA-256):

8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74

Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 1 G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144

\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157

\157\164\040\103\101\040\061\040\107\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144

\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157

\157\164\040\103\101\040\061\040\107\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023
\050\265\226\324\145\223

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\170
\130\137\056\255\054\031\113\343\067\007\065\064\023\050\265\226
\324\145\223\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\061\040\107\063\060\036\027\015
\061\062\060\061\061\062\061\067\062\067\064\064\132\027\015\064
\062\060\061\061\062\061\067\062\067\064\064\132\060\110\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\061\040\107\063\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\240\276\120\020\216\351\362\154\100
\264\004\234\205\271\061\312\334\055\344\021\251\004\074\033\125
\301\347\130\060\035\044\264\303\357\205\336\214\054\341\301\075
\337\202\346\117\255\107\207\154\354\133\111\301\112\325\273\217
\354\207\254\177\202\232\206\354\075\003\231\122\001\322\065\236
\254\332\360\123\311\146\074\324\254\002\001\332\044\323\073\250
\002\106\257\244\034\343\370\163\130\166\267\366\016\220\015\265
\360\317\314\372\371\306\114\345\303\206\060\012\215\027\176\065
\353\305\337\273\016\234\300\215\207\343\210\070\205\147\372\076
\307\253\340\023\234\005\030\230\317\223\365\261\222\264\374\043
\323\317\325\304\047\111\340\236\074\233\010\243\213\135\052\041
\340\374\071\252\123\332\175\176\317\032\011\123\274\135\005\004
\317\241\112\217\213\166\202\015\241\370\322\307\024\167\133\220
\066\007\201\233\076\006\372\122\136\143\305\246\000\376\245\351
\122\033\122\265\222\071\162\003\011\142\275\260\140\026\156\246
\335\045\302\003\146\335\363\004\321\100\342\116\213\206\364\157
\345\203\240\047\204\136\004\301\365\220\275\060\075\304\357\250
\151\274\070\233\244\244\226\321\142\332\151\300\001\226\256\313
\304\121\064\352\014\252\377\041\216\131\217\112\134\344\141\232
\247\322\351\052\170\215\121\075\072\025\356\242\131\216\251\134
\336\305\371\220\042\345\210\105\161\335\221\231\154\172\237\075
\075\230\174\136\366\276\026\150\240\136\256\013\043\374\132\017
\252\042\166\055\311\241\020\035\344\323\104\043\220\210\237\306
\052\346\327\365\232\263\130\036\057\060\211\010\033\124\242\265
\230\043\354\010\167\034\225\135\141\321\313\211\234\137\242\112

\221\232\357\041\252\111\026\010\250\275\141\050\061\311\164\255
\205\366\331\305\261\213\321\345\020\062\115\137\213\040\072\074
\111\037\063\205\131\015\333\313\011\165\103\151\163\373\153\161
\175\360\337\304\114\175\306\243\056\310\225\171\313\163\242\216
\116\115\044\373\136\344\004\276\162\033\246\047\055\111\132\231
\172\327\134\011\040\267\177\224\271\117\361\015\034\136\210\102
\033\021\267\347\221\333\236\154\364\152\337\214\006\230\003\255
\314\050\357\245\107\363\123\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\035\006\003\125\035\016\004\026\004\024\243\227\326\363
\136\242\020\341\253\105\237\074\027\144\074\356\001\160\234\314
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\030\372\133\165\374\076\172\307\137\167\307\312
\337\317\137\303\022\304\100\135\324\062\252\270\152\327\325\025
\025\106\230\043\245\346\220\133\030\231\114\343\255\102\243\202
\061\066\210\315\351\373\304\004\226\110\213\001\307\215\001\317
\133\063\006\226\106\146\164\035\117\355\301\266\271\264\015\141
\314\143\176\327\056\167\214\226\034\052\043\150\153\205\127\166
\160\063\023\376\341\117\246\043\167\030\372\032\214\350\275\145
\311\317\077\364\311\027\334\353\307\274\300\004\056\055\106\057
\151\146\303\033\217\376\354\076\323\312\224\277\166\012\045\015
\251\173\002\034\251\320\073\137\013\300\201\072\075\144\341\277
\247\055\116\275\115\304\330\051\306\042\030\320\305\254\162\002
\202\077\252\072\242\072\042\227\061\335\010\143\303\165\024\271
\140\050\055\133\150\340\026\251\146\202\043\121\365\353\123\330
\061\233\173\351\267\235\113\353\210\026\317\371\135\070\212\111
\060\217\355\361\353\031\364\167\032\061\030\115\147\124\154\057
\157\145\371\333\075\354\041\354\136\364\364\213\312\140\145\124
\321\161\144\364\371\246\243\201\063\066\063\161\360\244\170\137
\116\255\203\041\336\064\111\215\350\131\254\235\362\166\132\066
\362\023\364\257\340\011\307\141\052\154\367\340\235\256\273\206
\112\050\157\056\356\264\171\315\220\063\303\263\166\372\365\360
\154\235\001\220\372\236\220\366\234\162\317\107\332\303\037\344
\065\040\123\362\124\321\337\141\203\246\002\342\045\070\336\205
\062\055\136\163\220\122\135\102\304\316\075\113\341\371\031\204
\035\325\242\120\314\101\373\101\024\303\275\326\311\132\243\143
\146\002\200\275\005\072\073\107\234\354\000\046\114\365\210\121
\277\250\043\177\030\007\260\013\355\213\046\241\144\323\141\112
\353\134\237\336\263\257\147\003\263\037\335\155\135\151\150\151
\253\136\072\354\174\151\274\307\073\205\116\236\025\271\264\025
\117\303\225\172\130\327\311\154\351\154\271\363\051\143\136\264
\054\360\055\075\355\132\145\340\251\133\100\302\110\231\201\155
\236\037\006\052\074\022\264\213\017\233\242\044\360\246\215\326
\172\340\113\266\144\226\143\225\204\302\112\315\034\056\044\207
\063\140\345\303

END

CKA_NSS_MOZILLA_CA_POLICY


```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "QuoVadis Root CA 1 G3"
# Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93
# Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 17:27:44 2012
# Not Valid After : Sun Jan 12 17:27:44 2042
# Fingerprint (SHA-256):
8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74
# Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis
Root CA 1 G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\03\216\352\127\226\051\032\311\071\352\270\012\201\032\163\163
\300\223\171\147
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\244\274\133\077\376\067\232\372\144\360\342\372\005\075\013\253
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\061\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023
\050\265\226\324\145\223
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 2 G3"
#
# Issuer: CN=QuoVadis Root CA
2 G3,O=QuoVadis Limited,C=BM
# Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28

```

```
# Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 18:59:32 2012
# Not Valid After : Sun Jan 12 18:59:32 2042
# Fingerprint (SHA-256):
8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40
# Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\104
\127\064\044\133\201\211\233\065\362\316\270\053\073\133\247\046
\360\165\050\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\062\040\107\063\060\036\027\015
\061\062\060\061\061\062\061\070\065\071\063\062\132\027\015\064
\062\060\061\061\062\061\070\065\071\063\062\132\060\110\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\062\040\107\063\060\202\002\042\060\015\006\011\052\206
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\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\241\256\045\262\001\030\334\127\210
\077\106\353\371\257\342\353\043\161\342\232\321\141\146\041\137
\252\257\047\121\345\156\033\026\324\055\175\120\260\123\167\275
\170\072\140\342\144\002\233\174\206\233\326\032\216\255\377\037
\025\177\325\225\036\022\313\346\024\204\004\301\337\066\263\026
\237\212\343\311\333\230\064\316\330\063\027\050\106\374\247\311
\360\322\264\325\115\011\162\111\371\362\207\343\251\332\175\241
\175\153\262\072\045\251\155\122\104\254\370\276\156\373\334\246
\163\221\220\141\246\003\024\040\362\347\207\243\210\255\255\240
\214\377\246\013\045\122\045\347\026\001\325\313\270\065\201\014
\243\073\360\341\341\374\132\135\316\200\161\155\370\111\253\076
\073\272\270\327\200\001\373\245\353\133\263\305\136\140\052\061
\240\257\067\350\040\072\237\250\062\054\014\314\011\035\323\236
\216\135\274\114\230\356\305\032\150\173\354\123\246\351\024\065
\243\337\315\200\237\014\110\373\034\364\361\277\112\270\372\325
\214\161\112\307\037\255\376\101\232\263\203\135\362\204\126\357
\245\127\103\316\051\255\214\253\125\277\304\373\133\001\335\043
\041\241\130\000\216\303\320\152\023\355\023\343\022\053\200\334
\147\346\225\262\315\036\042\156\052\370\101\324\362\312\024\007
\215\212\125\022\306\151\365\270\206\150\057\123\136\260\322\252
\041\301\230\346\060\343\147\125\307\233\156\254\031\250\125\246
\105\006\320\043\072\333\353\145\135\052\021\021\360\073\117\312
\155\364\064\304\161\344\377\000\132\366\134\256\043\140\205\163
\361\344\020\261\045\256\325\222\273\023\301\014\340\071\332\264
\071\127\265\253\065\252\162\041\073\203\065\347\061\337\172\041
\156\270\062\010\175\035\062\221\025\112\142\162\317\343\167\241
\274\325\021\033\166\001\147\010\340\101\013\303\353\025\156\370
\244\031\331\242\253\257\342\047\122\126\053\002\212\054\024\044
\371\277\102\002\277\046\310\306\217\340\156\070\175\123\055\345
\355\230\263\225\143\150\177\371\065\364\337\210\305\140\065\222
\300\174\151\034\141\225\026\320\353\336\013\257\076\004\020\105
\145\130\120\070\257\110\362\131\266\026\362\074\015\220\002\306
\160\056\001\255\074\025\327\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\035\006\003\125\035\016\004\026\004\024\355\347\157\166
\132\277\140\354\111\133\306\245\167\273\162\026\161\233\304\075
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\221\337\200\077\103\011\176\161\302\367\353\263
\210\217\341\121\262\274\075\165\371\050\135\310\274\231\233\173
\135\252\345\312\341\012\367\350\262\323\237\335\147\061\176\272
\001\252\307\152\101\073\220\324\010\134\262\140\152\220\360\310
\316\003\142\371\213\355\373\156\052\334\006\115\074\051\017\211
\026\212\130\114\110\017\350\204\141\352\074\162\246\167\344\102
\256\210\243\103\130\171\176\256\312\245\123\015\251\075\160\275
\040\031\141\244\154\070\374\103\062\341\301\107\377\370\354\361
\021\042\062\226\234\302\366\133\151\226\173\040\014\103\101\232

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\133\366\131\031\210\336\125\210\067\121\013\170\134\012\036\243
\102\375\307\235\210\017\300\362\170\002\044\124\223\257\211\207
\210\311\112\200\035\352\320\156\076\141\056\066\273\065\016\047
\226\375\146\064\073\141\162\163\361\026\134\107\006\124\111\000
\172\130\022\260\012\357\205\375\261\270\063\165\152\223\034\022
\346\140\136\157\035\177\311\037\043\313\204\141\237\036\202\104
\371\137\255\142\125\044\232\122\230\355\121\347\241\176\227\072
\346\057\037\021\332\123\200\054\205\236\253\065\020\333\042\137
\152\305\136\227\123\362\062\002\011\060\243\130\360\015\001\325
\162\306\261\174\151\173\303\365\066\105\314\141\156\136\114\224
\305\136\256\350\016\136\213\277\367\315\340\355\241\016\033\063
\356\124\030\376\017\276\357\176\204\153\103\343\160\230\333\135
\165\262\015\131\007\205\025\043\071\326\361\337\251\046\017\326
\110\307\263\246\042\365\063\067\132\225\107\237\173\272\030\025
\157\377\326\024\144\203\111\322\012\147\041\333\017\065\143\140
\050\042\343\261\225\203\315\205\246\335\057\017\347\147\122\156
\273\057\205\174\365\112\163\347\305\076\300\275\041\022\005\077
\374\267\003\111\002\133\310\045\346\342\124\070\365\171\207\214
\035\123\262\116\205\173\006\070\307\054\370\370\260\162\215\045
\345\167\122\364\003\034\110\246\120\137\210\040\060\156\362\202
\103\253\075\227\204\347\123\373\041\301\117\017\042\232\206\270
\131\052\366\107\075\031\210\055\350\205\341\236\354\205\010\152
\261\154\064\311\035\354\110\053\073\170\355\146\304\216\171\151
\203\336\177\214
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "QuoVadis Root CA 2 G3"

Issuer: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28

Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

Not Valid Before: Thu Jan 12 18:59:32 2012

Not Valid After : Sun Jan 12 18:59:32 2042

Fingerprint (SHA-256):

8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40

Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 2 G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\011\074\141\363\213\213\334\175\125\337\165\070\002\005\000\341
\045\365\310\066
```

END

```

CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\257\014\206\156\277\100\055\177\013\076\022\120\272\022\075\006
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3 G3"
#
# Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d
#
# Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 20:26:32 2012
# Not Valid After : Sun Jan 12 20:26:32 2042
# Fingerprint (SHA-256):
88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46
# Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

```

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275
\003\240\317\022\152\035

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\056
\365\233\002\050\247\333\172\377\325\243\251\356\275\003\240\317
\022\152\035\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\063\040\107\063\060\036\027\015
\061\062\060\061\061\062\062\060\062\066\063\062\132\027\015\064
\062\060\061\061\062\062\060\062\066\063\062\132\060\110\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\063\040\107\063\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\263\313\016\020\147\216\352\024\227
\247\062\052\012\126\066\177\150\114\307\263\157\072\043\024\221
\377\031\177\245\312\254\356\263\166\235\172\351\213\033\253\153
\061\333\372\013\123\114\257\305\245\032\171\074\212\114\377\254
\337\045\336\116\331\202\062\013\104\336\312\333\214\254\243\156
\026\203\073\246\144\113\062\211\373\026\026\070\176\353\103\342
\323\164\112\302\142\012\163\012\335\111\263\127\322\260\012\205
\235\161\074\336\243\313\300\062\363\001\071\040\103\033\065\321
\123\263\261\356\305\223\151\202\076\026\265\050\106\241\336\352
\211\011\355\103\270\005\106\212\206\365\131\107\276\033\157\001
\041\020\271\375\251\322\050\312\020\071\011\312\023\066\317\234
\255\255\100\164\171\053\002\077\064\377\372\040\151\175\323\356
\141\365\272\263\347\060\320\067\043\206\162\141\105\051\110\131
\150\157\167\246\056\201\276\007\115\157\257\316\304\105\023\221
\024\160\006\217\037\237\370\207\151\261\016\357\303\211\031\353
\352\034\141\374\172\154\212\334\326\003\013\236\046\272\022\335
\324\124\071\253\046\243\063\352\165\201\332\055\315\017\117\344
\003\321\357\025\227\033\153\220\305\002\220\223\146\002\041\261
\107\336\213\232\112\200\271\125\217\265\242\057\300\326\063\147
\332\176\304\247\264\004\104\353\107\373\346\130\271\367\014\360
\173\053\261\300\160\051\303\100\142\055\073\110\151\334\043\074

\110\353\173\011\171\251\155\332\250\060\230\317\200\162\003\210
\246\133\106\256\162\171\174\010\003\041\145\256\267\341\034\245
\261\052\242\061\336\146\004\367\300\164\350\161\336\377\075\131
\314\226\046\022\213\205\225\127\032\253\153\165\013\104\075\021
\050\074\173\141\267\342\217\147\117\345\354\074\114\140\200\151
\127\070\036\001\133\215\125\350\307\337\300\314\167\043\064\111
\165\174\366\230\021\353\055\336\355\101\056\024\005\002\177\340
\376\040\353\065\347\021\254\042\316\127\075\336\311\060\155\020
\003\205\315\361\377\214\026\265\301\262\076\210\154\140\177\220
\117\225\367\366\055\255\001\071\007\004\372\165\200\175\277\111
\120\355\357\311\304\174\034\353\200\176\333\266\320\335\023\376
\311\323\234\327\262\227\251\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\035\006\003\125\035\016\004\026\004\024\306\027\320\274
\250\352\002\103\362\033\006\231\135\053\220\040\271\327\234\344
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\064\141\331\126\265\022\207\125\115\335\243\065
\061\106\273\244\007\162\274\137\141\142\350\245\373\013\067\261
\074\266\263\372\051\235\177\002\365\244\311\250\223\267\172\161
\050\151\217\163\341\122\220\332\325\276\072\345\267\166\152\126
\200\041\337\135\346\351\072\236\345\076\366\242\151\307\052\012
\260\030\107\334\040\160\175\122\243\076\131\174\301\272\311\310
\025\100\141\312\162\326\160\254\322\267\360\034\344\206\051\360
\316\357\150\143\320\265\040\212\025\141\232\176\206\230\264\311
\302\166\373\314\272\060\026\314\243\141\306\164\023\345\153\357
\243\025\352\003\376\023\213\144\344\323\301\322\350\204\373\111
\321\020\115\171\146\353\252\375\364\215\061\036\160\024\255\334
\336\147\023\114\201\025\141\274\267\331\221\167\161\031\201\140
\273\360\130\245\265\234\013\367\217\042\125\047\300\113\001\155
\073\231\015\324\035\233\143\147\057\320\356\015\312\146\274\224
\117\246\255\355\374\356\143\254\127\077\145\045\317\262\206\217
\320\010\377\270\166\024\156\336\345\047\354\253\170\265\123\271
\266\077\350\040\371\322\250\276\141\106\312\207\214\204\363\371
\361\240\150\233\042\036\201\046\233\020\004\221\161\300\006\037
\334\240\323\271\126\247\343\230\055\177\203\235\337\214\053\234
\062\216\062\224\360\001\074\042\052\237\103\302\056\303\230\071
\007\070\173\374\136\000\102\037\363\062\046\171\203\204\366\345
\360\301\121\022\300\013\036\004\043\014\124\245\114\057\111\305
\112\321\266\156\140\015\153\374\153\213\205\044\144\267\211\016
\253\045\107\133\074\317\176\111\275\307\351\012\306\332\367\176
\016\027\010\323\110\227\320\161\222\360\017\071\076\064\152\034
\175\330\362\042\256\273\151\364\063\264\246\110\125\321\017\016
\046\350\354\266\013\055\247\205\065\315\375\131\310\237\321\315
\076\132\051\064\271\075\204\316\261\145\324\131\221\221\126\165
\041\301\167\236\371\172\341\140\235\323\255\004\030\364\174\353
\136\223\217\123\112\042\051\370\110\053\076\115\206\254\133\177
\313\006\231\131\140\330\130\145\225\215\104\321\367\177\176\047

\177\175\256\200\365\007\114\266\076\234\161\124\231\004\113\375

\130\371\230\364

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "QuoVadis Root CA 3 G3"

Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM

Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d

Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM

Not Valid Before: Thu Jan 12 20:26:32 2012

Not Valid After : Sun Jan 12 20:26:32 2042

Fingerprint (SHA-256):

88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46

Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "QuoVadis Root CA 3 G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\110\022\275\222\074\250\304\071\006\347\060\155\047\226\346\244

\317\042\056\175

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

\337\175\271\255\124\157\150\241\337\211\127\003\227\103\260\327

END

CKA_ISSUER MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061

\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144

\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157

\157\164\040\103\101\040\063\040\107\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275

\003\240\317\022\152\035

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DigiCert Assured ID Root G2"


```
#
# Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b
# Subject:
  CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85
# Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
END
CKA_ID
  UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232
\364\113
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\226\060\202\002\176\240\003\002\001\002\002\020\013
\223\034\072\326\071\147\352\147\043\277\303\257\232\364\113\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
```

\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157
\157\164\040\107\062\060\036\027\015\061\063\060\070\060\061\061
\062\060\060\060\060\132\027\015\063\070\060\061\061\065\061\062
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145
\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145
\144\040\111\104\040\122\157\157\164\040\107\062\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\331\347\050
\057\122\077\066\162\111\210\223\064\363\370\152\036\061\124\200
\237\255\124\101\265\107\337\226\250\324\257\200\055\271\012\317
\165\375\211\245\175\044\372\343\042\014\053\274\225\027\013\063
\277\031\115\101\006\220\000\275\014\115\020\376\007\265\347\034
\156\042\125\061\145\227\275\323\027\322\036\142\363\333\352\154
\120\214\077\204\014\226\317\267\313\003\340\312\155\241\024\114
\033\211\335\355\000\260\122\174\257\221\154\261\070\023\321\351
\022\010\300\000\260\034\053\021\332\167\160\066\233\256\316\171
\207\334\202\160\346\011\164\160\125\151\257\243\150\237\277\335
\266\171\263\362\235\160\051\125\364\253\377\225\141\363\311\100
\157\035\321\276\223\273\323\210\052\273\235\277\162\132\126\161
\073\077\324\363\321\012\376\050\357\243\356\331\231\257\003\323
\217\140\267\362\222\241\261\275\211\211\037\060\315\303\246\056
\142\063\256\026\002\167\104\132\347\201\012\074\247\104\056\171
\270\077\004\274\134\240\207\341\033\257\121\216\315\354\054\372
\370\376\155\360\072\174\252\213\344\147\225\061\215\002\003\001
\000\001\243\102\060\100\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026
\004\024\316\303\112\271\231\125\362\270\333\140\277\251\176\275
\126\265\227\066\247\326\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\001\001\000\312\245\125\214\343\310
\101\156\151\047\247\165\021\357\074\206\066\157\322\235\306\170
\070\035\151\226\242\222\151\056\070\154\233\175\004\324\211\245
\261\061\067\212\311\041\314\253\154\315\213\034\232\326\277\110
\322\062\146\301\212\300\363\057\072\357\300\343\324\221\206\321
\120\343\003\333\163\167\157\112\071\123\355\336\046\307\265\175
\257\053\102\321\165\142\343\112\053\002\307\120\113\340\151\342
\226\154\016\104\146\020\104\217\255\005\353\370\171\254\246\033
\350\067\064\235\123\311\141\252\242\122\257\112\160\026\206\302
\072\310\261\023\160\066\330\317\356\364\012\064\325\133\114\375
\007\234\242\272\331\001\162\134\363\115\301\335\016\261\034\015
\304\143\276\255\364\024\373\211\354\242\101\016\114\314\310\127
\100\320\156\003\252\315\014\216\211\231\231\154\360\074\060\257
\070\337\157\274\243\276\051\040\047\253\164\377\023\042\170\336

```
\227\122\125\036\203\265\124\040\003\356\256\300\117\126\336\067
\314\303\177\252\004\047\273\323\167\270\142\333\027\174\234\050
\042\023\163\154\317\046\365\212\051\347
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Assured ID Root G2"

Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b

Subject: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85

#

Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert Assured ID Root G2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\241\113\110\331\103\356\012\016\100\220\117\074\340\244\300\221
```

```
\223\121\135\077
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\222\070\271\370\143\044\202\145\054\127\063\346\376\201\217\235
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
```

```
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
```

```
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
```

```
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
```

```
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
```

```
\122\157\157\164\040\107\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232
```

```
\364\113
```

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DigiCert Assured ID Root G3"

#

Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec

Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2

Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL

UTF8 "DigiCert Assured ID Root G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240
\154\354

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\106\060\202\001\315\240\003\002\001\002\002\020\013
\241\132\372\035\337\240\265\111\104\257\315\044\240\154\354\060
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060

\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056
\144\151\147\151\143\145\162\164\056\143\157\155\061\044\060\042
\006\003\125\004\003\023\033\104\151\147\151\103\145\162\164\040
\101\163\163\165\162\145\144\040\111\104\040\122\157\157\164\040
\107\063\060\036\027\015\061\063\060\070\060\061\061\062\060\060
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060
\060\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056
\143\157\155\061\044\060\042\006\003\125\004\003\023\033\104\151
\147\151\103\145\162\164\040\101\163\163\165\162\145\144\040\111
\104\040\122\157\157\164\040\107\063\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\031\347\274\254\104\145\355\315\270\077\130\373\215\261\127
\251\104\055\005\025\362\357\013\377\020\164\237\265\142\122\137
\146\176\037\345\334\033\105\171\013\314\306\123\012\235\215\135
\002\331\251\131\336\002\132\366\225\052\016\215\070\112\212\111
\306\274\306\003\070\007\137\125\332\176\011\156\342\177\136\320
\105\040\017\131\166\020\326\240\044\360\055\336\066\362\154\051
\071\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026\004
\024\313\320\275\251\341\230\005\121\241\115\067\242\203\171\316
\215\035\052\344\204\060\012\006\010\052\206\110\316\075\004\003
\003\003\147\000\060\144\002\060\045\244\201\105\002\153\022\113
\165\164\117\310\043\343\160\362\165\162\336\174\211\360\317\221
\162\141\236\136\020\222\131\126\271\203\307\020\347\070\351\130
\046\066\175\325\344\064\206\071\002\060\174\066\123\360\060\345
\142\143\072\231\342\266\243\073\233\064\372\036\332\020\222\161
\136\221\023\247\335\244\156\222\314\062\326\365\041\146\307\057
\352\226\143\152\145\105\222\225\001\264

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Assured ID Root G3"

Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec

Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri

Jan 15 12:00:00 2038

Fingerprint (SHA-256):

```

7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2
# Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\365\027\242\117\232\110\306\311\370\242\000\046\237\334\017\110
\054\253\060\211
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\174\177\145\061\014\201\337\215\272\076\231\342\134\255\156\373
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240
\154\354
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root G2"
#
# Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5
# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F
# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011
\372\345
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\216\060\202\002\166\240\003\002\001\002\002\020\003
\072\361\346\247\021\251\240\273\050\144\261\035\011\372\345\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107
\062\060\036\027\015\061\063\060\070\060\061\061\062\060\060\060
\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060\060
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103
\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013
\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157
\164\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\273\067\315\064\334\173\153\311\262\150\220
```

\255\112\165\377\106\272\041\012\010\215\365\031\124\311\373\210
\333\363\256\362\072\211\221\074\172\346\253\006\032\153\317\254
\055\350\136\011\044\104\272\142\232\176\326\243\250\176\340\124
\165\040\005\254\120\267\234\143\032\154\060\334\332\037\031\261
\327\036\336\375\327\340\313\224\203\067\256\354\037\103\116\335
\173\054\322\275\056\245\057\344\251\270\255\072\324\231\244\266
\045\351\233\153\000\140\222\140\377\117\041\111\030\367\147\220
\253\141\006\234\217\362\272\351\264\351\222\062\153\265\363\127
\350\135\033\315\214\035\253\225\004\225\111\363\065\055\226\343
\111\155\335\167\343\373\111\113\264\254\125\007\251\217\225\263
\264\043\273\114\155\105\360\366\251\262\225\060\264\375\114\125
\214\047\112\127\024\174\202\235\315\163\222\323\026\112\006\014
\214\120\321\217\036\011\276\027\241\346\041\312\375\203\345\020
\274\203\245\012\304\147\050\366\163\024\024\075\106\166\303\207
\024\211\041\064\115\257\017\105\014\246\111\241\272\273\234\305
\261\063\203\051\205\002\003\001\000\001\243\102\060\100\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060
\035\006\003\125\035\016\004\026\004\024\116\042\124\040\030\225
\346\343\156\346\017\372\372\271\022\355\006\027\217\071\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001
\001\000\140\147\050\224\157\016\110\143\353\061\335\352\147\030
\325\211\175\074\305\213\112\177\351\276\333\053\027\337\260\137
\163\167\052\062\023\071\201\147\102\204\043\362\105\147\065\354
\210\277\370\217\260\141\014\064\244\256\040\114\204\306\333\370
\065\341\166\331\337\246\102\273\307\104\010\206\177\066\164\044
\132\332\154\015\024\131\065\275\362\111\335\266\037\311\263\015
\107\052\075\231\057\273\134\273\265\324\040\341\231\137\123\106
\025\333\150\233\360\363\060\325\076\061\342\215\204\236\343\212
\332\332\226\076\065\023\245\137\360\371\160\120\160\107\101\021
\127\031\116\300\217\256\006\304\225\023\027\057\033\045\237\165
\362\261\216\231\241\157\023\261\101\161\376\210\052\310\117\020
\040\125\327\363\024\105\345\340\104\364\352\207\225\062\223\016
\376\123\106\372\054\235\377\213\042\271\113\331\011\105\244\336
\244\270\232\130\335\033\175\122\237\216\131\103\210\201\244\236
\046\325\157\255\335\015\306\067\175\355\003\222\033\345\167\137
\166\356\074\215\304\135\126\133\242\331\146\156\263\065\067\345
\062\266

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Global Root G2"

Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5


```

# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F
# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\337\074\044\371\277\326\146\166\033\046\200\163\376\006\321\314
\215\117\202\244
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\344\246\212\310\124\254\122\102\106\012\375\162\110\033\052\104
END
CKA_ISSUER
MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011
\372\345
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root G3"
#
# Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72
# Subject: CN=DigiCert Global
Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0

```

Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253
\105\162
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\077\060\202\001\305\240\003\002\001\002\002\020\005
\125\126\274\362\136\244\065\065\303\244\017\325\253\105\162\060
\012\006\010\052\206\110\316\075\004\003\003\060\141\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056
\144\151\147\151\143\145\162\164\056\143\157\155\061\040\060\036
\006\003\125\004\003\023\027\104\151\147\151\103\145\162\164\040
\107\154\157\142\141\154\040\122\157\157\164\040\107\063\060\036
\027\015\061\063\060\070\060\061\061\062\060\060\060\060\132\027
\015\063\070\060\061\061\065\061\062\060\060\060\060\132\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145
```

```
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107
\063\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\335\247\331\273\212\270\013
\373\013\177\041\322\360\276\276\163\363\063\135\032\274\064\352
\336\306\233\274\320\225\366\360\314\320\013\272\141\133\121\106
\176\236\055\237\356\216\143\014\027\354\007\160\365\317\204\056
\100\203\234\350\077\101\155\073\255\323\244\024\131\066\170\235
\003\103\356\020\023\154\162\336\256\210\247\241\153\265\103\316
\147\334\043\377\003\034\243\342\076\243\102\060\100\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\035
\006\003\125\035\016\004\026\004\024\263\333\110\244\371\241\305
\330\256\066\101\314\021\143\151\142\051\274\113\306\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061
\000\255\274\362\154\077\022\112\321\055\071\303\012\011\227\163
\364\210\066\214\210\047\273\346\210\215\120\205\247\143\371\236
\062\336\146\223\017\361\314\261\011\217\335\154\253\372\153\177
\240\002\060\071\146\133\302\144\215\270\236\120\334\250\325\111
\242\355\307\334\321\111\177\027\001\270\310\206\217\116\214\210
\053\250\232\251\212\305\321\000\275\370\124\342\232\345\133\174
\263\047\027
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Global Root G3"

Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72

Subject: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0

Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert Global Root G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\176\004\336\211\152\076\146\155\000\346\207\323\077\372\331\073
\350\075\064\236
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\365\135\244\120\245\373\050\176\036\017\015\314\226\127\126\312
```

```

END
CKA_ISSUER
MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253
\105\162
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Trusted Root G4"
#
# Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c
# Subject: CN=DigiCert
Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88
# Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Trusted Root G4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064
END
CKA_ID

```

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167
\165\134

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\220\060\202\003\170\240\003\002\001\002\002\020\005
\233\033\127\236\216\041\062\342\071\007\275\247\167\165\134\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\142
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\041\060\037\006\003\125\004\003\023\030\104\151\147\151\103\145
\162\164\040\124\162\165\163\164\145\144\040\122\157\157\164\040
\107\064\060\036\027\015\061\063\060\070\060\061\061\065\061\062\060\060
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060
\060\132\060\142\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056
\143\157\155\061\041\060\037\006\003\125\004\003\023\030\104\151
\147\151\103\145\162\164\040\124\162\165\163\164\145\144\040\122
\157\157\164\040\107\064\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\277\346\220\163\150\336\273\344\135
\112\074\060\042\060\151\063\354\302\247\045\056\311\041\075\362
\212\330\131\302\341\051\247\075\130\253\166\232\315\256\173\033
\204\015\304\060\037\363\033\244\070\026\353\126\306\227\155\035
\253\262\171\362\312\021\322\344\137\326\005\074\122\017\122\037
\306\236\025\245\176\276\237\251\127\026\131\125\162\257\150\223
\160\302\262\272\165\231\152\163\062\224\321\020\104\020\056\337
\202\363\007\204\346\164\073\155\161\342\055\014\033\356\040\325
\311\040\035\143\051\055\316\354\136\116\310\223\370\041\141\233
\064\353\005\306\136\354\133\032\274\353\311\317\315\254\064\100
\137\261\172\146\356\167\310\110\250\146\127\127\237\124\130\216
\014\053\267\117\247\060\331\126\356\312\173\135\343\255\311\117
\136\345\065\347\061\313\332\223\136\334\216\217\200\332\266\221
\230\100\220\171\303\170\307\266\261\304\265\152\030\070\003\020

\215\330\324\067\244\056\005\175\210\365\202\076\020\221\160\253
\125\202\101\062\327\333\004\163\052\156\221\001\174\041\114\324
\274\256\033\003\165\135\170\146\331\072\061\104\232\063\100\277
\010\327\132\111\244\302\346\251\240\147\335\244\047\274\241\117
\071\265\021\130\027\367\044\134\106\217\144\367\301\151\210\166
\230\166\075\131\135\102\166\207\211\227\151\172\110\360\340\242
\022\033\146\232\164\312\336\113\036\347\016\143\256\346\324\357
\222\222\072\236\075\334\000\344\105\045\211\266\232\104\031\053
\176\300\224\264\322\141\155\353\063\331\305\337\113\004\000\314
\175\034\225\303\217\367\041\262\262\021\267\273\177\362\325\214
\160\054\101\140\252\261\143\030\104\225\032\166\142\176\366\200
\260\373\350\144\246\063\321\211\007\341\275\267\346\103\244\030
\270\246\167\001\341\017\224\014\041\035\262\124\051\045\211\154
\345\016\122\121\107\164\276\046\254\266\101\165\336\172\254\137
\215\077\311\274\323\101\021\022\133\345\020\120\353\061\305\312
\162\026\042\011\337\174\114\165\077\143\354\041\137\304\040\121
\153\157\261\253\206\213\117\302\326\105\137\235\040\374\241\036
\305\300\217\242\261\176\012\046\231\365\344\151\057\230\035\055
\365\331\251\262\035\345\033\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\206\060\035\006\003\125\035\016\004\026\004\024\354\327\343\202
\322\161\135\144\114\337\056\147\077\347\272\230\256\034\017\117
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003
\202\002\001\000\273\141\331\175\251\154\276\027\304\221\033\303
\241\242\000\215\343\144\150\017\126\317\167\256\160\371\375\232
\112\231\271\311\170\134\014\014\137\344\346\024\051\126\013\066
\111\135\104\143\340\255\234\226\030\146\033\043\015\075\171\351
\155\153\326\124\370\322\074\301\103\100\256\035\120\365\122\374
\220\073\273\230\231\151\153\307\301\247\250\150\244\047\334\235
\371\047\256\060\205\271\366\147\115\072\076\217\131\071\042\123
\104\353\310\135\003\312\355\120\172\175\142\041\012\200\310\163
\146\321\240\005\140\137\350\245\264\247\257\250\367\155\065\234
\174\132\212\326\242\070\231\363\170\213\364\115\322\040\013\336
\004\356\214\233\107\201\162\015\300\024\062\357\060\131\056\256
\340\161\362\126\344\152\227\157\222\120\155\226\215\150\172\232
\262\066\024\172\006\362\044\271\011\021\120\327\010\261\270\211
\172\204\043\141\102\051\345\243\315\242\040\101\327\321\234\144
\331\352\046\241\213\024\327\114\031\262\120\101\161\075\077\115
\160\043\206\014\112\334\201\322\314\062\224\204\015\010\011\227
\034\117\300\356\153\040\164\060\322\340\071\064\020\205\041\025
\001\010\350\125\062\336\161\111\331\050\027\120\115\346\276\115
\321\165\254\320\312\373\101\270\103\245\252\323\303\005\104\117
\054\066\233\342\372\342\105\270\043\123\154\006\157\147\125\177
\106\265\114\077\156\050\132\171\046\322\244\250\142\227\322\036
\342\355\112\213\274\033\375\107\112\015\337\147\146\176\262\133
\101\320\073\344\364\073\364\004\143\351\357\302\124\000\121\240
\212\052\311\316\170\314\325\352\207\004\030\263\316\257\111\210

```
\257\363\222\231\266\263\346\141\017\322\205\000\347\120\032\344
\033\225\235\031\241\271\234\261\233\261\000\036\357\320\017\117
\102\154\311\012\274\356\103\372\072\161\245\310\115\046\245\065
\375\211\135\274\205\142\035\062\322\240\053\124\355\232\127\301
\333\372\020\317\031\267\213\112\033\217\001\266\047\225\123\350
\266\211\155\133\274\150\324\043\350\213\121\242\126\371\360\246
\200\240\326\036\263\274\017\017\123\165\051\252\352\023\167\344
\336\214\201\041\255\007\020\107\021\255\207\075\007\321\165\274
\317\363\146\176
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert Trusted Root G4"

Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US

Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c

Subject: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US

Not Valid Before: Thu Aug 01 12:00:00 2013

Not Valid After : Fri Jan 15 12:00:00 2038

Fingerprint (SHA-256):

55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88

#

Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert Trusted Root G4"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\335\373\026\315\111\061\311\163\242\003\175\077\310\072\115\175
\167\135\005\344
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\170\362\374\252\140\037\057\264\353\311\067\272\123\056\165\111
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167
```

```

\165\134
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO RSA Certification Authority"
#
# Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d
# Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Tue Jan 19 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34
# Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO RSA Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101

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END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

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END

CKA_VALUE MULTILINE_OCTAL

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\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\201
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\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103
\101\040\114\151\155\151\164\145\144\061\053\060\051\006\003\125
\004\003\023\042\103\117\115\117\104\117\040\122\123\101\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\060\036\027\015\061\060\060\061\061\071
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062
\063\065\071\065\071\132\060\201\205\061\013\060\011\006\003\125
\004\006\023\002\107\102\061\033\060\031\006\003\125\004\010\023
\022\107\162\145\141\164\145\162\040\115\141\156\143\150\145\163
\164\145\162\061\020\060\016\006\003\125\004\007\023\007\123\141
\154\146\157\162\144\061\032\060\030\006\003\125\004\012\023\021
\103\117\115\117\104\117\040\103\101\040\114\151\155\151\164\145
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\104\117\040\122\123\101\040\103\145\162\164\151\146\151\143\141
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\076\134\371\223\346\064\172\331\024\153\347\234\263\205\240\202
\172\166\257\161\220\327\354\375\015\372\234\154\372\337\260\202
\364\024\176\371\276\304\246\057\117\177\231\177\265\374\147\103
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\176\345\343\156\374\330\250\344\222\044\332\103\153\142\270\125
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\370\170\110\060\105\325\255\341\015\074\105\140\374\062\226\121
\047\274\147\303\312\056\266\153\352\106\307\307\040\240\261\037
\145\336\110\010\272\244\116\251\362\203\106\067\204\353\350\314
\201\110\103\147\116\162\052\233\134\275\114\033\050\212\134\042
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\372\225\027\332\174\063\127\101\074\215\121\355\013\266\134\257
\054\143\032\337\127\310\077\274\351\135\304\233\257\105\231\342
\243\132\044\264\272\251\126\075\317\157\252\377\111\130\276\360
\250\377\364\270\255\351\067\373\272\270\364\013\072\371\350\103
\102\036\211\330\204\313\023\361\331\273\341\211\140\270\214\050
\126\254\024\035\234\012\347\161\353\317\016\335\075\251\226\241
\110\275\074\367\257\265\015\042\114\300\021\201\354\126\073\366
\323\242\342\133\267\262\004\042\122\225\200\223\151\350\216\114
\145\361\221\003\055\160\164\002\352\213\147\025\051\151\122\002
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\242\252\054\041\252\107\316\050\234\006\105\166\277\202\030\047
\264\325\256\264\313\120\346\153\364\114\206\161\060\351\246\337
\026\206\340\330\377\100\335\373\320\102\210\177\243\063\072\056
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\070\230\354\331\062\062\324\060\016\006\003\125\035\017\001\001
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\367\015\001\001\014\005\000\003\202\002\001\000\012\361\325\106
\204\267\256\121\273\154\262\115\101\024\000\223\114\234\313\345
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\023\055\254\126\242\260\326\176\021\222\351\056\272\236\056\232
\162\261\275\031\104\154\141\065\242\232\264\026\022\151\132\214
\341\327\076\244\032\350\057\003\364\256\141\035\020\033\052\244
\213\172\305\376\005\246\341\300\326\310\376\236\256\217\053\272
\075\231\370\330\163\011\130\106\156\246\234\364\327\047\323\225
\332\067\203\162\034\323\163\340\242\107\231\003\070\135\325\111
\171\000\051\034\307\354\233\040\034\007\044\151\127\170\262\071
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\027\030\256\275\074\011\150\377\204\233\074\325\326\013\003\343
\127\236\024\367\321\353\117\310\275\207\043\267\266\111\103\171
\205\134\272\353\222\013\241\306\350\150\250\114\026\261\032\231
\012\350\123\054\222\273\241\011\030\165\014\145\250\173\313\043
\267\032\302\050\205\303\033\377\320\053\142\357\244\173\011\221
\230\147\214\024\001\315\150\006\152\143\041\165\003\200\210\212
\156\201\306\205\362\251\244\055\347\364\245\044\020\107\203\312
\315\364\215\171\130\261\006\233\347\032\052\331\235\001\327\224
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\314\131\306\346\072\355\022\056\151\074\154\225\261\375\252\035
\173\177\206\276\036\016\062\106\373\373\023\217\165\177\114\213
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\156\157\016\145\117\154\207\207\136\363\156\240\371\165\245\233

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\166\355\021\374\365\351\126\262\175\277\307\155\012\223\214\245
\320\300\266\035\276\072\116\224\242\327\156\154\013\302\212\174
\372\040\363\304\344\345\315\015\250\313\221\222\261\174\205\354
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END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "COMODO RSA Certification Authority"

Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d

Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

Not Valid Before: Tue Jan 19 00:00:00 2010

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34

Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "COMODO RSA Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

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\257\345\322\104\250\321\031\102\060\377\107\237\342\370\227\273
\315\172\214\264
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END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

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\033\061\260\161\100\066\314\024\066\221\255\304\076\375\354\030
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END

CKA_ISSUER MULTILINE_OCTAL

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\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
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END

CKA_SERIAL_NUMBER

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MULTILINE_OCTAL
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CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "USERTrust RSA Certification Authority"
#
# Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d
# Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon
Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2
# Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust RSA Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
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\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
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\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
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UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
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\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122

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\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
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END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

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\003\055

END

CKA_VALUE MULTILINE_OCTAL

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\060\021\006\003\125\004\010\023\012\116\145\167\040\112\145\162
\163\145\171\061\024\060\022\006\003\125\004\007\023\013\112\145
\162\163\145\171\040\103\151\164\171\061\036\060\034\006\003\125
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\124\040\116\145\164\167\157\162\153\061\056\060\054\006\003\125
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\101\165\164\150\157\162\151\164\171\060\036\027\015\061\060\060
\062\060\061\060\060\060\060\060\132\027\015\063\070\060\061
\061\070\062\063\065\071\065\071\132\060\201\210\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\023\060\021\006\003\125
\004\010\023\012\116\145\167\040\112\145\162\163\145\171\061\024
\060\022\006\003\125\004\007\023\013\112\145\162\163\145\171\040
\103\151\164\171\061\036\060\034\006\003\125\004\012\023\025\124
\150\145\040\125\123\105\122\124\122\125\123\124\040\116\145\164
\167\157\162\153\061\056\060\054\006\003\125\004\003\023\045\125
\123\105\122\124\162\165\163\164\040\122\123\101\040\103\145\162
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\254\127\015\166\355\315\047\323\114\255\120\203\141\342\252\040
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\026\235\030\275\121\216\065\246\247\146\310\162\147\333\041\146
\261\324\233\170\003\300\120\072\350\314\360\334\274\236\114\376
\257\005\226\065\037\127\132\267\377\316\371\075\267\054\266\366
\124\335\310\347\022\072\115\256\114\212\267\134\232\264\267\040
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\163\103\345\176\016\245\146\261\051\174\062\204\143\125\211\304
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\142\216\265\146\317\045\210\315\204\270\261\077\244\071\017\331
\002\236\353\022\114\225\174\363\153\005\251\136\026\203\314\270
\147\342\350\023\235\314\133\202\323\114\263\355\133\377\336\345
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\177\222\066\346\121\222\016\363\046\175\034\115\027\274\311\354
\103\046\320\277\101\137\100\251\104\104\364\231\347\127\207\236
\120\037\127\124\250\076\375\164\143\057\261\120\145\011\346\130
\102\056\103\032\114\264\360\045\107\131\372\004\036\223\324\046
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\125\142\221\363\151\025\330\274\210\343\304\252\013\375\357\250
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\044\021\125\377\044\232\156\136\052\053\356\013\115\237\177\367
\001\070\224\024\225\103\007\011\373\140\251\356\034\253\022\214
\240\232\136\247\230\152\131\155\213\077\010\373\310\321\105\257
\030\025\144\220\022\017\163\050\056\305\342\044\116\374\130\354
\360\364\105\376\042\263\353\057\216\322\331\105\141\005\301\227
\157\250\166\162\217\213\214\066\257\277\015\005\316\161\215\346
\246\157\037\154\246\161\142\305\330\320\203\162\014\361\147\021
\211\014\234\023\114\162\064\337\274\325\161\337\252\161\335\341
\271\154\214\074\022\135\145\332\275\127\022\266\103\153\377\345
\336\115\146\021\121\317\231\256\354\027\266\350\161\221\214\336
\111\376\335\065\161\242\025\047\224\034\317\141\343\046\273\157
\243\147\045\041\135\346\335\035\013\056\150\033\073\202\257\354
\203\147\205\324\230\121\164\261\271\231\200\211\377\177\170\031
\134\171\112\140\056\222\100\256\114\067\052\054\311\307\142\310
\016\135\367\066\133\312\340\045\045\001\264\335\032\007\234\167
\000\077\320\334\325\354\075\324\372\273\077\314\205\326\157\177
\251\055\337\271\002\367\365\227\232\265\065\332\303\147\260\207
\112\251\050\236\043\216\377\134\047\153\341\260\117\363\007\356

```
\000\056\324\131\207\313\122\101\225\352\364\107\327\356\144\101
\125\174\215\131\002\225\335\142\235\302\271\356\132\050\164\204
\245\233\267\220\307\014\007\337\365\211\066\164\062\326\050\301
\260\260\013\340\234\114\303\034\326\374\343\151\265\107\106\201
\057\242\202\253\323\143\104\160\304\215\377\055\063\272\255\217
\173\265\160\210\256\076\031\317\100\050\330\374\310\220\273\135
\231\042\365\122\346\130\305\037\210\061\103\356\210\035\327\306
\216\074\103\152\035\247\030\336\175\075\026\361\142\371\312\220
\250\375
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "USERTrust RSA Certification Authority"

Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d

Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Not Valid Before: Mon Feb 01 00:00:00 2010

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2

Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "USERTrust RSA Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\053\217\033\127\063\015\273\242\320\172\154\121\367\016\351\015
\332\271\255\216
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\033\376\151\321\221\267\031\063\243\162\250\017\341\125\345\265
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
```

```

\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\001\375\155\060\374\243\312\121\250\033\274\144\016\065
\003\055
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "USERTrust ECC Certification Authority"
#
# Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26
# Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A
# Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust ECC Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013

```


\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200
\314\046

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\217\060\202\002\025\240\003\002\001\002\002\020\134
\213\231\305\132\224\305\322\161\126\336\315\211\200\314\046\060
\012\006\010\052\206\110\316\075\004\003\003\060\201\210\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\023\060\021\006
\003\125\004\010\023\012\116\145\167\040\112\145\162\163\145\171
\061\024\060\022\006\003\125\004\007\023\013\112\145\162\163\145
\171\040\103\151\164\171\061\036\060\034\006\003\125\004\012\023
\025\124\150\145\040\125\123\105\122\124\122\125\123\124\040\116
\145\164\167\157\162\153\061\056\060\054\006\003\125\004\003\023
\045\125\123\105\122\124\162\165\163\164\040\105\103\103\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\060\036\027\015\061\060\060\062\060\061
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062
\063\065\071\065\071\132\060\201\210\061\013\060\011\006\003\125
\004\006\023\002\125\123\061\023\060\021\006\003\125\004\010\023
\012\116\145\167\040\112\145\162\163\145\171\061\024\060\022\006
\003\125\004\007\023\013\112\145\162\163\145\171\040\103\151\164
\171\061\036\060\034\006\003\125\004\012\023\025\124\150\145\040
\125\123\105\122\124\122\125\123\124\040\116\145\164\167\157\162
\153\061\056\060\054\006\003\125\004\003\023\045\125\123\105\122
\124\162\165\163\164\040\105\103\103\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\032\254\124\132\251\371\150
\043\347\172\325\044\157\123\306\132\330\113\253\306\325\266\321
\346\163\161\256\335\234\326\014\141\375\333\240\211\003\270\005
\024\354\127\316\356\135\077\342\041\263\316\367\324\212\171\340
\243\203\176\055\227\320\141\304\361\231\334\045\221\143\253\177
\060\243\264\160\342\307\241\063\234\363\277\056\134\123\261\137
\263\175\062\177\212\064\343\171\171\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\072\341\011\206\324\317\031\302
\226\166\164\111\166\334\340\065\306\143\143\232\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060

```
\066\147\241\026\010\334\344\227\000\101\035\116\276\341\143\001
\317\073\252\102\021\144\240\235\224\071\002\021\171\134\173\035
\372\144\271\356\026\102\263\277\212\302\011\304\354\344\261\115
\002\061\000\351\052\141\107\214\122\112\113\116\030\160\366\326
\104\326\156\365\203\272\155\130\275\044\331\126\110\352\357\304
\242\106\201\210\152\072\106\321\251\233\115\311\141\332\321\135
\127\152\030
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "USERTrust ECC Certification Authority"

Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26

Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

Not Valid Before: Mon Feb 01 00:00:00 2010

Not Valid After : Mon Jan 18 23:59:59 2038

Fingerprint (SHA-256):

4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A

Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "USERTrust ECC Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\321\313\312\135\262\325\052\177\151\073\147\115\345\360\132\035
\014\225\175\360
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\372\150\274\331\265\177\255\375\311\035\006\203\050\314\044\301
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

```

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200
\314\046
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign ECC Root CA - R5"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5
# Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24
# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371
\112\330\154

```

END

CKA_VALUE MULTILINE_OCTAL

```
\060\202\002\036\060\202\001\244\240\003\002\001\002\002\021\140
\131\111\340\046\056\273\125\371\012\167\212\161\371\112\330\154
\060\012\006\010\052\206\110\316\075\004\003\003\060\120\061\044
\060\042\006\003\125\004\013\023\033\107\154\157\142\141\154\123
\151\147\156\040\105\103\103\040\122\157\157\164\040\103\101\040
\055\040\122\065\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156\060\036
\027\015\061\062\061\061\061\063\060\060\060\060\060\132\027
\015\063\070\060\061\061\071\060\063\061\064\060\067\132\060\120
\061\044\060\042\006\003\125\004\013\023\033\107\154\157\142\141
\154\123\151\147\156\040\105\103\103\040\122\157\157\164\040\103
\101\040\055\040\122\065\061\023\060\021\006\003\125\004\012\023
\012\107\154\157\142\141\154\123\151\147\156\061\023\060\021\006
\003\125\004\003\023\012\107\154\157\142\141\154\123\151\147\156
\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053
\201\004\000\042\003\142\000\004\107\105\016\226\373\175\135\277
\351\071\321\041\370\237\013\266\325\173\036\222\072\110\131\034
\360\142\061\055\300\172\050\376\032\247\134\263\266\314\227\347
\105\324\130\372\321\167\155\103\242\300\207\145\064\012\037\172
\335\353\074\063\241\305\235\115\244\157\101\225\070\177\311\036
\204\353\321\236\111\222\207\224\207\014\072\205\112\146\237\235
\131\223\115\227\141\006\206\112\243\102\060\100\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006
\003\125\035\016\004\026\004\024\075\346\051\110\233\352\007\312
\041\104\112\046\336\156\336\322\203\320\237\131\060\012\006\010
\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061\000
\345\151\022\311\156\333\306\061\272\011\101\341\227\370\373\375
\232\342\175\022\311\355\174\144\323\313\005\045\213\126\331\240
\347\136\135\116\013\203\234\133\166\051\240\011\046\041\152\142
\002\060\161\322\265\217\134\352\073\341\170\011\205\250\165\222
\073\310\134\375\110\357\015\164\042\250\010\342\156\305\111\316
\307\014\274\247\141\151\361\367\073\341\052\313\371\053\363\146
\220\067
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign ECC Root CA - R5"

Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c

Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

Not Valid Before: Tue Nov 13 00:00:00 2012

```
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24
# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\044\306\060\315\244\030\357\040\151\377\255\117\335\137\106
\072\033\151\252
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\237\255\073\034\002\036\212\272\027\164\070\201\014\242\274\010
END
CKA_ISSUER
MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371
\112\330\154
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Staat der Nederlanden Root CA - G3"
#
# Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL
# Serial Number: 10003001 (0x98a239)
# Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL
#
Not Valid Before: Thu Nov 14 11:28:42 2013
# Not Valid After : Mon Nov 13 23:00:00 2028
# Fingerprint (SHA-256):
3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28
# Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Staat der Nederlanden Root CA - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\000\230\242\071
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\004\000
\230\242\071\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\116
\114\061\036\060\034\006\003\125\004\012\014\025\123\164\141\141
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145
\156\061\053\060\051\006\003\125\004\003\014\042\123\164\141\141
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145
\156\040\122\157\157\164\040\103\101\040\055\040\107\063\060\036
\027\015\061\063\061\061\061\064\061\061\062\070\064\062\132\027
\015\062\070\061\061\061\063\062\063\060\060\060\060\132\060\132
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\036\060
\034\006\003\125\004\012\014\025\123\164\141\141\164\040\144\145
\162\040\116\145\144\145\162\154\141\156\144\145\156\061\053\060
\051\006\003\125\004\003\014\042\123\164\141\141\164\040\144\145
\162\040\116\145\144\145\162\154\141\156\144\145\156\040\122\157
\157\164\040\103\101\040\055\040\107\063\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\276\062\242\124\017
\160\373\054\134\131\353\154\304\244\121\350\205\052\263\314\112
\064\362\260\137\363\016\307\034\075\123\036\210\010\150\330\157
\075\255\302\236\314\202\147\007\047\207\150\161\072\237\165\226
\042\106\005\260\355\255\307\133\236\052\336\234\374\072\306\225
```

\247\365\027\147\030\347\057\111\010\014\134\317\346\314\064\355
\170\373\120\261\334\153\062\360\242\376\266\074\344\354\132\227
\307\077\036\160\010\060\240\334\305\263\155\157\320\202\162\021
\253\322\201\150\131\202\027\267\170\222\140\372\314\336\077\204
\353\215\070\063\220\012\162\043\372\065\314\046\161\061\321\162
\050\222\331\133\043\155\146\265\155\007\102\353\246\063\316\222
\333\300\366\154\143\170\315\312\116\075\265\345\122\233\361\276
\073\346\124\140\260\146\036\011\253\007\376\124\211\021\102\321
\367\044\272\140\170\032\230\367\311\021\375\026\301\065\032\124
\165\357\103\323\345\256\116\316\347\173\303\306\116\141\121\113
\253\232\105\113\241\037\101\275\110\123\025\161\144\013\206\263
\345\056\276\316\244\033\301\051\204\242\265\313\010\043\166\103
\042\044\037\027\004\324\156\234\306\374\177\053\146\032\354\212
\345\326\317\115\365\143\011\267\025\071\326\173\254\353\343\174
\351\116\374\165\102\310\355\130\225\014\006\102\242\234\367\344
\160\263\337\162\157\132\067\100\211\330\205\244\327\361\013\336
\103\031\324\112\130\054\214\212\071\236\277\204\207\361\026\073
\066\014\351\323\264\312\154\031\101\122\011\241\035\260\152\277
\202\357\160\121\041\062\334\005\166\214\313\367\144\344\003\120
\257\214\221\147\253\305\362\356\130\330\336\276\367\347\061\317
\154\311\073\161\301\325\210\265\145\274\300\350\027\027\007\022
\265\134\322\253\040\223\264\346\202\203\160\066\305\315\243\215
\255\213\354\243\301\103\207\346\103\342\064\276\225\213\065\355
\007\071\332\250\035\172\237\066\236\022\260\014\145\022\220\025
\140\331\046\100\104\343\126\140\245\020\324\152\074\375\101\334
\016\132\107\266\357\227\141\165\117\331\376\307\262\035\324\355
\135\111\263\251\152\313\146\204\023\325\134\240\334\337\156\167
\006\321\161\165\310\127\157\257\017\167\133\002\003\001\000\001
\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024
\124\255\372\307\222\127\256\312\065\234\056\022\373\344\272\135
\040\334\224\127\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\060\231\235\005\062\310\136\016
\073\230\001\072\212\244\347\007\367\172\370\347\232\337\120\103
\123\227\052\075\312\074\107\230\056\341\025\173\361\222\363\141
\332\220\045\026\145\300\237\124\135\016\003\073\133\167\002\234
\204\266\015\230\137\064\335\073\143\302\303\050\201\302\234\051
\056\051\342\310\303\001\362\063\352\052\252\314\011\010\367\145
\147\306\315\337\323\266\053\247\275\314\321\016\160\137\270\043
\321\313\221\116\012\364\310\172\345\331\143\066\301\324\337\374
\042\227\367\140\135\352\051\057\130\262\275\130\275\215\226\117
\020\165\277\110\173\075\121\207\241\074\164\042\302\374\007\177
\200\334\304\254\376\152\301\160\060\260\351\216\151\342\054\151
\201\224\011\272\335\376\115\300\203\214\224\130\300\106\040\257
\234\037\002\370\065\125\111\057\106\324\300\360\240\226\002\017
\063\305\161\363\236\043\175\224\267\375\072\323\011\203\006\041
\375\140\075\256\062\300\322\356\215\246\360\347\264\202\174\012

```
\314\160\311\171\200\370\376\114\367\065\204\031\212\061\373\012
\331\327\177\233\360\242\232\153\303\005\112\355\101\140\024\060
\321\252\021\102\156\323\043\002\004\013\306\145\335\335\122\167
\332\201\153\262\250\372\001\070\271\226\352\052\154\147\227\211
\224\236\274\341\124\325\344\152\170\357\112\275\053\232\075\100
\176\306\300\165\322\156\373\150\060\354\354\213\235\371\111\065
\232\032\054\331\263\225\071\325\036\222\367\246\271\145\057\345
\075\155\072\110\114\010\334\344\050\022\050\276\175\065\134\352
\340\026\176\023\033\152\327\076\327\236\374\055\165\262\301\024
\325\043\003\333\133\157\013\076\170\057\015\336\063\215\026\267
\110\347\203\232\201\017\173\301\103\115\125\004\027\070\112\121
\325\131\242\211\164\323\237\276\036\113\327\306\155\267\210\044
\157\140\221\244\202\205\133\126\101\274\320\104\253\152\023\276
\321\054\130\267\022\063\130\262\067\143\334\023\365\224\035\077
\100\121\365\117\365\072\355\310\305\353\302\036\035\026\225\172
\307\176\102\161\223\156\113\025\267\060\337\252\355\127\205\110
\254\035\152\335\071\151\344\341\171\170\276\316\005\277\241\014
\367\200\173\041\147\047\060\131
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Staat der Nederlanden Root CA - G3"

Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

Serial Number: 10003001 (0x98a239)

Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

Not Valid Before: Thu Nov 14 11:28:42 2013

Not Valid After : Mon Nov 13 23:00:00 2028

Fingerprint (SHA-256):

3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28

Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Staat der Nederlanden Root CA - G3"

CKA_CERT_SHA1_HASH

MULTILINE_OCTAL

```
\330\353\153\101\121\222\131\340\363\347\205\000\300\075\266\210
\227\311\356\374
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\013\106\147\007\333\020\057\031\214\065\120\140\321\013\364\067
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
```



```
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\004\000\230\242\071
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "IdenTrust Commercial Root CA 1"

#

Issuer: CN=IdenTrust Commercial Root CA

1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02

Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 18:12:23 2014

Not Valid After : Mon Jan 16 18:12:23 2034

Fingerprint (SHA-256):

5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE

Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "IdenTrust Commercial Root CA 1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061
```

END

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000
\000\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\020\012
\001\102\200\000\000\001\105\043\310\104\265\000\000\000\002\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\112
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163
\164\061\047\060\045\006\003\125\004\003\023\036\111\144\145\156
\124\162\165\163\164\040\103\157\155\155\145\162\143\151\141\154
\040\122\157\157\164\040\103\101\040\061\060\036\027\015\061\064
\060\061\061\066\061\070\061\062\062\063\132\027\015\063\064\060
\061\061\066\061\070\061\062\062\063\132\060\112\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125
\004\012\023\011\111\144\145\156\124\162\165\163\164\061\047\060
\045\006\003\125\004\003\023\036\111\144\145\156\124\162\165\163
\164\040\103\157\155\155\145\162\143\151\141\154\040\122\157\157
\164\040\103\101\040\061\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\247\120\031\336\077\231\075\324\063
\106\361\157\121\141\202\262\251\117\217\147\211\135\204\331\123
\335\014\050\331\327\360\377\256\225\103\162\231\371\265\135\174
\212\301\102\341\061\120\164\321\201\015\174\315\233\041\253\103
\342\254\255\136\206\156\363\011\212\037\132\062\275\242\353\224
\371\350\134\012\354\377\230\322\257\161\263\264\123\237\116\207
\357\222\274\275\354\117\062\060\210\113\027\136\127\304\123\302
\366\002\227\215\331\142\053\277\044\037\142\215\337\303\270\051
\113\111\170\074\223\140\210\042\374\231\332\066\310\302\242\324
\054\124\000\147\065\156\163\277\002\130\360\244\335\345\260\242
\046\172\312\340\066\245\031\026\365\375\267\357\256\077\100\365
\155\132\004\375\316\064\312\044\334\164\043\033\135\063\023\022
\135\304\001\045\366\060\335\002\135\237\340\325\107\275\264\353
\033\241\273\111\111\330\237\133\002\363\212\344\044\220\344\142
\117\117\301\257\213\016\164\027\250\321\162\210\152\172\001\111
\314\264\106\171\306\027\261\332\230\036\007\131\372\165\041\205
\145\335\220\126\316\373\253\245\140\235\304\235\371\122\260\213
\275\207\371\217\053\043\012\043\166\073\367\063\341\311\000\363
\151\371\113\242\340\116\274\176\223\071\204\007\367\104\160\176
\376\007\132\345\261\254\321\030\314\362\065\345\111\111\010\312
\126\311\075\373\017\030\175\213\073\301\023\302\115\217\311\117
\016\067\351\037\241\016\152\337\142\056\313\065\006\121\171\054
\310\045\070\364\372\113\247\211\134\234\322\343\015\071\206\112
\164\174\325\131\207\302\077\116\014\134\122\364\075\367\122\202
\361\352\243\254\375\111\064\032\050\363\101\210\072\023\356\350
\336\377\231\035\137\272\313\350\036\362\271\120\140\300\061\323
\163\345\357\276\240\355\063\013\164\276\040\040\304\147\154\360
```

\010\003\172\125\200\177\106\116\226\247\364\036\076\341\366\330
\011\341\063\144\053\143\327\062\136\237\371\300\173\017\170\157
\227\274\223\232\371\234\022\220\170\172\200\207\025\327\162\164
\234\125\164\170\261\272\341\156\160\004\272\117\240\272\150\303
\173\377\061\360\163\075\075\224\052\261\013\101\016\240\376\115
\210\145\153\171\063\264\327\002\003\001\000\001\243\102\060\100
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\355\104\031\300
\323\360\006\213\356\244\173\276\102\347\046\124\310\216\066\166
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\002\001\000\015\256\220\062\366\246\113\174\104\166\031\141
\036\047\050\315\136\124\357\045\274\343\010\220\371\051\327\256
\150\010\341\224\000\130\357\056\056\176\123\122\214\266\134\007
\352\210\272\231\213\120\224\327\202\200\337\141\011\000\223\255
\015\024\346\316\301\362\067\224\170\260\137\234\263\242\163\270
\217\005\223\070\315\215\076\260\270\373\300\317\261\362\354\055
\055\033\314\354\252\232\263\252\140\202\033\055\073\303\204\075
\127\212\226\036\234\165\270\323\060\315\140\010\203\220\323\216
\124\361\115\146\300\135\164\003\100\243\356\205\176\302\037\167
\234\006\350\301\247\030\135\122\225\355\311\335\045\236\155\372
\251\355\243\072\064\320\131\173\332\355\120\363\065\277\355\353
\024\115\061\307\140\364\332\361\207\234\342\110\342\306\305\067
\373\006\020\372\165\131\146\061\107\051\332\166\232\034\351\202
\256\357\232\271\121\367\210\043\232\151\225\142\074\345\125\200
\066\327\124\002\377\361\271\135\316\324\043\157\330\105\204\112
\133\145\357\211\014\335\024\247\040\313\030\245\045\264\015\371
\001\360\242\322\364\000\310\164\216\241\052\110\216\145\333\023
\304\342\045\027\175\353\276\207\133\027\040\124\121\223\112\123
\003\013\354\135\312\063\355\142\375\105\307\057\133\334\130\240
\200\071\346\372\327\376\023\024\246\355\075\224\112\102\164\324
\303\167\131\163\315\217\106\276\125\070\357\372\350\221\062\352
\227\130\004\042\336\070\303\314\274\155\311\063\072\152\012\151
\077\240\310\352\162\217\214\143\206\043\275\155\074\226\236\225
\340\111\114\252\242\271\052\033\234\066\201\170\355\303\350\106
\342\046\131\104\165\036\331\165\211\121\315\020\204\235\141\140
\313\135\371\227\042\115\216\230\346\343\177\366\133\273\256\315
\312\112\201\153\136\013\363\121\341\164\053\351\176\047\247\331
\231\111\116\370\245\200\333\045\017\034\143\142\212\311\063\147
\153\074\020\203\306\255\336\250\315\026\216\215\360\007\067\161
\237\362\253\374\101\365\301\213\354\000\067\135\011\345\116\200
\357\372\261\134\070\006\245\033\112\341\334\070\055\074\334\253
\037\220\032\325\112\234\356\321\160\154\314\356\364\127\370\030
\272\204\156\207

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "IdenTrust Commercial Root CA 1"

Issuer: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02

Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 18:12:23 2014

Not Valid After : Mon Jan 16 18:12:23 2034

Fingerprint (SHA-256):

5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE

Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "IdenTrust Commercial Root CA 1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\337\161\176\252\112\331\116\311\125\204\231\140\055\110\336\137
\274\360\072\045

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

\263\076\167\163\165\356\240\323\343\176\111\143\111\131\273\307
END

CKA_ISSUER MULTILINE_OCTAL

\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000
\000\002

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "IdenTrust Public Sector Root CA 1"

#

Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02

#

Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 17:53:32 2014

```
# Not Valid After : Mon Jan 16 17:53:32 2034
# Fingerprint (SHA-256):
30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F
# Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "IdenTrust Public Sector Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_ID UTF8 "0"
CKA_ISSUER
MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\012
\001\102\200\000\000\001\105\043\317\106\174\000\000\000\002\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163
\164\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156
\124\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143
\164\157\162\040\122\157\157\164\040\103\101\040\061\060\036\027
\015\061\064\060\061\061\066\061\067\065\063\063\062\132\027\015
\063\064\060\061\061\066\061\067\065\063\063\062\132\060\115\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060\020
\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163\164
\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156\124
\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143\164
\157\162\040\122\157\157\164\040\103\101\040\061\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\266\042\224
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\374\244\110\257\350\107\153\012\373\047\166\344\362\077\212\073
\172\112\054\061\052\214\215\260\251\303\061\153\250\167\166\204
\046\266\254\201\102\015\010\353\125\130\273\172\370\274\145\175
\362\240\155\213\250\107\351\142\166\036\021\356\010\024\321\262
\104\026\364\352\320\372\036\057\136\333\313\163\101\256\274\000
\260\112\053\100\262\254\341\073\113\302\055\235\344\241\233\354
\032\072\036\360\010\263\320\344\044\065\007\237\234\264\311\122
\155\333\007\312\217\265\133\360\203\363\117\307\055\245\310\255
\313\225\040\244\061\050\127\130\132\344\215\033\232\253\236\015
\014\362\012\063\071\042\071\012\227\056\363\123\167\271\104\105
\375\204\313\066\040\201\131\055\232\157\155\110\110\141\312\114
\337\123\321\257\122\274\104\237\253\057\153\203\162\357\165\200
\332\006\063\033\135\310\332\143\306\115\315\254\146\061\315\321
\336\076\207\020\066\341\271\244\172\357\140\120\262\313\312\246
\126\340\067\257\253\064\023\071\045\350\071\146\344\230\172\252
\022\230\234\131\146\206\076\255\361\260\312\076\006\017\173\360
\021\113\067\240\104\155\173\313\250\214\161\364\325\265\221\066
\314\360\025\306\053\336\121\027\261\227\114\120\075\261\225\131
\174\005\175\055\041\325\000\277\001\147\242\136\173\246\134\362
\367\042\361\220\015\223\333\252\104\121\146\314\175\166\003\353
\152\250\052\070\031\227\166\015\153\212\141\371\274\366\356\166
\375\160\053\335\051\074\370\012\036\133\102\034\213\126\057\125
\033\034\241\056\265\307\026\346\370\252\074\222\216\151\266\001
\301\265\206\235\211\017\013\070\224\124\350\352\334\236\075\045
\274\123\046\355\325\253\071\252\305\100\114\124\253\262\264\331
\331\370\327\162\333\034\274\155\275\145\137\357\210\065\052\146
\057\356\366\263\145\360\063\215\174\230\101\151\106\017\103\034
\151\372\233\265\320\141\152\315\312\113\331\114\220\106\253\025
\131\241\107\124\051\056\203\050\137\034\302\242\253\162\027\000
\006\216\105\354\213\342\063\075\177\332\031\104\344\142\162\303
\337\042\306\362\126\324\335\137\225\162\355\155\137\367\110\003
\133\375\305\052\240\366\163\043\204\020\033\001\347\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\343\161\340\236\330\247\102\331\333\161\221\153\224\223
\353\303\243\321\024\243\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\002\001\000\107\372\335\012\260\021
\221\070\255\115\135\367\345\016\227\124\031\202\110\207\124\214
\252\144\231\330\132\376\210\001\305\130\245\231\261\043\124\043
\267\152\035\040\127\345\001\142\101\027\323\011\333\165\313\156
\124\220\165\376\032\237\201\012\302\335\327\367\011\320\133\162
\025\344\036\011\152\075\063\363\041\232\346\025\176\255\121\325
\015\020\355\175\102\300\217\356\300\232\010\325\101\326\134\016
\041\151\156\200\141\016\025\300\270\317\305\111\022\122\314\276
\072\314\324\056\070\005\336\065\375\037\157\270\200\150\230\075
\115\240\312\100\145\322\163\174\365\213\331\012\225\077\330\077
\043\155\032\321\052\044\031\331\205\263\027\357\170\156\251\130

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\321\043\323\307\023\355\162\045\177\135\261\163\160\320\177\006
\227\011\204\051\200\141\035\372\136\377\163\254\240\343\211\270
\034\161\025\306\336\061\177\022\334\341\155\233\257\347\350\237
\165\170\114\253\106\073\232\316\277\005\030\135\115\025\074\026
\232\031\120\004\232\262\232\157\145\213\122\137\074\130\004\050
\045\300\146\141\061\176\271\340\165\271\032\250\201\326\162\027
\263\305\003\061\065\021\170\170\242\340\351\060\214\177\200\337
\130\337\074\272\047\226\342\200\064\155\343\230\323\144\047\254
\110\176\050\167\134\306\045\141\045\370\205\014\145\372\304\062
\057\245\230\005\344\370\013\147\026\026\306\202\270\062\031\371
\371\271\171\334\037\315\353\257\253\016\335\033\333\105\344\172
\347\002\342\225\135\374\151\360\123\151\141\225\165\171\013\136
\125\346\070\034\224\251\131\063\236\310\161\164\171\177\121\211
\266\310\152\270\060\310\152\070\303\156\236\341\067\026\352\005
\142\114\133\022\107\355\247\264\263\130\126\307\111\363\177\022
\150\011\061\161\360\155\370\116\107\373\326\205\356\305\130\100
\031\244\035\247\371\113\103\067\334\150\132\117\317\353\302\144
\164\336\264\025\331\364\124\124\032\057\034\327\227\161\124\220
\216\331\040\235\123\053\177\253\217\342\352\060\274\120\067\357
\361\107\265\175\174\054\004\354\150\235\264\111\104\020\364\162
\113\034\144\347\374\346\153\220\335\151\175\151\375\000\126\245
\267\254\266\255\267\312\076\001\357\234
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "IdenTrust Public Sector Root CA 1"

Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02

Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

Not Valid Before: Thu Jan 16 17:53:32 2014

Not Valid After : Mon Jan 16 17:53:32 2034

Fingerprint (SHA-256):

30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F

Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "IdenTrust Public Sector Root CA 1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\272\051\101\140\167\230\077\364\363\357\362\061\005\073\056\352
\155\115\105\375
```

END

CKA_CERT_MD5_HASH

```

MULTILINE_OCTAL
\067\006\245\260\374\211\235\272\364\153\214\032\144\315\325\272
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G2"
#
# Issuer: CN=Entrust Root Certification Authority
- G2,OU="(c) 2009 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust,
Inc.",C=US
# Serial Number: 1246989352 (0x4a538c28)
# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Jul 07 17:25:54 2009
# Not Valid After : Sat Dec 07 17:55:54 2030
# Fingerprint (SHA-256):
43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39
# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162

```


\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\004\112\123\214\050

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\076\060\202\003\046\240\003\002\001\002\002\004\112
\123\214\050\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\201\276\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156\164
\162\165\163\164\054\040\111\156\143\056\061\050\060\046\006\003
\125\004\013\023\037\123\145\145\040\167\167\167\056\145\156\164
\162\165\163\164\056\156\145\164\057\154\145\147\141\154\055\164
\145\162\155\163\061\071\060\067\006\003\125\004\013\023\060\050
\143\051\040\062\060\060\071\040\105\156\164\162\165\163\164\054
\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164\150
\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171\061
\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165\163
\164\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\055
\040\107\062\060\036\027\015\060\071\060\067\060\067\061\067\062
\065\065\064\132\027\015\063\060\061\062\060\067\061\067\065\065
\065\064\132\060\201\276\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156
\164\162\165\163\164\054\040\111\156\143\056\061\050\060\046\006
\003\125\004\013\023\037\123\145\145\040\167\167\167\056\145\156

\164\162\165\163\164\056\156\145\164\057\154\145\147\141\154\055
\164\145\162\155\163\061\071\060\067\006\003\125\004\013\023\060
\050\143\051\040\062\060\060\071\040\105\156\164\162\165\163\164
\054\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164
\150\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171
\061\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165
\163\164\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040
\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012
\002\202\001\001\000\272\204\266\162\333\236\014\153\342\231\351
\060\001\247\166\352\062\270\225\101\032\311\332\141\116\130\162
\317\376\366\202\171\277\163\141\006\012\245\047\330\263\137\323
\105\116\034\162\326\116\062\362\162\212\017\367\203\031\320\152
\200\200\000\105\036\260\307\347\232\277\022\127\047\034\243\150
\057\012\207\275\152\153\016\136\145\363\034\167\325\324\205\215
\160\041\264\263\062\347\213\242\325\206\071\002\261\270\322\107
\316\344\311\111\304\073\247\336\373\124\175\127\276\360\350\156
\302\171\262\072\013\125\342\120\230\026\062\023\134\057\170\126
\301\302\224\263\362\132\344\047\232\237\044\327\306\354\320\233
\045\202\343\314\302\304\105\305\214\227\172\006\153\052\021\237
\251\012\156\110\073\157\333\324\021\031\102\367\217\007\277\365
\123\137\234\076\364\027\054\346\151\254\116\062\114\142\167\352
\267\350\345\273\064\274\031\213\256\234\121\347\267\176\265\123
\261\063\042\345\155\317\160\074\032\372\342\233\147\266\203\364
\215\245\257\142\114\115\340\130\254\144\064\022\003\370\266\215
\224\143\044\244\161\002\003\001\000\001\243\102\060\100\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\035\006\003\125\035\016\004\026\004\024\152\162\046\172\320\036
\357\175\347\073\151\121\324\154\215\237\220\022\146\253\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001
\001\000\171\237\035\226\306\266\171\077\042\215\207\323\207\003
\004\140\152\153\232\056\131\211\163\021\254\103\321\365\023\377
\215\071\053\300\362\275\117\160\214\251\057\352\027\304\013\124
\236\324\033\226\230\063\074\250\255\142\242\000\166\253\131\151
\156\006\035\176\304\271\104\215\230\257\022\324\141\333\012\031
\106\107\363\353\367\143\301\100\005\100\245\322\267\364\265\232
\066\277\251\210\166\210\004\125\004\053\234\207\177\032\067\074
\176\055\245\032\330\324\211\136\312\275\254\075\154\330\155\257
\325\363\166\017\315\073\210\070\042\235\154\223\232\304\075\277
\202\033\145\077\246\017\135\252\374\345\262\025\312\265\255\306
\274\075\320\204\350\352\006\162\260\115\071\062\170\277\076\021
\234\013\244\235\232\041\363\360\233\013\060\170\333\301\334\207
\103\376\274\143\232\312\305\302\034\311\307\215\377\073\022\130
\010\346\266\075\354\172\054\116\373\203\226\316\014\074\151\207
\124\163\244\163\302\223\377\121\020\254\025\124\001\330\374\005
\261\211\241\177\164\203\232\111\327\334\116\173\212\110\157\213

```

\105\366
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Entrust Root Certification Authority - G2"
# Issuer: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number: 1246989352 (0x4a538c28)
# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Jul 07 17:25:54 2009
# Not Valid After : Sat Dec 07 17:55:54 2030
# Fingerprint (SHA-256):
43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39
# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\214\364\047\375\171\014\072\321\146\006\215\350\036\127\357\273
\223\042\162\324
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\113\342\311\221\226\145\014\364\016\132\223\222\240\012\376\262
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062
END
CKA_SERIAL_NUMBER

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```

MULTILINE_OCTAL
\002\004\112\123\214\050
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - EC1"
#
# Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:a6:8b:79:29:00:00:00:50:d0:91:f9
# Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Dec 18 15:25:36 2012
# Not Valid After : Fri Dec 18 15:55:36 2037
# Fingerprint (SHA-256):
02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5
#
Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - EC1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165

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\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\015\000\246\213\171\051\000\000\000\000\120\320\221\371

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\371\060\202\002\200\240\003\002\001\002\002\015\000
\246\213\171\051\000\000\000\000\120\320\221\371\060\012\006\010
\052\206\110\316\075\004\003\003\060\201\277\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\026\060\024\006\003\125\004
\012\023\015\105\156\164\162\165\163\164\054\040\111\156\143\056
\061\050\060\046\006\003\125\004\013\023\037\123\145\145\040\167
\167\167\056\145\156\164\162\165\163\164\056\156\145\164\057\154
\145\147\141\154\055\164\145\162\155\163\061\071\060\067\006\003
\125\004\013\023\060\050\143\051\040\062\060\061\062\040\105\156
\164\162\165\163\164\054\040\111\156\143\056\040\055\040\146\157
\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163\145
\040\157\156\154\171\061\063\060\061\006\003\125\004\003\023\052
\105\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\040\055\040\105\103\061\060\036\027\015\061\062
\061\062\061\070\061\065\062\065\063\066\132\027\015\063\067\061
\062\061\070\061\065\065\065\063\066\132\060\201\277\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\026\060\024\006\003
\125\004\012\023\015\105\156\164\162\165\163\164\054\040\111\156
\143\056\061\050\060\046\006\003\125\004\013\023\037\123\145\145
\040\167\167\167\056\145\156\164\162\165\163\164\056\156\145\164
\057\154\145\147\141\154\055\164\145\162\155\163\061\071\060\067
\006\003\125\004\013\023\060\050\143\051\040\062\060\061\062\040
\105\156\164\162\165\163\164\054\040\111\156\143\056\040\055\040
\146\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165
\163\145\040\157\156\154\171\061\063\060\061\006\003\125\004\003
\023\052\105\156\164\162\165\163\164\040\122\157\157\164\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\040\055\040\105\103\061\060\166\060\020
\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042
\003\142\000\004\204\023\311\320\272\155\101\173\342\154\320\353

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\125\137\146\002\032\044\364\133\211\151\107\343\270\302\175\361
\362\002\305\237\240\366\133\325\213\006\031\206\117\123\020\155
\007\044\047\241\240\370\325\107\031\141\114\175\312\223\047\352
\164\014\357\157\226\011\376\143\354\160\135\066\255\147\167\256
\311\235\174\125\104\072\242\143\121\037\365\343\142\324\251\107
\007\076\314\040\243\102\060\100\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001
\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016
\004\026\004\024\267\143\347\032\335\215\351\010\246\125\203\244
\340\152\120\101\145\021\102\111\060\012\006\010\052\206\110\316
\075\004\003\003\003\147\000\060\144\002\060\141\171\330\345\102
\107\337\034\256\123\231\027\266\157\034\175\341\277\021\224\321
\003\210\165\344\215\211\244\212\167\106\336\155\141\357\002\365
\373\265\337\314\376\116\377\376\251\346\247\002\060\133\231\327
\205\067\006\265\173\010\375\353\047\213\112\224\371\341\372\247
\216\046\010\350\174\222\150\155\163\330\157\046\254\041\002\270
\231\267\046\101\133\045\140\256\320\110\032\356\006
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Entrust Root Certification Authority - EC1"

Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

Serial Number:00:a6:8b:79:29:00:00:00:00:50:d0:91:f9

Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

Not Valid Before: Tue Dec 18 15:25:36 2012

Not Valid After : Fri Dec 18 15:55:36 2037

Fingerprint (SHA-256):

02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5

Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority - EC1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\040\330\006\100\337\233\045\365\022\045\072\021\352\367\131\212
\353\024\265\107
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\266\176\035\360\130\305\111\154\044\073\075\355\230\030\355\274
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
```

```
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\015\000\246\213\171\051\000\000\000\000\120\320\221\371
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "CFCA EV ROOT"

#

Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Serial Number: 407555286 (0x184acd6)

Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Not Valid Before: Wed Aug 08 03:07:01 2012

#

Not Valid After : Mon Dec 31 03:07:01 2029

Fingerprint (SHA-256):

5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD

Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "CFCA EV ROOT"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\004\030\112\314\326

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\215\060\202\003\165\240\003\002\001\002\002\004\030
\112\314\326\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\126\061\013\060\011\006\003\125\004\006\023\002\103
\116\061\060\060\056\006\003\125\004\012\014\047\103\150\151\156
\141\040\106\151\156\141\156\143\151\141\154\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\061\025\060\023\006\003\125\004\003\014\014\103\106
\103\101\040\105\126\040\122\117\117\124\060\036\027\015\061\062
\060\070\060\070\060\063\060\067\060\061\132\027\015\062\071\061
\062\063\061\060\063\060\067\060\061\132\060\126\061\013\060\011
\006\003\125\004\006\023\002\103\116\061\060\060\056\006\003\125
\004\012\014\047\103\150\151\156\141\040\106\151\156\141\156\143
\151\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\025\060\023\006
\003\125\004\003\014\014\103\106\103\101\040\105\126\040\122\117
\117\124\060\202\002\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202
\002\001\000\327\135\153\315\020\077\037\005\131\325\005\115\067
\261\016\354\230\053\216\025\035\372\223\113\027\202\041\161\020
\122\327\121\144\160\026\302\125\151\115\216\025\155\237\277\014
\033\302\340\243\147\326\014\254\317\042\256\257\167\124\052\113
\114\212\123\122\172\303\356\056\336\263\161\045\301\351\135\075
\356\241\057\243\367\052\074\311\043\035\152\253\035\241\247\361
\363\354\240\325\104\317\025\317\162\057\035\143\227\350\231\371
\375\223\244\124\200\114\122\324\122\253\056\111\337\220\315\270
\137\276\077\336\241\312\115\040\324\045\350\204\051\123\267\261
\210\037\377\372\332\220\237\012\251\055\101\077\261\361\030\051
\356\026\131\054\064\111\032\250\006\327\250\210\322\003\162\172
\062\342\352\150\115\156\054\226\145\173\312\131\372\362\342\335
\356\060\054\373\314\106\254\304\143\353\157\177\066\053\064\163
\022\224\177\337\314\046\236\361\162\135\120\145\131\217\151\263
\207\136\062\157\303\030\212\265\225\217\260\172\067\336\132\105
\073\307\066\341\357\147\321\071\323\227\133\163\142\031\110\055
\207\034\006\373\164\230\040\111\163\360\005\322\033\261\240\243

\267\033\160\323\210\151\271\132\326\070\364\142\334\045\213\170
\277\370\350\176\270\134\311\225\117\137\247\055\271\040\153\317
\153\335\365\015\364\202\267\364\262\146\056\020\050\366\227\132
\173\226\026\217\001\031\055\154\156\177\071\130\006\144\203\001
\203\203\303\115\222\335\062\306\207\244\067\351\026\316\252\055
\150\257\012\201\145\072\160\301\233\255\115\155\124\312\052\055
\113\205\033\263\200\346\160\105\015\153\136\065\360\177\073\270
\234\344\004\160\211\022\045\223\332\012\231\042\140\152\143\140
\116\166\006\230\116\275\203\255\035\130\212\045\205\322\307\145
\036\055\216\306\337\266\306\341\177\212\004\041\025\051\164\360
\076\234\220\235\014\056\361\212\076\132\252\014\011\036\307\325
\074\243\355\227\303\036\064\372\070\371\010\016\343\300\135\053
\203\321\126\152\311\266\250\124\123\056\170\062\147\075\202\177
\164\320\373\341\266\005\140\271\160\333\216\013\371\023\130\157
\161\140\020\122\020\271\301\101\011\357\162\037\147\061\170\377
\226\005\215\002\003\001\000\001\243\143\060\141\060\037\006\003
\125\035\043\004\030\060\026\200\024\343\376\055\375\050\320\013
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035
\006\003\125\035\016\004\026\004\024\343\376\055\375\050\320\013
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\015\006
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001
\000\045\306\272\153\353\207\313\336\202\071\226\075\360\104\247
\153\204\163\003\336\235\053\117\272\040\177\274\170\262\317\227
\260\033\234\363\327\171\056\365\110\266\322\373\027\210\346\323
\172\077\355\123\023\320\342\057\152\171\313\000\043\050\346\036
\067\127\065\211\204\302\166\117\064\066\255\147\303\316\101\006
\210\305\367\356\330\032\270\326\013\177\120\377\223\252\027\113
\214\354\355\122\140\262\244\006\352\116\353\364\153\031\375\353
\365\032\340\045\052\232\334\307\101\066\367\310\164\005\204\071
\225\071\326\013\073\244\047\372\010\330\134\036\370\004\140\122
\021\050\050\003\377\357\123\146\000\245\112\064\026\146\174\375
\011\244\256\236\147\032\157\101\013\153\006\023\233\217\206\161
\005\264\057\215\211\146\063\051\166\124\232\021\370\047\372\262
\077\221\340\316\015\033\363\060\032\255\277\042\135\033\323\277
\045\005\115\341\222\032\177\231\237\074\104\223\312\324\100\111
\154\200\207\327\004\072\303\062\122\065\016\126\370\245\335\175
\304\213\015\021\037\123\313\036\262\027\266\150\167\132\340\324
\313\310\007\256\365\072\056\216\067\267\320\001\113\103\051\167
\214\071\227\217\202\132\370\121\345\211\240\030\347\150\177\135
\012\056\373\243\107\016\075\246\043\172\306\001\307\217\310\136
\277\155\200\126\276\212\044\272\063\352\237\341\062\021\236\361
\322\117\200\366\033\100\257\070\236\021\120\171\163\022\022\315
\346\154\235\054\210\162\074\060\201\006\221\042\352\131\255\332
\031\056\042\302\215\271\214\207\340\146\274\163\043\137\041\144
\143\200\110\365\240\074\030\075\224\310\110\101\035\100\272\136
\376\376\126\071\241\310\317\136\236\031\144\106\020\332\027\221

```
\267\005\200\254\213\231\222\175\347\242\330\007\013\066\047\347
\110\171\140\212\303\327\023\134\370\162\100\337\112\313\317\231
\000\012\000\013\021\225\332\126\105\003\210\012\237\147\320\325
\171\261\250\215\100\155\015\302\172\100\372\363\137\144\107\222
\313\123\271\273\131\316\117\375\320\025\123\001\330\337\353\331
\346\166\357\320\043\273\073\251\171\263\325\002\051\315\211\243
\226\017\112\065\347\116\102\300\165\315\007\317\346\054\353\173
\056
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "CFCA EV ROOT"

Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Serial Number: 407555286 (0x184accd6)

Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

Not Valid Before: Wed Aug 08 03:07:01 2012

Not Valid After : Mon Dec 31 03:07:01 2029

Fingerprint (SHA-256):

5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD

Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "CFCA EV ROOT"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\342\270\051\113\125\204\253\153\130\302\220\106\154\254\077\270
\071\217\204\203
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\164\341\266\355\046\172\172\104\060\063\224\253\173\047\201\060
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\004\030\112\314\326
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

```
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
```

```
# Certificate "OISTE WISeKey Global Root GB CA"
```

```
#
```

```
# Issuer: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
```

```
# Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0
```

```
#
```

```
Subject: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
```

```
# Not Valid Before: Mon Dec 01 15:00:32 2014
```

```
# Not Valid After : Thu Dec 01 15:10:31 2039
```

```
# Fingerprint (SHA-256):
```

```
6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6
```

```
# Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "OISTE WISeKey Global Root GB CA"
```

```
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
```

```
CKA_SUBJECT MULTILINE_OCTAL
```

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
```

```
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
```

```
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
```

```
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
```

```
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
```

```
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
```

```
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

```
END
```

```
CKA_ID
```

```
UTF8 "0"
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
```

```
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
```

```
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
```

```
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
```

```
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
```

```
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
```

```
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

```
END
```

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
```

```
\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366
```

```
\302\300
```

```
END
```

```
CKA_VALUE MULTILINE_OCTAL
```

```
\060\202\003\265\060\202\002\235\240\003\002\001\002\002\020\166
```

\261\040\122\164\360\205\207\106\263\370\043\032\366\302\300\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\155
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060
\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\102\040\103\101\060\036\027
\015\061\064\061\062\060\061\061\065\060\060\063\062\132\027\015
\063\071\061\062\060\061\061\065\061\060\063\061\132\060\155\061
\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016
\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061\042
\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106
\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163
\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123
\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141
\154\040\122\157\157\164\040\107\102\040\103\101\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\330\027\267
\034\112\044\052\326\227\261\312\342\036\373\175\070\357\230\365
\262\071\230\116\047\270\021\135\173\322\045\224\210\202\025\046
\152\033\061\273\250\133\041\041\053\330\017\116\237\132\361\261
\132\344\171\326\062\043\053\341\123\314\231\105\134\173\117\255
\274\277\207\112\013\113\227\132\250\366\110\354\175\173\015\315
\041\006\337\236\025\375\101\212\110\267\040\364\241\172\033\127
\324\135\120\377\272\147\330\043\231\037\310\077\343\336\377\157
\133\167\261\153\156\270\311\144\367\341\312\101\106\016\051\161
\320\271\043\374\311\201\137\116\367\157\337\277\204\255\163\144
\273\267\102\216\151\366\324\166\035\176\235\247\270\127\212\121
\147\162\327\324\250\270\225\124\100\163\003\366\352\364\353\376
\050\102\167\077\235\043\033\262\266\075\200\024\007\114\056\117
\367\325\012\026\015\275\146\103\067\176\043\103\171\303\100\206
\365\114\051\332\216\232\255\015\245\004\207\210\036\205\343\351
\123\325\233\310\213\003\143\170\353\340\031\112\156\273\057\153
\063\144\130\223\255\151\277\217\033\357\202\110\307\002\003\001
\000\001\243\121\060\117\060\013\006\003\125\035\017\004\004\003
\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\065
\017\310\066\143\136\342\243\354\371\073\146\025\316\121\122\343
\221\232\075\060\020\006\011\053\006\001\004\001\202\067\025\001
\004\003\002\001\000\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\003\202\001\001\000\100\114\373\207\262\231\201
\220\176\235\305\260\260\046\315\210\173\053\062\215\156\270\041
\161\130\227\175\256\067\024\257\076\347\367\232\342\175\366\161
\230\231\004\252\103\164\170\243\343\111\141\076\163\214\115\224
\340\371\161\304\266\026\016\123\170\037\326\242\207\057\002\071
\201\051\074\257\025\230\041\060\376\050\220\000\214\321\341\313

```
\372\136\310\375\370\020\106\073\242\170\102\221\027\164\125\012
\336\120\147\115\146\321\247\377\375\331\300\265\250\243\212\316
\146\365\017\103\315\247\053\127\173\143\106\152\252\056\122\330
\364\355\341\155\255\051\220\170\110\272\341\043\252\243\211\354
\265\253\226\300\264\113\242\035\227\236\172\362\156\100\161\337
\150\361\145\115\316\174\005\337\123\145\251\245\360\261\227\004
\160\025\106\003\230\324\322\277\124\264\240\130\175\122\157\332
\126\046\142\324\330\333\211\061\157\034\360\042\302\323\142\034
\065\315\114\151\025\124\032\220\230\336\353\036\137\312\167\307
\313\216\075\103\151\234\232\130\320\044\073\337\033\100\226\176
\065\255\201\307\116\161\272\210\023
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "OISTE WISEKey Global Root GB CA"

Issuer: CN=OISTE WISEKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0

Subject:

CN=OISTE WISEKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

Not Valid Before: Mon Dec 01 15:00:32 2014

Not Valid After : Thu Dec 01 15:10:31 2039

Fingerprint (SHA-256):

6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6

Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "OISTE WISEKey Global Root GB CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\017\371\100\166\030\323\327\152\113\230\360\250\065\236\014\375
\047\254\314\355
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\244\353\271\141\050\056\267\057\230\260\065\046\220\231\121\035
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366
\302\300
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SZAFIR ROOT CA2"
#
# Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL
# Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4
# Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL
# Not Valid Before: Mon Oct 19 07:43:30 2015
# Not Valid After : Fri Oct 19 07:43:30 2035
# Fingerprint (SHA-256):
A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE
#
Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SZAFIR ROOT CA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001

```

\353\055\334\344\326\344

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\162\060\202\002\132\240\003\002\001\002\002\024\076
\212\135\007\354\125\322\062\325\267\343\266\137\001\353\055\334
\344\326\344\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\121\061\013\060\011\006\003\125\004\006\023\002\120
\114\061\050\060\046\006\003\125\004\012\014\037\113\162\141\152
\157\167\141\040\111\172\142\141\040\122\157\172\154\151\143\172
\145\156\151\157\167\141\040\123\056\101\056\061\030\060\026\006
\003\125\004\003\014\017\123\132\101\106\111\122\040\122\117\117
\124\040\103\101\062\060\036\027\015\061\065\061\060\061\071\060
\067\064\063\063\060\132\027\015\063\065\061\060\061\071\060\067
\064\063\063\060\132\060\121\061\013\060\011\006\003\125\004\006
\023\002\120\114\061\050\060\046\006\003\125\004\012\014\037\113
\162\141\152\157\167\141\040\111\172\142\141\040\122\157\172\154
\151\143\172\145\156\151\157\167\141\040\123\056\101\056\061\030
\060\026\006\003\125\004\003\014\017\123\132\101\106\111\122\040
\122\117\117\124\040\103\101\062\060\202\001\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000
\060\202\001\012\002\202\001\001\000\267\274\076\120\250\113\315
\100\265\316\141\347\226\312\264\241\332\014\042\260\372\265\173
\166\000\167\214\013\317\175\250\206\314\046\121\344\040\075\205
\014\326\130\343\347\364\052\030\235\332\321\256\046\356\353\123
\334\364\220\326\023\112\014\220\074\303\364\332\322\216\015\222
\072\334\261\261\377\070\336\303\272\055\137\200\271\002\275\112
\235\033\017\264\303\302\301\147\003\335\334\033\234\075\263\260
\336\000\036\250\064\107\273\232\353\376\013\024\275\066\204\332
\015\040\277\372\133\313\251\026\040\255\071\140\356\057\165\266
\347\227\234\371\076\375\176\115\157\115\057\357\210\015\152\372
\335\361\075\156\040\245\240\022\264\115\160\271\316\327\162\073
\211\223\247\200\204\034\047\111\162\111\265\377\073\225\236\301
\314\310\001\354\350\016\212\012\226\347\263\246\207\345\326\371
\005\053\015\227\100\160\074\272\254\165\132\234\325\115\235\002
\012\322\113\233\146\113\106\007\027\145\255\237\154\210\000\334
\042\211\340\341\144\324\147\274\061\171\141\074\273\312\101\315
\134\152\000\310\074\070\216\130\257\002\003\001\000\001\243\102
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\035\006\003\125\035\016\004\026\004\024\056\026
\251\112\030\265\313\314\365\157\120\363\043\137\370\135\347\254
\360\310\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\003\202\001\001\000\265\163\370\003\334\131\133\035\166\351
\243\052\173\220\050\262\115\300\063\117\252\232\261\324\270\344
\047\377\251\226\231\316\106\340\155\174\114\242\070\244\006\160
\360\364\101\021\354\077\107\215\077\162\207\371\073\375\244\157
\053\123\000\340\377\071\271\152\007\016\353\035\034\366\242\162
\220\313\202\075\021\202\213\322\273\237\052\257\041\346\143\206

```
\235\171\031\357\367\273\014\065\220\303\212\355\117\017\365\314
\022\331\244\076\273\240\374\040\225\137\117\046\057\021\043\203
\116\165\007\017\277\233\321\264\035\351\020\004\376\312\140\217
\242\114\270\255\317\341\220\017\315\256\012\307\135\173\267\120
\322\324\141\372\325\025\333\327\237\207\121\124\353\245\343\353
\311\205\240\045\040\067\373\216\316\014\064\204\341\074\201\262
\167\116\103\245\210\137\206\147\241\075\346\264\134\141\266\076
\333\376\267\050\305\242\007\256\265\312\312\215\052\022\357\227
\355\302\060\244\311\052\172\373\363\115\043\033\231\063\064\240
\056\365\251\013\077\324\135\341\317\204\237\342\031\302\137\212
\326\040\036\343\163\267
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL

CK_FALSE

Trust for "SZAFIR ROOT CA2"

Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4

Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

Not Valid Before: Mon Oct 19 07:43:30 2015

Not Valid After : Fri Oct 19 07:43:30 2035

Fingerprint (SHA-256):

A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE

Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SZAFIR ROOT CA2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\342\122\372\225\077\355\333\044\140\275\156\050\363\234\314\317
\136\263\077\336
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\021\144\301\211\260\044\261\214\261\007\176\211\236\121\236\231
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
```

END

CKA_SERIAL_NUMBER


```

MULTILINE_OCTAL
\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001
\353\055\334\344\326\344
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Trusted Network CA 2"
#
# Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9
# Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Not Valid Before:
  Thu Oct 06 08:39:56 2011
# Not Valid After : Sat Oct 06 08:39:56 2046
# Fingerprint (SHA-256):
B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04
# Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Network CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062
END
CKA_ID
  UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164

```

\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\041\326\320\112\117\045\017\311\062\067\374\252\136\022
\215\351

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\322\060\202\003\272\240\003\002\001\002\002\020\041
\326\320\112\117\045\017\311\062\067\374\252\136\022\215\351\060
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\201
\200\061\013\060\011\006\003\125\004\006\023\002\120\114\061\042
\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164\157
\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\044\060\042\006
\003\125\004\003\023\033\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101\040
\062\060\042\030\017\062\060\061\061\061\060\060\066\060\070\063
\071\065\066\132\030\017\062\060\064\066\061\060\060\066\060\070
\063\071\065\066\132\060\201\200\061\013\060\011\006\003\125\004
\006\023\002\120\114\061\042\060\040\006\003\125\004\012\023\031
\125\156\151\172\145\164\157\040\124\145\143\150\156\157\154\157
\147\151\145\163\040\123\056\101\056\061\047\060\045\006\003\125
\004\013\023\036\103\145\162\164\165\155\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\061\044\060\042\006\003\125\004\003\023\033\103\145\162
\164\165\155\040\124\162\165\163\164\145\144\040\116\145\164\167
\157\162\153\040\103\101\040\062\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\275\371\170\370\346\325\200
\014\144\235\206\033\226\144\147\077\042\072\036\165\001\175\357
\373\134\147\214\311\314\134\153\251\221\346\271\102\345\040\113
\233\332\233\173\271\231\135\331\233\200\113\327\204\100\053\047
\323\350\272\060\273\076\011\032\247\111\225\357\053\100\044\302
\227\307\247\356\233\045\357\250\012\000\227\205\132\252\235\334
\051\311\342\065\007\353\160\115\112\326\301\263\126\270\241\101
\070\233\321\373\061\177\217\340\137\341\261\077\017\216\026\111
\140\327\006\215\030\371\252\046\020\253\052\323\320\321\147\215
\033\106\276\107\060\325\056\162\321\305\143\332\347\143\171\104
\176\113\143\044\211\206\056\064\077\051\114\122\213\052\247\300
\342\221\050\211\271\300\133\371\035\331\347\047\255\377\232\002
\227\301\306\120\222\233\002\054\275\251\271\064\131\012\277\204
\112\377\337\376\263\237\353\331\236\340\230\043\354\246\153\167
\026\052\333\314\255\073\034\244\207\334\106\163\136\031\142\150

\105\127\344\220\202\102\273\102\326\360\141\340\301\243\075\146
\243\135\364\030\356\210\311\215\027\105\051\231\062\165\002\061
\356\051\046\310\153\002\346\265\142\105\177\067\025\132\043\150
\211\324\076\336\116\047\260\360\100\014\274\115\027\313\115\242
\263\036\320\006\132\335\366\223\317\127\165\231\365\372\206\032
\147\170\263\277\226\376\064\334\275\347\122\126\345\263\345\165
\173\327\101\221\005\334\135\151\343\225\015\103\271\374\203\226
\071\225\173\154\200\132\117\023\162\306\327\175\051\172\104\272
\122\244\052\325\101\106\011\040\376\042\240\266\133\060\215\274
\211\014\325\327\160\370\207\122\375\332\357\254\121\056\007\263
\116\376\320\011\332\160\357\230\372\126\346\155\333\265\127\113
\334\345\054\045\025\310\236\056\170\116\370\332\234\236\206\054
\312\127\363\032\345\310\222\213\032\202\226\172\303\274\120\022
\151\330\016\132\106\213\072\353\046\372\043\311\266\260\201\276
\102\000\244\370\326\376\060\056\307\322\106\366\345\216\165\375
\362\314\271\320\207\133\314\006\020\140\273\203\065\267\136\147
\336\107\354\231\110\361\244\241\025\376\255\214\142\216\071\125
\117\071\026\271\261\143\235\377\267\002\003\001\000\001\243\102
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\035\006\003\125\035\016\004\026\004\024\266\241
\124\071\002\303\240\077\216\212\274\372\324\370\034\246\321\072
\016\375\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\015\006\011\052\206\110\206\367\015\001\001\015\005
\000\003\202\002\001\000\161\245\016\316\344\351\277\077\070\325
\211\132\304\002\141\373\114\305\024\027\055\213\117\123\153\020
\027\374\145\204\307\020\111\220\336\333\307\046\223\210\046\157
\160\326\002\136\071\240\367\217\253\226\265\245\023\134\201\024
\155\016\201\202\021\033\212\116\306\117\245\335\142\036\104\337
\011\131\364\133\167\013\067\351\213\040\306\370\012\116\056\130
\034\353\063\320\317\206\140\311\332\373\200\057\236\114\140\204
\170\075\041\144\326\373\101\037\030\017\347\311\165\161\275\275
\134\336\064\207\076\101\260\016\366\271\326\077\011\023\226\024
\057\336\232\035\132\271\126\316\065\072\260\137\160\115\136\343
\051\361\043\050\162\131\266\253\302\214\146\046\034\167\054\046
\166\065\213\050\247\151\240\371\073\365\043\335\205\020\164\311
\220\003\126\221\347\257\272\107\324\022\227\021\042\343\242\111
\224\154\347\267\224\113\272\055\244\332\063\213\114\246\104\377
\132\074\306\035\144\330\265\061\344\246\074\172\250\127\013\333
\355\141\032\313\361\316\163\167\143\244\207\157\114\121\070\326
\344\137\307\237\266\201\052\344\205\110\171\130\136\073\370\333
\002\202\147\301\071\333\303\164\113\075\066\036\371\051\223\210
\150\133\250\104\031\041\360\247\350\201\015\054\350\223\066\264
\067\262\312\260\033\046\172\232\045\037\232\232\200\236\113\052
\077\373\243\232\376\163\062\161\302\236\306\162\341\212\150\047
\361\344\017\264\304\114\245\141\223\370\227\020\007\052\060\045
\251\271\310\161\270\357\150\314\055\176\365\340\176\017\202\250
\157\266\272\154\203\103\167\315\212\222\027\241\236\133\170\026
\075\105\342\063\162\335\341\146\312\231\323\311\305\046\375\015

```
\150\004\106\256\266\331\233\214\276\031\276\261\306\362\031\343
\134\002\312\054\330\157\112\007\331\311\065\332\100\165\362\304
\247\031\157\236\102\020\230\165\346\225\213\140\274\355\305\022
\327\212\316\325\230\134\126\226\003\305\356\167\006\065\377\317
\344\356\077\023\141\356\333\332\055\205\360\315\256\235\262\030
\011\105\303\222\241\162\027\374\107\266\240\013\054\361\304\336
\103\150\010\152\137\073\360\166\143\373\314\006\054\246\306\342
\016\265\271\276\044\217
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

#

Trust for "Certum Trusted Network CA 2"

Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9

Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

Not Valid Before: Thu Oct 06 08:39:56 2011

Not Valid After : Sat Oct 06 08:39:56 2046

Fingerprint (SHA-256):

B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04

Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum Trusted Network CA 2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\323\335\110\076\053\277\114\005\350\257\020\365\372\166\046\317
\323\334\060\222
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\155\106\236\331\045\155\010\043\133\136\164\175\036\047\333\362
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
```

```

\101\040\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\041\326\320\112\117\045\017\311\062\067\374\252\136\022
\215\351
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Hellenic Academic and Research Institutions RootCA 2015"
#
# Issuer: CN=Hellenic
Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research Institutions Cert.
Authority,L=Athens,C=GR
# Serial Number: 0 (0x0)
# Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR
# Not Valid Before: Tue Jul 07 10:11:21 2015
# Not Valid After : Sat Jun 30 10:11:21 2040
# Fingerprint (SHA-256):
A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36
# Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157
\157\164\103\101\040\062\060\061\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122

```

\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157
\157\164\103\101\040\062\060\061\065

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

\060\202\006\013\060\202\003\363\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156\163
\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154\145
\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144
\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164
\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165\164
\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003\023
\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145\155
\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150\040
\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157\157
\164\103\101\040\062\060\061\065\060\036\027\015\061\065\060\067
\060\067\061\060\061\061\062\061\132\027\015\064\060\060\066\063
\060\061\060\061\061\062\061\132\060\201\246\061\013\060\011\006
\003\125\004\006\023\002\107\122\061\017\060\015\006\003\125\004
\007\023\006\101\164\150\145\156\163\061\104\060\102\006\003\125
\004\012\023\073\110\145\154\154\145\156\151\143\040\101\143\141
\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141\162
\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163\040
\103\145\162\164\056\040\101\165\164\150\157\162\151\164\171\061
\100\060\076\006\003\125\004\003\023\067\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\122\157\157\164\103\101\040\062\060\061
\065\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\302\370\251\077\033\211\374\074\074\004\135\075\220\066
\260\221\072\171\074\146\132\357\155\071\001\111\032\264\267\317
\177\115\043\123\267\220\000\343\023\052\050\246\061\361\221\000
\343\050\354\256\041\101\316\037\332\375\175\022\133\001\203\017
\271\260\137\231\341\362\022\203\200\115\006\076\337\254\257\347

\241\210\153\061\257\360\213\320\030\063\270\333\105\152\064\364
\002\200\044\050\012\002\025\225\136\166\052\015\231\072\024\133
\366\313\313\123\274\023\115\001\210\067\224\045\033\102\274\042
\330\216\243\226\136\072\331\062\333\076\350\360\020\145\355\164
\341\057\247\174\257\047\064\273\051\175\233\266\317\011\310\345
\323\012\374\210\145\145\164\012\334\163\034\134\315\100\261\034
\324\266\204\214\114\120\317\150\216\250\131\256\302\047\116\202
\242\065\335\024\364\037\377\262\167\325\207\057\252\156\175\044
\047\347\306\313\046\346\345\376\147\007\143\330\105\015\335\072
\131\145\071\130\172\222\231\162\075\234\204\136\210\041\270\325
\364\054\374\331\160\122\117\170\270\275\074\053\213\225\230\365
\263\321\150\317\040\024\176\114\134\137\347\213\345\365\065\201
\031\067\327\021\010\267\146\276\323\112\316\203\127\000\072\303
\201\370\027\313\222\066\135\321\243\330\165\033\341\213\047\352
\172\110\101\375\105\031\006\255\047\231\116\301\160\107\335\265
\237\201\123\022\345\261\214\110\135\061\103\027\343\214\306\172
\143\226\113\051\060\116\204\116\142\031\136\074\316\227\220\245
\177\001\353\235\340\370\213\211\335\045\230\075\222\266\176\357
\331\361\121\121\175\055\046\310\151\131\141\340\254\152\270\052
\066\021\004\172\120\275\062\204\276\057\334\162\325\327\035\026
\107\344\107\146\040\077\364\226\305\257\216\001\172\245\017\172
\144\365\015\030\207\331\256\210\325\372\204\301\072\300\151\050
\055\362\015\150\121\252\343\245\167\306\244\220\016\241\067\213
\061\043\107\301\011\010\353\156\367\170\233\327\202\374\204\040
\231\111\031\266\022\106\261\373\105\125\026\251\243\145\254\234
\007\017\352\153\334\037\056\006\162\354\206\210\022\344\055\333
\137\005\057\344\360\003\323\046\063\347\200\302\315\102\241\027
\064\013\002\003\001\000\001\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003
\125\035\016\004\026\004\024\161\025\147\310\310\311\275\165\135
\162\320\070\030\152\235\363\161\044\124\013\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\165
\273\155\124\113\252\020\130\106\064\362\142\327\026\066\135\010
\136\325\154\310\207\275\264\056\106\362\061\370\174\352\102\265
\223\026\125\334\241\014\022\240\332\141\176\017\130\130\163\144
\162\307\350\105\216\334\251\362\046\077\306\171\214\261\123\010
\063\201\260\126\023\276\346\121\134\330\233\012\117\113\234\126
\123\002\351\117\366\015\140\352\115\102\125\350\174\033\041\041
\323\033\072\314\167\362\270\220\361\150\307\371\132\376\372\055
\364\277\311\365\105\033\316\070\020\052\067\212\171\243\264\343
\011\154\205\206\223\377\211\226\047\170\201\217\147\343\106\164
\124\216\331\015\151\342\112\364\115\164\003\377\262\167\355\225
\147\227\344\261\305\253\277\152\043\350\324\224\342\104\050\142
\304\113\342\360\330\342\051\153\032\160\176\044\141\223\173\117
\003\062\045\015\105\044\053\226\264\106\152\277\112\013\367\232
\217\301\254\032\305\147\363\157\064\322\372\163\143\214\357\026
\260\250\244\106\052\370\353\022\354\162\264\357\370\053\176\214

```
\122\300\213\204\124\371\057\076\343\125\250\334\146\261\331\341
\137\330\263\214\131\064\131\244\253\117\154\273\037\030\333\165
\253\330\313\222\315\224\070\141\016\007\006\037\113\106\020\361
\025\276\215\205\134\073\112\053\201\171\017\264\151\237\111\120
\227\115\367\016\126\135\300\225\152\302\066\303\033\150\311\365
\052\334\107\232\276\262\316\305\045\350\372\003\271\332\371\026
\156\221\204\365\034\050\310\374\046\314\327\034\220\126\247\137
\157\072\004\274\315\170\211\013\216\017\057\243\252\117\242\033
\022\075\026\010\100\017\361\106\114\327\252\173\010\301\012\365
\155\047\336\002\217\312\303\265\053\312\351\353\310\041\123\070
\245\314\073\330\167\067\060\242\117\331\157\321\362\100\255\101
\172\027\305\326\112\065\211\267\101\325\174\206\177\125\115\203
\112\245\163\040\300\072\257\220\361\232\044\216\331\216\161\312
\173\270\206\332\262\217\231\076\035\023\015\022\021\356\324\253
\360\351\025\166\002\344\340\337\252\040\036\133\141\205\144\100
\251\220\227\015\255\123\322\132\035\207\152\000\227\145\142\264
\276\157\152\247\365\054\102\355\062\255\266\041\236\276\274
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hellenic Academic and Research Institutions RootCA 2015"

Issuer: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR

Serial Number: 0 (0x0)

Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR

Not Valid Before: Tue Jul 07 10:11:21 2015

Not Valid After : Sat Jun 30 10:11:21 2040

Fingerprint (SHA-256):

A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36

Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\001\014\006\225\246\230\031\024\377\277\137\306\260\266\225\352
\051\351\022\246
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\312\377\342\333\003\331\313\113\351\017\255\204\375\173\030\316
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122
```



```
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157
\157\164\103\101\040\062\060\061\065
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\001\000
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Hellenic Academic and Research Institutions ECC RootCA 2015"

#

#

Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Serial Number: 0 (0x0)

Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Not Valid Before: Tue Jul 07 10:37:12 2015

Not Valid After : Sat Jun 30 10:37:12 2040

Fingerprint (SHA-256):

44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33

Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003
```

\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103
\103\040\122\157\157\164\103\101\040\062\060\061\065

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103
\103\040\122\157\157\164\103\101\040\062\060\061\065

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\000

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\303\060\202\002\112\240\003\002\001\002\002\001\000
\060\012\006\010\052\206\110\316\075\004\003\002\060\201\252\061
\013\060\011\006\003\125\004\006\023\002\107\122\061\017\060\015
\006\003\125\004\007\023\006\101\164\150\145\156\163\061\104\060
\102\006\003\125\004\012\023\073\110\145\154\154\145\156\151\143
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151
\157\156\163\040\103\145\162\164\056\040\101\165\164\150\157\162
\151\164\171\061\104\060\102\006\003\125\004\003\023\073\110\145
\154\154\145\156\151\143\040\101\143\141\144\145\155\151\143\040
\141\156\144\040\122\145\163\145\141\162\143\150\040\111\156\163
\164\151\164\165\164\151\157\156\163\040\105\103\103\040\122\157
\157\164\103\101\040\062\060\061\065\060\036\027\015\064\060\060\066
\067\060\067\061\060\063\067\061\062\132\027\015\064\060\060\066
\063\060\061\060\063\067\061\062\132\060\201\252\061\013\060\011
\006\003\125\004\006\023\002\107\122\061\017\060\015\006\003\125
\004\007\023\006\101\164\150\145\156\163\061\104\060\102\006\003
\125\004\012\023\073\110\145\154\154\145\156\151\143\040\101\143
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163
\040\103\145\162\164\056\040\101\165\164\150\157\162\151\164\171
\061\104\060\102\006\003\125\004\003\023\073\110\145\154\154\145
\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144

```
\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164
\165\164\151\157\156\163\040\105\103\103\040\122\157\157\164\103
\101\040\062\060\061\065\060\166\060\020\006\007\052\206\110\316
\075\002\001\006\005\053\201\004\000\042\003\142\000\004\222\240
\101\350\113\202\204\134\342\370\061\021\231\206\144\116\011\045
\057\235\101\057\012\256\065\117\164\225\262\121\144\153\215\153
\346\077\160\225\360\005\104\107\246\162\070\120\166\225\002\132
\216\256\050\236\371\055\116\231\357\054\110\157\114\045\051\350
\321\161\133\337\035\301\165\067\264\327\372\173\172\102\234\152
\012\126\132\174\151\013\252\200\011\044\154\176\301\106\243\102
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\035\006\003\125\035\016\004\026\004\024\264\042
\013\202\231\044\001\016\234\273\344\016\375\277\373\227\040\223
\231\052\060\012\006\010\052\206\110\316\075\004\003\002\003\147
\000\060\144\002\060\147\316\026\142\070\242\254\142\105\247\251
\225\044\300\032\047\234\062\073\300\300\325\272\251\347\370\004
\103\123\205\356\122\041\336\235\365\045\203\076\236\130\113\057
\327\147\023\016\041\002\060\005\341\165\001\336\150\355\052\037
\115\114\011\010\015\354\113\255\144\027\050\347\165\316\105\145
\162\041\027\313\042\101\016\214\023\230\070\232\124\155\233\312
\342\174\352\002\130\042\221
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hellenic Academic and Research Institutions ECC RootCA 2015"

Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Serial Number: 0 (0x0)

Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

Not Valid Before: Tue Jul 07 10:37:12 2015

Not Valid After : Sat Jun 30 10:37:12 2040

Fingerprint (SHA-256):

44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33

#

Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\237\361\161\215\222\325\232\363\175\164\227\264\274\157\204\150
```

```
\013\272\266\146
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\201\345\264\027\353\302\365\341\113\015\101\173\111\222\376\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103
\103\040\122\157\157\164\103\101\040\062\060\061\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ISRG Root X1"
#
# Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00
# Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Not Valid Before: Thu Jun 04 11:04:38 2015
# Not Valid After : Mon Jun 04 11:04:38 2035
# Fingerprint (SHA-256):
96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6
#
Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145

```

```
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143
\202\213\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\153\060\202\003\123\240\003\002\001\002\002\021\000
\202\020\317\260\322\100\343\131\104\143\340\273\143\202\213\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\051
\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156\145
\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145\141
\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003\125
\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130\061
\060\036\027\015\061\065\060\066\060\064\061\061\060\064\063\070
\132\027\015\063\065\060\066\060\064\061\061\060\064\063\070\132
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\255\350\044\163\364\024\067\363\233\236\053\127\050\034
\207\276\334\267\337\070\220\214\156\074\346\127\240\170\367\165
\302\242\376\365\152\156\366\000\117\050\333\336\150\206\154\104
\223\266\261\143\375\024\022\153\277\037\322\352\061\233\041\176
\321\063\074\272\110\365\335\171\337\263\270\377\022\361\041\232
\113\301\212\206\161\151\112\146\146\154\217\176\074\160\277\255
\051\042\006\363\344\300\346\200\256\342\113\217\267\231\176\224
\003\237\323\107\227\174\231\110\043\123\350\070\256\117\012\157
\203\056\321\111\127\214\200\164\266\332\057\320\070\215\173\003
\160\041\033\165\362\060\074\372\217\256\335\332\143\253\353\026
\117\302\216\021\113\176\317\013\350\377\265\167\056\364\262\173
\112\340\114\022\045\014\160\215\003\051\240\341\123\044\354\023
```

\331\356\031\277\020\263\112\214\077\211\243\141\121\336\254\207
\007\224\364\143\161\354\056\342\157\133\230\201\341\211\134\064
\171\154\166\357\073\220\142\171\346\333\244\232\057\046\305\320
\020\341\016\336\331\020\216\026\373\267\367\250\367\307\345\002
\007\230\217\066\010\225\347\342\067\226\015\066\165\236\373\016
\162\261\035\233\274\003\371\111\005\330\201\335\005\264\052\326
\101\351\254\001\166\225\012\017\330\337\325\275\022\037\065\057
\050\027\154\322\230\301\250\011\144\167\156\107\067\272\316\254
\131\136\150\235\177\162\326\211\305\006\101\051\076\131\076\335
\046\365\044\311\021\247\132\243\114\100\037\106\241\231\265\247
\072\121\156\206\073\236\175\162\247\022\005\170\131\355\076\121
\170\025\013\003\217\215\320\057\005\262\076\173\112\034\113\163
\005\022\374\306\352\340\120\023\174\103\223\164\263\312\164\347
\216\037\001\010\320\060\324\133\161\066\264\007\272\301\060\060
\134\110\267\202\073\230\246\175\140\212\242\243\051\202\314\272
\275\203\004\033\242\203\003\101\241\326\005\361\033\302\266\360
\250\174\206\073\106\250\110\052\210\334\166\232\166\277\037\152
\245\075\031\217\353\070\363\144\336\310\053\015\012\050\377\367
\333\342\025\102\324\042\320\047\135\341\171\376\030\347\160\210
\255\116\346\331\213\072\306\335\047\121\156\377\274\144\365\063
\103\117\002\003\001\000\001\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\171\264\131\346\173\266\345\344\001
\163\200\010\210\310\032\130\366\351\233\156\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\125
\037\130\251\274\262\250\120\320\014\261\330\032\151\040\047\051
\010\254\141\165\134\212\156\370\202\345\151\057\325\366\126\113
\271\270\163\020\131\323\041\227\176\347\114\161\373\262\322\140
\255\071\250\013\352\027\041\126\205\361\120\016\131\353\316\340
\131\351\272\311\025\357\206\235\217\204\200\366\344\351\221\220
\334\027\233\142\033\105\360\146\225\322\174\157\302\352\073\357
\037\317\313\326\256\047\361\251\260\310\256\375\175\176\232\372
\042\004\353\377\331\177\352\221\053\042\261\027\016\217\362\212
\064\133\130\330\374\001\311\124\271\270\046\314\212\210\063\211
\114\055\204\074\202\337\356\226\127\005\272\054\273\367\304\267
\307\116\073\202\276\061\310\042\163\163\222\321\302\200\244\071
\071\020\063\043\202\114\074\237\206\262\125\230\035\276\051\206
\214\042\233\236\342\153\073\127\072\202\160\115\334\011\307\211
\313\012\007\115\154\350\135\216\311\357\316\253\307\273\265\053
\116\105\326\112\320\046\314\345\162\312\010\152\245\225\343\025
\241\367\244\355\311\054\137\245\373\377\254\050\002\056\276\327
\173\273\343\161\173\220\026\323\007\136\106\123\174\067\007\102
\214\323\304\226\234\325\231\265\052\340\225\032\200\110\256\114
\071\007\316\314\107\244\122\225\053\272\270\373\255\322\063\123
\175\345\035\115\155\325\241\261\307\102\157\346\100\047\065\134
\243\050\267\007\215\347\215\063\220\347\043\237\373\120\234\171
\154\106\325\264\025\263\226\156\176\233\014\226\072\270\122\055

```
\077\326\133\341\373\010\302\204\376\044\250\243\211\332\254\152
\341\030\052\261\250\103\141\133\323\037\334\073\215\166\362\055
\350\215\165\337\027\063\154\075\123\373\173\313\101\137\377\334
\242\320\141\070\341\226\270\254\135\213\067\327\165\325\063\300
\231\021\256\235\101\301\162\165\204\276\002\101\102\137\147\044
\110\224\321\233\047\276\007\077\271\270\117\201\164\121\341\172
\267\355\235\043\342\276\340\325\050\004\023\074\061\003\236\335
\172\154\217\306\007\030\306\177\336\107\216\077\050\236\004\006
\317\245\124\064\167\275\354\211\233\351\027\103\337\133\333\137
\376\216\036\127\242\315\100\235\176\142\042\332\336\030\047
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "ISRG Root X1"

Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US

Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00

Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US

Not Valid Before: Thu Jun 04 11:04:38 2015

Not Valid After : Mon Jun 04 11:04:38 2035

Fingerprint (SHA-256):

96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6

Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ISRG Root X1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\312\275\052\171\241\007\152\061\362\035\045\066\065\313\003\235
\103\051\245\350
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\014\322\371\340\332\027\163\351\355\206\115\245\343\160\347\116
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143
\202\213\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AC RAIZ FNMT-RCM"
#
# Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07
# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Not Valid Before: Wed Oct 29 15:59:56 2008
# Not Valid After : Tue Jan 01 00:00:00 2030
# Fingerprint (SHA-256):
EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA
#
Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AC RAIZ FNMT-RCM"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
\007
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\203\060\202\003\153\240\003\002\001\002\002\017\135
\223\215\060\147\066\310\006\035\032\307\124\204\151\007\060\015

```


\006\011\052\206\110\206\367\015\001\001\013\005\000\060\073\061
\013\060\011\006\003\125\004\006\023\002\105\123\061\021\060\017
\006\003\125\004\012\014\010\106\116\115\124\055\122\103\115\061
\031\060\027\006\003\125\004\013\014\020\101\103\040\122\101\111
\132\040\106\116\115\124\055\122\103\115\060\036\027\015\060\070
\061\060\062\071\061\065\065\071\065\066\132\027\015\063\060\060
\061\060\061\060\060\060\060\060\060\132\060\073\061\013\060\011
\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003\125
\004\012\014\010\106\116\115\124\055\122\103\115\061\031\060\027
\006\003\125\004\013\014\020\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\272\161\200\172\114\206\156\177
\310\023\155\300\306\175\034\000\227\217\054\014\043\273\020\232
\100\251\032\267\207\210\370\233\126\152\373\346\173\216\213\222
\216\247\045\135\131\021\333\066\056\267\121\027\037\251\010\037
\004\027\044\130\252\067\112\030\337\345\071\324\127\375\327\301
\054\221\001\221\342\042\324\003\300\130\374\167\107\354\217\076
\164\103\272\254\064\215\115\070\166\147\216\260\310\157\060\063
\130\161\134\264\365\153\156\324\001\120\270\023\176\154\112\243
\111\321\040\031\356\274\300\051\030\145\247\336\376\357\335\012
\220\041\347\032\147\222\102\020\230\137\117\060\274\076\034\105
\264\020\327\150\100\024\300\100\372\347\167\027\172\346\013\217
\145\133\074\331\232\122\333\265\275\236\106\317\075\353\221\005
\002\300\226\262\166\114\115\020\226\073\222\372\234\177\017\231
\337\276\043\065\105\036\002\134\376\265\250\233\231\045\332\136
\363\042\303\071\365\344\052\056\323\306\037\304\154\252\305\034
\152\001\005\112\057\322\305\301\250\064\046\135\146\245\322\002
\041\371\030\267\006\365\116\231\157\250\253\114\121\350\317\120
\030\305\167\310\071\011\054\111\222\062\231\250\273\027\027\171
\260\132\305\346\243\304\131\145\107\065\203\136\251\350\065\013
\231\273\344\315\040\306\233\112\006\071\265\150\374\042\272\356
\125\214\053\116\352\363\261\343\374\266\231\232\325\102\372\161
\115\010\317\207\036\152\161\175\371\323\264\351\245\161\201\173
\302\116\107\226\245\366\166\205\243\050\217\351\200\156\201\123
\245\155\137\270\110\371\302\371\066\246\056\111\377\270\226\302
\214\007\263\233\210\130\374\353\033\034\336\055\160\342\227\222
\060\241\211\343\274\125\250\047\326\113\355\220\255\213\372\143
\045\131\055\250\065\335\312\227\063\274\345\315\307\235\321\354
\357\136\016\112\220\006\046\143\255\271\331\065\055\007\272\166
\145\054\254\127\217\175\364\007\224\327\201\002\226\135\243\007
\111\325\172\320\127\371\033\347\123\106\165\252\260\171\102\313
\150\161\010\351\140\275\071\151\316\364\257\303\126\100\307\255
\122\242\011\344\157\206\107\212\037\353\050\047\135\203\040\257
\004\311\154\126\232\213\106\365\002\003\001\000\001\243\201\203
\060\201\200\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\367

\175\305\375\304\350\232\033\167\144\247\365\035\240\314\277\207
\140\232\155\060\076\006\003\125\035\040\004\067\060\065\060\063
\006\004\125\035\040\000\060\053\060\051\006\010\053\006\001\005
\005\007\002\001\026\035\150\164\164\160\072\057\057\167\167\167
\056\143\145\162\164\056\146\156\155\164\056\145\163\057\144\160
\143\163\057\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\002\001\000\007\220\112\337\363\043\116\360\303
\234\121\145\233\234\042\242\212\014\205\363\163\051\153\115\376
\001\342\251\014\143\001\277\004\147\245\235\230\137\375\001\023
\372\354\232\142\351\206\376\266\142\322\156\114\224\373\300\165
\105\174\145\014\370\262\067\317\254\017\317\215\157\371\031\367
\217\354\036\362\160\236\360\312\270\357\267\377\166\067\166\133
\366\156\210\363\257\142\062\042\223\015\072\152\216\024\146\014
\055\123\164\127\145\036\325\262\335\043\201\073\245\146\043\047
\147\011\217\341\167\252\103\315\145\121\010\355\121\130\376\346
\071\371\313\107\204\244\025\361\166\273\244\356\244\073\304\137
\357\262\063\226\021\030\267\311\145\276\030\341\243\244\334\372
\030\371\323\274\023\233\071\172\064\272\323\101\373\372\062\212
\052\267\053\206\013\151\203\070\276\315\212\056\013\160\255\215
\046\222\356\036\365\001\053\012\331\326\227\233\156\340\250\031
\034\072\041\213\014\036\100\255\003\347\335\146\176\365\271\040
\015\003\350\226\371\202\105\324\071\340\240\000\135\327\230\346
\175\236\147\163\303\232\052\367\253\213\241\072\024\357\064\274
\122\016\211\230\232\004\100\204\035\176\105\151\223\127\316\353
\316\370\120\174\117\034\156\004\103\233\371\326\073\043\030\351
\352\216\321\115\106\215\361\073\344\152\312\272\373\043\267\233
\372\231\001\051\132\130\132\055\343\371\324\155\016\046\255\301
\156\064\274\062\370\014\005\372\145\243\333\073\067\203\042\351
\326\334\162\063\375\135\362\040\275\166\074\043\332\050\367\371
\033\353\131\144\325\334\137\162\176\040\374\315\211\265\220\147
\115\142\172\077\116\255\035\303\071\376\172\364\050\026\337\101
\366\110\200\005\327\017\121\171\254\020\253\324\354\003\146\346
\152\260\272\061\222\102\100\152\276\072\323\162\341\152\067\125
\274\254\035\225\267\151\141\362\103\221\164\346\240\323\012\044
\106\241\010\257\326\332\105\031\226\324\123\035\133\204\171\360
\300\367\107\357\213\217\305\006\256\235\114\142\235\377\106\004
\370\323\311\266\020\045\100\165\376\026\252\311\112\140\206\057
\272\357\060\167\344\124\342\270\204\231\130\200\252\023\213\121
\072\117\110\366\213\266\263

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AC RAIZ FNMT-RCM"

Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES

#

```
Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07
# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Not Valid Before: Wed Oct 29 15:59:56 2008
# Not Valid After : Tue Jan 01 00:00:00 2030
# Fingerprint (SHA-256):
EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA
# Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AC RAIZ FNMT-RCM"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\354\120\065\007\262\025\304\225\142\031\342\250\232\133\102\231
\054\114\054\040
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\342\011\004\264\323\275\321\240\024\375\032\322\107\304\127\035
END
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
\007
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 1"
#
# Issuer: CN=Amazon Root CA 1,O=Amazon,C=US
# Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca
# Subject: CN=Amazon Root CA 1,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sun Jan 17 00:00:00 2038
# Fingerprint (SHA-256):
8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E
# Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103
\346\226\066\133\312
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\101\060\202\002\051\240\003\002\001\002\002\023\006
\154\237\317\231\277\214\012\071\342\360\170\212\103\346\226\066
\133\312\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172
\157\156\040\122\157\157\164\040\103\101\040\061\060\036\027\015
\061\065\060\065\062\066\060\060\060\060\060\060\132\027\015\063
\070\060\061\061\067\060\060\060\060\060\060\132\060\071\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157
\157\164\040\103\101\040\061\060\202\001\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060
\202\001\012\002\202\001\001\000\262\170\200\161\312\170\325\343
\161\257\107\200\120\164\175\156\330\327\210\166\364\231\150\367
\130\041\140\371\164\204\001\057\254\002\055\206\323\240\103\172
\116\262\244\320\066\272\001\276\215\333\110\310\007\027\066\114
\364\356\210\043\307\076\353\067\365\265\031\370\111\150\260\336
\327\271\166\070\035\141\236\244\376\202\066\245\345\112\126\344
\105\341\371\375\264\026\372\164\332\234\233\065\071\057\372\260
\040\120\006\154\172\320\200\262\246\371\257\354\107\031\217\120
\070\007\334\242\207\071\130\370\272\325\251\371\110\147\060\226
\356\224\170\136\157\211\243\121\300\060\206\146\241\105\146\272
\124\353\243\303\221\371\110\334\377\321\350\060\055\175\055\164
```

\160\065\327\210\044\367\236\304\131\156\273\163\207\027\362\062
\106\050\270\103\372\267\035\252\312\264\362\237\044\016\055\113
\367\161\134\136\151\377\352\225\002\313\070\212\256\120\070\157
\333\373\055\142\033\305\307\036\124\341\167\340\147\310\017\234
\207\043\326\077\100\040\177\040\200\304\200\114\076\073\044\046
\216\004\256\154\232\310\252\015\002\003\001\000\001\243\102\060
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\206\060\035\006\003\125\035\016\004\026\004\024\204\030\314
\205\064\354\274\014\224\224\056\010\131\234\307\262\020\116\012
\010\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000
\003\202\001\001\000\230\362\067\132\101\220\241\032\305\166\121
\050\040\066\043\016\256\346\050\273\252\370\224\256\110\244\060
\177\033\374\044\215\113\264\310\241\227\366\266\361\172\160\310
\123\223\314\010\050\343\230\045\317\043\244\371\336\041\323\174
\205\011\255\116\232\165\072\302\013\152\211\170\166\104\107\030
\145\154\215\101\216\073\177\232\313\364\265\247\120\327\005\054
\067\350\003\113\255\351\141\240\002\156\365\362\360\305\262\355
\133\267\334\372\224\134\167\236\023\245\177\122\255\225\362\370
\223\073\336\213\134\133\312\132\122\133\140\257\024\367\113\357
\243\373\237\100\225\155\061\124\374\102\323\307\106\037\043\255
\331\017\110\160\232\331\165\170\161\321\162\103\064\165\156\127
\131\302\002\134\046\140\051\317\043\031\026\216\210\103\245\324
\344\313\010\373\043\021\103\350\103\051\162\142\241\251\135\136
\010\324\220\256\270\330\316\024\302\320\125\362\206\366\304\223
\103\167\146\141\300\271\350\101\327\227\170\140\003\156\112\162
\256\245\321\175\272\020\236\206\154\033\212\271\131\063\370\353
\304\220\276\361\271

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Amazon Root CA 1"

Issuer: CN=Amazon Root CA 1,O=Amazon,C=US

Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca

Subject: CN=Amazon Root CA 1,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After : Sun Jan 17 00:00:00 2038

Fingerprint (SHA-256):

8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E

Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Amazon"

```

Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\215\247\371\145\354\136\374\067\221\017\034\156\131\375\301\314
\152\156\336\026
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\103\306\277\256\354\376\255\057\030\306\210\150\060\374\310\346
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103
\346\226\066\133\312
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 2"
#
# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US
# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37
#
# Subject: CN=Amazon Root CA 2,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4
# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
END
CKA_ID UTF8 "0"

```

CKA_ISSUER MULTILINE_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370
\133\046\273\212\067

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\101\060\202\003\051\240\003\002\001\002\002\023\006
\154\237\322\226\065\206\237\012\017\345\206\170\370\133\046\273
\212\067\060\015\006\011\052\206\110\206\367\015\001\001\014\005
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172
\157\156\040\122\157\157\164\040\103\101\040\062\060\036\027\015
\061\065\060\065\062\066\060\060\060\060\060\132\027\015\064
\060\060\065\062\066\060\060\060\060\060\132\060\071\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157
\157\164\040\103\101\040\062\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\255\226\237\055\234\112\114\112
\201\171\121\231\354\212\313\153\140\121\023\274\115\155\006\374
\260\010\215\335\031\020\152\307\046\014\065\330\300\157\040\204
\351\224\261\233\205\003\303\133\333\112\350\310\370\220\166\331
\133\117\343\114\350\006\066\115\314\232\254\075\014\220\053\222
\324\006\031\140\254\067\104\171\205\201\202\255\132\067\340\015
\314\235\246\114\122\166\352\103\235\267\004\321\120\366\125\340
\325\322\246\111\205\351\067\351\312\176\256\134\225\115\110\232
\077\256\040\132\155\210\225\331\064\270\122\032\103\220\260\277
\154\005\271\266\170\267\352\320\344\072\074\022\123\142\377\112
\362\173\276\065\005\251\022\064\343\363\144\164\142\054\075\000
\111\132\050\376\062\104\273\207\335\145\047\002\161\073\332\112
\367\037\332\315\367\041\125\220\117\017\354\256\202\341\237\153
\331\105\323\273\360\137\207\355\074\054\071\206\332\077\336\354
\162\125\353\171\243\255\333\335\174\260\272\034\316\374\336\117
\065\166\317\017\370\170\037\152\066\121\106\047\141\133\351\236
\317\360\242\125\175\174\045\212\157\057\264\305\317\204\056\053
\375\015\121\020\154\373\137\033\274\033\176\305\256\073\230\001
\061\222\377\013\127\364\232\262\271\127\351\253\357\015\166\321
\360\356\364\316\206\247\340\156\351\264\151\241\337\151\366\063
\306\151\056\227\023\236\245\207\260\127\020\201\067\311\123\263
\273\177\366\222\321\234\320\030\364\222\156\332\203\117\246\143

\231\114\245\373\136\357\041\144\172\040\137\154\144\205\025\313
\067\351\142\014\013\052\026\334\001\056\062\332\076\113\365\236
\072\366\027\100\224\357\236\221\010\206\372\276\143\250\132\063
\354\313\164\103\225\371\154\151\122\066\307\051\157\374\125\003
\134\037\373\237\275\107\353\347\111\107\225\013\116\211\042\011
\111\340\365\141\036\361\277\056\212\162\156\200\131\377\127\072
\371\165\062\243\116\137\354\355\050\142\331\115\163\362\314\201
\027\140\355\315\353\334\333\247\312\305\176\002\275\362\124\010
\124\375\264\055\011\054\027\124\112\230\321\124\341\121\147\010
\322\355\156\176\157\077\322\055\201\131\051\146\313\220\071\225
\021\036\164\047\376\335\353\257\002\003\001\000\001\243\102\060
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\206\060\035\006\003\125\035\016\004\026\004\024\260\014\360
\114\060\364\005\130\002\110\375\063\345\122\257\113\204\343\146
\122\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000
\003\202\002\001\000\252\250\200\217\016\170\243\340\242\324\315
\346\365\230\172\073\352\000\003\260\227\016\223\274\132\250\366
\054\214\162\207\251\261\374\177\163\375\143\161\170\245\207\131
\317\060\341\015\020\262\023\132\155\202\365\152\346\200\237\240
\005\013\150\344\107\153\307\152\337\266\375\167\062\162\345\030
\372\011\364\240\223\054\135\322\214\165\205\166\145\220\014\003
\171\267\061\043\143\255\170\203\011\206\150\204\312\377\371\317
\046\232\222\171\347\315\113\305\347\141\247\027\313\363\251\022
\223\223\153\247\350\057\123\222\304\140\130\260\314\002\121\030
\133\205\215\142\131\143\266\255\264\336\232\373\046\367\000\047
\300\135\125\067\164\231\311\120\177\343\131\056\104\343\054\045
\356\354\114\062\167\264\237\032\351\113\135\040\305\332\375\034
\207\026\306\103\350\324\273\046\232\105\160\136\251\013\067\123
\342\106\173\047\375\340\106\362\211\267\314\102\266\313\050\046
\156\331\245\311\072\310\101\023\140\367\120\214\025\256\262\155
\032\025\032\127\170\346\222\052\331\145\220\202\077\154\002\257
\256\022\072\047\226\066\004\327\035\242\200\143\251\233\361\345
\272\264\174\024\260\116\311\261\037\164\137\070\366\121\352\233
\372\054\242\021\324\251\055\047\032\105\261\257\262\116\161\015
\300\130\106\326\151\006\313\123\313\263\376\153\101\315\101\176
\175\114\017\174\162\171\172\131\315\136\112\016\254\233\251\230
\163\171\174\264\364\314\271\270\007\014\262\164\134\270\307\157
\210\241\220\247\364\252\371\277\147\072\364\032\025\142\036\267
\237\276\075\261\051\257\147\241\022\362\130\020\031\123\003\060
\033\270\032\211\366\234\275\227\003\216\243\011\363\035\213\041
\361\264\337\344\034\321\237\145\002\006\352\134\326\023\263\204
\357\242\245\134\214\167\051\247\150\300\153\256\100\322\250\264
\352\315\360\215\113\070\234\031\232\033\050\124\270\211\220\357
\312\165\201\076\036\362\144\044\307\030\257\116\377\107\236\007
\366\065\145\244\323\012\126\377\365\027\144\154\357\250\042\045
\111\223\266\337\000\027\332\130\176\135\356\305\033\260\321\321
\137\041\020\307\371\363\272\002\012\047\007\305\361\326\307\323


```

\340\373\011\140\154
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Amazon Root CA 2"
# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US
# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37
#
# Subject: CN=Amazon Root CA 2,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4
# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\132\214\357\105\327\246\230\131\166\172\214\213\104\226\265\170
\317\107\113\032
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\310\345\215\316\250\102\342\172\300\052\134\174\236\046\277\146
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370
\133\046\273\212\067
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 3"
#

```

```
# Issuer: CN=Amazon Root CA 3,O=Amazon,C=US
# Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a
# Subject: CN=Amazon Root CA 3,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4
# Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350
\236\166\003\362\112
END
CKA_VALUE MULTILINE_OCTAL
\060\202\001\266\060\202\001\133\240\003\002\001\002\002\023\006
\154\237\325\164\227\066\146\077\073\013\232\331\350\236\166\003
\362\112\060\012\006\010\052\206\110\316\075\004\003\002\060\071
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060
\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031
\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040
\122\157\157\164\040\103\101\040\063\060\036\027\015\061\065\060
\065\062\066\060\060\060\060\060\132\027\015\064\060\060\065
\062\066\060\060\060\060\060\060\132\060\071\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040
\103\101\040\063\060\131\060\023\006\007\052\206\110\316\075\002
\001\006\010\052\206\110\316\075\003\001\007\003\102\000\004\051
\227\247\306\101\177\300\015\233\350\001\033\126\306\362\122\245
```

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\272\055\262\022\350\322\056\327\372\311\305\330\252\155\037\163
\201\073\073\230\153\071\174\063\245\305\116\206\216\200\027\150
\142\105\127\175\104\130\035\263\067\345\147\010\353\146\336\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\206\060\035\006\003\125\035\016\004\026\004\024\253
\266\333\327\006\236\067\254\060\206\007\221\160\307\234\304\031
\261\170\300\060\012\006\010\052\206\110\316\075\004\003\002\003
\111\000\060\106\002\041\000\340\205\222\243\027\267\215\371\053
\006\245\223\254\032\230\150\141\162\372\341\241\320\373\034\170
\140\246\103\231\305\270\304\002\041\000\234\002\357\361\224\234
\263\226\371\353\306\052\370\266\054\376\072\220\024\026\327\214
\143\044\110\034\337\060\175\325\150\073
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Amazon Root CA 3"

Issuer: CN=Amazon Root CA 3,O=Amazon,C=US

Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a

Subject: CN=Amazon Root CA 3,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After

: Sat May 26 00:00:00 2040

Fingerprint (SHA-256):

18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4

Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Amazon Root CA 3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\015\104\335\214\074\214\032\032\130\165\144\201\351\017\056\052
\377\263\322\156
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\240\324\357\013\367\265\330\111\225\052\354\365\304\374\201\207
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350
\236\166\003\362\112

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Amazon Root CA 4"

#

Issuer: CN=Amazon Root CA 4,O=Amazon,C=US

Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e

Subject: CN=Amazon Root CA 4,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After : Sat May 26 00:00:00 2040

Fingerprint (SHA-256):

E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92

Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Amazon Root CA 4"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156

\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157

\156\040\122\157\157\164\040\103\101\040\064

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156

\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157

\156\040\122\157\157\164\040\103\101\040\064

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173

\054\310\032\301\016

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\362\060\202\001\170\240\003\002\001\002\002\023\006

\154\237\327\301\273\020\114\051\103\345\161\173\173\054\310\032

\301\016\060\012\006\010\052\206\110\316\075\004\003\003\060\071

```
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060
\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031
\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040
\122\157\157\164\040\103\101\040\064\060\036\027\015\061\065\060
\065\062\066\060\060\060\060\060\132\027\015\064\060\060\065
\062\066\060\060\060\060\060\132\060\071\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040
\103\101\040\064\060\166\060\020\006\007\052\206\110\316\075\002
\001\006\005\053\201\004\000\042\003\142\000\004\322\253\212\067
\117\243\123\015\376\301\212\173\113\250\173\106\113\143\260\142
\366\055\033\333\010\161\041\322\000\350\143\275\232\047\373\360
\071\156\135\352\075\245\311\201\252\243\133\040\230\105\135\026
\333\375\350\020\155\343\234\340\343\275\137\204\142\363\160\144
\063\240\313\044\057\160\272\210\241\052\240\165\370\201\256\142
\006\304\201\333\071\156\051\260\036\372\056\134\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\206\060\035\006\003\125\035\016\004\026\004\024\323\354\307\072
\145\156\314\341\332\166\232\126\373\234\363\206\155\127\345\201
\060\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060
\145\002\060\072\213\041\361\275\176\021\255\320\357\130\226\057
\326\353\235\176\220\215\053\317\146\125\303\054\343\050\251\160
\012\107\016\360\067\131\022\377\055\231\224\050\116\052\117\065
\115\063\132\002\061\000\352\165\000\116\073\304\072\224\022\221
\311\130\106\235\041\023\162\247\210\234\212\344\114\112\333\226
\324\254\213\153\153\111\022\123\063\255\327\344\276\044\374\265
\012\166\324\245\274\020
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Amazon Root CA 4"

Issuer: CN=Amazon Root CA 4,O=Amazon,C=US

Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e

Subject:

CN=Amazon Root CA 4,O=Amazon,C=US

Not Valid Before: Tue May 26 00:00:00 2015

Not Valid After : Sat May 26 00:00:00 2040

Fingerprint (SHA-256):

E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92

Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\366\020\204\007\326\370\273\147\230\014\302\342\104\302\353\256
\034\357\143\276
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\211\274\047\325\353\027\215\006\152\151\325\375\211\107\264\315
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173
\054\310\032\301\016
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 1 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98
# Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9
# Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 1 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156

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\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320
\363\230

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\044
\062\165\362\035\057\322\011\063\367\264\152\312\320\363\230\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145
\143\040\103\154\141\163\163\040\061\040\120\165\142\154\151\143
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060
\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074

\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\061
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\307\071\327
\111\144\251\231\202\042\114\352\105\331\007\026\343\173\364\203
\350\231\163\372\153\261\066\340\232\167\240\100\302\201\215\001
\307\314\214\275\217\175\367\171\343\172\114\003\115\331\373\375
\207\070\050\054\335\232\213\124\010\333\147\373\033\214\376\050
\222\057\276\267\262\110\247\201\241\330\136\210\303\314\071\100
\101\132\321\334\345\332\020\237\057\332\001\115\375\056\106\174
\371\056\047\012\151\067\356\221\243\033\152\314\104\277\033\307
\303\324\021\262\120\140\227\011\275\056\042\365\101\204\146\237
\315\100\246\251\000\200\301\037\225\222\237\336\363\110\357\333
\035\167\141\374\177\337\356\226\244\162\320\266\076\377\170\047
\257\313\222\025\151\010\333\143\020\342\346\227\254\156\334\254
\366\242\316\036\107\231\271\211\267\022\346\241\324\315\131\021
\147\303\157\205\330\102\116\050\276\131\125\131\004\225\253\217
\067\200\277\015\360\374\037\072\144\061\130\201\170\327\342\065
\366\040\077\051\270\217\026\156\076\110\334\265\114\007\341\362
\032\352\176\012\171\326\250\275\353\135\206\053\115\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\063\101\350\310\071\022\025\223\110\362\226\062\056\132
\365\332\224\137\123\140\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\001\001\000\025\343\163\127\261\027
\266\137\111\151\104\246\366\136\172\147\254\322\336\165\111\253
\376\045\125\307\072\311\104\025\020\156\277\061\153\313\331\007
\223\177\034\205\143\000\343\062\022\340\314\313\373\071\154\217
\342\123\342\074\100\063\331\244\214\107\346\255\130\373\211\257
\343\336\206\051\126\064\054\105\270\022\372\104\211\156\055\024
\045\050\044\001\145\326\352\122\254\005\156\126\022\011\075\320
\164\364\327\275\006\312\250\072\215\126\102\372\215\162\076\164
\361\003\162\337\207\033\136\016\172\125\226\054\070\267\230\205
\315\115\063\104\311\224\217\132\061\060\067\113\243\072\022\263
\347\066\321\041\150\113\055\070\346\123\256\034\045\126\010\126
\003\147\204\235\306\303\316\044\142\307\114\066\317\260\006\104
\267\365\137\002\335\331\124\351\057\220\116\172\310\116\203\100
\014\232\227\074\067\277\277\354\366\360\264\205\167\050\301\013
\310\147\202\020\027\070\242\267\006\352\233\277\072\370\351\043
\007\277\164\340\230\070\025\125\170\356\162\000\134\031\243\364
\322\063\340\377\275\321\124\071\051\017

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

For Email Distrust After: Wed Aug

31 00:00:00 2022

CKA_NSS_EMAIL_DISTRUST_AFTER MULTILINE_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

Trust for "Symantec Class 1 Public Primary Certification Authority - G6"

Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust Network,O=Symantec Corporation,C=US

Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98

Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust Network,O=Symantec Corporation,C=US

Not Valid Before: Tue Oct 18 00:00:00 2011

Not Valid After : Tue Dec 01 23:59:59 2037

Fingerprint (SHA-256):

9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9

Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Symantec Class 1 Public Primary Certification Authority - G6"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\121\177\141\036\051\221\153\123\202\373\162\347\104\331\215\303
\314\123\155\144

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\057\250\264\332\366\144\113\036\202\371\106\075\124\032\174\260

END

CKA_ISSUER MULTILINE_OCTAL

\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320
\363\230

END

CKA_TRUST_SERVER_AUTH

```

CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 2 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41
# Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0
# Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151

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\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261
\377\101
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\144
\202\236\374\067\036\164\135\374\227\377\227\310\261\377\101\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145
\143\040\103\154\141\163\163\040\062\040\120\165\142\154\151\143
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060
\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074
\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\062
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\001\017\000\060\202\001\012\002\202\001\001\000\315\314\351
\005\310\143\205\313\077\100\143\027\275\030\372\065\346\004\147
\127\145\230\051\244\117\311\134\217\017\064\322\370\332\250\023
\142\252\270\036\120\147\170\260\026\114\240\071\251\025\172\256
\355\322\242\300\360\220\067\051\030\046\134\350\015\074\266\154
\111\077\301\340\334\331\113\266\024\031\013\246\323\226\341\326
\011\343\031\046\034\371\037\145\113\371\032\103\034\000\203\326
\320\252\111\242\324\333\346\142\070\272\120\024\103\155\371\061
\370\126\026\331\070\002\221\317\353\154\335\273\071\116\231\341
\060\147\105\361\324\360\215\303\337\376\362\070\007\041\175\000
\136\126\104\263\344\140\275\221\053\234\253\133\004\162\017\262
\050\331\162\253\005\040\102\045\251\133\003\152\040\020\314\061
\360\053\332\065\054\320\373\232\227\116\360\202\113\053\330\137
\066\243\013\055\257\143\015\035\045\177\241\156\134\142\241\215
\050\076\241\374\034\040\370\001\057\272\125\232\021\260\031\322

```
\310\120\171\153\016\152\005\327\252\004\066\262\243\362\341\137
\167\247\167\234\345\036\334\351\337\152\301\145\135\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\207\214\040\225\310\230\112\321\326\200\006\112\220\064
\104\337\034\115\277\260\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\001\001\000\201\216\262\245\146\226
\267\041\245\266\357\157\043\132\137\333\201\305\102\245\170\301
\151\375\364\074\327\371\134\153\160\162\032\374\132\227\115\000
\200\210\210\202\212\303\161\015\216\305\211\233\054\355\215\013
\322\162\124\365\175\324\134\103\127\351\363\256\245\002\021\366
\166\053\201\127\335\175\332\164\060\375\124\107\366\340\026\156
\246\264\012\110\346\347\165\007\017\051\031\071\316\171\364\266
\154\305\137\231\325\037\113\372\337\155\054\074\015\124\200\160
\360\210\013\200\317\306\150\242\270\035\160\331\166\214\374\356
\245\311\317\255\035\317\231\045\127\132\142\105\313\026\153\275
\111\315\245\243\214\151\171\045\256\270\114\154\213\100\146\113
\026\077\317\002\032\335\341\154\153\007\141\152\166\025\051\231
\177\033\335\210\200\301\277\265\217\163\305\246\226\043\204\246
\050\206\044\063\152\001\056\127\163\045\266\136\277\217\346\035
\141\250\100\051\147\035\207\233\035\177\233\237\231\315\061\326
\124\276\142\273\071\254\150\022\110\221\040\245\313\261\335\376
\157\374\132\344\202\125\131\257\061\251
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

#

Trust for "Symantec Class 2 Public Primary Certification Authority - G6"

Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust

Network,O=Symantec Corporation,C=US

Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41

Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust

Network,O=Symantec Corporation,C=US

Not Valid Before: Tue Oct 18 00:00:00 2011

Not Valid After : Tue Dec 01 23:59:59 2037

Fingerprint (SHA-256):

CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0

Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\100\263\061\240\351\277\350\125\274\071\223\312\160\117\116\302
\121\324\035\217
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\175\013\203\345\373\174\255\007\117\040\251\265\337\143\355\171
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261
\377\101
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root CA 3 2013"
#
# Issuer: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Serial Number: 1039788 (0xfddac)
# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Not Valid Before: Fri Sep 20 08:25:51 2013
# Not Valid After : Wed Sep 20 08:25:51 2028
# Fingerprint (SHA-256):
A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57
# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root CA 3 2013"

```

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\003\017\335\254

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\016\060\202\002\366\240\003\002\001\002\002\003\017
\335\254\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003
\014\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\101\040\063\040\062\060\061\063\060\036\027\015\061\063\060\071
\062\060\060\070\062\065\065\061\132\027\015\062\070\060\071\062
\060\060\070\062\065\065\061\132\060\105\061\013\060\011\006\003
\125\004\006\023\002\104\105\061\025\060\023\006\003\125\004\012
\014\014\104\055\124\162\165\163\164\040\107\155\142\110\061\037
\060\035\006\003\125\004\003\014\026\104\055\124\122\125\123\124
\040\122\157\157\164\040\103\101\040\063\040\062\060\061\063\060
\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000
\304\173\102\222\202\037\354\355\124\230\216\022\300\312\011\337
\223\156\072\223\134\033\344\020\167\236\116\151\210\154\366\341
\151\362\366\233\242\141\261\275\007\040\164\230\145\361\214\046
\010\315\250\065\312\200\066\321\143\155\350\104\172\202\303\154
\136\336\273\350\066\322\304\150\066\214\237\062\275\204\042\340
\334\302\356\020\106\071\155\257\223\071\256\207\346\303\274\011
\311\054\153\147\133\331\233\166\165\114\013\340\273\305\327\274
\076\171\362\137\276\321\220\127\371\256\366\146\137\061\277\323
\155\217\247\272\112\363\043\145\273\267\357\243\045\327\012\352
\130\266\357\210\372\372\171\262\122\130\325\360\254\214\241\121
\164\051\225\252\121\073\220\062\003\237\034\162\164\220\336\075
\355\141\322\345\343\375\144\107\345\271\267\112\251\367\037\256

\226\206\004\254\057\343\244\201\167\267\132\026\377\330\017\077
\366\267\170\314\244\257\372\133\074\022\133\250\122\211\162\357
\210\363\325\104\201\206\225\043\237\173\335\274\331\064\357\174
\224\074\252\300\101\302\343\235\120\032\300\344\031\042\374\263
\002\003\001\000\001\243\202\001\005\060\202\001\001\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035
\006\003\125\035\016\004\026\004\024\077\220\310\175\307\025\157
\363\044\217\251\303\057\113\242\017\041\262\057\347\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\276
\006\003\125\035\037\004\201\266\060\201\263\060\164\240\162\240
\160\206\156\154\144\141\160\072\057\057\144\151\162\145\143\164
\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164\057
\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157\157
\164\045\062\060\103\101\045\062\060\063\045\062\060\062\060\061
\063\054\117\075\104\055\124\162\165\163\164\045\062\060\107\155
\142\110\054\103\075\104\105\077\143\145\162\164\151\146\151\143
\141\164\145\162\145\166\157\143\141\164\151\157\156\154\151\163
\164\060\073\240\071\240\067\206\065\150\164\164\160\072\057\057
\143\162\154\056\144\055\164\162\165\163\164\056\156\145\164\057
\143\162\154\057\144\055\164\162\165\163\164\137\162\157\157\164
\137\143\141\137\063\137\062\060\061\063\056\143\162\154\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001
\001\000\016\131\016\130\344\164\110\043\104\317\064\041\265\234
\024\032\255\232\113\267\263\210\155\134\251\027\160\360\052\237
\215\173\371\173\205\372\307\071\350\020\010\260\065\053\137\317
\002\322\323\234\310\013\036\356\005\124\256\067\223\004\011\175
\154\217\302\164\274\370\034\224\276\061\001\100\055\363\044\040
\267\204\125\054\134\310\365\164\112\020\031\213\243\307\355\065
\326\011\110\323\016\300\272\071\250\260\106\002\260\333\306\210
\131\302\276\374\173\261\053\317\176\142\207\125\226\314\001\157
\233\147\041\225\065\213\370\020\374\161\033\267\113\067\151\246
\073\326\354\213\356\301\260\363\045\311\217\222\175\241\352\303
\312\104\277\046\245\164\222\234\343\164\353\235\164\331\313\115
\207\330\374\264\151\154\213\240\103\007\140\170\227\351\331\223
\174\302\106\274\233\067\122\243\355\212\074\023\251\173\123\113
\111\232\021\005\054\013\156\126\254\037\056\202\154\340\151\147
\265\016\155\055\331\344\300\025\361\077\372\030\162\341\025\155
\047\133\055\060\050\053\237\110\232\144\053\231\357\362\165\111
\137\134

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "D-TRUST Root CA 3 2013"

Issuer: CN=D-TRUST Root

```
CA 3 2013,O=D-Trust GmbH,C=DE
# Serial Number: 1039788 (0xfddac)
# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Not Valid Before: Fri Sep 20 08:25:51 2013
# Not Valid After : Wed Sep 20 08:25:51 2028
# Fingerprint (SHA-256):
A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57
# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root CA 3 2013"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\154\174\314\347\324\256\121\137\231\010\315\077\366\350\303\170
\337\157\357\227
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\267\042\146\230\176\326\003\340\301\161\346\165\315\126\105\277
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\003\017\335\254
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"
#
# Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu
SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR
# Serial Number: 1 (0x1)
# Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu
SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR
# Not Valid Before: Mon Nov 25 08:25:55 2013
# Not Valid After : Sun Oct 25 08:25:55 2043
# Fingerprint (SHA-256):
46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16
```


#

Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165
\162\165\155\040\061

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165
\162\165\155\040\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\001\001

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\143\060\202\003\113\240\003\002\001\002\002\001\001

\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122\061
\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145\040
\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003\125
\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154\151
\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157\152
\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165\162
\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055\060
\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145\162
\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145
\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060\064
\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040\113
\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040\123
\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165\162
\165\155\040\061\060\036\027\015\061\063\061\061\062\065\060\070
\062\065\065\065\132\027\015\064\063\061\060\062\065\060\070\062
\065\065\065\132\060\201\322\061\013\060\011\006\003\125\004\006
\023\002\124\122\061\030\060\026\006\003\125\004\007\023\017\107
\145\142\172\145\040\055\040\113\157\143\141\145\154\151\061\102
\060\100\006\003\125\004\012\023\071\124\165\162\153\151\171\145
\040\102\151\154\151\155\163\145\154\040\166\145\040\124\145\153
\156\157\154\157\152\151\153\040\101\162\141\163\164\151\162\155
\141\040\113\165\162\165\155\165\040\055\040\124\125\102\111\124
\101\113\061\055\060\053\006\003\125\004\013\023\044\113\141\155
\165\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040
\115\145\162\153\145\172\151\040\055\040\113\141\155\165\040\123
\115\061\066\060\064\006\003\125\004\003\023\055\124\125\102\111
\124\101\113\040\113\141\155\165\040\123\115\040\123\123\114\040
\113\157\153\040\123\145\162\164\151\146\151\153\141\163\151\040
\055\040\123\165\162\165\155\040\061\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\257\165\060\063\252\273
\153\323\231\054\022\067\204\331\215\173\227\200\323\156\347\377
\233\120\225\076\220\225\126\102\327\031\174\046\204\215\222\372
\001\035\072\017\342\144\070\267\214\274\350\210\371\213\044\253
\056\243\365\067\344\100\216\030\045\171\203\165\037\073\377\154
\250\305\306\126\370\264\355\212\104\243\253\154\114\374\035\320
\334\357\150\275\317\344\252\316\360\125\367\242\064\324\203\153
\067\174\034\302\376\265\003\354\127\316\274\264\265\305\355\000
\017\123\067\052\115\364\117\014\203\373\206\317\313\376\214\116
\275\207\371\247\213\041\127\234\172\337\003\147\211\054\235\227
\141\247\020\270\125\220\177\016\055\047\070\164\337\347\375\332
\116\022\343\115\025\042\002\310\340\340\374\017\255\212\327\311
\124\120\314\073\017\312\026\200\204\320\121\126\303\216\126\177
\211\042\063\057\346\205\012\275\245\250\033\066\336\323\334\054
\155\073\307\023\275\131\043\054\346\345\244\367\330\013\355\352
\220\100\104\250\225\273\223\325\320\200\064\266\106\170\016\037
\000\223\106\341\356\351\371\354\117\027\002\003\001\000\001\243

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\102\060\100\060\035\006\003\125\035\016\004\026\004\024\145\077
\307\212\206\306\074\335\074\124\134\065\370\072\355\122\014\107
\127\310\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\052\077\341\361\062\216\256\341\230
\134\113\136\317\153\036\152\011\322\042\251\022\307\136\127\175
\163\126\144\200\204\172\223\344\011\271\020\315\237\052\047\341
\000\167\276\110\310\065\250\201\237\344\270\054\311\177\016\260
\322\113\067\135\352\271\325\013\136\064\275\364\163\051\303\355
\046\025\234\176\010\123\212\130\215\320\113\050\337\301\263\337
\040\363\371\343\343\072\337\314\234\224\330\116\117\303\153\027
\267\367\162\350\255\146\063\265\045\123\253\340\370\114\251\235
\375\362\015\272\256\271\331\252\306\153\371\223\273\256\253\270
\227\074\003\032\272\103\306\226\271\105\162\070\263\247\241\226
\075\221\173\176\300\041\123\114\207\355\362\013\124\225\121\223
\325\042\245\015\212\361\223\016\076\124\016\260\330\311\116\334
\362\061\062\126\352\144\371\352\265\235\026\146\102\162\363\177
\323\261\061\103\374\244\216\027\361\155\043\253\224\146\370\255
\373\017\010\156\046\055\177\027\007\011\262\214\373\120\300\237
\226\215\317\266\375\000\235\132\024\232\277\002\104\365\301\302
\237\042\136\242\017\241\343
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL

CK_FALSE

Trust for "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

Serial Number: 1 (0x1)

Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

Not Valid Before: Mon Nov 25 08:25:55 2013

Not Valid After : Sun Oct 25 08:25:55 2043

Fingerprint (SHA-256):

46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16

Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

CKA_CERT_SHA1_HASH MULTILINE OCTAL

```
\061\103\144\233\354\316\047\354\355\072\077\013\217\015\344\350
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```
\221\335\356\312
```

END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\334\000\201\334\151\057\076\057\260\073\366\075\132\221\216\111

END
CKA_ISSUER MULTILINE_OCTAL
\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165
\162\165\155\040\061

END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL

\002\001\001

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "GDCA TrustAUTH R5 ROOT"

#

Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN

Serial Number: 7d:09:97:fe:f0:47:ea:7a

Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN

Not Valid Before: Wed Nov 26 05:13:15 2014

Not Valid After : Mon Dec 31 15:59:59 2040

Fingerprint (SHA-256):

BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93

Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

```
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\175\011\227\376\360\107\352\172
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\210\060\202\003\160\240\003\002\001\002\002\010\175
\011\227\376\360\107\352\172\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\142\061\013\060\011\006\003\125\004
\006\023\002\103\116\061\062\060\060\006\003\125\004\012\014\051
\107\125\101\116\107\040\104\117\116\107\040\103\105\122\124\111
\106\111\103\101\124\105\040\101\125\124\110\117\122\111\124\131
\040\103\117\056\054\114\124\104\056\061\037\060\035\006\003\125
\004\003\014\026\107\104\103\101\040\124\162\165\163\164\101\125
\124\110\040\122\065\040\122\117\117\124\060\036\027\015\061\064
\061\061\062\066\060\065\061\063\061\065\132\027\015\064\060\061
\062\063\061\061\065\065\071\065\071\132\060\142\061\013\060\011
\006\003\125\004\006\023\002\103\116\061\062\060\060\006\003\125
\004\012\014\051\107\125\101\116\107\040\104\117\116\107\040\103
\105\122\124\111\106\111\103\101\124\105\040\101\125\124\110\117
\122\111\124\131\040\103\117\056\054\114\124\104\056\061\037\060
\035\006\003\125\004\003\014\026\107\104\103\101\040\124\162\165
\163\164\101\125\124\110\040\122\065\040\122\117\117\124\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\331
\243\026\360\310\164\164\167\233\357\063\015\073\006\176\125\374
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\272\202\025\242\234\217\155\260\231\112\012\362\353\211\160\143
\116\171\304\267\133\275\242\135\261\362\101\002\053\255\251\072
\243\354\171\012\354\137\072\343\375\357\200\074\255\064\233\032
\253\210\046\173\126\242\202\206\037\353\065\211\203\177\137\256
\051\116\075\266\156\354\256\301\360\047\233\256\343\364\354\357
\256\177\367\206\075\162\172\353\245\373\131\116\247\353\225\214
\042\071\171\341\055\010\217\314\274\221\270\101\367\024\301\043
\251\303\255\232\105\104\263\262\327\054\315\306\051\342\120\020
\256\134\313\202\216\027\030\066\175\227\346\210\232\260\115\064
\011\364\054\271\132\146\052\260\027\233\236\036\166\235\112\146
\061\101\337\077\373\305\006\357\033\266\176\032\106\066\367\144
\143\073\343\071\030\043\347\147\165\024\325\165\127\222\067\275
\276\152\033\046\120\362\066\046\006\220\305\160\001\144\155\166
\146\341\221\333\156\007\300\141\200\056\262\056\057\214\160\247
\321\073\074\263\221\344\156\266\304\073\160\362\154\222\227\011
\315\107\175\030\300\363\273\236\017\326\213\256\007\266\132\017
\316\013\014\107\247\345\076\270\275\175\307\233\065\240\141\227
\072\101\165\027\314\053\226\167\052\222\041\036\331\225\166\040
\147\150\317\015\275\337\326\037\011\152\232\342\314\163\161\244
\057\175\022\200\267\123\060\106\136\113\124\231\017\147\311\245
\310\362\040\301\202\354\235\021\337\302\002\373\032\073\321\355
\040\232\357\145\144\222\020\015\052\342\336\160\361\030\147\202
\214\141\336\270\274\321\057\234\373\017\320\053\355\033\166\271
\344\071\125\370\370\241\035\270\252\200\000\114\202\347\262\177
\011\270\274\060\240\057\015\365\122\236\216\367\222\263\012\000
\035\000\124\227\006\340\261\007\331\307\017\134\145\175\074\155
\131\127\344\355\245\215\351\100\123\237\025\113\240\161\366\032
\041\343\332\160\006\041\130\024\207\205\167\171\252\202\171\002
\003\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004
\026\004\024\342\311\100\237\115\316\350\232\241\174\317\016\077
\145\305\051\210\152\031\121\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\003\202\002\001\000\321\111\127\340
\247\314\150\130\272\001\017\053\031\315\215\260\141\105\254\021
\355\143\120\151\370\037\177\276\026\217\375\235\353\013\252\062
\107\166\322\147\044\355\275\174\063\062\227\052\307\005\206\146
\015\027\175\024\025\033\324\353\375\037\232\366\136\227\151\267
\032\045\244\012\263\221\077\137\066\254\213\354\127\250\076\347
\201\212\030\127\071\205\164\032\102\307\351\133\023\137\217\371
\010\351\222\164\215\365\107\322\253\073\326\373\170\146\116\066
\175\371\351\222\351\004\336\375\111\143\374\155\373\024\161\223
\147\057\107\112\267\271\377\036\052\163\160\106\060\277\132\362
\057\171\245\341\215\014\331\371\262\143\067\214\067\145\205\160
\152\134\133\011\162\271\255\143\074\261\335\370\374\062\277\067
\206\344\273\216\230\047\176\272\037\026\341\160\021\362\003\337

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\045\142\062\047\046\030\062\204\237\377\000\072\023\272\232\115
\364\117\270\024\160\042\261\312\053\220\316\051\301\160\364\057
\235\177\362\220\036\326\132\337\267\106\374\346\206\372\313\340
\040\166\172\272\246\313\365\174\336\142\245\261\213\356\336\202
\146\212\116\072\060\037\077\200\313\255\047\272\014\136\327\320
\261\126\312\167\161\262\265\165\241\120\251\100\103\027\302\050
\331\317\122\213\133\310\143\324\102\076\240\063\172\106\056\367
\012\040\106\124\176\152\117\061\361\201\176\102\164\070\145\163
\047\356\306\174\270\216\327\245\072\327\230\241\234\214\020\125
\323\333\113\354\100\220\362\315\156\127\322\142\016\174\127\223
\261\247\155\315\235\203\273\052\347\345\266\073\161\130\255\375
\321\105\274\132\221\356\123\025\157\323\105\011\165\156\272\220
\135\036\004\317\067\337\036\250\146\261\214\346\040\152\357\374
\110\116\164\230\102\257\051\157\056\152\307\373\175\321\146\061
\042\314\206\000\176\146\203\014\102\364\275\064\222\303\032\352
\117\312\176\162\115\013\160\214\246\110\273\246\241\024\366\373
\130\104\231\024\256\252\013\223\151\240\051\045\112\245\313\053
\335\212\146\007\026\170\025\127\161\033\354\365\107\204\363\236
\061\067\172\325\177\044\255\344\274\375\375\314\156\203\350\014
\250\267\101\154\007\335\275\074\206\227\057\322
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "GDCA TrustAUTH R5 ROOT"

Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN

Serial Number:7d:09:97:fe:f0:47:ea:7a

Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN

Not Valid Before: Wed Nov 26 05:13:15 2014

Not Valid After : Mon Dec 31 15:59:59 2040

Fingerprint (SHA-256):

BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93

Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\017\066\070\133\201\032\045\303\233\061\116\203\312\351\064\146
\160\314\164\264
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\143\314\331\075\064\065\134\157\123\243\342\010\160\110\037\264

END

CKA_ISSUER MULTILINE_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\175\011\227\376\360\107\352\172

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "TrustCor RootCert CA-1"

#

Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA

Serial Number:00:da:9b:ec:71:f3:03:b0:19

Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor
Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

Not Valid Before: Thu Feb 04 12:32:16 2016

Not Valid After : Mon Dec 31 17:23:16 2029

Fingerprint (SHA-256):

D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C

Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TrustCor RootCert CA-1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164


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\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\332\233\354\161\363\003\260\031
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\060\060\202\003\030\240\003\002\001\002\002\011\000
\332\233\354\161\363\003\260\031\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\201\244\061\013\060\011\006\003
\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157
\162\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040
\122\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124
\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\037\060
\035\006\003\125\004\003\014\026\124\162\165\163\164\103\157\162
\040\122\157\157\164\103\145\162\164\040\103\101\055\061\060\036
\027\015\061\066\060\062\060\064\061\062\063\062\061\066\132\027
\015\062\071\061\062\063\061\061\067\062\063\061\066\132\060\201
\244\061\013\060\011\006\003\125\004\006\023\002\120\101\061\017
\060\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061
\024\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141
\040\103\151\164\171\061\044\060\042\006\003\125\004\012\014\033
\124\162\165\163\164\103\157\162\040\123\171\163\164\145\155\163
\040\123\056\040\144\145\040\122\056\114\056\061\047\060\045\006
\003\125\004\013\014\036\124\162\165\163\164\103\157\162\040\103
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157
\162\151\164\171\061\037\060\035\006\003\125\004\003\014\026\124
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\162\165\163\164\103\157\162\040\122\157\157\164\103\145\162\164
\040\103\101\055\061\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\277\216\267\225\342\302\046\022\153\063
\031\307\100\130\012\253\131\252\215\000\243\374\200\307\120\173
\216\324\040\046\272\062\022\330\043\124\111\045\020\042\230\235
\106\322\301\311\236\116\033\056\054\016\070\363\032\045\150\034
\246\132\005\346\036\213\110\277\230\226\164\076\151\312\351\265
\170\245\006\274\325\000\136\011\012\362\047\172\122\374\055\325
\261\352\264\211\141\044\363\032\023\333\251\317\122\355\014\044
\272\271\236\354\176\000\164\372\223\255\154\051\222\256\121\264
\273\323\127\277\263\363\250\215\234\364\044\113\052\326\231\236
\364\236\376\300\176\102\072\347\013\225\123\332\267\150\016\220
\114\373\160\077\217\112\054\224\363\046\335\143\151\251\224\330
\020\116\305\107\010\220\231\033\027\115\271\154\156\357\140\225
\021\216\041\200\265\275\240\163\330\320\262\167\304\105\352\132
\046\373\146\166\166\370\006\037\141\155\017\125\305\203\267\020
\126\162\006\007\245\363\261\032\003\005\144\016\235\132\212\326
\206\160\033\044\336\376\050\212\053\320\152\260\374\172\242\334
\262\171\016\213\145\017\002\003\001\000\001\243\143\060\141\060
\035\006\003\125\035\016\004\026\004\024\356\153\111\074\172\077
\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060\037
\006\003\125\035\043\004\030\060\026\200\024\356\153\111\074\172
\077\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\001\001\000\045\030\324\221\217\023\356\217\036\035\021\123
\332\055\104\051\031\240\036\153\061\236\115\016\236\255\075\134
\101\157\225\053\044\241\171\230\072\070\066\373\273\146\236\110
\377\220\220\357\075\324\270\233\264\207\165\077\040\233\316\162
\317\241\125\301\115\144\242\031\006\241\007\063\014\013\051\345
\361\352\253\243\354\265\012\164\220\307\175\162\362\327\134\237
\221\357\221\213\267\334\355\146\242\317\216\146\073\274\237\072
\002\340\047\335\026\230\300\225\324\012\244\344\201\232\165\224
\065\234\220\137\210\067\006\255\131\225\012\260\321\147\323\031
\312\211\347\062\132\066\034\076\202\250\132\223\276\306\320\144
\221\266\317\331\266\030\317\333\176\322\145\243\246\304\216\027
\061\301\373\176\166\333\323\205\343\130\262\167\172\166\073\154
\057\120\034\347\333\366\147\171\037\365\202\225\232\007\247\024
\257\217\334\050\041\147\011\322\326\115\132\034\031\034\216\167
\134\303\224\044\075\062\153\113\176\324\170\224\203\276\067\115
\316\137\307\036\116\074\340\211\063\225\013\017\245\062\326\074
\132\171\054\031

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA_NSS_SERVER_DISTRICT_AFTER_MULTILINE_OCTAL

\062\062\061\061\063\060\060\060\060\060\060\060\132

END

For Email Distrust After: Wed Nov 30 00:00:00 2022

CKA_NSS_EMAIL_DISTRICT_AFTER_MULTILINE_OCTAL

\062\062\061\061\063\060\060\060\060\060\060\060\132

END

Trust for "TrustCor RootCert CA-1"

Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

#

Serial Number:00:da:9b:ec:71:f3:03:b0:19

Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

Not Valid Before: Thu Feb 04 12:32:16 2016

Not Valid After : Mon Dec 31 17:23:16 2029

Fingerprint (SHA-256):

D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C

Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TrustCor RootCert CA-1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\377\275\315\347\202\310\103\136\074\157\046\206\134\312\250\072
\105\133\303\012

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\156\205\361\334\032\000\323\042\325\262\262\254\153\067\005\105

END

CKA_ISSUER MULTILINE_OCTAL

\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\011\000\332\233\354\161\363\003\260\031

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END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor RootCert CA-2"
#
# Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor
  Systems S. de R.L.,L=Panama City,ST=Panama,C=PA
# Serial Number:25:a1:df:ca:33:cb:59:02
# Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
  R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:23 2016
# Not Valid After : Sun Dec 31 17:26:39 2034
# Fingerprint (SHA-256):
07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65
# Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
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\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
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CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
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\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162

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\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\045\241\337\312\063\313\131\002

END

CKA_VALUE MULTILINE_OCTAL

\060\202\006\057\060\202\004\027\240\003\002\001\002\002\010\045
\241\337\312\063\313\131\002\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\244\061\013\060\011\006\003\125
\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010\014
\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004\007
\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044\060
\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157\162
\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040\122
\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124\162
\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143\141
\164\145\040\101\165\164\150\157\162\151\164\171\061\037\060\035
\006\003\125\004\003\014\026\124\162\165\163\164\103\157\162\040
\122\157\157\164\103\145\162\164\040\103\101\055\062\060\036\027
\015\061\066\060\062\060\064\061\062\063\062\062\063\132\027\015
\063\064\061\062\063\061\061\067\062\066\063\071\132\060\201\244
\061\013\060\011\006\003\125\004\006\023\002\120\101\061\017\060
\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061\024
\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141\040
\103\151\164\171\061\044\060\042\006\003\125\004\012\014\033\124
\162\165\163\164\103\157\162\040\123\171\163\164\145\155\163\040
\123\056\040\144\145\040\122\056\114\056\061\047\060\045\006\003
\125\004\013\014\036\124\162\165\163\164\103\157\162\040\103\145
\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162
\151\164\171\061\037\060\035\006\003\125\004\003\014\026\124\162
\165\163\164\103\157\162\040\122\157\157\164\103\145\162\164\040
\103\101\055\062\060\202\002\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012
\002\202\002\001\000\247\040\156\302\052\242\142\044\225\220\166
\310\070\176\200\322\253\301\233\145\005\224\364\301\012\020\325
\002\254\355\237\223\307\207\310\260\047\053\102\014\075\012\076
\101\132\236\165\335\215\312\340\233\354\150\062\244\151\222\150
\214\013\201\016\126\240\076\032\335\054\045\024\202\057\227\323
\144\106\364\124\251\334\072\124\055\061\053\231\202\362\331\052
\327\357\161\000\270\061\244\276\172\044\007\303\102\040\362\212
\324\222\004\033\145\126\114\154\324\373\266\141\132\107\043\264
\330\151\264\267\072\320\164\074\014\165\241\214\116\166\241\351
\333\052\245\073\372\316\260\377\176\152\050\375\047\034\310\261
\351\051\361\127\156\144\264\320\301\025\155\016\276\056\016\106

\310\136\364\121\376\357\016\143\072\073\161\272\317\157\131\312
\014\343\233\135\111\270\114\342\127\261\230\212\102\127\234\166
\357\357\275\321\150\250\322\364\011\273\167\065\276\045\202\010
\304\026\054\104\040\126\251\104\021\167\357\135\264\035\252\136
\153\076\213\062\366\007\057\127\004\222\312\365\376\235\302\351
\350\263\216\114\113\002\061\331\344\074\110\202\047\367\030\202
\166\110\072\161\261\023\241\071\325\056\305\064\302\035\142\205
\337\003\376\115\364\257\075\337\134\133\215\372\160\341\245\176
\047\307\206\056\152\217\022\306\204\136\103\121\120\234\031\233
\170\346\374\366\355\107\176\173\075\146\357\023\023\210\137\074
\241\143\373\371\254\207\065\237\363\202\236\244\077\012\234\061
\151\213\231\244\210\112\216\156\146\115\357\026\304\017\171\050
\041\140\015\205\026\175\327\124\070\361\222\126\375\265\063\114
\203\334\327\020\237\113\375\306\370\102\275\272\174\163\002\340
\377\175\315\133\341\324\254\141\173\127\325\112\173\133\324\205
\130\047\135\277\370\053\140\254\240\046\256\024\041\047\306\167
\232\063\200\074\136\106\077\367\303\261\243\206\063\306\350\136
\015\271\065\054\252\106\301\205\002\165\200\240\353\044\373\025
\252\344\147\177\156\167\077\364\004\212\057\174\173\343\027\141
\360\335\011\251\040\310\276\011\244\320\176\104\303\262\060\112
\070\252\251\354\030\232\007\202\053\333\270\234\030\255\332\340
\106\027\254\317\135\002\003\001\000\001\243\143\060\141\060\035
\006\003\125\035\016\004\026\004\024\331\376\041\100\156\224\236
\274\233\075\234\175\230\040\031\345\214\060\142\262\060\037\006
\003\125\035\043\004\030\060\026\200\024\331\376\041\100\156\224
\236\274\233\075\234\175\230\040\031\345\214\060\142\262\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\002\001\000\236\105\236\014\073\266\357\341\072\310\174\321\000
\075\317\342\352\006\265\262\072\273\006\113\150\172\320\043\227
\164\247\054\360\010\330\171\132\327\132\204\212\330\022\232\033
\331\175\134\115\160\305\245\371\253\345\243\211\211\335\001\372
\354\335\371\351\222\227\333\260\106\102\363\323\142\252\225\376
\061\147\024\151\130\220\012\252\013\356\067\043\307\120\121\264
\365\176\236\343\173\367\344\314\102\062\055\111\014\313\377\111
\014\233\036\064\375\156\156\226\212\171\003\266\157\333\011\313
\375\137\145\024\067\341\070\365\363\141\026\130\344\265\155\015
\013\004\033\077\120\055\177\263\307\172\032\026\200\140\370\212
\037\351\033\052\306\371\272\001\032\151\277\322\130\307\124\127
\010\217\341\071\140\167\113\254\131\204\032\210\361\335\313\117
\170\327\347\341\063\055\374\356\101\372\040\260\276\313\367\070
\224\300\341\320\205\017\273\355\054\163\253\355\376\222\166\032
\144\177\133\015\063\011\007\063\173\006\077\021\244\134\160\074
\205\300\317\343\220\250\203\167\372\333\346\305\214\150\147\020
\147\245\122\055\360\304\231\217\177\277\321\153\342\265\107\326
\331\320\205\231\115\224\233\017\113\215\356\000\132\107\035\021
\003\254\101\030\257\207\267\157\014\072\217\312\317\334\003\301

```
\242\011\310\345\375\200\136\310\140\102\001\033\032\123\132\273
\067\246\267\274\272\204\351\036\154\032\324\144\332\324\103\376
\223\213\113\362\054\171\026\020\324\223\013\210\217\241\330\206
\024\106\221\107\233\050\044\357\127\122\116\134\102\234\252\367
\111\354\047\350\100\036\263\246\211\042\162\234\365\015\063\264
\130\243\060\073\335\324\152\124\223\276\032\115\363\223\224\367
\374\204\013\077\204\040\134\064\003\104\305\332\255\274\012\301
\002\317\036\345\224\331\363\216\133\330\114\360\235\354\141\027
\273\024\062\124\014\002\051\223\036\222\206\366\177\357\347\222
\005\016\131\335\231\010\056\056\372\234\000\122\323\305\146\051
\344\247\227\104\244\016\050\201\023\065\305\366\157\144\346\101
\304\325\057\314\064\105\045\317\101\000\226\075\112\056\302\226
\230\117\116\112\234\227\267\333\037\222\062\310\377\017\121\156
\326\354\011
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL

```
\062\062\061\061\063\060\060\060\060\060\060\060\132
```

END

For Email Distrust After: Wed Nov 30 00:00:00 2022

CKA_NSS_EMAIL_DISTRICT_AFTER

MULTILINE_OCTAL

```
\062\062\061\061\063\060\060\060\060\060\060\060\132
```

END

Trust for "TrustCor RootCert CA-2"

Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

Serial Number:25:a1:df:ca:33:cb:59:02

Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

Not Valid Before: Thu Feb 04 12:32:23 2016

Not Valid After : Sun Dec 31 17:26:39 2034

Fingerprint (SHA-256):

07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65

Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TrustCor RootCert CA-2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\276\155\313\126\361\125\271\143\324\022\312\116\006\064\307
\224\262\034\300
```

END

```

CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\242\341\370\030\013\272\105\325\307\101\052\273\067\122\105\144
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\045\241\337\312\063\313\131\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST
CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor ECA-1"
#
# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Serial Number:00:84:82:2c:5f:1c:62:d0:40
# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:33 2016
# Not Valid After : Mon Dec 31 17:28:07 2029
# Fingerprint (SHA-256):
5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C
# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor ECA-1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155

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\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\011\000\204\202\054\137\034\142\320\100

END

CKA_VALUE MULTILINE_OCTAL

\060\202\004\040\060\202\003\010\240\003\002\001\002\002\011\000
\204\202\054\137\034\142\320\100\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\201\234\061\013\060\011\006\003
\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157
\162\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040
\122\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124
\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\027\060
\025\006\003\125\004\003\014\016\124\162\165\163\164\103\157\162
\040\105\103\101\055\061\060\036\027\015\061\066\060\062\060\064
\061\062\063\062\063\063\132\027\015\062\071\061\062\063\061\061
\067\062\070\060\067\132\060\201\234\061\013\060\011\006\003\125
\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010\014
\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004\007
\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044\060
\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157\162
\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040\122

\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124\162
\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143\141
\164\145\040\101\165\164\150\157\162\151\164\171\061\027\060\025
\006\003\125\004\003\014\016\124\162\165\163\164\103\157\162\040
\105\103\101\055\061\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\317\217\340\021\265\237\250\166\166\333
\337\017\124\357\163\143\051\202\255\107\306\243\153\355\376\137
\063\370\103\121\351\032\063\221\061\027\240\164\304\324\247\001
\346\262\222\076\152\235\355\016\371\164\230\100\323\077\003\200
\006\202\100\350\261\342\247\121\247\035\203\046\153\253\336\372
\027\221\053\330\306\254\036\261\236\031\001\325\227\246\352\015
\267\304\125\037\047\174\322\010\325\166\037\051\025\207\100\071
\335\070\105\021\165\320\232\247\064\340\277\315\310\122\035\271
\107\176\015\270\273\306\014\366\163\127\026\132\176\103\221\037
\125\072\306\155\104\004\252\234\251\234\247\114\211\027\203\256
\243\004\136\122\200\213\036\022\045\021\031\327\014\175\175\061
\104\101\352\333\257\260\034\357\201\320\054\305\232\041\233\075
\355\102\073\120\046\362\354\316\161\141\006\142\041\124\116\177
\301\235\076\177\040\214\200\313\052\330\227\142\310\203\063\221
\175\260\242\132\017\127\350\073\314\362\045\262\324\174\057\354
\115\306\241\072\025\172\347\266\135\065\365\366\110\112\066\105
\146\324\272\230\130\301\002\003\001\000\001\243\143\060\141\060
\035\006\003\125\035\016\004\026\004\024\104\236\110\365\314\155
\110\324\240\113\177\376\131\044\057\203\227\231\232\206\060\037
\006\003\125\035\043\004\030\060\026\200\024\104\236\110\365\314
\155\110\324\240\113\177\376\131\044\057\203\227\231\232\206\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003
\202\001\001\000\005\076\065\134\025\160\233\311\307\163\141\157
\162\053\324\302\217\362\103\135\002\316\304\224\271\224\021\203
\147\135\342\147\154\165\166\277\273\014\252\066\306\255\107\223
\143\334\036\176\326\336\056\376\351\031\062\070\003\177\024\366
\000\163\054\131\261\041\006\341\373\254\030\225\014\243\377\231
\226\367\053\047\233\325\044\314\035\335\301\072\340\230\104\260
\304\344\076\167\261\163\251\144\054\366\034\001\174\077\135\105
\205\300\205\347\045\217\225\334\027\363\074\237\032\156\260\312
\343\035\052\351\114\143\372\044\141\142\326\332\176\266\034\154
\365\002\035\324\052\335\125\220\353\052\021\107\074\056\136\164
\262\202\042\245\175\123\037\105\354\047\221\175\347\042\026\350
\300\150\066\330\306\361\117\200\104\062\371\341\321\321\035\252
\336\250\253\234\004\257\255\040\016\144\230\115\245\153\300\110
\130\226\151\115\334\007\214\121\223\242\337\237\017\075\213\140
\264\202\215\252\010\116\142\105\340\371\013\322\340\340\074\133
\336\134\161\047\045\302\346\003\201\213\020\123\343\307\125\242
\264\237\327\346

END

```

CKA_NSS_Mozilla_CA_POLICY
CK_BBOOL CK_TRUE
# For Server Distrust After: Wed Nov 30 00:00:00 2022
CKA_NSS_SERVER_DISTRICT_AFTER_MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END
# For Email Distrust After: Wed Nov 30 00:00:00
2022
CKA_NSS_EMAIL_DISTRICT_AFTER_MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END

# Trust for "TrustCor ECA-1"
# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Serial Number:00:84:82:2c:5f:1c:62:d0:40
# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:33 2016
# Not Valid After : Mon Dec 31 17:28:07 2029
# Fingerprint (SHA-256):
5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C
# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor ECA-1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\321\337\225\225\147\153\143\300\360\133\034\027\115\213\204
\013\310\170\275
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\047\222\043\035\012\365\100\174\351\346\153\235\330\365\347\154
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061
END

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CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\204\202\054\137\034\142\320\100
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com Root Certification Authority RSA"
#
# Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:7b:2c:9b:d3:16:80:32:99
# Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 17:39:39 2016
# Not Valid After : Tue Feb 12 17:39:39 2041
# Fingerprint (SHA-256):
85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69
# Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority RSA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
END

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CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\173\054\233\323\026\200\062\231

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\335\060\202\003\305\240\003\002\001\002\002\010\173
\054\233\323\026\200\062\231\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\174\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014\005
\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014\007
\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004\012
\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151\157
\156\061\061\060\057\006\003\125\004\003\014\050\123\123\114\056
\143\157\155\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\122\123\101\060\036\027\015\061\066\060\062\061\062\061\067
\063\071\063\071\132\027\015\064\061\060\062\061\062\061\067\063
\071\063\071\132\060\174\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061
\061\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157
\155\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\060\202\002\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202
\002\001\000\371\017\335\243\053\175\313\320\052\376\354\147\205
\246\347\056\033\272\167\341\343\365\257\244\354\372\112\135\221
\304\127\107\153\030\167\153\166\362\375\223\344\075\017\302\026
\236\013\146\303\126\224\236\027\203\205\316\126\357\362\026\375
\000\142\365\042\011\124\350\145\027\116\101\271\340\117\106\227
\252\033\310\270\156\142\136\151\261\137\333\052\002\176\374\154
\312\363\101\330\355\320\350\374\077\141\110\355\260\003\024\035
\020\016\113\031\340\273\116\354\206\145\377\066\363\136\147\002
\013\235\206\125\141\375\172\070\355\376\342\031\000\267\157\241
\120\142\165\164\074\240\372\310\045\222\264\156\172\042\307\370
\036\241\343\262\335\221\061\253\053\035\004\377\245\112\004\067
\351\205\244\063\053\375\342\326\125\064\174\031\244\112\150\307
\262\250\323\267\312\241\223\210\353\301\227\274\214\371\035\331
\042\204\044\164\307\004\075\152\251\051\223\314\353\270\133\341
\376\137\045\252\064\130\310\301\043\124\235\033\230\021\303\070
\234\176\075\206\154\245\017\100\206\174\002\364\134\002\117\050
\313\256\161\237\017\072\310\063\376\021\045\065\352\374\272\305
\140\075\331\174\030\325\262\251\323\165\170\003\162\042\312\072
\303\037\357\054\345\056\251\372\236\054\266\121\106\375\257\003
\326\352\140\150\352\205\026\066\153\205\351\036\300\263\335\304
\044\334\200\052\201\101\155\224\076\310\340\311\201\101\000\236

\136\277\177\305\010\230\242\030\054\102\100\263\371\157\070\047
\113\116\200\364\075\201\107\340\210\174\352\034\316\265\165\134
\121\056\034\053\177\032\162\050\347\000\265\321\164\306\327\344
\237\255\007\223\266\123\065\065\374\067\344\303\366\135\026\276
\041\163\336\222\012\370\240\143\152\274\226\222\152\076\370\274
\145\125\233\336\365\015\211\046\004\374\045\032\246\045\151\313
\302\155\312\174\342\131\137\227\254\353\357\056\310\274\327\033
\131\074\053\314\362\031\310\223\153\047\143\031\317\374\351\046
\370\312\161\233\177\223\376\064\147\204\116\231\353\374\263\170
\011\063\160\272\146\246\166\355\033\163\353\032\245\015\304\042
\023\040\224\126\012\116\054\154\116\261\375\317\234\011\272\242
\063\355\207\002\003\001\000\001\243\143\060\141\060\035\006\003
\125\035\016\004\026\004\024\335\004\011\007\242\365\172\175\122
\123\022\222\225\356\070\200\045\015\246\131\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003
\125\035\043\004\030\060\026\200\024\335\004\011\007\242\365\172
\175\122\123\022\222\225\356\070\200\045\015\246\131\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\206\060\015\006
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001
\000\040\030\021\224\051\373\046\235\034\036\036\160\141\361\225
\162\223\161\044\255\150\223\130\216\062\257\033\263\160\003\374
\045\053\164\205\220\075\170\152\364\271\213\245\227\073\265\030
\221\273\036\247\371\100\133\221\371\125\231\257\036\021\320\134
\035\247\146\343\261\224\007\014\062\071\246\352\033\260\171\330
\035\234\160\104\343\212\335\304\371\225\037\212\070\103\077\001
\205\245\107\247\075\106\262\274\345\042\150\367\173\234\330\054
\076\012\041\310\055\063\254\277\305\201\231\061\164\301\165\161
\305\276\261\360\043\105\364\235\153\374\031\143\235\243\274\004
\306\030\013\045\273\123\211\017\263\200\120\336\105\356\104\177
\253\224\170\144\230\323\366\050\335\207\330\160\145\164\373\016
\271\023\353\247\017\141\251\062\226\314\336\273\355\143\114\030
\273\251\100\367\240\124\156\040\210\161\165\030\352\172\264\064
\162\340\043\047\167\134\266\220\352\206\045\100\253\357\063\017
\313\237\202\276\242\040\373\366\265\055\032\346\302\205\261\164
\017\373\310\145\002\244\122\001\107\335\111\042\301\277\330\353
\153\254\176\336\354\143\063\025\267\043\010\217\306\017\215\101
\132\335\216\305\271\217\345\105\077\170\333\272\322\033\100\261
\376\161\115\077\340\201\242\272\136\264\354\025\340\223\335\010
\037\176\341\125\231\013\041\336\223\236\012\373\346\243\111\275
\066\060\376\347\167\262\240\165\227\265\055\201\210\027\145\040
\367\332\220\000\237\311\122\314\062\312\065\174\365\075\017\330
\053\327\365\046\154\311\006\064\226\026\352\160\131\032\062\171
\171\013\266\210\177\017\122\110\075\277\154\330\242\104\056\321
\116\267\162\130\323\211\023\225\376\104\253\370\327\213\033\156
\234\274\054\240\133\325\152\000\257\137\067\341\325\372\020\013
\230\234\206\347\046\217\316\360\354\156\212\127\013\200\343\116
\262\300\240\143\141\220\272\125\150\067\164\152\266\222\333\237
\241\206\042\266\145\047\016\354\266\237\102\140\344\147\302\265

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\332\101\013\304\323\213\141\033\274\372\037\221\053\327\104\007
\136\272\051\254\331\305\351\357\123\110\132\353\200\361\050\130
\041\315\260\006\125\373\047\077\123\220\160\251\004\036\127\047
\271
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SSL.com Root Certification Authority RSA"

Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:7b:2c:9b:d3:16:80:32:99

Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

Not Valid Before: Fri Feb 12 17:39:39 2016

Not Valid After : Tue Feb 12 17:39:39 2041

Fingerprint (SHA-256):

85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69

Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN

CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SSL.com Root Certification Authority RSA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\267\253\063\010\321\352\104\167\272\024\200\022\132\157\275\251
\066\111\014\273
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\206\151\022\300\160\361\354\254\254\302\325\274\245\133\241\051
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\010\173\054\233\323\026\200\062\231
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END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "SSL.com Root Certification Authority ECC"

#

Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:75:e6:df:cb:c1:68:5b:a8

Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Not Valid Before: Fri Feb 12 18:14:03 2016

Not Valid After : Tue Feb 12 18:14:03 2041

Fingerprint (SHA-256):

34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65

Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"

CKA_CERTIFICATE_TYPE

CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\010\165\346\337\313\301\150\133\250

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\215\060\202\002\024\240\003\002\001\002\002\010\165

\346\337\313\301\150\133\250\060\012\006\010\052\206\110\316\075
\004\003\002\060\174\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165
\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\061
\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157\155
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103\060\036\027\015\061\066\060\062\061\062\061\070\061\064\060\063
\063\132\027\015\064\061\060\062\061\062\061\070\061\064\060\063
\132\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057
\006\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\040\105\103\103\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\105\156\251\120\304\246\043\066\236
\137\050\215\027\313\226\042\144\077\334\172\216\035\314\010\263
\242\161\044\272\216\111\271\004\033\107\226\130\253\055\225\310
\355\236\010\065\310\047\353\211\214\123\130\353\142\212\376\360
\133\017\153\061\122\143\101\073\211\315\354\354\266\215\031\323
\064\007\334\273\306\006\177\302\105\225\354\313\177\250\043\340
\011\351\201\372\363\107\323\243\143\060\141\060\035\006\003\125
\035\016\004\026\004\024\202\321\205\163\060\347\065\004\323\216
\002\222\373\345\244\321\304\041\350\315\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125
\035\043\004\030\060\026\200\024\202\321\205\163\060\347\065\004
\323\216\002\222\373\345\244\321\304\041\350\315\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\206\060\012\006\010
\052\206\110\316\075\004\003\002\003\147\000\060\144\002\060\157
\347\353\131\021\244\140\317\141\260\226\173\355\005\371\057\023
\221\334\355\345\374\120\153\021\106\106\263\034\041\000\142\273
\276\303\347\350\315\007\231\371\015\013\135\162\076\304\252\002
\060\037\274\272\013\342\060\044\373\174\155\200\125\012\231\076
\200\015\063\345\146\243\263\243\273\245\325\213\217\011\054\246
\135\176\342\360\007\010\150\155\322\174\151\156\137\337\345\152
\145

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

```

# Trust for "SSL.com Root Certification Authority ECC"
# Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:75:e6:df:cb:c1:68:5b:a8
# Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:14:03 2016
# Not Valid After : Tue Feb 12 18:14:03 2041
# Fingerprint (SHA-256):
34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65
# Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\303\031\174\071\044\346\124\257\033\304\253\040\225\172\342\303
\016\023\002\152
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\056\332\344\071\177\234\217\067\321\160\237\046\027\121\072\216
END
CKA_ISSUER
MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\165\346\337\313\301\150\133\250
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com EV Root Certification Authority RSA R2"
#
# Issuer: CN=SSL.com EV Root
Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:56:b6:29:cd:34:bc:78:f6
# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL
Corporation,L=Houston,ST=Texas,C=US

```

```
# Not Valid Before: Wed May 31 18:14:37 2017
# Not Valid After : Fri May 30 18:14:37 2042
# Fingerprint (SHA-256):
2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C
# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\126\266\051\315\064\274\170\366
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\353\060\202\003\323\240\003\002\001\002\002\010\126
\266\051\315\064\274\170\366\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003\125
\004\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014
\005\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014
\007\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004
\012\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151
\157\156\061\067\060\065\006\003\125\004\003\014\056\123\123\114
```

\056\143\157\155\040\105\126\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\040\122\123\101\040\122\062\060\036\027\015\061
\067\060\065\063\061\061\070\061\064\063\067\132\027\015\064\062
\060\065\063\060\061\070\061\064\063\067\132\060\201\202\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\016\060\014\006
\003\125\004\010\014\005\124\145\170\141\163\061\020\060\016\006
\003\125\004\007\014\007\110\157\165\163\164\157\156\061\030\060
\026\006\003\125\004\012\014\017\123\123\114\040\103\157\162\160
\157\162\141\164\151\157\156\061\067\060\065\006\003\125\004\003
\014\056\123\123\114\056\143\157\155\040\105\126\040\122\157\157
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\040\122\123\101\040\122\062
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\217\066\145\100\341\326\115\300\327\264\351\106\332\153\352
\063\107\315\114\371\175\175\276\275\055\075\360\333\170\341\206
\245\331\272\011\127\150\355\127\076\240\320\010\101\203\347\050
\101\044\037\343\162\025\320\001\032\373\136\160\043\262\313\237
\071\343\317\305\116\306\222\155\046\306\173\273\263\332\047\235
\012\206\351\201\067\005\376\360\161\161\354\303\034\351\143\242
\027\024\235\357\033\147\323\205\125\002\002\326\111\311\314\132
\341\261\367\157\062\237\311\324\073\210\101\250\234\275\313\253
\333\155\173\011\037\242\114\162\220\332\053\010\374\317\074\124
\316\147\017\250\317\135\226\031\013\304\343\162\353\255\321\175
\035\047\357\222\353\020\277\133\353\073\257\317\200\335\301\322
\226\004\133\172\176\244\251\074\070\166\244\142\216\240\071\136
\352\167\317\135\000\131\217\146\054\076\007\242\243\005\046\021
\151\227\352\205\267\017\226\013\113\310\100\341\120\272\056\212
\313\367\017\232\042\347\177\232\067\023\315\362\115\023\153\041
\321\300\314\042\362\241\106\366\104\151\234\312\141\065\007\000
\157\326\141\010\021\352\272\270\366\351\263\140\345\115\271\354
\237\024\146\311\127\130\333\315\207\151\370\212\206\022\003\107
\277\146\023\166\254\167\175\064\044\205\203\315\327\252\234\220
\032\237\041\054\177\170\267\144\270\330\350\246\364\170\263\125
\313\204\322\062\304\170\256\243\217\141\335\316\010\123\255\354
\210\374\025\344\232\015\346\237\032\167\316\114\217\270\024\025
\075\142\234\206\070\006\000\146\022\344\131\166\132\123\300\002
\230\242\020\053\150\104\173\216\171\316\063\112\166\252\133\201
\026\033\265\212\330\320\000\173\136\142\264\011\326\206\143\016
\246\005\225\111\272\050\213\210\223\262\064\034\330\244\125\156
\267\034\320\336\231\125\073\043\364\042\340\371\051\146\046\354
\040\120\167\333\112\013\217\276\345\002\140\160\101\136\324\256
\120\071\042\024\046\313\262\073\163\164\125\107\007\171\201\071
\250\060\023\104\345\004\212\256\226\023\045\102\017\271\123\304
\233\374\315\344\034\336\074\372\253\326\006\112\037\147\246\230
\060\034\335\054\333\334\030\225\127\146\306\377\134\213\126\365
\167\002\003\001\000\001\243\143\060\141\060\017\006\003\125\035

\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125
\035\043\004\030\060\026\200\024\371\140\273\324\343\325\064\366
\270\365\006\200\045\247\163\333\106\151\250\236\060\035\006\003
\125\035\016\004\026\004\024\371\140\273\324\343\325\064\366\270
\365\006\200\045\247\163\333\106\151\250\236\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\126
\263\216\313\012\235\111\216\277\244\304\221\273\146\027\005\121
\230\165\373\345\120\054\172\236\361\024\372\253\323\212\076\377
\221\051\217\143\213\330\264\251\124\001\015\276\223\206\057\371
\112\155\307\136\365\127\371\312\125\034\022\276\107\017\066\305
\337\152\267\333\165\302\107\045\177\271\361\143\370\150\055\125
\004\321\362\215\260\244\317\274\074\136\037\170\347\245\240\040
\160\260\004\305\267\367\162\247\336\042\015\275\063\045\106\214
\144\222\046\343\076\056\143\226\332\233\214\075\370\030\011\327
\003\314\175\206\202\340\312\004\007\121\120\327\377\222\325\014
\357\332\206\237\231\327\353\267\257\150\342\071\046\224\272\150
\267\277\203\323\352\172\147\075\142\147\256\045\345\162\350\342
\344\354\256\022\366\113\053\074\237\351\260\100\363\070\124\263
\375\267\150\310\332\306\217\121\074\262\373\221\334\034\347\233
\235\341\267\015\162\217\342\244\304\251\170\371\353\024\254\306
\103\005\302\145\071\050\030\002\303\202\262\235\005\276\145\355
\226\137\145\164\074\373\011\065\056\173\234\023\375\033\017\135
\307\155\201\072\126\017\314\073\341\257\002\057\042\254\106\312
\106\074\240\034\114\326\104\264\136\056\134\025\146\011\341\046
\051\376\306\122\141\272\261\163\377\303\014\234\345\154\152\224
\077\024\312\100\026\225\204\363\131\251\254\137\114\141\223\155
\321\073\314\242\225\014\042\246\147\147\104\056\271\331\322\212
\101\263\146\013\132\373\175\043\245\362\032\260\377\336\233\203
\224\056\321\077\337\222\267\221\257\005\073\145\307\240\154\261
\315\142\022\303\220\033\343\045\316\064\274\157\167\166\261\020
\303\367\005\032\300\326\257\164\142\110\027\167\222\151\220\141
\034\336\225\200\164\124\217\030\034\303\363\003\320\277\244\103
\165\206\123\030\172\012\056\011\034\066\237\221\375\202\212\042
\113\321\016\120\045\335\313\003\014\027\311\203\000\010\116\065
\115\212\213\355\360\002\224\146\054\104\177\313\225\047\226\027
\255\011\060\254\266\161\027\156\213\027\366\034\011\324\055\073
\230\245\161\323\124\023\331\140\363\365\113\146\117\372\361\356
\040\022\215\264\254\127\261\105\143\241\254\166\251\302\373

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SSL.com EV Root Certification Authority RSA R2"

Issuer: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:56:b6:29:cd:34:bc:78:f6

```
# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL
Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Wed May 31 18:14:37 2017
# Not Valid After : Fri May 30 18:14:37 2042
# Fingerprint (SHA-256):
2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C
# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\164\072\360\122\233\320\062\240\364\112\203\315\324\272\251\173
\174\056\304\232
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\341\036\061\130\032\256\124\123\002\366\027\152\021\173\115\225
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\126\266\051\315\064\274\170\366
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com EV Root Certification Authority ECC"
#
# Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:2c:29:9c:5b:16:ed:05:95
# Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:15:23 2016
# Not Valid After : Tue Feb 12 18:15:23 2041
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# Fingerprint (SHA-256):
22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8
# Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification
  Authority ECC"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\054\051\234\133\026\355\005\225
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\224\060\202\002\032\240\003\002\001\002\002\010\054
\051\234\133\026\355\005\225\060\012\006\010\052\206\110\316\075
\004\003\002\060\177\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165
\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\064
\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157\155
\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171

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\040\105\103\103\060\036\027\015\061\066\060\062\061\062\061\070
\061\065\062\063\132\027\015\064\061\060\062\061\062\061\070\061
\065\062\063\132\060\177\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061
\064\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157
\155\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\040\105\103\103\060\166\060\020\006\007\052\206\110\316\075
\002\001\006\005\053\201\004\000\042\003\142\000\004\252\022\107
\220\230\033\373\357\303\100\007\203\040\116\361\060\202\242\006
\321\362\222\206\141\362\366\041\150\312\000\304\307\352\103\000
\124\206\334\375\037\337\000\270\101\142\134\334\160\026\062\336
\037\231\324\314\305\007\310\010\037\141\026\007\121\075\175\134
\007\123\343\065\070\214\337\315\237\331\056\015\112\266\031\056
\132\160\132\006\355\276\360\241\260\312\320\011\051\243\143\060
\141\060\035\006\003\125\035\016\004\026\004\024\133\312\136\345
\336\322\201\252\315\250\055\144\121\266\331\162\233\227\346\117
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\037\006\003\125\035\043\004\030\060\026\200\024\133\312
\136\345\336\322\201\252\315\250\055\144\121\266\331\162\233\227
\346\117\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\206\060\012\006\010\052\206\110\316\075\004\003\002\003\150
\000\060\145\002\061\000\212\346\100\211\067\353\351\325\023\331
\312\324\153\044\363\260\075\207\106\130\032\354\261\337\157\373
\126\272\160\153\307\070\314\350\261\214\117\017\367\361\147\166
\016\203\320\036\121\217\002\060\075\366\043\050\046\114\306\140
\207\223\046\233\262\065\036\272\326\367\074\321\034\316\372\045
\074\246\032\201\025\133\363\022\017\154\356\145\212\311\207\250
\371\007\340\142\232\214\134\112

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "SSL.com EV Root Certification Authority ECC"

Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Serial Number:2c:29:9c:5b:16:ed:05:95

Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

Not Valid Before: Fri Feb 12 18:15:23 2016

Not Valid After : Tue Feb 12 18:15:23 2041

Fingerprint (SHA-256):

22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8

Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST


```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\114\335\121\243\321\365\040\062\024\260\306\305\062\043\003\221
\307\106\102\155
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\131\123\042\145\203\102\001\124\300\316\102\271\132\174\362\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\054\051\234\133\026\355\005\225
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
#
Certificate "GlobalSign Root CA - R6"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Not Valid Before: Wed Dec 10 00:00:00 2014
# Not Valid After : Sun Dec 10 00:00:00 2034
# Fingerprint (SHA-256):
2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69
# Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R6"

```

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\203\060\202\003\153\240\003\002\001\002\002\016\105
\346\273\003\203\063\303\205\145\110\346\377\105\121\060\015\006
\011\052\206\110\206\367\015\001\001\014\005\000\060\114\061\040
\060\036\006\003\125\004\013\023\027\107\154\157\142\141\154\123
\151\147\156\040\122\157\157\164\040\103\101\040\055\040\122\066
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\064
\061\062\061\060\060\060\060\060\060\060\132\027\015\063\064\061
\062\061\060\060\060\060\060\060\060\132\060\114\061\040\060\036
\006\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101\040\055\040\122\066\061\023
\060\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123
\151\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154
\157\142\141\154\123\151\147\156\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\225\007\350\163\312\146\371
\354\024\312\173\074\367\015\010\361\264\105\013\054\202\264\110
\306\353\133\074\256\203\270\101\222\063\024\244\157\177\351\052
\314\306\260\210\153\305\266\211\321\306\262\377\024\316\121\024
\041\354\112\335\033\132\306\326\207\356\115\072\025\006\355\144
\146\013\222\200\312\104\336\163\224\116\363\247\211\177\117\170
\143\010\310\022\120\155\102\146\057\115\271\171\050\115\122\032
\212\032\200\267\031\201\016\176\304\212\274\144\114\041\034\103
\150\327\075\074\212\305\262\146\325\220\232\267\061\006\305\276
\342\155\062\006\246\036\371\271\353\252\243\270\277\276\202\143
\120\320\360\030\211\337\344\017\171\365\352\242\037\052\322\160

\056\173\347\274\223\273\155\123\342\110\174\214\020\007\070\377
\146\262\167\141\176\340\352\214\074\252\264\244\366\363\225\112
\022\007\155\375\214\262\211\317\320\240\141\167\310\130\164\260
\324\043\072\367\135\072\312\242\333\235\011\336\135\104\055\220
\361\201\315\127\222\372\176\274\120\004\143\064\337\153\223\030
\276\153\066\262\071\344\254\044\066\267\360\357\266\034\023\127
\223\266\336\262\370\342\205\267\163\242\270\065\252\105\362\340
\235\066\241\157\124\212\361\162\126\156\056\210\305\121\102\104
\025\224\356\243\305\070\226\233\116\116\132\013\107\363\006\066
\111\167\060\274\161\067\345\246\354\041\010\165\374\346\141\026
\077\167\325\331\221\227\204\012\154\324\002\115\164\300\024\355
\375\071\373\203\362\136\024\241\004\260\013\351\376\356\217\341
\156\013\262\010\263\141\146\011\152\261\006\072\145\226\131\300
\360\065\375\311\332\050\215\032\021\207\160\201\012\250\232\165
\035\236\072\206\005\000\236\333\200\326\045\371\334\005\236\047
\131\114\166\071\133\352\371\245\241\330\203\017\321\377\337\060
\021\371\205\317\063\110\365\312\155\144\024\054\172\130\117\323
\113\010\111\305\225\144\032\143\016\171\075\365\263\214\312\130
\255\234\102\105\171\156\016\207\031\134\124\261\145\266\277\214
\233\334\023\351\015\157\270\056\334\147\156\311\213\021\265\204
\024\212\000\031\160\203\171\221\227\221\324\032\047\277\067\036
\062\007\330\024\143\074\050\114\257\002\003\001\000\001\243\143
\060\141\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\035\006\003\125\035\016\004\026\004\024\256\154
\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310\147
\123\240\060\037\006\003\125\035\043\004\030\060\026\200\024\256
\154\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310
\147\123\240\060\015\006\011\052\206\110\206\367\015\001\001\014
\005\000\003\202\002\001\000\203\045\355\350\321\375\225\122\315
\236\300\004\240\221\151\346\134\320\204\336\334\255\242\117\350
\107\170\326\145\230\251\133\250\074\207\174\002\212\321\156\267
\026\163\346\137\300\124\230\325\164\276\301\315\342\021\221\255
\043\030\075\335\341\162\104\226\264\225\136\300\173\216\231\170
\026\103\023\126\127\263\242\263\073\265\167\334\100\162\254\243
\353\233\065\076\261\010\041\241\347\304\103\067\171\062\276\265
\347\234\054\114\274\103\051\231\216\060\323\254\041\340\343\035
\372\330\007\063\166\124\000\042\052\271\115\040\056\160\150\332
\345\123\374\203\134\323\235\362\377\104\014\104\146\362\322\343
\275\106\000\032\155\002\272\045\135\215\241\061\121\335\124\106
\034\115\333\231\226\357\032\034\004\134\246\025\357\170\340\171
\376\135\333\076\252\114\125\375\232\025\251\157\341\246\373\337
\160\060\351\303\356\102\106\355\302\223\005\211\372\175\143\173
\077\320\161\201\174\000\350\230\256\016\170\064\303\045\373\257
\012\237\040\153\335\073\023\217\022\214\342\101\032\110\172\163
\240\167\151\307\266\134\177\202\310\036\376\130\033\050\053\250
\154\255\136\155\300\005\322\173\267\353\200\376\045\067\376\002
\233\150\254\102\135\303\356\365\314\334\360\120\165\322\066\151

```
\234\346\173\004\337\156\006\151\266\336\012\011\110\131\207\353
\173\024\140\172\144\252\151\103\357\221\307\114\354\030\335\154
\357\123\055\214\231\341\136\362\162\076\317\124\310\275\147\354
\244\017\114\105\377\323\271\060\043\007\114\217\020\277\206\226
\331\231\132\264\231\127\034\244\314\273\025\211\123\272\054\005
\017\344\304\236\031\261\030\064\325\114\235\272\355\367\037\257
\044\225\004\170\250\003\273\356\201\345\332\137\174\213\112\241
\220\164\045\247\263\076\113\310\054\126\275\307\310\357\070\342
\134\222\360\171\367\234\204\272\164\055\141\001\040\176\176\321
\362\117\007\131\137\213\055\103\122\353\106\014\224\341\365\146
\107\171\167\325\124\133\037\255\044\067\313\105\132\116\240\104
\110\310\330\260\231\305\025\204\011\366\326\111\111\300\145\270
\346\032\161\156\240\250\361\202\350\105\076\154\326\002\327\012
\147\203\005\132\311\244\020
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root CA - R6"

Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51

Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

Not Valid Before: Wed Dec 10 00:00:00 2014

Not Valid After : Sun Dec 10 00:00:00 2034

Fingerprint (SHA-256):

2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69

Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Root CA - R6"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\200\224\144\016\265\247\241\312\021\234\037\335\325\237\201\002
\143\247\373\321
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\117\335\007\344\324\042\144\071\036\014\067\102\352\321\306\256
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
```

```

END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST
CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "OISTE WISeKey Global Root GC CA"
#
# Issuer: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:2d:3a:ea
# Subject: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Not Valid Before: Tue May 09 09:48:34 2017
# Not Valid After : Fri May 09 09:58:33 2042
# Fingerprint (SHA-256):
85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D
# Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GC CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```

\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055
\072\352

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\002\151\060\202\001\357\240\003\002\001\002\002\020\041
\052\126\014\256\332\014\253\100\105\277\053\242\055\072\352\060
\012\006\010\052\206\110\316\075\004\003\003\060\155\061\013\060
\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003
\125\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040
\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165
\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144
\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105
\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040
\122\157\157\164\040\107\103\040\103\101\060\036\027\015\061\067
\060\065\060\071\060\071\064\070\063\064\132\027\015\064\062\060
\065\060\071\060\071\065\070\063\063\132\060\155\061\013\060\011
\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003\125
\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040\006
\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156
\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061
\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040
\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122
\157\157\164\040\107\103\040\103\101\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\114\351\120\300\306\017\162\030\274\330\361\272\263\211\342
\171\112\243\026\247\153\124\044\333\121\377\352\364\011\044\303
\013\042\237\313\152\047\202\201\015\322\300\257\061\344\164\202
\156\312\045\331\214\165\235\361\333\320\232\242\113\041\176\026
\247\143\220\322\071\324\261\207\170\137\030\226\017\120\033\065
\067\017\152\306\334\331\023\115\244\216\220\067\346\275\133\061
\221\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\110\207\024\254\343\303\236\220\140\072\327\312\211\356\323
\255\214\264\120\146\060\020\006\011\053\006\001\004\001\202\067
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\060\046\307\151\133\334\325
\347\262\347\310\014\214\214\303\335\171\214\033\143\325\311\122
\224\116\115\202\112\163\036\262\200\204\251\045\300\114\132\155
\111\051\140\170\023\342\176\110\353\144\002\061\000\333\064\040
\062\010\377\232\111\002\266\210\336\024\257\135\154\231\161\215
\032\077\213\327\340\242\066\206\034\007\202\072\166\123\375\302
\242\355\357\173\260\200\117\130\017\113\123\071\275

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "OISTE WISeKey Global Root GC CA"

Issuer: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:2d:3a:ea

Subject: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

Not Valid Before: Tue May 09

09:48:34 2017

Not Valid After : Fri May 09 09:58:33 2042

Fingerprint (SHA-256):

85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D

Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "OISTE WISeKey Global Root GC CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\340\021\204\136\064\336\276\210\201\271\234\366\026\046\321\226

\037\303\271\061

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\251\326\271\055\057\223\144\370\245\151\312\221\351\150\007\043

END

CKA_ISSUER MULTILINE_OCTAL

\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061

\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145

\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124

\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144

\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037

\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154

\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055

\072\352

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "UCA Global G2 Root"

#

Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN

Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef

```
# Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 11 00:00:00 2016
# Not Valid After : Mon Dec 31 00:00:00 2040
# Fingerprint (SHA-256):
9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C
# Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Global G2 Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\106\060\202\003\056\240\003\002\001\002\002\020\135
\337\261\332\132\243\355\135\276\132\145\040\145\003\220\357\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\075
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164
\061\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107
\154\157\142\141\154\040\107\062\040\122\157\157\164\060\036\027
\015\061\066\060\063\061\061\060\060\060\060\060\060\132\027\015
\064\060\061\062\063\061\060\060\060\060\060\060\132\060\075\061
\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060\017
\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164\061
\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107\154
\157\142\141\154\040\107\062\040\122\157\157\164\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\305\346\053
\157\174\357\046\005\047\243\201\044\332\157\313\001\371\231\232
\251\062\302\042\207\141\101\221\073\313\303\150\033\006\305\114
```


\251\053\301\147\027\042\035\053\355\371\051\211\223\242\170\275
\222\153\240\243\015\242\176\312\223\263\246\321\214\065\325\165
\371\027\366\317\105\305\345\172\354\167\223\240\217\043\256\016
\032\003\177\276\324\320\355\056\173\253\106\043\133\377\054\346
\124\172\224\300\052\025\360\311\215\260\172\073\044\341\327\150
\342\061\074\006\063\106\266\124\021\246\245\057\042\124\052\130
\015\001\002\361\372\025\121\147\154\300\372\327\266\033\177\321
\126\210\057\032\072\215\073\273\202\021\340\107\000\320\122\207
\253\373\206\176\017\044\153\100\235\064\147\274\215\307\055\206
\157\171\076\216\251\074\027\113\177\260\231\343\260\161\140\334
\013\365\144\303\316\103\274\155\161\271\322\336\047\133\212\350
\330\306\256\341\131\175\317\050\055\065\270\225\126\032\361\262
\130\113\267\022\067\310\174\263\355\113\200\341\215\372\062\043
\266\157\267\110\225\010\261\104\116\205\214\072\002\124\040\057
\337\277\127\117\073\072\220\041\327\301\046\065\124\040\354\307
\077\107\354\357\132\277\113\172\301\255\073\027\120\134\142\330
\017\113\112\334\053\372\156\274\163\222\315\354\307\120\350\101
\226\327\251\176\155\330\351\035\217\212\265\271\130\222\272\112
\222\053\014\126\375\200\353\010\360\136\051\156\033\034\014\257
\217\223\211\255\333\275\243\236\041\312\211\031\354\337\265\303
\032\353\026\376\170\066\114\326\156\320\076\027\034\220\027\153
\046\272\373\172\057\277\021\034\030\016\055\163\003\217\240\345
\065\240\132\342\114\165\035\161\341\071\070\123\170\100\314\203
\223\327\012\236\235\133\217\212\344\345\340\110\344\110\262\107
\315\116\052\165\052\173\362\042\366\311\276\011\221\226\127\172
\210\210\254\356\160\254\371\334\051\343\014\034\073\022\116\104
\326\247\116\260\046\310\363\331\032\227\221\150\352\357\215\106
\006\322\126\105\130\232\074\014\017\203\270\005\045\303\071\317
\073\244\064\211\267\171\022\057\107\305\347\251\227\151\374\246
\167\147\265\337\173\361\172\145\025\344\141\126\145\002\003\001
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\201\304\214\314\365\344\060\377\245\014\010\137\214\025
\147\041\164\001\337\337\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\002\001\000\023\145\042\365\216\053
\255\104\344\313\377\271\150\346\303\200\110\075\004\173\372\043
\057\172\355\066\332\262\316\155\366\346\236\345\137\130\217\313
\067\062\241\310\145\266\256\070\075\065\033\076\274\073\266\004
\320\274\371\111\365\233\367\205\305\066\266\313\274\370\310\071
\325\344\137\007\275\025\124\227\164\312\312\355\117\272\272\144
\166\237\201\270\204\105\111\114\215\157\242\353\261\314\321\303
\224\332\104\302\346\342\352\030\350\242\037\047\005\272\327\345
\326\251\315\335\357\166\230\215\000\016\315\033\372\003\267\216
\200\130\016\047\077\122\373\224\242\312\136\145\311\326\204\332
\271\065\161\363\046\300\117\167\346\201\047\322\167\073\232\024
\157\171\364\366\320\341\323\224\272\320\127\121\275\047\005\015
\301\375\310\022\060\356\157\215\021\053\010\235\324\324\277\200

```
\105\024\232\210\104\332\060\352\264\247\343\356\357\133\202\325
\076\326\255\170\222\333\134\074\363\330\255\372\270\153\177\304
\066\050\266\002\025\212\124\054\234\260\027\163\216\320\067\243
\024\074\230\225\000\014\051\005\133\236\111\111\261\137\307\343
\313\317\047\145\216\065\027\267\127\310\060\331\101\133\271\024
\266\350\302\017\224\061\247\224\230\314\152\353\265\341\047\365
\020\250\001\350\216\022\142\350\210\314\265\177\106\227\300\233
\020\146\070\032\066\106\137\042\150\075\337\311\306\023\047\253
\123\006\254\242\074\206\006\145\157\261\176\261\051\104\232\243
\272\111\151\050\151\217\327\345\137\255\004\206\144\157\032\240
\014\305\010\142\316\200\243\320\363\354\150\336\276\063\307\027
\133\177\200\304\114\114\261\246\204\212\303\073\270\011\315\024
\201\272\030\343\124\127\066\376\333\057\174\107\241\072\063\310
\371\130\073\104\117\261\312\002\211\004\226\050\150\305\113\270
\046\211\273\326\063\057\120\325\376\232\211\272\030\062\222\124
\306\133\340\235\371\136\345\015\042\233\366\332\342\310\041\262
\142\041\252\206\100\262\056\144\323\137\310\343\176\021\147\105
\037\005\376\343\242\357\263\250\263\363\175\217\370\014\037\042
\037\055\160\264\270\001\064\166\060\000\345\043\170\247\126\327
\120\037\212\373\006\365\302\031\360\320
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "UCA Global G2 Root"

Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN

Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef

Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN

Not Valid Before: Fri Mar 11 00:00:00 2016

Not Valid After : Mon Dec 31 00:00:00 2040

Fingerprint (SHA-256):

9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C

Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "UCA Global G2 Root"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\050\371\170\026\031\172\377\030\045\030\252\104\376\301\240\316
\134\266\114\212
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\200\376\360\304\112\360\134\142\062\237\034\272\170\251\120\370
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "UCA Extended Validation Root"
#
# Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60
# Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 13 00:00:00 2015
# Not Valid After : Fri Dec 31 00:00:00 2038
# Fingerprint (SHA-256):
D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24
# Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Extended Validation Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164

```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043
\160\140

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\132\060\202\003\102\240\003\002\001\002\002\020\117
\322\053\217\365\144\310\063\236\117\064\130\146\043\160\140\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\107
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164
\061\045\060\043\006\003\125\004\003\014\034\125\103\101\040\105
\170\164\145\156\144\145\144\040\126\141\154\151\144\141\164\151
\157\156\040\122\157\157\164\060\036\027\015\061\065\060\063\061
\063\060\060\060\060\060\060\132\027\015\063\070\061\062\063\061
\060\060\060\060\060\060\132\060\107\061\013\060\011\006\003\125
\004\006\023\002\103\116\061\021\060\017\006\003\125\004\012\014
\010\125\156\151\124\162\165\163\164\061\045\060\043\006\003\125
\004\003\014\034\125\103\101\040\105\170\164\145\156\144\145\144
\040\126\141\154\151\144\141\164\151\157\156\040\122\157\157\164
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\251\011\007\050\023\002\260\231\340\144\252\036\103\026\172
\163\261\221\240\165\076\250\372\343\070\000\172\354\211\152\040
\017\213\305\260\233\063\003\132\206\306\130\206\325\301\205\273
\117\306\234\100\115\312\276\356\151\226\270\255\201\060\232\174
\222\005\353\005\053\232\110\320\270\166\076\226\310\040\273\322
\260\361\217\330\254\105\106\377\252\147\140\264\167\176\152\037
\074\032\122\172\004\075\007\074\205\015\204\320\037\166\012\367
\152\024\337\162\343\064\174\127\116\126\001\076\171\361\252\051
\073\154\372\370\217\155\115\310\065\337\256\353\334\044\356\171
\105\247\205\266\005\210\336\210\135\045\174\227\144\147\011\331
\277\132\025\005\206\363\011\036\354\130\062\063\021\363\167\144
\260\166\037\344\020\065\027\033\362\016\261\154\244\052\243\163
\374\011\037\036\062\031\123\021\347\331\263\054\056\166\056\241
\243\336\176\152\210\011\350\362\007\212\370\262\315\020\347\342
\163\100\223\273\010\321\077\341\374\013\224\263\045\357\174\246
\327\321\257\237\377\226\232\365\221\173\230\013\167\324\176\350
\007\322\142\265\225\071\343\363\361\155\017\016\145\204\212\143
\124\305\200\266\340\236\113\175\107\046\247\001\010\135\321\210
\236\327\303\062\104\372\202\112\012\150\124\177\070\123\003\314
\244\000\063\144\121\131\013\243\202\221\172\136\354\026\302\363
\052\346\142\332\052\333\131\142\020\045\112\052\201\013\107\007
\103\006\160\207\322\372\223\021\051\172\110\115\353\224\307\160
\115\257\147\325\121\261\200\040\001\001\264\172\010\246\220\177
\116\340\357\007\101\207\257\152\245\136\213\373\317\120\262\232
\124\257\303\211\272\130\055\365\060\230\261\066\162\071\176\111
\004\375\051\247\114\171\344\005\127\333\224\271\026\123\215\106

\263\035\225\141\127\126\177\257\360\026\133\141\130\157\066\120
\021\013\330\254\053\225\026\032\016\037\010\315\066\064\145\020
\142\146\325\200\137\024\040\137\055\014\240\170\012\150\326\054
\327\351\157\053\322\112\005\223\374\236\157\153\147\377\210\361
\116\245\151\112\122\067\005\352\306\026\215\322\304\231\321\202
\053\073\272\065\165\367\121\121\130\363\310\007\335\344\264\003
\177\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035
\016\004\026\004\024\331\164\072\344\060\075\015\367\022\334\176
\132\005\237\036\064\232\367\341\024\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\066\215
\227\314\102\025\144\051\067\233\046\054\326\373\256\025\151\054
\153\032\032\367\137\266\371\007\114\131\352\363\311\310\271\256
\314\272\056\172\334\300\365\260\055\300\073\257\237\160\005\021
\152\237\045\117\001\051\160\343\345\014\341\352\132\174\334\111
\273\301\036\052\201\365\026\113\162\221\310\242\061\271\252\332
\374\235\037\363\135\100\002\023\374\116\034\006\312\263\024\220
\124\027\031\022\032\361\037\327\014\151\132\366\161\170\364\224
\175\221\013\216\354\220\124\216\274\157\241\114\253\374\164\144
\375\161\232\370\101\007\241\315\221\344\074\232\340\233\062\071
\163\253\052\325\151\310\170\221\046\061\175\342\307\060\361\374
\024\170\167\022\016\023\364\335\026\224\277\113\147\173\160\123
\205\312\260\273\363\070\115\054\220\071\300\015\302\135\153\351
\342\345\325\210\215\326\054\277\253\033\276\265\050\207\022\027
\164\156\374\175\374\217\320\207\046\260\033\373\271\154\253\342
\236\075\025\301\073\056\147\002\130\221\237\357\370\102\037\054
\267\150\365\165\255\317\265\366\377\021\175\302\360\044\245\255
\323\372\240\074\251\372\135\334\245\240\357\104\244\276\326\350
\345\344\023\226\027\173\006\076\062\355\307\267\102\274\166\243
\330\145\070\053\070\065\121\041\016\016\157\056\064\023\100\341
\053\147\014\155\112\101\060\030\043\132\062\125\231\311\027\340
\074\336\366\354\171\255\053\130\031\242\255\054\042\032\225\216
\276\226\220\135\102\127\304\371\024\003\065\053\034\055\121\127
\010\247\072\336\077\344\310\264\003\163\302\301\046\200\273\013
\102\037\255\015\257\046\162\332\314\276\263\243\203\130\015\202
\305\037\106\121\343\234\030\314\215\233\215\354\111\353\165\120
\325\214\050\131\312\164\064\332\214\013\041\253\036\352\033\345
\307\375\025\076\300\027\252\373\043\156\046\106\313\372\371\261
\162\153\151\317\042\204\013\142\017\254\331\031\000\224\242\166
\074\324\055\232\355\004\236\055\006\142\020\067\122\034\205\162
\033\047\345\314\306\061\354\067\354\143\131\233\013\035\166\314
\176\062\232\210\225\010\066\122\273\336\166\137\166\111\111\255
\177\275\145\040\262\311\301\053\166\030\166\237\126\261

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "UCA Extended Validation Root"

Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN

Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60

Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN

Not Valid Before: Fri Mar 13 00:00:00 2015

Not Valid After : Fri Dec 31 00:00:00 2038

Fingerprint (SHA-256):

D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24

Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL

UTF8 "UCA Extended Validation Root"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\243\241\260\157\044\141\043\112\343\066\245\302\067\374\246\377
\335\360\327\072

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\241\363\137\103\306\064\233\332\277\214\176\005\123\255\226\342

END

CKA_ISSUER MULTILINE_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043
\160\140

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Certigna Root CA"

#

Issuer: CN=Certigna Root

CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1

Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

Not Valid Before: Tue Oct 01 08:32:27 2013

```
# Not Valid After : Sat Oct 01 08:32:27 2033
# Fingerprint (SHA-256):
D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68
# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304
\343\246\341
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\133\060\202\004\103\240\003\002\001\002\002\021\000
\312\351\033\211\361\125\003\015\243\346\101\155\304\343\246\341
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061\022
\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157\164
\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060\060
\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063\066
\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164\151
\147\156\141\040\122\157\157\164\040\103\101\060\036\027\015\061
\063\061\060\060\061\060\070\063\062\062\067\132\027\015\063\063
\061\060\060\061\060\070\063\062\062\067\132\060\132\061\013\060
\011\006\003\125\004\006\023\002\106\122\061\022\060\020\006\003
\125\004\012\014\011\104\150\151\155\171\157\164\151\163\061\034
\060\032\006\003\125\004\013\014\023\060\060\060\062\040\064\070
\061\064\066\063\060\070\061\060\060\060\063\066\061\031\060\027
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\006\003\125\004\003\014\020\103\145\162\164\151\147\156\141\040
\122\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\315\030\071\145\032\131\261\352
\144\026\016\214\224\044\225\174\203\323\305\071\046\334\014\357
\026\127\215\327\330\254\243\102\177\202\312\355\315\133\333\016
\267\055\355\105\010\027\262\331\263\313\326\027\122\162\050\333
\216\116\236\212\266\013\371\236\204\232\115\166\336\042\051\134
\322\263\322\006\076\060\071\251\164\243\222\126\034\241\157\114
\012\040\155\237\043\172\264\306\332\054\344\035\054\334\263\050
\320\023\362\114\116\002\111\241\124\100\236\346\345\005\240\055
\204\310\377\230\154\320\353\212\032\204\010\036\267\150\043\356
\043\325\160\316\155\121\151\020\356\241\172\302\321\042\061\302
\202\205\322\362\125\166\120\174\045\172\311\204\134\013\254\335
\102\116\053\347\202\242\044\211\313\220\262\320\356\043\272\146
\114\273\142\244\371\123\132\144\173\174\230\372\243\110\236\017
\225\256\247\030\364\152\354\056\003\105\257\360\164\370\052\315
\172\135\321\276\104\046\062\051\361\361\365\154\314\176\002\041
\013\237\157\244\077\276\235\123\342\317\175\251\054\174\130\032
\227\341\075\067\067\030\146\050\322\100\305\121\212\214\303\055
\316\123\210\044\130\144\060\026\305\252\340\326\012\246\100\337
\170\366\365\004\174\151\023\204\274\321\321\247\006\317\001\367
\150\300\250\127\273\072\141\255\004\214\223\343\255\374\360\333
\104\155\131\334\111\131\256\254\232\231\066\060\101\173\166\063
\042\207\243\302\222\206\156\371\160\356\256\207\207\225\033\304
\172\275\061\363\324\322\345\231\377\276\110\354\165\365\170\026
\035\246\160\301\177\074\033\241\222\373\317\310\074\326\305\223
\012\217\365\125\072\166\225\316\131\230\212\011\225\167\062\232
\203\272\054\004\072\227\275\324\057\276\327\154\233\242\312\175
\155\046\311\125\325\317\303\171\122\010\011\231\007\044\055\144
\045\153\246\041\151\233\152\335\164\115\153\227\172\101\275\253
\027\371\220\027\110\217\066\371\055\325\305\333\356\252\205\105
\101\372\315\072\105\261\150\346\066\114\233\220\127\354\043\271
\207\010\302\304\011\361\227\206\052\050\115\342\164\300\332\304
\214\333\337\342\241\027\131\316\044\131\164\061\332\177\375\060
\155\331\334\341\152\341\374\137\002\003\001\000\001\243\202\001
\032\060\202\001\026\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004
\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037\326
\341\342\171\176\053\060\037\006\003\125\035\043\004\030\060\026
\200\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037
\326\341\342\171\176\053\060\104\006\003\125\035\040\004\075\060
\073\060\071\006\004\125\035\040\000\060\061\060\057\006\010\053
\006\001\005\005\007\002\001\026\043\150\164\164\160\163\072\057
\057\167\167\167\167\056\143\145\162\164\151\147\156\141\056\146
\162\057\141\165\164\157\162\151\164\145\163\057\060\155\006\003
\125\035\037\004\146\060\144\060\057\240\055\240\053\206\051\150

\164\164\160\072\057\057\143\162\154\056\143\145\162\164\151\147
\156\141\056\146\162\057\143\145\162\164\151\147\156\141\162\157
\157\164\143\141\056\143\162\154\060\061\240\057\240\055\206\053
\150\164\164\160\072\057\057\143\162\154\056\144\150\151\155\171
\157\164\151\163\056\143\157\155\057\143\145\162\164\151\147\156
\141\162\157\157\164\143\141\056\143\162\154\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\224
\270\236\117\360\343\225\010\042\347\315\150\101\367\034\125\325
\174\000\342\055\072\211\135\150\070\057\121\042\013\112\215\313
\351\273\135\076\273\134\075\261\050\376\344\123\125\023\317\241
\220\033\002\035\137\146\106\011\063\050\341\015\044\227\160\323
\020\037\352\144\127\226\273\135\332\347\304\214\117\114\144\106
\035\134\207\343\131\336\102\321\233\250\176\246\211\335\217\034
\311\060\202\355\073\234\315\300\351\031\340\152\330\002\165\067
\253\367\064\050\050\221\362\004\012\117\065\343\140\046\001\372
\320\021\214\371\021\152\356\257\075\303\120\323\217\137\063\171
\074\206\250\163\105\220\214\040\266\162\163\027\043\276\007\145
\345\170\222\015\272\001\300\353\214\034\146\277\254\206\167\001
\224\015\234\346\351\071\215\037\246\121\214\231\014\071\167\341
\264\233\372\034\147\127\157\152\152\216\251\053\114\127\171\172
\127\042\317\315\137\143\106\215\134\131\072\206\370\062\107\142
\243\147\015\030\221\334\373\246\153\365\110\141\163\043\131\216
\002\247\274\104\352\364\111\235\361\124\130\371\140\257\332\030
\244\057\050\105\334\172\240\210\206\135\363\073\347\377\051\065
\200\374\144\103\224\346\343\034\157\276\255\016\052\143\231\053
\311\176\205\366\161\350\006\003\225\376\336\217\110\034\132\324
\222\350\053\356\347\061\333\272\004\152\207\230\347\305\137\357
\175\247\042\367\001\330\115\371\211\320\016\232\005\131\244\236
\230\331\157\053\312\160\276\144\302\125\243\364\351\257\303\222
\051\334\210\026\044\231\074\215\046\230\266\133\267\314\316\267
\067\007\375\046\331\230\205\044\377\131\043\003\232\355\235\235
\250\344\136\070\316\327\122\015\157\322\077\155\261\005\153\111
\316\212\221\106\163\364\366\057\360\250\163\167\016\145\254\241
\215\146\122\151\176\113\150\014\307\036\067\047\203\245\214\307
\002\344\024\315\111\001\260\163\263\375\306\220\072\157\322\154
\355\073\356\354\221\276\242\103\135\213\000\112\146\045\104\160
\336\100\017\370\174\025\367\242\316\074\327\136\023\214\201\027
\030\027\321\275\361\167\020\072\324\145\071\301\047\254\127\054
\045\124\377\242\332\117\212\141\071\136\256\075\112\214\275

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certigna Root CA"

Issuer: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1

```

# Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR
# Not Valid Before: Tue Oct 01 08:32:27 2013
# Not Valid After : Sat Oct 01 08:32:27 2033
# Fingerprint (SHA-256):
D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68
# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\055\015\122\024\377\236\255\231\044\001\164\040\107\156\154\205
\047\047\365\103
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\016\134\060\142\047\353\133\274\327\256\142\272\351\325\337\167
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304
\343\246\341
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign Root CA - G1"
#
# Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8
# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C

```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\012\061\365\344\142\014\154\130\355\326\330
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\224\060\202\002\174\240\003\002\001\002\002\012\061
\365\344\142\014\154\130\355\326\330\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\060\147\061\013\060\011\006\003
\125\004\006\023\002\111\116\061\023\060\021\006\003\125\004\013
\023\012\145\155\123\151\147\156\040\120\113\111\061\045\060\043
\006\003\125\004\012\023\034\145\115\165\144\150\162\141\040\124
\145\143\150\156\157\154\157\147\151\145\163\040\114\151\155\151
\164\145\144\061\034\060\032\006\003\125\004\003\023\023\145\155
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\107
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034
\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157
\147\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032
\006\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157
\157\164\040\103\101\040\055\040\107\061\060\202\001\042\060\015
```

\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001
\017\000\060\202\001\012\002\202\001\001\000\223\113\273\351\146
\212\356\235\133\325\064\223\320\033\036\303\347\236\270\144\063
\177\143\170\150\264\315\056\161\165\327\233\040\306\115\051\274
\266\150\140\212\367\041\232\126\065\132\363\166\275\330\315\232
\377\223\126\113\245\131\006\241\223\064\051\335\026\064\165\116
\362\201\264\307\226\116\255\031\025\122\112\376\074\160\165\160
\315\257\053\253\025\232\063\074\252\263\213\252\315\103\375\365
\352\160\377\355\317\021\073\224\316\116\062\026\323\043\100\052
\167\263\257\074\001\054\154\355\231\054\213\331\116\151\230\262
\367\217\101\260\062\170\141\326\015\137\303\372\242\100\222\035
\134\027\346\160\076\065\347\242\267\302\142\342\253\244\070\114
\265\071\065\157\352\003\151\372\072\124\150\205\155\326\362\057
\103\125\036\221\015\016\330\325\152\244\226\321\023\074\054\170
\120\350\072\222\322\027\126\345\065\032\100\034\076\215\054\355
\071\337\102\340\203\101\164\337\243\315\302\206\140\110\150\343
\151\013\124\000\213\344\166\151\041\015\171\116\064\010\136\024
\302\314\261\267\255\327\174\160\212\307\205\002\003\001\000\001
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\373
\357\015\206\236\260\343\335\251\271\361\041\027\177\076\374\360
\167\053\032\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\001\001\000\131\377\362\214\365\207\175\161
\075\243\237\033\133\321\332\370\323\234\153\066\275\233\251\141
\353\336\026\054\164\075\236\346\165\332\327\272\247\274\102\027
\347\075\221\353\345\175\335\076\234\361\317\222\254\154\110\314
\302\042\077\151\073\305\266\025\057\243\065\306\150\052\034\127
\257\071\357\215\320\065\303\030\014\173\000\126\034\315\213\031
\164\336\276\017\022\340\320\252\241\077\002\064\261\160\316\235
\030\326\010\003\011\106\356\140\340\176\266\304\111\004\121\175
\160\140\274\252\262\377\171\162\172\246\035\075\137\052\370\312
\342\375\071\267\107\271\353\176\337\004\043\257\372\234\006\007
\351\373\143\223\200\100\265\306\154\012\061\050\316\014\237\317
\263\043\065\200\101\215\154\304\067\173\201\057\200\241\100\102
\205\351\331\070\215\350\241\123\315\001\277\151\350\132\006\362
\105\013\220\372\256\341\277\235\362\256\127\074\245\256\262\126
\364\213\145\100\351\375\061\201\054\364\071\011\330\356\153\247
\264\246\035\025\245\230\367\001\201\330\205\175\363\121\134\161
\210\336\272\314\037\200\176\112

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "emSign Root CA - G1"

Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

```

# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8
# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies
Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\212\307\255\217\163\254\116\301\265\165\115\245\100\364\374\317
\174\265\216\214
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\234\102\204\127\335\313\013\247\056\225\255\266\363\332\274\254
END
CKA_ISSUER MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\061\365\344\142\014\154\130\355\326\330
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign ECC Root CA - G3"
#
# Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84
# Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B

```

Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign ECC Root CA - G3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\074\366\007\251\150\160\016\332\213\204

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\116\060\202\001\323\240\003\002\001\002\002\012\074
\366\007\251\150\160\016\332\213\204\060\012\006\010\052\206\110
\316\075\004\003\003\060\153\061\013\060\011\006\003\125\004\006
\023\002\111\116\061\023\060\021\006\003\125\004\013\023\012\145
\155\123\151\147\156\040\120\113\111\061\045\060\043\006\003\125
\004\012\023\034\145\115\165\144\150\162\141\040\124\145\143\150
\156\157\154\157\147\151\145\163\040\114\151\155\151\164\145\144
\061\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040
\107\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060
\060\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060
\060\132\060\153\061\013\060\011\006\003\125\004\006\023\002\111
\116\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151
\147\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023
\034\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154
\157\147\151\145\163\040\114\151\155\151\164\145\144\061\040\060

```
\036\006\003\125\004\003\023\027\145\155\123\151\147\156\040\105
\103\103\040\122\157\157\164\040\103\101\040\055\040\107\063\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\043\245\014\270\055\022\365\050\363
\261\262\335\342\002\022\200\236\071\137\111\115\237\311\045\064
\131\164\354\273\006\034\347\300\162\257\350\256\057\341\101\124
\207\024\250\112\262\350\174\202\346\133\152\265\334\263\165\316
\213\006\320\206\043\277\106\325\216\017\077\004\364\327\034\222
\176\366\245\143\302\365\137\216\056\117\241\030\031\002\053\062
\012\202\144\175\026\223\321\243\102\060\100\060\035\006\003\125
\035\016\004\026\004\024\174\135\002\204\023\324\314\212\233\201
\316\027\034\056\051\036\234\110\143\102\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\276
\363\141\317\002\020\035\144\225\007\270\030\156\210\205\005\057
\203\010\027\220\312\037\212\114\350\015\033\172\261\255\325\201
\011\107\357\073\254\010\004\174\134\231\261\355\107\007\322\002
\061\000\235\272\125\374\251\112\350\355\355\346\166\001\102\173
\310\370\140\331\215\121\213\125\073\373\214\173\353\145\011\303
\370\226\315\107\250\202\362\026\125\167\044\176\022\020\225\004
\054\243
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "emSign ECC Root CA - G3"

Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies

Limited,OU=emSign PKI,C=IN

Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84

Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

Not Valid Before: Sun Feb 18 18:30:00 2018

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B

Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign ECC Root CA - G3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\060\103\372\117\362\127\334\240\303\200\356\056\130\352\170\262
\077\346\273\301
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\316\013\162\321\237\210\216\320\120\003\350\343\270\213\147\100

END

CKA_ISSUER MULTILINE_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145

\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147

\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006

\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103

\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\074\366\007\251\150\160\016\332\213\204

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "emSign Root CA - C1"

#

Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2

Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Not Valid Before: Sun Feb 18 18:30:00 2018

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F

#

Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign Root CA - C1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003

\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164

\040\103\101\040\055\040\103\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164
\040\103\101\040\055\040\103\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\013\000\256\317\000\272\304\317\062\370\103\262

END

CKA_VALUE MULTILINE_OCTAL

\060\202\003\163\060\202\002\133\240\003\002\001\002\002\013\000
\256\317\000\272\304\317\062\370\103\262\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\126\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\023\060\021\006\003\125\004
\013\023\012\145\155\123\151\147\156\040\120\113\111\061\024\060
\022\006\003\125\004\012\023\013\145\115\165\144\150\162\141\040
\111\156\143\061\034\060\032\006\003\125\004\003\023\023\145\155
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\103
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013
\145\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\103\061\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\317\353\251\271\361\231
\005\314\330\050\041\112\363\163\064\121\204\126\020\365\240\117
\054\022\343\372\023\232\047\320\317\371\171\032\164\137\035\171
\071\374\133\370\160\216\340\222\122\367\344\045\371\124\203\331
\035\323\310\132\205\077\136\307\266\007\356\076\300\316\232\257
\254\126\102\052\071\045\160\326\277\265\173\066\255\254\366\163
\334\315\327\035\212\203\245\373\053\220\025\067\153\034\046\107
\334\073\051\126\223\152\263\301\152\072\235\075\365\301\227\070
\130\005\213\034\021\343\344\264\270\135\205\035\203\376\170\137
\013\105\150\030\110\245\106\163\064\073\376\017\310\166\273\307
\030\363\005\321\206\363\205\355\347\271\331\062\255\125\210\316
\246\266\221\260\117\254\176\025\043\226\366\077\360\040\064\026
\336\012\306\304\004\105\171\177\247\375\276\322\251\245\257\234
\305\043\052\367\074\041\154\275\257\217\116\305\072\262\363\064
\022\374\337\200\032\111\244\324\251\225\367\236\211\136\242\211
\254\224\313\250\150\233\257\212\145\047\315\211\356\335\214\265
\153\051\160\103\240\151\013\344\271\017\002\003\001\000\001\243
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\376\241
\340\160\036\052\003\071\122\132\102\276\134\221\205\172\030\252

```
\115\265\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\001\001\000\302\112\126\372\025\041\173\050\242
\351\345\035\373\370\055\304\071\226\101\114\073\047\054\304\154
\030\025\200\306\254\257\107\131\057\046\013\343\066\260\357\073
\376\103\227\111\062\231\022\025\133\337\021\051\377\253\123\370
\273\301\170\017\254\234\123\257\127\275\150\214\075\151\063\360
\243\240\043\143\073\144\147\042\104\255\325\161\313\126\052\170
\222\243\117\022\061\066\066\342\336\376\000\304\243\140\017\047
\255\240\260\212\265\066\172\122\241\275\047\364\040\047\142\350
\115\224\044\023\344\012\004\351\074\253\056\310\103\011\112\306
\141\004\345\111\064\176\323\304\310\365\017\300\252\351\272\124
\136\363\143\053\117\117\120\324\376\271\173\231\214\075\300\056
\274\002\053\323\304\100\344\212\007\061\036\233\316\046\231\023
\373\021\352\232\042\014\021\031\307\136\033\201\120\060\310\226
\022\156\347\313\101\177\221\073\242\107\267\124\200\033\334\000
\314\232\220\352\303\303\120\006\142\014\060\300\025\110\247\250
\131\174\341\256\042\242\342\012\172\017\372\142\253\122\114\341
\361\337\312\276\203\015\102
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "emSign Root CA - C1"

Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2

Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

Not Valid Before: Sun Feb 18 18:30:00 2018

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F

Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign Root CA - C1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\347\056\361\337\374\262\011\050\317\135\324\325\147\067\261\121
```

```
\313\206\117\001
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\330\343\135\001\041\372\170\132\260\337\272\322\356\052\137\150
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164
\040\103\101\040\055\040\103\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\000\256\317\000\272\304\317\062\370\103\262
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign ECC Root CA - C3"
#
# Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8
# Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3
#
Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:1F:60:15:0C:EE:48:66
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign ECC Root CA - C3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

```

\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\173\161\266\202\126\270\022\174\234\250

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\053\060\202\001\261\240\003\002\001\002\002\012\173
\161\266\202\126\270\022\174\234\250\060\012\006\010\052\206\110
\316\075\004\003\003\060\132\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\023\060\021\006\003\125\004\013\023\012\145
\155\123\151\147\156\040\120\113\111\061\024\060\022\006\003\125
\004\012\023\013\145\115\165\144\150\162\141\040\111\156\143\061
\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147\156
\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040\103
\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013
\145\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\103\063\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\375\245\141\256\173\046\020\035\351\267\042
\060\256\006\364\201\263\261\102\161\225\071\274\323\122\343\257
\257\371\362\227\065\222\066\106\016\207\225\215\271\071\132\351
\273\337\320\376\310\007\101\074\273\125\157\203\243\152\373\142
\260\201\211\002\160\175\110\305\112\343\351\042\124\042\115\223
\273\102\014\257\167\234\043\246\175\327\141\021\316\145\307\370
\177\376\365\362\251\243\102\060\100\060\035\006\003\125\035\016
\004\026\004\024\373\132\110\320\200\040\100\362\250\351\000\007
\151\031\167\247\346\303\364\317\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001
\001\377\004\005\060\003\001\001\377\060\012\006\010\052\206\110
\316\075\004\003\003\003\150\000\060\145\002\061\000\264\330\057
\002\211\375\266\114\142\272\103\116\023\204\162\265\256\335\034
\336\326\265\334\126\217\130\100\132\055\336\040\114\042\203\312
\223\250\176\356\022\100\307\326\207\117\370\337\205\002\060\034
\024\144\344\174\226\203\021\234\260\321\132\141\113\246\017\111
\323\000\374\241\374\344\245\377\177\255\327\060\320\307\167\177
\276\201\007\125\060\120\040\024\365\127\070\012\250\061\121

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "emSign ECC Root CA - C3"

Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8

Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

Not Valid Before: Sun Feb 18 18:30:00 2018

#

Not Valid After : Wed Feb 18 18:30:00 2043

Fingerprint (SHA-256):

BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3

Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:1F:60:15:0C:EE:48:66

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "emSign ECC Root CA - C3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\266\257\103\302\233\201\123\175\366\357\153\303\037\037\140\025

\014\356\110\146

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\076\123\263\243\201\356\327\020\370\323\260\035\027\222\365\325

END

CKA_ISSUER MULTILINE_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003

\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040

\122\157\157\164\040\103\101\040\055\040\103\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\012\173\161\266\202\126\270\022\174\234\250

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Hongkong Post Root CA 3"

#

Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4

Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Not Valid Before: Sat Jun 03 02:29:46 2017

```
# Not Valid After : Tue Jun 03 02:29:46 2042
# Fingerprint (SHA-256):
5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6
# Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\317\060\202\003\267\240\003\002\001\002\002\024\010
\026\137\212\114\245\354\000\311\223\100\337\304\306\256\043\270
\034\132\244\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\157\061\013\060\011\006\003\125\004\006\023\002\110
\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156\147
\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023\011
\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003\125
\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163
\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147
\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103
```

\101\040\063\060\036\027\015\061\067\060\066\060\063\060\062\062
\071\064\066\132\027\015\064\062\060\066\060\063\060\062\062\071
\064\066\132\060\157\061\013\060\011\006\003\125\004\006\023\002
\110\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156
\147\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023
\011\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003
\125\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157
\163\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156
\147\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040
\103\101\040\063\060\202\002\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012
\002\202\002\001\000\263\210\327\352\316\017\040\116\276\346\326
\003\155\356\131\374\302\127\337\051\150\241\203\016\076\150\307
\150\130\234\034\140\113\211\103\014\271\324\025\262\356\301\116
\165\351\265\247\357\345\351\065\231\344\314\034\347\113\137\215
\063\060\040\063\123\331\246\273\325\076\023\216\351\037\207\111
\255\120\055\120\312\030\276\001\130\242\023\160\226\273\211\210
\126\200\134\370\275\054\074\341\114\127\210\273\323\271\225\357
\313\307\366\332\061\164\050\246\346\124\211\365\101\061\312\345
\046\032\315\202\340\160\332\073\051\273\325\003\365\231\272\125
\365\144\321\140\016\263\211\111\270\212\057\005\322\204\105\050
\174\217\150\120\022\170\374\013\265\123\313\302\230\034\204\243
\236\260\276\043\244\332\334\310\053\036\332\156\105\036\211\230
\332\371\000\056\006\351\014\073\160\325\120\045\210\231\313\315
\163\140\367\325\377\065\147\305\241\274\136\253\315\112\270\105
\353\310\150\036\015\015\024\106\022\343\322\144\142\212\102\230
\274\264\306\010\010\370\375\250\114\144\234\166\001\275\057\251
\154\063\017\330\077\050\270\074\151\001\102\206\176\151\301\311
\006\312\345\172\106\145\351\302\326\120\101\056\077\267\344\355
\154\327\277\046\001\021\242\026\051\112\153\064\006\220\354\023
\322\266\373\152\166\322\074\355\360\326\055\335\341\025\354\243
\233\057\054\311\076\053\344\151\073\377\162\045\261\066\206\133
\307\177\153\213\125\033\112\305\040\141\075\256\313\120\341\010
\072\276\260\217\143\101\123\060\010\131\074\230\035\167\272\143
\221\172\312\020\120\140\277\360\327\274\225\207\217\227\305\376
\227\152\001\224\243\174\133\205\035\052\071\072\320\124\241\321
\071\161\235\375\041\371\265\173\360\342\340\002\217\156\226\044
\045\054\240\036\054\250\304\211\247\357\355\231\006\057\266\012
\114\117\333\242\314\067\032\257\107\205\055\212\137\304\064\064
\114\000\375\030\223\147\023\321\067\346\110\264\213\006\305\127
\173\031\206\012\171\313\000\311\122\257\102\377\067\217\341\243
\036\172\075\120\253\143\006\347\025\265\077\266\105\067\224\067
\261\176\362\110\303\177\305\165\376\227\215\105\217\032\247\032
\162\050\032\100\017\002\003\001\000\001\243\143\060\141\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\037\006\003\125\035\043\004\030\060\026\200\024\027\235\315\036
\213\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141

\060\035\006\003\125\035\016\004\026\004\024\027\235\315\036\213
\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\002\001\000\126\325\173\156\346\042\001\322\102\233\030\325\016
\327\146\043\134\343\376\240\307\222\322\351\224\255\113\242\306
\354\022\174\164\325\110\322\131\024\231\300\353\271\321\353\364
\110\060\133\255\247\127\163\231\251\323\345\267\321\056\131\044
\130\334\150\056\056\142\330\152\344\160\013\055\040\120\040\244
\062\225\321\000\230\273\323\375\367\062\362\111\256\306\172\340
\107\276\156\316\313\243\162\072\055\151\135\313\310\350\105\071
\324\372\102\301\021\114\167\135\222\373\152\377\130\104\345\353
\201\236\257\240\231\255\276\251\001\146\313\070\035\074\337\103
\037\364\115\156\264\272\027\106\374\175\375\207\201\171\152\015
\063\017\372\057\370\024\271\200\263\135\115\252\227\341\371\344
\030\305\370\325\070\214\046\074\375\362\050\342\356\132\111\210
\054\337\171\075\216\236\220\074\275\101\112\072\335\133\366\232
\264\316\077\045\060\177\062\175\242\003\224\320\334\172\241\122
\336\156\223\215\030\046\375\125\254\275\217\233\322\317\257\347
\206\054\313\037\011\157\243\157\251\204\324\163\277\115\241\164
\033\116\043\140\362\314\016\252\177\244\234\114\045\250\262\146
\073\070\377\331\224\060\366\162\204\276\150\125\020\017\306\163
\054\026\151\223\007\376\261\105\355\273\242\125\152\260\332\265
\112\002\045\047\205\327\267\267\206\104\026\211\154\200\053\076
\227\251\234\325\176\125\114\306\336\105\020\034\352\351\073\237
\003\123\356\356\172\001\002\026\170\324\350\302\276\106\166\210
\023\077\042\273\110\022\035\122\000\264\002\176\041\032\036\234
\045\364\363\075\136\036\322\034\371\263\055\266\367\067\134\306
\313\041\116\260\367\231\107\030\205\301\053\272\125\256\006\352
\320\007\262\334\253\320\202\226\165\316\322\120\376\231\347\317
\057\237\347\166\321\141\052\373\041\273\061\320\252\237\107\244
\262\042\312\026\072\120\127\304\133\103\147\305\145\142\003\111
\001\353\103\331\330\370\236\255\317\261\143\016\105\364\240\132
\054\233\055\305\246\300\255\250\107\364\047\114\070\015\056\033
\111\073\122\364\350\210\203\053\124\050\324\362\065\122\264\062
\203\142\151\144\014\221\234\237\227\352\164\026\375\037\021\006
\232\233\364

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Hongkong Post Root CA 3"

Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4

Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

Not Valid Before: Sat Jun 03 02:29:46 2017

Not Valid After : Tue Jun 03 02:29:46 2042


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# Fingerprint (SHA-256):
5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6
#
Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\242\320\354\040\122\201\133\301\363\370\144\002\044\116\302
\216\002\113\002
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\021\374\237\275\163\060\002\212\375\077\363\130\271\313\040\360
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G4"
#
# Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58
# Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Wed May 27 11:11:16 2015
# Not Valid After : Sun Dec 27 11:41:16 2037
# Fingerprint (SHA-256):
DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88

```

```
#
Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125
\145\255\130
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\006\113\060\202\004\063\240\003\002\001\002\002\021\000
\331\265\103\177\257\251\071\017\000\000\000\000\125\145\255\130
```

\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165\163
\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004\013
\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165\163
\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162\155
\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051\040
\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111\156
\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162\151
\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060\060
\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107\064
\060\036\027\015\061\065\060\065\062\067\061\061\061\061\061\066
\132\027\015\063\067\061\062\062\067\061\061\064\061\061\066\132
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\261\354\054\102\356\342\321\060\377\245\222\107\342\055
\303\272\144\227\155\312\367\015\265\131\301\263\313\250\150\031
\330\257\204\155\060\160\135\176\363\056\322\123\231\341\376\037
\136\331\110\257\135\023\215\333\377\143\063\115\323\000\002\274
\304\370\321\006\010\224\171\130\212\025\336\051\263\375\375\304
\117\350\252\342\240\073\171\315\277\153\103\062\335\331\164\020
\271\367\364\150\324\273\320\207\325\252\113\212\052\157\052\004
\265\262\246\307\240\172\346\110\253\322\321\131\314\326\176\043
\346\227\154\360\102\345\334\121\113\025\101\355\111\112\311\336
\020\227\326\166\301\357\245\265\066\024\227\065\330\170\042\065
\122\357\103\275\333\047\333\141\126\202\064\334\313\210\140\014
\013\132\345\054\001\306\124\257\327\252\301\020\173\322\005\132
\270\100\236\206\247\303\220\206\002\126\122\011\172\234\322\047
\202\123\112\145\122\152\365\074\347\250\362\234\257\213\275\323
\016\324\324\136\156\207\236\152\075\105\035\321\135\033\364\351
\012\254\140\231\373\211\264\377\230\054\317\174\035\351\002\252
\004\232\036\270\334\210\156\045\263\154\146\367\074\220\363\127
\301\263\057\365\155\362\373\312\241\370\051\235\106\213\263\152
\366\346\147\007\276\054\147\012\052\037\132\262\076\127\304\323

\041\041\143\145\122\221\033\261\231\216\171\176\346\353\215\000
\331\132\252\352\163\350\244\202\002\107\226\376\133\216\124\141
\243\353\057\113\060\260\213\043\165\162\174\041\074\310\366\361
\164\324\034\173\243\005\125\356\273\115\073\062\276\232\167\146
\236\254\151\220\042\007\037\141\072\226\276\345\232\117\314\005
\074\050\131\323\301\014\124\250\131\141\275\310\162\114\350\334
\237\207\177\275\234\110\066\136\225\243\016\271\070\044\125\374
\165\146\353\002\343\010\064\051\112\306\343\053\057\063\240\332
\243\206\245\022\227\375\200\053\332\024\102\343\222\275\076\362
\135\136\147\164\056\034\210\107\051\064\137\342\062\250\234\045
\067\214\272\230\000\227\213\111\226\036\375\045\212\254\334\332
\330\135\164\156\146\260\377\104\337\241\030\306\276\110\057\067
\224\170\370\225\112\077\177\023\136\135\131\375\164\206\103\143
\163\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003
\125\035\016\004\026\004\024\237\070\304\126\043\303\071\350\240
\161\154\350\124\114\344\350\072\261\277\147\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\022
\345\102\246\173\213\017\014\344\106\245\266\140\100\207\214\045
\176\255\270\150\056\133\306\100\166\074\003\370\311\131\364\363
\253\142\316\020\215\264\132\144\214\150\300\260\162\103\064\322
\033\013\366\054\123\322\312\220\113\206\146\374\252\203\042\364
\213\032\157\046\110\254\166\167\010\277\305\230\134\364\046\211
\236\173\303\271\144\062\001\177\323\303\335\130\155\354\261\253
\204\125\164\167\204\004\047\122\153\206\114\316\335\271\145\377
\326\306\136\237\232\020\231\113\165\152\376\152\351\227\040\344
\344\166\172\306\320\044\252\220\315\040\220\272\107\144\373\177
\007\263\123\170\265\012\142\362\163\103\316\101\053\201\152\056
\205\026\224\123\324\153\137\162\042\253\121\055\102\325\000\234
\231\277\336\273\224\073\127\375\232\365\206\313\126\073\133\210
\001\345\174\050\113\003\371\111\203\174\262\177\174\343\355\216
\241\177\140\123\216\125\235\120\064\022\017\267\227\173\154\207
\112\104\347\365\155\354\200\067\360\130\031\156\112\150\166\360
\037\222\344\352\265\222\323\141\121\020\013\255\247\331\137\307
\137\334\037\243\134\214\241\176\233\267\236\323\126\157\146\136
\007\226\040\355\013\164\373\146\116\213\021\025\351\201\111\176
\157\260\324\120\177\042\327\137\145\002\015\246\364\205\036\330
\256\006\113\112\247\322\061\146\302\370\316\345\010\246\244\002
\226\104\150\127\304\325\063\317\031\057\024\304\224\034\173\244
\331\360\237\016\261\200\342\321\236\021\144\251\210\021\072\166
\202\345\142\302\200\330\244\203\355\223\357\174\057\220\260\062
\114\226\025\150\110\122\324\231\010\300\044\350\034\343\263\245
\041\016\222\300\220\037\317\040\137\312\073\070\307\267\155\072
\363\346\104\270\016\061\153\210\216\160\353\234\027\122\250\101
\224\056\207\266\347\246\022\305\165\337\133\300\012\156\173\244
\344\136\206\371\066\224\337\167\303\351\015\300\071\361\171\273
\106\216\253\103\131\047\267\040\273\043\351\126\100\041\354\061

```
\075\145\252\103\362\075\337\160\104\341\272\115\046\020\073\230
\237\363\310\216\033\070\126\041\152\121\223\323\221\312\106\332
\211\267\075\123\203\054\010\037\213\217\123\335\377\254\037
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

Trust for "Entrust Root Certification Authority - G4"

Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58

#

Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

Not Valid Before: Wed May 27 11:11:16 2015

Not Valid After : Sun Dec 27 11:41:16 2037

Fingerprint (SHA-256):

DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88

Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Entrust Root Certification Authority - G4"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\024\210\116\206\046\067\260\046\257\131\142\134\100\167\354\065
\051\272\226\001
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\211\123\361\203\043\267\174\216\005\361\214\161\070\116\037\210
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125
\145\255\130
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Microsoft ECC Root Certificate Authority 2017"
#
# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec
# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 23:06:45 2019
# Not Valid After : Fri Jul 18 23:16:04 2042
# Fingerprint (SHA-256):
35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02
# Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```

\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001
\302\354

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\131\060\202\001\337\240\003\002\001\002\002\020\146
\362\075\257\207\336\213\261\112\352\014\127\061\001\302\354\060
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\036\060\034\006\003
\125\004\012\023\025\115\151\143\162\157\163\157\146\164\040\103
\157\162\160\157\162\141\164\151\157\156\061\066\060\064\006\003
\125\004\003\023\055\115\151\143\162\157\163\157\146\164\040\105
\103\103\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\062\060
\061\067\060\036\027\015\061\071\061\062\061\070\062\063\060\066
\064\065\132\027\015\064\062\060\067\061\070\062\063\061\066\060
\064\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125
\123\061\036\060\034\006\003\125\004\012\023\025\115\151\143\162
\157\163\157\146\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\066\060\064\006\003\125\004\003\023\055\115\151\143\162
\157\163\157\146\164\040\105\103\103\040\122\157\157\164\040\103
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157
\162\151\164\171\040\062\060\061\067\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\324\274\075\002\102\165\101\023\043\315\200\004\206\002\121
\057\152\250\201\142\013\145\314\366\312\235\036\157\112\146\121
\242\003\331\235\221\372\266\026\261\214\156\336\174\315\333\171
\246\057\316\273\316\161\057\345\245\253\050\354\143\004\146\231
\370\372\362\223\020\005\341\201\050\102\343\306\150\364\346\033
\204\140\112\211\257\355\171\017\073\316\361\366\104\365\001\170
\300\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\310\313\231\162\160\122\014\370\346\276\262\004\127\051\052
\317\102\020\355\065\060\020\006\011\053\006\001\004\001\202\067
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\060\130\362\115\352\014\371
\137\136\356\140\051\313\072\362\333\326\062\204\031\077\174\325
\057\302\261\314\223\256\120\273\011\062\306\306\355\176\311\066
\224\022\344\150\205\006\242\033\320\057\002\061\000\231\351\026
\264\016\372\126\110\324\244\060\026\221\170\333\124\214\145\001
\212\347\120\146\302\061\267\071\272\270\032\042\007\116\374\153
\124\026\040\377\053\265\347\114\014\115\246\117\163

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "Microsoft ECC Root Certificate Authority 2017"
# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec
# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 23:06:45 2019
# Not Valid After : Fri Jul 18 23:16:04 2042
# Fingerprint (SHA-256):
35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02
#
Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\231\232\144\303\177\364\175\237\253\225\361\107\151\211\024\140
\356\304\303\305
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\335\241\003\346\112\223\020\321\277\360\031\102\313\376\355\147
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001
\302\354
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Microsoft RSA Root Certificate Authority 2017"
#
# Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3
# Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 22:51:22 2019

```


Not Valid After : Fri Jul 18 23:00:23 2042

Fingerprint (SHA-256):

C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0

Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL

CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\250\060\202\003\220\240\003\002\001\002\002\020\036
\323\227\011\137\330\264\263\107\160\036\252\276\177\105\263\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036\060
\034\006\003\125\004\012\023\025\115\151\143\162\157\163\157\146
\164\040\103\157\162\160\157\162\141\164\151\157\156\061\066\060
\064\006\003\125\004\003\023\055\115\151\143\162\157\163\157\146
\164\040\122\123\101\040\122\157\157\164\040\103\145\162\164\151
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\062\060\061\067\060\036\027\015\061\071\061\062\061\070\062
\062\065\061\062\062\132\027\015\064\062\060\067\061\070\062\063
\060\060\062\063\132\060\145\061\013\060\011\006\003\125\004\006

\023\002\125\123\061\036\060\034\006\003\125\004\012\023\025\115
\151\143\162\157\163\157\146\164\040\103\157\162\160\157\162\141
\164\151\157\156\061\066\060\064\006\003\125\004\003\023\055\115
\151\143\162\157\163\157\146\164\040\122\123\101\040\122\157\157
\164\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165
\164\150\157\162\151\164\171\040\062\060\061\067\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\133\276
\224\063\214\051\225\221\026\012\225\275\107\142\301\211\363\231
\066\337\106\220\311\245\355\170\152\157\107\221\150\370\047\147
\120\063\035\241\246\373\340\345\103\243\204\002\127\001\135\234
\110\100\202\123\020\274\277\307\073\150\220\266\202\055\345\364
\145\320\314\155\031\314\225\371\173\254\112\224\255\016\336\113
\103\035\207\007\222\023\220\200\203\144\065\071\004\374\345\351
\154\263\266\037\120\224\070\145\120\134\027\106\271\266\205\265
\034\265\027\350\326\105\235\330\262\046\260\312\304\160\112\256
\140\244\335\263\331\354\374\073\325\127\162\274\077\310\311\262
\336\113\153\370\043\154\003\300\005\275\225\307\315\163\073\146
\200\144\343\032\254\056\371\107\005\362\006\266\233\163\365\170
\063\133\307\241\373\047\052\241\264\232\221\214\221\323\072\202
\076\166\100\264\315\122\141\121\160\050\077\305\305\132\362\311
\214\111\273\024\133\115\310\377\147\115\114\022\226\255\365\376
\170\250\227\207\327\375\136\040\200\334\241\113\042\373\324\211
\255\272\316\107\227\107\125\173\217\105\310\147\050\204\225\034
\150\060\357\357\111\340\065\173\144\347\230\260\224\332\115\205
\073\076\125\304\050\257\127\363\236\023\333\106\047\237\036\242
\136\104\203\244\245\312\325\023\263\113\077\304\343\302\346\206
\141\244\122\060\271\172\040\117\157\017\070\123\313\063\014\023
\053\217\326\232\275\052\310\055\261\034\175\113\121\312\107\321
\110\047\162\135\207\353\325\105\346\110\145\235\257\122\220\272
\133\242\030\145\127\022\237\150\271\324\025\153\224\304\151\042
\230\364\063\340\355\371\121\216\101\120\311\064\117\166\220\254
\374\070\301\330\341\173\271\343\343\224\341\106\151\313\016\012
\120\153\023\272\254\017\067\132\267\022\265\220\201\036\126\256
\127\042\206\331\311\322\321\327\121\343\253\073\306\125\375\036
\016\323\164\012\321\332\252\352\151\270\227\050\217\110\304\007
\370\122\103\072\364\312\125\065\054\260\246\152\300\234\371\362
\201\341\022\152\300\105\331\147\263\316\377\043\242\211\012\124
\324\024\271\052\250\327\354\371\253\315\045\130\062\171\217\220
\133\230\071\304\010\006\301\254\177\016\075\000\245\002\003\001
\000\001\243\124\060\122\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\011\313\131\177\206\262\160\217\032\303\071\343\300\331
\351\277\273\115\262\043\060\020\006\011\053\006\001\004\001\202
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206
\367\015\001\001\014\005\000\003\202\002\001\000\254\257\076\135
\302\021\226\211\216\243\347\222\326\227\025\270\023\242\246\102

\056\002\315\026\005\131\047\312\040\350\272\270\350\032\354\115
\250\227\126\256\145\103\261\217\000\233\122\315\125\315\123\071
\155\142\114\213\015\133\174\056\104\277\203\020\217\363\123\202
\200\303\117\072\307\156\021\077\346\343\026\221\204\373\155\204
\177\064\164\255\211\247\316\271\327\327\237\204\144\222\276\225
\241\255\011\123\063\335\356\012\352\112\121\216\157\125\253\272
\265\224\106\256\214\177\330\242\120\045\145\140\200\106\333\063
\004\256\154\265\230\164\124\045\334\223\344\370\343\125\025\075
\270\155\303\012\244\022\301\151\205\156\337\144\361\123\231\341
\112\165\040\235\225\017\344\326\334\003\361\131\030\350\107\211
\262\127\132\224\266\251\330\027\053\027\111\345\166\313\301\126
\231\072\067\261\377\151\054\221\221\223\341\337\114\243\067\166
\115\241\237\370\155\036\035\323\372\354\373\364\105\035\023\155
\317\367\131\345\042\047\162\053\206\363\127\273\060\355\044\115
\334\175\126\273\243\263\370\064\171\211\301\340\362\002\141\367
\246\374\017\273\034\027\013\256\101\331\174\275\047\243\375\056
\072\321\223\224\261\163\035\044\213\257\133\040\211\255\267\147
\146\171\365\072\306\246\226\063\376\123\222\310\106\261\021\221
\306\231\177\217\311\326\146\061\040\101\020\207\055\014\326\301
\257\064\230\312\144\203\373\023\127\321\301\360\074\172\214\245
\301\375\225\041\240\161\301\223\147\161\022\352\217\210\012\151
\031\144\231\043\126\373\254\052\056\160\276\146\304\014\204\357
\345\213\363\223\001\370\152\220\223\147\113\262\150\243\265\142
\217\351\077\214\172\073\136\017\347\214\270\306\174\357\067\375
\164\342\310\117\063\162\341\224\071\155\275\022\257\276\014\116
\160\174\033\157\215\263\062\223\163\104\026\155\350\364\367\340
\225\200\217\226\135\070\244\364\253\336\012\060\207\223\330\115
\000\161\142\105\047\113\072\102\204\133\177\145\267\147\064\122
\055\234\026\153\252\250\330\173\243\102\114\161\307\014\312\076
\203\344\246\357\267\001\060\136\121\243\171\365\160\151\246\101
\104\017\206\260\054\221\306\075\352\256\017\204

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Microsoft RSA Root Certificate Authority 2017"

Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

Serial Number: 1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3

Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

Not Valid Before: Wed Dec 18 22:51:22 2019

Not Valid After : Fri Jul 18 23:00:23 2042

Fingerprint (SHA-256):

C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0

Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\163\245\346\112\073\377\203\026\377\016\334\314\141\212\220\156
\116\256\115\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\020\377\000\377\317\311\370\307\172\300\356\065\216\311\017\107
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "e-Szigno Root CA 2017"
#
# Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a
# Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Aug 22 12:07:06 2017
# Not Valid After : Fri Aug 22 12:07:06 2042
# Fingerprint (SHA-256):
BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99
# Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "e-Szigno Root CA 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\014\001\124\110\357\041\375\227\131\015\365\004\012

END

CKA_VALUE

MULTILINE_OCTAL

\060\202\002\100\060\202\001\345\240\003\002\001\002\002\014\001
\124\110\357\041\375\227\131\015\365\004\012\060\012\006\010\052
\206\110\316\075\004\003\002\060\161\061\013\060\011\006\003\125
\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007\014
\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003\125
\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164\144
\056\061\027\060\025\006\003\125\004\141\014\016\126\101\124\110
\125\055\062\063\065\070\064\064\071\067\061\036\060\034\006\003
\125\004\003\014\025\145\055\123\172\151\147\156\157\040\122\157
\157\164\040\103\101\040\062\060\061\067\060\036\027\015\061\067
\060\070\062\062\061\062\060\067\060\066\132\027\015\064\062\060
\070\062\062\061\062\060\067\060\066\132\060\161\061\013\060\011
\006\003\125\004\006\023\002\110\125\061\021\060\017\006\003\125
\004\007\014\010\102\165\144\141\160\145\163\164\061\026\060\024
\006\003\125\004\012\014\015\115\151\143\162\157\163\145\143\040
\114\164\144\056\061\027\060\025\006\003\125\004\141\014\016\126
\101\124\110\125\055\062\063\065\070\064\064\071\067\061\036\060
\034\006\003\125\004\003\014\025\145\055\123\172\151\147\156\157
\040\122\157\157\164\040\103\101\040\062\060\061\067\060\131\060
\023\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316
\075\003\001\007\003\102\000\004\226\334\075\212\330\260\173\157
\306\047\276\104\220\261\263\126\025\173\216\103\044\175\032\204

```
\131\356\143\150\262\306\136\207\320\025\110\036\250\220\255\275
\123\242\332\336\072\220\246\140\137\150\062\265\206\101\337\207
\133\054\173\305\376\174\172\332\243\143\060\141\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006
\003\125\035\016\004\026\004\024\207\021\025\010\321\252\301\170
\014\261\257\316\306\311\220\357\277\060\004\300\060\037\006\003
\125\035\043\004\030\060\026\200\024\207\021\025\010\321\252\301
\170\014\261\257\316\306\311\220\357\277\060\004\300\060\012\006
\010\052\206\110\316\075\004\003\002\003\111\000\060\106\002\041
\000\265\127\335\327\212\125\013\066\341\206\104\372\324\331\150
\215\270\334\043\212\212\015\324\057\175\352\163\354\277\115\154
\250\002\041\000\313\245\264\022\372\347\265\350\317\176\223\374
\363\065\217\157\116\132\174\264\274\116\262\374\162\252\133\131
\371\347\334\061
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "e-Szigno Root CA 2017"

Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a

Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

Not Valid Before: Tue Aug 22 12:07:06 2017

Not Valid After : Fri Aug 22 12:07:06 2042

Fingerprint (SHA-256):

BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99

#

Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "e-Szigno Root CA 2017"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\211\324\203\003\117\236\232\110\200\137\162\067\324\251\246\357
\313\174\037\321
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\336\037\366\236\204\256\247\264\041\316\036\130\175\321\204\230
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
```

```
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\014\001\124\110\357\041\375\227\131\015\365\004\012
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "certSIGN Root CA G2"

#

Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

Serial Number:11:00:34:b6:4e:c6:36:2d:36

Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

Not Valid Before: Mon Feb 06 09:27:35 2017

Not Valid After : Thu Feb 06 09:27:35 2042

Fingerprint (SHA-256):

65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05

Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "certSIGN Root CA G2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT

MULTILINE_OCTAL

```
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\011\021\000\064\266\116\306\066\055\066

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\107\060\202\003\057\240\003\002\001\002\002\011\021
\000\064\266\116\306\066\055\066\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\101\061\013\060\011\006\003\125
\004\006\023\002\122\117\061\024\060\022\006\003\125\004\012\023
\013\103\105\122\124\123\111\107\116\040\123\101\061\034\060\032
\006\003\125\004\013\023\023\143\145\162\164\123\111\107\116\040
\122\117\117\124\040\103\101\040\107\062\060\036\027\015\061\067
\060\062\060\066\060\071\062\067\063\065\132\027\015\064\062\060
\062\060\066\060\071\062\067\063\065\132\060\101\061\013\060\011
\006\003\125\004\006\023\002\122\117\061\024\060\022\006\003\125
\004\012\023\013\103\105\122\124\123\111\107\116\040\123\101\061
\034\060\032\006\003\125\004\013\023\023\143\145\162\164\123\111
\107\116\040\122\117\117\124\040\103\101\040\107\062\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\300\305
\165\031\221\175\104\164\164\207\376\016\073\226\334\330\001\026
\314\356\143\221\347\013\157\316\073\012\151\032\174\302\343\257
\202\216\206\327\136\217\127\353\323\041\131\375\071\067\102\060
\276\120\352\266\017\251\210\330\056\055\151\041\347\321\067\030
\116\175\221\325\026\137\153\133\000\302\071\103\015\066\205\122
\271\123\145\017\035\102\345\217\317\005\323\356\334\014\032\331
\270\213\170\042\147\344\151\260\150\305\074\344\154\132\106\347
\315\307\372\357\304\354\113\275\152\244\254\375\314\050\121\357
\222\264\051\253\253\065\232\114\344\304\010\306\046\314\370\151
\237\344\234\360\051\323\134\371\306\026\045\236\043\303\040\301
\075\017\077\070\100\260\376\202\104\070\252\132\032\212\153\143
\130\070\264\025\323\266\021\151\173\036\124\356\214\032\042\254
\162\227\077\043\131\233\311\042\204\301\007\117\314\177\342\127
\312\022\160\273\246\145\363\151\165\143\275\225\373\033\227\315
\344\250\257\366\321\116\250\331\212\161\044\315\066\075\274\226
\304\361\154\251\256\345\317\015\156\050\015\260\016\265\312\121
\173\170\024\303\040\057\177\373\024\125\341\021\231\375\325\012
\241\236\002\343\142\137\353\065\113\054\270\162\350\076\075\117
\254\054\273\056\206\342\243\166\217\345\223\052\317\245\253\310
\134\215\113\006\377\022\106\254\170\313\024\007\065\340\251\337
\213\351\257\025\117\026\211\133\275\366\215\306\131\256\210\205
\016\301\211\353\037\147\305\105\216\377\155\067\066\053\170\146
\203\221\121\053\075\377\121\167\166\142\241\354\147\076\076\201
\203\340\126\251\120\037\037\172\231\253\143\277\204\027\167\361
\015\073\337\367\234\141\263\065\230\212\072\262\354\074\032\067
\077\176\217\222\317\331\022\024\144\332\020\002\025\101\377\117
\304\353\034\243\311\372\231\367\106\351\341\030\331\261\270\062
\055\313\024\014\120\330\203\145\203\356\271\134\317\313\005\132
\114\372\031\227\153\326\135\023\323\302\134\124\274\062\163\240
\170\365\361\155\036\313\237\245\246\237\042\334\321\121\236\202

\171\144\140\051\023\076\243\375\117\162\152\253\342\324\345\270
\044\125\054\104\113\212\210\104\234\312\204\323\052\073\002\003
\001\000\001\243\102\060\100\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\035\006\003\125\035\016\004
\026\004\024\202\041\055\146\306\327\240\340\025\353\316\114\011
\167\304\140\236\124\156\003\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\002\001\000\140\336\032\270\347
\362\140\202\325\003\063\201\313\006\212\361\042\111\351\350\352
\221\177\306\063\136\150\031\003\206\073\103\001\317\007\160\344
\010\036\145\205\221\346\021\042\267\365\002\043\216\256\271\036
\175\037\176\154\346\275\045\325\225\032\362\005\246\257\205\002
\157\256\370\326\061\377\045\311\112\310\307\212\251\331\237\113
\111\233\021\127\231\222\103\021\336\266\063\244\314\327\215\144
\175\324\315\074\050\054\264\232\226\352\115\365\304\104\304\045
\252\040\200\330\051\125\367\340\101\374\006\046\377\271\066\365
\103\024\003\146\170\341\021\261\332\040\137\106\000\170\000\041
\245\036\000\050\141\170\157\250\001\001\217\235\064\232\377\364
\070\220\373\270\321\263\162\006\311\161\346\201\305\171\355\013
\246\171\362\023\013\234\367\135\016\173\044\223\264\110\333\206
\137\336\120\206\170\347\100\346\061\250\220\166\160\141\257\234
\067\054\021\265\202\267\252\256\044\064\133\162\014\151\015\315
\131\237\366\161\257\234\013\321\012\070\371\006\042\203\123\045
\014\374\121\304\346\276\342\071\225\013\044\255\257\321\225\344
\226\327\164\144\153\161\116\002\074\252\205\363\040\243\103\071
\166\133\154\120\376\232\234\024\036\145\024\212\025\275\243\202
\105\132\111\126\152\322\234\261\143\062\345\141\340\123\042\016
\247\012\111\352\313\176\037\250\342\142\200\366\020\105\122\230
\006\030\336\245\315\057\177\252\324\351\076\010\162\354\043\003
\002\074\246\252\330\274\147\164\075\024\027\373\124\113\027\343
\323\171\075\155\153\111\311\050\016\056\164\120\277\014\331\106
\072\020\206\311\247\077\351\240\354\177\353\245\167\130\151\161
\346\203\012\067\362\206\111\152\276\171\010\220\366\002\026\144
\076\345\332\114\176\014\064\311\371\137\266\263\050\121\247\247
\053\252\111\372\215\145\051\116\343\153\023\247\224\243\055\121
\155\170\014\104\313\337\336\010\157\316\243\144\253\323\225\204
\324\271\122\124\162\173\226\045\314\274\151\343\110\156\015\320
\307\235\047\232\252\370\023\222\335\036\337\143\237\065\251\026
\066\354\214\270\203\364\075\211\217\315\264\027\136\327\263\027
\101\020\135\047\163\140\205\127\111\042\007

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "certSIGN Root CA G2"

Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

```

# Serial Number:11:00:34:b6:4e:c6:36:2d:36
# Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Not Valid Before: Mon Feb 06 09:27:35 2017
# Not Valid After : Thu Feb 06 09:27:35 2042
# Fingerprint (SHA-256):
65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05
# Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "certSIGN Root CA G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\046\371\223\264\355\075\050\047\260\271\113\247\351\025\035\243
\215\222\345\062
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\214\361\165\212\306\031\317\224\267\367\145\040\207\303\227\307
END
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\021\000\064\266\116\306\066\055\066
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global Certification Authority"
#
# Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
#
Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2
# Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:34:12 2017
# Not Valid After : Sat Aug 23 19:34:12 2042
# Fingerprint (SHA-256):
97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8

```

Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\014\005\367\016\206\332\111\363\106\065\056\272\262
```

END

CKA_VALUE

MULTILINE_OCTAL

```
\060\202\005\332\060\202\003\302\240\003\002\001\002\002\014\005
\367\016\206\332\111\363\106\065\056\272\262\060\015\006\011\052
\206\110\206\367\015\001\001\013\005\000\060\201\210\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006\003
\125\004\010\014\010\111\154\154\151\156\157\151\163\061\020\060
\016\006\003\125\004\007\014\007\103\150\151\143\141\147\157\061
\041\060\037\006\003\125\004\012\014\030\124\162\165\163\164\167
\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\003\014\050\124\162\165
\163\164\167\141\166\145\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171\060\036\027\015\061\067\060\070\062\063\061
```

\071\063\064\061\062\132\027\015\064\062\060\070\062\063\061\071
\063\064\061\062\132\060\201\210\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\021\060\017\006\003\125\004\010\014\010
\111\154\154\151\156\157\151\163\061\020\060\016\006\003\125\004
\007\014\007\103\150\151\143\141\147\157\061\041\060\037\006\003
\125\004\012\014\030\124\162\165\163\164\167\141\166\145\040\110
\157\154\144\151\156\147\163\054\040\111\156\143\056\061\061\060
\057\006\003\125\004\003\014\050\124\162\165\163\164\167\141\166
\145\040\107\154\157\142\141\154\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\271\135\121\050\113\074\067\222\321\202\316\275\035\275\315
\335\270\253\317\012\076\341\135\345\334\252\011\271\127\002\076
\346\143\141\337\362\017\202\143\256\243\367\254\163\321\174\347
\263\013\257\010\000\011\131\177\315\051\052\210\223\207\027\030
\200\355\210\262\264\266\020\037\055\326\137\125\242\023\135\321
\306\353\006\126\211\210\376\254\062\235\375\134\303\005\307\156
\356\206\211\272\210\003\235\162\041\206\220\256\217\003\245\334
\237\210\050\313\243\222\111\017\354\320\017\342\155\104\117\200
\152\262\324\347\240\012\123\001\272\216\227\221\166\156\274\374
\325\153\066\346\100\210\326\173\057\137\005\350\054\155\021\363
\347\262\276\222\104\114\322\227\244\376\322\162\201\103\007\234
\351\021\076\365\213\032\131\175\037\150\130\335\004\000\054\226
\363\103\263\176\230\031\164\331\234\163\331\030\276\101\307\064
\171\331\364\142\302\103\271\263\047\260\042\313\371\075\122\307
\060\107\263\311\076\270\152\342\347\350\201\160\136\102\213\117
\046\245\376\072\302\040\156\273\370\026\216\315\014\251\264\033
\154\166\020\341\130\171\106\076\124\316\200\250\127\011\067\051
\033\231\023\217\014\310\326\054\034\373\005\350\010\225\075\145
\106\334\356\315\151\342\115\217\207\050\116\064\013\076\317\024
\331\273\335\266\120\232\255\167\324\031\326\332\032\210\310\116
\033\047\165\330\262\010\361\256\203\060\271\021\016\315\207\360
\204\215\025\162\174\241\357\314\362\210\141\272\364\151\273\014
\214\013\165\127\004\270\116\052\024\056\075\017\034\036\062\246
\142\066\356\146\342\042\270\005\100\143\020\042\363\063\035\164
\162\212\054\365\071\051\240\323\347\033\200\204\055\305\075\343
\115\261\375\032\157\272\145\007\073\130\354\102\105\046\373\330
\332\045\162\304\366\000\261\042\171\275\343\174\131\142\112\234
\005\157\075\316\346\326\107\143\231\306\044\157\162\022\310\254
\177\220\264\013\221\160\350\267\346\026\020\161\027\316\336\006
\117\110\101\175\065\112\243\211\362\311\113\173\101\021\155\147
\267\010\230\114\345\021\031\256\102\200\334\373\220\005\324\370
\120\312\276\344\255\307\302\224\327\026\235\346\027\217\257\066
\373\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\231\340\031\147\015\142\333\166\263\332
\075\270\133\350\375\102\322\061\016\207\060\016\006\003\125\035

\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\230\163
\160\342\260\323\355\071\354\114\140\331\251\022\206\027\036\226
\320\350\124\050\073\144\055\041\246\370\235\126\023\152\110\075
\117\307\076\051\333\155\130\203\124\075\207\175\043\005\324\344
\034\334\350\070\145\206\305\165\247\132\333\065\005\275\167\336
\273\051\067\100\005\007\303\224\122\237\312\144\335\361\033\053
\334\106\012\020\002\061\375\112\150\015\007\144\220\346\036\365
\052\241\250\273\074\135\371\243\010\013\021\014\361\077\055\020
\224\157\376\342\064\207\203\326\317\345\033\065\155\322\003\341
\260\015\250\240\252\106\047\202\066\247\025\266\010\246\102\124
\127\266\231\132\342\013\171\220\327\127\022\121\065\031\210\101
\150\045\324\067\027\204\025\373\001\162\334\225\336\122\046\040
\230\046\342\166\365\047\157\372\000\073\112\141\331\015\313\121
\223\052\375\026\006\226\247\043\232\043\110\376\121\275\266\304
\260\261\124\316\336\154\101\255\026\147\176\333\375\070\315\271
\070\116\262\301\140\313\235\027\337\130\236\172\142\262\046\217
\164\225\233\344\133\035\322\017\335\230\034\233\131\271\043\323
\061\240\246\377\070\335\317\040\117\351\130\126\072\147\303\321
\366\231\231\235\272\066\266\200\057\210\107\117\206\277\104\072
\200\344\067\034\246\272\352\227\230\021\320\204\142\107\144\036
\252\356\100\277\064\261\234\217\116\341\362\222\117\037\216\363
\236\227\336\363\246\171\152\211\161\117\113\047\027\110\376\354
\364\120\017\117\111\175\314\105\343\275\172\100\305\101\334\141
\126\047\006\151\345\162\101\201\323\266\001\211\240\057\072\162
\171\376\072\060\277\101\354\307\142\076\221\113\307\331\061\166
\102\371\367\074\143\354\046\214\163\014\175\032\035\352\250\174
\207\250\302\047\174\341\063\101\017\317\317\374\000\240\042\200
\236\112\247\157\000\260\101\105\267\042\312\150\110\305\102\242
\256\335\035\362\340\156\116\005\130\261\300\220\026\052\244\075
\020\100\276\217\142\143\203\251\234\202\175\055\002\351\203\060
\174\313\047\311\375\036\146\000\260\056\323\041\057\216\063\026
\154\230\355\020\250\007\326\314\223\317\333\321\151\034\344\312
\311\340\266\234\351\316\161\161\336\154\077\026\244\171

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Trustwave Global Certification Authority"

Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2

Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Not Valid Before: Wed Aug 23 19:34:12 2017

Not Valid After : Sat Aug 23 19:34:12 2042

```

# Fingerprint (SHA-256):
97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8
# Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\057\217\066\117\341\130\227\104\041\131\207\245\052\232\320\151
\225\046\177\265
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\034\030\055\057\272\137\155\241\154\274\307\253\221\307\016
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\005\367\016\206\332\111\363\106\065\056\272\262
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P256 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d
# Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:35:10 2017
# Not Valid After : Sat Aug 23 19:35:10 2042
# Fingerprint (SHA-256):
94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4

```

```
# Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global ECC P256 Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\014\015\152\137\010\077\050\134\076\121\225\337\135
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\140\060\202\002\007\240\003\002\001\002\002\014\015
\152\137\010\077\050\134\076\121\225\337\135\060\012\006\010\052
\206\110\316\075\004\003\002\060\201\221\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145
\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120
```

\062\065\066\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061
\067\060\070\062\063\061\071\063\065\061\060\132\027\015\064\062
\060\070\062\063\061\071\063\065\061\060\132\060\201\221\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164
\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105
\103\103\040\120\062\065\066\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060
\131\060\023\006\007\052\206\110\316\075\002\001\006\010\052\206
\110\316\075\003\001\007\003\102\000\004\176\373\154\346\043\343
\163\062\010\312\140\346\123\234\272\164\215\030\260\170\220\122
\200\335\070\300\112\035\321\250\314\223\244\227\006\070\312\015
\025\142\306\216\001\052\145\235\252\337\064\221\056\201\301\344
\063\222\061\304\375\011\072\246\077\255\243\103\060\101\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\017\006\003\125\035\017\001\001\377\004\005\003\003\007\006\000
\060\035\006\003\125\035\016\004\026\004\024\243\101\006\254\220
\155\321\112\353\165\245\112\020\231\263\261\241\213\112\367\060
\012\006\010\052\206\110\316\075\004\003\002\003\107\000\060\104
\002\040\007\346\124\332\016\240\132\262\256\021\237\207\305\266
\377\151\336\045\276\370\240\267\010\363\104\316\052\337\010\041
\014\067\002\040\055\046\003\240\005\275\153\321\366\134\370\145
\314\206\155\263\234\064\110\143\204\011\305\215\167\032\342\314
\234\341\164\173

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "Trustwave Global ECC P256 Certification Authority"

Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings, Inc.",L=Chicago,ST=Illinois,C=US

Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d

Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings, Inc.",L=Chicago,ST=Illinois,C=US

Not Valid Before: Wed Aug 23 19:35:10 2017

Not Valid After : Sat Aug 23 19:35:10 2042

Fingerprint (SHA-256):

94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4

Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE


```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global
ECC P256 Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\264\220\202\335\105\014\276\213\133\261\146\323\342\244\010\046
\315\355\102\317
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\133\104\343\215\135\066\206\046\350\015\005\322\131\247\203\124
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\015\152\137\010\077\050\134\076\121\225\337\135
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P384 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b
# Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:36:43 2017
# Not Valid After : Sat Aug 23 19:36:43 2042
# Fingerprint (SHA-256):
55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97
# Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
  UTF8 "Trustwave Global ECC P384 Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
  MULTILINE_OCTAL
\002\014\010\275\205\227\154\231\047\244\200\150\107\073
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\235\060\202\002\044\240\003\002\001\002\002\014\010
\275\205\227\154\231\047\244\200\150\107\073\060\012\006\010\052
\206\110\316\075\004\003\003\060\201\221\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145
\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120
\063\070\064\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061
\067\060\070\062\063\061\071\063\066\064\063\132\027\015\064\062
\060\070\062\063\061\071\063\066\064\063\132\060\201\221\061\013
```

\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164
\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105
\103\103\040\120\063\070\064\040\103\145\162\164\151\146\151\143
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\153\332\015\165\065\010\061\107\005
\256\105\231\125\361\021\023\056\112\370\020\061\043\243\176\203
\323\177\050\010\072\046\032\072\317\227\202\037\200\267\047\011
\217\321\216\060\304\012\233\016\254\130\004\253\367\066\175\224
\043\244\233\012\212\213\253\353\375\071\045\146\361\136\376\214
\256\215\101\171\235\011\140\316\050\251\323\212\155\363\326\105
\324\362\230\204\070\145\240\243\103\060\101\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\017\006\003
\125\035\017\001\001\377\004\005\003\003\007\006\000\060\035\006
\003\125\035\016\004\026\004\024\125\251\204\211\322\301\062\275
\030\313\154\246\007\116\310\347\235\276\202\220\060\012\006\010
\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067
\001\222\227\105\022\176\240\363\076\255\031\072\162\335\364\120
\223\003\022\276\104\322\117\101\244\214\234\235\037\243\366\302
\222\347\110\024\376\116\233\245\221\127\256\306\067\162\273\002
\060\147\045\012\261\014\136\356\251\143\222\157\345\220\013\376
\146\042\312\107\375\212\061\367\203\376\172\277\020\276\030\053
\036\217\366\051\036\224\131\357\216\041\067\313\121\230\245\156
\113

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Trustwave Global ECC P384 Certification Authority"

Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b

Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US

Not Valid Before: Wed Aug 23 19:36:43 2017

Not Valid After : Sat Aug 23 19:36:43 2042

Fingerprint (SHA-256):

55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97

Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2

CKA_CLASS

```

CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global ECC P384 Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\347\363\243\310\317\157\303\004\056\155\016\147\062\305\236\150
\225\015\136\322
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\352\317\140\304\073\271\025\051\100\241\227\355\170\047\223\326
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\014\010\275\205\227\154\231\047\244\200\150\107\073
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "NAVER Global Root Certification Authority"
#
# Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d
# Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Not Valid Before: Fri Aug 18 08:58:42 2017
# Not Valid After : Tue Aug 18 23:59:59 2037
# Fingerprint (SHA-256):
88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65
# Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NAVER Global Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104
\161\370\326\120\115\015
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\242\060\202\003\212\240\003\002\001\002\002\024\001
\224\060\036\242\013\335\365\305\063\052\261\103\104\161\370\326
\120\115\015\060\015\006\011\052\206\110\206\367\015\001\001\014
\005\000\060\151\061\013\060\011\006\003\125\004\006\023\002\113
\122\061\046\060\044\006\003\125\004\012\014\035\116\101\126\105
\122\040\102\125\123\111\116\105\123\123\040\120\114\101\124\106
\117\122\115\040\103\157\162\160\056\061\062\060\060\006\003\125
\004\003\014\051\116\101\126\105\122\040\107\154\157\142\141\154
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036\027
\015\061\067\060\070\061\070\060\070\065\070\064\062\132\027\015
\063\067\060\070\061\070\062\063\065\071\065\071\132\060\151\061
\013\060\011\006\003\125\004\006\023\002\113\122\061\046\060\044
\006\003\125\004\012\014\035\116\101\126\105\122\040\102\125\123
\111\116\105\123\123\040\120\114\101\124\106\117\122\115\040\103
\157\162\160\056\061\062\060\060\006\003\125\004\003\014\051\116
\101\126\105\122\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
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\060\202\002\012\002\202\002\001\000\266\324\361\223\134\265\100
\211\012\253\015\220\133\120\143\256\220\224\164\027\105\162\326
\173\145\132\051\113\247\126\240\113\270\057\102\165\351\331\173
\044\132\061\145\253\027\027\321\063\072\331\021\334\100\066\207
\337\307\152\351\046\136\131\212\167\343\350\110\234\061\026\372
\076\221\261\312\311\243\342\237\316\041\123\243\002\066\060\313
\122\002\345\332\062\135\303\305\346\371\356\021\307\213\311\104
\036\204\223\030\112\264\237\345\022\144\151\320\046\205\142\001
\266\311\002\035\276\203\121\273\134\332\370\255\025\152\231\367
\222\124\367\064\133\351\277\352\051\201\022\324\123\221\226\263
\221\132\335\376\220\163\050\373\060\106\265\312\010\007\307\161
\162\311\146\323\064\227\366\214\364\030\112\341\320\075\132\105
\266\151\247\051\373\043\316\210\330\022\234\000\110\250\246\017
\263\073\222\215\161\016\164\305\213\310\114\371\364\233\216\270
\074\151\355\157\073\120\057\130\355\304\260\320\034\033\152\014
\342\274\104\252\330\315\024\135\224\170\141\277\016\156\332\052
\274\057\014\013\161\246\263\026\077\234\346\371\314\237\123\065
\342\003\240\240\030\277\273\361\276\364\326\214\207\015\102\367
\006\271\361\155\355\004\224\250\376\266\323\006\306\100\141\337
\235\235\363\124\166\316\123\072\001\246\222\101\354\004\243\217
\015\242\325\011\312\326\313\232\361\357\103\135\300\253\245\101
\317\134\123\160\160\311\210\246\055\324\153\141\163\120\046\206
\141\016\137\033\302\053\342\214\325\273\235\301\003\102\272\224
\332\137\251\260\312\314\115\012\357\107\151\003\057\042\373\361
\050\316\277\135\120\145\250\220\155\263\164\260\010\307\254\250
\321\353\076\234\374\135\032\203\056\053\313\265\363\104\235\072
\247\027\141\226\242\161\323\160\226\025\115\267\114\163\356\031
\134\305\133\076\101\376\254\165\140\073\033\143\316\000\335\332
\010\220\142\264\345\055\356\110\247\153\027\231\124\276\207\112
\343\251\136\004\114\353\020\155\124\326\357\361\350\362\142\026
\313\200\153\355\075\355\365\037\060\245\256\113\311\023\355\212
\001\001\311\270\121\130\300\146\072\261\146\113\304\325\061\002
\142\351\164\204\014\333\115\106\055\002\003\001\000\001\243\102
\060\100\060\035\006\003\125\035\016\004\026\004\024\322\237\210
\337\241\315\054\275\354\365\073\001\001\223\063\047\262\353\140
\113\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\015\006\011\052\206\110\206\367\015\001\001\014\005
\000\003\202\002\001\000\062\312\200\263\235\075\124\006\335\322
\322\056\360\244\001\041\013\147\110\312\155\216\340\310\252\015
\252\215\041\127\217\306\076\172\312\333\121\324\122\263\324\226
\204\245\130\140\177\345\013\216\037\365\334\012\025\201\345\073
\266\267\042\057\011\234\023\026\261\154\014\065\010\155\253\143
\162\355\334\276\354\307\127\346\060\040\161\326\327\020\301\023
\125\001\214\052\103\344\101\361\317\072\172\123\222\316\242\003
\005\015\070\337\002\273\020\056\331\073\322\233\172\300\241\246
\370\265\061\346\364\165\311\271\123\231\165\107\042\132\024\025
\307\170\033\266\235\351\014\370\033\166\361\205\204\336\241\332

```
\022\357\244\342\020\227\172\170\336\014\121\227\250\041\100\213
\206\275\015\360\136\116\113\066\273\073\040\037\212\102\126\341
\013\032\277\173\320\042\103\054\104\214\373\345\052\264\154\034
\034\272\224\340\023\176\041\346\232\302\313\305\102\144\264\036
\224\173\010\045\310\161\314\207\105\127\205\323\237\051\142\042
\203\121\227\000\030\227\167\152\230\222\311\174\140\154\337\154
\175\112\344\160\114\302\236\270\035\367\320\064\307\017\314\373
\247\377\003\276\255\160\220\332\013\335\310\155\227\137\232\177
\011\062\101\375\315\242\314\132\155\114\362\252\111\376\146\370
\351\330\065\353\016\050\036\356\110\057\072\320\171\011\070\174
\246\042\202\223\225\320\003\276\276\002\240\005\335\040\042\343
\157\035\210\064\140\306\346\012\271\011\165\013\360\007\350\151
\226\065\307\373\043\201\216\070\071\270\105\053\103\170\242\321
\054\024\377\015\050\162\162\225\233\136\011\333\211\104\230\252
\241\111\273\161\122\362\277\366\377\047\241\066\257\270\266\167
\210\335\072\244\155\233\064\220\334\024\135\060\277\267\353\027
\344\207\267\161\320\241\327\167\025\324\102\327\362\363\061\231
\135\233\335\026\155\077\352\006\043\370\106\242\042\355\223\366
\335\232\346\052\207\261\230\124\361\042\367\153\105\343\342\216
\166\035\232\215\304\006\215\066\267\024\363\235\124\151\267\216
\074\325\244\155\223\201\267\255\366\275\144\173\302\311\150\071
\240\222\234\315\064\206\221\220\372\144\121\235\376\376\353\245
\365\165\336\211\367\162
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "NAVER Global Root Certification Authority"

Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d

Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

Not Valid Before: Fri Aug 18 08:58:42 2017

Not Valid After : Tue Aug 18 23:59:59 2037

Fingerprint (SHA-256):

88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65

Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "NAVER Global Root Certification Authority"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\217\153\362\251\047\112\332\024\240\304\364\216\141\047\371\300
\036\170\135\321
```

END

```

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\310\176\101\366\045\073\365\011\263\027\350\106\075\277\320\233
END
CKA_ISSUER MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104
\161\370\326\120\115\015
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
#
# Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95
# Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Not Valid Before: Thu Dec 20 09:37:33 2018
# Not Valid After : Sun Dec 20 09:37:33 2043
# Fingerprint (SHA-256):
55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB
# Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8
"AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052

```



```
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056
\235\225
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\156\060\202\001\363\240\003\002\001\002\002\020\142
\366\062\154\345\304\343\150\134\033\142\335\234\056\235\225\060
\012\006\010\052\206\110\316\075\004\003\003\060\170\061\013\060
\011\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003
\125\004\012\014\010\106\116\115\124\055\122\103\115\061\016\060
\014\006\003\125\004\013\014\005\103\145\162\145\163\061\030\060
\026\006\003\125\004\141\014\017\126\101\124\105\123\055\121\062
\070\062\066\060\060\064\112\061\054\060\052\006\003\125\004\003
\014\043\101\103\040\122\101\111\132\040\106\116\115\124\055\122
\103\115\040\123\105\122\126\111\104\117\122\105\123\040\123\105
\107\125\122\117\123\060\036\027\015\061\070\061\062\062\060\060
\071\063\067\063\063\132\027\015\064\063\061\062\062\060\060\071
\063\067\063\063\132\060\170\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\021\060\017\006\003\125\004\012\014\010\106
\116\115\124\055\122\103\115\061\016\060\014\006\003\125\004\013
\014\005\103\145\162\145\163\061\030\060\026\006\003\125\004\141
\014\017\126\101\124\105\123\055\121\062\070\062\066\060\060\064
\112\061\054\060\052\006\003\125\004\003\014\043\101\103\040\122
\101\111\132\040\106\116\115\124\055\122\103\115\040\123\105\122
\126\111\104\117\122\105\123\040\123\105\107\125\122\117\123\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\366\272\127\123\310\312\253\337\066
\112\122\041\344\227\322\203\147\236\360\145\121\320\136\207\307
\107\261\131\362\127\107\233\000\002\223\104\027\151\333\102\307
\261\262\072\030\016\264\135\214\263\146\135\241\064\371\066\054
\111\333\363\106\374\263\104\151\104\023\146\375\327\305\375\257
\066\115\316\003\115\007\161\317\257\152\005\322\242\103\132\012
```

```
\122\157\001\003\116\216\213\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003
\125\035\016\004\026\004\024\001\271\057\357\277\021\206\140\362
\117\320\101\156\253\163\037\347\322\156\111\060\012\006\010\052
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\256
\112\343\053\100\303\164\021\362\225\255\026\043\336\116\014\032
\346\135\245\044\136\153\104\173\374\070\342\117\313\234\105\027
\021\114\024\047\046\125\071\165\112\003\314\023\220\237\222\002
\061\000\372\112\154\140\210\163\363\356\270\230\142\251\316\053
\302\331\212\246\160\061\035\257\260\224\114\353\117\306\343\321
\363\142\247\074\377\223\056\007\134\111\001\147\151\022\002\162
\277\347
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "AC

RAIZ FNMT-RCM SERVIDORES SEGUROS"

Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95

Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

Not Valid Before: Thu Dec 20 09:37:33 2018

Not Valid After : Sun Dec 20 09:37:33 2043

Fingerprint (SHA-256):

55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB

Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\142\377\331\236\300\145\015\003\316\165\223\322\355\077\055\062
\311\343\345\112
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\031\066\234\122\003\057\322\321\273\043\314\335\036\022\125\273
```

END

CKA_ISSUER

MULTILINE_OCTAL

```
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
```

```
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056
\235\225
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "GlobalSign Secure Mail Root R45"

#

Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

Serial Number:76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc

#

Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

Not Valid Before: Wed Mar 18 00:00:00 2020

Not Valid After : Sat Mar 18 00:00:00 2045

Fingerprint (SHA-256):

31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74

Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Secure Mail Root R45"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
```

\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217
\127\334

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\160\060\202\003\130\240\003\002\001\002\002\020\166
\123\376\250\114\120\253\237\215\062\265\035\003\217\127\334\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\122
\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060
\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151
\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125\004
\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123\145
\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040\122
\064\065\060\036\027\015\062\060\060\063\061\070\060\060\060\060
\060\060\132\027\015\064\065\060\063\061\070\060\060\060\060\060
\060\132\060\122\061\013\060\011\006\003\125\004\006\023\002\102
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142
\141\154\123\151\147\156\040\156\166\055\163\141\061\050\060\046
\006\003\125\004\003\023\037\107\154\157\142\141\154\123\151\147
\156\040\123\145\143\165\162\145\040\115\141\151\154\040\122\157
\157\164\040\122\064\065\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\334\171\314\155\006\371\155\273\340
\126\004\154\177\340\165\314\055\005\111\350\113\334\124\354\133
\167\225\162\277\177\142\235\205\251\212\044\120\137\123\345\333
\164\157\244\051\133\023\052\011\255\232\305\057\302\367\166\073
\241\105\106\252\103\346\044\376\053\260\157\062\160\031\106\132
\171\046\057\374\075\175\137\144\313\127\314\141\141\250\331\225
\156\343\225\240\156\177\107\022\030\326\357\003\311\373\212\372
\232\275\202\025\251\125\167\113\021\117\131\340\153\303\161\363
\014\330\124\325\201\150\076\023\271\025\056\207\212\074\104\047
\066\142\044\156\370\054\005\162\060\141\275\102\221\043\304\235
\045\247\331\124\232\024\243\061\255\200\171\014\247\143\154\230
\243\254\127\107\063\037\145\226\341\320\322\065\332\371\161\367
\241\246\045\265\101\135\337\076\140\330\321\366\237\245\362\270
\314\023\252\217\371\262\156\341\203\055\223\335\076\205\032\335
\350\261\134\046\001\313\111\205\374\374\322\324\177\205\142\206
\164\371\313\354\065\042\242\014\060\217\073\253\171\353\126\362
\372\102\363\355\371\037\105\211\100\051\255\352\222\164\352\122
\375\126\264\053\332\242\355\165\302\156\253\316\122\220\113\366
\336\360\111\217\232\110\324\210\031\155\105\346\314\214\271\335
\144\140\140\002\100\370\271\317\274\130\353\075\205\271\306\012
\323\234\007\146\217\307\030\071\043\106\341\074\036\243\057\120
\141\222\013\075\053\154\361\243\107\070\127\221\253\015\217\306
\235\115\004\322\046\122\134\345\245\375\052\055\026\052\001\151

\347\251\175\341\066\267\261\052\305\331\261\215\275\271\213\316
\314\213\241\076\013\110\315\120\225\064\304\330\010\131\330\153
\046\364\276\365\324\042\027\000\127\311\256\233\004\060\063\237
\013\373\337\126\242\311\156\124\166\332\261\227\142\047\131\017
\021\212\042\033\144\226\077\250\361\267\044\112\215\074\123\174
\155\203\166\075\262\046\110\163\365\104\026\001\055\011\052\216
\026\226\120\320\163\006\135\273\042\110\202\114\012\106\132\077
\200\377\134\362\362\232\254\054\010\340\326\352\360\022\070\201
\117\246\020\355\106\253\314\026\234\013\317\144\246\231\002\205
\104\147\106\255\375\115\347\002\003\001\000\001\243\102\060\100
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\240\223\025\050
\156\356\217\010\262\065\306\236\142\171\164\247\261\016\053\173
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003
\202\002\001\000\105\012\370\321\134\254\142\201\320\004\327\266
\377\127\121\211\013\014\313\336\044\145\067\373\253\236\355\146
\364\352\014\031\151\211\270\031\261\060\126\264\331\366\367\276
\306\256\227\313\105\366\021\214\072\060\144\114\301\237\131\300
\106\102\010\006\107\144\027\170\340\225\007\006\326\214\242\254
\251\331\077\323\173\126\117\374\304\207\050\337\266\053\026\043
\300\237\037\133\343\326\104\136\042\117\043\004\214\065\026\265
\171\007\206\134\057\227\342\366\010\144\246\334\333\250\212\343
\244\173\167\015\321\051\223\050\040\264\123\243\113\116\137\336
\301\366\165\043\374\037\074\170\117\160\061\170\057\242\065\124
\161\004\254\310\304\155\303\366\221\261\376\315\356\104\156\201
\366\100\305\076\052\001\277\253\114\261\003\077\015\021\344\017
\322\044\343\042\210\233\237\137\107\075\121\111\340\011\067\176
\027\041\061\166\267\147\161\110\050\113\045\327\020\350\237\141
\131\026\305\076\062\116\037\014\316\243\314\017\344\307\021\007
\042\057\070\010\335\133\227\353\102\154\131\232\232\356\172\320
\235\337\305\333\011\103\056\012\252\031\075\153\350\152\060\172
\127\346\277\263\152\071\251\217\343\361\117\145\150\266\275\237
\050\217\241\026\132\011\120\072\062\056\035\057\104\021\102\246
\000\346\061\230\377\055\241\017\346\244\140\126\317\171\327\262
\116\327\260\372\156\014\127\043\307\316\037\245\261\114\155\031
\111\236\016\177\160\217\161\077\130\050\237\165\335\141\340\072
\267\071\266\356\227\324\065\121\373\213\111\140\310\074\146\256
\227\356\215\046\131\127\273\170\360\172\120\060\011\260\140\252
\237\116\334\311\076\036\072\334\142\223\063\260\072\124\164\157
\054\061\105\321\153\021\062\152\150\166\366\075\366\152\023\136
\044\230\347\352\035\232\317\170\202\007\140\367\115\020\323\201
\232\105\215\236\257\233\334\200\307\103\262\225\150\244\303\016
\350\012\107\025\277\124\063\334\001\347\325\246\036\163\330\172
\262\277\057\255\343\125\060\236\337\016\101\274\340\021\365\241
\014\250\042\341\343\000\243\116\160\174\222\343\004\321\172\102
\212\165\220\131\343\233\321\114\242\144\275\163\171\233\157\362
\263\301\366\074

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END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "GlobalSign Secure Mail Root R45"
# Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE
# Serial Number:76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc
# Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 18 00:00:00 2020
# Not Valid After : Sat Mar 18 00:00:00 2045
# Fingerprint (SHA-256):
31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74
# Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root R45"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\166\030\321\363\200\044\075\122\100\306\021\152\255\127\167\011
\175\201\060\240
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\223\304\173\263\016\124\107\034\103\054\213\276\160\205\142\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217
\127\334
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL
CK_FALSE

#
# Certificate "GlobalSign Secure Mail Root E45"

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#
# Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE
# Serial Number:76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a
# Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 18 00:00:00 2020
# Not Valid After : Sat Mar 18 00:00:00 2045
# Fingerprint (SHA-256):
5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19
# Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root E45"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270
\220\012
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\041\060\202\001\247\240\003\002\001\002\002\020\166
\123\376\252\047\035\225\106\135\326\361\236\345\270\220\012\060
\012\006\010\052\206\110\316\075\004\003\003\060\122\061\013\060
\011\006\003\125\004\006\023\002\102\105\061\031\060\027\006\003
\125\004\012\023\020\107\154\157\142\141\154\123\151\147\156\040
\156\166\055\163\141\061\050\060\046\006\003\125\004\003\023\037
\107\154\157\142\141\154\123\151\147\156\040\123\145\143\165\162
\145\040\115\141\151\154\040\122\157\157\164\040\105\064\065\060
\036\027\015\062\060\060\063\061\070\060\060\060\060\060\132
\027\015\064\065\060\063\061\070\060\060\060\060\060\132\060

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\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031
\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123
\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125
\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123
\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040
\105\064\065\060\166\060\020\006\007\052\206\110\316\075\002\001
\006\005\053\201\004\000\042\003\142\000\004\371\171\213\201\107
\067\211\226\077\105\111\120\177\032\046\013\223\062\176\056\300
\300\247\010\232\303\156\217\233\076\013\042\354\067\123\267\157
\212\260\274\047\067\113\155\251\106\073\331\037\377\245\241\104
\273\055\163\277\236\101\007\134\123\233\121\010\072\132\273\157
\070\307\026\221\170\302\112\023\151\035\202\337\132\057\000\210
\226\242\056\034\164\371\235\176\146\067\212\243\102\060\100\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\337\023\136\213\137
\302\100\002\375\126\267\224\114\266\036\325\246\261\024\226\060
\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060\145
\002\060\023\260\276\327\161\040\076\344\253\234\316\066\022\175
\137\114\037\052\265\151\105\063\137\323\055\132\262\344\210\307
\336\012\066\102\062\171\235\246\153\272\341\371\104\052\173\212
\303\022\002\061\000\240\146\034\116\207\235\207\311\355\231\114
\033\012\356\055\140\303\067\307\035\315\265\162\260\331\306\357
\274\362\377\077\360\122\335\010\347\252\144\171\303\344\151\127
\221\057\244\313\174

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Secure Mail Root E45"

Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

Serial Number:76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a

Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

Not Valid Before: Wed Mar 18 00:00:00 2020

Not Valid After : Sat Mar 18 00:00:00 2045

Fingerprint (SHA-256):

5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19

Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Secure Mail Root E45"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\030\056\037\062\117\211\337\276\376\210\211\360\223\302\304\240


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\053\147\165\041
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\374\306\056\237\364\122\055\052\250\244\272\373\147\062\377
END
CKA_ISSUER
MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270
\220\012
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Root R46"
#
# Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Serial Number: 11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1
# Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not
  Valid After : Tue Mar 20 00:00:00 2046
# Fingerprint (SHA-256):
4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9
# Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root R46"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
END

```

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320
\337\045\147\321

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\132\060\202\003\102\240\003\002\001\002\002\022\021
\322\273\271\327\043\030\236\100\137\012\235\055\320\337\045\147
\321\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066\060\036\027\015\061\071\060\063
\062\060\060\060\060\060\060\060\132\027\015\064\066\060\063\062
\060\060\060\060\060\060\060\132\060\106\061\013\060\011\006\003
\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004\012
\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166\055
\163\141\061\034\060\032\006\003\125\004\003\023\023\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\122\064\066
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\254\254\164\062\350\263\145\345\272\355\103\046\035\246\211
\015\105\272\051\210\262\244\035\143\335\323\301\054\011\127\211
\071\241\125\351\147\064\167\014\156\344\125\035\122\045\322\023
\153\136\341\035\251\267\175\211\062\137\015\236\237\054\172\143
\140\100\037\246\260\266\170\217\231\124\226\010\130\256\344\006
\274\142\005\002\026\277\257\250\043\003\266\224\017\274\156\154
\302\313\325\246\273\014\351\366\301\002\373\041\336\146\335\027
\253\164\102\357\360\164\057\045\364\352\153\125\133\220\333\235
\337\136\207\012\100\373\255\031\153\373\367\312\140\210\336\332
\301\217\326\256\325\177\324\074\203\356\327\026\114\203\105\063
\153\047\320\206\320\034\055\153\363\253\175\361\205\251\365\050
\322\255\357\363\204\113\034\207\374\023\243\072\162\242\132\021
\053\326\047\161\047\355\201\055\155\146\201\222\207\264\033\130
\172\314\077\012\372\106\117\115\170\134\370\053\110\343\004\204
\313\135\366\264\152\263\145\374\102\236\121\046\043\040\313\075
\024\371\201\355\145\026\000\117\032\144\227\146\010\317\214\173
\343\053\300\235\371\024\362\033\361\126\152\026\277\054\205\205
\315\170\070\232\353\102\152\002\064\030\203\027\116\224\126\370

\266\202\265\363\226\335\075\363\276\177\040\167\076\173\031\043
\153\054\324\162\163\103\127\175\340\370\327\151\117\027\066\004
\371\300\220\140\067\105\336\346\014\330\164\215\256\234\242\155
\164\135\102\276\006\365\331\144\156\002\020\254\211\260\114\073
\007\115\100\176\044\305\212\230\202\171\216\244\247\202\040\215
\043\372\047\161\311\337\306\101\164\240\115\366\221\026\334\106
\214\137\051\143\061\131\161\014\330\157\302\266\062\175\373\346
\135\123\246\176\025\374\273\165\174\135\354\370\366\027\034\354
\307\153\031\313\363\173\360\053\007\245\331\154\171\124\166\154
\235\034\246\156\016\351\171\014\250\043\152\243\337\033\060\061
\237\261\124\173\376\152\313\146\252\334\145\320\242\236\112\232
\007\041\153\201\217\333\304\131\372\336\042\300\004\234\343\252
\133\066\223\350\075\275\172\241\235\013\166\261\013\307\235\375
\317\230\250\006\302\370\052\243\241\203\240\267\045\162\245\002
\343\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\003\134\253\163\201\207\250\314\260\246
\325\224\342\066\226\111\377\005\231\054\060\015\006\011\052\206
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\174\170
\354\366\002\054\273\133\176\222\053\135\071\334\276\330\035\242
\102\063\115\371\357\244\052\073\104\151\036\254\331\105\243\116
\074\247\330\044\121\262\124\034\223\116\304\357\173\223\205\140
\046\352\011\110\340\365\273\307\351\150\322\273\152\061\161\314
\171\256\021\250\360\231\375\345\037\274\057\250\314\127\353\166
\304\041\246\107\123\125\115\150\277\005\244\356\327\046\253\142
\332\103\067\113\342\306\265\345\262\203\031\072\307\323\333\115
\236\010\172\363\356\317\076\142\373\254\350\140\314\321\307\241
\134\203\105\304\105\314\363\027\153\024\311\004\002\076\322\044
\246\171\351\036\316\242\347\301\131\025\237\035\342\113\232\076
\237\166\010\055\153\330\272\127\024\332\203\352\376\214\125\351
\320\116\251\314\167\061\261\104\021\172\134\261\076\323\024\105
\025\030\142\044\023\322\313\115\316\134\203\301\066\362\020\265
\016\210\155\270\341\126\237\211\336\226\146\071\107\144\054\156
\115\256\142\173\277\140\164\031\270\126\254\222\254\026\062\355
\255\150\125\376\230\272\323\064\336\364\311\141\303\016\206\366
\113\204\140\356\015\173\265\062\130\171\221\125\054\201\103\263
\164\037\172\252\045\236\035\327\241\213\271\315\102\056\004\244
\146\203\115\211\065\266\154\250\066\112\171\041\170\042\320\102
\274\321\100\061\220\241\276\004\317\312\147\355\365\360\200\323
\140\311\203\052\042\005\320\007\073\122\277\014\236\252\053\371
\273\346\037\217\045\272\205\215\027\036\002\376\135\120\004\127
\317\376\055\274\357\134\300\032\253\266\237\044\306\337\163\150
\110\220\054\024\364\077\122\032\344\322\313\024\303\141\151\317
\342\371\030\305\272\063\237\024\243\004\135\271\161\367\265\224
\330\366\063\301\132\301\064\213\174\233\335\223\072\347\023\242
\160\141\237\257\217\353\330\305\165\370\063\146\324\164\147\072
\067\167\234\347\335\244\017\166\103\146\212\103\362\237\373\014

```
\102\170\143\321\342\017\157\173\324\241\075\164\227\205\267\110
\071\101\326\040\374\320\072\263\372\350\157\304\212\272\161\067
\276\213\227\261\170\061\117\263\347\266\003\023\316\124\235\256
\045\131\314\177\065\137\010\367\100\105\061\170\052\172
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

#

Trust for "GlobalSign Root R46"

Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE

Serial Number:11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1

Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE

Not Valid Before: Wed Mar 20 00:00:00 2019

Not Valid After : Tue Mar 20 00:00:00 2046

Fingerprint (SHA-256):

4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9

Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Root R46"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\123\242\260\113\312\153\326\105\346\071\212\216\304\015\322\277
\167\303\242\220
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\304\024\060\344\372\146\103\224\052\152\033\044\137\031\320\357
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320
\337\045\147\321
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```
#
# Certificate "GlobalSign Root E46"
#
# Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE
# Serial Number:11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43
# Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not Valid After : Tue Mar 20 00:00:00 2046
# Fingerprint (SHA-256):
CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58
#
Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root E46"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\105\064\066
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\105\064\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204
\035\230\350\103
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\013\060\202\001\221\240\003\002\001\002\002\022\021
\322\273\272\063\156\324\274\346\044\150\305\015\204\035\230\350
\103\060\012\006\010\052\206\110\316\075\004\003\003\060\106\061
\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060\027
\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151\147
\156\040\156\166\055\163\141\061\034\060\032\006\003\125\004\003
\023\023\107\154\157\142\141\154\123\151\147\156\040\122\157\157
\164\040\105\064\066\060\036\027\015\061\071\060\063\062\060\060
```

\060\060\060\060\060\132\027\015\064\066\060\063\062\060\060\060
\060\060\060\060\132\060\106\061\013\060\011\006\003\125\004\006
\023\002\102\105\061\031\060\027\006\003\125\004\012\023\020\107
\154\157\142\141\154\123\151\147\156\040\156\166\055\163\141\061
\034\060\032\006\003\125\004\003\023\023\107\154\157\142\141\154
\123\151\147\156\040\122\157\157\164\040\105\064\066\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\234\016\261\317\267\350\236\122\167\165\064
\372\245\106\247\255\062\031\062\264\007\251\047\312\224\273\014
\322\012\020\307\332\211\260\227\014\160\023\011\001\216\330\352
\107\352\276\262\200\053\315\374\050\015\333\254\274\244\206\067
\355\160\010\000\165\352\223\013\173\056\122\234\043\150\043\006
\103\354\222\057\123\204\333\373\107\024\007\350\137\224\147\135
\311\172\201\074\040\243\102\060\100\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\061\012\220\217\266\306\235\322\104\113\200
\265\242\346\037\261\022\117\033\225\060\012\006\010\052\206\110
\316\075\004\003\003\003\150\000\060\145\002\061\000\337\124\220
\355\233\357\213\224\002\223\027\202\231\276\263\236\054\366\013
\221\214\237\112\024\261\366\144\274\273\150\121\023\014\003\367
\025\213\204\140\271\213\377\122\216\347\214\274\034\002\060\074
\371\021\324\214\116\300\301\141\302\025\114\252\253\035\013\061
\137\073\034\342\000\227\104\061\346\376\163\226\057\332\226\323
\376\010\007\263\064\211\274\005\237\367\036\206\356\213\160

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GlobalSign Root E46"

Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

Serial Number: 11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43

Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

Not Valid Before: Wed Mar 20 00:00:00 2019

Not Valid After : Tue Mar 20 00:00:00 2046

Fingerprint (SHA-256):

CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58

Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL

CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GlobalSign Root E46"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\071\264\154\325\376\200\006\353\342\057\112\273\010\063\240\257

```

\333\271\335\204
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\265\270\146\355\336\010\203\343\311\342\001\064\006\254\121\157
END
CKA_ISSUER MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\105\064\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204
\035\230\350\103
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GLOBALTRUST
# 2020"
#
# Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5
# Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Not Valid Before: Mon Feb 10 00:00:00 2020
# Not Valid After : Sun Jun 10 00:00:00 2040
# Fingerprint (SHA-256):
9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A
# Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GLOBALTRUST 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060
END
CKA_ID

```

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\013\132\113\275\132\373\117\212\133\372\145\345

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\202\060\202\003\152\240\003\002\001\002\002\013\132
\113\275\132\373\117\212\133\372\145\345\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\115\061\013\060\011\006
\003\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004
\012\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157
\156\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060
\027\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122
\125\123\124\040\062\060\062\060\060\060\060\036\027\015\062\060\060\062
\061\060\060\060\060\060\060\060\132\027\015\064\060\060\066\061
\060\060\060\060\060\060\060\132\060\115\061\013\060\011\006\003
\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004\012
\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157\156
\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060\027
\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122\125
\123\124\040\062\060\062\060\060\202\002\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060
\202\002\012\002\202\002\001\000\256\056\126\255\033\034\357\366
\225\217\240\167\033\053\323\143\217\204\115\105\242\017\237\133
\105\253\131\173\121\064\371\354\213\212\170\305\335\153\257\275
\304\337\223\105\036\277\221\070\013\256\016\026\347\101\163\370
\333\273\321\270\121\340\313\203\073\163\070\156\167\212\017\131
\143\046\315\247\052\316\124\373\270\342\300\174\107\316\140\174
\077\262\163\362\300\031\266\212\222\207\065\015\220\050\242\344
\025\004\143\076\272\257\356\174\136\314\246\213\120\262\070\367
\101\143\312\316\377\151\217\150\016\225\066\345\314\271\214\011
\312\113\335\061\220\226\310\314\037\375\126\226\064\333\216\034
\352\054\276\205\056\143\335\252\251\225\323\375\051\225\023\360
\310\230\223\331\055\026\107\220\021\203\242\072\042\242\050\127
\242\353\376\300\214\050\240\246\175\347\052\102\073\202\200\143
\245\143\037\031\314\174\262\146\250\302\323\155\067\157\342\176
\006\121\331\105\204\037\022\316\044\122\144\205\013\110\200\116
\207\261\042\042\060\252\353\256\276\340\002\340\100\350\260\102
\200\003\121\252\264\176\252\104\327\103\141\363\242\153\026\211
\111\244\243\244\053\212\002\304\170\364\150\212\301\344\172\066
\261\157\033\226\033\167\111\215\324\311\006\162\217\317\123\343
\334\027\205\040\112\334\230\047\323\221\046\053\107\036\151\007

\257\336\242\344\344\324\153\013\263\136\174\324\044\200\107\051
\151\073\156\350\254\375\100\353\330\355\161\161\053\362\350\130
\035\353\101\227\042\305\037\324\071\320\047\217\207\343\030\364
\340\251\106\015\365\164\072\202\056\320\156\054\221\243\061\134
\073\106\352\173\004\020\126\136\200\035\365\245\145\350\202\374
\342\007\214\142\105\365\040\336\106\160\206\241\274\223\323\036
\164\246\154\260\054\367\003\014\210\014\313\324\162\123\206\274
\140\106\363\230\152\302\361\277\103\371\160\040\167\312\067\101
\171\125\122\143\215\133\022\237\305\150\304\210\235\254\362\060
\253\267\243\061\227\147\255\217\027\017\154\307\163\355\044\224
\153\310\203\232\320\232\067\111\004\253\261\026\310\154\111\111
\055\253\241\320\214\222\362\101\112\171\041\045\333\143\327\266
\234\247\176\102\151\373\072\143\002\003\001\000\001\243\143\060
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\035\006\003\125\035\016\004\026\004\024\334\056\037
\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150\234
\042\060\037\006\003\125\035\043\004\030\060\026\200\024\334\056
\037\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150
\234\042\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\003\202\002\001\000\221\360\102\002\150\100\356\303\150\300
\124\057\337\354\142\303\303\236\212\240\061\050\252\203\216\244
\126\226\022\020\206\126\272\227\162\322\124\060\174\255\031\325
\035\150\157\373\024\102\330\215\016\363\265\321\245\343\002\102
\136\334\350\106\130\007\065\002\060\340\274\164\112\301\103\052
\377\333\032\320\260\257\154\303\375\313\263\365\177\155\003\056
\131\126\235\055\055\065\214\262\326\103\027\054\222\012\313\135
\350\214\017\113\160\103\320\202\377\250\314\277\244\224\300\276
\207\275\212\343\223\173\306\217\233\026\235\047\145\274\172\305
\102\202\154\134\007\320\251\301\210\140\104\351\230\205\026\137
\370\217\312\001\020\316\045\303\371\140\033\240\305\227\303\323
\054\210\061\242\275\060\354\320\320\300\022\361\301\071\343\345
\365\370\326\112\335\064\315\373\157\301\117\343\000\213\126\342
\222\367\050\262\102\167\162\043\147\307\077\021\025\262\304\003
\005\276\273\021\173\012\277\250\156\347\377\130\103\317\233\147
\240\200\007\266\035\312\255\155\352\101\021\176\055\164\223\373
\302\274\276\121\104\305\357\150\045\047\200\343\310\240\324\022
\354\331\245\067\035\067\174\264\221\312\332\324\261\226\201\357
\150\134\166\020\111\257\176\245\067\200\261\034\122\275\063\201
\114\217\371\335\145\331\024\315\212\045\130\364\342\305\203\245
\011\220\324\154\024\143\265\100\337\353\300\374\304\130\176\015
\024\026\207\124\047\156\126\344\160\204\270\154\062\022\176\202
\061\103\276\327\335\174\241\255\256\326\253\040\022\357\012\303
\020\214\111\226\065\334\013\165\136\261\117\325\117\064\016\021
\040\007\165\103\105\351\243\021\332\254\243\231\302\266\171\047
\342\271\357\310\342\366\065\051\172\164\372\305\177\202\005\142
\246\012\352\150\262\171\107\006\156\362\127\250\025\063\306\367
\170\112\075\102\173\153\176\376\367\106\352\321\353\216\357\210

```
\150\133\350\301\331\161\176\375\144\357\377\147\107\210\130\045
\057\076\206\007\275\373\250\345\202\250\254\245\323\151\103\315
\061\210\111\204\123\222\300\261\071\033\071\203\001\060\304\362
\251\372\320\003\275\162\067\140\126\037\066\174\275\071\221\365
\155\015\277\173\327\222
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "GLOBALTRUST 2020"

Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5

Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

Not Valid Before: Mon Feb 10 00:00:00 2020

Not Valid After : Sun Jun 10 00:00:00 2040

Fingerprint (SHA-256):

9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A

Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE

CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GLOBALTRUST 2020"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\320\147\301\023\121\001\014\252\320\307\152\145\067\061\026\046
\117\123\161\242
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\212\307\157\313\155\343\314\242\361\174\203\372\016\170\327\350
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\013\132\113\275\132\373\117\212\133\372\145\345
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

#
# Certificate "ANF
Secure Server Root CA"
#
# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1
# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Not Valid Before: Wed Sep 04 10:00:38 2019
# Not Valid After : Tue Aug 30 10:00:38 2039
# Fingerprint (SHA-256):
FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99
# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ANF Secure Server Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\015\323\343\274\154\371\153\261
END

```

CKA_VALUE MULTILINE_OCTAL

\060\202\005\357\060\202\003\327\240\003\002\001\002\002\010\015
\323\343\274\154\371\153\261\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\204\061\022\060\020\006\003\125
\004\005\023\011\107\066\063\062\070\067\065\061\060\061\013\060
\011\006\003\125\004\006\023\002\105\123\061\047\060\045\006\003
\125\004\012\023\036\101\116\106\040\101\165\164\157\162\151\144
\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141\143
\151\157\156\061\024\060\022\006\003\125\004\013\023\013\101\116
\106\040\103\101\040\122\141\151\172\061\042\060\040\006\003\125
\004\003\023\031\101\116\106\040\123\145\143\165\162\145\040\123
\145\162\166\145\162\040\122\157\157\164\040\103\101\060\036\027
\015\061\071\060\071\060\064\061\060\060\060\063\070\132\027\015
\063\071\060\070\063\060\061\060\060\060\063\070\132\060\201\204
\061\022\060\020\006\003\125\004\005\023\011\107\066\063\062\070
\067\065\061\060\061\013\060\011\006\003\125\004\006\023\002\105
\123\061\047\060\045\006\003\125\004\012\023\036\101\116\106\040
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162
\164\151\146\151\143\141\143\151\157\156\061\024\060\022\006\003
\125\004\013\023\013\101\116\106\040\103\101\040\122\141\151\172
\061\042\060\040\006\003\125\004\003\023\031\101\116\106\040\123
\145\143\165\162\145\040\123\145\162\166\145\162\040\122\157\157
\164\040\103\101\060\202\002\042\060\015\006\011\052\206\110\206
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012
\002\202\002\001\000\333\353\153\053\346\144\124\225\202\220\243
\162\244\031\001\235\234\013\201\137\163\111\272\247\254\363\004
\116\173\226\013\354\021\340\133\246\034\316\033\322\015\203\034
\053\270\236\035\176\105\062\140\017\007\351\167\130\176\237\152
\310\141\116\266\046\301\114\215\377\114\357\064\262\037\145\330
\271\170\365\255\251\161\271\357\117\130\035\245\336\164\040\227
\241\355\150\114\336\222\027\113\274\253\377\145\232\236\373\107
\331\127\162\363\011\241\256\166\104\023\156\234\055\104\071\274
\371\307\073\244\130\075\101\275\264\302\111\243\310\015\322\227
\057\007\145\122\000\247\156\310\257\150\354\364\024\226\266\127
\037\126\303\071\237\053\155\344\363\076\366\065\144\332\014\034
\241\204\113\057\113\113\342\054\044\235\155\223\100\353\265\043
\216\062\312\157\105\323\250\211\173\036\317\036\372\133\103\213
\315\315\250\017\152\312\014\136\271\236\107\217\360\331\266\012
\013\130\145\027\063\271\043\344\167\031\175\313\112\056\222\173
\117\057\020\167\261\215\057\150\234\142\314\340\120\370\354\221
\247\124\114\127\011\325\166\143\305\350\145\036\356\155\152\317
\011\235\372\174\117\255\140\010\375\126\231\017\025\054\173\251
\200\253\214\141\217\112\007\166\102\336\075\364\335\262\044\063
\133\270\265\243\104\311\254\177\167\074\035\043\354\202\251\246
\342\310\006\114\002\376\254\134\231\231\013\057\020\212\246\364
\177\325\207\164\015\131\111\105\366\360\161\134\071\051\326\277
\112\043\213\365\137\001\143\322\207\163\050\265\113\012\365\370
\253\202\054\176\163\045\062\035\013\143\012\027\201\000\377\266

\166\136\347\264\261\100\312\041\273\325\200\121\345\110\122\147
\054\322\141\211\007\015\017\316\102\167\300\104\163\234\104\120
\240\333\020\012\055\225\034\201\257\344\034\345\024\036\361\066
\101\001\002\057\175\163\247\336\102\314\114\351\211\015\126\367
\237\221\324\003\306\154\311\217\333\330\034\340\100\230\135\146
\231\230\200\156\055\377\001\305\316\313\106\037\254\002\306\103
\346\256\242\204\074\305\116\036\075\155\311\024\114\343\056\101
\273\312\071\277\066\074\052\031\252\101\207\116\245\316\113\062
\171\335\220\111\177\002\003\001\000\001\243\143\060\141\060\037
\006\003\125\035\043\004\030\060\026\200\024\234\137\320\154\143
\243\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060
\035\006\003\125\035\016\004\026\004\024\234\137\320\154\143\243
\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\002\001\000\116\036\271\212\306\240\230\077\156\303\151\300\152
\134\111\122\254\313\053\135\170\070\301\325\124\204\237\223\360
\207\031\075\054\146\211\353\015\102\374\314\360\165\205\077\213
\364\200\135\171\345\027\147\275\065\202\342\362\074\216\175\133
\066\313\132\200\000\051\362\316\053\054\361\217\252\155\005\223
\154\162\307\126\353\337\120\043\050\345\105\020\075\350\147\243
\257\016\125\017\220\011\142\357\113\131\242\366\123\361\300\065
\344\057\301\044\275\171\057\116\040\042\073\375\032\040\260\244
\016\054\160\355\164\077\270\023\225\006\121\310\350\207\046\312
\244\133\152\026\041\222\335\163\140\236\020\030\336\074\201\352
\350\030\303\174\211\362\213\120\076\275\021\342\025\003\250\066
\175\063\001\154\110\025\327\210\220\231\004\305\314\346\007\364
\274\364\220\355\023\342\352\213\303\217\243\063\017\301\051\114
\023\116\332\025\126\161\163\162\202\120\366\232\063\174\242\261
\250\032\064\164\145\134\316\321\353\253\123\340\032\200\330\352
\072\111\344\046\060\233\345\034\212\250\251\025\062\206\231\222
\012\020\043\126\022\340\366\316\114\342\273\276\333\215\222\163
\001\146\057\142\076\262\162\047\105\066\355\115\126\343\227\231
\377\072\065\076\245\124\112\122\131\113\140\333\356\376\170\021
\177\112\334\024\171\140\266\153\144\003\333\025\203\341\242\276
\366\043\227\120\360\011\063\066\247\161\226\045\363\271\102\175
\333\070\077\054\130\254\350\102\341\016\330\323\073\114\056\202
\351\203\056\153\061\331\335\107\206\117\155\227\221\056\117\342
\050\161\065\026\321\362\163\376\045\053\007\107\044\143\047\310
\370\366\331\153\374\022\061\126\010\300\123\102\257\234\320\063
\176\374\006\360\061\104\003\024\361\130\352\362\152\015\251\021
\262\203\276\305\032\277\007\352\131\334\243\210\065\357\234\166
\062\074\115\006\042\316\025\345\335\236\330\217\332\336\322\304
\071\345\027\201\317\070\107\353\177\210\155\131\033\337\237\102
\024\256\176\317\250\260\146\145\332\067\257\237\252\075\352\050
\266\336\325\061\130\026\202\133\352\273\031\165\002\163\032\312
\110\032\041\223\220\012\216\223\204\247\175\073\043\030\222\211

```

\240\215\254
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "ANF Secure Server Root CA"
# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1
# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Not Valid Before: Wed Sep 04 10:00:38 2019
# Not Valid After : Tue Aug 30 10:00:38 2039
# Fingerprint (SHA-256):
FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99
# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ANF Secure Server Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\133\156\150\320\314\025\266\240\137\036\301\137\256\002\374\153
\057\135\157\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\046\246\104\132\331\257\116\057\262\035\266\145\260\116\350\226
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\015\323\343\274\154\371\153\261
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

```

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Certum EC-384 CA"

#

Issuer: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4

Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Not Valid Before: Mon Mar 26 07:24:54 2018

Not Valid After : Thu Mar 26 07:24:54 2043

Fingerprint (SHA-256):

6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6

Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE

CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certum EC-384 CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272
\163\364

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\145\060\202\001\353\240\003\002\001\002\002\020\170
\217\047\134\201\022\122\040\245\004\320\055\335\272\163\364\060
\012\006\010\052\206\110\316\075\004\003\003\060\164\061\013\060
\011\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003
\125\004\012\023\030\101\163\163\145\143\157\040\104\141\164\141
\040\123\171\163\164\145\155\163\040\123\056\101\056\061\047\060
\045\006\003\125\004\013\023\036\103\145\162\164\165\155\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164
\150\157\162\151\164\171\061\031\060\027\006\003\125\004\003\023
\020\103\145\162\164\165\155\040\105\103\055\063\070\064\040\103
\101\060\036\027\015\061\070\060\063\062\066\060\067\062\064\065
\064\132\027\015\064\063\060\063\062\066\060\067\062\064\065\064
\132\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143
\157\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027
\006\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103
\055\063\070\064\040\103\101\060\166\060\020\006\007\052\206\110
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\304
\050\216\253\030\133\152\276\156\144\067\143\344\315\354\253\072
\367\314\241\270\016\202\111\327\206\051\237\241\224\362\343\140
\170\230\201\170\006\115\362\354\232\016\127\140\203\237\264\346
\027\057\032\263\135\002\133\211\043\074\302\021\005\052\247\210
\023\030\363\120\204\327\275\064\054\047\211\125\377\316\114\347
\337\246\037\050\304\360\124\303\271\174\267\123\255\353\302\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\215
\006\146\164\044\166\072\363\211\367\274\326\275\107\175\057\274
\020\137\113\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003
\150\000\060\145\002\060\003\125\055\246\346\030\304\174\357\311
\120\156\301\047\017\234\207\257\156\325\033\010\030\275\222\051
\301\357\224\221\170\322\072\034\125\211\142\345\033\011\036\272
\144\153\361\166\264\324\002\061\000\264\102\204\231\377\253\347
\236\373\221\227\047\135\334\260\133\060\161\316\136\070\032\152
\331\045\347\352\367\141\222\126\370\352\332\066\302\207\145\226
\056\162\045\057\177\337\303\023\311

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum EC-384 CA"

Issuer: CN=Certum EC-384


```

CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4
# Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Mon Mar 26 07:24:54 2018
# Not Valid After : Thu Mar 26 07:24:54 2043
# Fingerprint (SHA-256):
6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6
# Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum EC-384 CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\363\076\170\074\254\337\364\242\314\254\147\125\151\126\327\345
\026\074\341\355
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\266\145\263\226\140\227\022\241\354\116\341\075\243\306\311\361
END
CKA_ISSUER MULTILINE_OCTAL
\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272
\163\364
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Trusted Root CA"
#
# Issuer: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Serial Number:1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed
# Subject: CN=Certum Trusted Root
CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Fri Mar 16 12:10:13 2018

```

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# Not Valid After : Mon Mar 16 12:10:13 2043
# Fingerprint (SHA-256):
FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD
# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117
\265\355
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\300\060\202\003\250\240\003\002\001\002\002\020\036
\277\131\120\270\311\200\067\114\006\367\353\125\117\265\355\060
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\172
\061\013\060\011\006\003\125\004\006\023\002\120\114\061\041\060
\037\006\003\125\004\012\023\030\101\163\163\145\143\157\040\104
\141\164\141\040\123\171\163\164\145\155\163\040\123\056\101\056
\061\047\060\045\006\003\125\004\013\023\036\103\145\162\164\165
\155\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\061\037\060\035\006\003\125
\004\003\023\026\103\145\162\164\165\155\040\124\162\165\163\164
\145\144\040\122\157\157\164\040\103\101\060\036\027\015\061\070
```

\060\063\061\066\061\062\061\060\061\063\132\027\015\064\063\060
\063\061\066\061\062\061\060\061\063\132\060\172\061\013\060\011
\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003\125
\004\012\023\030\101\163\163\145\143\157\040\104\141\164\141\040
\123\171\163\164\145\155\163\040\123\056\101\056\061\047\060\045
\006\003\125\004\013\023\036\103\145\162\164\165\155\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171\061\037\060\035\006\003\125\004\003\023\026
\103\145\162\164\165\155\040\124\162\165\163\164\145\144\040\122
\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\321\055\216\273\267\066\352\155\067
\221\237\116\223\247\005\344\051\003\045\316\034\202\367\174\231
\237\101\006\315\355\243\272\300\333\011\054\301\174\337\051\176
\113\145\057\223\247\324\001\153\003\050\030\243\330\235\005\301
\052\330\105\361\221\336\337\073\320\200\002\214\317\070\017\352
\247\134\170\021\244\301\310\205\134\045\323\323\262\347\045\317
\021\124\227\253\065\300\036\166\034\357\000\123\237\071\334\024
\245\054\042\045\263\162\162\374\215\263\345\076\010\036\024\052
\067\013\210\074\312\260\364\310\302\241\256\274\301\276\051\147
\125\342\374\255\131\134\376\275\127\054\260\220\215\302\355\067
\266\174\231\210\265\325\003\232\075\025\015\075\072\250\250\105
\360\225\116\045\131\035\315\230\151\273\323\314\062\311\215\357
\201\376\255\175\211\273\272\140\023\312\145\225\147\240\363\031
\366\003\126\324\152\323\047\342\241\255\203\360\112\022\042\167
\034\005\163\342\031\161\102\300\354\165\106\232\220\130\340\152
\216\053\245\106\060\004\216\031\262\027\343\276\251\272\177\126
\361\044\003\327\262\041\050\166\016\066\060\114\171\325\101\232
\232\250\270\065\272\014\072\362\104\033\040\210\367\305\045\327
\075\306\343\076\103\335\207\376\304\352\365\123\076\114\145\377
\073\112\313\170\132\153\027\137\015\307\303\117\116\232\052\242
\355\127\115\042\342\106\232\077\017\221\064\044\175\125\343\214
\225\067\323\032\360\011\053\054\322\311\215\264\015\000\253\147
\051\050\330\001\365\031\004\266\035\276\166\376\162\134\304\205
\312\322\200\101\337\005\250\243\325\204\220\117\013\363\340\077
\233\031\322\067\211\077\362\173\122\034\214\366\341\367\074\007
\227\214\016\242\131\201\014\262\220\075\323\343\131\106\355\017
\251\247\336\200\153\132\252\007\266\031\313\274\127\363\227\041
\172\014\261\053\164\076\353\332\247\147\055\114\304\230\236\066
\011\166\146\146\374\032\077\352\110\124\034\276\060\275\200\120
\277\174\265\316\000\366\014\141\331\347\044\003\340\343\001\201
\016\275\330\205\064\210\275\262\066\250\173\134\010\345\104\200
\214\157\370\057\325\041\312\035\034\320\373\304\265\207\321\072
\116\307\166\265\065\110\265\002\003\001\000\001\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\035\006\003\125\035\016\004\026\004\024\214\373\034\165
\274\002\323\237\116\056\110\331\371\140\124\252\304\263\117\372
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006

\060\015\006\011\052\206\110\206\367\015\001\001\015\005\000\003
\202\002\001\000\110\242\325\000\013\056\320\077\274\034\325\265
\124\111\036\132\153\364\344\362\340\100\067\340\314\024\173\271
\311\372\065\265\165\027\223\152\005\151\205\234\315\117\031\170
\133\031\201\363\143\076\303\316\133\217\365\057\136\001\166\023
\077\054\000\271\315\226\122\071\111\155\004\116\305\351\017\206
\015\341\372\263\137\202\022\361\072\316\146\006\044\064\053\350
\314\312\347\151\334\207\235\302\064\327\171\321\323\167\270\252
\131\130\376\235\046\372\070\206\076\235\212\207\144\127\345\027
\072\342\371\215\271\343\063\170\301\220\330\270\335\267\203\121
\344\304\314\043\325\006\174\346\121\323\315\064\061\300\366\106
\273\013\255\374\075\020\005\052\073\112\221\045\356\214\324\204
\207\200\052\274\011\214\252\072\023\137\350\064\171\120\301\020
\031\371\323\050\036\324\321\121\060\051\263\256\220\147\326\037
\012\143\261\305\251\306\102\061\143\027\224\357\151\313\057\372
\214\024\175\304\103\030\211\331\360\062\100\346\200\342\106\137
\345\343\301\000\131\250\371\350\040\274\211\054\016\107\064\013
\352\127\302\123\066\374\247\324\257\061\315\376\002\345\165\372
\271\047\011\371\363\365\073\312\175\237\251\042\313\210\311\252
\321\107\075\066\167\250\131\144\153\047\317\357\047\301\343\044
\265\206\367\256\176\062\115\260\171\150\321\071\350\220\130\303
\203\274\017\054\326\227\353\316\014\341\040\307\332\267\076\303
\077\277\057\334\064\244\373\053\041\315\147\217\113\364\343\352
\324\077\347\117\272\271\245\223\105\034\146\037\041\372\144\136
\157\340\166\224\062\313\165\365\156\345\366\217\307\270\244\314
\250\226\175\144\373\044\132\112\003\154\153\070\306\350\003\103
\232\367\127\271\263\051\151\223\070\364\003\362\273\373\202\153
\007\040\321\122\037\232\144\002\173\230\146\333\134\115\132\017
\320\204\225\240\074\024\103\006\312\312\333\270\101\066\332\152
\104\147\207\257\257\343\105\021\025\151\010\262\276\026\071\227
\044\157\022\105\321\147\135\011\250\311\025\332\372\322\246\137
\023\141\037\277\205\254\264\255\255\005\224\010\203\036\165\027
\323\161\073\223\120\043\131\240\355\074\221\124\235\166\000\305
\303\270\070\333

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certum Trusted Root CA"

Issuer: CN=Certum

Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Serial Number: 1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed

Subject: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

Not Valid Before: Fri Mar 16 12:10:13 2018

Not Valid After : Mon Mar 16 12:10:13 2043

Fingerprint (SHA-256):

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FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD
# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\310\203\104\300\030\256\237\314\361\207\267\217\042\321\305\327
\105\204\272\345
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\121\341\302\347\376\114\204\257\131\016\057\364\124\157\352\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117
\265\355
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TunTrust Root CA"
#
# Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Serial Number:13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13
#
# Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Not Valid Before: Fri Apr 26 08:57:56 2019
# Not Valid After : Tue Apr 26 08:57:56 2044
# Fingerprint (SHA-256):
2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41
# Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TunTrust Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164
\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\023\002\325\342\100\114\222\106\206\026\147\135\264\273
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END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "TunTrust Root CA"

Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

Serial Number: 13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13

Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

#

Not Valid Before: Fri Apr 26 08:57:56 2019

Not Valid After : Tue Apr 26 08:57:56 2044

Fingerprint (SHA-256):

2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41

Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "TunTrust Root CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

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\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
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CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA TLS RSA Root CA 2021"
#
# Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e
# Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 10:55:38 2021
# Not Valid After : Mon Feb 13 10:55:37 2045
# Fingerprint (SHA-256):
D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D
# Fingerprint
(SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS RSA Root CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
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\132\245\247\071\252\351\204\177\074\121\250\072\331\224\133\214
\277\117\010\161\345\333\250\134\324\322\246\376\000\243\306\026
\307\017\350\200\316\034\050\144\164\031\010\323\102\343\316\000
\135\177\261\334\023\260\341\005\313\321\040\252\206\164\236\071
\347\221\375\377\133\326\367\255\246\057\003\013\155\343\127\124
\353\166\123\030\215\021\230\272
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "HARICA TLS RSA Root CA 2021"

Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e

Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Not Valid Before: Fri Feb 19 10:55:38 2021

Not Valid After : Mon Feb 13 10:55:37 2045

Fingerprint (SHA-256):

D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D

Fingerprint (SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D

CKA_CLASS

CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "HARICA TLS RSA Root CA 2021"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\002\055\005\202\372\210\316\024\014\006\171\336\177\024\020\351
\105\327\245\155
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\145\107\233\130\206\335\054\360\374\242\204\037\036\226\304\221
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
```

```

\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123
\101\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\071\312\223\034\357\103\363\306\216\223\307\364\144\211
\070\176
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA TLS ECC Root CA 2021"
#
# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce
# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:01:10 2021
# Not Valid After : Mon Feb 13 11:01:09 2045
# Fingerprint (SHA-256):
3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01
# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS ECC Root
CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103
\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103

```

\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342
\277\316
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\124\060\202\001\333\240\003\002\001\002\002\020\147
\164\235\215\167\330\073\152\333\042\364\377\131\342\277\316\060
\012\006\010\052\206\110\316\075\004\003\003\060\154\061\013\060
\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163
\040\103\101\061\044\060\042\006\003\125\004\003\014\033\110\101
\122\111\103\101\040\124\114\123\040\105\103\103\040\122\157\157
\164\040\103\101\040\062\060\062\061\060\036\027\015\062\061\060
\062\061\071\061\061\060\061\061\060\132\027\015\064\065\060\062
\061\063\061\061\060\061\060\071\132\060\154\061\013\060\011\006
\003\125\004\006\023\002\107\122\061\067\060\065\006\003\125\004
\012\014\056\110\145\154\154\145\156\151\143\040\101\143\141\144
\145\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143
\150\040\111\156\163\164\151\164\165\164\151\157\156\163\040\103
\101\061\044\060\042\006\003\125\004\003\014\033\110\101\122\111
\103\101\040\124\114\123\040\105\103\103\040\122\157\157\164\040
\103\101\040\062\060\062\061\060\166\060\020\006\007\052\206\110
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\070
\010\376\261\240\226\322\172\254\257\111\072\320\300\340\303\073
\050\252\361\162\155\145\000\107\210\204\374\232\046\153\252\113
\272\154\004\012\210\136\027\362\125\207\374\060\260\064\342\064
\130\127\032\204\123\351\060\331\251\362\226\164\303\121\037\130
\111\061\314\230\116\140\021\207\165\323\162\224\220\117\233\020
\045\052\250\170\055\276\220\101\130\220\025\162\247\241\267\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\311
\033\123\201\022\376\004\325\026\321\252\274\232\157\267\240\225
\031\156\312\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\206\060\012\006\010\052\206\110\316\075\004\003\003\003
\147\000\060\144\002\060\021\336\256\370\334\116\210\260\251\360
\042\255\302\121\100\357\140\161\055\356\217\002\304\135\003\160
\111\244\222\352\305\024\210\160\246\323\015\260\252\312\054\100
\234\373\351\202\156\232\002\060\053\107\232\007\306\321\302\201
\174\312\013\226\030\101\033\243\364\060\011\236\265\043\050\015
\237\024\266\074\123\242\114\006\151\175\372\154\221\306\052\111
\105\346\354\267\023\341\072\154
END
CKA_NSS_MOZILLA_CA_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "HARICA TLS ECC Root CA 2021"
# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce
# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic
  Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:01:10 2021
# Not Valid After : Mon Feb 13 11:01:09 2045
# Fingerprint (SHA-256):
3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01
# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS ECC Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\274\260\301\235\351\230\222\160\031\070\127\351\215\247\264\135
\156\356\001\110
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\256\367\114\345\146\065\321\267\233\214\042\223\164\323\113\260
END
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103
\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342
\277\316
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA Client RSA Root CA 2021"
#

```

Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e
Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
Not Valid Before: Fri Feb 19 10:58:46 2021
Not Valid After : Mon Feb 13 10:58:45 2045
Fingerprint (SHA-256):
1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D
#

Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "HARICA Client RSA Root CA 2021"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002
\050\076

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\252\060\202\003\222\240\003\002\001\002\002\020\125
\122\370\036\333\033\044\054\236\273\226\030\315\002\050\076\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\157
\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067\060
\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151\143
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145

\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151
\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003\014
\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040\122
\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061\060
\036\027\015\062\061\060\062\061\071\061\060\065\070\064\066\132
\027\015\064\065\060\062\061\063\061\060\065\070\064\065\132\060
\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067
\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151
\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122
\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164
\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003
\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040
\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\201\333\127\102\220\054\164\065\364\370\270\164\031\115\253
\011\132\167\105\201\163\142\260\065\237\370\320\267\063\000\207
\023\266\226\253\016\124\022\060\007\274\233\267\110\327\321\031
\203\256\216\330\251\361\251\000\204\260\214\136\236\350\014\217
\124\151\277\366\324\010\117\046\160\376\030\101\143\032\263\062
\213\100\370\007\253\127\061\360\306\026\166\147\232\264\335\057
\362\321\153\305\320\222\204\221\161\156\017\056\143\351\037\123
\244\335\122\023\314\011\203\051\201\014\305\123\165\104\261\016
\147\123\030\320\303\037\210\113\237\224\044\264\051\274\273\350
\116\375\157\322\025\035\111\334\215\160\362\021\032\040\121\125
\021\272\210\157\304\367\120\171\326\252\061\342\204\075\136\062
\310\167\052\120\161\345\013\057\351\266\352\357\253\012\063\071
\016\375\217\245\147\103\202\216\230\151\011\011\033\100\315\070
\147\107\352\311\354\227\161\022\336\044\365\162\074\321\367\103
\114\046\367\220\262\211\351\105\113\125\075\061\005\172\101\342
\225\272\103\300\027\305\266\205\075\031\215\144\160\363\133\254
\315\237\323\051\165\207\113\225\147\152\246\370\321\335\274\220
\206\211\103\051\251\067\133\365\135\260\046\132\123\102\166\220
\053\317\236\126\154\053\124\317\134\232\145\337\133\213\110\140
\070\174\373\305\013\317\166\004\143\002\063\052\175\365\203\147
\347\372\306\103\375\053\017\324\046\057\167\244\062\301\044\352
\144\235\277\263\070\161\061\104\362\107\270\242\146\101\241\373
\233\173\274\307\106\152\165\277\132\242\214\350\152\104\301\270
\226\265\300\062\010\055\173\164\065\163\262\312\306\376\257\021
\162\030\366\347\310\302\317\245\052\352\173\326\131\350\174\240
\262\152\100\011\151\016\245\226\333\321\000\271\361\210\156\066
\360\210\262\235\361\122\362\303\174\277\060\211\074\012\151\371
\042\244\145\341\233\340\164\306\261\205\227\226\054\256\224\217
\120\246\071\022\037\276\107\362\201\170\323\165\066\236\175\132
\040\227\342\122\256\231\237\306\174\233\146\363\376\330\317\356
\275\227\006\035\055\205\334\076\066\123\226\173\040\272\350\310
\341\255\226\142\076\021\174\263\000\204\236\247\114\161\253\112
\067\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035

\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\240\326\007\075\136\044\367\173\240\104
\056\044\122\015\031\252\053\004\221\247\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\015\107
\371\011\146\061\122\354\171\356\302\250\362\150\076\355\226\105
\313\072\246\230\143\077\352\053\115\116\003\320\034\202\341\313
\323\345\326\253\133\147\050\274\235\376\014\231\012\200\125\247
\316\033\043\141\015\260\127\360\376\340\312\276\346\220\333\203
\054\276\203\216\364\171\266\376\320\015\102\247\130\037\151\352
\201\365\005\245\376\106\150\353\154\170\311\340\352\347\346\336
\061\305\322\325\054\202\143\050\235\135\250\032\176\210\346\347
\053\361\054\325\320\005\236\334\055\275\067\146\324\004\242\247
\255\277\072\302\250\073\255\377\215\235\063\340\271\232\204\241
\207\037\166\364\202\164\327\016\371\060\110\076\133\210\076\252
\134\153\326\057\014\350\216\163\302\030\221\203\071\266\146\132
\320\037\140\047\135\115\343\366\072\015\146\120\234\170\173\253
\363\023\020\256\017\057\253\350\144\263\030\040\235\106\065\144
\045\163\352\233\020\134\130\065\211\261\106\110\247\364\254\324
\035\236\133\314\251\245\032\023\117\044\120\252\331\033\155\261
\100\373\235\335\130\164\304\302\157\024\162\354\333\065\237\270
\124\165\105\303\246\310\032\050\065\072\256\145\362\251\230\316
\257\133\311\070\214\061\073\177\314\334\226\375\342\133\326\320
\131\364\166\272\013\313\117\203\020\307\100\320\035\140\351\052
\345\110\130\167\014\105\151\276\031\161\004\044\342\343\044\037
\112\310\301\076\231\365\226\230\070\110\045\241\025\260\033\327
\342\204\030\133\366\161\065\232\150\173\100\314\030\134\014\044
\235\324\225\365\231\252\106\352\256\254\277\364\024\031\044\350
\214\354\343\365\274\006\150\212\052\014\005\137\012\227\165\247
\334\176\300\375\327\172\030\337\060\321\070\113\037\260\230\160
\277\314\174\163\360\156\304\061\245\244\227\035\254\277\316\154
\041\112\276\047\043\147\363\006\126\201\012\221\216\266\341\003
\005\063\054\332\064\010\115\116\120\043\255\037\245\305\324\172
\376\352\011\354\247\050\140\213\106\174\265\352\233\335\117\371
\347\153\025\306\210\317\103\333\345\047\334\004\126\156\157\106
\025\361\126\055\350\134\014\163\303\043\201\070\040\313\311\014
\151\317\054\253\073\204\140\063\031\122\375\151\024\063

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "HARICA Client RSA Root CA 2021"

Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e

Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Not Valid Before: Fri Feb 19 10:58:46 2021

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# Not Valid After : Mon Feb 13 10:58:45 2045
# Fingerprint (SHA-256):
1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D
#
Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA Client RSA Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\106\306\220\012\167\072\266\274\364\145\255\254\374\343\367\007
\000\156\336\156
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\157\355\134\327\210\314\070\251\334\351\335\331\135\333\330\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002
\050\076
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA Client ECC Root CA 2021"
#
# Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0
# Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:03:34 2021
# Not Valid After : Mon Feb 13 11:03:33 2045
# Fingerprint (SHA-256):
8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B
# Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

```

```
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA Client ECC Root CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020
\175\360
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\132\060\202\001\341\240\003\002\001\002\002\020\061
\150\331\330\341\142\127\036\322\031\104\210\346\020\175\360\060
\012\006\010\052\206\110\316\075\004\003\003\060\157\061\013\060
\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163
\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110\101
\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103\040
\122\157\157\164\040\103\101\040\062\060\062\061\060\036\027\015
\062\061\060\062\061\071\061\061\060\063\063\064\132\027\015\064
\065\060\062\061\063\061\061\060\063\063\063\132\060\157\061\013
\060\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006
\003\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101
```

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\143\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145
\141\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156
\163\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110
\101\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103
\040\122\157\157\164\040\103\101\040\062\060\062\061\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\007\030\255\225\226\224\320\134\017\202\367
\052\100\372\002\311\311\075\066\246\243\004\152\301\155\225\001
\210\140\022\124\154\134\242\053\156\023\072\210\225\014\034\046
\206\066\112\211\031\267\030\336\073\350\250\120\037\312\337\133
\277\111\200\025\333\343\060\341\035\132\307\052\212\001\007\376
\155\054\064\357\050\050\227\274\301\371\127\206\225\213\065\317
\236\132\321\150\225\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\122\010\322\276\062\201\045\375\365\032\227
\354\116\137\032\273\123\315\220\255\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\012\006\010\052\206\110
\316\075\004\003\003\003\147\000\060\144\002\060\114\061\105\106
\117\250\346\276\303\167\262\032\030\113\055\210\173\130\346\253
\224\153\104\003\260\027\377\337\202\163\104\121\054\375\223\035
\006\173\024\322\211\354\100\014\357\041\001\056\002\060\057\311
\056\132\154\054\035\331\225\340\236\260\271\134\122\174\366\370
\070\312\056\361\324\035\362\242\111\242\225\370\301\130\136\117
\376\163\012\357\061\260\253\043\130\023\214\213\336\073
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "HARICA

Client ECC Root CA 2021"

Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0

Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

Not Valid Before: Fri Feb 19 11:03:34 2021

Not Valid After : Mon Feb 13 11:03:33 2045

Fingerprint (SHA-256):

8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B

Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "HARICA Client ECC Root CA 2021"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\276\144\323\332\024\113\322\153\315\257\217\333\246\246\162\370
```

```
\336\046\371\000
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\255\270\120\246\251\202\172\154\075\032\252\244\322\143\244\104
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020
\175\360
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"
#
# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Serial Number:1b:70:e9:d2:ff:ae:6c:71
#
Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Not Valid Before: Tue Sep 23 15:22:07 2014
# Not Valid After : Mon May 05 15:22:07 2036
# Fingerprint (SHA-256):
57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A
# Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064

```

```
\060\066\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\033\160\351\322\377\256\154\161
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\033
\160\351\322\377\256\154\161\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\121\061\013\060\011\006\003\125\004
\006\023\002\105\123\061\102\060\100\006\003\125\004\003\014\071
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162
\164\151\146\151\143\141\143\151\157\156\040\106\151\162\155\141
\160\162\157\146\145\163\151\157\156\141\154\040\103\111\106\040
\101\066\062\066\063\064\060\066\070\060\036\027\015\061\064\060
\071\062\063\061\065\062\062\060\067\132\027\015\063\066\060\065
\060\065\061\065\062\062\060\067\132\060\121\061\013\060\011\006
\003\125\004\006\023\002\105\123\061\102\060\100\006\003\125\004
\003\014\071\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\040\106\151
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\040\103
\111\106\040\101\066\062\066\063\064\060\066\070\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\226\153
\216\352\370\373\361\242\065\340\177\114\332\340\303\122\327\175
\266\020\310\002\136\263\103\052\304\117\152\262\312\034\135\050
\232\170\021\032\151\131\127\257\265\040\102\344\213\017\346\337
\133\246\003\222\057\365\021\344\142\327\062\161\070\331\004\014
\161\253\075\121\176\017\007\337\143\005\134\351\277\224\157\301
\051\202\300\264\332\121\260\301\074\273\255\067\112\134\312\361
\113\066\016\044\253\277\303\204\167\375\250\120\364\261\347\306
\057\322\055\131\215\172\012\116\226\151\122\002\252\066\230\354
\374\372\024\203\014\067\037\311\222\067\177\327\201\055\345\304
\271\340\076\064\376\147\364\076\146\321\323\364\100\317\136\142
\064\017\160\006\076\040\030\132\316\367\162\033\045\154\223\164
\024\223\243\163\261\016\252\207\020\043\131\137\040\005\031\107
\355\150\216\222\022\312\135\374\326\053\262\222\074\040\317\341
\137\257\040\276\240\166\177\166\345\354\032\206\141\063\076\347
\173\264\077\240\017\216\242\271\152\157\271\207\046\157\101\154
```

\210\246\120\375\152\143\013\365\223\026\033\031\217\262\355\233
\233\311\220\365\001\014\337\031\075\017\076\070\043\311\057\217
\014\321\002\376\033\125\326\116\320\215\074\257\117\244\363\376
\257\052\323\005\235\171\010\241\313\127\061\264\234\310\220\262
\147\364\030\026\223\072\374\107\330\321\170\226\061\037\272\053
\014\137\135\231\255\143\211\132\044\040\166\330\337\375\253\116
\246\042\252\235\136\346\047\212\175\150\051\243\347\212\270\332
\021\273\027\055\231\235\023\044\106\367\305\342\330\237\216\177
\307\217\164\155\132\262\350\162\365\254\356\044\020\255\057\024
\332\377\055\232\106\161\107\276\102\337\273\001\333\364\177\323
\050\217\061\131\133\323\311\002\246\264\122\312\156\227\373\103
\305\010\046\157\212\364\273\375\237\050\252\015\325\105\363\023
\072\035\330\300\170\217\101\147\074\036\224\144\256\173\013\305
\350\331\001\210\071\032\227\206\144\101\325\073\207\014\156\372
\017\306\275\110\024\277\071\115\324\236\101\266\217\226\035\143
\226\223\331\225\006\170\061\150\236\067\006\073\200\211\105\141
\071\043\307\033\104\243\025\345\034\370\222\060\273\002\003\001
\000\001\243\201\357\060\201\354\060\035\006\003\125\035\016\004
\026\004\024\145\315\353\253\065\036\000\076\176\325\164\300\034
\264\163\107\016\032\144\057\060\022\006\003\125\035\023\001\001
\377\004\010\060\006\001\001\377\002\001\001\060\201\246\006\003
\125\035\040\004\201\236\060\201\233\060\201\230\006\004\125\035
\040\000\060\201\217\060\057\006\010\053\006\001\005\005\007\002
\001\026\043\150\164\164\160\072\057\057\167\167\167\056\146\151
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\056\143
\157\155\057\143\160\163\060\134\006\010\053\006\001\005\005\007
\002\002\060\120\036\116\000\120\000\141\000\163\000\145\000\157
\000\040\000\144\000\145\000\040\000\154\000\141\000\040\000\102
\000\157\000\156\000\141\000\156\000\157\000\166\000\141\000\040
\000\064\000\067\000\040\000\102\000\141\000\162\000\143\000\145
\000\154\000\157\000\156\000\141\000\040\000\060\000\070\000\060
\000\061\000\067\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\164\207\050\002\053\167\037\146
\211\144\355\217\164\056\106\034\273\250\370\370\013\035\203\266
\072\247\350\105\212\007\267\340\076\040\313\341\010\333\023\010
\370\050\241\065\262\200\263\013\121\300\323\126\232\215\063\105
\111\257\111\360\340\075\007\172\105\023\132\377\310\227\330\323
\030\054\175\226\370\335\242\145\103\160\223\220\025\272\220\337
\350\031\260\333\054\212\140\017\267\157\224\007\036\035\246\311
\205\366\275\064\370\100\170\142\020\160\072\276\175\113\071\201
\251\020\324\226\101\273\370\137\034\013\035\010\362\261\260\211
\172\362\367\240\340\304\217\213\170\265\073\130\245\043\216\117
\125\376\066\073\340\014\267\312\052\060\101\040\264\200\315\256
\374\166\146\163\250\256\156\341\174\332\003\350\224\040\346\042
\243\320\037\220\135\040\123\024\046\127\332\124\227\337\026\104
\020\001\036\210\146\217\162\070\223\335\040\267\064\276\327\361
\356\143\216\107\171\050\006\374\363\131\105\045\140\042\063\033


```
\243\137\250\272\052\332\032\075\315\100\352\214\356\005\025\225
\325\245\054\040\057\247\230\050\356\105\374\361\270\210\000\054
\217\102\332\121\325\234\345\023\150\161\105\103\213\236\013\041
\074\113\134\005\334\032\237\230\216\332\275\042\236\162\315\255
\012\313\314\243\147\233\050\164\304\233\327\032\074\004\130\246
\202\235\255\307\173\157\377\200\226\351\370\215\152\275\030\220
\035\377\111\032\220\122\067\223\057\074\002\135\202\166\013\121
\347\026\307\127\370\070\371\247\315\233\042\124\357\143\260\025
\155\123\145\003\112\136\112\240\262\247\216\111\000\131\070\325
\307\364\200\144\365\156\225\120\270\021\176\025\160\070\112\260
\177\320\304\062\160\300\031\377\311\070\055\024\054\146\364\102
\104\346\125\166\033\200\025\127\377\300\247\247\252\071\252\330
\323\160\320\056\272\353\224\152\372\137\064\206\347\142\265\375
\212\360\060\205\224\311\257\044\002\057\157\326\335\147\376\343
\260\125\117\004\230\117\244\101\126\342\223\320\152\350\326\363
\373\145\340\316\165\304\061\131\014\356\202\310\014\140\063\112
\031\272\204\147\047\017\274\102\135\275\044\124\015\354\035\160
\006\137\244\274\372\040\174\125
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Autoridad de Certificacion

Firmaprofesional CIF A62634068"

Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Serial Number:1b:70:e9:d2:ff:ae:6c:71

Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

Not Valid Before: Tue Sep 23 15:22:07 2014

Not Valid After : Mon May 05 15:22:07 2036

Fingerprint (SHA-256):

57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A

Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\013\276\302\047\042\111\313\071\252\333\065\134\123\343\214\256
\170\377\266\376
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\116\156\233\124\114\312\267\372\110\344\220\261\025\113\034\243
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
```

```
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\010\033\160\351\322\377\256\154\161
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "vTrus ECC Root CA"

#

Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:d:1c:d6:da

Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

Not Valid Before: Tue Jul 31 07:26:44 2018

Not Valid After : Fri Jul 31 07:26:44 2043

Fingerprint (SHA-256):

30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3

#

Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "vTrus ECC Root CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103
\103\040\122\157\157\164\040\103\101
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103
\103\040\122\157\157\164\040\103\101
```

END

```
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244
\073\346\155\034\326\332
```

```
END
```

```
CKA_VALUE MULTILINE_OCTAL
\060\202\002\017\060\202\001\225\240\003\002\001\002\002\024\156
\152\274\131\252\123\276\230\071\147\242\322\153\244\073\346\155
\034\326\332\060\012\006\010\052\206\110\316\075\004\003\003\060
\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061\034
\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103\150
\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060\030
\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103\103
\040\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067
\063\061\060\067\062\066\064\064\132\027\015\064\063\060\067\063
\061\060\067\062\066\064\064\132\060\107\061\013\060\011\006\003
\125\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012
\023\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056
\054\114\164\144\056\061\032\060\030\006\003\125\004\003\023\021
\166\124\162\165\163\040\105\103\103\040\122\157\157\164\040\103
\101\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\145\120\112\256\214\171\226
\112\252\034\010\303\243\242\315\376\131\126\101\167\375\046\224
\102\273\035\315\010\333\163\262\133\165\363\317\234\116\202\364
\277\370\141\046\205\154\326\205\133\162\160\322\375\333\142\264
\337\123\213\275\261\104\130\142\102\011\307\372\177\133\020\347
\376\100\375\300\330\303\053\062\347\160\246\267\246\040\125\035
\173\200\135\113\217\147\114\361\020\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\230\071\315\276\330\262\214\367
\262\253\341\255\044\257\173\174\241\333\037\317\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060
\127\235\335\126\361\307\343\351\270\111\120\153\233\151\303\157
\354\303\175\045\344\127\225\023\100\233\122\323\073\363\100\031
\274\046\307\055\006\236\265\173\066\237\365\045\324\143\153\000
\002\061\000\351\323\306\236\126\232\052\314\241\332\077\310\146
\053\323\130\234\040\205\372\253\221\212\160\160\021\070\140\144
\013\142\011\221\130\000\371\115\373\064\150\332\011\255\041\006
\030\224\316
```

```
END
```

```
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
# Trust for "vTrus ECC Root CA"
# Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN
```

```

# Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:6d:1c:d6:da
# Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Not Valid Before: Tue Jul 31 07:26:44 2018
# Not Valid After : Fri Jul 31 07:26:44 2043
# Fingerprint (SHA-256):
30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3
# Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "vTrus ECC Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\366\234\333\260\374\366\002\023\266\122\062\246\243\221\077\026
\160\332\303\341
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\336\113\301\365\122\214\233\103\341\076\217\125\124\027\215\205
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103
\103\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244
\073\346\155\034\326\332
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "vTrus Root CA"
#
# Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45
# Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Not Valid Before: Tue Jul 31 07:24:05 2018
# Not Valid After : Fri Jul 31 07:24:05 2043
# Fingerprint (SHA-256):
8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87
# Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7

```

```

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "vTrus Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\126\060\202\003\076\240\003\002\001\002\002\024\103
\343\161\023\330\263\131\024\135\267\316\214\375\065\375\157\274
\005\215\105\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\103\061\013\060\011\006\003\125\004\006\023\002\103
\116\061\034\060\032\006\003\125\004\012\023\023\151\124\162\165
\163\103\150\151\156\141\040\103\157\056\054\114\164\144\056\061
\026\060\024\006\003\125\004\003\023\015\166\124\162\165\163\040
\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067\063
\061\060\067\062\064\060\065\132\027\015\064\063\060\067\063\061
\060\067\062\064\060\065\132\060\103\061\013\060\011\006\003\125
\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012\023
\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056\054
\114\164\144\056\061\026\060\024\006\003\125\004\003\023\015\166
\124\162\165\163\040\122\157\157\164\040\103\101\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\275\125\174
\141\323\270\035\004\142\005\240\256\154\267\160\264\101\352\113
\003\136\020\077\220\132\034\213\073\260\146\213\154\110\246\034
\042\272\325\100\222\356\063\262\043\131\311\216\274\130\332\213
\236\320\031\362\057\131\306\214\143\132\272\237\243\013\260\263
\232\134\272\021\270\022\351\014\273\317\156\154\200\207\051\024

```

\003\054\215\044\232\310\144\203\265\152\254\023\054\063\361\237
\334\054\141\074\032\077\160\125\233\255\000\122\177\317\004\271
\376\066\372\234\300\026\256\142\376\226\114\103\176\125\024\276
\032\263\322\155\302\257\166\146\225\153\052\260\224\167\205\136
\004\017\142\035\143\165\367\153\347\313\133\232\160\354\076\147
\005\360\376\007\010\200\317\050\333\005\306\024\047\057\206\175
\360\047\336\377\346\176\063\110\347\013\036\130\321\047\053\123
\016\127\112\145\327\373\242\200\140\374\114\274\065\123\001\152
\227\162\202\257\361\035\160\350\234\365\357\136\302\154\307\107
\176\132\224\205\046\115\073\272\353\114\350\260\011\302\145\302
\235\235\011\233\116\265\227\005\254\365\006\240\367\066\005\176
\364\220\262\153\304\264\371\144\352\351\032\012\310\015\250\355
\047\311\324\347\263\271\253\202\042\220\047\075\052\350\174\220
\357\274\117\375\342\012\044\247\336\145\044\244\135\352\300\166
\060\323\167\120\370\015\004\233\224\066\001\163\312\006\130\246
\323\073\334\372\004\106\023\125\212\311\104\107\270\121\071\032
\056\350\064\342\171\313\131\112\012\177\274\246\357\037\003\147
\152\131\053\045\142\223\331\123\031\146\074\047\142\051\206\115
\244\153\356\377\324\116\272\325\264\342\216\110\132\000\031\011
\361\005\331\316\221\261\367\353\351\071\117\366\157\004\103\232
\125\365\076\005\024\275\277\263\131\264\330\216\063\204\243\220
\122\252\263\002\225\140\371\014\114\150\371\356\325\027\015\370
\161\127\265\045\344\051\356\145\135\257\321\356\074\027\013\132
\103\305\245\206\352\044\236\342\005\007\334\064\102\022\221\326
\071\164\256\114\101\202\333\362\246\110\321\263\233\363\063\252
\363\246\300\305\116\365\364\235\166\143\346\002\306\042\113\301
\225\077\120\144\054\124\345\266\360\074\051\317\127\002\003\001
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\124\142\160\143\361\165\204\103\130\216\321\026\040\261\306
\254\032\274\366\211\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015
\001\001\013\005\000\003\202\002\001\000\051\272\222\111\247\255
\360\361\160\303\344\227\360\237\251\045\325\153\236\064\376\346
\032\144\366\072\153\122\262\020\170\032\237\114\332\212\332\354
\034\067\122\340\102\113\373\154\166\312\044\013\071\022\025\235
\237\021\055\374\171\144\334\340\340\365\335\340\127\311\245\262
\166\160\120\244\376\267\012\160\325\240\064\361\165\327\115\111
\272\021\321\263\330\354\202\377\353\016\304\277\144\055\175\143
\156\027\170\354\135\174\210\310\353\216\127\166\331\131\004\372
\274\122\037\105\254\360\172\200\354\354\157\166\256\221\333\020
\216\004\334\222\337\240\366\346\256\111\323\301\154\022\033\314
\051\252\371\010\245\342\067\024\312\261\270\146\357\032\202\344
\360\370\361\247\026\151\267\333\251\141\074\237\365\061\313\344
\000\106\302\057\164\261\261\327\201\356\250\046\225\274\210\257
\114\065\007\052\002\312\170\024\155\107\053\100\126\351\313\052
\140\241\147\003\240\316\214\274\260\162\147\304\061\316\333\064
\345\045\003\140\045\173\161\230\344\300\033\053\137\164\102\322

```
\113\305\131\010\007\207\276\305\303\177\347\226\331\341\334\050
\227\326\217\005\343\365\233\116\312\035\120\107\005\123\260\312
\071\347\205\240\211\301\005\073\001\067\323\077\111\342\167\353
\043\310\210\146\073\075\071\166\041\106\361\354\137\043\270\353
\242\146\165\164\301\100\367\330\150\232\223\342\055\251\056\275
\034\243\036\310\164\306\244\055\172\040\253\073\270\260\106\375
\157\335\137\122\125\165\142\360\227\240\174\327\070\375\045\337
\315\240\233\020\317\213\270\070\136\136\305\264\246\002\066\241
\036\137\034\317\342\226\235\051\252\375\230\256\122\341\363\101
\122\373\251\056\162\226\237\047\343\252\163\175\370\032\043\146
\173\073\253\145\260\062\001\113\025\076\075\242\117\014\053\065
\242\306\331\147\022\065\060\315\166\056\026\263\231\236\115\117
\116\055\073\064\103\341\232\016\015\244\146\227\272\322\034\112
\114\054\052\213\213\201\117\161\032\251\335\134\173\173\010\305
\000\015\067\100\343\174\173\124\137\057\205\137\166\366\367\247
\260\034\127\126\301\162\350\255\242\257\215\063\111\272\037\212
\334\346\164\174\140\206\157\207\227\173
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "vTrus Root CA"

Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45

Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

Not Valid Before: Tue Jul 31 07:24:05 2018

Not Valid After : Fri Jul 31 07:24:05 2043

Fingerprint (SHA-256):

8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87

Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "vTrus Root CA"

CKA_CERT_SHA1_HASH

MULTILINE_OCTAL

```
\204\032\151\373\365\315\032\045\064\023\075\343\370\374\270\231
\320\311\024\267
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\270\311\067\337\372\153\061\204\144\305\352\021\152\033\165\374
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
```

```
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "ISRG Root X2"

#

Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US

Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52

#

Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US

Not Valid Before: Fri Sep 04 00:00:00 2020

Not Valid After : Mon Sep 17 16:00:00 2040

Fingerprint (SHA-256):

69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70

Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "ISRG Root X2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
```

END

CKA_ID UTF8 "0"

CKA_ISSUER

MULTILINE_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
```


END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057
\207\122

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\033\060\202\001\241\240\003\002\001\002\002\020\101
\322\235\321\162\352\356\247\200\301\054\154\351\057\207\122\060
\012\006\010\052\206\110\316\075\004\003\003\060\117\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006\003
\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123\145
\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150\040
\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023\014
\111\123\122\107\040\122\157\157\164\040\130\062\060\036\027\015
\062\060\060\071\060\064\060\060\060\060\060\132\027\015\064
\060\060\071\061\067\061\066\060\060\060\060\132\060\117\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006
\003\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123
\145\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150
\040\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023
\014\111\123\122\107\040\122\157\157\164\040\130\062\060\166\060
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000
\042\003\142\000\004\315\233\325\237\200\203\012\354\011\112\363
\026\112\076\134\317\167\254\336\147\005\015\035\007\266\334\026
\373\132\213\024\333\342\161\140\304\272\105\225\021\211\216\352
\006\337\367\052\026\034\244\271\305\305\062\340\003\340\036\202
\030\070\213\327\105\330\012\152\156\346\000\167\373\002\121\175
\042\330\012\156\232\133\167\337\360\372\101\354\071\334\165\312
\150\007\014\037\352\243\102\060\100\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\174\102\226\256\336\113\110\073\372\222\370
\236\214\317\155\213\251\162\067\225\060\012\006\010\052\206\110
\316\075\004\003\003\003\150\000\060\145\002\060\173\171\116\106
\120\204\302\104\207\106\033\105\160\377\130\231\336\364\375\244
\322\125\246\040\055\164\326\064\274\101\243\120\137\001\047\126
\264\276\047\165\006\257\022\056\165\230\215\374\002\061\000\213
\365\167\154\324\310\145\252\340\013\054\356\024\235\047\067\244
\371\123\245\121\344\051\203\327\370\220\061\133\102\237\012\365
\376\256\000\150\347\214\111\017\266\157\133\133\025\362\347

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "ISRG Root X2"

Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US

```

# Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52
#
Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US
# Not Valid Before: Fri Sep 04 00:00:00 2020
# Not Valid After : Mon Sep 17 16:00:00 2040
# Fingerprint (SHA-256):
69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70
# Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\275\261\271\074\325\227\215\105\306\046\024\125\370\333\225\307
\132\321\123\257
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\323\236\304\036\043\074\246\337\317\243\176\155\340\024\346\345
END
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057
\207\122
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HiPKI Root CA - G1"
#
# Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW
# Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60
# Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW
# Not Valid Before: Fri Feb 22 09:46:04 2019
# Not Valid After : Thu Dec 31 15:59:59 2037
# Fingerprint (SHA-256):
F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC

```

Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60

```
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HiPKI Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152
\136\140
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\055
\335\254\316\142\227\224\241\103\350\260\315\166\152\136\140\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\117
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151\120
\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061\060
\036\027\015\061\071\060\062\062\062\060\071\064\066\060\064\132
\027\015\063\067\061\062\063\061\061\065\065\071\065\071\132\060
\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043
\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167
\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114
\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151
\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
```

\000\364\036\177\122\163\062\014\163\344\275\023\164\243\324\060
\250\320\256\113\330\266\337\165\107\146\364\174\347\071\004\036
\152\160\040\322\132\107\162\147\125\364\245\350\235\325\036\041
\241\360\147\272\314\041\150\276\104\123\277\215\371\342\334\057
\125\310\067\077\037\244\300\234\263\344\167\134\240\106\376\167
\372\032\240\070\352\355\232\162\336\053\275\224\127\072\272\354
\171\347\137\175\102\144\071\172\046\066\367\044\360\325\057\272
\225\230\021\146\255\227\065\326\165\001\200\340\257\364\204\141
\214\015\036\137\174\207\226\136\101\257\353\207\352\370\135\361
\056\210\005\076\114\042\273\332\037\052\335\122\106\144\071\363
\102\316\331\236\014\263\260\167\227\144\234\300\364\243\056\037
\225\007\260\027\337\060\333\000\030\226\114\241\201\113\335\004
\155\123\243\075\374\007\254\324\305\067\202\353\344\225\010\031
\050\202\322\102\072\243\330\123\354\171\211\140\110\140\310\162
\222\120\334\003\217\203\077\262\102\127\132\333\152\351\021\227
\335\205\050\274\060\114\253\343\302\261\105\104\107\037\340\212
\026\007\226\322\041\017\123\300\355\251\176\324\116\354\233\011
\354\257\102\254\060\326\277\321\020\105\340\246\026\262\245\305
\323\117\163\224\063\161\002\241\152\243\326\063\227\117\041\143
\036\133\217\331\301\136\105\161\167\017\201\135\137\041\232\255
\203\314\372\136\326\215\043\137\033\075\101\257\040\165\146\132
\112\366\237\373\253\030\367\161\300\266\035\061\354\073\040\353
\313\342\270\365\256\222\262\367\341\204\113\362\242\362\223\232
\042\236\323\024\157\066\124\275\037\136\131\025\271\163\250\301
\174\157\173\142\351\026\154\107\132\145\363\016\021\233\106\331
\375\155\334\326\234\300\264\175\245\260\335\077\126\157\241\371
\366\344\022\110\375\006\177\022\127\266\251\043\117\133\003\303
\340\161\052\043\267\367\260\261\073\274\230\275\326\230\250\014
\153\366\216\022\147\246\362\262\130\344\002\011\023\074\251\273
\020\264\322\060\105\361\354\367\000\021\337\145\370\334\053\103
\125\277\026\227\304\017\325\054\141\204\252\162\206\376\346\072
\176\302\077\175\356\374\057\024\076\346\205\335\120\157\267\111
\355\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125
\035\016\004\026\004\024\362\167\027\372\136\250\376\366\075\161
\325\150\272\311\106\014\070\330\257\260\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\120\121
\360\165\334\160\004\343\377\252\165\324\161\242\313\236\217\250
\251\323\257\165\307\124\317\072\034\004\231\042\254\304\021\342
\357\063\112\246\043\035\016\015\107\330\067\307\157\257\064\177
\117\201\153\065\117\351\162\245\061\342\170\347\367\116\224\030
\133\100\175\317\153\041\124\206\346\225\172\373\306\312\352\234
\110\116\127\011\135\057\254\364\245\264\227\063\130\325\254\171
\251\314\137\371\205\372\122\305\215\370\221\024\353\072\015\027
\320\122\302\173\343\302\163\216\106\170\006\070\054\350\134\332
\146\304\364\244\360\126\031\063\051\132\145\222\005\107\106\112
\253\204\303\036\047\241\037\021\222\231\047\165\223\017\274\066

\073\227\127\217\046\133\014\273\234\017\324\156\060\007\324\334
\137\066\150\146\071\203\226\047\046\212\310\304\071\376\232\041
\157\325\162\206\351\177\142\345\227\116\320\044\320\100\260\320
\165\010\216\275\150\356\010\327\156\174\020\160\106\033\174\340
\210\262\236\162\206\231\001\343\277\237\111\031\264\045\276\126
\145\256\027\143\345\036\337\350\377\107\245\277\341\046\005\204
\344\260\300\257\347\010\231\250\014\136\046\200\105\324\370\150
\057\226\217\256\342\112\034\234\026\014\023\157\070\207\366\273
\310\064\137\222\003\121\171\160\246\337\313\365\231\115\171\315
\116\274\127\237\103\116\153\056\053\030\370\152\163\214\272\305
\065\357\071\152\101\036\317\161\250\242\262\206\007\133\072\311
\341\357\077\145\004\200\107\062\104\160\225\116\061\147\152\164
\133\020\105\165\352\260\237\320\346\065\376\116\237\213\314\053
\222\105\133\156\045\140\205\106\315\321\252\260\166\146\223\167
\226\276\203\276\070\266\044\116\046\013\314\355\172\126\032\340
\351\132\306\144\255\114\172\000\110\104\057\271\100\273\023\076
\276\025\170\235\205\201\112\052\127\336\325\031\103\332\333\312
\133\107\206\203\013\077\266\015\166\170\163\171\042\136\261\200
\037\317\276\321\077\126\020\230\053\225\207\241\037\235\144\024
\140\071\054\263\000\125\056\344\365\263\016\127\304\221\101\000
\234\077\350\245\337\352\366\377\310\360\255\155\122\250\027\253
\233\141\374\022\121\065\344\045\375\257\252\152\206\071

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "HiPKI Root CA - G1"

Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60

#

Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

Not Valid Before: Fri Feb 22 09:46:04 2019

Not Valid After : Thu Dec 31 15:59:59 2037

Fingerprint (SHA-256):

F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC

Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "HiPKI Root CA - G1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\152\222\344\250\356\033\354\226\105\067\343\051\127\111\315\226

\343\345\322\140

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```

\151\105\337\026\145\113\350\150\232\217\166\137\377\200\236\323
END
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152
\136\140
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign ECC Root CA - R4"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2
# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL

```

\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\334\060\202\001\203\240\003\002\001\002\002\015\002
\003\345\176\365\077\223\375\245\011\041\262\246\060\012\006\010
\052\206\110\316\075\004\003\002\060\120\061\044\060\042\006\003
\125\004\013\023\033\107\154\157\142\141\154\123\151\147\156\040
\105\103\103\040\122\157\157\164\040\103\101\040\055\040\122\064
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\062
\061\061\061\063\060\060\060\060\060\060\132\027\015\063\070\060
\061\061\071\060\063\061\064\060\067\132\060\120\061\044\060\042
\006\003\125\004\013\023\033\107\154\157\142\141\154\123\151\147
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040
\122\064\061\023\060\021\006\003\125\004\012\023\012\107\154\157
\142\141\154\123\151\147\156\061\023\060\021\006\003\125\004\003
\023\012\107\154\157\142\141\154\123\151\147\156\060\131\060\023
\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316\075
\003\001\007\003\102\000\004\270\306\171\323\217\154\045\016\237
\056\071\031\034\003\244\256\232\345\071\007\011\026\312\143\261
\271\206\370\212\127\301\127\316\102\372\163\241\367\145\102\377
\036\301\000\262\156\163\016\377\307\041\345\030\244\252\331\161
\077\250\324\271\316\214\035\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\124\260\173\255\105\270\342\100\177
\373\012\156\373\276\063\311\074\243\204\325\060\012\006\010\052
\206\110\316\075\004\003\002\003\107\000\060\104\002\040\042\117
\164\162\271\140\257\361\346\234\240\026\005\120\137\303\136\073
\156\141\164\357\276\001\304\276\030\110\131\141\202\062\002\040
\046\235\124\143\100\336\067\140\120\317\310\330\355\235\202\256
\067\230\274\243\217\114\114\251\064\053\154\357\373\225\233\046

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```

# Trust for "GlobalSign ECC Root CA - R4"
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2
# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\153\240\260\230\341\161\357\132\255\376\110\025\200\167\020\364
\275\157\013\050
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\046\051\370\155\341\210\277\242\145\177\252\304\315\017\177\374
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R1"
#
# Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17
# Subject: CN=GTS Root R1,O=Google Trust
Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):

```


D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF
Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002
\003\345\223\157\061\260\023\111\210\153\242\027\060\015\006\011
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157
\164\040\122\061\060\036\027\015\061\066\060\066\062\062\060\060
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003
\023\013\107\124\123\040\122\157\157\164\040\122\061\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\266\021
\002\213\036\343\241\167\233\073\334\277\224\076\267\225\247\100
\074\241\375\202\371\175\062\006\202\161\366\366\214\177\373\350
\333\274\152\056\227\227\243\214\113\371\053\366\261\371\316\204
\035\261\371\305\227\336\357\271\362\243\351\274\022\211\136\247

\252\122\253\370\043\047\313\244\261\234\143\333\327\231\176\360
\012\136\353\150\246\364\306\132\107\015\115\020\063\343\116\261
\023\243\310\030\154\113\354\374\011\220\337\235\144\051\045\043
\007\241\264\322\075\056\140\340\317\322\011\207\273\315\110\360
\115\302\302\172\210\212\273\272\317\131\031\326\257\217\260\007
\260\236\061\361\202\301\300\337\056\246\155\154\031\016\265\330
\176\046\032\105\003\075\260\171\244\224\050\255\017\177\046\345
\250\010\376\226\350\074\150\224\123\356\203\072\210\053\025\226
\011\262\340\172\214\056\165\326\234\353\247\126\144\217\226\117
\150\256\075\227\302\204\217\300\274\100\300\013\134\275\366\207
\263\065\154\254\030\120\177\204\340\114\315\222\323\040\351\063
\274\122\231\257\062\265\051\263\045\052\264\110\371\162\341\312
\144\367\346\202\020\215\350\235\302\212\210\372\070\146\212\374
\143\371\001\371\170\375\173\134\167\372\166\207\372\354\337\261
\016\171\225\127\264\275\046\357\326\001\321\353\026\012\273\216
\013\265\305\305\212\125\253\323\254\352\221\113\051\314\031\244
\062\045\116\052\361\145\104\320\002\316\252\316\111\264\352\237
\174\203\260\100\173\347\103\253\247\154\243\217\175\211\201\372
\114\245\377\325\216\303\316\113\340\265\330\263\216\105\317\166
\300\355\100\053\375\123\017\260\247\325\073\015\261\212\242\003
\336\061\255\314\167\352\157\173\076\326\337\221\042\022\346\276
\372\330\062\374\020\143\024\121\162\336\135\326\026\223\275\051
\150\063\357\072\146\354\007\212\046\337\023\327\127\145\170\047
\336\136\111\024\000\242\000\177\232\250\041\266\251\261\225\260
\245\271\015\026\021\332\307\154\110\074\100\340\176\015\132\315
\126\074\321\227\005\271\313\113\355\071\113\234\304\077\322\125
\023\156\044\260\326\161\372\364\301\272\314\355\033\365\376\201
\101\330\000\230\075\072\310\256\172\230\067\030\005\225\002\003
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004
\026\004\024\344\257\053\046\161\032\053\110\047\205\057\122\146
\054\357\360\211\023\161\076\060\015\006\011\052\206\110\206\367
\015\001\001\014\005\000\003\202\002\001\000\237\252\102\046\333
\013\233\276\377\036\226\222\056\076\242\145\112\152\230\272\042
\313\175\301\072\330\202\012\006\306\366\245\336\300\116\207\146
\171\241\371\246\130\234\252\371\265\346\140\347\340\350\261\036
\102\101\063\013\067\075\316\211\160\025\312\265\044\250\317\153
\265\322\100\041\230\317\042\064\317\073\305\042\204\340\305\016
\212\174\135\210\344\065\044\316\233\076\032\124\036\156\333\262
\207\247\374\363\372\201\125\024\142\012\131\251\042\005\061\076
\202\326\356\333\127\064\274\063\225\323\027\033\350\047\242\213
\173\116\046\032\172\132\144\266\321\254\067\361\375\240\363\070
\354\162\360\021\165\235\313\064\122\215\346\166\153\027\306\337
\206\253\047\216\111\053\165\146\201\020\041\246\352\076\364\256
\045\377\174\025\336\316\214\045\077\312\142\160\012\367\057\011
\146\007\310\077\034\374\360\333\105\060\337\142\210\301\265\017
\235\303\237\112\336\131\131\107\305\207\042\066\346\202\247\355

```
\012\271\342\007\240\215\173\172\112\074\161\322\342\003\241\037
\062\007\335\033\344\102\316\014\000\105\141\200\265\013\040\131
\051\170\275\371\125\313\143\305\074\114\364\266\377\333\152\137
\061\153\231\236\054\301\153\120\244\327\346\030\024\275\205\077
\147\253\106\237\240\377\102\247\072\177\134\313\135\260\160\035
\053\064\365\324\166\011\014\353\170\114\131\005\363\063\102\303
\141\025\020\033\167\115\316\042\214\324\205\362\105\175\267\123
\352\357\100\132\224\012\134\040\137\116\100\135\142\042\166\337
\377\316\141\275\214\043\170\322\067\002\340\216\336\321\021\067
\211\366\277\355\111\007\142\256\222\354\100\032\257\024\011\331
\320\116\262\242\367\276\356\356\330\377\334\032\055\336\270\066
\161\342\374\171\267\224\045\321\110\163\133\241\065\347\263\231
\147\165\301\031\072\053\107\116\323\102\216\375\061\310\026\146
\332\322\014\074\333\263\216\311\241\015\200\017\173\026\167\024
\277\377\333\011\224\262\223\274\040\130\025\351\333\161\103\363
\336\020\303\000\334\250\052\225\266\302\326\077\220\153\166\333
\154\376\214\274\362\160\065\014\334\231\031\065\334\327\310\106
\143\325\066\161\256\127\373\267\202\155\334
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER

CK_BBOOL CK_FALSE

Trust for "GTS Root R1"

Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17

Subject: CN=GTS Root R1,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF

Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\345\214\034\304\221\073\070\143\113\351\020\156\343\255\216\153
\235\331\201\112
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\005\376\320\277\161\250\243\166\143\332\001\340\330\122\334\100
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "GTS Root R2"

#

Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa

Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8

Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94

CKA_CLASS

CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R2"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002
\003\345\256\305\215\004\045\032\253\021\045\252\060\015\006\011
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157
\164\040\122\062\060\036\027\015\061\066\060\066\062\062\060\060
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003
\023\013\107\124\123\040\122\157\157\164\040\122\062\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\316\336
\375\246\373\354\354\024\064\074\007\006\132\154\131\367\031\065
\335\367\301\235\125\252\323\315\073\244\223\162\357\012\372\155
\235\366\360\205\200\133\241\110\122\237\071\305\267\356\050\254
\357\313\166\150\024\271\337\255\001\154\231\037\304\042\035\237
\376\162\167\340\054\133\257\344\004\277\117\162\240\032\064\230
\350\071\150\354\225\045\173\166\241\346\151\271\205\031\275\211
\214\376\255\355\066\352\163\274\377\203\342\313\175\301\322\316
\112\263\215\005\236\213\111\223\337\301\133\320\156\136\360\056
\060\056\202\374\372\274\264\027\012\110\345\210\233\305\233\153
\336\260\312\264\003\360\332\364\220\270\145\144\367\134\114\255
\350\176\146\136\231\327\270\302\076\310\320\023\235\255\356\344
\105\173\211\125\367\212\037\142\122\204\022\263\302\100\227\343
\212\037\107\221\246\164\132\322\370\261\143\050\020\270\263\011
\270\126\167\100\242\046\230\171\306\376\337\045\356\076\345\240
\177\324\141\017\121\113\074\077\214\332\341\160\164\330\302\150
\241\371\301\014\351\241\342\177\273\125\074\166\006\356\152\116
\314\222\210\060\115\232\275\117\013\110\232\204\265\230\243\325
\373\163\301\127\141\335\050\126\165\023\256\207\216\347\014\121
\011\020\165\210\114\274\215\371\173\074\324\042\110\037\052\334
\353\153\273\104\261\313\063\161\062\106\257\255\112\361\214\350
\164\072\254\347\032\042\163\200\322\060\367\045\102\307\042\073
\073\022\255\226\056\306\303\166\007\252\040\267\065\111\127\351
\222\111\350\166\026\162\061\147\053\226\176\212\243\307\224\126
\042\277\152\113\176\001\041\262\043\062\337\344\232\104\155\131
\133\135\365\000\240\034\233\306\170\227\215\220\377\233\310\252
\264\257\021\121\071\136\331\373\147\255\325\133\021\235\062\232
\033\275\325\272\133\245\311\313\045\151\123\125\047\134\340\312
\066\313\210\141\373\036\267\320\313\356\026\373\323\246\114\336

\222\245\324\342\337\365\006\124\336\056\235\113\264\223\060\252
\201\316\335\032\334\121\163\015\117\160\351\345\266\026\041\031
\171\262\346\211\013\165\144\312\325\253\274\011\301\030\241\377
\324\124\241\205\074\375\024\044\003\262\207\323\244\267\002\003
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004
\026\004\024\273\377\312\216\043\237\117\231\312\333\342\150\246
\245\025\047\027\036\331\016\060\015\006\011\052\206\110\206\367
\015\001\001\014\005\000\003\202\002\001\000\037\312\316\335\307
\276\241\237\331\047\114\013\334\027\230\021\152\210\336\075\346
\161\126\162\262\236\032\116\234\325\053\230\044\135\233\153\173
\260\063\202\011\275\337\045\106\352\230\236\266\033\376\203\074
\322\142\141\301\004\355\316\340\305\311\310\023\023\125\347\250
\143\255\214\173\001\376\167\060\341\316\150\233\005\370\022\356
\171\061\240\101\105\065\050\012\161\244\044\117\214\334\074\202
\007\137\146\334\175\020\376\014\141\263\005\225\356\341\256\201
\017\250\370\307\217\115\250\043\002\046\153\035\203\122\125\316
\265\057\000\312\200\100\340\341\164\254\140\365\207\200\235\256
\066\144\221\135\260\150\030\352\212\141\311\167\250\227\304\311
\307\245\374\125\113\363\360\177\271\145\075\047\150\320\314\153
\372\123\235\341\221\032\311\135\032\226\155\062\207\355\003\040
\310\002\316\132\276\331\352\375\262\115\304\057\033\337\137\172
\365\370\213\306\356\061\072\045\121\125\147\215\144\062\173\351
\236\303\202\272\052\055\351\036\264\340\110\006\242\374\147\257
\037\042\002\163\373\040\012\257\235\124\113\241\315\377\140\107
\260\077\135\357\033\126\275\227\041\226\055\012\321\136\235\070
\002\107\154\271\364\366\043\045\270\240\152\232\053\167\010\372
\304\261\050\220\046\130\010\074\342\176\252\327\075\157\272\061
\210\012\005\353\047\265\241\111\356\240\105\124\173\346\047\145
\231\040\041\250\243\274\373\030\226\273\122\157\014\355\203\121
\114\351\131\342\040\140\305\302\145\222\202\214\363\020\037\016
\212\227\276\167\202\155\077\217\035\135\274\111\047\275\314\117
\017\341\316\166\206\004\043\305\300\214\022\133\375\333\204\240
\044\361\110\377\144\174\320\276\134\026\321\357\231\255\300\037
\373\313\256\274\070\042\006\046\144\332\332\227\016\077\050\025
\104\250\117\000\312\360\232\314\317\164\152\264\076\074\353\225
\354\265\323\132\330\201\231\351\103\030\067\353\263\273\321\130
\142\101\363\146\322\217\252\170\225\124\040\303\132\056\164\053
\325\321\276\030\151\300\254\325\244\317\071\272\121\204\003\145
\351\142\300\142\376\330\115\125\226\342\320\021\372\110\064\021
\354\236\355\005\035\344\310\326\035\206\313

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

```
# Trust for "GTS Root R2"
# Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa
# Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed
Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8
# Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\232\104\111\166\062\333\336\372\320\274\373\132\173\027\275\236
\126\011\044\224
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\036\071\300\123\346\036\051\202\013\312\122\125\066\135\127\334
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
# Certificate "GTS Root R3"
#
# Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66
# Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48
```

Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE

CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002
\003\345\270\202\353\040\370\045\047\155\075\146\060\012\006\010
\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122
\063\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107
\124\123\040\122\157\157\164\040\122\063\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\037\117\063\207\063\051\212\241\204\336\313\307\041\130
\101\211\352\126\235\053\113\205\306\035\114\047\274\177\046\121
\162\157\342\237\326\243\312\314\105\024\106\213\255\357\176\206
\214\354\261\176\057\377\251\161\235\030\204\105\004\101\125\156
\053\352\046\177\273\220\001\343\113\031\272\344\124\226\105\011
\261\325\154\221\104\255\204\023\216\232\214\015\200\014\062\366


```
\340\047\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\301\361\046\272\240\055\256\205\201\317\323\361\052\022
\275\270\012\147\375\274\060\012\006\010\052\206\110\316\075\004
\003\003\003\151\000\060\146\002\061\000\366\341\040\225\024\173
\124\243\220\026\021\277\204\310\352\157\153\027\236\036\106\230
\040\233\237\323\015\331\254\323\057\315\174\370\133\056\125\273
\277\335\222\367\244\014\334\061\341\242\002\061\000\374\227\146
\146\345\103\026\023\203\335\307\337\057\276\024\070\355\001\316
\261\027\032\021\165\351\275\003\217\046\176\204\345\311\140\246
\225\327\124\131\267\347\021\054\211\324\271\356\027
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GTS Root R3"

Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66

Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48

Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "GTS Root R3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\355\345\161\200\053\310\222\271\133\203\074\322\062\150\077\011
\315\240\036\106
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\076\347\235\130\002\224\106\121\224\345\340\042\112\213\347\163
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063
```

END

CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL
\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R4"
#
# Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52
# Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D
#
Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002
\003\345\300\150\357\143\032\234\162\220\120\122\060\012\006\010

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\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122
\064\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107
\124\123\040\122\157\157\164\040\122\064\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\363\164\163\247\150\213\140\256\103\270\065\305\201\060
\173\113\111\235\373\301\141\316\346\336\106\275\153\325\141\030
\065\256\100\335\163\367\211\221\060\132\353\074\356\205\174\242
\100\166\073\251\306\270\107\330\052\347\222\221\152\163\351\261
\162\071\237\051\237\242\230\323\137\136\130\206\145\017\241\204
\145\006\321\334\213\311\307\163\310\214\152\057\345\304\253\321
\035\212\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\200\114\326\353\164\377\111\066\243\325\330\374\265\076
\305\152\360\224\035\214\060\012\006\010\052\206\110\316\075\004
\003\003\003\151\000\060\146\002\061\000\350\100\377\203\336\003
\364\237\256\035\172\247\056\271\257\117\366\203\035\016\055\205
\001\035\321\331\152\354\017\302\257\307\136\126\136\134\325\034
\130\042\050\013\367\060\266\057\261\174\002\061\000\360\141\074
\247\364\240\202\343\041\325\204\035\163\206\234\055\257\312\064
\233\361\237\271\043\066\342\274\140\003\235\200\263\232\126\310
\341\342\273\024\171\312\315\041\324\224\265\111\103

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "GTS Root R4"

Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US

Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52

Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US

Not Valid Before: Wed Jun 22 00:00:00 2016

Not Valid After : Sun Jun 22 00:00:00 2036

Fingerprint (SHA-256):

34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D

Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "GTS Root R4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\167\323\003\147\265\340\014\025\366\014\070\141\337\174\341\073
\222\106\115\107
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\103\226\203\167\031\115\166\263\235\145\122\344\035\042\245\350
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Telia Root CA v2"
#
# Issuer: CN=Telia Root CA v2,O=Telia Finland
Oyj,C=FI
# Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e
# Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI
# Not Valid Before: Thu Nov 29 11:55:54 2018
# Not Valid After : Sun Nov 29 11:55:54 2043
# Fingerprint (SHA-256):
24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C
# Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Telia Root CA v2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006

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\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005
\236
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\017\001
\147\137\047\326\376\172\343\344\254\276\011\133\005\236\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\060\104\061
\013\060\011\006\003\125\004\006\023\002\106\111\061\032\060\030
\006\003\125\004\012\014\021\124\145\154\151\141\040\106\151\156
\154\141\156\144\040\117\171\152\061\031\060\027\006\003\125\004
\003\014\020\124\145\154\151\141\040\122\157\157\164\040\103\101
\040\166\062\060\036\027\015\061\070\061\061\062\071\061\061\065
\065\065\064\132\027\015\064\063\061\061\062\071\061\061\065\065
\065\064\132\060\104\061\013\060\011\006\003\125\004\006\023\002
\106\111\061\032\060\030\006\003\125\004\012\014\021\124\145\154
\151\141\040\106\151\156\154\141\156\144\040\117\171\152\061\031
\060\027\006\003\125\004\003\014\020\124\145\154\151\141\040\122
\157\157\164\040\103\101\040\166\062\060\202\002\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017
\000\060\202\002\012\002\202\002\001\000\262\320\077\007\274\342
\173\320\153\231\370\342\167\151\347\316\235\244\003\274\202\155
\241\376\201\145\037\114\047\254\216\000\272\026\173\353\060\152
\000\300\263\164\150\176\262\257\307\325\142\263\172\077\120\312
\214\066\104\044\143\322\066\351\014\205\366\103\166\325\114\241
\140\162\147\342\050\063\245\313\061\270\072\042\043\064\270\175
\275\126\042\100\235\352\364\173\003\255\150\374\262\201\117\230
\320\164\352\215\345\175\315\143\303\243\366\336\222\302\130\031
\340\226\273\305\304\251\075\245\164\226\376\257\371\211\252\275
\225\027\124\330\170\104\361\014\167\025\222\340\230\102\247\244
\326\252\040\222\315\301\240\263\226\262\072\204\102\215\175\325
\225\344\326\333\351\142\304\130\263\171\305\214\323\065\063\203
\237\165\241\122\047\141\070\361\131\075\216\120\340\275\171\074
\347\154\226\376\136\331\002\145\264\216\134\320\021\064\337\135
\277\122\247\201\000\303\177\231\105\231\025\325\027\310\012\123
\354\143\363\231\175\314\151\022\206\302\027\360\001\236\277\204
```

\274\321\122\313\033\222\146\316\244\123\345\241\277\304\333\011
\326\346\211\126\053\310\343\174\336\343\377\211\345\065\156\050
\350\154\013\043\121\251\045\005\353\110\370\335\261\312\372\154
\010\121\357\267\030\154\104\312\046\341\163\306\211\006\201\345
\212\254\260\342\051\306\271\044\263\153\104\021\364\245\103\302
\114\103\345\160\066\214\266\063\127\172\225\056\202\240\364\134
\020\263\141\203\366\002\005\206\056\174\055\154\334\003\106\156
\065\223\325\172\225\057\336\040\330\133\176\224\220\004\152\272
\131\075\004\005\165\235\067\242\016\056\075\353\301\244\122\203
\376\320\153\324\146\216\334\306\351\022\116\035\052\127\252\020
\274\174\136\202\175\246\246\311\362\055\271\365\027\047\255\321
\016\211\124\053\225\372\300\255\035\230\024\170\063\102\206\012
\251\163\265\373\164\015\267\033\060\031\304\132\016\034\047\267
\332\030\320\377\212\310\005\272\361\252\034\242\067\267\346\110
\244\106\054\224\352\250\166\142\107\213\020\123\007\110\127\154
\342\222\115\266\256\005\313\334\301\112\136\217\254\075\031\116
\302\355\140\165\053\333\301\312\102\325\002\003\001\000\001\243
\143\060\141\060\037\006\003\125\035\043\004\030\060\026\200\024
\162\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057
\206\330\044\071\060\035\006\003\125\035\016\004\026\004\024\162
\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057\206
\330\044\071\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\240\073\131\247\011\224\076\066
\204\322\176\057\071\245\226\227\372\021\255\374\147\363\161\011
\362\262\211\204\147\104\257\271\357\355\226\354\234\144\333\062
\060\157\147\232\254\176\137\262\253\001\066\176\201\372\344\204
\136\322\254\066\340\153\142\305\175\113\016\202\155\322\166\142
\321\376\227\370\237\060\174\030\371\264\122\167\202\035\166\333
\323\035\251\360\301\232\000\275\155\165\330\175\347\372\307\070
\243\234\160\350\106\171\003\257\056\164\333\165\370\156\123\014
\003\310\231\032\211\065\031\074\323\311\124\174\250\360\054\346
\156\007\171\157\152\341\346\352\221\202\151\012\035\303\176\131
\242\236\153\106\025\230\133\323\257\106\035\142\310\316\200\122
\111\021\077\311\004\022\303\023\174\077\073\212\226\333\074\240
\036\012\264\213\124\262\044\147\015\357\202\313\276\074\175\321
\342\177\256\026\326\126\130\271\332\040\261\203\025\241\357\212
\115\062\157\101\057\023\122\202\224\327\032\301\170\242\121\335
\053\160\155\267\032\371\367\260\340\147\227\126\333\174\141\123
\011\003\050\002\100\307\263\330\375\234\160\152\306\050\303\205
\351\342\355\032\223\240\336\113\230\242\204\076\005\167\001\226
\075\373\264\040\017\234\162\002\172\022\057\325\243\272\121\170
\257\052\053\104\145\116\265\375\012\350\301\315\171\207\141\053
\336\200\127\105\277\147\361\233\221\136\245\244\354\131\110\020
\015\070\307\260\372\303\104\155\004\365\170\120\034\222\226\133
\332\365\270\056\272\133\317\345\360\152\235\113\057\130\163\055
\117\055\304\034\076\364\263\077\253\025\016\073\031\101\212\244

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\301\127\022\146\161\114\372\123\343\127\353\142\225\011\236\124
\335\321\302\074\127\074\275\070\255\230\144\267\270\003\232\123
\126\140\135\263\330\102\033\134\113\022\212\034\353\353\175\306
\172\151\307\047\177\244\370\213\362\344\224\146\207\113\351\224
\007\011\022\171\212\262\353\164\004\334\316\364\104\131\340\026
\312\305\054\130\327\074\173\317\142\206\152\120\175\065\066\146
\247\373\067\347\050\307\330\320\255\245\151\224\217\350\301\337
\044\370\033\007\061\207\201\330\135\366\350\050\330\112\122\200
\254\023\356\120\024\036\230\307
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Telia Root CA v2"

Issuer: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI

Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e

Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI

Not Valid Before: Thu Nov 29 11:55:54 2018

Not Valid After : Sun Nov 29 11:55:54 2043

Fingerprint (SHA-256):

24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C

Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Telia Root CA v2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\271\231\315\321\163\120\212\304\107\005\010\234\214\210\373\276
\240\053\100\315
```

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

```
\016\217\254\252\202\337\205\261\364\334\020\034\374\231\331\110
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005
\236
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "D-TRUST BR Root CA 1 2020"

#

Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE

Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96

Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust

GmbH,C=DE

Not Valid Before: Tue Feb 11 09:45:00 2020

Not Valid After : Sun Feb 11 09:44:59 2035

Fingerprint (SHA-256):

E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44

Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "D-TRUST BR Root CA 1 2020"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113
\115\226

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\174
\311\217\053\204\327\337\352\017\311\145\232\323\113\115\226\060
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003

\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122
\125\123\124\040\102\122\040\122\157\157\164\040\103\101\040\061
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\060
\071\064\065\060\060\132\027\015\063\065\060\062\061\061\060\071
\064\064\065\071\132\060\110\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\102\122
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\306\313\307\050\321\373\204\365\232
\357\102\024\040\341\103\153\156\165\255\374\053\003\204\324\166
\223\045\327\131\073\101\145\153\036\346\064\052\273\164\366\022
\316\350\155\347\253\344\074\116\077\104\010\213\315\026\161\313
\277\222\231\364\244\327\074\120\124\122\220\205\203\170\224\147
\147\243\034\011\031\075\165\064\205\336\355\140\175\307\014\264
\101\122\271\156\345\356\102\243\202\001\015\060\202\001\011\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\163\221\020\253\377
\125\263\132\174\011\045\325\262\272\010\240\153\253\037\155\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057
\144\055\164\162\165\163\164\137\142\162\137\162\157\157\164\137
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\102
\122\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316
\075\004\003\003\003\151\000\060\146\002\061\000\224\220\055\023
\372\341\143\370\141\143\350\255\205\170\124\221\234\270\223\070
\076\032\101\332\100\026\123\102\010\312\057\216\361\076\201\126
\300\252\330\355\030\304\260\256\364\076\372\046\002\061\000\363
\050\342\306\333\053\231\373\267\121\270\044\243\244\224\172\032
\077\346\066\342\003\127\063\212\060\313\202\307\326\024\021\325
\165\143\133\024\225\234\037\001\317\330\325\162\247\017\073

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

```

# Trust for "D-TRUST BR Root CA 1 2020"
# Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96
# Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Not Valid Before: Tue Feb 11 09:45:00 2020
# Not Valid After : Sun Feb 11 09:44:59 2035
# Fingerprint (SHA-256):
E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44
# Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST BR Root CA 1 2020"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\133\230\360\343\265\367\164\074\355\346\260\066\175\062\315
\364\011\101\147
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\265\252\113\325\355\367\343\125\056\217\162\012\363\165\270\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113
\115\226
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST EV Root CA 1 2020"
#
# Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0
# Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Not Valid Before: Tue Feb 11 10:00:00 2020
# Not Valid After : Sun Feb 11 09:59:59 2035
# Fingerprint (SHA-256):

```

```
08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB
# Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST EV Root CA 1 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373
\377\320
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\137
\002\101\327\172\207\174\114\003\243\254\226\215\373\377\320\060
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003
\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122
\125\123\124\040\105\126\040\122\157\157\164\040\103\101\040\061
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\061
\060\060\060\060\060\132\027\015\063\065\060\062\061\061\060\071
\065\071\065\071\132\060\110\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\105\126
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\361\013\335\206\103\040\031\337\227
\205\350\042\112\233\317\235\230\277\264\005\046\311\313\343\246
\322\217\305\236\170\173\061\211\251\211\255\047\074\145\020\202
\374\337\303\235\116\360\063\043\304\322\062\365\034\260\337\063
```

\027\135\305\360\261\212\371\357\271\267\024\312\051\112\302\017
\251\177\165\145\111\052\060\147\364\144\367\326\032\167\332\303
\302\227\141\102\173\111\255\243\202\001\015\060\202\001\011\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\177\020\001\026\067
\072\244\050\344\120\370\244\367\354\153\062\266\376\351\213\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057
\144\055\164\162\165\163\164\137\145\166\137\162\157\157\164\137
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\105
\126\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316
\075\004\003\003\003\151\000\060\146\002\061\000\312\074\306\052
\165\302\136\165\142\071\066\000\140\132\213\301\223\231\314\331
\333\101\073\073\207\231\027\073\325\314\117\312\042\367\240\200
\313\371\264\261\033\126\365\162\322\374\031\321\002\061\000\221
\367\060\223\077\020\106\053\161\244\320\073\104\233\300\051\002
\005\262\101\167\121\363\171\132\236\216\024\240\116\102\322\133
\201\363\064\152\003\347\042\070\120\133\355\031\117\103\026

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "D-TRUST EV Root CA 1 2020"

Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0

Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

Not Valid Before: Tue

Feb 11 10:00:00 2020

Not Valid After : Sun Feb 11 09:59:59 2035

Fingerprint (SHA-256):

08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB

Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "D-TRUST EV Root CA 1 2020"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\141\333\214\041\131\151\003\220\330\174\234\022\206\124\317\235
\075\364\335\007
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\214\055\235\160\237\110\231\021\006\021\373\351\313\060\300\156
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373
\377\320
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert TLS ECC P384 Root G5"
#
# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3
# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05
# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS ECC P384 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065

```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052
\056\363

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\031\060\202\001\237\240\003\002\001\002\002\020\011
\340\223\145\254\367\331\310\271\076\034\013\004\052\056\363\060
\012\006\010\052\206\110\316\075\004\003\003\060\116\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120
\063\070\064\040\122\157\157\164\040\107\065\060\036\027\015\062
\061\060\061\061\065\060\060\060\060\060\060\132\027\015\064\066
\060\061\061\064\062\063\065\071\065\071\132\060\116\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120
\063\070\064\040\122\157\157\164\040\107\065\060\166\060\020\006
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003
\142\000\004\301\104\241\317\021\227\120\232\336\043\202\065\007
\315\320\313\030\235\322\361\177\167\065\117\073\335\224\162\122
\355\302\073\370\354\372\173\153\130\040\354\231\256\311\374\150
\263\165\271\333\011\354\310\023\365\116\306\012\035\146\060\114
\273\037\107\012\074\141\020\102\051\174\245\010\016\340\042\351
\323\065\150\316\233\143\237\204\265\231\115\130\240\216\365\124
\347\225\311\243\102\060\100\060\035\006\003\125\035\016\004\026
\004\024\301\121\105\120\131\253\076\347\054\132\372\040\042\022
\007\200\210\174\021\152\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\061\000\211\152\215\107\347
\354\374\156\125\003\331\147\154\046\116\203\306\375\311\373\053
\023\274\267\172\214\264\145\322\151\151\143\023\143\073\046\120
\056\001\241\171\006\221\235\110\277\302\276\002\060\107\303\025
\173\261\240\221\231\111\223\250\074\174\350\106\006\213\054\362
\061\000\224\235\142\310\211\275\031\204\024\351\245\373\001\270
\015\166\103\214\056\123\313\174\337\014\027\226\120

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert TLS ECC P384 Root G5"
# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3
# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05
# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert
  TLS ECC P384 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\027\363\336\136\237\017\031\351\216\366\037\062\046\156\040\304
\007\256\060\356
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\323\161\004\152\103\034\333\246\131\341\250\243\252\305\161\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052
\056\363
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert TLS RSA4096 Root G5"
#
# Issuer:

```

```
CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a
# Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75
# Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS RSA4096 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174
\317\212
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\010
\371\264\170\250\372\176\332\152\063\067\211\336\174\317\212\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060
\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164
\054\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023
\034\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123
\101\064\060\071\066\040\122\157\157\164\040\107\065\060\036\027
\015\062\061\060\061\061\065\060\060\060\060\060\060\132\027\015
\064\066\060\061\061\064\062\063\065\071\065\071\132\060\115\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054
\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023\034
```


\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123\101
\064\060\071\066\040\122\157\157\164\040\107\065\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\263\320\364
\311\171\021\235\375\374\146\201\347\314\325\344\274\354\201\076
\152\065\216\056\267\347\336\257\371\007\115\317\060\235\352\011
\013\231\275\154\127\332\030\112\270\170\254\072\071\250\246\110
\254\056\162\345\275\353\361\032\315\347\244\003\251\077\021\264
\330\057\211\026\373\224\001\075\273\057\370\023\005\241\170\034
\216\050\340\105\340\203\364\131\033\225\263\256\176\003\105\345
\276\302\102\376\356\362\074\266\205\023\230\062\235\026\250\051
\302\013\034\070\334\237\061\167\134\277\047\243\374\047\254\267
\053\275\164\233\027\055\362\201\332\135\260\341\043\027\076\210
\112\022\043\320\352\317\235\336\003\027\261\102\112\240\026\114
\244\155\223\351\077\072\356\072\174\235\130\235\364\116\217\374
\073\043\310\155\270\342\005\332\314\353\354\303\061\364\327\247
\051\124\200\317\104\133\114\157\060\236\363\314\335\037\224\103
\235\115\177\160\160\015\324\072\321\067\360\154\235\233\300\024
\223\130\357\315\101\070\165\274\023\003\225\174\177\343\134\351
\325\015\325\342\174\020\142\252\153\360\075\166\363\077\243\350
\260\301\375\357\252\127\115\254\206\247\030\264\051\301\054\016
\277\144\276\051\214\330\002\055\315\134\057\362\177\357\025\364
\014\025\254\012\260\361\323\015\117\152\115\167\227\001\240\361
\146\267\267\316\357\316\354\354\245\165\312\254\343\341\143\367
\270\241\004\310\274\173\077\135\055\026\042\126\355\110\111\376
\247\057\171\060\045\233\272\153\055\077\235\073\304\027\347\035
\056\373\362\317\246\374\343\024\054\226\230\041\214\264\221\351
\031\140\203\362\060\053\006\163\120\325\230\073\006\351\307\212
\014\140\214\050\370\122\233\156\341\366\115\273\006\044\233\327
\053\046\077\375\052\057\161\365\326\044\276\177\061\236\017\155
\350\217\117\115\243\077\377\065\352\337\111\136\101\217\206\371
\361\167\171\113\033\264\243\136\057\373\106\002\320\146\023\136
\136\205\117\316\330\160\210\173\316\001\265\226\227\327\315\175
\375\202\370\302\044\301\312\001\071\117\215\242\301\024\100\037
\234\146\325\014\011\106\326\362\320\321\110\166\126\072\103\313
\266\012\021\071\272\214\023\154\006\265\236\317\353\002\003\001
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\121\063\034\355\066\100\257\027\323\045\315\151\150\362\257
\116\043\076\263\101\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367\015
\001\001\014\005\000\003\202\002\001\000\140\246\257\133\137\127
\332\211\333\113\120\251\304\043\065\041\377\320\141\060\204\221
\267\077\020\317\045\216\311\277\106\064\331\301\041\046\034\160
\031\162\036\243\311\207\376\251\103\144\226\072\310\123\004\012
\266\101\273\304\107\000\331\237\030\030\073\262\016\363\064\352
\044\367\335\257\040\140\256\222\050\137\066\347\135\344\336\307
\074\333\120\071\255\273\075\050\115\226\174\166\306\133\364\301

\333\024\245\253\031\142\007\030\100\137\227\221\334\234\307\253
\265\121\015\346\151\123\125\314\071\175\332\305\021\125\162\305
\073\213\211\370\064\055\244\027\345\027\346\231\175\060\210\041
\067\315\060\027\075\270\362\274\250\165\240\103\334\076\211\113
\220\256\155\003\340\034\243\240\226\011\273\175\243\267\052\020
\104\113\106\007\064\143\355\061\271\004\356\243\233\232\256\346
\061\170\364\352\044\141\073\253\130\144\377\273\207\047\142\045
\201\337\334\241\057\366\355\247\377\172\217\121\056\060\370\244
\001\322\205\071\137\001\231\226\157\132\133\160\031\106\376\206
\140\076\255\200\020\011\335\071\045\057\130\177\273\322\164\360
\367\106\037\106\071\112\330\123\320\363\056\073\161\245\324\157
\374\363\147\344\007\217\335\046\031\341\215\133\372\243\223\021
\233\351\310\072\303\125\150\232\222\341\122\166\070\350\341\272
\275\373\117\325\357\263\347\110\203\061\360\202\041\343\266\276
\247\253\157\357\237\337\114\317\001\270\142\152\043\075\347\011
\115\200\033\173\060\244\303\335\007\177\064\276\244\046\262\366
\101\350\011\035\343\040\230\252\067\117\377\367\361\342\051\160
\061\107\077\164\320\024\026\372\041\212\002\325\212\011\224\167
\056\362\131\050\213\174\120\222\012\146\170\070\203\165\304\265
\132\250\021\306\345\301\235\146\125\317\123\304\257\327\165\205
\251\102\023\126\354\041\167\201\223\132\014\352\226\331\111\312
\241\010\362\227\073\155\233\004\030\044\104\216\174\001\362\334
\045\330\136\206\232\261\071\333\365\221\062\152\321\246\160\212
\242\367\336\244\105\205\046\250\036\214\135\051\133\310\113\330
\232\152\003\136\160\362\205\117\154\113\150\057\312\124\366\214
\332\062\376\303\153\203\077\070\306\176

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert TLS RSA4096 Root G5"

Issuer: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a

Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

Not Valid Before: Fri Jan 15 00:00:00 2021

Not Valid After : Sun Jan 14 23:59:59 2046

Fingerprint (SHA-256):

37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75

Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL

UTF8 "DigiCert TLS RSA4096 Root G5"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\247\210\111\334\135\174\165\214\214\336\071\230\126\263\252\320

\262\245\161\065

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

\254\376\367\064\226\251\362\263\264\022\113\344\047\101\157\341

END

CKA_ISSUER MULTILINE_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145

\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004

\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040

\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174

\317\212

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DigiCert SMIME ECC

P384 Root G5"

#

Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef

Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

Not Valid Before: Fri Jan 15 00:00:00 2021

Not Valid After : Sun Jan 14 23:59:59 2046

Fingerprint (SHA-256):

E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B

Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145

\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004

\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115

\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040

\107\065

END

CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243
\326\357

END

CKA_VALUE MULTILINE_OCTAL
\060\202\002\034\060\202\001\243\240\003\002\001\002\002\020\005
\077\156\240\006\001\162\175\355\077\303\243\266\243\326\357\060
\012\006\010\052\206\110\316\075\004\003\003\060\120\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111
\156\143\056\061\050\060\046\006\003\125\004\003\023\037\104\151
\147\151\103\145\162\164\040\123\115\111\115\105\040\105\103\103
\040\120\063\070\064\040\122\157\157\164\040\107\065\060\036\027
\015\062\061\060\061\061\065\060\060\060\060\060\060\132\027\015
\064\066\060\061\061\064\062\063\065\071\065\071\132\060\120\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054
\040\111\156\143\056\061\050\060\046\006\003\125\004\003\023\037
\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040\105
\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\026\235\125\345\266\324\373\373\147
\153\032\324\241\252\322\167\225\076\210\345\007\237\266\160\146
\040\050\244\210\354\160\065\257\263\062\377\067\023\112\236\274
\001\003\336\204\301\270\306\346\145\107\211\362\023\125\277\315
\245\036\010\140\177\255\177\350\141\222\051\317\011\107\136\013
\034\300\037\244\277\362\133\274\230\357\231\114\314\160\153\266
\272\320\050\035\277\276\004\243\102\060\100\060\035\006\003\125
\035\016\004\026\004\024\163\172\153\226\333\102\007\213\122\146
\302\144\062\027\376\340\147\220\056\255\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052
\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067\104
\365\062\200\343\161\353\364\155\317\174\314\221\232\303\156\161
\330\322\043\135\222\115\202\102\155\134\141\225\366\221\365\247
\010\366\152\227\351\234\224\055\230\160\375\063\266\011\002\060
\007\074\057\271\130\202\136\017\243\142\250\223\147\360\040\303
\151\277\003\054\073\120\247\073\257\101\070\311\122\110\221\326

```

\016\373\274\140\060\174\144\077\022\036\105\177\121\076\364\246
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert
SMIME ECC P384 Root G5"
# Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef
# Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B
# Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\034\270\247\010\311\015\040\171\001\240\262\066\177\360\225\145
\344\123\044\376
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\246\376\364\122\066\104\330\356\015\267\003\013\357\164\263\003
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243
\326\357
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

```

```

# Certificate "DigiCert SMIME RSA4096 Root G5"
#
# Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55
# Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A
#
Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272
\034\125
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\005
\366\272\004\043\203\106\313\175\134\346\271\133\272\034\125\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\117
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060
\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164
\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003\023
\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065\060

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\036\027\015\062\061\060\061\061\065\060\060\060\060\060\060\132
\027\015\064\066\060\061\061\064\062\063\065\071\065\071\132\060
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027
\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162
\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003
\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105
\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\340\152\133\331\370\371\175\354\265\173\357\137\335\134\064
\330\332\135\321\313\145\165\253\041\174\133\000\324\202\157\105
\205\101\212\251\022\002\162\062\360\024\365\003\165\273\143\227
\111\017\100\231\013\032\036\126\247\322\320\341\253\335\345\004
\033\343\037\024\022\002\210\365\240\200\011\366\047\232\120\360
\272\343\242\340\254\152\024\221\265\153\070\020\172\242\061\341
\221\033\267\271\360\053\133\310\167\011\166\267\121\304\066\012
\231\123\124\104\045\267\011\065\206\027\005\126\223\075\101\267
\002\327\142\037\212\222\021\207\352\021\155\352\010\021\334\261
\170\110\111\222\366\264\121\200\170\043\330\376\341\126\032\072
\220\023\126\064\211\325\342\225\213\137\336\262\314\373\077\070
\267\205\367\352\236\277\056\241\056\057\115\175\152\021\056\066
\240\377\021\010\004\225\125\340\033\073\147\223\251\224\125\352
\062\355\006\072\177\302\177\343\255\023\047\321\064\101\263\060
\303\277\264\210\370\003\202\244\337\076\253\170\167\240\131\223
\161\347\335\353\000\004\173\314\110\071\050\340\036\243\025\151
\310\066\262\241\013\227\337\125\326\357\221\234\244\366\026\367
\121\012\356\003\043\221\334\004\377\340\335\070\366\042\003\000
\302\007\161\032\022\311\327\106\052\224\033\315\326\273\033\356
\277\276\115\120\130\260\013\315\060\166\051\365\317\345\266\152
\057\166\260\260\151\152\320\155\145\030\065\176\223\274\162\027
\301\125\102\315\057\302\045\273\364\375\035\241\144\042\124\135
\342\236\162\101\204\156\161\226\352\105\007\266\136\172\112\206
\235\163\144\167\070\003\322\017\123\245\125\040\304\115\377\150
\157\125\251\352\335\161\344\117\331\205\243\174\116\051\002\236
\013\011\362\032\123\314\000\246\335\321\064\366\015\301\060\261
\234\002\144\254\065\355\245\260\051\261\322\225\063\017\322\040
\063\275\354\043\113\362\031\371\332\230\144\344\054\061\037\056
\341\215\034\004\225\050\115\214\130\315\113\345\163\202\206\214
\354\250\326\171\134\373\144\273\334\014\114\050\366\027\257\342
\150\326\026\206\230\333\374\001\334\061\272\370\234\016\371\050
\106\112\341\375\226\006\105\171\021\150\027\145\134\213\046\207
\133\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035
\016\004\026\004\024\321\243\324\127\035\117\125\333\165\114\134
\102\236\143\026\316\264\306\073\037\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\007\247
\012\336\123\273\232\353\160\277\262\066\220\315\344\247\270\361

\014\344\135\132\035\170\145\374\311\270\036\043\021\127\174\151
\065\155\001\377\123\120\277\007\016\272\307\001\077\130\052\224
\165\003\253\034\013\043\334\033\212\036\067\075\035\130\217\163
\331\263\052\157\337\020\240\133\014\247\312\260\177\271\044\242
\001\065\062\345\136\106\101\353\330\177\163\347\102\351\244\121
\046\167\201\012\250\353\017\012\120\235\176\212\040\147\374\013
\216\072\021\323\305\214\140\030\331\113\261\374\324\361\264\111
\116\256\207\341\321\373\166\241\137\363\006\317\227\226\014\351
\236\165\201\134\123\015\042\374\066\346\111\156\164\333\000\205
\215\174\042\240\216\373\020\114\324\142\023\133\357\113\162\046
\213\374\116\212\217\376\227\020\123\305\170\213\102\144\033\137
\340\211\375\273\011\177\120\340\124\205\046\021\152\035\145\371
\111\051\334\174\066\337\373\075\367\322\254\356\062\215\156\246
\175\071\234\105\304\312\015\365\073\264\171\123\245\057\126\307
\121\305\212\114\144\135\220\103\043\216\153\114\027\170\314\350
\277\365\073\344\250\110\317\255\233\014\337\062\112\323\331\022
\216\043\170\015\055\257\237\257\236\074\011\302\227\000\355\072
\151\034\161\077\071\337\323\217\304\146\365\357\066\224\017\363
\335\222\266\226\137\220\246\335\163\252\246\040\224\224\045\152
\011\014\162\344\023\043\140\114\243\312\027\056\173\147\000\333
\320\315\352\172\037\071\046\127\211\060\167\313\116\345\225\105
\117\137\373\066\134\075\371\040\265\072\020\045\117\223\062\132
\356\301\226\350\351\126\004\260\111\141\115\354\170\250\235\030
\301\377\330\352\057\126\357\225\053\173\004\136\147\343\125\100
\355\071\004\371\013\171\365\152\214\134\017\211\232\220\307\315
\213\336\333\046\065\241\156\315\263\102\362\242\017\073\014\216
\223\377\024\317\374\367\223\367\344\101\010\156\031\122\021\017
\123\031\163\170\014\317\330\205\201\370\255\125\310\260\236\106
\143\257\234\122\356\134\277\360\300\133\067\036\011\040\322\076
\043\306\241\025\112\016\066\176\060\305\171\152\274\042\210\331
\014\122\100\037\335\116\017\147\046\026\322\255\027\034

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER

CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DigiCert SMIME RSA4096 Root G5"

Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55

Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

Not Valid Before: Fri Jan 15 00:00:00 2021

Not Valid After : Sun Jan 14 23:59:59 2046

Fingerprint (SHA-256):

90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A

Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST


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CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\133\305\255\342\232\247\124\332\204\211\123\245\376\327\133\106
\206\320\127\010
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\321\173\340\265\077\065\162\237\175\276\013\245\244\035\251\156
END
CKA_ISSUER
MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272
\034\125
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certainly Root R1"
#
# Issuer: CN=Certainly Root R1,O=Certainly,C=US
# Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0
# Subject: CN=Certainly Root R1,O=Certainly,C=US
# Not Valid Before: Thu Apr 01 00:00:00 2021
# Not Valid After : Sun Apr 01 00:00:00 2046
#
Fingerprint (SHA-256):
77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0
# Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certainly Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104
\071\267\340

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\107\060\202\003\057\240\003\002\001\002\002\021\000
\216\017\371\113\220\161\150\145\063\124\364\324\104\071\267\340
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022
\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156
\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162
\164\141\151\156\154\171\040\122\157\157\164\040\122\061\060\036
\027\015\062\061\060\064\060\061\060\060\060\060\060\060\132\027
\015\064\066\060\064\060\061\060\060\060\060\060\060\132\060\075
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156\154
\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162\164
\141\151\156\154\171\040\122\157\157\164\040\122\061\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\320\066
\324\037\352\335\253\344\321\266\346\373\042\300\335\023\015\152
\173\042\023\034\227\074\150\143\146\062\234\003\265\215\244\201
\203\332\170\060\021\317\334\262\053\276\222\277\216\344\304\023
\276\244\150\114\332\002\150\026\164\276\262\335\004\344\153\052
\335\067\037\140\054\333\365\367\241\174\225\267\014\160\206\056
\361\072\357\122\367\314\323\233\371\213\276\016\337\061\267\235
\150\134\222\246\365\345\363\012\064\265\377\173\242\344\207\241
\306\257\027\000\357\003\221\355\251\034\116\161\075\322\213\154
\211\364\170\206\346\152\111\240\316\265\322\260\253\233\366\364
\324\056\343\162\371\066\306\353\025\267\045\214\072\374\045\015
\263\042\163\041\164\310\112\226\141\222\365\057\013\030\245\364
\255\342\356\101\275\001\171\372\226\214\215\027\002\060\264\371
\257\170\032\214\264\066\020\020\007\005\160\320\364\061\220\212
\121\305\206\046\171\262\021\210\136\305\360\012\124\315\111\246
\277\002\234\322\104\247\355\343\170\357\106\136\155\161\321\171

\160\034\106\137\121\351\311\067\334\137\176\151\173\101\337\064
\105\340\073\204\364\241\212\012\066\236\067\314\142\122\341\211
\015\050\371\172\043\261\015\075\075\232\375\235\201\357\054\220
\300\173\104\116\273\111\340\016\112\126\222\274\313\265\335\171
\027\211\221\336\141\211\164\222\250\343\062\205\276\116\205\244
\113\131\313\053\305\170\216\161\124\320\002\067\231\214\345\111
\352\340\124\162\244\021\006\057\013\214\301\133\276\265\241\260
\123\156\234\270\140\221\037\131\153\371\055\364\224\012\227\265
\354\305\166\003\124\033\145\122\272\114\222\126\121\065\240\100
\330\051\333\256\122\166\073\055\060\100\233\212\320\102\126\264
\267\210\001\244\207\073\123\226\315\243\026\217\363\146\252\027
\261\307\140\340\301\103\005\014\356\233\133\140\157\006\134\207
\133\047\371\100\021\236\234\063\301\267\345\065\127\005\177\047
\316\027\040\214\034\374\361\373\332\061\051\111\355\365\013\204
\247\117\301\366\116\302\050\234\372\356\340\257\007\373\063\021
\172\041\117\013\041\020\266\100\072\253\042\072\004\234\213\233
\204\206\162\232\322\247\245\304\264\165\221\251\053\043\002\003
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001
\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004
\026\004\024\340\252\077\045\215\237\104\134\301\072\350\056\256
\167\114\204\076\147\014\364\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\003\202\002\001\000\271\127\257\270\022
\332\127\203\217\150\013\063\035\003\123\125\364\225\160\344\053
\075\260\071\353\372\211\142\375\367\326\030\004\057\041\064\335
\361\150\360\325\226\132\336\302\200\243\301\215\306\152\367\131
\167\256\025\144\317\133\171\005\167\146\352\214\323\153\015\335
\361\131\054\301\063\245\060\200\025\105\007\105\032\061\042\266
\222\000\253\231\115\072\217\167\257\251\042\312\057\143\312\025
\326\307\306\360\075\154\374\034\015\230\020\141\236\021\242\042
\327\012\362\221\172\153\071\016\057\060\303\066\111\237\340\351
\017\002\104\120\067\224\125\175\352\237\366\073\272\224\245\114
\351\274\076\121\264\350\312\222\066\124\155\134\045\050\332\335
\255\024\375\323\356\342\042\005\353\320\362\267\150\022\327\132
\212\101\032\306\222\245\132\073\143\105\117\277\341\072\167\042
\057\134\277\106\371\132\003\205\023\102\137\312\336\123\327\142
\265\246\065\004\302\107\377\231\375\204\337\134\316\351\136\200
\050\101\362\175\347\036\220\330\117\166\076\202\074\015\374\245
\003\372\173\032\331\105\036\140\332\304\216\371\374\053\311\173
\225\305\052\377\252\211\337\202\061\017\162\377\014\047\327\012
\036\126\000\120\036\014\220\301\226\265\330\024\205\273\247\015
\026\301\370\007\044\033\272\205\241\032\005\011\200\272\225\143
\311\072\354\045\237\177\235\272\244\107\025\233\104\160\361\152
\113\326\070\136\103\363\030\176\120\156\351\132\050\346\145\346
\167\033\072\375\035\276\003\046\243\333\324\341\273\176\226\047
\053\035\356\244\373\332\045\124\023\003\336\071\306\303\037\115
\220\354\217\033\112\322\034\355\205\225\070\120\171\106\326\301
\220\120\061\251\134\232\156\035\365\063\126\213\247\231\322\362

```
\310\054\063\223\222\060\307\116\214\145\063\020\144\027\375\044
\027\226\321\215\302\072\152\053\353\023\213\104\362\041\363\112
\032\267\167\137\327\355\210\244\162\345\071\037\225\235\276\147
\301\160\021\075\273\364\370\111\267\343\046\227\072\237\322\137
\174\373\300\231\174\071\051\340\173\035\277\015\247\217\322\051
\064\156\044\025\313\336\220\136\277\032\304\146\352\302\346\272
\071\137\212\231\251\101\131\007\260\054\257
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certainly Root R1"

Issuer: CN=Certainly Root R1,O=Certainly,C=US

Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0

Subject: CN=Certainly Root R1,O=Certainly,C=US

Not

Valid Before: Thu Apr 01 00:00:00 2021

Not Valid After : Sun Apr 01 00:00:00 2046

Fingerprint (SHA-256):

77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0

Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certainly Root R1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\240\120\356\017\050\161\364\047\262\022\155\157\120\226\045\272
\314\206\102\257
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\007\160\324\076\202\207\240\372\063\066\023\364\372\063\347\022
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104
\071\267\340
```

END

CKA_TRUST_SERVER_AUTH

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Certainly Root E1"

#

Issuer: CN=Certainly Root E1,O=Certainly,C=US

Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8

Subject: CN=Certainly Root E1,O=Certainly,C=US

Not Valid Before: Thu Apr 01 00:00:00 2021

Not Valid After : Sun Apr 01 00:00:00 2046

Fingerprint (SHA-256):

B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2

Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certainly Root E1"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE

CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151

\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145

\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151

\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145

\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277

\314\370

END

CKA_VALUE MULTILINE_OCTAL

\060\202\001\367\060\202\001\175\240\003\002\001\002\002\020\006

\045\063\261\107\003\063\047\134\371\215\232\271\277\314\370\060

\012\006\010\052\206\110\316\075\004\003\003\060\075\061\013\060

\011\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003

\125\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032

\060\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156

\154\171\040\122\157\157\164\040\105\061\060\036\027\015\062\061

\060\064\060\061\060\060\060\060\060\060\132\027\015\064\066\060

\064\060\061\060\060\060\060\060\060\132\060\075\061\013\060\011

```
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125
\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032\060
\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156\154
\171\040\122\157\157\164\040\105\061\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\336\157\370\177\034\337\355\371\107\207\206\261\244\300\212
\370\202\227\200\352\217\310\112\136\052\175\210\150\247\001\142
\024\221\044\172\134\236\243\027\175\212\206\041\064\030\120\033
\020\336\320\067\113\046\307\031\140\200\351\064\275\140\031\066
\100\326\051\207\011\074\221\172\366\274\023\043\335\131\116\004
\136\317\310\002\034\030\123\301\061\330\332\040\351\104\215\344
\166\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\363\050\030\313\144\165\356\051\052\353\355\256\043\130\070
\205\353\310\042\007\060\012\006\010\052\206\110\316\075\004\003
\003\003\150\000\060\145\002\061\000\261\216\132\040\303\262\031
\142\115\336\260\117\337\156\322\160\212\361\237\176\152\214\346
\272\336\203\151\312\151\263\251\005\265\226\222\027\207\302\322
\352\320\173\316\330\101\133\174\256\002\060\106\336\352\313\135
\232\354\062\302\145\026\260\114\060\134\060\363\332\116\163\206
\006\330\316\211\004\110\067\067\370\335\063\121\235\160\257\173
\125\330\001\056\175\005\144\016\206\270\221
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Certainly Root E1"

Issuer: CN=Certainly

Root E1,O=Certainly,C=US

Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8

Subject: CN=Certainly Root E1,O=Certainly,C=US

Not Valid Before: Thu Apr 01 00:00:00 2021

Not Valid After : Sun Apr 01 00:00:00 2046

Fingerprint (SHA-256):

B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2

Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Certainly Root E1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\371\341\155\334\001\211\317\325\202\105\143\076\305\067\175\302
```

```
\353\223\157\053
```

END

```

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\012\236\312\315\076\122\120\306\066\363\113\243\355\247\123\351
END
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277
\314\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Global Root CA RSA v3"
#
# Issuer: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR
# Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34
# Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Not Valid Before: Wed Mar 18 09:07:17 2020
# Not Valid After : Sun Mar 12 09:07:17 2045
# Fingerprint (SHA-256):
EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2
# Fingerprint (SHA1):
E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Global Root CA RSA v3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063

```

END

CKA_ID UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025
\006\064\373\171\020\064

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\363\060\202\003\333\240\003\002\001\002\002\024\015
\115\305\315\026\042\225\226\010\176\270\013\177\025\006\064\373
\171\020\064\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\201\200\061\013\060\011\006\003\125\004\006\023\002
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\122
\123\101\040\166\063\060\036\027\015\062\060\060\063\061\070\060
\071\060\067\061\067\132\027\015\064\065\060\063\061\062\060\071
\060\067\061\067\132\060\201\200\061\013\060\011\006\003\125\004
\006\023\002\124\122\061\017\060\015\006\003\125\004\007\023\006
\101\156\153\141\162\141\061\031\060\027\006\003\125\004\012\023
\020\105\055\124\165\147\162\141\040\105\102\107\040\101\056\123
\056\061\035\060\033\006\003\125\004\013\023\024\105\055\124\165
\147\162\141\040\124\162\165\163\164\040\103\145\156\164\145\162
\061\046\060\044\006\003\125\004\003\023\035\105\055\124\165\147
\162\141\040\107\154\157\142\141\154\040\122\157\157\164\040\103
\101\040\122\123\101\040\166\063\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\242\146\360\211\267\162\173
\356\011\311\143\322\323\103\335\136\303\246\204\070\112\361\215
\201\273\024\275\107\350\100\027\363\075\303\170\105\162\246\056
\220\336\232\072\324\040\161\312\274\237\035\113\227\012\307\061
\272\076\327\376\045\251\052\216\066\364\321\057\307\267\251\135
\063\334\060\160\370\100\154\113\262\246\061\141\321\064\074\075

\061\172\307\257\304\247\247\204\341\227\244\350\113\366\027\174
\356\074\007\355\342\212\127\334\266\373\370\103\045\120\352\047
\201\250\206\274\217\122\112\226\072\140\032\226\273\375\163\364
\205\375\203\375\177\204\155\064\154\177\152\267\113\001\003\277
\255\151\267\327\062\331\365\127\152\351\206\202\076\245\146\061
\263\026\075\302\363\046\140\062\323\122\036\260\154\244\067\076
\364\365\257\353\341\337\200\006\317\052\101\347\146\011\341\113
\227\347\167\275\041\155\051\266\147\303\055\176\355\326\171\145
\321\317\072\266\321\261\136\126\141\120\172\132\316\116\120\061
\200\003\230\107\347\344\030\174\104\132\306\244\263\073\306\306
\303\072\360\154\303\213\310\244\221\005\363\365\331\266\252\006
\241\267\253\344\261\352\041\024\134\203\244\374\377\266\120\323
\214\022\046\231\166\160\351\300\017\246\164\374\273\320\033\170
\316\162\222\342\050\234\274\346\351\011\330\072\323\211\346\276
\056\167\337\001\012\157\226\366\345\215\074\115\122\166\032\126
\341\163\176\027\254\075\255\154\243\122\022\030\160\346\200\116
\063\362\176\046\062\254\005\215\070\244\346\166\074\237\020\151
\016\155\235\322\301\171\040\153\133\317\063\215\321\224\166\065
\347\135\125\307\267\254\050\253\106\314\347\073\041\265\012\012
\344\112\131\334\201\065\113\104\225\022\012\147\245\241\377\133
\000\007\322\300\314\371\077\374\237\063\362\000\370\214\154\207
\235\006\055\361\357\343\346\006\372\305\146\023\133\374\120\007
\236\161\206\262\332\157\164\060\317\223\123\350\334\042\326\336
\040\037\141\215\243\056\243\170\062\220\154\334\254\062\265\005
\344\365\074\063\015\326\340\207\167\027\114\235\260\330\011\250
\015\127\367\104\205\360\310\004\276\134\135\132\343\027\216\124
\143\151\177\111\164\144\005\214\243\002\003\001\000\001\243\143
\060\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024
\262\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123
\041\320\110\357\060\035\006\003\125\035\016\004\026\004\024\262
\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123\041
\320\110\357\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\003\202\002\001\000\211\250\162\177\214\353\316\056\030
\304\020\200\055\020\014\377\373\024\315\004\340\024\074\116\232
\373\237\051\277\042\236\127\271\202\163\022\143\046\265\314\220
\351\322\052\051\356\234\055\314\054\231\276\105\047\344\261\161
\355\344\070\225\061\101\362\175\172\143\170\337\312\066\026\057
\202\210\237\274\021\107\117\166\115\310\055\216\353\337\055\174
\116\073\332\256\366\343\332\135\024\246\256\350\205\104\235\006
\156\216\373\357\172\112\152\055\053\050\030\376\277\220\054\165
\026\237\017\352\226\175\005\356\233\023\245\104\154\370\003\320
\335\043\341\375\003\022\022\010\364\030\064\263\340\067\013\167
\021\001\110\277\141\264\265\370\031\331\313\115\352\243\214\357
\375\360\006\265\155\222\364\112\141\120\204\355\354\111\323\344
\276\150\346\056\343\061\013\124\013\032\222\326\202\330\266\242
\145\074\146\004\371\125\332\154\373\333\265\024\146\115\224\203

```
\073\315\036\246\053\262\376\167\100\206\253\347\337\012\311\375
\366\335\207\126\030\330\260\054\125\140\226\372\010\176\122\220
\365\113\246\056\207\174\313\040\333\006\076\240\135\003\167\175
\242\074\023\033\051\242\023\125\240\075\024\042\257\157\270\320
\232\033\162\335\005\001\215\206\140\277\244\147\356\265\245\015
\321\177\346\032\053\142\146\303\007\272\347\240\110\034\070\303
\351\105\373\247\177\374\355\002\150\032\312\167\022\167\246\000
\125\050\024\354\326\307\022\242\033\145\102\351\221\350\313\076
\207\211\124\135\331\257\235\227\234\151\347\012\377\017\132\170
\213\143\052\114\175\107\224\077\336\113\351\123\320\060\361\305
\366\236\111\337\073\240\221\243\243\376\315\130\314\352\337\257
\157\050\073\240\151\233\217\354\254\256\053\124\235\233\004\261
\107\040\257\226\022\076\143\224\035\004\347\056\273\206\307\014
\232\210\277\166\107\357\367\260\013\227\146\322\104\317\140\122
\007\341\325\054\112\072\047\141\167\312\327\217\347\207\016\060
\377\014\273\004\342\141\303\242\310\227\141\216\264\060\152\074
\155\302\007\137\112\163\057\077\371\026\212\001\146\357\272\221
\312\122\127\173\256\324\346\017\335\013\172\177\213\236\046\040
\317\073\357\201\161\203\131
```

END

CKA_NSS_Mozilla_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "E-Tugra Global Root CA RSA v3"

Issuer: CN=E-Tugra

Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34

Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

Not Valid Before: Wed Mar 18 09:07:17 2020

Not Valid After : Sun Mar 12 09:07:17 2045

Fingerprint (SHA-256):

EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2

Fingerprint (SHA1): E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Global Root CA RSA v3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\351\250\135\042\024\122\034\133\252\012\264\276\044\152\043\212
\311\272\342\251
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\042\276\020\366\302\370\003\210\163\137\063\051\107\050\107\244
```

END

```
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025
\006\064\373\171\020\064
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "E-Tugra Global Root CA ECC v3"

#

Issuer: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR

Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1

Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR

Not Valid Before: Wed Mar 18 09:46:58 2020

Not Valid After : Sun Mar 12 09:46:58 2045

Fingerprint (SHA-256):

87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13

Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Global Root CA ECC v3"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
```

```
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206
\346\324\227\210\042\301
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\245\060\202\002\052\240\003\002\001\002\002\024\046
\106\031\167\061\341\117\157\050\066\336\071\121\206\346\324\227
\210\042\301\060\012\006\010\052\206\110\316\075\004\003\003\060
\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122\061
\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162\141
\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165\147
\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033\006
\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124\162
\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006\003
\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154\157
\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103\040
\166\063\060\036\027\015\062\060\060\063\061\070\060\071\064\066
\065\070\132\027\015\064\065\060\063\061\062\060\071\064\066\065
\070\132\060\201\200\061\013\060\011\006\003\125\004\006\023\002
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\105
\103\103\040\166\063\060\166\060\020\006\007\052\206\110\316\075
\002\001\006\005\053\201\004\000\042\003\142\000\004\216\230\051
\277\307\020\036\047\333\253\003\314\050\054\330\136\110\031\020
\051\314\313\131\201\314\214\270\222\027\211\203\052\222\366\303
\244\035\114\142\325\237\326\240\106\334\034\274\166\301\343\107
```

```
\320\133\023\332\347\245\263\146\110\347\041\232\112\117\206\012
\175\154\352\115\062\200\012\262\172\011\233\151\113\230\201\342
\056\354\002\160\226\037\375\365\106\316\312\334\202\243\143\060
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024\377
\202\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245
\220\314\365\060\035\006\003\125\035\016\004\026\004\024\377\202
\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245\220
\314\365\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003\151
\000\060\146\002\061\000\346\005\130\151\141\345\055\312\015\313
\361\031\010\275\326\375\121\222\032\176\143\124\004\220\221\232
\065\221\071\231\372\007\251\146\223\272\310\150\324\212\077\372
\355\156\026\002\047\267\002\061\000\335\132\027\053\166\035\145
\102\226\246\254\135\212\171\126\330\212\033\337\232\336\137\307
\120\217\261\133\161\014\046\337\152\100\000\354\063\221\041\161
\276\150\344\043\244\331\255\241\067
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "E-Tugra Global Root CA ECC v3"

Issuer: CN=E-Tugra Global

Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1

Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR

Not Valid Before: Wed Mar 18 09:46:58 2020

Not Valid After : Sun Mar 12 09:46:58 2045

Fingerprint (SHA-256):

87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13

Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "E-Tugra Global Root CA ECC v3"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\212\057\257\127\123\261\260\346\241\004\354\133\152\151\161\155
\366\034\342\204
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\106\274\201\273\361\265\036\367\113\226\274\024\342\347\047\144
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
```

```
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
```

END

CKA_SERIAL_NUMBER

MULTILINE_OCTAL

```
\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206
\346\324\227\210\042\301
```

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "DIGITALSIGN GLOBAL ROOT RSA CA"

#

Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Serial

Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87

Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Not Valid Before: Thu Jan 21 10:50:34 2021

Not Valid After : Mon Jan 15 10:50:34 2046

Fingerprint (SHA-256):

82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95

Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D

CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"

CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

CKA_SUBJECT MULTILINE_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
```

END

CKA_ID

UTF8 "0"

CKA_ISSUER MULTILINE_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004
\152\377\305\324\225\207

END

CKA_VALUE MULTILINE_OCTAL

\060\202\005\265\060\202\003\235\240\003\002\001\002\002\024\135
\131\310\312\253\011\127\365\346\265\332\051\224\004\152\377\305
\324\225\207\060\015\006\011\052\206\110\206\367\015\001\001\015
\005\000\060\142\061\013\060\011\006\003\125\004\006\023\002\120
\124\061\052\060\050\006\003\125\004\012\014\041\104\151\147\151
\164\141\154\123\151\147\156\040\103\145\162\164\151\146\151\143
\141\144\157\162\141\040\104\151\147\151\164\141\154\061\047\060
\045\006\003\125\004\003\014\036\104\111\107\111\124\101\114\123
\111\107\116\040\107\114\117\102\101\114\040\122\117\117\124\040
\122\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061
\061\060\065\060\063\064\132\027\015\064\066\060\061\061\065\061
\060\065\060\063\064\132\060\142\061\013\060\011\006\003\125\004
\006\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041
\104\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164
\151\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141
\154\061\047\060\045\006\003\125\004\003\014\036\104\111\107\111
\124\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122
\117\117\124\040\122\123\101\040\103\101\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\310\207\266\070\323
\034\360\336\022\370\203\307\304\212\342\211\270\264\042\172\170
\370\014\146\121\150\166\067\012\325\117\302\132\010\270\026\134
\367\162\001\011\067\204\201\052\124\153\327\222\320\154\372\250
\247\103\022\064\353\016\333\067\017\051\376\212\061\121\102\350
\113\234\220\250\310\054\021\323\375\240\051\176\316\336\224\366
\202\340\130\264\116\105\045\361\042\362\075\323\017\173\124\032
\334\062\266\326\121\116\176\101\264\127\270\054\306\271\016\056
\312\127\361\325\310\323\130\347\245\351\102\021\256\323\040\045
\224\151\327\217\312\242\015\303\323\237\007\150\077\025\322\147
\056\123\375\166\202\233\013\163\251\051\015\236\021\223\024\010
\230\354\236\124\022\112\126\242\006\025\354\153\154\056\222\140
\056\206\015\256\202\037\121\115\343\262\007\327\020\031\127\042
\366\251\151\104\204\363\331\075\240\006\277\314\210\176\177\365

\316\133\245\302\052\152\164\102\352\157\246\377\371\150\261\320
\137\275\221\322\125\157\063\127\114\036\235\344\342\213\301\205
\145\240\340\152\234\000\000\210\222\335\130\010\026\362\160\061
\250\034\341\336\275\116\161\351\326\276\176\265\241\132\303\115
\367\277\233\275\224\244\375\365\252\123\223\106\311\046\001\004
\160\304\240\161\272\316\045\146\373\221\176\125\160\356\111\012
\115\142\177\302\120\232\162\362\030\147\235\351\105\250\064\204
\350\370\201\366\321\132\042\036\007\117\073\263\177\335\021\245
\163\334\276\251\031\072\151\251\155\033\062\342\211\252\245\047
\013\132\176\164\342\017\144\071\135\176\134\271\301\027\374\307
\215\136\311\354\044\355\322\362\077\172\204\105\067\002\276\076
\153\131\304\346\133\026\155\300\252\236\252\265\131\056\054\160
\125\234\314\231\226\230\044\124\321\216\332\312\264\021\264\267
\160\103\037\157\220\013\040\240\250\166\023\145\333\333\043\132
\165\113\241\013\061\167\012\356\175\150\141\032\023\214\352\121
\176\134\126\243\127\114\135\241\353\023\145\277\124\024\314\363
\356\334\327\354\074\227\362\170\126\270\337\162\134\160\374\316
\006\335\237\322\007\061\357\347\122\221\236\315\272\327\300\030
\104\007\061\145\111\062\151\023\112\353\217\002\003\001\000\001
\243\143\060\141\060\017\006\003\125\035\023\001\001\377\004\005
\060\003\001\001\377\060\037\006\003\125\035\043\004\030\060\026
\200\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024
\332\223\045\025\326\206\060\035\006\003\125\035\016\004\026\004
\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024\332
\223\045\025\326\206\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001
\001\015\005\000\003\202\002\001\000\024\373\061\045\070\061\370
\312\010\262\043\166\070\255\370\323\131\365\314\264\127\045\341
\104\276\176\374\026\354\256\372\046\237\117\147\026\112\126\360
\375\355\307\031\001\064\216\220\132\055\326\200\134\354\161\322
\201\045\202\036\000\161\337\232\321\325\035\042\273\321\245\363
\142\017\264\353\334\044\163\376\246\126\315\232\024\305\004\065
\026\061\242\007\353\245\000\342\266\370\137\162\375\077\141\111
\216\336\176\115\070\327\172\036\164\067\154\121\334\276\000\004
\270\070\024\363\040\301\355\233\247\043\375\015\102\204\035\177
\362\163\303\320\170\143\361\237\354\327\133\351\361\276\154\240
\113\003\236\215\151\341\024\332\210\020\201\043\123\377\332\124
\053\013\306\271\226\225\004\030\106\363\173\250\227\330\133\150
\244\344\070\034\016\105\345\230\323\011\256\232\136\354\263\171
\015\071\162\362\364\224\235\016\236\140\042\346\250\366\114\205
\315\007\202\072\150\071\315\075\137\343\070\364\266\257\073\153
\112\237\140\121\105\242\100\002\345\252\014\343\076\321\170\324
\242\164\234\046\272\005\232\050\160\112\076\246\013\320\035\111
\360\272\370\256\101\020\176\244\007\022\275\250\317\051\075\127
\273\307\361\103\107\000\076\256\160\030\132\040\173\011\313\072
\072\160\200\345\114\140\230\301\025\301\035\112\367\310\360\233
\341\162\255\347\135\150\130\013\004\261\214\274\237\267\373\156
\213\133\004\125\373\353\043\125\327\170\120\332\045\313\276\047


```
\066\273\044\032\171\034\121\321\376\023\273\377\170\054\334\244
\276\057\366\305\113\123\317\247\114\231\136\160\254\131\210\004
\256\144\004\277\173\246\172\115\323\350\167\275\241\176\120\025
\363\357\111\060\205\115\041\127\252\333\054\165\227\255\201\001
\207\242\261\160\235\036\006\132\003\140\261\077\246\155\202\054
\324\024\261\201\245\350\075\210\035\264\162\054\130\067\212\216
\070\224\270\163\335\251\340\270\366\167\242\263\174\130\336\256
\151\072\265\213\245\032\273\362\330\164\006\234\375\142\163\040
\041\166\261\176\160\236\031\324\353\027\142\031\070\231\315\066
\053\107\376\061\313\337\271\344\254\010\323\330\246\353\324\236
\176\113\144\244\125\135\053\027\311
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DIGITALSIGN GLOBAL ROOT RSA CA"

Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Serial Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87

#

Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

Not Valid Before: Thu Jan 21 10:50:34 2021

Not Valid After : Mon Jan 15 10:50:34 2046

Fingerprint (SHA-256):

82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95

Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\271\202\007\227\256\122\245\150\157\106\007\337\375\003\162\075
\222\206\210\055
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\033\032\275\032\171\306\333\264\355\263\207\314\251\323\116\170
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004
\152\377\305\324\225\207
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DIGITALSIGN GLOBAL ROOT ECDSA CA"
#
# Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1
# Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Not Valid Before: Thu Jan 21 11:07:50 2021
# Not Valid After : Mon Jan 15 11:07:50 2046
# Fingerprint
(SHA-256):
26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE
# Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_SERIAL_NUMBER

```

MULTILINE_OCTAL

\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055
\344\353\372\235\266\341

END

CKA_VALUE MULTILINE_OCTAL

\060\202\002\152\060\202\001\360\240\003\002\001\002\002\024\066
\055\217\162\210\242\050\047\344\000\377\044\306\055\344\353\372
\235\266\341\060\012\006\010\052\206\110\316\075\004\003\003\060
\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061\052
\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141\154
\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144\157
\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006\003
\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107\116
\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103\104
\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061\061
\061\060\067\065\060\132\027\015\064\066\060\061\061\065\061\061
\060\067\065\060\132\060\144\061\013\060\011\006\003\125\004\006
\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041\104
\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164\151
\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141\154
\061\051\060\047\006\003\125\004\003\014\040\104\111\107\111\124
\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122\117
\117\124\040\105\103\104\123\101\040\103\101\060\166\060\020\006
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003
\142\000\004\156\013\243\253\063\115\034\352\112\350\374\004\215
\024\240\175\360\010\054\137\203\253\223\321\322\173\272\327\111
\175\217\354\022\120\137\324\271\313\345\360\371\063\143\037\311
\127\354\100\330\021\013\227\350\122\026\314\051\216\364\006\206
\036\070\334\075\127\304\356\252\275\310\124\004\046\132\047\023
\121\107\075\037\037\032\216\250\225\244\063\320\314\107\314\155
\270\374\110\243\143\060\141\060\017\006\003\125\035\023\001\001
\377\004\005\060\003\001\001\377\060\037\006\003\125\035\043\004
\030\060\026\200\024\316\257\112\213\032\165\342\361\070\347\002
\360\026\255\136\352\144\325\173\264\060\035\006\003\125\035\016
\004\026\004\024\316\257\112\213\032\165\342\361\070\347\002\360
\026\255\136\352\144\325\173\264\060\016\006\003\125\035\017\001
\001\377\004\004\003\002\001\006\060\012\006\010\052\206\110\316
\075\004\003\003\003\150\000\060\145\002\060\012\210\304\161\234
\104\003\115\215\264\307\274\250\256\331\060\047\065\152\153\026
\143\327\374\347\131\341\247\211\033\114\061\232\043\125\104\346
\363\103\041\325\107\047\157\155\127\001\252\002\061\000\373\262
\352\342\227\177\121\265\237\110\353\274\157\065\211\250\144\160
\253\127\166\315\300\306\024\140\312\177\342\202\000\163\367\314
\065\352\216\044\233\345\010\131\307\004\214\163\170\376

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "DIGITALSIGN GLOBAL ROOT ECDSA CA"

Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1

Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

Not Valid Before: Thu Jan 21 11:07:50 2021

Not Valid After : Mon Jan 15 11:07:50 2046

Fingerprint (SHA-256):

26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE

Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

\147\250\010\353\217\210\365\200\154\005\105\033\027\363\327\000
\057\322\112\212

END

CKA_CERT_MD5_HASH

MULTILINE_OCTAL

\252\055\241\316\377\041\302\210\313\132\036\214\341\311\222\217
END

CKA_ISSUER MULTILINE_OCTAL

\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055
\344\353\372\235\266\341

END

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST

CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

Certificate "Security Communication RootCA3"

#

#

Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number:00:e1:7c:37:40:fd:1b:fe:67

```
# Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Thu Jun 16 06:17:16 2016
# Not Valid After : Mon Jan 18 06:17:16 2038
# Fingerprint (SHA-256):
24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94
# Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\341\174\067\100\375\033\376\147
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\177\060\202\003\147\240\003\002\001\002\002\011\000
\341\174\067\100\375\033\376\147\060\015\006\011\052\206\110\206
\367\015\001\001\014\005\000\060\135\061\013\060\011\006\003\125
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060
\045\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122
\157\157\164\103\101\063\060\036\027\015\061\066\060\066\061\066
\060\066\061\067\061\066\132\027\015\063\070\060\061\061\070\060
\066\061\067\061\066\132\060\135\061\013\060\011\006\003\125\004
\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023\034
\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163\164
\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060\045
```

\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171\040
\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122\157
\157\164\103\101\063\060\202\002\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002
\012\002\202\002\001\000\343\311\162\111\367\060\336\011\174\251
\100\201\130\323\264\072\335\272\141\017\223\120\156\151\074\065
\302\356\133\163\220\033\147\114\041\354\137\065\273\071\076\053
\012\140\357\273\155\053\206\373\161\242\310\254\344\126\224\371
\311\257\261\162\324\040\254\164\322\270\025\255\121\376\205\164
\241\271\020\376\005\200\371\122\223\263\100\075\165\020\254\300
\226\267\247\176\166\274\343\033\122\031\316\021\037\013\004\064
\365\330\365\151\074\167\363\144\364\015\252\205\336\340\011\120
\004\027\226\204\267\310\212\274\115\162\374\034\273\317\363\006
\115\371\237\144\367\176\246\146\206\065\161\310\021\200\114\301
\161\100\130\036\276\240\163\366\374\076\120\341\340\057\046\075
\176\134\043\265\171\160\336\372\340\321\245\326\014\101\161\173
\367\352\214\034\210\307\354\213\365\321\057\125\226\106\174\132
\073\130\073\373\272\330\055\265\045\332\172\116\317\104\256\041
\246\236\230\312\040\156\174\273\210\205\133\373\300\020\142\273
\362\371\047\107\357\321\211\071\103\304\337\336\341\101\277\124
\163\040\227\055\154\332\363\324\007\243\346\271\330\157\256\374
\214\031\056\323\147\147\053\225\333\130\134\265\152\002\363\270
\203\136\264\153\276\101\176\127\011\165\104\120\125\315\132\021
\141\041\012\141\302\251\210\375\023\274\055\211\057\315\141\340
\225\276\312\265\173\341\173\064\147\013\037\266\014\307\174\036
\031\123\312\247\261\112\025\040\126\024\160\075\053\202\054\017
\235\025\035\107\200\107\377\170\231\016\061\257\157\076\217\355
\206\151\036\173\030\210\024\262\302\374\202\063\056\234\113\055
\373\160\073\161\252\053\173\046\047\363\032\302\334\373\027\270
\241\352\313\240\264\256\323\224\176\172\320\253\303\354\070\055
\021\056\210\277\324\077\255\022\073\102\254\217\002\156\175\314
\321\137\141\276\241\274\072\152\110\352\046\125\042\026\135\137
\015\377\047\063\237\030\003\164\212\133\122\040\107\153\105\115
\042\167\214\125\047\360\257\036\214\311\203\042\124\267\232\320
\117\331\316\374\331\056\034\226\050\261\002\323\003\275\045\122
\034\064\146\117\043\253\364\167\202\226\035\321\127\060\010\021
\005\375\127\321\331\307\002\003\001\000\001\243\102\060\100\060
\035\006\003\125\035\016\004\026\004\024\144\024\174\374\130\162
\026\246\012\051\064\025\157\052\313\274\374\257\250\253\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003\202
\002\001\000\334\002\043\010\342\357\041\072\307\015\267\046\322
\142\223\247\245\043\162\007\040\202\140\337\030\327\124\255\151
\045\222\236\331\024\317\231\271\122\201\317\256\154\212\073\132
\071\310\154\001\103\302\042\155\002\360\142\315\116\143\103\300
\024\332\364\143\360\352\364\161\356\116\207\343\161\251\364\311
\127\345\056\137\034\171\273\043\252\207\104\127\351\275\065\115

\101\273\113\050\243\230\262\033\331\013\027\007\345\367\352\235
\365\166\327\277\304\266\201\130\377\310\377\144\151\142\171\255
\156\016\037\177\356\035\151\345\267\162\161\263\376\245\001\065
\224\124\053\300\122\155\217\125\304\311\322\270\313\312\064\010
\121\205\240\365\274\264\027\130\352\012\134\172\275\143\306\072
\057\377\226\111\031\204\352\147\330\004\261\141\364\000\133\112
\267\234\161\067\031\205\171\277\201\260\307\023\016\166\161\076
\072\200\006\256\006\026\247\215\265\302\304\313\377\100\245\134
\215\245\311\072\355\162\201\312\134\230\074\322\064\003\167\010
\375\360\051\131\135\041\010\307\140\277\244\161\173\270\331\036
\202\276\011\257\145\157\050\253\277\113\265\356\076\010\107\047
\240\017\157\017\213\077\254\225\030\363\271\016\334\147\125\156
\142\236\106\016\321\004\170\312\162\256\166\331\245\370\262\337
\210\011\141\213\357\044\116\321\131\077\132\324\075\311\223\074
\053\144\365\201\015\026\226\367\222\303\376\061\157\350\052\062
\164\016\364\114\230\112\030\016\060\124\325\305\353\274\305\025
\236\350\231\041\353\047\053\011\012\333\361\346\160\030\126\273
\014\344\276\371\350\020\244\023\222\270\034\340\333\147\035\123
\003\244\042\247\334\135\222\020\074\352\377\374\033\020\032\303
\330\320\234\235\145\313\320\053\047\061\003\036\066\341\075\166
\165\014\377\105\046\271\335\121\274\043\307\137\330\330\207\020
\100\022\015\075\070\067\347\104\074\030\300\123\011\144\217\377
\325\232\246\174\160\056\163\125\041\350\337\377\203\271\035\076
\062\036\326\246\175\054\361\146\351\134\035\247\243\316\136\045
\062\053\343\225\254\052\007\316\264\050\170\206\074\055\246\235
\115\322\164\060\335\144\121\025\333\203\203\121\327\257\375\063
\235\115\146

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Security Communication RootCA3"

Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number:00:e1:7c:37:40:fd:1b:fe:67

Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

Not Valid Before: Thu Jun 16 06:17:16 2016

Not Valid After : Mon Jan 18 06:17:16 2038

Fingerprint (SHA-256):

24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94

#

Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Security Communication RootCA3"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\303\003\310\042\164\222\345\141\242\234\137\171\221\053\036\104
\023\221\060\072
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\034\232\026\377\236\134\340\115\212\024\001\364\065\135\051\046
END
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\341\174\067\100\375\033\376\147
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication ECC RootCA1"
#
# Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number:00:d6:5d:9b:b3:78:81:2e:eb
# Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Thu Jun 16 05:15:28 2016
# Not Valid After : Mon Jan 18 05:15:28 2038
# Fingerprint (SHA-256):
E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11
# Fingerprint (SHA1): B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication ECC RootCA1"
CKA_CERTIFICATE_TYPE
CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156

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\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\326\135\233\263\170\201\056\353
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\070\060\202\001\276\240\003\002\001\002\002\011\000
\326\135\233\263\170\201\056\353\060\012\006\010\052\206\110\316
\075\004\003\003\060\141\061\013\060\011\006\003\125\004\006\023
\002\112\120\061\045\060\043\006\003\125\004\012\023\034\123\105
\103\117\115\040\124\162\165\163\164\040\123\171\163\164\145\155
\163\040\103\117\056\054\114\124\104\056\061\053\060\051\006\003
\125\004\003\023\042\123\145\143\165\162\151\164\171\040\103\157
\155\155\165\156\151\143\141\164\151\157\156\040\105\103\103\040
\122\157\157\164\103\101\061\060\036\027\015\061\066\060\066\061
\066\060\065\061\065\062\070\132\027\015\063\070\060\061\061\070
\060\065\061\065\062\070\132\060\141\061\013\060\011\006\003\125
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\053\060
\051\006\003\125\004\003\023\042\123\145\143\165\162\151\164\171
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\105
\103\103\040\122\157\157\164\103\101\061\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\244\245\157\140\003\003\303\275\061\364\323\027\234\053
\204\165\254\345\375\075\127\156\327\143\277\346\004\211\222\216
\201\234\343\351\107\156\312\220\022\310\023\340\247\235\367\145
\164\037\154\020\262\350\344\351\357\155\205\062\231\104\261\136
\375\314\166\020\330\133\275\242\306\371\326\102\344\127\166\334
\220\302\065\251\113\210\074\022\107\155\134\377\111\117\032\112
\120\261\243\102\060\100\060\035\006\003\125\035\016\004\026\004
\024\206\034\347\376\055\245\112\213\010\376\050\021\372\276\243
\146\370\140\131\057\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075\004
\003\003\003\150\000\060\145\002\060\025\135\102\075\374\266\356
```

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\367\073\261\066\350\236\366\304\106\050\111\063\320\130\103\052
\143\051\314\115\261\264\172\242\271\015\070\245\135\110\052\375
\313\262\163\135\243\210\010\307\014\002\061\000\300\253\055\016
\155\355\030\242\333\123\351\045\333\125\010\340\120\314\337\104
\141\026\202\253\111\260\262\201\354\163\207\170\264\114\262\142
\033\022\372\026\115\045\113\143\275\036\067\331
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "Security Communication ECC RootCA1"

Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

Serial Number:00:d6:5d:9b:b3:78:81:2e:eb

Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

Not Valid Before: Thu Jun 16 05:15:28 2016

Not Valid After : Mon Jan 18 05:15:28 2038

Fingerprint (SHA-256):

E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11

Fingerprint (SHA1):

B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "Security Communication ECC RootCA1"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\270\016\046\251\277\322\262\073\300\357\106\311\272\307\273\366
\035\015\101\101
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\176\103\260\222\150\354\005\103\114\230\253\135\065\056\176\206
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
```

END

CKA_SERIAL_NUMBER MULTILINE_OCTAL

```
\002\011\000\326\135\233\263\170\201\056\353
```

END

CKA_TRUST_SERVER_AUTH

```

CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "BJCA Global Root CA1"
#
# Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20
# Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Not Valid Before: Thu Dec 19 03:16:17 2019
# Not Valid After : Mon Dec 12 03:16:17 2044
# Fingerprint (SHA-256):
F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE
# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300
\154\040
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\020\125
\157\145\343\264\331\220\152\033\011\321\154\076\300\154\040\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\124

```

\061\013\060\011\006\003\125\004\006\023\002\103\116\061\046\060
\044\006\003\125\004\012\014\035\102\105\111\112\111\116\107\040
\103\105\122\124\111\106\111\103\101\124\105\040\101\125\124\110
\117\122\111\124\131\061\035\060\033\006\003\125\004\003\014\024
\102\112\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101\061\060\036\027\015\061\071\061\062\061\071\060\063
\061\066\061\067\132\027\015\064\064\061\062\061\062\060\063\061
\066\061\067\132\060\124\061\013\060\011\006\003\125\004\006\023
\002\103\116\061\046\060\044\006\003\125\004\012\014\035\102\105
\111\112\111\116\107\040\103\105\122\124\111\106\111\103\101\124
\105\040\101\125\124\110\117\122\111\124\131\061\035\060\033\006
\003\125\004\003\014\024\102\112\103\101\040\107\154\157\142\141
\154\040\122\157\157\164\040\103\101\061\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\361\146\010\275\331
\305\025\141\313\204\004\101\245\151\067\167\035\301\260\173\372
\303\167\110\220\023\162\144\321\270\174\220\065\235\030\171\210
\343\227\001\074\107\201\362\016\242\230\015\236\077\067\340\031
\262\220\362\106\034\222\261\072\141\316\372\267\106\236\003\206
\327\063\156\355\367\105\214\166\067\336\156\226\221\367\327\176
\053\207\027\325\213\065\356\204\221\162\127\334\140\303\303\271
\347\307\147\044\043\117\143\012\143\366\146\175\113\125\247\077
\170\144\111\151\022\227\340\114\015\323\011\240\062\060\072\372
\237\300\362\234\305\022\052\056\034\265\004\063\332\244\070\021
\152\336\306\030\366\107\072\042\101\207\042\374\304\211\050\124
\330\214\245\060\012\370\027\026\312\254\067\375\171\247\221\027
\170\070\231\255\130\355\262\336\314\211\175\003\234\263\211\145
\347\343\073\261\042\206\217\006\155\170\007\375\221\022\177\260
\153\034\211\015\371\270\313\164\133\007\302\310\364\065\321\144
\143\172\351\156\232\050\326\060\275\346\033\335\025\257\204\352
\234\307\312\365\016\352\362\135\051\207\217\151\163\071\276\056
\044\157\105\041\254\305\324\151\045\006\203\255\172\110\205\023
\054\015\006\270\154\171\126\374\243\147\062\201\365\127\245\312
\127\102\151\351\134\044\141\357\342\060\030\116\104\230\125\157
\172\302\223\330\031\266\336\174\107\212\021\116\111\107\333\050
\224\002\013\224\112\054\371\022\320\117\350\061\176\154\172\277
\246\077\233\071\075\002\026\243\030\263\147\254\133\077\054\203
\053\147\071\201\134\271\176\224\325\144\335\236\217\156\256\350
\174\133\264\327\152\107\110\327\176\263\324\055\216\126\166\116
\317\151\361\156\104\154\324\044\352\215\044\241\030\277\275\127
\376\251\231\065\265\333\020\167\270\075\110\272\326\301\347\361
\043\076\327\337\205\235\047\074\324\100\275\012\014\275\365\347
\215\045\326\201\164\207\106\324\051\165\242\102\154\367\163\211
\347\175\277\172\112\037\323\042\311\025\125\317\337\157\174\125
\320\244\213\007\021\067\137\203\246\046\127\246\001\133\176\376
\130\150\007\251\351\172\331\271\350\377\120\037\253\302\264\300
\316\350\352\375\017\275\215\115\270\274\161\002\003\001\000\001
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\305

\357\355\314\330\215\041\306\110\344\343\327\024\056\247\026\223
\345\230\001\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001
\013\005\000\003\202\002\001\000\122\202\254\041\064\037\043\362
\242\330\371\270\257\067\066\040\211\321\067\003\326\151\237\270
\141\020\272\242\061\230\131\107\350\321\015\045\036\025\101\014
\340\052\125\325\127\122\313\370\344\307\151\243\035\115\161\002
\136\137\041\105\140\110\134\011\216\111\020\301\004\334\251\142
\153\002\360\103\310\116\235\070\111\164\311\062\160\124\155\301
\107\374\216\264\066\236\324\234\275\335\040\326\123\311\030\251
\265\126\271\166\213\225\147\146\356\275\230\376\256\357\276\156
\373\140\366\375\131\306\052\033\077\043\112\224\044\060\047\310
\211\274\353\104\044\232\313\075\276\117\325\172\316\216\027\313
\142\301\331\336\036\016\172\377\103\206\064\122\274\141\077\074
\137\273\331\166\264\123\274\227\263\376\212\114\022\056\053\363
\327\316\341\242\377\335\173\160\373\073\241\115\244\143\002\375
\070\227\225\077\005\160\240\153\337\142\201\103\213\264\131\015
\112\214\124\234\305\273\201\237\315\175\245\357\013\045\036\072
\040\333\034\374\037\230\147\002\012\324\163\104\023\333\121\204
\032\125\003\126\340\000\176\164\006\377\070\304\162\035\323\250
\077\150\061\135\323\011\307\056\214\133\143\340\350\334\036\322
\354\141\036\362\336\345\357\366\231\166\140\055\036\224\162\161
\306\013\052\062\307\222\116\325\106\327\035\371\251\031\012\310
\372\225\316\155\043\230\252\013\070\255\232\126\015\157\215\361
\061\000\210\301\027\234\315\031\066\065\376\125\123\240\340\074
\063\137\226\136\342\062\351\337\063\273\006\112\251\330\204\163
\316\167\322\306\254\161\341\134\243\035\014\273\012\337\137\342
\243\161\330\332\067\132\240\170\053\364\324\175\353\166\355\362
\141\160\245\145\232\323\211\064\030\253\373\162\076\327\264\075
\171\134\330\037\241\063\173\331\202\120\014\223\027\252\154\334
\302\202\273\002\127\066\257\230\047\052\071\120\341\260\211\365
\045\227\176\107\150\020\264\354\163\312\263\227\321\044\334\366
\142\240\050\323\265\243\270\144\267\210\142\102\317\235\123\315
\231\276\144\150\217\117\036\022\110\367\322\051\303\230\050\312
\362\062\013\223\214\051\117\074\140\062\315\005\226\141\354\362
\257\376\263\160\054\056\246\362

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

Trust for "BJCA Global Root CA1"

Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20

Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Not Valid Before: Thu Dec 19 03:16:17

```

2019
# Not Valid After : Mon Dec 12 03:16:17 2044
# Fingerprint (SHA-256):
F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE
# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\325\354\215\173\114\272\171\364\347\350\313\235\153\256\167\203
\020\003\041\152
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\102\062\231\166\103\063\066\044\065\007\202\233\050\371\320\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300
\154\040
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "BJCA Global Root CA2"
#
# Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb
# Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Not Valid Before: Thu Dec 19 03:18:21 2019
# Not Valid After : Mon Dec 12 03:18:21 2044
# Fingerprint (SHA-256):
57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82
# Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264
\112\353
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\045\060\202\001\253\240\003\002\001\002\002\020\054
\027\010\175\144\052\300\376\205\030\131\006\317\264\112\353\060
\012\006\010\052\206\110\316\075\004\003\003\060\124\061\013\060
\011\006\003\125\004\006\023\002\103\116\061\046\060\044\006\003
\125\004\012\014\035\102\105\111\112\111\116\107\040\103\105\122
\124\111\106\111\103\101\124\105\040\101\125\124\110\117\122\111
\124\131\061\035\060\033\006\003\125\004\003\014\024\102\112\103
\101\040\107\154\157\142\141\154\040\122\157\157\164\040\103\101
\062\060\036\027\015\061\071\061\062\061\071\060\063\061\070\062
\061\132\027\015\064\064\061\062\061\062\060\063\061\070\062\061
\132\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116
\061\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111
\116\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101
\125\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004
\003\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\101\062\060\166\060\020\006\007\052\206\110
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\235
\313\200\221\215\123\147\265\271\120\261\003\370\345\111\037\101
\042\011\260\121\122\130\326\053\064\217\305\022\106\024\305\213
\057\054\204\377\054\156\250\325\361\011\343\003\041\024\304\103
```

```
\075\174\301\054\304\113\152\112\315\351\207\340\175\366\042\276
\372\112\121\270\060\212\375\341\336\030\022\012\366\107\267\347
\027\277\047\212\324\101\114\226\074\140\226\301\375\025\034\243
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\322\112
\261\121\177\006\360\321\202\037\116\156\137\253\203\374\110\324
\260\221\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003
\150\000\060\145\002\060\032\274\133\327\376\251\322\124\016\112
\135\322\155\261\100\334\364\103\325\322\112\231\031\022\126\200
\367\203\064\341\065\116\110\155\004\017\127\061\060\060\055\261
\252\235\003\070\333\006\002\061\000\313\314\207\123\313\172\337
\040\121\163\220\300\250\133\141\320\305\120\071\375\205\376\301
\343\170\370\246\326\113\275\233\207\217\017\345\326\123\226\253
\074\310\100\332\141\367\123\243\367
```

END

CKA_NSS_MOZILLA_CA_POLICY

CK_BBOOL CK_TRUE

CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE

CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

Trust for "BJCA Global Root CA2"

Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb

Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

Not Valid Before: Thu Dec 19 03:18:21 2019

Not Valid After : Mon Dec 12 03:18:21 2044

Fingerprint (SHA-256):

57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82

Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST

CKA_TOKEN

CK_BBOOL CK_TRUE

CKA_PRIVATE CK_BBOOL CK_FALSE

CKA_MODIFIABLE CK_BBOOL CK_FALSE

CKA_LABEL UTF8 "BJCA Global Root CA2"

CKA_CERT_SHA1_HASH MULTILINE_OCTAL

```
\364\047\206\353\156\270\155\210\061\147\002\373\272\146\244\123
\000\252\172\246
```

END

CKA_CERT_MD5_HASH MULTILINE_OCTAL

```
\136\012\366\107\137\246\024\350\021\001\225\077\115\001\353\074
```

END

CKA_ISSUER MULTILINE_OCTAL

```
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
```



```
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264
\112\353
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST
CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

Found in path(s):

```
* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/certdata.txt
```

1.249 ssl-client 1.36.1-r15

1.249.1 Available under license :

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jseward@bzip.org

bzip2/libbzip2 version 1.0.4 of 20 December 2006

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* /opt/cola/permits/1978701202_1713373462.1014466/0/perfmark-api-0-17-0-sources-2-jar/io/perfmark/package-  
info.java  
* /opt/cola/permits/1978701202_1713373462.1014466/0/perfmark-api-0-17-0-sources-2-  
jar/io/perfmark/PerfMark.java  
* /opt/cola/permits/1978701202_1713373462.1014466/0/perfmark-api-0-17-0-sources-2-jar/io/perfmark/Tag.java  
*  
/opt/cola/permits/1978701202_1713373462.1014466/0/perfmark-api-0-17-0-sources-2-jar/io/perfmark/Link.java  
* /opt/cola/permits/1978701202_1713373462.1014466/0/perfmark-api-0-17-0-sources-2-jar/io/perfmark/Impl.java
```

1.253 scanelf 1.3.7-r2

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```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>
```

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If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19xx name of author
```

Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the
appropriate parts of the General Public License. Of course, the
commands you use may be called something other than `show w' and `show
c'; they could even be mouse-clicks or menu items--whatever suits your
program.

You should also get your employer (if you work as a programmer) or your
school, if any, to sign a "copyright disclaimer" for the program, if
necessary. Here a sample; alter
the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the
program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

That's all there is to it!

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1.256 jsr305 3.0.2

1.256.1 Available under license :

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```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>org.sonatype.oss</groupId>
    <artifactId>oss-parent</artifactId>
    <version>7</version>
```

```

    <relativePath />
  </parent>

  <groupId>com.google.code.findbugs</groupId>
  <artifactId>jsr305</artifactId>
  <version>3.0.2</version>
  <packaging>jar</packaging>

  <url>http://findbugs.sourceforge.net/</url>
  <name>FindBugs-jsr305</name>
  <description>JSR305 Annotations for Findbugs</description>
  <licenses>
    <license>
      <name>The Apache Software License, Version 2.0</name>
      <url>http://www.apache.org/licenses/LICENSE-2.0.txt</url>
      <distribution>repo</distribution>
    </license>
  </licenses>

  <prerequisites>
    <maven>3.0</maven>
  </prerequisites>

  <scm>
    <connection>scm:git:https://code.google.com/p/jsr-305/</connection>
    <developerConnection>scm:git:https://code.google.com/p/jsr-305/</developerConnection>
    <url>https://code.google.com/p/jsr-305/</url>
  </scm>

  <build>
    <plugins>
      <plugin>
        <groupId>org.apache.maven.plugins</groupId>
        <artifactId>maven-javadoc-plugin</artifactId>
        <version>2.9.1</version>
        <executions>
          <execution>
            <phase>package</phase>
            <goals>
              <goal>jar</goal>
            </goals>
            <configuration>
              <quiet>>true</quiet>
            </configuration>
          </execution>
        </executions>
      </plugin>
    </plugins>
  </build>

```

```

<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-compiler-plugin</artifactId>
<version>3.0</version>
<configuration>
  <source>1.5</source>
  <target>1.5</target>
</configuration>
</plugin>
<plugin>
  <groupId>org.apache.maven.plugins</groupId>
  <artifactId>maven-source-plugin</artifactId>
  <version>2.4</version>
  <executions>
    <execution>
      <id>attach-sources</id>
      <goals>
        <goal>jar-no-fork</goal>
      </goals>
    </execution>
  </executions>
</plugin>
<plugin>
  <groupId>org.apache.felix</groupId>
  <artifactId>maven-bundle-plugin</artifactId>
  <version>2.4.0</version>
  <extensions>>true</extensions>
  <executions>
    <execution>
      <id>bundle-manifest</id>
      <phase>process-classes</phase>
      <goals>
        <goal>manifest</goal>
      </goals>
    </execution>
  </executions>
  <configuration>
    <instructions>
      <Bundle-SymbolicName>org.jsr-305</Bundle-SymbolicName>
      <Bundle-Name>${project.name}</Bundle-Name>
      <Export-Package>javax.annotation;javax.annotation.concurrent;javax.annotation.meta</Export-Package>
    </instructions>
  </configuration>
</plugin>
<plugin>
  <groupId>org.apache.maven.plugins</groupId>
  <artifactId>maven-jar-plugin</artifactId>
  <version>2.4</version>
  <configuration>

```

```

    <archive>
      <manifestFile>${project.build.outputDirectory}/META-INF/MANIFEST.MF</manifestFile>
    </archive>
  </configuration>
</plugin>
<plugin>
  <groupId>org.sonatype.plugins</groupId>
  <artifactId>nexus-staging-maven-plugin</artifactId>
  <version>1.6.3</version>
  <extensions>>true</extensions>
  <configuration>
    <serverId>ossrh</serverId>
    <nexusUrl>https://oss.sonatype.org/</nexusUrl>
    <autoReleaseAfterClose>>true</autoReleaseAfterClose>
  </configuration>
</plugin>
<plugin>
  <groupId>org.apache.maven.plugins</groupId>
  <artifactId>maven-gpg-plugin</artifactId>
  <version>1.5</version>
  <executions>
    <execution>
      <id>sign-artifacts</id>
      <phase>verify</phase>
      <goals>
        <goal>sign</goal>
      </goals>
    </execution>
  </executions>
</plugin>
</plugins>
</build>
</project>

```

Found in path(s):

* /opt/cola/permits/1982448225_1713767424.6824625/0/jsr305-3-0-2-14-jar/META-INF/maven/com.google.code.findbugs/jsr305/pom.xml

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Manifest-Version: 1.0

Bundle-Description: JSR305 Annotations for Findbugs

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-SymbolicName: org.jsr-305

Archiver-Version: Plexus Archiver

Built-By: lan

Bnd-LastModified: 1490936130302

Bundle-ManifestVersion: 2

Tool: Bnd-2.1.0.20130426-122213

Export-Package: javax.annotation;uses:="javax.annotation.meta";version
="3.0.2",javax.annotation.concurrent;version="3.0.2",javax.annotation
.meta;uses:="javax.annotation";version="3.0.2"
Bundle-Name: FindBugs-jsr305
Bundle-Version: 3.0.2
Created-By: Apache Maven Bundle Plugin
Build-Jdk: 1.8.0_101

Found in path(s):

* /opt/cola/permits/1982448225_1713767424.6824625/0/jsr305-3-0-2-14-jar/META-INF/MANIFEST.MF

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