

# Smart Call Home Quick Start Configuration Guide for Cisco ASR 901, 903, 920 Series Routers<sup>®</sup>

Smart Call Home offers proactive diagnostics and real-time alerts on select Cisco devices, which provides higher network availability and increased operational efficiency. Smart Call is a secure connected service of Cisco SMARTnet<sup>™</sup> for the Cisco ASR 9xx series routers (ASR901 Series Routers, ASR903 Series Routers & ASR920 Series Routers).

This document provides information to configure and register a Cisco ASR 9xx Series Router for Smart Call Home using four transport options. It is assumed that the device has the necessary DNS configuration (ip domain-name and ip name-server for DNS look-ups or ip host for static entries) in order to resolve host-names that may appear in destination addresses.

1. HTTPS transport from the Cisco ASR 9xx Series Router to Cisco
2. Email from the Cisco ASR 9xx Series Router to a Transport Gateway (TG) - HTTPS transport to Cisco
3. HTTP from the Cisco ASR 9xx Series Router to a Transport Gateway (TG) - HTTPS transport to Cisco
4. Single Command configuration

**Note:** For security reasons, Cisco recommends customers make use of one of the HTTPS transport options, due to the additional payload encryption that HTTPS offers. The Transport Gateway software is downloadable from Cisco and is available for customers that require an aggregation point or a proxy for connection to the internet. For more information refer to [Smart Call Home Security – White Paper](#)

## Requirements for Smart Call Home:

- ✓ Cisco release required to support Call Home –  
15.5(2) -ASR 901, IOS 3.13 - ASR 920 & ASR 903
- ✓ Device serial number covered by an active Cisco service contract
- ✓ A Cisco.com ID with the device's contract mapped to it. (To create or edit your Cisco.com profile, refer to [Cisco Account Profile](#))

## Resources for Smart Call Home:

Additional Smart Call Home resources are available on [Cisco.com](#) and the [SCH Support Forum](#).

[Configuring Call Home for the Cisco ASR 901 Series Aggregation Services Router](#)

# Call Home Configuration - HTTPS

The following is a sample configuration that shows the minimum steps that are required to configure Call Home on a Cisco ASR 9xx Series Router so that it can communicate securely with the Smart Call Home System. The sample uses HTTPS and a command to start the registration process. All commands are in blue.

## 1. Configure HTTP Source Interface –

```
ASR9xx(config)#ip http client source-interface <interface type> <number>
```

## 2. Enable Call Home - In global configuration mode enter the service call-home command to activate the call-home feature and enter the call-home configuration command to enter call-home configuration mode.

```
ASR9xx#configure terminal
ASR9xx(config)#service call-home
ASR9xx(config)#call-home
```

## 3. Configure the mandatory contact email address -

```
ASR9xx(cfg-call-home)#contact-email-addr username@domain-name
```

## 4. Activate the default CiscoTAC-1 Profile and set the transport option to HTTP-

```
ASR9xx(cfg-call-home)#profile CiscoTAC-1
ASR9xx(cfg-call-home-profile)#destination transport-method http
ASR9xx(cfg-call-home-profile)#active
```

## 5. Exit and Save the configuration -

```
ASR9xx(config)#end
ASR9xx#copy running-config startup-config
```

## 6. Send a Call Home Inventory message to start the registration process -

```
ASR9xx#call-home send alert-group inventory profile CiscoTAC-1
Sending inventory info call-home message ...
Please wait. This may take some time ...
```

## 7. Receive an email from Cisco and follow the link to complete registration for Smart Call home

```
From: call-home-notify@cisco.com [mailto:call-home-notify@cisco.com]
Sent: Monday, April 18, 2011 1:34 PM
To: 
Subject: Pending Device Registration waiting to be confirmed
```

Dear Customer,

We have received a INVENTORY Call Home message from device tspm-7010-1.

To ensure that Call Home messages sent by this device will be processed, please confirm the device registration within 3 months via the Smart Call Home application available at <https://tools.cisco.com/sch/pendingDevices.do?step=2&securityToken=54ccfda7-7bff-4a73-b2d7-3b87e8ea208a>

To complete the device registration, please use the following security token:  
54ccfda7-7bff-4a73-b2d7-3b87e8ea208a

Regards,  
Cisco

For corporate legal information please click here:  
[http://www.cisco.com/web/about/doing\\_business/legal/cri/index.html](http://www.cisco.com/web/about/doing_business/legal/cri/index.html)

# Call Home Configuration - Email to Transport Gateway and HTTPS to Cisco

The following is a sample configuration that shows the minimum steps that are required to configure Call Home on a Cisco ASR 9xx Series Router to send Email to a Transport Gateway, which will use HTTPS to securely communicate with the Smart Call Home System. The sample uses a command to start the registration process, and assumes that the Transport Gateway software has been installed, configured and registered with Smart Call Home. All commands are in blue.

1. **Enable Call Home** - In global configuration mode enter the service call-home command to activate the call-home feature and enter the call-home configuration command to enter call-home configuration mode.

```
ASR9xx#configure terminal
ASR9xx(config)#service call-home
ASR9xx(config)#call-home
```

2. **Configure the mandatory contact email address** -

```
ASR9xx(cfg-call-home)# contact-email-addr username@domain-name
```

3. **Configure the mandatory email server information** - The mail-server address is an IP address or domain-name of a SMTP server that Call Home will send email messages to.

```
ASR9xx(cfg-call-home)#mail-server <address> priority <server_priority_number>
```

4. **De-activate the default CiscoTAC-1 Profile if it is active** -

```
ASR9xx(cfg-call-home)#profile CiscoTAC-1
ASR9xx(cfg-call-home-profile)#no active
```

5. **Configure a user profile** - The profile's alert-group subscriptions will be similar to the default CiscoTAC-1 profile with the destination email transport-method and with a destination email address which is for the email account used by the Transport Gateway.

```
ASR9xx(cfg-call-home-profile)#profile Your_profile_name
ASR9xx(cfg-call-home-profile)#active
ASR9xx(cfg-call-home-profile)#destination transport-method email
ASR9xx(cfg-call-home-profile)#destination address email <account_for_TG@yourCompany.com>
ASR9xx(cfg-call-home-profile)#subscribe-to-alert-group diagnostic severity minor
ASR9xx(cfg-call-home-profile)#subscribe-to-alert-group environment severity minor
ASR9xx(cfg-call-home-profile)#subscribe-to-alert-group syslog severity major pattern ".*"
ASR9xx(cfg-call-home-profile)#subscribe-to-alert-group configuration periodic monthly 23 15:00
ASR9xx(cfg-call-home-profile)#subscribe-to-alert-group inventory periodic monthly 23 15:00
```

6. **Exit and Save the configuration** -

```
ASR9xx(cfg-call-home-profile)#end
ASR9xx#copy running-config startup-config
```

7. **Send a Call Home Inventory message to start the registration process** -

```
ASR9xx#call-home send alert-group inventory profile Your_profile_name
Sending inventory info call-home message ...
Please wait. This may take some time ...
```

8. **Receive the email from Cisco and follow the link to complete registration for Smart Call home**

From: call-home-notify@cisco.com [mailto:call-home-notify@cisco.com]

Sent: Monday, April 18, 2011 1:34 PM

To: [REDACTED]

Subject: Pending Device Registration waiting to be confirmed

Dear Customer,

We have received a INVENTORY Call Home message from device tspm-7010-1.

To ensure that Call Home messages sent by this device will be processed, please confirm the device registration within 3 months via the Smart Call Home application available at <https://tools.cisco.com/sch/pendingDevices.do?step=2&securityToken=54ccfda7-7bff-4a73-b2d7-3b87e8ea208a>

To complete the device registration, please use the following security token:

54ccfda7-7bff-4a73-b2d7-3b87e8ea208a

Regards,

Cisco

For corporate legal information please click here:

[http://www.cisco.com/web/about/doing\\_business/legal/cri/index.html](http://www.cisco.com/web/about/doing_business/legal/cri/index.html)

# Call Home Configuration - HTTP to Transport Gateway and HTTPS to Cisco

The following is a sample configuration that shows the minimum steps that are required to configure Call Home on a Cisco ASR 9xx Series Router so that it can use HTTP to communicate with the Transport Gateway, which will use HTTPS to communicate with the Smart Call Home System. This sample uses a command to start the registration process, and assumes that the Transport Gateway software has been installed, configured and registered with Smart Call Home. All commands are in blue.

## 1. Configure HTTP Source Interface –

```
ASR9xx(config)#ip http client source-interface <interface type> <number>
```

## 2. Enable Call Home - In global configuration mode enter the service call-home command to activate the call-home feature and enter the call-home configuration command to enter call-home configuration mode.

```
ASR9xx#configure terminal
ASR9xx(config)#service call-home
ASR9xx(config)#call-home
```

## 3. Configure the mandatory contact email address -

```
ASR9xx(cfg-call-home)#contact-email-addr username@domain-name
```

## 4. De-activate the default CiscoTAC-1 Profile if it is active -

```
ASR9xx(cfg-call-home)#profile CiscoTAC-1
ASR9xx(cfg-call-home-profile)#no active
```

## 5. Configure a user profile - The profile's alert-group subscriptions will be similar to the default CiscoTAC-1 profile with the destination HTTP transport-method and with a destination HTTP address provided by the Transport Gateway (Refer to [Configure the HTTP Server](#) section).

```
ASR9xx(cfg-call-home)#copy profile CiscoTAC-1 <userprofilename>
ASR9xx(cfg-call-home)#profile <userprofilename>
ASR9xx(cfg-call-home-profile)#destination transport-method http
ASR9xx(cfg-call-home-profile)#no destination transport-method email
ASR9xx(cfg-call-home-profile)#no destination address http all
ASR9xx(cfg-call-home-profile)#destination address http <http://url_from_TG>
ASR9xx(cfg-call-home-profile)#active
```

## 6. Exit and Save the configuration -

```
ASR9xx(cfg-call-home-profile)#end
ASR9xx#copy running-config startup-config
```

## 7. Send a Call Home Inventory message to start the registration process -

```
ASR9xx#call-home send alert-group inventory profile Your_profile_name
Sending inventory info call-home message ...
Please wait. This may take some time ...
```

## 8. Receive the email from Cisco and follow the link to complete registration for Smart Call home.

From: call-home-notify@cisco.com [mailto:call-home-notify@cisco.com]  
Sent: Monday, April 18, 2011 1:34 PM  
To: [REDACTED]  
Subject: Pending Device Registration waiting to be confirmed

Dear Customer,

We have received a INVENTORY Call Home message from device tspm-7010-1.

To ensure that Call Home messages sent by this device will be processed, please confirm the device registration within 3 months via the Smart Call Home application available at <https://tools.cisco.com/sch/pendingDevices.do?step=2&securityToken=54ccfda7-7bff-4a73-b2d7-3b87e8ea208a>

To complete the device registration, please use the following security token:  
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Regards,  
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## Call Home Configuration - HTTP with Single command

The following is a sample configuration that shows the single command that is required to configure Call Home on a Cisco ASR 9xx Series Router so that it can communicate securely with the Smart Call Home System. All commands are in blue.

**Enable Call Home** - In global configuration mode enter the call-home reporting command, mentioning the contact email address, http proxy server and port number to activate the call-home feature so that it can use email to communicate with the Smart Call Home System.

```
ASR9xx#configure terminal
ASR9xx(config)# call-home reporting contact-email-addr <username@domain-name> http-proxy <proxy_server_name> port
<port_number>
```

**Note:** After successfully enabling Call Home using the **call-home reporting** command, an inventory message for full registration mode is sent out

## Downloading Cisco Transport Gateway Software

To download Cisco Transport Gateway software, go to the [Download Software](#) web page. On that page the Related Information section on the right lists the different OS versions (Linux, Solaris, Windows) of Transport Gateway software. Find the correct OS version of Transport Gateway software in the list and then click either **Download Now** or **Add to cart**. After you have downloaded the correct OS version of Transport Gateway software, then refer to the [Transport Gateway Installation/Configuration/Registration sections of the Smart Call Home Users' Guide](#) for information on how to install the downloaded code then configure and register the Transport Gateway.