



# Release Notes for the Ultra Cloud Core Session Management Function

## Version 2020.03.0

**First Published:** September 22, 2020

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### Introduction

This Release Notes identifies changes and issues related to this software release. This release is the next major release for this product after 2020.02.0.

### Release Package Version Information

Software Packages	Version
smf.2020.03.0.SPA.tgz	2020.03.0

Descriptions for the various packages provided with this release are located in the [Release Package Descriptions](#) section.

### Verified Compatibility

Products	Version
Ultra Cloud Core PCF	2020.03.0
Ultra Cloud Core SMI	2020.03.0
Ultra Cloud Core UPF	2020.03.0

### Related Documentation

For the complete list of documentation available for this release, go to:

<https://www.cisco.com/c/en/us/support/wireless/ultra-cloud-core-session-management-function/tsd-products-support-series-home.html>

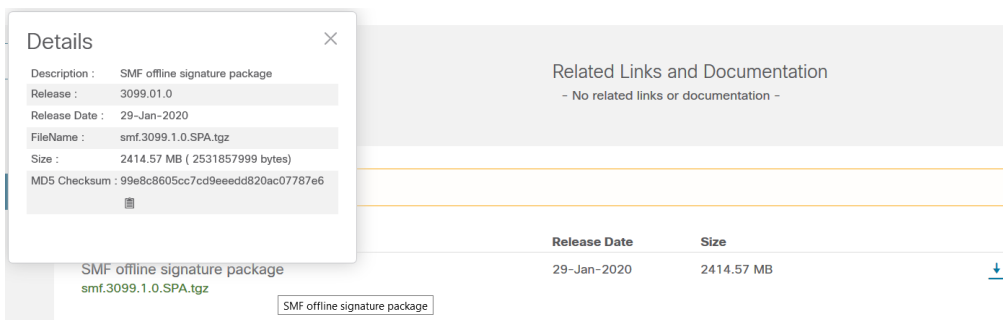
### Installation and Upgrade Notes

This Release Notes does not contain general installation and upgrade instructions. Refer to the existing installation documentation for specific installation and upgrade considerations.

## Software Integrity Verification

To verify the integrity of the software image you have from Cisco, you can validate the SHA512 checksum information against the checksum identified by Cisco for the software.

Image checksum information is available through **Cisco.com Software Download Details**. To find the checksum, hover the mouse pointer over the software image you have downloaded.



At the bottom you find the SHA512 checksum, if you do not see the whole checksum you can expand it by pressing the "... " at the end.

To validate the information, calculate a SHA512 checksum using the information in [Table 1](#) and verify that it matches either the one provided on the software download page.

To calculate a SHA512 checksum on your local desktop please see the table below.

**Table 1 – Checksum Calculations per Operating System**

Operating System	SHA512 checksum calculation command examples
Microsoft Windows	Open a command line window and type the following command  <pre>&gt; certutil.exe -hashfile &lt;filename&gt;.&lt;extension&gt; SHA512</pre>
Apple MAC	Open a terminal window and type the following command  <pre>\$ shasum -a 512 &lt;filename&gt;.&lt;extension&gt;</pre>
Linux	Open a terminal window and type the following command  <pre>\$ sha512sum &lt;filename&gt;.&lt;extension&gt;</pre> <p>Or</p> <pre>\$ shasum -a 512 &lt;filename&gt;.&lt;extension&gt;</pre>
<p><b>NOTES:</b></p> <p>&lt;filename&gt; is the name of the file.</p> <p>&lt;extension&gt; is the file extension (e.g. .zip or .tgz).</p>	

If the SHA512 checksum matches, you can be sure that no one has tampered with the software image or the image has not been corrupted during download.

If the SHA512 checksum does not match, we advise you to not attempt upgrading any systems with the corrupted software image. Download the software again and verify the SHA512 checksum again. If there is a constant mismatch, please open a case with the Cisco Technical Assistance Center.

## Certificate Validation

SMF software images are signed via x509 certificates. Please view the .README file packaged with the software for information and instructions on how to validate the certificates.

## Open Bugs for this Release

The following table lists the known bugs that were found in this software release and which remain open.

**NOTE:** This software release may contain open bugs first identified in other releases. Additional information for all open bugs for this release are available in the [Cisco Bug Search Tool](#).

Bug ID	Headline
CSCvv02975	[SMF-IOT] SMF is throwing the 500 Internal Server Error with 'cause': 'SYSTEM_FAILURE'
CSCvv39170	[SMF] SMF init N4 heartbeat not sent when service-ims VM is restarted till it comes back up
CSCvv50821	SMF-node_mgr is restarting continuously after smf restart
CSCvv50857	[SMF]: After SMF restart, UPF is not able to make N4Association with SMF
CSCvv58529	[SMF-SVI] Small no. of IP Leaks observed during BV run - rel-2020.03.0, rel-2020.02.0
CSCvv62052	[SMF] protocol pod OOM killed
CSCvv63404	[SMF-IOT] RAT_Type is NOT added for NR calls while disconnecting calls with ResourceMgr failures
CSCvv63521	[SMF-SVI] ipv4v6 pdn_mbr procedure failures seen CM run
CSCvv64251	[SVI SMF] smf-service pod restart after OOM 2+ days into longevity run
CSCvv65601	[SMF-SVI] Service pod restart at (*UpfServData).DuplicateExistingDIRulesToIdftTunnel with CM
CSCvv66464	[SMF] Protocol VM reboot results in sx-path-failure
CSCvv69748	[SMF-IVT] REST-EP crashes noticed on i137 build
CSCvv70046	[SMF-SVI] smf-service crashed at userplane.(*ModifyParams).SetChargingInfo - i140
CSCvv70051	[SMF-SVI] rest-ep, udp-proxy restarted with OOM - i140
CSCvv70149	[SVI SMF] smf-protocol restart OOM on overnight run
CSCvv72431	[SMF:BEMS01147255]:SMF not responding to RS during wifi HO in TMO
CSCvv74754	[SMF]: SMF does not sends UUC in charging Release request.
CSCvv77418	Protocol sync pool memory chunks not reinitialized leading to message rejected in UPF/SMF

## Resolved Bugs for this Release

The following table lists the known bugs that are resolved in this specific software release.

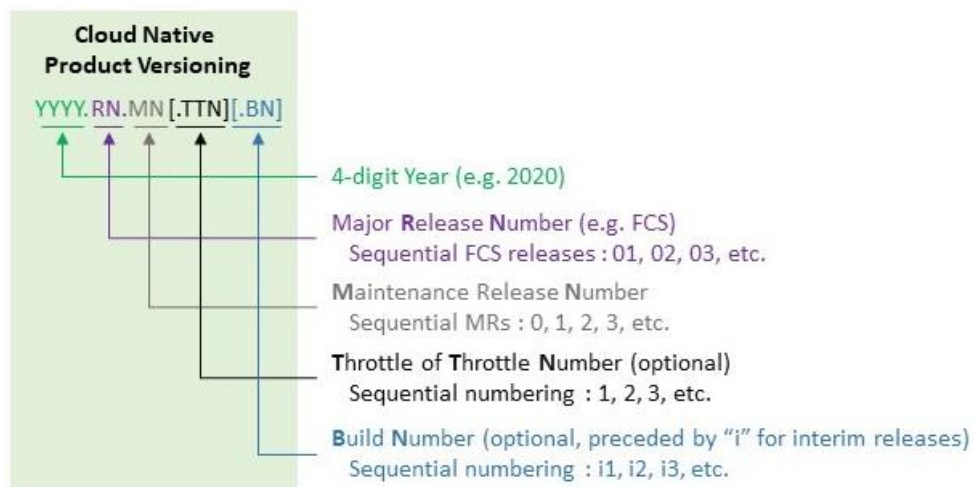
**NOTE:** This software release may contain bug fixes first introduced in other releases. Additional information for all resolved bugs for this release are available in the [Cisco Bug Search Tool](#).

Bug ID	Headline
CSCvt68031	PDR/FAR/QER not getting cleared if 4g to 5g HO got failed at idft leg
CSCvu03321	[SMF-SVI] smf_service_counters, gauge counters not working as expected
CSCvu19374	[SMF-SVI] n4_heartbeat_res accepted stat shows 50 years as process time
CSCvu30145	[SMF]: SMF sends UNK_RULE_ID for PCC rules installing audio.
CSCvu95541	[SVI SMF] epsfb redirect: smf intermittently sends 500 Internal Server Error after PDU_RES_MOD_FAIL
CSCw01451	[SVI SMF] protocol pod restart on processor.decodePF CPRsp when sending corrupted packets via netem
CSCw19344	[SVI SMF] GetQosModInfo API execution failed. Error: GetRuleIDFromName failed
CSCw26615	[SMF]: Mon subs output gives junk characters

## Operator Notes

### Cloud Native Product Versioning System

The **show helm list** command displays detailed information about the version of the cloud native product currently deployed.



## Obtaining Documentation and Submitting a Service Request

The appropriate version number field increments after a version has been released. The new version numbering format is a contiguous sequential number that represents incremental changes between releases. This format facilitates identifying the changes between releases when using Bug Search Tool to research software releases.

## Release Package Descriptions

[Table 2](#) lists provides descriptions for the packages that are available with this release.

**Table 2 - Release Package Information**

Software Packages	Description
smf.<version>.SPA.tgz	The SMF offline release signature package. This package contains the SMF deployment software as well as the release signature, certificate, and verification information.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, refer to <https://www.cisco.com/c/en/us/support/index.html>.

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