



Release Notes for the Ultra Cloud Core Policy Control Function Version 2021.02.0

First Published: May 3, 2021

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Introduction

This Release Notes identifies changes and issues related to this software release.

Release Package Version Information

Software Packages	Version
pcf.2021.02.0.SPA.tgz	2021.02.0

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

Verified Compatibility

Products	Version
Ultra Cloud Core SMI	2020.02.2.19
Ultra Cloud Core SMF	2021.02.m0.i204

For information on the Ultra Cloud Core SMI release, refer to the corresponding SMI Release Notes available at:

<https://www.cisco.com/c/en/us/support/wireless/ultra-cloud-core-subscriber-microservices-infrastructure/products-release-notes-list.html>

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-policy-control-function/products-installation-and-configuration-guides-list.html>

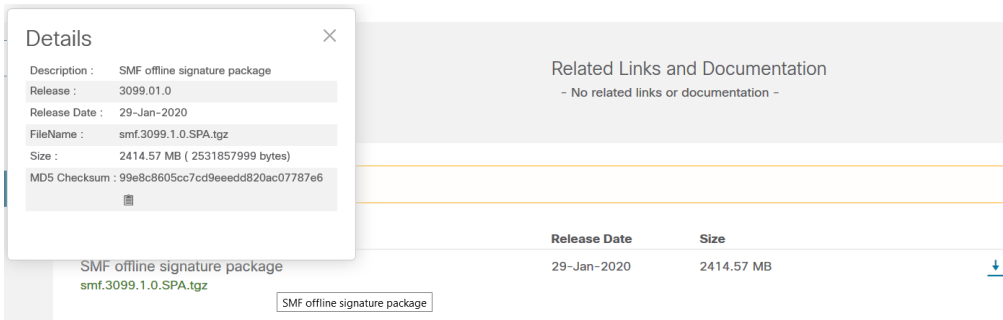
Installation and Upgrade Notes

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 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 <code>> certutil.exe -hashfile <filename>.<extension> SHA512</code>
Apple MAC	Open a terminal window and type the following command <code>\$ shasum -a 512 <filename>.<extension></code>
Linux	Open a terminal window and type the following command <code>\$ sha512sum <filename>.<extension></code> Or <code>\$ shasum -a 512 <filename>.<extension></code>
NOTES: <filename> is the name of the file. <extension> is the file extension (e.g. .zip or .tgz).	

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.

MD5 Checksum Details

be36da23751f775f007faff4869246c2 pcf.2021.02.0.SPA.tgz

Certificate Validation

PCF software images are signed via x509 certificates. For information and instructions on how to validate the certificates, refer to the .README file packaged with the software.

Open Bugs for this Release

None in this release.

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	Behavior Change
CSCvx16311	SVI-PCF i82: creating repository name from central with underscore is not supported	No
CSCvx33049	PCF is performing 2 registrations with same NRF	No
CSCvx34649	Response time spikes seen for Heartbeat messages from PCF to NRF	No
CSCvx48044	[PCF-CNDP-SVI] After failback of site with 31M sessions, cdl slot and index pods takes 37 mins	No
CSCvx49859	PCF sends GOAWAY to NRF after 30sec	Yes
CSCvx55449	Simless emergency feature for pcf	No
CSCvx57018	[PCF-CNDP-SVI] - Continuous CDL ep restart on PCF ideal cluster	No
CSCvx61063	[PCF-CNDP-SVI] -etcd space exceeded issue made cdl-ep pods in unhealthy state	No
CSCvx62296	[PCF-CNDP-SVI] - Policy changes done using PB Central causes issue	No
CSCvx74018	PCF is sending N7_NOTIFY on receiving error/timeout for ldap profile refresh event	No

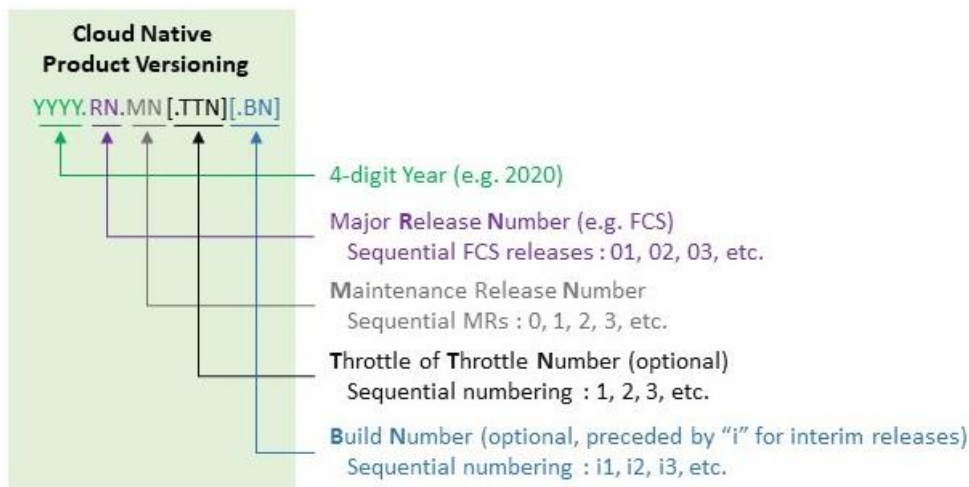
Operator Notes

Bug ID	Headline	Behavior Change
CSCvx74071	PCF Flow Information Description overwrites the configured Flow Direction for N7 Dynamic Rule	Yes
CSCvx75126	[PCF-IVT] PCF should not throw error in case AN_INFO reported with servingNetwork and not UE info	No
CSCvx97263	Stale warmup sessions left on the system	No
CSCvy01381	[PCF-CNDP-SVI] Rx traffic doesn't recover after node power off/on scenario	No
CSCvy09897	Splunk unavailability causing PCF pod restarts	No

Operator Notes

Cloud Native Product Version Numbering System

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



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
pcf.<version>.SPA.tgz	The PCF offline release signature package. This package contains the PCF 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>.

Obtaining Documentation and Submitting a Service Request

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