Release Notes for the Ultra Cloud Core Policy Control Function Version 2023.01.0

First Published: January 24, 2023

Introduction

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

Release Lifecycle Milestones

Release Lifecycle Milestone	Milestone	Date
First Customer Ship	FCS	31-Jan-2023
End of Life	EoL	31-Jan-2023
End of Software Maintenance	EoSM	31-Jul-2024
End of Vulnerability and Security Support	EoVSS	31-Jul-2024
Last Date of Support	LDoS	31-Jul-2025

Release Package Version Information

Software Packages	Version
pcf.2023.01.0.SPA.tgz	2023.01.0

Descriptions for the software packages provided with this release are available in the Release Package Descriptions section.

Verified Compatibility

Products	Version
Ultra Cloud Core SMI	2023.01.1.i18
Ultra Cloud Core CDL	1.10.2

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/series.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/tsd-products-support-series-home.html

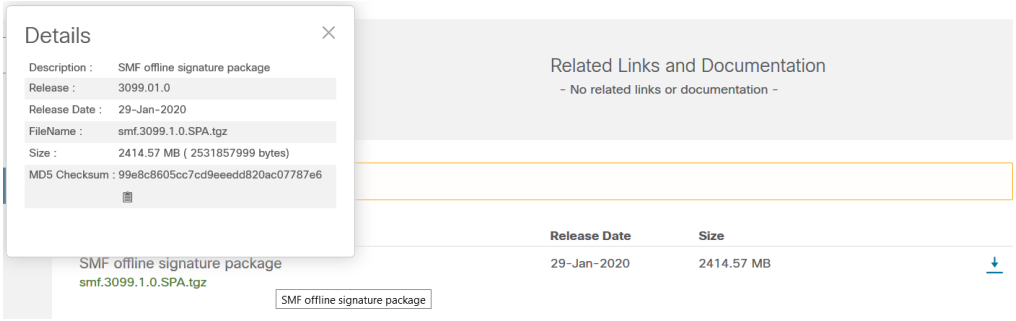
Installation and Upgrade Notes

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 > certutil.exe -hashfile *<filename>.<extension>* SHA512
Apple MAC	Open a terminal window and type the following command $ shasum -a 512 <filename>.<extension>

Linux	Open a terminal window and type the following command
	
	$ sha512sum <filename>.<extension>
	
	Or
	
	$ shasum -a 512 <filename>.<extension>

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.

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.

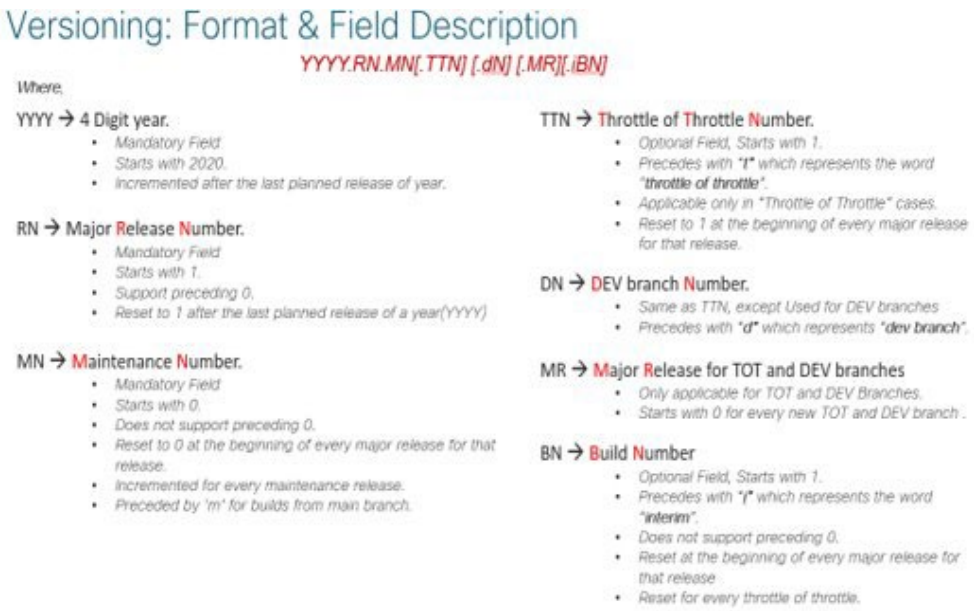
NOTE: This software release may contain bug fixes first introduced in other releases. Additional information for all resolved bugs for this release are available in the Cisco Bug Search Tool.

Bug ID	Headline	Behavior Change
CSCwe01948	PCF is sending allowedNfTypes as AF instead of AF/P-CSCF to NRF while registration	No
CSCwe02362	Exclude default fqdn in nf-profile during NRF Registration	No
CSCwd28739	n3galocation is not functional	No
CSCwb60734	Observing SDF Filter decoding failed error in Syslog during IMS call model run	No
CSCwd71834	Exception (405 and 501) in NRF Heartbeat response	No
CSCwd81211	Number of UNKNOWN peer connection is increasing and connections are not getting closed	No
CSCwd89287	3GPP-User-Location-Info sent in Rx_RAR is not having the updated value when location changes from NR	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 provide descriptions for the software 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.

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