Release Notes for the Ultra Cloud Core Redundancy Configuration Manager Version 2023.03.0

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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-Jul-2023
End of Life	EoL	31-Jul-2023
End of Software Maintenance	EoSM	28-Jan-2025
End of Vulnerability and Security Support	EoVSS	28-Jan-2025
Last Date of Support	LDoS	31-Jan-2026

These milestones and the intervals between them are defined in the Cisco Ultra Cloud Core (UCC) Software Release Lifecycle Product Bulletin available on cisco.com.

Release Package Version Information

Software Packages	Version
rcm.2023.03.0.i5.SPA.tgz	2023.03.0
NED package	ncs-5.6.8-rcm-nc-2023.03.0 ncs-6.1-rcm-nc-2023.03.0
NSO	5.6.8 6.1

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	2023.03.1
Ultra Cloud CDL	1.11.4
Ultra Cloud Core UPF	2023.03.0

Related Documentation

For a complete list of documentation available for this release, go to: https://www.cisco.com/c/en/us/support/wireless/ultra-cloud-core-user-plane-function/series.html

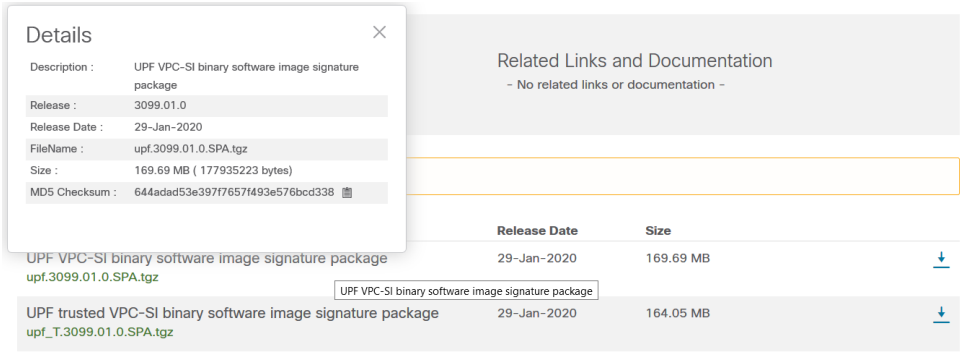
Installation and Upgrade Notes

This Release Note 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

UPF 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

There are no open bugs in this specific software release.

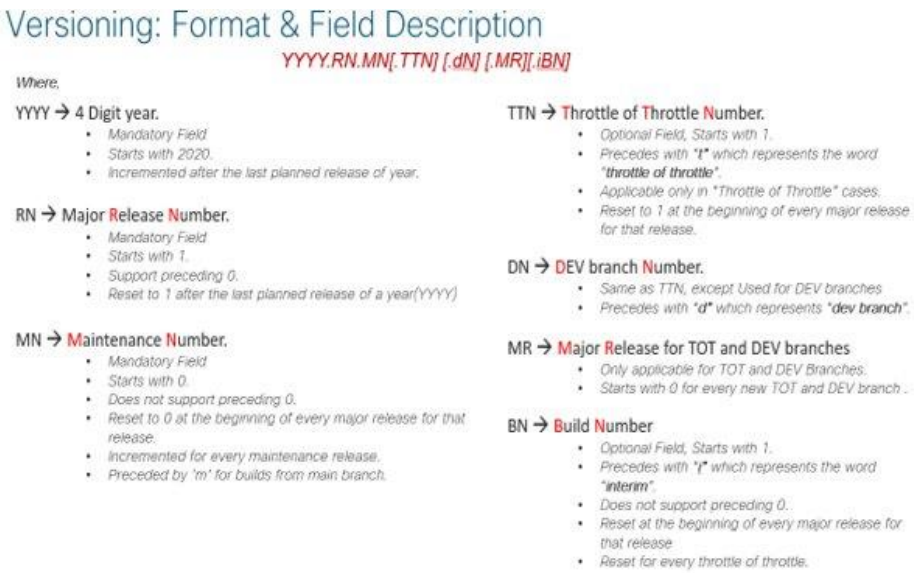
Resolved Bugs for this Release

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

Bug ID	Headline	Behavior Change
CSCwd02219	RCM checkpointmgr optimisation for URR handling	No
CSCwe98183	checkpoint manager stats for invalid callid is needed	No
CSCwf06065	checkpoint manager level aggregate session stats for different types of checkpoints	No
CSCwf59447	rcm-dashboard not up with offline image or with rcm-product	No

Operator Notes

Cloud Native Product Version Numbering System



Release Package Descriptions

Table 2 provides descriptions for the packages that are available with this release.

Table 2 - Release Package Information

Software Packages	Description
companion-vpc-<staros_version>.zip.SPA.tar.gz	Contains files pertaining to VPC, including SNMP MIBs, RADIUS dictionaries, ORBEM clients, etc. These files pertain to both trusted and non-trusted build variants. The VPC companion package also includes the release signature file, a verification script, the x.509 certificate, and a README file containing information on how to use the script to validate the certificate.
qvpc-si-<staros_version>.bin.SPA.tar.gz	The UPF release signature package. This package contains the VPC-SI deployment software for the UPF as well as the release signature, certificate, and verification information. Files within this package are nested under a top-level folder pertaining to the corresponding StarOS build.
qvpc-si-<staros_version>.qcow2.zip.SPA.tar.gz	The UPF release signature package. This package contains the VPC-SI deployment software for the UPF as well as the release signature, certificate, and verification information. Files within this package are nested under a top-level folder pertaining to the corresponding StarOS build.

Software Packages	Description
qvpc-si_T-<staros_version>.bin.SPA.tar.gz	The trusted UPF release signature package. This package contains the VPC-SI deployment software for the UPF as well as the release, signature, certificate, and verification information. Files within this package are nested under a top-level folder pertaining to the corresponding StarOS build.
qvpc-si_T-<staros_version>.qcow2.zip.SPA.tar.gz	The trusted UPF release signature package. This package contains the VPC-SI deployment software for the UPF as well as the release, signature, certificate, and verification information. Files within this package are nested under a top-level folder pertaining to the corresponding StarOS build.
ncs-<nso_version>-rcm-nc-<version>.tar.gz	The NETCONF NED package. This package includes all the yang files that are used for NF configuration. Note that NSO is used for NED file creation.

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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