



Release Notes for UCC 5G UPF, Release 2025.04.0



Ultra Cloud Core – User Plane Function, Release 2025.04.0 3

Release lifecycle milestones 3

New software features..... 3

Changes in behavior 3

Resolved issues 3

Open issues..... 4

Compatibility..... 4

Supported software packages 4

Related resources..... 8

Legal information 8

Ultra Cloud Core - User Plane Function, Release 2025.04.0

This Release Notes identifies changes and issues related to the release of 5G User Plane Function (UPF).

For more information on UPF, see the [Related resources](#) section.

Release lifecycle milestones

The following table provides EoL milestones for Cisco UCC UPF software:

Table 1. EoL milestone information for UCC UPF, Release 2025.04.0

Milestone	Date
First Customer Ship (FCS)	07-Nov-2025
End of Life (EoL)	07-Nov-2025
End of Software Maintenance (EoSM)	08-May-2027
End of Vulnerability and Security Support (EoVSS)	08-May-2027
Last Date of Support (LDoS)	31-May-2028

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.

New software features

There are no new software features introduced in this release.

Changes in behavior

There are no behavior changes in this release.

Resolved issues

This table lists the resolved issues in this specific software release.

Note: This software release may contain resolved bugs first identified in other releases. To see additional information, click the bug ID to access the [Cisco Bug Search Tool](#). To search for a documented Cisco product issue, type in the browser: <bug_number> site:[cisco.com](#)

Table 2. Resolved issues for UCC UPF, Release 2025.04.0

Bug ID	Description
CSCwp91767	Abnormal CC-Total-Octets values after UP reload.
CSCwq68820	SMU-FAPI: init_hash_req_record() error logs are triggered after UP Upgrade.

Bug ID	Description
CSCwr40180	sessmgr restarts after SRP switchover.
CSCwr51333	IPV6 GTPU Transport Atomic fragment packet being dropped in UPF.
CSCwr69057	Uplink Flows not data filling EDR ip_control_param for TMO Data APN.

Open issues

This table lists the open issues in this specific software release.

Note: This software release may contain open bugs first identified in other releases. To see additional information, click the bug ID to access the [Cisco Bug Search Tool](#). To search for a documented Cisco product issue, type in the browser: <bug_number> site:[cisco.com](#)

Table 3. Open issues for UCC UPF, Release 2025.04.0

Bug ID	Description
CSCwr80361	Unable to clear the stuck mon sub sessions from npumgr.

Compatibility

This section lists compatibility information of the Cisco UCC software products that are verified to work with this version of the UCC UPF software.

Table 4. Compatibility information for UCC UPF, Release 2025.04.0

Product	Supported Release
ADC Plugin	2.74.12.2726
RCM	2025.04.0
Ultra Cloud Core SMI	2025.03.1.10
Ultra Cloud SMF	2025.04.0

Supported software packages

This section provides information about the release packages associated with UCC UPF software.

Table 5. Software packages for UCC UPF, Release 2025.04.0

Software Package	Description	Release
companion-vpc-2025.04.0.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	2025.04.0 (21.28.m38.99199)

Software Package	Description	Release
	certificate.	
qvpc-si-2025.04.0.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.	2025.04.0 (21.28.m38.99199)
qvpc-si-2025.04.0.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.	2025.04.0 (21.28.m38.99199)
NED Package	The NETCONF NED package. This package includes all the yang files that are used for NF configuration.	ncs-6.1.17-cisco-staros-5.57.1
NSO	Note that NSO is used for the NED file creation.	6.4.8

Use this link to download the [NED](#) package associated with the software.

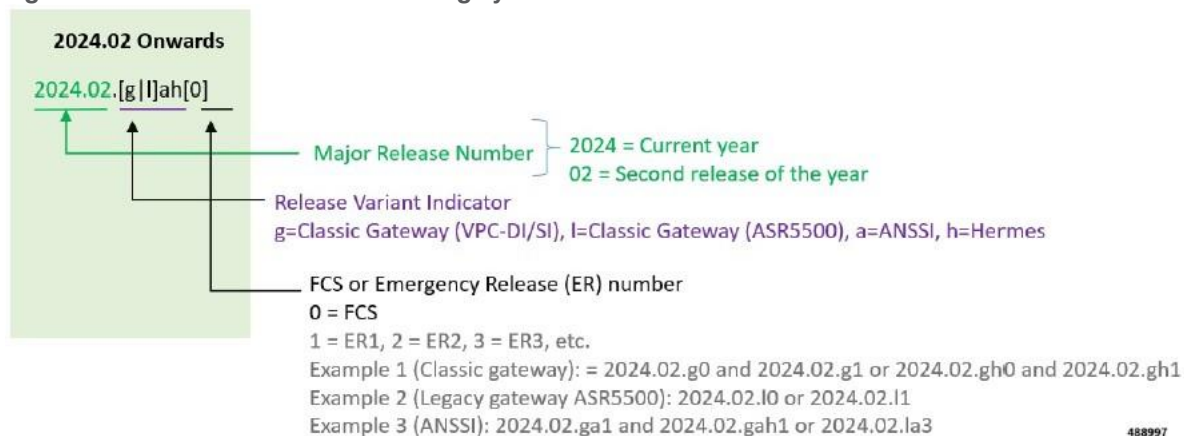
StarOS version numbering system

The output of the **show version** command displays detailed information about the version of StarOS currently running on the ASR 5500 or Cisco Virtualized Packet Core platform.

Note: Starting 2024.01.0 release (January 2024), Cisco is transitioning to a new release versioning scheme. The release version is based on the current year and product. Refer to the figure for more details.

During the transition phase, some file names will reflect the new versioning whereas others will refer to the 21.28.x- based naming convention. With the next release, StarOS-related packages will be completely migrated to the new versioning scheme.

Figure 1. StarOS version numbering system format



For any clarification, contact your Cisco account representative.

Cloud native product version numbering system

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

Figure 2. Cloud native product versioning format and description
Versioning: Format & Field Description

Where,		YYYY.RN.MN[.TTN] [.dN] [.MR][.iBN]
YYYY →	4 Digit year.	TTN → Throttle of Throttle Number.
	• Mandatory Field. • Starts with 2020. • Incremented after the last planned release of year.	• Optional Field, Starts with 1. • Precedes with "t" which represents the word "throttle or throttle". • Applicable only in "Throttle of Throttle" cases. • Reset to 1 at the beginning of every major release for that release.
RN →	Major Release Number.	DN → Dev branch Number
	• Mandatory Field. • Starts with 1. • Support preceding 0. • Reset to 1 after the last planned release of a year(YYYY).	• Same as TTN except Used for DEV branches. • Precedes with "d" which represents "dev branch".
MN →	Maintenance Number.	MR → Major Release for TOT and DEV branches
	• Mandatory Field. • Starts with 0. • Does not support preceding 0. • Reset to 0 at the beginning of every major release for that release. • Incremented for every maintenance release. • Preceded by "m" for bulbs from main branch.	• Only applicable for TOT and DEV Branches. • Starts with 0 for every new TOT and DEV branch.
		BN → Build Number
		• Optional Field, Starts with 1. • Precedes with "t" which represents the word "interim". • Does not support preceding 0. • Reset at the beginning of every major release for that release. • Reset of every throttle of throttle.

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.

Software integrity version

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.

Figure 3. Sample of UPF software image

Ultra Cloud Core - User Plane Function

Release 2023.02.2.t1.0

Related Links and Documentation

[UPF Release Notes](#)

Details

Description : VPC-SI binary software image signature package

Release : 2023.02.2.t1.0

Release Date : 11-Aug-2023

FileName : qvpc-si-21.28.mt10.bin.SPA.tar.gz

Size : 194.12 MB (203547769 bytes)

MD5 Checksum : d86d3864378b16434d346c75e17e0bc6

SHA512 Checksum : 1aa84d98d14e1cefad5d54266389d01e

[UPF Release Notes](#)

[Advisories](#)

	Release Date	Size	
	11-Aug-2023	2.83 MB	
	11-Aug-2023	194.12 MB	
VPC-SI qcow2 image signature package	11-Aug-2023	194.18 MB	
qvpc-si-21.28.mt10.qcow2.zip.SPA.tar.gz			
Trusted VPC-SI binary software image signature package	11-Aug-2023	188.31 MB	
qvpc-si_T-21.28.mt10.bin.SPA.tar.gz			
Trusted VPC-SI qcow2 image signature package	11-Aug-2023	188.38 MB	
qvpc-si_T-21.28.mt10.qcow2.zip.SPA.tar.gz			

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

To validate the information, calculate a SHA512 checksum using the information in the following table and verify that it matches the one provided on the software download page.

To calculate a SHA512 checksum on your local desktop, see this table.

Table 6. SHA512 checksum calculation commands by 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>
Note: <filename> is the name of the file. <extension> is the file type extension (for example, .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 not to 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.

Related resources

Table 7. Related resources and additional information

Resources	Link
UPF documentation	User Plane Function
Ultra Cloud Core Subscriber Microservices Infrastructure	Subscriber Microservices Infrastructure
Ultra Cloud Core Session Management Function	Session Management Function
Ultra Cloud Core Serving Gateway Function	Ultra Cloud Core Serving Gateway Function
Service Request and Additional information	Cisco Support

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