Release Notes for the Ultra Cloud Core Policy Control Function, Version 2025.02.0

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Ultra Cloud Core Policy Control Function

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	30-Apr-2025
End of Life	EoL	30-Apr-2025
End of Software Maintenance	EoSM	29-Oct-2026
End of Vulnerability and Security Support	EoVSS	29-Oct-2026
Last Date of Support	LDoS	31-Oct-2027

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
pcf.2025.02.0.SPA.tgz	2025.02.0
NED Package	ncs-6.4.3-cisco-pcf-nc-1.1.tar.gz
NSO Version	6.4.3

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	2025.02.1.17
Ultra Cloud Core CDL	1.12.1

For more information on the Ultra Cloud Core SMI, refer to the documents for this release available at:

https://www.cisco.com/c/en/us/support/wireless/ultra-cloud-core-subscriber-microservices-infrastructure/series.html

What's New in this Release

Features and Enhancements

This section covers a brief description of the features and enhancements introduced in this release. It also includes links to detailed documentation, where available.

Feature	Description
Diameter Traffic Performance Optimization	This release introduces new configuration options to enhance the performance of Diameter pods when processing Diameter messages. These options allow for tuning Istio concurrency based on the user's traffic profile. **Commands introduced:** **advance-tuning istio-resource-control diameter** - This CLI command configures the Istio-proxy in the diameter-ep pod. **diameter properties <grpc-tcp-nodelay> value {false | True}** - The `grpc-tcp-nodelay` option in this CLI command controls the Nagle algorithm for TCP transmission. By enabling this command, you can reduce the latency and prevent delays in sending small packets, thus optimizing real-time data transmission. **Default Setting:** Disabled – Configuration Required to Enable
SPR MongoDB Deployment in PCF Namespace	This feature involves the integration of MongoDB replica sets into the PCF namespace on a Kubernetes (K8s) cluster. It supports various operations like storing, retrieving, and updating subscriber data. The PCF ops-center and policy builder page manage the configuration of the MongoDB replica sets. **Default Setting:** Disabled – Configuration Required to Enable

Behavior Changes

There are no behavior changes in this release.

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/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 will find the SHA512 checksum. If you do not see the whole checksum, you can expand it by pressing "..." 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, refer to the following table.

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`*

Operating System	SHA512 checksum calculation command examples
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 (for example, .zip or .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

There are no open bugs in this release.

Resolved Bugs for this Release

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

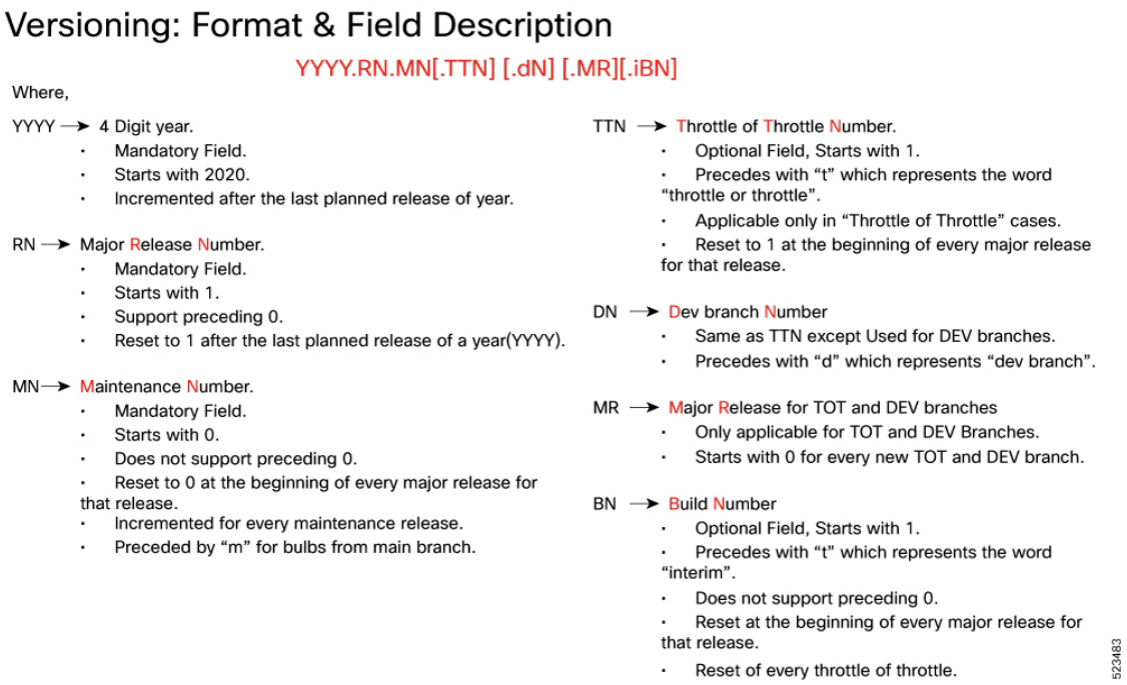
Note This software release may contain bug fixes first introduced in other releases. Additional information for all resolved bugs for this release are available in the Cisco Bug Search Tool.

Bug ID	Headline	Behavior Change
CSCwo08082	Ops Center output incomplete for show sub/ show wps-sub	No
CSCwo81447	Unified API KPIs are not enabled	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

The following table 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, NED package, as well as the release signature, certificate, and verification information.
ncs-<nso_version>-pcf-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 the 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.