



Ultra Cloud Core 5G Policy Control Function, Release 2023.04 - Release Change Reference

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About this Guide



Note The documentation set for this product strives to use bias-free language. For purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. While any existing biased terms are being substituted, exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

This document is a part of the Ultra Cloud Core 5G Policy Control Function documentation set.

For information about available documentation, see the Ultra Cloud Core 5G Policy Control Function Documentation Map for this release at [Cisco.com](https://www.cisco.com).

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Conventions Used

The following tables describe the conventions used throughout this documentation.

Notice Type	Description
Information Note	Provides information about important features or instructions.
Caution	Alerts you of potential damage to a program, device, or system.
Warning	Alerts you of potential personal injury or fatality. May also alert you of potential electrical hazards.

Typeface Conventions	Description
Text represented as a <i>screen display</i>	This typeface represents displays that appear on your terminal screen, for example: <code>Login:</code>
Text represented as commands	This typeface represents commands that you enter, for example: show ip access-list This document always gives the full form of a command in lowercase letters. Commands are not case sensitive.
Text represented as a command variable	This typeface represents a variable that is part of a command, for example: show card slot_number <i>slot_number</i> is a variable representing the applicable chassis slot number.
Text represented as menu or sub-menu names	This typeface represents menus and sub-menus that you access within a software application, for example: Click the File menu, then click New

Contacting Customer Support

Use the information in this section to contact customer support.

Refer to the support area of <http://www.cisco.com> for up-to-date product documentation or to submit a service request. A valid username and password are required to access this site. Please contact your Cisco sales or service representative for additional information.



CHAPTER 1

UCC 5G PCF - Release Change Reference

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- [Features and Changes Quick References](#), on page 1
- [Add CDL Utility to PCF Software Image](#), on page 2
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- [NF Set and NF Service Set](#), on page 4
- [URSP Support in PCF](#), on page 5

New in Documentation

Information on new features, enhancements, and behavior changes in the Release Change Reference (RCR) document will now be available under the **What's New in this Release** section in the 5G release notes.



Note This document will be deprecated in 2024.01 and later releases.

Features and Changes Quick References

Table 1:

Features / Behavior Changes	Release Introduced / Modified	Default
Add CDL Utility to PCF Software Image	2023.04.0	Enabled – Always-on
Enhancement to N7 and NRF Features in Support with Release 16 Baseline Compliance	2023.04.0	Enabled – Always-on
NF Set and NF Service Set	2023.04.0	Enabled – Always-on
URSP Support in PCF	2023.04.0	Enabled – Always-on

Add CDL Utility to PCF Software Image

Add CDL Utility to PCF Software Image

Feature Summary and Revision History

Table 2: Summary Data

Applicable Products or Functional Area	PCF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled - Always-on
Related Documentation	Not Applicable

Table 3: Revision History

Revision Details	Release
Added pcf-utilities pod to retain the CDL utility scripts on master nodes post force VM redeploy from Cluster Manager.	2023.04.0

Feature Description

PCF supports the `pcf-utilities` pod to retain the CDL utility scripts on master nodes post force VM redeploy from Cluster Manager. The scripts is available on the following master node persistent volume path:

```
/data/<pcf-namepsace>/ data-pcf-utilities-0/cdl/
```

For more information, refer to [Ultra Cloud Core 5G Policy Control Function Configuration and Administration Guide > Add CDL Utility to PCF Software](#) chapter.

Enhancement to N7 and NRF Features in Support with Release 16 Baseline Compliance

Enhancement to N7 and NRF Features in Support with Release 16 Baseline Compliance

Feature Summary and Revision History

Table 4: Summary Data

Applicable Products or Functional Area	PCF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled - Always-on
Related Documentation	Not Applicable

Table 5: Revision History

Revision Details	Release
Added support for: <ul style="list-style-type: none"> • Not supporting simultaneous online and offline charging. • Added <code>loadTimeStamp</code> attribute. 	2023.04.0

PCF supports the following enhancements of the N7 and NRF functionalities:

- Both the online and offline charging attributes shall not be simultaneously present with the same value
 - If offline charging applies, the PCF includes the `offline` attribute set to `true` within the `SmPolicyDecision` data structure in the response of HTTP POST message.
 - If online charging applies, the PCF includes the `online` attribute set to `true` within the `SmPolicyDecision` data structure in the response of HTTP POST message.
- Update the load information during the NRF profile registration, update and heartbeats. PCF captures the timestamp using the `loadTimeStamp` attribute to indicate the point of time in which the NF updates this attribute in NRF.

For more information, refer to [UCC 5G PCF Configuration and Administration Guide > Heartbeat](#) chapter and [UCC 5G PCF Configuration and Administration Guide > Online Charging Enablement over N7 to SMF](#) chapter.

NF Set and NF Service Set

NF Set and NF Service Set

Feature Summary and Revision History

Table 6: Summary Data

Applicable Products or Functional Area	PCF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled – Configuration required to disable
Related Documentation	Not Applicable

Table 7: Revision History

Revision Details	Release
First introduced.	2023.04.0

Feature Description

PCF supports the NF Set and NF Service Set feature. To configure the feature, the `set ID` attribute for NF Set ID and NF Service Set ID is added to the following CLI commands:

- `service-registration profile`
- `service-registration services`

Use the `set ID` attribute for configuring `nf-client` for the NF Set ID and NF Service Set ID in the following CLI commands:

- `profile nf-pair nf-type`
- `profile nf-client nf-type`

For more information, refer to [Ultra Cloud Core 5G Policy Control Function Configuration and Administration Guide > NF Set and NF Service Set](#) chapter.

URSP Support in PCF

URSP Support in PCRF

Feature Summary and Revision History

Table 8: Summary Data

Applicable Products or Functional Area	PCF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled - Always-on
Related Documentation	Not Applicable

Table 9: Revision History

Revision Details	Release
First introduced.	2023.04.0

Feature Description

PCF offers URSP support which is the UE Route Selection Policy. It is used by the UE to determine how to route outgoing traffic. Traffic can be routed to an established PDU Session, can be offloaded to non-3GPP access outside a PDU Session.

For more information, refer to [Ultra Cloud Core 5G Policy Control Function Configuration and Administration Guide > URSP Support in PCF](#) chapter.

