



Ultra Cloud Core 5G User Plane Function, Release 2021.04 - Release Change Reference

First Published: 2021-10-29

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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About this Guide



Note Control and User Plane Separation (CUPS) represents a significant architectural change in the way StarOS-based products are deployed in the 3G, 4G, and 5G networks. This document provides information on the features and functionality specifically supported by this 5G UPF product deployed in a 5G network. It should not be assumed that features and functionality that have been previously supported in legacy or non-CUPS products are supported by this product. References to any legacy or non-CUPS products or features are for informational purposes only. Furthermore, it should not be assumed that any constructs (including, but not limited to, commands, statistics, attributes, MIB objects, alarms, logs, services) referenced in this document imply functional parity with legacy or non-CUPS products. Please contact your Cisco Account or Support representative for any questions about parity between this product and any legacy or non-CUPS products.



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This Release Change Reference (RCR) describes new and modified feature and behavior change information for the applicable 5G UPF release(s).

- [Conventions Used, on page v](#)

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.

Notice Type	Description
Warning	Alerts you of potential personal injury or fatality. May also alert you of potential electrical hazards.

Typeface Conventions	Description
Text represented as a <code>screen display</code>	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 <i>variable</i>	This typeface represents a variable that is part of a command, for example: show card <i>slot_number</i> <i>slot_number</i> is a variable representing the desired 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



CHAPTER

1

UCC 5G UPF - Release Change Reference

- [Features and Behavior Change Quick Reference, on page 1](#)
- [Feature Defaults Quick Reference, on page 1](#)
- [IPsec Support for IPv6, on page 2](#)
- [IPv6 Dual-Stack Support, on page 3](#)
- [Outer Header Removal, on page 3](#)

Features and Behavior Change Quick Reference

Features / Behavior Changes	Release Introduced / Modified
IPsec Support for IPv6, on page 2	2021.04.0
IPv6 Dual-Stack Support, on page 3	2021.04.0
Outer Header Removal	2021.04.0

Feature Defaults Quick Reference

The following table indicates what features are enabled or disabled by default.

Feature	Default
IPSec Support for IPv6	Enabled - Always-on
IPv6 Dual-Stack Support	Enabled - Always-on
Outer Header Removal	Enabled - Always-on

IPsec Support for IPv6

Feature Summary and Revision History

Summary Data

Table 1: Summary Data

Applicable Product (s) or Functional Area	5G-UPF
Applicable Platforms	VPC-SI
Feature Default Setting	Enabled – Always-on
Related Changes in this Release	Not Applicable
Related Documentation	<i>UCC 5G UPF Configuration and Administration Guide</i>

Revision History

Table 2: Revision History

Revision Details	Release
First introduced	2021.04.0

Feature Description

IPsec is a suite of protocols that interact with one another to provide secure private communications across IP networks. These protocols allow the system to establish and maintain secure tunnels with peer security gateways. IPsec provides confidentiality, data integrity, access control, and data source authentication to IP datagrams.

For more information, refer to the [UCC 5G UPF Configuration and Administration Guide > IPsec Support for IPv6](#) chapter.

IPv6 Dual-Stack Support

Feature Summary and Revision History

Summary Data

Table 3: Summary Data

Applicable Product (s) or Functional Area	5G-UPF
Applicable Platforms	VPC-SI
Feature Default Setting	Enabled – Always-on
Related Changes in this Release	Not Applicable
Related Documentation	<i>UCC 5G UPF Configuration and Administration Guide</i>

Revision History

Revision Details	Release
First introduced.	2021.04.0

Feature Description

IPv6 Dual-Stack Support feature enables the gNodeB to support both IPv4 and IPv6 transport types over the same N3 interface.

This feature also provides IPv6 support on N3, N4, and N6 interfaces. N9 interface is currently not supported.

Outer Header Removal

Feature Summary and Revision History

Summary Data

Table 4: Summary Data

Applicable Product(s) or Functional Area	5G-UPF
Applicable Platform(s)	VPC-SI
Feature Default Setting	Enabled - Always-on

Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

Revision History

Table 5: Revision History

Revision Details	Release
Support is added for Outer Header Removal IE.	2021.04.0
In this release, PFCP library is upgraded to support the latest version of Outer Header IE.	2020.02.5
First introduced.	2020.02.0

Feature Description

Outer Header Removal feature is used to remove GPRS Tunnelling Protocol User Plane (GTP-U) header from the uplink GTP-U packets.

For more information, refer to the [UCC 5G UPF Configuration and Administration Guide > N4 Interface Compliance with 3GPP Specification](#) chapter.