



Cisco Ultra Cloud Core Serving Gateway Control Plane Function, Release 2023.04 - Release Change Reference

First Published: 2023-10-17

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 THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses and phone numbers are listed on the Cisco website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/c/en/us/about/legal/trademarks.html. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)

© 2023 Cisco Systems, Inc. All rights reserved.



CONTENTS

CHAPTER 1 UCC 5G cnSGW-C - Release Change Reference 1

New in Documentation 1

Features and Changes Quick Reference 1

Wireless Priority Service Enhancements 1

Feature Summary and Revision History 1

Summary Data 1

Revision History 2

Feature Description 2

Contents



UCC 5G cnSGW-C - Release Change Reference

- New in Documentation, on page 1
- Features and Changes Quick Reference, on page 1
- Wireless Priority Service Enhancements, on page 1

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 Reference

The following table indicates the default values for features and behavior changes in this release.

Features/ Behavior Changes	Release Introduced/ Modified	Default
Wireless Priority Service Enhancements, on page 1	2023.04.0	Enabled – Always-on

Wireless Priority Service Enhancements

Feature Summary and Revision History

Summary Data

Table 1: Summary Data

Applicable Product(s) or Functional Area cnSGW-C	Applicable Product(s) or Functional Area	cnSGW-C
--	--	---------

Applicable Platform(s)	SMI
Feature Default Setting	Disabled – Configuration required to enable
Related Documentation	Not Applicable

Revision History

Table 2: Revision History

Revision Details	Release
The following Wireless Priority Service enhancements are added:	2023.04.0
 Message Priority Profile support introduced. WPS session monitoring is performed using a sub-type label in the show sub CLI. 	
First introduced.	2021.02.0

Feature Description

Priorities determine the order in which service requests are dequeued by a server. For example, the priority that client assigns to individual services can range from 0 to 15, where 0 represents the highest priority.

In cnSGW, the cnSGW service sends the Inter-process Communication (IPC) message to the protocol pod for Wireleass Priority Service (WPS) session using Priority IPC Stream.

cnSGW creates the message-priority profile, which can define priority either at global level or at each interface level (PFCP, GTP). You can select the Message Priority value based on:

- ARP and QCI received in Bearer context in the Create Session Request (CSR), Create Bearer Response (CBR), and Create Session Response.
- Update Message priority value based on ARP and QCI received in Bearer context in the Update Bearer Request (UBR).

cnSGW supports the following functionalities:

- WPS sessions per Roaming partner.
- Exclusion of WPS sessions from overload throttling. For more information, refer to the *UCC 5G cnSGWc Configuration and Administration Guide > Sx Load/Overload Control Handling* and *GTPv2 Load/Overload Support* chapters.
- Session type conflict resolution at cnSGW.
- WPS sessions handing at UPF over Sxa Interface for collocated subscriber.
- · WPS session monitoring

Operators can monitor the S-GW service statistics for WPS users and users can also monitor number of active WPS sessions.

For more information, refer to the UCC 5G cnSGWc Configuration and Administration Guide > eMPS/WPS Support chapter.

Feature Description