



UPC CUPS Documentation Map, Release 21.25

First Published: 2021-09-30

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 3G/4G CUPS product deployed in a 3G/4G 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.

Table 1. UPC CUPS Documentation Map

Information Type	Document	Description
Overview information	<i>Ultra Packet Core CUPS Overview Guide</i>	Provides an overview of CUPS, architecture, platform requirements, etc.
Deployment information	<i>Ultra Packet Core CUPS Overview Guide, Release 21.25 > Deployment Information chapter</i>	Provides information on deploying CUPS. NOTE: For more information on 4G-LTE-5G-SA Deployment with NSO and ESC, and access to documentation, contact your Cisco Account representative.
	<i>VPC-DI System Administration Guide, StarOS Release 21.25</i> <i>VPC-SI System Administration Guide, StarOS Release 21.25</i>	Provides information on the Cisco Virtualized Packet Core– Distributed Instance (VPC-DI) and Cisco Virtualized Packet Core–Single Instance (VPC-SI), which consolidates the operations of the physical Cisco ASR 5500 chassis running StarOS into a single Virtual Machine (VM) that can run on commercial off-the-shelf (COTS) servers. NOTE: For information on deploying VPC-DI and VPC-SI, contact your Cisco Account representative.
CUPS Control Plane feature configuration procedures and troubleshooting information	<i>Ultra Packet Core CUPS Control Plane Administration Guide, Release 21.25</i>	Describes the CUPS Control Plane, how to configure the various features, monitoring and troubleshooting information.
CUPS User Plane feature configuration procedures and troubleshooting information	<i>Ultra Packet Core CUPS User Plane Administration Guide, Release 21.25</i>	Describes the CUPS User Plane, how to configure the various features, monitoring and troubleshooting information.
CUPS Sx Interface feature configuration procedures and troubleshooting information	<i>Ultra Packet Core CUPS Sx Interface Administration and Reference Guide, Release 21.25</i>	Describes the CUPS Sx interface, how to configure the various features, monitoring and troubleshooting information.
Redundancy Configuration Manager (RCM)	<i>Redundancy Configuration Manager Configuration and Administration Guide, Release 21.25</i>	Provides an overview of RCM, RCM High Availability, RCM IPSec, and N:M UP redundancy.

Information Type	Document	Description
Lawful Intercept Support	<i>Ultra Packet Core CUPS Lawful Interception Configuration Guide, Release 21.25</i>	Describes Lawful Intercept support in CUPS. NOTE: For access to the documentation, contact your Cisco Account representative.
Bulk Statistics	<i>Statistics and Counters Reference - Bulk-statistic Descriptions, StarOS Release 21.25</i>	Provides detailed descriptions of CUPS bulk statistics.
Release Notes	<i>21.25.0_ReleaseNotes</i>	Provides information to download the software. Lists resolved and open defects, upgrade and migration paths, limitations, and additional notes in this release.
CLI Reference information	<i>Command Line Interface Reference, Modes A - B, StarOS Release 21.25</i> <i>Command Line Interface Reference, Modes C - D, StarOS Release 21.25</i> <i>Command Line Interface Reference, Modes E - F, StarOS Release 21.25</i> <i>Command Line Interface Reference, Modes G - H, StarOS Release 21.25</i> <i>Command Line Interface Reference, Modes I - Q, StarOS Release 21.25</i> <i>Command Line Interface Reference, Modes R - Z, StarOS Release 21.25</i>	Provides information on the CLI commands for CUPS. NOTE: Not all configurations/ features/functionality are applicable for CUPS.
Statistics and Counters information	<i>Statistics and Counters Reference, StarOS Release 21.25</i>	Provides information on statistics and counters for CUPS.
SNMP MIB information	<i>SNMP MIB Reference, StarOS Release 21.25</i>	Provides information on SNMP MIBs for CUPS.
StarOS Reference Documentation		
Authentication, Authorization, and Accounting (AAA) reference	<i>AAA Interface Administration and Reference, StarOS Release 21.25</i>	Describes RADIUS and Diameter attributes supported in StarOS. NOTE: Not all RADIUS and Diameter attributes and/or features are applicable to CUPS.
Application Detection and Control (ADC)	<i>ADC Administration Guide, StarOS Release 21.25</i>	Describes the ADC in-line service, which is used to detect Peer-to-Peer protocols by analyzing traffic. NOTE: Not all ADC features/functionality are applicable for CUPS.
Content Filtering (CF)	<i>CF Administration Guide, StarOS Release 21.25</i> <i>Content Classification Manager Administration Guide, StarOS Release 21.25</i>	Describes Content Filtering, which is an in-line service available for 3GPP and 3GPP2 networks to filter HTTP and WAP requests from mobile subscribers based on the URLs in the requests. NOTE: Not all CF features/functionality are applicable for CUPS.
Enhanced Charging Service (ECS)	<i>ECS Administration Guide, StarOS Release 21.25</i>	Describes the ECS, which is an in-line service feature that enables operators to reduce billing-related costs and gives the ability to offer tiered, detailed, and itemized billing to their subscribers. NOTE: Not all ECS features/functionality are applicable for CUPS.

Information Type	Document	Description
Gateway GPRS Support Node (GGSN)	<i>GGSN Administration Guide, StarOS Release 21.25</i>	Describes the GGSN, which provides wireless carriers with a flexible solution that functions in General Packet Radio Service (GPRS) or Universal Mobile Telecommunications System (UMTS) wireless data networks. NOTE: Not all GGSN features/functionality/interfaces are applicable for CUPS.
GPRS Tunneling Protocol Prime (GTPP)	<i>GTPP Interface Administration and Reference, StarOS Release 21.25</i>	Describes the GTPP protocol accounting, and the specific Charging Data Records (CDRs) supported in the Cisco ASR 5500 Multimedia Core Platform. NOTE: Not all GTPP features/functionality/CDRs are applicable for CUPS.
Network Address Translation (NAT)	<i>NAT Administration Guide, StarOS Release 21.25</i>	Describes the NAT, which is an in-line service feature that translates non-routable private IP address(es) to routable public IP address(es) from a pool of public IP addresses that have been designated for NAT. NOTE: Not all NAT features/functionality are applicable for CUPS.
Open Source Software License information	<i>Open Source Software Licenses in the StarOS Release 21.25</i>	Provides information about Open Source used in StarOS.
Packet Data Network (PDN) Gateway (P-GW)	<i>P-GW Administration Guide, StarOS Release 21.25</i>	Describes the P-GW, which is a critical network function for the 4G mobile core network, known as the evolved packet core (EPC). NOTE: Not all P-GW features/functionality are applicable for CUPS.
Serving Gateway (S-GW)	<i>S-GW Administration Guide, StarOS Release 21.25</i>	Describes the S-GW, which routes and forwards data packets from the UE and acts as the mobility anchor during inter-eNodeB handovers. NOTE: Not all S-GW features/functionality are applicable for CUPS.
System Architecture Evolution Gateway (SAEGW)	<i>SAEGW Administration Guide, StarOS Release 21.25</i>	Describes the SAEGW, which provides wireless carriers with a flexible solution that functions with P-GW and S-GW in LTE-SAE (3GPP2 Long Term Evolution-System Architecture Evolution) wireless data networks. NOTE: Not all SAEGW features/functionality are applicable for CUPS.
Thresholding	<i>Thresholding Configuration Guide, StarOS Release 21.25</i>	Describes the Thresholding on the system that is used to monitor the system for conditions that could potentially cause errors or outage. NOTE: Not all Thresholds/features/functionality are applicable for CUPS.

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 are considered un-Controlled copies and the original on-line version should be referred to for latest version.

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax 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: www.cisco.com/go/trademarks. 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)

© 2021 Cisco Systems, Inc. All rights reserved.