Release Notes for Cisco NCS 4201 and Cisco NCS 4202 Series, Cisco IOS XE Fuji 16.7.x

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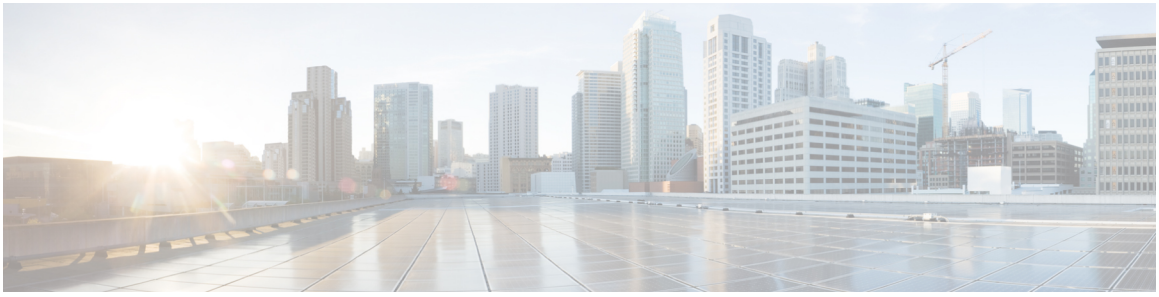
Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
http://www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883



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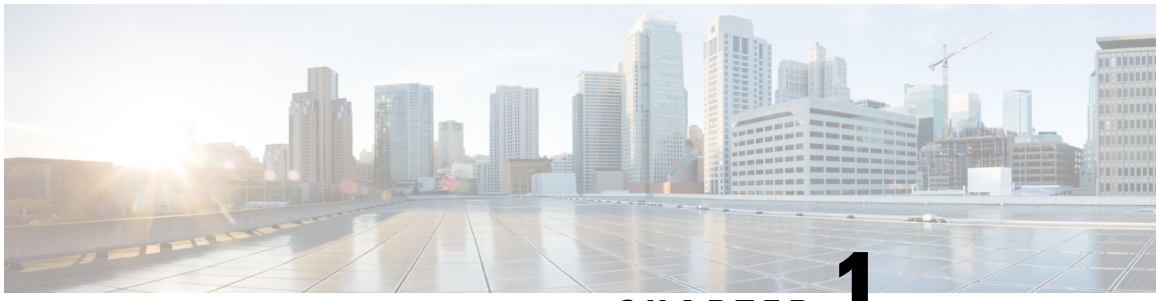


CHAPTER 1

Introduction

This document provides information about the IOS XE software release for the Cisco NCS 4201 and Cisco NCS 4202 beginning with Cisco IOS XE Everest 16.5.1, which is the first supported release in the Release 16 Series.

Cisco NCS 4201 and Cisco NCS 4202 Overview

The Cisco NCS 4201 and NCS 4202 Network Convergence Systems are full-featured, compact one-RU high converged access platforms designed for the cost-effective delivery of TDM to IP or MPLS migration services. These temperature-hardened, high-throughput, small-form-factor, low-power-consumption systems are optimized for circuit emulation (CEM) and business applications. NCS 4201 and NCS 4202 chassis allow service providers to deliver dense scale in a compact form factor and unmatched CEM and Carrier Ethernet (CE) capabilities. They also provide a comprehensive and scalable feature set, supporting both Layer 2 VPN (L2VPN) and Layer 3 VPN (L3VPN) services in a compact package .

For more information on the Cisco NCS 4201 Chassis, see the Cisco NCS 4201 Hardware Installation Guide.

For more information on the Cisco NCS 4202 Chassis, see the Cisco NCS 4202 Hardware Installation Guide.

Feature Navigator

You can use Cisco Feature Navigator to find information about feature, platform, and software image support. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on cisco.com is not required.

Hardware Supported

NCS4201 is a fixed router and does not have any field replaceable units.

The following table lists the hardware supported for Cisco NCS 4202 chassis.

Chassis	Supported Interface Modules	Part Numbers
NCS 4202	8 port T1/E1 CEM Interface Module	NCS4200-8E1T1-CE
	1 port OC-48/STM-16 or 4 port OC-12/OC-3 / STM-1/STM-4 + 12 ports T1/E1 + 4 ports T3/E3	NCS4200-3GMS
	8-Port 1GE RJ45 and 1-Port 10GE SFP+ module	NCS4200-1T8LR-PS

Determining the Software Version

You can use the following commands to verify your software version:

- Consolidated Package— **show version**
- Individual sub-packages—**show version installed** (lists all installed packages)

ROMMON Version

- NCS4201—15.6(31r)S
- NCS4202—15.6(24r)S

Bundled FPGA Versions

The following are HoFPGA versions bundled in the IOS:

- NCS4201—0X00030015
- NCS4202
  - BFD—0X0003001c
  - Netflow—0X00020008

The following is the CEM FPGA version:

- NCS4202—0x10050071

The following are HoFPGA versions bundled in the IOS for 3.18.8aSP release:

- NCS4201—0X00030015

- NCS4202
  - BFD—0X0003001c
  - Netflow—0X00020008

The following is the CEM FPGA version:

- NCS4202—NA

The following are HoFPGA versions bundled in the IOS for 3.18.9SP release:

- NCS4201—0X00030014
- NCS4202
  - BFD—0X0003001b
  - Netflow—0X00020008

The following is the CEM FPGA version:

- NCS4202—NA

Limitations and Restrictions on the Cisco NCS 4201 and Cisco NCS 4202 Series

- The default interface command is used to default the parameters under that interface. However, when speed is configured on the interface, the following error is displayed:

  ```
  Speed is configured. Remove speed configuration before enabling auto-negotiation
  ```

- SSFPs are not supported.
- Virtual services should be deactivated and uninstalled before performing replace operations.
- For Cisco NCS 4202 Series:
  - Interface naming is from right to left. For more information, see the Cisco NCS 4200 Series Software Configuration Guide .
  - Packet size greater than 1460 is not supported over IPsec Tunnel.
  - Minimal traffic drop might be seen for a moment when higher rate traffic is sent through the IPsec tunnels for the first time.
  - IPsec is only supported for TCP and UDP and is not supported for SCTP.

Known Issues

Identifier	Description
CSCux22026	supress syslog messages while booting up for internal interfaces

Field Notices and Bulletins

- Field Notices—We recommend that you view the field notices for this release to determine whether your software or hardware platforms are affected. You can find field notices at http://www.cisco.com/en/US/support/tsd_products_field_notice_summary.html.
- Bulletins—You can find bulletins at http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod_literature.html.

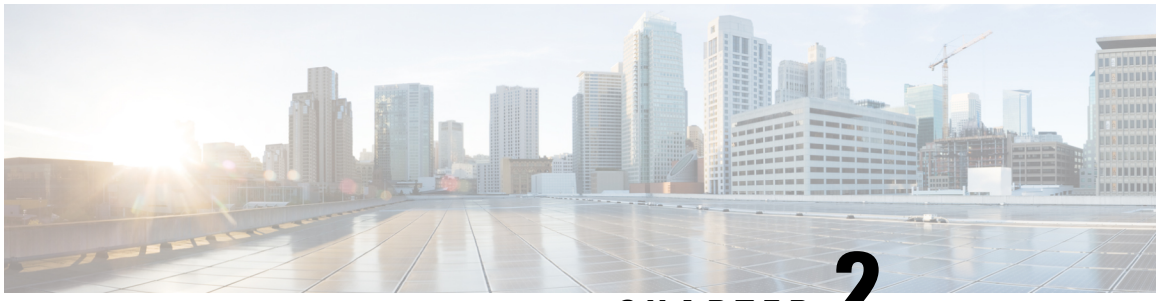
MIB Support

To view supported MIB, go to http://tools.cisco.com/ITDIT/MIBS/MainServlet.

Accessibility Features in the Cisco NCS 4201 and Cisco NCS 4202 Series

For a list of accessibility features in Cisco NCS 4201 and Cisco NCS 4202 Series, see the Voluntary Product Accessibility Template (VPAT) on the Cisco website, or contact accessibility@cisco.com.

All product documents are accessible except for images, graphics, and some charts. If you would like to receive the product documentation in audio format, braille, or large print, contact accessibility@cisco.com.



CHAPTER 2

New Features

This chapter describes the new hardware and software features supported on the Cisco NCS 4200 Series in this release.

New Software Features for NCS 4201 and NCS 4202 in Cisco IOS XE Fuji 16.7.2

There are no new software features in this release.

New Hardware Features for NCS 4201 and NCS 4202 in Cisco IOS XE Fuji 16.7.2

There are no new hardware features in this release.

New Software Features for NCS 4201 and NCS 4202 in Cisco IOS XE Fuji 16.7.1

- **3G SDH Support on the 1 port OC48/ 4 port OC12/OC3 + 12 port T1/E1 + 4 port T3/E3 CEM Interface Module**

  Synchronous Digital Hierarchy (SDH) is supported on the 4 Port OC481/OC12/OC3 + 12 Port A900-IMA3G-IMSGT1/E1 + 4 Port T3/E3 CEM Interface Module.

  Note You can configure STM-1 or STM-4 on all four ports. If you configure rate STM-16 on any of the four ports, others ports are not available.

- **Latching Loopback**

  Latching loopback feature is supported.

  For more information, see Carrier Ethernet Configuration Guide Cisco IOS XE Fuji 16.7.x.

- **Layer 2 Control Protocol**

  Effective Cisco IOS XE Fuji 16.7.1, you can forward, tunnel, or discard Multiple Registration Protocol (MRP), Multiple VLAN Registration Protocol (MMRP) or Multiple MAC Registration Protocol (MVRP) for a service instance on an ethernet interface.

  For more information, see Carrier Ethernet Configuration Guide, Cisco IOS XE Fuji 16.7.x.

- **Port Licensing Support on the 1 port OC48/ 4 port OC12/OC3 + 12 port T1/E1 + 4 port T3/E3 CEM Interface Module**

  The Cisco Software License Activation feature is a set of processes and components to activate Cisco IOS XE software feature sets by obtaining and validating fee-based Cisco software licenses. You should enable the license only for OCx ports. Use the **platform enable controller Mediatype** command to enable a particular license type on the controller port.

  Note License is not required for the ports 0-15 (DSx ports).

- **Programmability**

  - Yet Another Next Generation (YANG) data-modelling language—A Data Modelling Language for the Network Configuration Protocol (NETCONF), which replaces the process of manual configuration with a programmatic and standards-based way of writing configurations to any network device. It supports the automation of configuration for multiple switches across the network using data models.
  - RESTCONF—Provides a programmatic interface based on standard mechanisms for accessing configuration data, state data, data-model-specific Remote Procedure Call (RPC) operations and event notifications defined in the YANG model.
  - YANG Data Models—For the list of Cisco IOS XE YANG models available with this release, navigate to https://github.com/YangModels/yang/tree/master/vendor/cisco/xe/1671.

    Revision statements embedded in the YANG files indicate if there has been a model revision. The README.md file in the same github location highlights changes that have been made in the release.

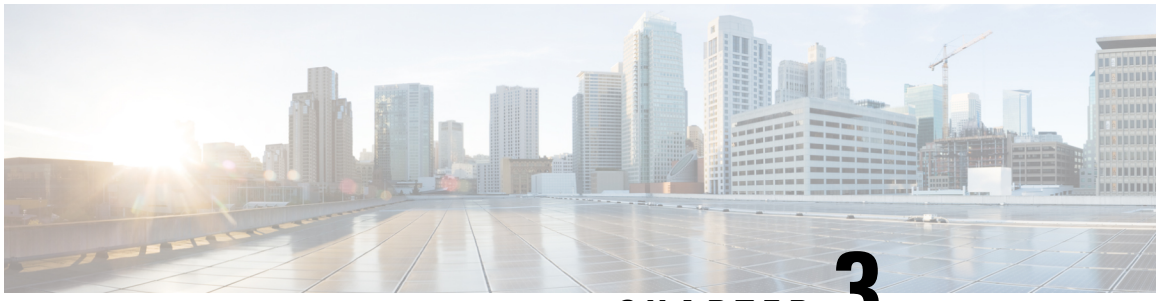
    For more information, see Programmability Configuration Guide, Cisco IOS XE Fuji 16.7.x.

New Hardware Features for NCS 4201 and NCS 4202 in Cisco IOS XE Fuji 16.7.1

- **4 Port OC48/OC12/OC3 + 12 Port T1/E1 + 4 Port T3/E3 CEM Interface Module**

  The NCS4202-3GMS interface module supports 12xDS1/E1 + 4xDS3/E3/STS-1e + 4xOC3/12/1GE or 1xOC48 interface over the high-density port.

  For more information on supported ports, see Cisco NCS 4202 Hardware Installation Guide.



CHAPTER 3

Caveats

This chapter describes open and resolved severity 1 and 2 caveats and select severity 3 caveats:

- The "Open Caveats" sections list open caveats that apply to the current release and may apply to previous releases. A caveat that is open for a prior release and is still unresolved applies to all future releases until it is resolved.
- The "Resolved Caveats" sections list caveats resolved in a specific release, but open in previous releases.

The bug IDs are sorted alphanumerically.

Note The Caveats section includes the bug ID and a short description of the bug. For details on the symptoms, conditions, and workaround for a specific caveat you must use the Bug Search Tool.

Cisco Bug Search Tool

Cisco Bug Search Tool (BST), the online successor to Bug Toolkit, is designed to improve effectiveness in network risk management and device troubleshooting. You can search for bugs based on product, release, and keyword, and aggregates key data such as bug details, product, and version. For more details on the tool, see the help page located at http://www.cisco.com/web/applicat/cbsshelp/help.html

Open Caveats – Cisco IOS XE Fuji 16.7.2

Caveat ID Number	Description
CSCve00923	SR_OSPF::High conv observed with LDP labeled in primary path and unlabeled/imp null backup path

Caveat ID Number	Description
CSCvi41441	Monitor session configuration without destination interface blocks ISIS on source interface

Resolved Caveats – Cisco IOS XE Fuji 16.7.2

Caveat ID Number	Description
CSCvc27630	Tx Packets or Tx Bytes generated is always lesser than configured rate-steps
CSCvf46252	Crash in cylon_mgr when MPLS TE interface shut down
CSCvf80724	VPLS A-S PW : Complete traffic drop (imp and disp) over VPLS Act PW
CSCvf99074	Ping Loss on Built-in Te 0/0/10 or 0/0/11 Port and CRC / MAC Errors at Peer End
CSCvg21893	Unexpected traffic was sent out from access port from REP ring
CSCvg21899	Traffic forwarding not happening for VLANs added via "encap dot1q add" command in TEFP
CSCvg36200	IPv4 deny ACL applied in the BDI is blocking L2 switched traffic under certain conditions
CSCvg53877	Egress QOS Fails when speed is changed at interface via nego auto, speed cli command
CSCvg79798	"ZTP reset" as last reload reason in IOS when ZTP button pressed > 8sec
CSCvg85163	ZTP not triggered with Gratuitous ARP
CSCvg86559	Cylon_Mgr Resources Leaked on Multiple Occurrences of Primary Core BFD Session Flaps
CSCvh03346	Fan speed display in IOS not matching the actual written value and read value
CSCvh22799	Ports 4-7 no traffic flow on TDM IM removal and inserting gig IM
CSCvh41777	Removal of the policy from the service instance under a tengig interface causes traffic loss
CSCvh86486	Issue with sfp-h10gb-cu1m cabling
CSCvi06424	Traffic fails after moving/relearning mac-address from EFP to Xconnect interface
CSCvi44683	REP: Not able to achieve less than 50ms convergence
CSCvh55399	T1 Service Latency is Asymmetric in a Simple Linear Topology

Open Caveats – Cisco IOS XE Fuji 16.7.1

Caveat ID Number	Description
CSCvf97552	dualrate_eem_policy doesnt succeed durint port mode change which causes BDI Ping failure
CSCvg08224	G8265.1: PTP flaps between HOLDOVER and LOCKED with 64/64 packet rate and HOTSTANDBY
CSCvg26930	Ten Gig interface going into admin down state after one gig shut down
CSCvg42314	Random BFD Flap seen on ASR920.

Resolved Caveats – Cisco IOS XE Fuji 16.7.1

Caveat ID Number	Description
CSCvd75495	Wrong marking for locally generated packet of BFD,LDP, and BGP
CSCvf10783	Cisco IOS XE Software for Cisco ASR 920 Series Routers Arbitrary File Overwrite Vulnerability
CSCvf90854	configured priority2 under ptp clock is not sent downstream when T- BC selected VP
CSCvf96793	DS3 VCOP AIS raised for J1 byte mismatch