



Cisco Nexus 3000 Series NX-OS Release Notes, Release 6.0(2)U2(1)

Release Date: December 16, 2013
Part Number: OL-29565-05 D0
Current Release: Cisco NX-OS Release 6.0(2)U2(1)

This document describes the features, caveats, and limitations for Cisco Nexus 3000 Series and Cisco Nexus 3100 Series switches. Use this document in combination with documents listed in the “[Obtaining Documentation and Submitting a Service Request](#)” section on page 28.



Note

Release notes are sometimes updated with new information about restrictions and caveats. See the following website for the most recent version of the Cisco Nexus 3000 Series release notes: <http://www.cisco.com/c/en/us/support/switches/nexus-3000-series-switches/products-release-notes-list.html>



Note

[Table 1](#) shows the online change history for this document.

Table 1 Online History Change

Part Number	Revision	Date	Description
OL-29565-05	A0	December 16, 2013	Created NX-OS Release 6.0(2)U2(1) release notes.
	B0	December 23, 2013	Added new hardware descriptions and updated the Open Caveats.
	D0	May 25, 2014	Added CSCuh83492 to the list of Closed Caveats.



Table 1 **Online History Change**

Part Number	Revision	Date	Description
	E0	May 11, 2015	Added Known Behaviors in Cisco NX-OS Release 6.0(2)U2(1) , page 26.
	F0	November 3, 2015	Added the following footnote: GLC-SX-MMD is supported on all Cisco Nexus 3000 Series Switches except for the Cisco Nexus 3064-T. Please refer to the comparability matrix for all the supported platforms.

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Introduction

Several new hardware and software features are introduced for the Cisco Nexus 3000 Series and Cisco Nexus 3100 Series devices to improve the performance, scalability, and management of the product line. Cisco NX-OS Release 6.x also supports all hardware and software supported in Cisco NX-OS Release 5.1 and Cisco NX-OS Release 5.0.

Cisco NX-OS offers the following benefits:

- Cisco NX-OS runs on all Cisco data center switch platforms: Cisco Nexus 7000, Nexus 5000, Nexus 4000, Nexus 3000, Nexus 2000, and Nexus 1000V Series switches.
- Cisco NX-OS software interoperates with Cisco products that run any variant of Cisco IOS software and also with any networking operating system that conforms to common networking standards.
- Cisco NX-OS modular processes are triggered on demand, each in a separate protected memory space. Processes are started and system resources are allocated only when a feature is enabled. The modular processes are governed by a real-time preemptive scheduler that helps ensure timely processing of critical functions.
- Cisco NX-OS provides a programmatic XML interface that is based on the NETCONF industry standard. The Cisco NX-OS XML interface provides a consistent API for devices. Cisco NX-OS also provides support for Simple Network Management Protocol (SNMP) Versions 1, 2, and 3 MIBs.
- Cisco NX-OS enables administrators to limit access to switch operations by assigning roles to users. Administrators can customize access and restrict it to the users who require it.

Cisco Nexus 3000 Series Switches

The Cisco Nexus 3000 Series switches are high-performance, high-density, ultra-low-latency Ethernet switches that provide line-rate Layer 2 and Layer 3 switching. The Cisco Nexus 3000 Series includes the following switches:

- The Cisco Nexus 3064 switch is a 1 RU switch that supports 48 1- or 10-Gigabit downlink ports, four Quad Small Form-Factor Pluggable (QSFP+) ports that can be used as a 40 Gigabit Ethernet port or 4 x10-Gigabit Ethernet ports, one 10/100/1000 management port, and one console port.
- The Cisco Nexus 3048 switch is a 1 rack unit (RU) switch that supports 48 10/100/1000 Ethernet server-facing (downlink) ports, four 10-Gigabit network-facing (uplink) ports, one 100/1000 management port, and one console port.

- The Cisco Nexus 3016 is a 1 RU, 16-port QSFP+ switch. Each QSFP+ port can be used as a 40-Gigabit Ethernet port or 4 x10-Gigabit Ethernet ports.

Each switch includes one or two power supply units and one fan tray module, and each switch can be ordered with either forward (port-side exhaust) airflow or reverse (port-side intake) airflow for cooling. All platforms support both AC and DC power supplies. All combinations of power (AC/DC) and airflow (forward/reverse) are available. The Cisco Nexus 3000 Series switches run the Cisco NX-OS software.

For information about the Cisco Nexus 3000 Series, see the [Cisco Nexus 3000 Series Hardware Installation Guide](#).

Cisco Nexus 3100 Series Switches

The Cisco Nexus 3100 Series switches are high-performance, high-density, ultra-low-latency Ethernet switches that provide line-rate Layer 2 and Layer 3 switching. In Cisco NX-OS Release 6.0(2)U2(1), the Cisco Nexus 3100 Series includes the Cisco Nexus 3132 switch.

The Cisco Nexus 3132 switch is a 1RU, 40-Gbps QSFP-based switch that supports 32 fixed 40-Gbps QSFP+ ports. It also has 4 SFP+ ports that can be internally multiplexed with the first QSFP port. Each QSFP+ port can operate in the default 40-Gbps mode or 4 x 10-Gbps mode, up to a maximum of 104 10-Gbps ports.

Each switch includes dual redundant power supply units, four redundant fans, one 10/100/1000 management port, and one console port. Each switch can be ordered with either forward (port-side exhaust) airflow or reverse (port-side intake) airflow for cooling. It supports both AC and DC power supplies. All combinations of power (AC/DC) and airflow (forward/reverse) are available. The Cisco Nexus 3100 Series switches run the Cisco NX-OS software.

For information about the Cisco Nexus 3000 Series, see the [Cisco Nexus 3100 Series Hardware Installation Guide](#).

System Requirements

This section includes the following topics:

- [Memory Requirements, page 4](#)
- [Hardware Supported, page 4](#)
- [Twinax Cable Support on Cisco Nexus 3000 Switches, page 16](#)
- [Cisco QSFP 40-Gbps Bidirectional Short-Reach Transceiver, page 17](#)

Memory Requirements

The Cisco NX-OS Release 6.0(2)U2(1) software requires 135 MB of flash memory.

Hardware Supported

Cisco NX-OS Release 6.0(2)U2(1) supports the Cisco Nexus 3000 Series switches. You can find detailed information about supported hardware in the [Cisco Nexus 3000 Series Hardware Installation Guide](#).

Table 2 shows the hardware supported by the Cisco NX-OS Release 6.x software. Table 3 shows the hardware supported by the Cisco NX-OS 5.x releases.

Table 4 shows the transceivers supported by the Cisco NX-OS Release 6.x software. Table 5 shows transceivers supported by the Cisco NX-OS 5.x releases.

Table 2 Hardware Supported by Cisco NX-OS Release 6.x Software

Hardware	Part Number	Supported Cisco NX-OS Release	Supported Cisco NX-OS Release
		6.0(2)U1(3) 6.0(2)U1(2) 6.0(2)U1(1a) 6.0(2)U1(1)	6.0(2)U2(1)
Cisco Nexus 3132Q switch	N3K-C3132Q-40GE		X
Cisco Nexus 3016 switch	N3K-C3016Q-40GE	X	X
Cisco Nexus 3048 switch	N3K-C3048TP-1GE	X	X
Cisco Nexus 3064-TQ switch	N3K-C3064TQ-10GT	X	X
Cisco Nexus 3064-X switch	N3K-C3064PQ-10GX	X	X
Cisco Nexus 3064-E switch	N3K-C3064PQ-10GE	X	X
Cisco Nexus 3064 switch	N3K-C3064PQ	X	X
Cisco Nexus 3048 fan module with forward airflow (port-side exhaust)	N3K-C3048-FAN	X	X
Cisco Nexus 3048 fan module with reverse airflow (port-side intake)	N3K-C3048-FAN-B	X	X
Cisco Nexus 3064-T 500W forward airflow (port-side exhaust) AC power supply	NXA-PAC-500W	X	X
Cisco Nexus 3064-T 500W reverse airflow (port-side intake) AC power supply	NXA-PAC-500W-B	X	X
Cisco Nexus 3064-X forward airflow (port-side exhaust) AC power supply	N3K-C3064-X-FA-L3	X	X
Cisco Nexus 3064-X reversed airflow (port-side intake) AC power supply	N3K-C3064-X-BA-L3	X	X
Cisco Nexus 3064-X forward airflow (port-side exhaust) DC power supply	N3K-C3064-X-FD-L3	X	X
Cisco Nexus 3064-X forward airflow (port-side intake) DC power supply	N3K-C3064-X-BD-L3	X	X
Cisco Nexus 3064 fan module with forward airflow (port-side exhaust); also used in the Cisco Nexus 3016	N3K-C3064-FAN	X	X

Hardware	Part Number	Supported Cisco NX-OS Release	Supported Cisco NX-OS Release
		6.0(2)U1(3) 6.0(2)U1(2) 6.0(2)U1(1a) 6.0(2)U1(1)	6.0(2)U2(1)
Cisco Nexus 3064 fan module with reverse airflow (port-side intake); also used in the Cisco Nexus 3016	N3K-C3064-FAN-B	X	X
Cisco Nexus 3000 power supply with forward airflow (port-side exhaust)	N2200-PAC-400W	X	X
Cisco Nexus 3000 power supply with reverse airflow (port-side intake)	N2200-PAC-400W-B	X	X
Cisco Nexus 2000 power supply with forward airflow (port-side exhaust)	N2200-PDC-400W	X	X
Cisco Nexus 2000 DC power supply with reverse airflow (port-side intake)	N3K-PDC-350W-B	X	X

Table 3 Hardware Supported by Cisco NX-OS Release 5.x Software

Hardware	Part Number	Supported Cisco NX-OS Release						
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2) 5.0(3)U3(1)	5.0(3)U2(2d) 5.0(3)U2(2c) 5.0(3)U2(2b)	5.0(3)U2(2a)	5.0(3)U2(2) 5.0(3)U2(1) 5.0(3)U1(2a) 5.0(3)U1(2)	5.0(3)U1(1d)
Cisco Nexus 3016 switch	N3K-C3016Q-40GE	X	X	X	X	X	—	—
Cisco Nexus 3048 switch	N3K-C3048TP-1GE	X	X	X	X	—	—	—
Cisco Nexus 3064-TQ switch	N3K-C3064TQ-10GT	X ¹	—	—	—	—	—	—
Cisco Nexus 3064-X switch	N3K-C3064P10GX	X	X	X	—	—	—	—
Cisco Nexus 3064-E switch	N3K-C3064PQ-10GE	X	X	X	X	X	X	—
Cisco Nexus 3064 switch	N3K-C3064PQ	X	X	X	X	X	X	X

Table 3 Hardware Supported by Cisco NX-OS Release 5.x Software (continued)

Hardware	Part Number	Supported Cisco NX-OS Release						
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2) 5.0(3)U3(1)	5.0(3)U2(2d) 5.0(3)U2(2c) 5.0(3)U2(2b)	5.0(3)U2(2a)	5.0(3)U2(2) 5.0(3)U2(1) 5.0(3)U1(2a) 5.0(3)U1(2)	5.0(3)U1(1d)
Cisco Nexus 3048 fan module with forward airflow (port-side exhaust)	N3K-C3048-FAN	X	X	X	X	—	—	—
Cisco Nexus 3048 fan module with reverse airflow (port-side intake)	N3K-C3048-FAN-B	X	X	X	X	—	—	—
Nexus 3064-T 500W forward airflow (port side exhaust) AC power supply	NXA-PAC-500W	X	X	—	—	—	—	—
Nexus 3064-T 500W reverse airflow (port side intake) AC power supply	NXA-PAC-500W-B	X	X	—	—	—	—	—
Cisco Nexus 3064-X forward airflow (port-side exhaust) AC power supply	N3K-C3064-X-FA-L3	X	X	X	—	—	—	—

Table 3 Hardware Supported by Cisco NX-OS Release 5.x Software (continued)

Hardware	Part Number	Supported Cisco NX-OS Release						
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2) 5.0(3)U3(1)	5.0(3)U2(2d) 5.0(3)U2(2c) 5.0(3)U2(2b)	5.0(3)U2(2a)	5.0(3)U2(2) 5.0(3)U2(1) 5.0(3)U1(2a) 5.0(3)U1(2)	5.0(3)U1(1d)
Cisco Nexus 3064-X reversed airflow (port-side intake) AC power supply	N3K-C3064-X-BA-L3	X	X	X	—	—	—	—
Cisco Nexus 3064-X forward airflow (port-side exhaust) DC power supply	N3K-C3064-X-FD-L3	X	X	X	—	—	—	—
Cisco Nexus 3064-X forward airflow (port-side intake) DC power supply	N3K-C3064-X-BD-L3	X	X	X	—	—	—	—
Cisco Nexus 3064 fan module with forward airflow (port-side exhaust); also used in the Cisco Nexus 3016	N3K-C3064-FAN	X	X	X	X	X	X	X

Table 3 Hardware Supported by Cisco NX-OS Release 5.x Software (continued)

Hardware	Part Number	Supported Cisco NX-OS Release						
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2) 5.0(3)U3(1)	5.0(3)U2(2d) 5.0(3)U2(2c) 5.0(3)U2(2b)	5.0(3)U2(2a)	5.0(3)U2(2) 5.0(3)U2(1) 5.0(3)U1(2a) 5.0(3)U1(2)	5.0(3)U1(1d)
Cisco Nexus 3064 fan module with reverse airflow (port-side intake); also used in the Cisco Nexus 3016	N3K-C3064-FAN-B	X	X	X	X	X	X	X
Cisco Nexus 3000 power supply with forward airflow (port-side exhaust)	N2200-PAC-400W	X	X	X	X	X	X	X
Cisco Nexus 3000 power supply with reverse airflow (port-side intake)	N2200-PAC-400W-B	X	X	X	X	X	X	X
Cisco Nexus 2000 power supply with forward airflow (port-side exhaust)	N2200-PDC-400W	X	X	X	X	X	X	X
Cisco Nexus 2000 DC power supply with reverse airflow (port-side intake)	N3K-PDC-350W-B	X	X	X	X	X	X	X

1. Recommended release for Cisco Nexus 3064-TQ switch is Cisco NX-OS Release 5.0(3)U5(1c) or later releases.

Table 4 Transceivers Supported by Cisco NX-OS Release 6.x Software

Transceivers ¹	Part Number	Supported Cisco NX-OS Release	
		6.0(2)U1(3) 6.0(2)U1(2) 6.0(2)U1(1a) 6.0(2)U1(1)	6.0(2)U2(1)
QSFP			
QSFP 40G Bidirectional short-reach transceiver	QSFP-40G-SR-BD	X	X
QSFP 40G active optical cable 1 m	QSFP-H40G-AOC1M	X	X
QSFP 40G active optical cable 2 m	QSFP-H40G-AOC2M	X	X
QSFP 40G active optical cable 3 m	QSFP-H40G-AOC3M	X	X
QSFP 40G active optical cable 5 m	QSFP-H40G-AOC5M	X	X
QSFP 40G active optical cable 7 m	QSFP-H40G-AOC7M	X	X
QSFP 40G active optical cable 10 m	QSFP-H40G-AOC10M	X	X
QSFP to 4 x SFP 10Gbps active optical cable 1 m	QSFP-4X10G-AOC1M	X	X
QSFP to 4 x SFP 10Gbps active optical cable 2 m	QSFP-4X10G-AOC2M	X	X
QSFP to 4 x SFP 10Gbps active optical cable 3 m	QSFP-4X10G-AOC3M	X	X
QSFP to 4 x SFP 10Gbps active optical cable 5 m	QSFP-4X10G-AOC5M	X	X
QSFP to 4 x SFP 10Gbps active optical cable 7 m	QSFP-4X10G-AOC7M	X	X
QSFP to 4 x SFP 10Gbps active optical cable 10 m	QSFP-4X10G-AOC10M	X	X
Active copper splitter cable 7 m	QSFP-4x10G-AC7M ²	X	X
Active copper splitter cable 10 m	QSFP-4x10G-AC10M ¹	X	X
Active copper QSFP transceiver module 7 m	QSFP-H40G-ACU7M ¹	X	X
Active copper QSFP transceiver module 10 m	QSFP-H40G-ACU10M ¹	X	X
40GBASE-CSR4 QSFP transceiver module with multifiber push-on (MPO) connector 300 m	QSFP-40G-CSR4 ¹	X	X
40GBASE-CSR4 QSFP transceiver module with MPO connector 300 m (using fiber splitter cables)	QSFP-40G-CSR4 ¹	X	X
40GBASE-SR4 QSFP transceiver module with MPO connector 100 m	QSFP-40G-SR4 ¹	X	X
40GBASE-SR4 QSFP transceiver module with MPO connector 100 m (using fiber splitter cables)	QSFP-40G-SR4 ¹	X	X
40GBASE-LR4 QSFP transceiver module with LC connector 10 km (using single mode fiber)	QSFP-40GE-LR4	X	X
QSFP to SFP/SFP+ adapter	CVR-QSFP-SFP10G	X	X
40GBASE-CR4 passive copper cable, 1 m	QSFP-H40G-CU1M	X	X

Table 4 Transceivers Supported by Cisco NX-OS Release 6.x Software (continued)

Transceivers ¹	Part Number	Supported Cisco NX-OS Release	
		6.0(2)U1(3) 6.0(2)U1(2) 6.0(2)U1(1a) 6.0(2)U1(1)	6.0(2)U2(1)
40GBASE-CR4 passive copper cable, 3 m	QSFP-H40G-CU3M	X	X
40GBASE-CR4 passive copper cable, 5 m	QSFP-H40G-CU5M	X	X
QSFP to 4xSFP10G passive copper splitter cable, 1 m	QSFP-4SFP10G-CU1M	X	X
QSFP to 4xSFP10G passive copper splitter cable, 3 m	QSFP-4SFP10G-CU3M	X	X
QSFP to 4xSFP10G passive copper splitter cable, 5 m	QSFP-4SFP10G-CU5M	X	X
Revision 2 copper splitter cables 3 m	QSFP-4SFP10G-CU3 (Rev. 2)	X	X
Revision 2 copper splitter cables 5 m	QSFP-4SFP10G-CU5 (Rev. 2)	X	X
10-Gigabit			
10GBASE-DWDM long-range transceiver module 80 km with single mode duplex fiber	DWDM-SFP10G	X	X
10GBASE-SR SFP+ module (multimode fiber [MMF])	SFP-10G-SR	X	X
10GBASE-LR SFP+ module (single-mode fiber [SMF])	SFP-10G-LR	X	X
10GBASE-ER SFP+ module (single-mode fiber [SMF])	SFP-10G-ER	X	X
10GBASE-ZR SFP+ module (single-mode fiber [SMF]) ³	SFP-10G-ZR ²	X	X
10GBASE-DWDM SFP+ module (single-mode fiber [SMF]) ²	10-2767-01 ²	X	X
Active Twinax cable assembly, 7 m	SFP-H10GB-ACU7M	X	X
Active Twinax cable assembly, 10 m	SFP-H10GB-ACU10M	X	X
10GBASE-CU SFP+ cable 1 m (Twinax cable)	SFP-H10GB-CU1M	X	X
10GBASE-CU SFP+ cable 1.5 m (Twinax cable)	SFP-H10GB-CU1-5M	X	X
10GBASE-CU SFP+ cable 2 m (Twinax cable) ³	SFP-H10GB-CU2M ⁴	X	X
10GBASE-CU SFP+ cable 3 m (Twinax cable)	SFP-H10GB-CU3M	X	X
10GBASE-CU SFP+ cable 5 m (Twinax cable)	SFP-H10GB-CU5M	X	X
10GBASE-CU SFP+ cable 2.5 m (Twinax cable) ³	SFP-H10GB-CU2-5M ³	X	X
Active optical cable 1 m	SFP-10G-AOC1M ⁴	X	X
Active optical cable 2 m	SFP-10G-AOC2M	X	X
Active optical cable 3 m	SFP-10G-AOC3M ⁴	X	X
Active optical cable 5 m	SFP-10G-AOC5M ⁴	X	X

Table 4 Transceivers Supported by Cisco NX-OS Release 6.x Software (continued)

Transceivers ¹	Part Number	Supported Cisco NX-OS Release	
		6.0(2)U1(3) 6.0(2)U1(2) 6.0(2)U1(1a) 6.0(2)U1(1)	6.0(2)U2(1)
Active optical cable 7 m	SFP-10G-AOC7M ⁴	X	X
Active optical cable 10 m	SFP-10G-AOC10M	X	X
1-Gigabit Ethernet			
1000Base-BX fiber transceiver	GLC-BX-D ⁴	X	X
1000Base-BX fiber transceiver	GLC-BX-U ⁴	X	X
1000BASE-EX fiber transceiver module, SMF	GLC-EX-SMD	X	X
Gigabit Ethernet SFP, LC connector LX/LH transceiver (SMF)	GLC-LH-SM ⁴	X	X
1000BASE-LX/LH SFP transceiver module for MMF and SMF	GLC-LH-SMD ⁴	X	X
Gigabit Ethernet SFP, LC connector SX transceiver (MMF)	GLC-SX-MM ³	X	X
Gigabit Ethernet SFP, LC connector SX transceiver (MMF)	GLC-SX-MMD ⁵	X	X
1000BASE-T SFP ⁶	GLC-T ⁴	X	X
1000BASE-ZX fiber transceiver module, SMF, 1550 nm	GLC-ZX-SMD	X	X
1000BASE-T SFP transceiver module with extended operating temperature range	SFP-GE-T ⁴	X	X
100-Mbps Ethernet			
100BASE-FX SFP module for Gigabit Ethernet ports GLC-GE-100FX ⁷	10-2019-02 ⁵ GLC-GE-100FX	X	X

- OIR is supported for all optical modules and transceivers in Cisco NX-OS Release 6.02 and later releases.
- Supported on the Cisco Nexus 3016, Cisco Nexus 3064-X, Cisco Nexus 3064-TQ, Cisco Nexus 3064, and Cisco Nexus 3064-E switches.
- Supported on the Cisco Nexus 3064-E and Cisco Nexus 3064-X switches.
- Supported on the Cisco Nexus 3048, Cisco Nexus 3064-X, Cisco Nexus 3064, and Cisco Nexus 3064-E switches.
- GLC-SX-MMD is supported on all Cisco Nexus 3000 Series Switches except for the Cisco Nexus 3064-T. Please refer to the comparability matrix for all the supported platforms.
- Supported on the Cisco Nexus 3048, Cisco Nexus 3064-E, and Cisco Nexus 3064-X switches.
- Supported on the Cisco Nexus 3064, Cisco Nexus 3064-E, and Cisco Nexus 3064-X switches. For the GLC-GE-100FX, only part number 10-2019-02 is supported.



Note The Cisco Nexus 3000 supports 1,000 and 10,000 speeds while using SFP+ with Cisco QSA [CVR-QSFP-SFP10G] (and a maximum of 6 QSAs). The 100 speed is not supported on the SFP+ along with QSA, but using any speed 100 is supported on the SFP+.

Table 5 Transceivers Supported by Cisco NX-OS Release 5.x Software

Transceivers	Part Number	Supported Cisco NX-OS Release						
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2)	5.0(3)U2(2c) 5.0(3)U2(2b) 5.0(3)U2(2a) 5.0(3)U2(2)	5.0(3) U2(1)	5.0(3)U1(2) 5.0(3)U1(2a)
QSFP								
Active copper splitter cable 7 m	QSFP-4x10G-AC7M ¹	X	—	—	—	—	—	—
Active copper splitter cable 10 m	QSFP-4x10G-AC10M ¹	X	—	—	—	—	—	—
Active copper QSFP transceiver module 7 m	QSFP-H40G-ACU7M ¹	X	—	—	—	—	—	—
Active copper QSFP transceiver module 10 m	QSFP-H40G-ACU10M ¹	X	—	—	—	—	—	—
40GBASE-CSR4 QSFP transceiver module with MPO connector 300 m	QSFP-40G-CSR4 ¹	X	X	—	—	—	—	—
40GBASE-CSR4 QSFP transceiver module with MPO connector 300 m (using fiber splitter cables)	QSFP-40G-CSR4 ¹	X	X	—	—	—	—	—
40GBASE-SR4 QSFP transceiver module with MPO connector 100 m	QSFP-40G-SR4 ¹	X	X	X	X	X	X	X
40GBASE-SR4 QSFP transceiver module with MPO connector 100 m (using fiber splitter cables)	QSFP-40G-SR4 ¹	X	X	X	X	X	X	X
40GBASE-CR4 passive copper cable, 1 m	QSFP-H40G-CU1M	X	X	X	X	X	X	X
40GBASE-CR4 passive copper cable, 3 m	QSFP-H40G-CU3M	X	X	X	X	X	X	X

Table 5 Transceivers Supported by Cisco NX-OS Release 5.x Software (continued)

Transceivers	Part Number	Supported Cisco NX-OS Release							
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2) 5.0(3)U3(1)	5.0(3)U2(2c) 5.0(3)U2(2b) 5.0(3)U2(2a) 5.0(3)U2(2)	5.0(3) U2(1)	5.0(3)U1(2) 5.0(3)U1(2a)	5.0(3)U1(1a) 5.0(3)U1(1b) 5.0(3)U1(1d)	
40GBASE-CR4 passive copper cable, 5 m	QSFP-H40G-CU5M	X	X	X	X	X	X	X	
QSFP to 4xSFP10G passive copper splitter cable, 1 m	QSFP-4SFP10G-CU1M	X	X	X	X	X	X	X	
QSFP to 4xSFP10G passive copper splitter cable, 3 m	QSFP-4SFP10G-CU3M	X	X	X	X	X	X	X	
QSFP to 4xSFP10G passive copper splitter cable, 5 m	QSFP-4SFP10G-CU5M	X	X	X	X	X	X	X	
Revision 2 copper splitter cables 3 m	QSFP-4SFP10G-CU3 (Rev. 2)	X	—	—	—	—	—	—	
Revision 2 copper splitter cables 5 m	QSFP-4SFP10G-CU5 (Rev. 2)	X	—	—	—	—	—	—	
10-Gigabit									
10GBASE-SR SFP+ module (multimode fiber [MMF])	SFP-10G-SR	X	X	X	X	X	X	X	
10GBASE-LR SFP+ module (single-mode fiber [SMF])	SFP-10G-LR	X	X	X	X	X	X	X	
10GBASE-ER SFP+ module (single-mode fiber [SMF])	SFP-10G-ER	X	X	X	X	X	X	X	
10GBASE-ZR SFP+ module (single-mode fiber [SMF]) ²	SFP-10G-ZR ²	X	X	X	—	—	—	—	

Table 5 Transceivers Supported by Cisco NX-OS Release 5.x Software (continued)

Transceivers	Part Number	Supported Cisco NX-OS Release						
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2) 5.0(3)U3(1)	5.0(3)U2(2c) 5.0(3)U2(2b) 5.0(3)U2(2a) 5.0(3)U2(2)	5.0(3)U2(1)	5.0(3)U1(2) 5.0(3)U1(2a)	5.0(3)U1(1a) 5.0(3)U1(1b) 5.0(3)U1(1d)
10GBASE-DWDM SFP+ module (single-mode fiber [SMF]) ²	10-2767-01 ²	X	X	X	—	—	—	—
10GBASE-CU SFP+ cable 1 m (Twinax cable)	SFP-H10GB-CU1M	X	X	X	X	X	X	X
10GBASE-CU SFP+ cable 3 m (Twinax cable)	SFP-H10GB-CU3M	X	X	X	X	X	X	X
10GBASE-CU SFP+ cable 5 m (Twinax cable)	SFP-H10GB-CU5M	X	X	X	X	X	X	X
10GBASE-CU SFP+ cable 2 m (Twinax cable) ³	SFP-H10GB-CU2M ³	X	X	—	—	—	—	—
10GBASE-CU SFP+ cable 2.5 m (Twinax cable) ³	SFP-H10GB-CU2-5M ³	X	X	—	—	—	—	—
Active optical cable 1 m	SFP-10G-AOC1M ⁴	X	—	—	—	—	—	—
Active optical cable 3 m	SFP-10G-AOC3M ⁴	X	—	—	—	—	—	—
Active optical cable 5 m	SFP-10G-AOC5M ⁴	X	—	—	—	—	—	—
Active optical cable 7 m	SFP-10G-AOC7M ⁴	X	—	—	—	—	—	—
1-Gigabit Ethernet								
1000BASE-T SFP ⁴	GLC-T ⁴	X	X	X	X	X	X	X
Gigabit Ethernet SFP, LC connector SX transceiver (MMF)	GLC-SX-MM ³	X	X	X	X	X	X	X

Table 5 Transceivers Supported by Cisco NX-OS Release 5.x Software (continued)

Transceivers	Part Number	Supported Cisco NX-OS Release						
		5.0(3)U5(1f) 5.0(3)U5(1e) 5.0(3)U5(1d) 5.0(3)U5(1c) 5.0(3)U5(1b) 5.0(3)U5(1a) 5.0(3)U5(1)	5.0(3)U4(1)	5.0(3)U3(2b) 5.0(3)U3(2a) 5.0(3)U3(2) 5.0(3)U3(1)	5.0(3)U2(2c) 5.0(3)U2(2b) 5.0(3)U2(2a) 5.0(3)U2(2)	5.0(3) U2(1)	5.0(3)U1(2) 5.0(3)U1(2a)	5.0(3)U1(1a) 5.0(3)U1(1b) 5.0(3)U1(1d)
Gigabit Ethernet SFP, LC connector SX transceiver (MMF)	GLC-SX-MMD ⁵	X	X	—	—	—	—	—
Gigabit Ethernet SFP, LC connector LX/LH transceiver (SMF)	GLC-LH-SM ⁴	X	X	X	X	X	X	X
1000BASE-LX/LH SFP transceiver module for MMF and SMF	GLC-LH-SMD ⁴	X	—	—	—	—	—	—
1000Base-BX fiber transceiver	GLC-BX-U ⁴	X	—	—	—	—	—	—
1000Base-BX fiber transceiver	GLC-BX-D ⁴	X	—	—	—	—	—	—
1000BASE-T SFP transceiver module with extended operating temperature range	SFP-GE-T ⁴	X	—	—	—	—	—	—
100-Mbps Ethernet								
100BASE-FX SFP module for Gigabit Ethernet ports GLC-GE-100FX ⁵	10-2019-02 ⁵ GLC-GE-100FX	X	X	X	X	X	X	X

- Supported on the Cisco Nexus 3016, Cisco Nexus 3064-X, Cisco Nexus 3064-TQ, Cisco Nexus 3064, and Cisco Nexus 3064-E switches.
- Supported on the Cisco Nexus 3064-E and Cisco Nexus 3064-X switches.
- Supported on the Cisco Nexus 3048, Cisco Nexus 3064-X, Cisco Nexus 3064, and Cisco Nexus 3064-E switches.
- Supported on the Cisco Nexus 3048, Cisco Nexus 3064-E, and Cisco Nexus 3064-X switches.
- Supported on the Cisco Nexus 3064, Cisco Nexus 3064-E, and Cisco Nexus 3064-X switches. For the GLC-GE-100FX, only part number 10-2019-02 is supported.

Twinax Cable Support on Cisco Nexus 3000 Switches

Starting with Cisco Release NX-OS 5.0(3)U1(1), the following algorithm is used to detect copper SFP+ twinax, QSFP+ twinax, and QSFP+ splitter cables on Cisco Nexus 3000 Series switches.

If the attached interconnect (transceiver) is a copper SFP+ twinax or QSFP+ twinax cable:

- Verify the transceiver SPROM to match the Cisco magic code.
- If the check succeeds, bring up the interface. Otherwise, print the following warning message appears stating that a non-Cisco transceiver is attached and that you should try to bring up the port.

```
2009 Oct 9 01:46:42 switch %ETHPORT-3-IF_NON-CISCO_TRANSCEIVER: Non-Cisco transceiver
on interface Ethernet1/18 is detected.
```

If the attached transceiver is a QSFP+ splitter cable, then no special check is performed. The Cisco NX-OS software tries to bring up the port.

The following disclaimer applies to non-Cisco manufactured and non-Cisco certified QSFP copper splitter cables:

If a customer has a valid support contract for Cisco Nexus switches, Cisco TAC will support twinax cables that are a part of the compatibility matrix for the respective switches. However, if the twinax cables are not purchased through Cisco, a customer cannot return these cables through an RMA to Cisco for replacement.

If a twinax cable that is not part of the compatibility matrix is connected into a system, Cisco TAC will still debug the problem, provided the customer has a valid support contract on the switches. However TAC may ask the customer to replace the cables with Cisco qualified cables if there is a situation that points to the cables possibly being faulty or direct the customer to the cable provider for support. Cisco TAC cannot issue an RMA against uncertified cables for replacement.

Cisco QSFP 40-Gbps Bidirectional Short-Reach Transceiver

The Cisco QSFP 40-Gbps Bidirectional (BiDi) transceiver is a short-reach pluggable optical transceiver with a duplex LC connector for 40-GbE short-reach data communications and interconnect applications by using multimode fiber (MMF). The Cisco QSFP 40-Gbps BiDi transceiver offers a solution that uses existing duplex MMF infrastructure for 40-GbE connectivity. With the Cisco QSFP 40-Gbps BiDi transceiver, customers can upgrade their network from 10-GbE to 40-GbE without incurring any fiber infrastructure upgrade cost. The Cisco QSFP 40-Gbps BiDi transceiver can enable 40-GbE connectivity in a range of up to 100 meters over OM3 fiber, which meets most data center reach requirements. It complies with the Multiple Source Agreement (MSA) QSFP specification and enables customers to use it on all Cisco QSFP 40-Gbps platforms and achieve high density in a 40-GbE network. It can be used in data centers, high-performance computing (HPC) networks, enterprise and distribution layers, and service provider transport applications.

New and Changed Features

This section describes the new features introduced in Cisco NX-OS Release 6.0(2)U2(1). This section includes the following topics:

- [New Supported Hardware, page 17](#)
- [New Software Features, page 18](#)

New Supported Hardware

Cisco NX-OS Release 6.0(2)U2(1) supports the new hardware listed in this section.

Cisco Nexus 3132Q Switch

The Cisco Nexus 3132Q switch has the following hardware specifications:

- 32 fixed 40 Gigabit Ethernet QSFP+ ports (each QSFP+ port can handle four 10 Gigabit Ethernet connections)
- Locator LED
- Dual redundant power supplies
- Redundant (3+1) fans
- One 10/100/1000-Mbps management port
- One RS-232 serial console port
- One USB port
- Locator LED

New Software Features

All Cisco Nexus 3000 Series switches are supported by Cisco NX-OS Release 6.0(2)U2(1). Cisco NX-OS interoperates with any networking operating system, including Cisco IOS software, that conforms to the networking standards listed in the product data sheet.

Cisco NX-OS Release 6.0(2)U2(1) includes the following new software features:

- [Priority Flow Control \(PFC\)](#)
- [Policy-Based Routing](#)
- [IP-in-IP Encapsulation and Decapsulation Tunnel Support](#)
- [BGP remove-private-as Enhancements](#)
- [eBGP Next-Hop Unchanged](#)
- [NTP Server](#)
- [ICMP Unreachables Support to Set Source Interface](#)
- [SPAN with ACL Filtering](#)
- [Static MAC Address Configuration](#)
- [QoS Enhancements](#)
- [Ingress Buffer Statistics](#)
- [PFC Frame Counter Statistics](#)
- [Queue Limit Configuration](#)
- [QoS Group Mapping to Priority Group](#)
- [Command Options for WRED Drop Probability, Cap-Average and Queue Weight](#)
- [ACL Logging](#)
- [Advertising IPv6 Routes Over IPv4 Peers](#)
- [Default Interface Configuration](#)
- [Fast reboot](#)
- [Consistency Checkers](#)

- [Soft Error Recovery](#)
- [Copy file Start Support](#)
- [Unified Forwarding Table](#)
- [NVGRE Entropy](#)
- [Resilient Hashing](#)
- [Dynamic Port Breakout](#)
- [SVI Autostate Disable](#)
- [Disabling BGP Dampening with Redistribution](#)
- [Cisco Plug-in for OpenFlow Release 1.1](#)
- [One Platform Kit \(onePK\)](#)
- [MIBs](#)

Priority Flow Control (PFC)

Priority Flow Control (PFC) is a mechanism that prevents frame loss due to congestion. PFC functions on a per class-of-service (CoS) basis. When a buffer threshold is exceeded due to congestion, PFC sends a pause frame that indicates which CoS value needs to be paused.

Policy-Based Routing

Policy-based routing allows you to configure a defined policy for IPv4 and IPv6 traffic flows, lessening reliance on routes derived from routing protocols. All packets received on an interface with policy-based routing enabled are passed through enhanced packet filters or route maps. The route maps dictate the policy, determining where to forward packets.

IP-in-IP Encapsulation and Decapsulation Tunnel Support

IP tunnels can encapsulate a same-layer or higher-layer protocol and transport the result over IP through a tunnel created between two devices. This release introduces IP-in-IP encapsulation and decapsulation as carrier protocols. It also introduces Point-to-Point IP-in-IP Tunnel Encapsulation and Decapsulation and Multi-Point IP-in-IP Tunnel Decapsulation as tunnel types.

BGP remove-private-as Enhancements

This release add two new keywords to the existing **remove-private-as** command - **all** and **replace-as**.

eBGP Next-Hop Unchanged

When the eBGP Next-Hop Unchanged feature is configured, BGP sends routes to an eBGP multihop peer without modifying the next hop attribute. This feature provides flexibility when designing and migrating networks. It can be used only between eBGP peers configured as multihop.

NTP Server

The Network Time Protocol (NTP) synchronizes the time of day among a set of distributed time servers and clients so that you can correlate events when you receive system logs and other time-specific events from multiple network devices.

ICMP Unreachables Support to Set Source Interface

You can configure an interface IP address for ICMP source IP field to handle ICMP error messages. When ICMP packets are constructed in a network stack, the packets will use the configured interface IP address.

SPAN with ACL Filtering

Through this feature, you can filter ingress traffic at source ports by using ACLs so that they mirror only those packets of information that match the ACL criteria.

Static MAC Address Configuration

You can change the default MAC address of the Layer 3 interface by using the `mac-address` command from the interface configuration mode. A static MAC address can be configured on SVI, Layer 3 interfaces, port channels, Layer 3 subinterfaces, and tunnel interfaces.

QoS Enhancements

Various QoS enhancements have been added to this release. They are:

- Three strict priority classes
- New buffer statistics commands
- ECN enhancements
- Minimum guaranteed bandwidth in the `shape` command

Ingress Buffer Statistics

You can now monitor the real-time status of the shared buffer, per port at ingress as well as egress.

PFC Frame Counter Statistics

You can monitor the Tx and Rx counters for PFC-enabled devices either at an interface level or at a per priority (COS) level for each interface. Currently, PFC frame counters are supported only on the following switches:

- Cisco Nexus 3064-X
- Cisco Nexus 3064-E
- Cisco Nexus 3132Q

Queue Limit Configuration

You can configure the threshold for using shared buffers at egress and ingress based on the alpha value.

QoS Group Mapping to Priority Group

By default, the priority-group number is assigned by the system. However, you can override it and map it to a QoS group by using the **priority-group** command.

Command Options for WRED Drop Probability, Cap-Average and Queue Weight

New command options are now available to control the WRED and ECN frame dropping and marking parameters when queue usage is between minimum and maximum thresholds.

ACL Logging

ACL logging allows you to monitor traffic flows that hit specific access control lists (ACLs). A flow table maintains the number of hits per flow.

Advertising IPv6 Routes Over IPv4 Peers

IPv6 addresses are now advertised over IPv4 eBGP peers, thus allowing IPv6 traffic to be routed over a preestablished IPv4 eBGP connection.

Default Interface Configuration

You now have a single command to revert to the default configuration of an interface.

Fast reboot

Cisco NX-OS Release 6.0(2)U2(1) introduces fast reboot. During fast reboot, the system image that runs on the CPU reloads the new image and runs it without a CPU or firmware reset. Although there is a brief disruption in traffic during fast reboot, it enables a switch to reload faster than during cold reboot. Currently, fast reboot is supported only with limited configurations and topologies on the following switches:

- Cisco Nexus 3064-X
- Cisco Nexus 3064-E
- Cisco Nexus 3132Q

Consistency Checkers

Cisco NX-OS Release 6.0(2)U2(1) supports the following consistency checkers:

VLAN Membership

To compare the hardware and software configuration of all interfaces in a VLAN and display the results, use the following command:

```
show consistency-checker membership vlan vlan-id
```

Port Channel Membership

To compare the hardware and software configuration of all ports in a port channel and display the results, use the following command:

```
show consistency-checker membership port-channels
```

L3 Interface

To compare the software and hardware configuration of L3 interfaces and display the results, use the following command:

```
show consistency-checker l3-interface module slot
```



Note The L3 interface checker works only on the physical interface.

Link State

To compare the software and hardware link state of interfaces and display the results, use the following command:

```
show consistency-checker link-state module slot
```

VLAN STP State

To compare the software and hardware configuration of the spanning tree state of a VLAN and display the results, use the following command:

```
show consistency-checker stp-state vlan vlan-id
```

Forwarding Inconsistency

To display the results of the forwarding inconsistency checker for IPv4 or IPv6 routes, use the following command:

```
show forwarding [ipv4 | ipv6] [unicast] inconsistency module slot
```

Use the test forwarding inconsistency command to start the forwarding inconsistency checker and the test forwarding inconsistency stop command to end the forwarding inconsistency checker.

Soft Error Recovery

Cisco NX-OS Release 6.0(2)U2(1) introduces software error recovery (SER) for soft errors in the internal memory tables of the forwarding engine.

Copy file Start Support

The startup configuration file is stored as an ASCII text file and all commands in the configuration file are run during the next bootup to generate the binary configuration file.

Unified Forwarding Table

Cisco NX-OS Release 6.0(2)U2(1) supports a minimum guaranteed number of entries for L2, L3 host, LPM tables, and a 256K x 105 bit shared table.

NVGRE Entropy

Cisco NX-OS Release 6.0(2)U2(1) supports hashing for transit NVGRE traffic. You can configure the switch to include the GRE Key field present in the GRE header in hash computations when NVGRE traffic is forwarded over a port channel or an Equal Cost Multipath (ECMP).

Resilient Hashing

The resilient hashing system for Cisco Nexus 3100 Series switches maps traffic flows to physical ports. In case a link fails, the flows assigned to the failed link are redistributed uniformly among the working links. The existing flows through the working links are not rehashed and their packets are not delivered out of order.

Dynamic Port Breakout

In NX-OS Release 6.0(2)U2(1), you can operate QSFP ports as either 40-GbE or 4 x10-GbE modes on Cisco Nexus 3132 switches.

SVI Autostate Disable

SVI Autostate Disable enables the Switch Virtual Interface (SVI) to be in the “up” state even if no interface is in the “up” state in the corresponding VLAN.

Disabling BGP Dampening with Redistribution

When an IGP metric of redistributed routes into BGP changes, BGP has internal dampening that prevents an immediate route update to the BGP peers. It affects how BGP handles IGP metric changes reported for redistributed routes. BGP dampens these changes through a batch process with a 10 minutes delay. The dampen-igp-metric command allows the user to adjust this delay or remove it altogether for quicker response to these changes.

Cisco Plug-in for OpenFlow Release 1.1

Cisco NX-OS Release 6.0(2)U2(1) supports Cisco Plug-in Version 1.1 for OpenFlow . Cisco Plug-in for OpenFlow creates TCP/IP connections to controllers based on OpenFlow Switch Specification Version 1.0.1 (Wire Protocol 0x01).

Cisco Plug-in for OpenFlow resides on the switch and the controllers reside on a server, external to the switch. Flow management and any network management are either part of the controller or accomplished through the controller. Cisco Plug-in for OpenFlow maintains databases for configurations on the logical switch, OpenFlow-enabled interfaces, and flows. The interface database contains the list of OpenFlow-enabled interfaces on the logical switch, and the flow database contains the list of flows on the logical switch as well as the interface programmed to forward traffic.

This release includes all the necessary infrastructure to support the Cisco Plug-in for OpenFlow. This infrastructure includes support for the installation of the Cisco Plug-in for OpenFlow as a Virtual Services container, support for matches and actions defined by version 1.0 of the OpenFlow protocol, and support for connectivity to the Cisco Extensible Network Controller (XNC).

One Platform Kit (onePK)

Cisco Nexus 3000 Series switches completely support One Platform Kit (onePK) Turbo API in Cisco NX-OS Release 6.0(2)U2(1). onePK is a cross-platform API and software development kit that enables you to develop applications that interact directly with Cisco networking devices. onePK provides you access to networking services by using a set of controlled APIs that share the same programming model and style. For more information, see the following URL:

<http://www.cisco.com/en/US/prod/iOSSwrel/onepk.html>

MIBs

Support for the following MIBs is added in Cisco NX-OS Release 6.0(2)U2(1):

- CISCO-CLASS-BASED-QOS-MIB
- CISCO-SWITCH-QOS-MIB
- CISCO-PFC-EXT-MIB
- IGMP-STD-MIB
- MSDP-MIB

Upgrade and Downgrade Guidelines

Ensure that you use the **install all** command to upgrade the switch software from one Cisco NX-OS release to another.

Upgrade Path to Release 6.0(2)U2(1)

Cisco Nexus 3000 Series switches that use software versions older than Cisco NX-OS Release 5.0(3)U5(1) need to be updated to Cisco NX-OS Release 5.0(3)U5(1) before they are upgraded to Cisco NX-OS Release 6.0(2).

Cisco NX-OS Release 5.0(3)U3(1) does not support a software upgrade from Cisco NX-OS Release 5.0(3)U2(2c). If you want to upgrade through this path, see [CSCty75328](#) for details about how to work around this issue.



Note

It is recommended that you upgrade to Cisco NX-OS Release 6.0(2)U2(1) by using Cisco NX-OS install procedures.

In Cisco NX-OS Release 5.0(3)U3(1), support for IPv6 has been added in Control Plane Policing (CoPP). To enable redirection of IPv6 control packets to the CPU, you must configure IPv6 CoPP on the system. Entering the **write erase** command on a device that runs Release 5.0(3)U3(1) automatically applies CoPP on the device and ensures that all IPv4 and IPv6-related CoPP configuration is set up correctly.

If you upgrade from a Cisco NX-OS release that does not support the CoPP feature to a release that does support the CoPP feature, you must run the setup utility after the upgrade to enable CoPP on the device.

If you upgrade from Cisco NX-OS Release 5.0(3)U2(2), which supports the CoPP feature, to Cisco NX-OS Release 5.0(3)U3(1), which adds CoPP classes for IPv6 support, you must run the setup script to enable the IPv6 CoPP feature on the device.

Limitations

Link Level Flow Control (LLFC) is not supported on Cisco Nexus 3000 series and Cisco Nexus 3100 series switches.

Caveats

Open and resolved caveat record numbers are provided with links to the Bug Search page where you can find details about each caveat.

This section includes the following topics:

- [Resolved Caveats in Cisco NX-OS Release 6.0\(2\)U2\(1\), page 25](#)
- [Open Caveats in Cisco NX-OS Release 6.0\(2\)U2\(1\), page 25](#)
- [Known Behaviors in Cisco NX-OS Release 6.0\(2\)U2\(1\), page 26](#)

Resolved Caveats in Cisco NX-OS Release 6.0(2)U2(1)

[Table 6](#) lists descriptions of resolved caveats in Cisco NX-OS Release 6.0(2)U2(1). The record ID links to the Cisco Bug Search page where you can find details about the caveat.

Table 6 Cisco NX-OS Release 6.0(2)U2(1) – Resolved Caveats

Record Number	Resolved Caveat Headline
CSCuh83492	Nexus 3000: Interface SNMP counter incorrect or increment with no traffic.
CSCuj59275	Output discard keeps increasing on all L2 Ports on Cisco Nexus 3000.
CSCuh57235	Config-sync feature is broken; verify and commit commands fail.
CSCui66078	ASIC parity error syslog cause bit value should be decoded to table.
CSCul70898	SNMP Response SAP MTS queue buildup seen.

Open Caveats in Cisco NX-OS Release 6.0(2)U2(1)

[Table 7](#) lists descriptions of open caveats in Cisco NX-OS Release 6.0(2)U2(1). The record ID links to the Cisco Bug Search page where you can find details about the caveat.

Table 7 Cisco NX-OS Release 6.0(2)U2(1) – Open Caveats

Record Number	Open Caveat Headline
CSCui05283	Cisco QSA does not link up with 1G optics for Cisco Nexus 3132.
CSCul87497	Control packet drops seen when SP-0 buffers are 100 percent utilized.
CSCul95537	Multicast bridging and routing to the same trunk port blocked bridging traffic.
CSCul68201	10G IXIA ports connecting Cisco Nexus 3064 in linkFlapErrDisabled state.
CSCul51543	Molex Pigtail Cable: local port is shut, but remote end shows "up" state.

Record Number	Open Caveat Headline
CSCUj97667	sh policy-map int xx does not show counters for applied global policies.
CSCUl00512	Cisco Nexus 3132Q has 40G ports, which are down set to 10G.
CSCUl94027	ERSPAN session is coming down when destination IP is removed in scenario.
CSCUl50412	Random links are staying up when reloading peer box using AOC 40G cable.
CSCUl96473	In Cisco Nexus 3064, negating feature NTP or TACACS+ does not remove the configuration.
CSCUl80853	PING fails when downgrading from Cisco NX-OS Release 6.0(2)U2(1) to Cisco NX-OS Release 5.0(3)U5(1f) due to mac-address addition.
CSCUj58223	Pause is not triggered on a no-drop class after configuration modification.
CSCUj88123	Cisco Nexus 3132 FIB_MCAST_RESOURCE_EXHAUSTION: error seen with Nexus 7000 multicast routes.
CSCUl97967	Buffer gets stuck and PFC frames are sent for a particular scenario.
CSCUl02066	40G links with AOC cable not up between Cisco Nexus 3132 and Cisco Nexus 3172.
CSCUm05155	Linkscan event does not come from SDK to USD for congested port going down.
CSCUl71950	Buffer gets stuck after toggling PFC mode from On to Auto.
CSCUi34567	SNMPWalk on OSPFv3 MIB sequence number shows negative value.
CSCUj44541	Cisco NX-OS Release 6.0(2)U2(1): Breakout-Rollback fails when checkpoint is created before setting speed to 40G.
CSCUl70274	Port channel members are flapping on peer reload.
CSCUl72536	Banner motd config line missing in startup-config after upgrade from Cisco NX-OS Release 5.0(3)U5(1f) to 6.0.(2).U2.(2Z).65.
CSCUl98192	SSTE: show incompatibility displays inconsistency error msg for PO w/downgrade.
CSCUl98145	SSTE: After downgrade to Cisco NX-OS Release 5.0(3)U5 or Cisco NX-OS Release 5.0(3)U3, duplicate snmp-server trap configuration.
CSCUl85229	Static route pointing to tunnel shows forwarding inconsistencies.
CSCUl85362	IPv4 forward consistency check is taking forever when all the ports are admin down.
CSCUl00512	Cisco Nexus 3132-QD has speed of 40G ports, which are down set to 10G.
CSCUl05688	ACLLOG incompatibility shown with Cisco NX-OS Release 5.0(3)U5.
CSCUm04893	sflow configuration appears four times for same port after breakin.
CSCUj73559	"show tech-support bcm-usd" executes invalid commands
CSCUl69752	Ports are down due to UDLD aggressive mode when the switch is booted.
CSCUl61959	QI2 BFD session flaps occur in a scale setup.
CSCUi05283	Cisco QSA does not link up with 1G optics in the QI2 platform.

Known Behaviors in Cisco NX-OS Release 6.0(2)U2(1)

Large core files are split into 3 or more files. For example:

- 1405964207_0x101_fwm_log.3679.tar.gzaa
- 1405964207_0x101_fwm_log.3679.tar.gzab

- 1405964207_0x101_fwm_log.3679.tar.gzac

To decode the multiple core files, first club the files to a single file as demonstrated below:

```
$ cat 1405964207_0x101_fwm_log.3679.tar.gz* > 1405964207_0x101_fwm_log.3679.tar.gz
```

MIB Support

The Cisco Management Information Base (MIB) list includes Cisco proprietary MIBs and many other Internet Engineering Task Force (IETF) standard MIBs. These standard MIBs are defined in Requests for Comments (RFCs). To find specific MIB information, you must examine the Cisco proprietary MIB structure and related IETF-standard MIBs supported by the Cisco Nexus 3000 Series switch. The MIB Support List is available at the following FTP sites:

<ftp://ftp.cisco.com/pub/mibs/supportlists/nexus3000/Nexus3000MIBSupportList.html>

Related Documentation

Documentation for the Cisco Nexus 3000 Series Switch is available at the following URL:

http://www.cisco.com/en/US/products/ps11541/tsd_products_support_series_home.html

The documentation set is divided into the following categories:

Release Notes

The release notes are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_release_notes_list.html

Installation and Upgrade Guides

The installation and upgrade guides are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_installation_guides_list.html

Command References

The command references are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_command_reference_list.html

Technical References

The technical references are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_technical_reference_list.html

Configuration Guides

The configuration guides are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/products_installation_and_configuration_guides_list.html

Error and System Messages

The system message reference guide is available at the following URL:

http://www.cisco.com/en/US/products/ps11541/products_system_message_guides_list.html

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to nexus3k-docfeedback@cisco.com. We appreciate your feedback.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

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