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# Cisco Nexus 3000 Series NX-OS Release Notes, Release 5.0(3)U1(2a)

**Release Date:** July 12, 2011  
**Part Number:** OL-25341-01E0  
**Current Release:** Cisco NX-OS Release 5.0(3)U1(2a)  
**Current Release:** Cisco NX-OS Release 5.0(3)U1(2)

This document describes the features, caveats, and limitations for Cisco Nexus 3000 Series switches. Use this document in combination with documents listed in the “[Obtaining Documentation and Submitting a Service Request](#)” section on page 7.



**Note**

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

**Table 1-1** Online History Change

Revision	Date	Description
A0	July 12, 2011	Created NX-OS Release 5.0(3)U1(2) release notes.
B0	July 15, 2011	Updated <a href="#">Hardware Supported, page 3</a> to include reversed airflow fan and power supply.
C0	August 26, 2011	Created NX-OS Release 5.0(3)U1(2a) release notes.
D0	September 7, 2011	Added <a href="#">CSCtr61490</a> (PSIRT).
E0	November 28, 2013	Updated resolved caveat <a href="#">CSCuh79034</a> .

## Contents

This document includes the following sections:

- [Introduction, page 2](#)
- [System Requirements, page 2](#)
- [New and Changed Features, page 4](#)



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- [Limitations, page 4](#)
- [Caveats, page 4](#)
- [Obtaining Documentation and Submitting a Service Request, page 7](#)

## Introduction

The Cisco NX-OS software is a data center-class operating system built with modularity, resiliency, and serviceability at its foundation. Based on the industry-proven Cisco MDS 9000 SAN-OS software, Cisco NX-OS helps ensure continuous availability and sets the standard for mission-critical data center environments. The highly modular design of Cisco NX-OS makes zero-effect operations a reality and enables exceptional operational flexibility. Cisco NX-OS software 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 running 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 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

Cisco NX-OS Release 5.0(3)U1(2a) supports the new Nexus 3064-E switch and the existing Nexus 3064 switch. 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. Each switch is a 1 rack unit (RU) switch that supports 48 fixed 1- and 10-Gigabit Ethernet host ports, four fixed 40-Gigabit Ethernet network ports, two fixed 100/1000 management ports, and one console port. They include one or two power supply units and one fan tray module, both of which provide front-to-back air flow and back-to-front airflow for cooling. The Cisco Nexus 3000 Series switches run the industry-leading Cisco NX-OS Software operating system.

For information about the new Cisco Nexus 3064-E switch, see the [“New Hardware Features” section on page 4](#). For information about the Cisco Nexus 3000 Series, see the *Cisco Nexus 3000 Series Hardware Installation Guide*.

## System Requirements

This section includes the following topics:

- [Memory Requirements, page 3](#)
- [Hardware Supported, page 3](#)

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## Memory Requirements

The Cisco NX-OS Release 5.0(3)U1(2a) software requires 135MB of flash memory.

## Hardware Supported

Cisco NX-OS Release 5.0(3)U1(2a) 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 1-2 shows the hardware supported by Cisco NX-OS Release 5.0(3)U1(2a) software.

**Table 1-2 Hardware Supported by Cisco NX-OS Release 5.0(3)U1(2a) Software**

Hardware	Part Number	Supported Release	Supported Release	Supported Release
		5.0(3)U1(2a)	5.0(3)U1(2)	5.0(3)U1(1d)
<b>Cisco Nexus 3000 Series</b>				
Cisco Nexus 3064-E switch	N3K-C3064PQ-10GE	X	X	—
Cisco Nexus 3064 switch	N3K-C3064PQ	X	X	X
Cisco Nexus 3064 fan module, Standard airflow (port-side exhaust)	N3K-C3064-FAN	X	X	X
Cisco Nexus 3064 fan module, Reversed airflow (port-side intake)	N3K-C3064-FAN-B	X	X	X
Cisco Nexus 3000 power supply, Standard airflow (port-side exhaust)	N2200-PAC-400W	X	X	X
Cisco Nexus 3000 power supply, Reversed airflow (port-side intake)	N2200-PAC-400W-B	X	X	X
<b>Transceivers</b>				
<b>QSFP</b>				
QSFP to 4xSFP10G passive copper splitter cable, 5 m	QSFP-4SFP10G-CU5M	X	X	X
<b>10-Gigabit</b>				
10GBASE-SR SFP+ module (multimode fiber [MMF])	SFP-10G-SR	X	X	X
10GBASE-LR SFP+ module (single-mode fiber [SMF])	SFP-10G-LR	X	X	X
10GBASE-CU SFP+ cable 1 m (Twinax cable)	SFP-H10GB-CU1M	X	X	X
10GBASE-CU SFP+ cable 3 m (Twinax cable)	SFP-H10GB-CU3M	X	X	X
10GBASE-CU SFP+ cable 5 m (Twinax cable)	SFP-H10GB-CU5M	X	X	X
Active Twinax cable assembly, 7 m	SFP-H10GB-ACU7M	X	X	X

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**Table 1-2**      *Hardware Supported by Cisco NX-OS Release 5.0(3)U1(2a) Software (continued)*

		Supported Release	Supported Release	Supported Release
Hardware	Part Number	5.0(3)U1(2a)	5.0(3)U1(2)	5.0(3)U1(1d)
Active Twinax cable assembly, 10 m	SFP-H10GB-ACU10M	X	X	X
<b>1-Gigabit Ethernet</b>				
1000BASE-T SFP	GLC-T	X	X	X
Gigabit Ethernet SFP, LC connector SX transceiver (MMF)	GLC-SX-MM	X	X	X
Gigabit Ethernet SFP, LC connector LX/LH transceiver (SMF)	GLC-LH-SM	X	X	X

## New and Changed Features

This section describes the new features introduced in Cisco NX-OS Release 5.0(3)U1(2a). This section includes the following topics:

- [New Hardware Features, page 4](#)
- [New Software Features, page 4](#)

## New Hardware Features

There are no new hardware features in this release.

## New Software Features

There are no new hardware features in this release.

## Limitations

This section describes the limitations for Cisco NX-OS Release 5.0(3)U1(2a).

- When a private VLAN port is configured as a TX (egress) SPAN source, the traffic seen at the SPAN destination port is marked with the VLAN of the ingressed frame. There is no workaround.
- Multiple **boot kickstart** statements in the configuration are not supported.

## Caveats

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

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This section includes the following topics:

- [Open Caveats, page 5](#)
- [Resolved Caveats, page 6](#)

## Open Caveats

Table 1-3 lists descriptions of open caveats in Cisco NX-OS Release 5.0(3)U1(2a). The record ID links to the Cisco Bug Toolkit where you can find details about the caveat.

**Table 1-3** Cisco NX-OS Release 5.0(3)U1(2a)—Open Caveats


Record Number	Open Caveat Headline
<a href="#">CSCti94539</a>	SVI counters do not display values in the <b>show interface vlan xyz counters</b> command output even when member ports show the packet counts correctly in the <b>show interface ethernet xyz counters</b> command output.
<a href="#">CSCtn10660</a>	When a monitor session is created with a source interface on the STP blocked source port, the transmitted packets are spanned when no packets are actually transmitted out of the STP blocked port.
<a href="#">CSCtn95676</a>	Failed to allocate shared memory <code>mfwd_mrrib_get_route_buffer</code> .
<a href="#">CSCtn99196</a>	The <b>show spanning tree</b> command output shows ports which are not part of the VLAN.
<a href="#">CSCto07020</a>	The transmit SPAN is always tagged even when egress is untagged it will show tagged with VLAN 1.
<a href="#">CSCto26494</a>	The <b>clear mac</b> command clears some MAC addresses from the hardware and not in the software; the MAC addresses in hardware and software are not synchronized.
<a href="#">CSCto26707</a>	The <b>mac add count</b> and <b>show mac add</b> commands do not show MAC addresses learned on some interfaces.
<a href="#">CSCto27430</a>	CRC errors are not seen when packets larger than the programmed MTU value traverse from a 12 trunk port to an other port.
<a href="#">CSCto32375</a>	When untagged packets are sent with a packet size greater than the system MTU, they are not truncated to the programmed MTU value.
<a href="#">CSCto48220</a>	The banner motd configuration change is not reflected in the running configuration.
<a href="#">CSCto53539</a>	The interface discard counters increment even when packets are not forwarded.
<a href="#">CSCto57493</a>	When STP mode is changed to MST mode, MAC addresses are not synchronized.
<a href="#">CSCto62445</a>	Packets on the TX SPAN destination are incorrectly trunked for untagged traffic if the packet size is greater than an MTU of +22.
<a href="#">CSCto67340</a>	There are forwarding issues on Layer 3 subinterfaces with HSRP enabled.

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## Resolved Caveats

Table 1-4 lists descriptions of resolved caveats in Cisco NX-OS Release 5.0(3)U1(2a). The record ID links to the Cisco Bug Toolkit where you can find details about the caveat.

**Table 1-4 Cisco NX-OS Release 5.0(3)U1(2a)—Resolved Caveats**

Record Number	Resolved Caveat Headline
<a href="#">CSCti42439</a>	In Cisco NX-OS Release 5.0(3)U1(2a) and earlier releases, the startup configuration shows only some features for a user.
<a href="#">CSCtn68302</a>	When a Nexus 7000 Series device receives SSH logins at very high rates, the dcos_sshd process can cause high CPU rates.
<a href="#">CSCtr47503</a>	An invalid module is detected for PCIE TEST during the POST.
<a href="#">CSCtr61490</a>	<p>A vulnerability exists in Cisco Nexus 5000 and 3000 Series Switches that may allow traffic to bypass deny statements in access control lists (ACLs) that are configured on the device.</p> <p>Cisco has released free software updates that address this vulnerability.</p> <p>A workaround is available to mitigate this vulnerability.</p> <p>This advisory is posted at <a href="http://www.cisco.com/warp/public/707/cisco-sa-20110907-nexus.shtml">http://www.cisco.com/warp/public/707/cisco-sa-20110907-nexus.shtml</a>.</p>
<a href="#">CSCtr65682</a>	An SNMP memory leak is associated with the libcmd() process.
<a href="#">CSCtr68220</a>	The SNMP walk fails on a Nexus 3064-E switch when sharing snmpOID with a Nexus 3064PQ switch.
<a href="#">CSCtr72396</a>	LLDP resets when you issue the <b>show lldp neighbors system-details</b> command.
<a href="#">CSCtr96016</a>	Layer 3 LACP port channel members fail to re-join bundle in P state, remain I.
<a href="#">CSCts30610</a>	The maximum DHCP relay targets has increased to 32.
<a href="#">CSCuh79034</a>	High CPU utilization due to bcm_usd and syslogd causing protocol flaps.
	 <p><b>Note</b> This caveat was resolved in Cisco NX-OS Release 5.0(3)U5(1g)</p>

## 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](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](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:

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[http://www.cisco.com/en/US/products/ps11541/prod\\_installation\\_guides\\_list.html](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](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](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](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](http://www.cisco.com/en/US/products/ps11541/products_system_message_guides_list.html)

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## **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: <http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

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