



Cisco Nexus 3000 Series NX-OS Release Notes, Release 10.3(3)F

Introduction

This document describes the features, issues, and exceptions of Cisco NX-OS Release 10.3(3)F software for use on Cisco Nexus 3500 and 3600 platform switches.

The [Cisco NX-OS Software Strategy and Lifecycle Guide](#) provides details about the new Cisco NX-OS Software Release and Image-naming Convention.

Note: The documentation set for this product strives to use bias-free language. For the purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

The following table lists the changes to this document.

Date	Description
July 4, 2023	Added CSCwd89936 to Resolved Issues.
May 8, 2023	Cisco NX-OS Release 10.3(3)F became available.

New and Enhanced Software Features

The enhanced features listed below are existing features introduced in earlier releases but enhanced to support new platforms in Cisco NX-OS Release 10.3(3)F for Cisco Nexus 3000 series.

Enhanced Features		
Product Impact	Feature	Description
Feature Set	ECMP Hash key not set for ECMP routes	From Cisco NX-OS Release 10.3(3)F, the hardware keyword is added to the ip load-sharing address command to enable underlay and overlay load balancing between two different ECMP VXLAN routes. See Cisco Nexus 3600 NX-OS Unicast Routing Configuration Guide, Release 10.3(x).
	MACsec support	From Cisco NX-OS Release 10.3(3)F, MACsec is supported on Cisco N36180YC-R switches. See Cisco Nexus 3600 NX-OS Security Configuration Guide, Release 10.3(x).
	Enhanced Support for Cisco Application Hosting Framework (CAF)	Cisco Application Hosting Framework (CAF) now supports Cisco Agents on N3K-C36180YC-R, N3K-C3636C-R, and N3K-C36480LD-R2 TORs. See Cisco Nexus 3600 Series NX-OS Programmability Guide, Release 10.3(x).
	ACL flow redirect	From Cisco NX-OS Release 10.3(3)F, the widelflow keyword along with new options is added to the existing IP ACL command [sequence-number] {permit deny} protocol source destination to redirect ACL flow. See Cisco Nexus 3548 Switch NX-OS Security Configuration Guide, Release 10.3(x).

Enhanced Features		
Product Impact	Feature	Description
	Expanded support for Type-6 password encryption	Type-6 encryption uses stronger AES 128-bit encryption for storing passwords and is now supported for storing passwords for RPM keychain, SNMP, LDP, OSPF, MSDP, PIM, and BGP. See Cisco Nexus 3600 Switch NX-OS System Management Configuration Guide, Cisco Nexus 3600 Switch NX-OS VXLAN Configuration Guide, and Cisco Nexus 3600 Switch NX-OS Multicast Routing Configuration Guide, Release 10.3(x).

Hardware Features

Cisco NX-OS Release 10.3(3)F does not include any new hardware for the Cisco Nexus 3000 Series. However, from Cisco NX-OS Release 10.3(3)F, the following AC ports are supported on Cisco Nexus 36180YC-R (N3K-C36180YC-R):

- AC port-side exhaust (NXA-PAC-750W-PE)
- AC port-side intake (NXA-PAC-750W-PI)

The following table provides information about spares support:

Minimum/Maximum	Port-side-Intake	Port-side-Exhaust
	Fan Speed %	Fan Speed %
Typical/Minimum	50%	70%
Maximum	100%	100%

For information about N3K-C36180YC-R, see [Cisco Nexus 3600 Hardware Installation Guide](#).

Release Image

Cisco Nexus 3000 Series platforms support only 64-bit image. The 64-bit Cisco NX-OS image filename begins with "nxos64-msll" (for example, nxos64-msll.10.3.3.F.bin) and this image is supported on Cisco Nexus 3600 series fixed switches and Cisco Nexus 3500-XL series switches. 32-bit image is no longer supported.

Open Issues

Bug ID	Description
CSCwd89936	Headline: Nexus 3500 hardware fails to program L3 ltl-index for few mcast groups after mcast flow stop/start. Symptoms: After mcast flow stops for about 3 minutes, l3-ntl ages on mtc. Then starting the mcast flow again does not program l3-ntl again. Workarounds: None

Bug ID	Description
CSCwd68210	<p>Headline: After upgrading Cisco Nexus 9500, Cisco Nexus 9000 and Cisco Nexus 3000 Switch 100Gig Interface does not come up.</p> <p>Symptoms: Interface doesn't come up after upgrading Nexus 9500 from Cisco NX-OS Release 9.3(4) to 9.3(8). SFP used is the QSFP-100G-CWDM4-S Link between Nexus 9000: N9K-X9736C-FX and leaf: N3K-C36180YC-R.</p> <p>Workarounds: None</p>
CSCwd86342	<p>Headline: SPAN traffic received from Cisco Nexus 9300 is dropped on Cisco Nexus 3548.</p> <p>Symptoms: On Cisco Nexus 9000 SPAN is configured and the SAPN destination interface is configured to Cisco Nexus 3548. On Cisco Nexus 3548, traffic is received and dropped. The drops are verified using the show hardware internal errors module 1 command. However, SPAN/ERSPAN traffic that Cisco Nexus 3548 should have received traffic is not seen.</p> <p>Workarounds: To resolve the issue, replace Cisco Nexus 9000 with Catalyst or add Catalyst switch in between Cisco Nexus 9000 and Cisco Nexus 3000.</p>
CSCwe67479	<p>Headline: Cisco Nexus 3500 switch does not propagate correct PTP clock received from upstream to downstream devices.</p> <p>Symptoms: PTP clients receives incorrect clock information from Cisco Nexus 3500 switch that is working as a BC device.</p> <p>Workarounds: None</p>

Resolved Issues

Bug ID	Description
CSCwd86850	<p>Headline: Cisco Nexus 3548 - L3 Adjacency is not programmed properly in hardware.</p> <p>Symptoms: L3 adjacency is mis-programmed in hardware, and routed packets to destination hosts are dropped. Issue is seen on single or multiple hosts.</p> <p>Workarounds: Run the clear ip arp force-delete command for the affected entries to trigger ARP learning again and refresh the HW entry. However, running the clear ip arp force-delete command for an entire subnet/VLAN may cause a couple of seconds of disruption.</p>
CSCwd88051	<p>Headline: Cisco Nexus 3000 Spanning-tree creates an instance for interface that is a part of a port-channel.</p> <p>Symptoms: Spanning creates an instance on the interface that is a part of a port-channel. This causes STP disputes on the root bridge.</p> <p>Workarounds: Reload.</p>
CSCwd89936	<p>Headline: Cisco Nexus 3500 fails to program SG L3 ltl-index after receiving igmpv3 source leave on mrouter port.</p> <p>Symptoms: After mcast flow stops for about 3 minutes, l3-ltl ages on mtc, then start the mcast flow again, but l3-ltl does not program output interface.</p> <p>Workarounds: None</p>
CSCwd90070	<p>Headline: Cisco Nexus 3548 unicast fails after reload in Warp mode.</p> <p>Symptoms: After reloading the Nexus 3548 on Cisco NX-OS Release 9.3(9), the switch fails to forward few traffic flows. UDP and TCP is impacted but ICMP is not impacted.</p> <p>Workarounds: None</p>

Bug ID	Description
CSCwe32514	<p>Headline: Cisco Nexus 3000 switch reloads with Kernel panic and no core.</p> <p>Symptoms: Cisco Nexus 3000 running with SNMP on Cisco NX-OS Release 9.3(9) or 9.3(10) gets frequent reloads with kernel panic. There is no core getting generated due to low memory in the box. Device reports critical memory alert followed by reload due to kernel panic.</p> <p>Workarounds: None</p>

Device Hardware

The following tables list the Cisco Nexus 3500 and Cisco Nexus 3600 Series hardware that Cisco NX-OS Release 10.3(3)F supports. For additional information about the supported hardware, see the Hardware Installation Guide for your Cisco Nexus 3500 and Cisco Nexus 3600 Series devices.

Cisco Nexus 3500 Switches

Product ID	Description
N3K-C3524P-XL	Cisco Nexus 3524-XL switch
N3K-C3548P-XL	Cisco Nexus 3548-XL switch

Cisco Nexus 3500 Series Fans, Fan Trays, and Power Supplies

Product ID	Description
N2200-PAC-400W	Cisco Nexus 2000 or 3000 400W AC power supply, forward airflow (port side exhaust)
N2200-PAC-400W-B	Cisco Nexus 2000 or 3000 400W AC power supply, reverse airflow (port side intake)
N2200-PDC-400W	Cisco Nexus 2000 or 3000 400W DC power supply, forward airflow (port side exhaust)
N3K-PDC-350W-B	Cisco Nexus 2000 or 3000 350W DC power supply, reverse airflow (port side intake)
NXA-FAN-30CFM-B	Cisco Nexus 2000 or 3000 individual fan, reverse airflow (port side intake)
NXA-FAN-30CFM-F	Cisco Nexus 2000 or 3000 individual fan, forward airflow (port side exhaust)

Cisco Nexus 3600 Switches

Product ID	Description
N3K-C3636C-R	The Cisco Nexus 3636C-R is a 1 rack unit (RU) switch with 36 100-Gigabit QSFP28 ports, 40-Gigabit QSFP, 2 management ports, 1 console port, and 1 USB port. The switch supports both port-side exhaust and port-side intake airflow schemes. The switch has two power supplies, one for operations and the other for redundancy. Both power supplies must be either AC power supplies or DC power supplies.
N3K-C36180YC-R	The Cisco Nexus 36180YC-R is a 1 rack unit (RU) switch with 48 1/10/25-Gigabit SFP ports and 6 40Gigabit QSFP/100-Gigabit QSFP28 ports, 1 management port, 1 console port, and 1 USB port. The switch supports both port-side exhaust and port-side intake airflow schemes. The switch has two power supplies, one for operations and the other for redundancy. Both power supplies must be either AC power supplies or DC power supplies.

Upgrade and Downgrade

To perform a software upgrade or downgrade, follow the instructions in the Cisco Nexus 3500 Series NX-OS Software Upgrade and Downgrade Guide and Cisco Nexus 3600 Series NX-OS Software Upgrade and Downgrade Guide.

For information about an In Service Software Upgrade (ISSU), see the [Cisco NX-OS ISSU Support Matrix](#).

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>

Supported Optics

To determine which transceivers and cables are supported by Cisco Nexus 3000 Series switches, see the [Transceiver Module \(TMG\) Compatibility Matrix](#).

To see the transceiver specifications and installation information, see <https://www.cisco.com/c/en/us/support/interfacesmodules/transceiver-modules/products-installation-guides-list.html>.

Related Content

This document describes and provides links to the user documentation available for Cisco Nexus 3000 Series documentation. To find a document online, use one of the links in this section.

Document Title	Description
Cisco Nexus 3000 Series switch documentation	Cisco Nexus 3000 Series documentation
Cisco NX-OS Software Strategy and Lifecycle Guide	Cisco NX-OS Software Release and Image-naming Convention
Cisco Nexus 3000 and 9000 Series NXAPI REST SDK User Guide and API Reference	Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference
<ul style="list-style-type: none">Cisco NX-OS Licensing GuideCisco Nexus 9000 and 3000 Series NX-OS Switch License NavigatorCisco Nexus Smart Licensing Using Policy User Guide	Licensing Information

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