ılıılı
CISCO

Cisco Nexus 3000 Series NX-OS Release Notes, Release 9.3(12)

Introduction

This document describes the features, issues, and exceptions of Cisco NX-OS Release 9.3(12) software for use on Cisco Nexus 3000 Series switches.

> 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.

Date	Description
July 01, 2023	Cisco NX-OS Release 9.3(12) became available.

New and Enhanced Software Features

There are no new or enhanced software and hardware features introduced in Cisco NX-OS Release 9.3(12).

Open Issues

Click the bug ID to access the Bug Search tool and see additional information about the bug.

Bug ID	Description
CSCwf03481	Headline: Cisco Nexus N3K-C3408-S crashes due to innsud with the show routing hash command. Symptoms: When running multiple iterations of show routing hash on a Cisco Nexus C3408-S switch on Cisco NX-OS Release 9.3(8) or 9.3(11), messages such as Failed to get hashing result and route not found due to innusd crash are noticed and result in device reload. Workarounds: None.
CSCwf47528	Headline: MAC address is not seen in hardware and software in scaled traffic config. Symptoms: When sending Layer 2 traffic (MAC) with MAC count as 60K(> 55K), a missing MAC entry is observed in both hardware and Software. Workarounds: For scaled traffic, send traffic with Random Source MAC (with PVLAN configurations).
CSCwf52402	Headline: Multicast forwarding issue with RPF fail scenario. Symptoms: The symptoms are as follows: • In RPF fail scenario, multicast flow does not work if (S,G) entry populates on RP first, then (*,G) populates but (S,G) does not populate on IHR. • In RPF fail scenario, multicast flow works if (*,G) entry populates on RP first, then (S,G) populates, and then (S,G) populates on IHR. • This causes intermittent multicast forwarding issue. Workarounds: None. However, ensure that the source is reachable from the RP so that the RP can receive on the shortest path tree.

Bug ID	Description
CSCwf56469	Headline: Nexus 3600 - Traffic dropped even when destination interface is not oversubscribed. Symptoms: When an egress port is at 100% traffic capacity, the ingress port starts to discard all input traffic from the ingress interface, regardless of the current port occupation rate. Workarounds: None.

Resolved Issues

Click the bug ID to access the Bug Search tool and see additional information about the bug.

Bug ID	Description
CSCvz13739	Headline: MTC - Switch is learning MAC address - 0000.0000.0000, All zero MAC learning is not expected. Symptoms: The Cisco Nexus 3500 switch is incorrectly learning all zero MAC addresses "0000.0000.0000". Workarounds: None.
CSCwd75851	Headline: /nxos/xlog get filled 100% with repeated "copy run start" and log files do not get rolled over. Symptoms: When configuration changes are done through automation and multiple sessions try to save the config changes simultaneously and repeatedly, the syslogs show failure messages such as, %SYSMGR-3-CFGWRITE_FAILED: Configuration copy failed (error-id 0x401E0000).Over the time, /nxos/xlog folder gets filled 100% and the configuration cannot be saved anymore. Workarounds: Avoid simultaneous configuration sessions and excessive or repeated config save operation.
CSCwd88051	Headline: Spanning-tree creates instance on interface that is a part of a port-channel. Symptoms: The symptoms are as follows: • Spanning creates instance on interface that is a part of a port-channel. • This causes STP disputes on the root bridge. Workarounds: Use "channel-group" without force option, that is, configure MTU explicitly on Eth1/43 before running 'channel-group'.
CSCwe32514	Headline: Cisco Nexus 3000 switch (4GB) reloads with Kernel panic and no core. Symptoms: Cisco Nexus 3000 switches with 4GB RAM that run SNMP on Cisco NX-OS Releases lower than 9.3(9) or 10.2(6), frequently reload 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. Workarounds: None.
CSCwe33612	Headline: On Cisco Nexus 3408-S switch, performing shutdown on Port-channel with 15 or more member ports can cause switch to reload. Symptoms: When performing shutdown on a port-channel with 15 or more member ports, the Cisco Nexus 3408-S switch can reload due to innusd hap reset. Workarounds: None. The individual members of the port-channel can be shut down without any issue, this only impacts shutting down the actual port-channel interface.

Bug ID	Description
CSCwe41327	Headline: SYSMGR-3-CFGWRITE_FAILED: Configuration copy failed due to 100% usage of startup-cfg.
	Symptoms: Nexus switches may fail to save the config to startup config due to frequent changes to the ACL config with errors. The issue is seen only if config changes are done using config session/commit way. The issue is not seen if config changes are done without config session.
	Workarounds: To avoid growing usage of startup-cfg by making config changes without config session/commit, after the startup-cfg usage hits 100%, the config save to startup fails. To recover, reload the switch. The running config can be saved to bootflash if additional config is not saved to the bootflash.
CSCwe84113	Headline: Shut down mgmt0, then reload, and peer mgmt0 is still up.
	Symptoms: When running the shutdown mgmt0 command and reloading the Cisco N3K-C31108PC-V switch running Cisco NX-OS Release 9.2(3) or 9.3(11) or Cisco N3K-C31108TC-V switch running Cisco NX-OS Release 9.3(8), the following symptoms are seen: n3k-1[mgmt0]---------[mgmt0]n3k-2
	Shut down the mgmt0 on n3k-1, save configuration, and then reload the device, mgmt0 of n3k-2 is still up.
	Workarounds: None.

Device Hardware

The following tables list the Cisco Nexus 3000 Series hardware that Cisco NX-OS Release 9.3(12) supports. For additional information about the supported hardware, see the Hardware Installation Guide for your Cisco Nexus 3000 Series device.

Table 1. Cisco Nexus 3000 and 3100 Series Switches

Product ID	Description
N3K-C3048TP-1GE	Cisco Nexus 3048 switch
N3K-C31108PC-V	Cisco Nexus 31108PC-V switch
N3K-C31108TC-V	Cisco Nexus 31108TC-V switch
N3K-C31128PQ-10GE	Cisco Nexus 31128PQ, 96 x 10 Gb-SFP+, 8 x 10-Gb QSFP+, 2-RU switch
N3K-C3132C-Z	Cisco Nexus 3132C-Z switch
N3k-C3132Q-V	Cisco Nexus 3132Q-V switch
N3K-C3132Q-XL	Cisco Nexus C3132Q-XL switch
N3K-C3164Q-40GE	Cisco Nexus 3164Q, 64 x 40-Gb SFP+, 2-RU switch
N3K-C3172PQ-10GE	Cisco Nexus 3172PQ switch
N3K-C3172PQ-XL	Cisco Nexus C3172PQ-XL switch
N3K-C3172TQ-10GT	Cisco Nexus 3172TQ switch

Product ID	Description
N3K-C3172TQ-XL	Cisco Nexus C3172TQ-XL switch

Table 2. Cisco Nexus 3000 and 3100 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-C3048-FAN	Cisco Nexus 3048 fan module with forward airflow (port-side exhaust)
N3K-C3048-FAN-B	Cisco Nexus 3048 fan module with reverse airflow (port-side intake)
N3K-PDC-350W-B	Cisco Nexus 2000 DC power supply with reverse airflow (port-side intake)
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, reversed airflow (port-side intake)
NXA-FAN-30CFM-F	Cisco Nexus 2000 or 3000 individual fan, forward airflow (port-side exhaust)

Table 3. Cisco Nexus 3200 Series Switches

Product ID	Description
N3K-C3232C	Cisco Nexus 3232C switch
N3K-C3264C-E	Cisco Nexus 3264C-E switch
N3K-C3264Q	Cisco Nexus 3264Q switch

Table 4. Cisco Nexus 3400-S Series Switches

Product ID	Description
N3K-C3408-S	Cisco Nexus 3408-S switch with 32 ports of QSFP-DD
N3K-C3408-S	Cisco Nexus 3408-S switch with 400G QSFP-DD Transceiver, 400G-FR4, Duplex LC, 2km Duplex SMF
N3K-C3432D-S	Cisco Nexus 3432D-S switch with 32 ports of QSFP-DD

Table 5. Cisco Nexus 3500 Series Switches

Product ID	Description
N3K-C3524P-10GX	Cisco Nexus 3524 switch, 24 SFP+
N3K-C3524P-XL	Cisco Nexus 3524-XL switch

Product ID	Description
N3K-C3548P-10GX	Cisco Nexus 3548X switch, 48 SFP+
N3K-C3548P-XL	Cisco Nexus 3548-XL switch

Table 6.   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

Table 7.   Cisco Nexus 3600 Series 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 40-Gigabit 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.

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/interfaces-modules/transceiver-modules/products-installation-guides-list.html.

Upgrade and Downgrade

Upgrading Cisco Nexus 3048 Family Switches

To perform a software upgrade to Cisco NX-OS Release 9.3(12) from earlier releases, see Upgrade Nexus 3048 NX-OS Software document.

Upgrading Cisco Nexus 3000 and Cisco Nexus 3100 Family Switches

To perform a software upgrade to Cisco NX-OS Release 9.3(12) from earlier releases, see Upgrade Nexus 3000 and 3100 NX-OS Software document.

Upgrading Cisco Nexus 3200 and Cisco Nexus 3400-S Family Switches

To perform a software upgrade, follow the instructions in the Cisco Nexus 3400-S Series NX-OS Software Upgrade and Downgrade Guide, Release 9.3(x).

Upgrade Path to Cisco NX-OS Release 9.3(12)

For the list of platforms and releases that support a non-disruptive In-Service Software Upgrade (ISSU) to Cisco NX-OS Release 9.3(12), see the Cisco NX-OS ISSU Support Matrix.

The following disruptive upgrade paths are supported:

- For Cisco Nexus 3232C and 3264Q switches:

    Release 7.0(3)I5(1) or later -> Release 9.3(12)

- For Cisco Nexus 3264C-E switches:

    Release 9.2(1) or 9.2(2) -> Release 9.3(12)

- For Cisco Nexus 3408-S and 3432D-S switches:

    Release 9.2(2t) to 9.2(2v) -> Release 9.3(12)

    Release 9.2(2v) -> Release 9.3(12)

Upgrading Cisco Nexus 3524 and Cisco Nexus 3548 Family Switches

To perform a software upgrade to Cisco NX-OS Release 9.3(12) from earlier releases, see Upgrade Nexus 3524 and 3548 NX-OS Software document.

Upgrading Cisco Nexus 3600 Family Switches

To perform a software upgrade, follow the instructions in the Cisco Nexus 3600 Series NX-OS Software Upgrade and Downgrade Guide, Release 9.3(x).

Upgrade Path to Cisco NX-OS Release 9.3(12)

The following disruptive upgrade paths are supported:

- Release 9.2(1) or 9.2(2)-> Release 9.3(12)

Note: Graceful Insertion and Removal (GIR) Maintenance mode is not supported on Cisco Nexus 3500 Platform Switches.

Related Content

Cisco Nexus 3000 Series documentation: [Cisco Nexus 3000 Series switch documentation](#)

Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference: [Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference](#)

Cisco Nexus OpenConfig YANG Reference, Release 9.3(x): [Cisco Nexus OpenConfig YANG, Release 9.3(x)](#)

Licensing information:

- Cisco NX-OS Licensing Guide
- Cisco Nexus 9000 and 3000 Series NX-OS Switch License Navigator

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.

Legal Information