Cisco Nexus 3000 Series NX-OS Release Notes, Release 9.3(7)

This document describes the features, issues, and exceptions of Cisco NX-OS Release 9.3(7) 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.

The following table lists the changes to this document.

Table 1. Changes to this Document

Date	Description
March 11, 2021	Cisco NX-OS Release 9.3(7) 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 9.3(7).

Enhanced Features	
Feature	**Description**
User-Defined MAC address	Added the ability to enable configuring a user-defined MAC address. For more information, see the Cisco Nexus 3548 Switch NX-OS Interfaces Configuration Guide, Release 9.3(x).
vPC with User-Defined MAC Scale 256	Enhanced to configure a user-defined MAC address limit between range of 16 to 256. For more information, see the Cisco Nexus 3548 Switch NX-OS Interfaces Configuration Guide, Release 9.3(x).

New Hardware Features

Cisco NX-OS Release 9.3(7) does not include any new hardware.

Open Issues

Bug ID	Description
CSCvx24330	Headline: Nexus 3548 sending ARP requests for static ARP entry Symptoms: Nexus 3548 is sending ARP requests even when the static ARP entry is applied in subinterfaces. Issue follows below pattern: • The first time when you try to ping concerned IP, Nexus sends a broadcast ARP request • Once the first broadcast ARP request is sent, Nexus sends unicast ARP requests every 45 seconds when ARP timeout is set to 60 seconds. Workarounds: You can clear the ARP entry using force-delete option but the moment the physical interface flaps the issue resurfaces. Use the clear ip arp force-delete command.
CSCvx51159	Headline: Nexus 3548 - Boot times increased after upgrade to 9.3(6) Symptoms: After upgrade from 9.3(5) to 9.3(6), boot times have increase from 20-40 seconds. Workarounds: None

Resolved Issues

Bug ID	Description
CSCvx19940	Headline: DHCP offer is not forwarded out of vpc port when received via vpc PL. Symptoms: A DHCP offer packet is received by a DHCP relay from the server, and isn't sent out towards the client attached via VPC. Workaround: None.
CSCvx21260	Headline: Nexus 9000/3000 NXOS : Micron_M500IT Bootflash in read only mode Symptoms: Nexus 9000/3000 switch bootflash goes into read-only mode with Micron_M500IT SSD drive after 28,224 power-on-hours (POH) for the first time. The bootflash will stop responding causing failure of operations such as config changes/save, read/write operations etc. Workarounds: Reload the switch. However, this failure will reappear after 1008 hours of operation.
CSCvw33235	Headline: N3500 is missing cli to configure custom mac-address on L3 interfaces Symptoms: L3 interface with custom mac-address cannot resolve arp. Workarounds: Use nxos version 9.3(3) or 703I7(6).
CSCvw49048	Headline: JSON formatted outputs inconsistent with unicast routing table. Symptoms: When retrieving JSON formatted MROUTE entries, the uptime for the route is reported in the same format as " regular" CLI.With the higher uptime, the value gets imprecise eg " 1w2d" However for Unicast routing table, the JSON formatted outputs provide more precise uptime information.This bug is opened to unify the JSON outputs of both unicast and multicast table and to provide more precise uptime than " regular" CLI Workarounds: NA
CSCvw55744	Headline: When NAT Sampling timeout is configured, TCP translation timeout never takes effect Symptoms: When NAT sampling timeout and TCP timeout are both configured, the TCP timeout is ignored. After the sampling timeout expires, the general NAT translation timeout counts down, and the entry is aged out without the TCP timeout ever triggering.TCP/UDP timeouts are not honored when set to default values. # show run all ip nat translation tcp-timeout 3600ip nat translation udp-timeout 3600If you re-configure TCP/UDP timeout to different value than default (3600 s) then problem is not seen and configured timeouts are honored.# show run all ip nat translation tcp-timeout 3000ip nat translation udp-timeout 2500 Workarounds: Configure TCP/UDP timeouts to different value than default one. After that, values should be honored.- configure higher sampling-timeout value to make up for the missing TCP timeout value
CSCvx06819	Headline: PVLAN port up/down logs errors Symptoms: When a port configured for PVLAN host mode (" switchport mode private-vlan host") goes up or down on the Nexus 3548 switch, it displays a " libsdk_port_cbl_vlan_bmp_set_batch" message. This message is cosmetic and doesn't affect the switch's operation. Example:switch(config-if)# 2021 Jan 19 09:30:29 NOX %ETHPORT-5-IF_DOWN_CFG_CHANGE: Interface Ethernet1/4 is down(Config change)2021 Jan 19 09:30:29 switch %USER-2-SYSTEM_MSG: libsdk_port_cbl_vlan_bmp_set_batch:925: No merge for pbmp: vbmp: 221 cbl: 3 - iftmc2021 Jan 19 09:30:29 switch %ETHPORT-5-IF_DOWN_ADMIN_DOWN: Interface Ethernet1/4 is down (Administratively down) Workarounds: None

Bug ID	Description
CSCvx57722	Headline: NX-OS memory leak on ipqosmgr UUID libacfg.so Symptoms: Memory starts decresing on system resources. Workaround: None

Device Hardware

The following tables list the Cisco Nexus 9000 Series hardware that Cisco NX-OS Release 9.3(7) supports. For additional information about the supported hardware, see the Hardware Installation Guide for your Cisco Nexus 9000 Series device.

Table 1. Cisco Nexus 3000 and 3100 Series Switches

Product ID	Description
N3K-C3048TP-1GE	Cisco Nexus 3048 switch
N3K-C3064PQ	Cisco Nexus 3064 switch
N3K-C3064PQ-10GE	Cisco Nexus 3064-E switch
N3K-C3064PQ-10GX	Cisco Nexus 3064-X switch
N3K-C3064TQ-10GT	Cisco Nexus 3064-TQ 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-40GE	Cisco Nexus 3132Q switch
N3K-C3132Q-40GX	Cisco Nexus 3132Q-X 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
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-C3064-X-BA-L3	Cisco Nexus 3064-X reverse airflow (port-side intake) AC power supply
N3K-C3064-X-BD-L3	Cisco Nexus 3064-X forward airflow (port-side intake) DC power supply
N3K-C3064-X-FA-L3	Cisco Nexus 3064-X forward airflow (port-side exhaust) AC power supply
N3K-C3064-X-FD-L3	Cisco Nexus 3064-X forward airflow (port-side exhaust) DC power supply
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)
NXA-PAC-500W	Cisco Nexus 3064-T 500W forward airflow (port-side exhaust) AC power supply
NXA-PAC-500W-B	Cisco Nexus 3064-T 500W reverse airflow (port-side intake) AC power supply

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-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-10G	Cisco Nexus 3524 switch
N3K-C3524P-10GX	Cisco Nexus 3524 switch, 24 SFP+
N3K-C3524P-XL	Cisco Nexus 3524-XL switch
N3K-C3548P-10G	Cisco Nexus 3548 switch
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.

Product ID	Description
	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(7) 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(7) 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(7)

For the list of platforms and releases that support a non-disruptive In-Service Software Upgrade (ISSU) to Cisco NX-OS Release 9.3(7), 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)I3(1) or later -> Release 9.3(7)

- For Cisco Nexus 3264C-E switches:

Release 9.2(1) or 9.2(2) -> Release 9.3(7)

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

  Release 9.2(2t) to 9.2(2v) -> Release 9.3(7)

  Release 9.2(2v) -> Release 9.3(7)

Upgrading Cisco Nexus 3524 and Cisco Nexus 3548 Family Switches

To perform a software upgrade to Cisco NX-OS Release 9.3(7) 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(7)

The following disruptive upgrade paths are supported:

- Release 9.2(1) or 9.2(2)-> Release 9.3(7)
- Release 7.0(3)F3(4) -> Release 9.3(7)*
- Release 7.0(3)F3(3c) -> Release 9.3(7)*
- Release 7.0(3)F3(3) -> Release 7.0(3)F3(4) -> Release 9.3(7)*

  * These upgrade paths require **write erase** and **reload**.

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.

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