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Cisco Nexus 3000 Series NX-OS Release Notes, Release 9.3(13)

Introduction

This document describes the features, issues, and exceptions of Cisco NX-OS Release 9.3(13) 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
December 18, 2023	Cisco NX-OS Release 9.3(13) 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(13).

Open Issues

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

Bug ID	Description
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.
CSCwi44292	Headline: Pre-upgrade check on nxos64-msll images does not display new BIOS version correctly during downgrade.
	Symptoms: During downgrade from an impacted NXOS version to a previous version, pre-upgrade check displays New BIOS version as blank on following impacted platforms
	Impacted Software version:10.4(2),9.3(13)
	Impacted Platforms:
	-N3K-C36180YC-R
	-N9K-X96XX with N9K-X9636Q-R, N9K-X9636C-RX, N9K-X9624D-R2,N9K-X96136YC-R line cards
	Workarounds: None.

Resolved Issues

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

Bug ID	Description
CSCwh26840	Headline: Nexus 3548: Configuring "link loopback" leads to vsh.bin core and crash
	Symptoms: when configuring "link loopback" on physical port of N3548, observe the following errors:
	Switch(config-if)# link loopback
	Internal error during command execution (11 8b)
	2023 Aug 15 19:55:55 N3K-C3548-9x %VSHD-2-VSHD_SYSLOG_EOL_ERR: EOL function pm_cli_ethpm_set_port_config from library libpmcli_eth.so exited due to Signal 11
	2023 Aug 15 19:56:06 N3K-C3548-9x %SYSMGR-2-LAST_CORE_BASIC_TRACE: : PID 25921 with message vsh.bin(non-sysmgr) crashed, core will be saved .
	2023 Aug 15 20:06:11 N3K-C3548-9x %VSHD-2-VSHD_SYSLOG_EOL_ERR: EOL function pm_cli_ethpm_set_port_config from library libpmcli_eth.so exited due to Signal 11
	2023 Aug 15 20:08:57 N3K-C3548-9x %SYSMGR-2-LAST_CORE_BASIC_TRACE: : PID 27292 with message vsh.bin(non-sysmgr) crashed, core will be saved .
	2023 Aug 15 20:56:25 N3K-C3548-9x %VSHD-2-VSHD_SYSLOG_EOL_ERR: EOL function pm_cli_ethpm_set_port_config from library libpmcli_eth.so exited due to Signal 11
	2023 Aug 15 20:57:46 N3K-C3548-9x %SYSMGR-2-LAST_CORE_BASIC_TRACE: : PID 32605 with message vsh.bin(non-sysmgr) crashed, core will be saved .
	Workarounds: None
CSCwh69800	Headline: N3500 "hardware profile buffer span-threshold xx" gets reset after egress link flap
	Symptoms: On Nexus 3548 running nxos version 9.3.8 and 9.3.10 "hardware profile buffer span-threshold xx" config command gets reset, after a link flap on a SPAN interface causing drops on a span session.
	Workarounds: Workaround is the remove the command "hardware profile buffer spanthreshold xx" then reapply.
CSCwh30695	Headline: QSA flap during ISSU/Speed mismatch post OIR on N3164
	Symptoms: After non-disruptive ISSU upgrade to latest 9.3.X releases, the QSA ports of respective platforms will experience a flap and if these QSA ports are then OIR'd, the optics will not recover and it will be showing up as speed mismatch.
	Workarounds: Reload the switch to recover the QSA ports back to normal state.
CSCwh90029	Headline: Error fetching entries from hardware - forwarding I2 table utilization instance all.
	Symptoms: Random interfaces on a Nexus 3164 might go into error-disabled state. Reason provided is "null".
	Workarounds: None

Bug ID	Description
CSCwi24874	Headline: Crash "aclqos hap reset" is occurred in Nexus 3500
	Symptoms: Crash "aclqos hap reset" is occurred in Nexus 3500
	Description
	========
	The crash "aclqos hap reset" is occurred when adding the multiple ACLs into "copp-system-acl-pimreg".
	The logs are shown bellow.
	# show system reset-reason
	reset reason for module 1 (from Supervisor in slot 1)
	1) At 140118 usecs after Mon Nov 20 15:45:12 2023
	Reason: Reset Requested due to Fatal Module Error
	Service: aclqos hap reset
	Version: 9.3(8)
	# show cores
	VDC Module Instance Process-name PID Date(Year-Month-Day Time)
	1 1 1 aclqos 21672 2023-11-20 15:47:20
	# show logging nvram
	snip
	%SYSMGR-SLOT1-2-SERVICE_CRASHED: Service "aclqos" (PID 21672) hasn't caught signal 11 (core will be saved).
	%SYSMGR-SLOT1-2-HAP_FAILURE_SUP_RESET: Service "aclqos" in vdc 1 has had a hap failure
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: fsm_action_become_offline: PID 10693 with message Could not turn off console logging on vdc 1 error: mts req-response with syslogd in vdc 1 failed (0xFFFFFFFF) .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: core_client_main: PID 2661 with message filename = 0x102_aclqos_log.21672.tar.gz .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: copy_cores_to_logflash: PID 2661 with message filename = 0x102_aclqos_compress.21672.log .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: copy_cores_to_logflash: PID 2661 with message filename = 0x102_aclqos_compress.21672.log.2675 .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: copy_cores_to_logflash: PID 2661 with message filename = 1700465012_0x102_aclqos_log.22134.tar.gz .
	Workarounds: None
CSCwh42690	Headline: Netstack crash when punting IPV6 packet with IPV6 destination option larger than 56 bytes.
	Symptoms: In an MPLS environment, the device that punts the IPV6 MPLS packet (with an extension header of greater than 56 bytes) to SUP experiences netstack crash or device reload.
	Workarounds: Stop sending packets that get punted to CPU such as traceroute probes that might have this options enabled.

Bug ID	Description
CSCwh90029	Headline: Error fetching entries from hardware forwarding I2 table utilization instance all
	Symptoms: Random interfaces on a Nexus 3164 might go into error-disabled state. Reason provided is "null".2023 Oct 9 22:38:02.946 [Hostname] %ETHPORT-5-IF_SEQ_ERROR: Error ("(null)") communicating with MTS_SAP_ELTM for opcode MTS_OPC_ETHPM_PORT_PRE_CFG (RID_PORT: Ethernet1/42)2023 Oct 9 22:38:02.946 [Hostname] %ETHPORT-3-IF_DOWN_ERROR_DISABLED: Interface Ethernet1/42 is down (Error disabled. Reason:(null)
	Workarounds: None
CSCwi24874	Headline: Crash "aclqos hap reset" has occurred in Nexus 3500
	Symptoms: Crash "aclqos hap reset" has occurred in Nexus 3500
	The crash "aclqos hap reset" is occurred when adding the multiple ACLs into "copp-system-acl-pimreg".
	The logs are shown below.
	# show system reset-reason
	reset reason for module 1 (from Supervisor in slot 1)
	1) At 140118 usecs after Mon Nov 20 15:45:12 2023
	Reason: Reset Requested due to Fatal Module Error Service: aclqos hap reset Version: 9.3(8)
	# show cores
	VDC Module Instance Process-name PID Date(Year-Month-Day Time)
	1 1 1 aclqos 21672 2023-11-20 15:47:20 # show logging nvram
	snip
	%SYSMGR-SLOT1-2-SERVICE_CRASHED: Service "aclqos" (PID 21672) hasn't caught signal 11 (core will be saved).
	%SYSMGR-SLOT1-2-HAP_FAILURE_SUP_RESET: Service "aclqos" in vdc 1 has had a hap failure
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: fsm_action_become_offline: PID 10693 with message Could not turn off console logging on vdc 1 error: mts req-response with syslogd in vdc 1 failed (0xFFFFFFFF) .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: core_client_main: PID 2661 with message filename = 0x102_aclqos_log.21672.tar.gz .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: copy_cores_to_logflash: PID 2661 with message filename = 0x102_aclqos_compress.21672.log .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: copy_cores_to_logflash: PID 2661 with message filename = 0x102_aclqos_compress.21672.log.2675 .
	%SYSMGR-SLOT1-2-LAST_CORE_BASIC_TRACE: copy_cores_to_logflash: PID 2661 with message filename = 1700465012_0x102_aclqos_log.22134.tar.gz.
	Workarounds: None

Known Issues and Limitations

Bug ID	Description
CSCwh29639	Cisco Nexus 3548 does not display all SPAN sessions in 'show monitor session all drop' CLI output. This happens when multiple SPAN sessions are configured. Workaround is to use 'show monitor session X drop' CLI for each SPAN session.

Device Hardware

The following tables list the Cisco Nexus 3000 Series hardware that Cisco NX-OS Release 9.3(13) 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
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)

Product ID	Description
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
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)

Product ID	Description
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 <u>Transceiver Module (TMG) Compatibility Matrix</u>.

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(13) from earlier releases, see <u>Upgrade Nexus 3048 NX-OS Software</u> document.

Upgrading Cisco Nexus 3000 and Cisco Nexus 3100 Family Switches

To perform a software upgrade to Cisco NX-OS Release 9.3(13) from earlier releases, see <u>Upgrade Nexus 3000 and 3100 NX-OS Software</u> document.

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

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

Upgrade Path to Cisco NX-OS Release 9.3(13)

For the list of platforms and releases that support a non-disruptive In-Service Software Upgrade (ISSU) to Cisco NX-OS Release 9.3(13), see the <u>Cisco NX-OS ISSU Support Matrix</u>.

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(13)

For Cisco Nexus 3264C-E switches:

Release 9.2(1) or 9.2(2) -> Release 9.3(13)

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

Release 9.2(2t) to 9.2(2v) -> Release 9.3(13)

Release 9.2(2v) -> Release 9.3(13)

Upgrading Cisco Nexus 3524 and Cisco Nexus 3548 Family Switches

To perform a software upgrade to Cisco NX-OS Release 9.3(13) from earlier releases, see <u>Upgrade Nexus 3524 and 3548 NX-OS Software</u> document.

Upgrading Cisco Nexus 3600 Family Switches

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

Upgrade Path to Cisco NX-OS Release 9.3(13)

The following disruptive upgrade paths are supported:

Release 9.2(1) or 9.2(2)-> Release 9.3(13)

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: <u>Cisco Nexus 3000</u> 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

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