



Cisco Nexus 3000 Series NX-OS Release Notes, Release 10.4(1)F

Introduction

The Cisco Nexus 3000 Series NX-OS Release Notes document describes the features, issues, and exceptions of Cisco NX-OS Release 10.4(1)F software for use on Cisco Nexus 3500 and 3600 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.

Changes to this document:

| Date | Description |
|-----------------|--|
| August 18, 2023 | Cisco NX-OS Release 10.4(1)F became available. |

New and Enhanced Software Features

| New Features | | |
|----------------|--|--|
| Product Impact | Feature | Description |
| Security | Radius over DTLS Support | Datagram Transport Layer Security (DTLS) protocol is now used to transport RADIUS datagrams over a secure channel using UDP. See Cisco Nexus 3600 NX-OS Security Configuration Guide, Release 10.4(x). |
| | Support ARP response for out-of-subnet | With Cisco NX-OS Release 10.4(1)F, you can enable or disable the ARP out-of-subnet packet transaction on the connected host using the ip arp outside-subnet command. This command is available in both global and interface modes. See Cisco Nexus 3600 Series NX-OS Unicast Routing Configuration Guide, Release 10.4(x). |

The enhanced features listed below are existing features introduced in earlier releases but enhanced to support new platforms in Cisco NX-OS Release 10.4(1)F for Cisco Nexus 3000 series.

| Enhanced Features | | |
|-------------------|-----------------------------|--|
| Product Impact | Feature | Description |
| Security | Keychain support for OSPFv3 | A new option to enable keychain is provided for OSPFv3 encryption and authentication commands. See Cisco Nexus 3600 Switch NX-OS Unicast Routing Configuration Guide, Release 10.4(x), and Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference for Release 10.4x. |

Hardware Features

Cisco NX-OS Release 10.4(1)F does not include any new hardware for the Cisco Nexus 3000 Series.

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.10.4.1.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 |
|----------------------------|---|
| CSCwe67479 | <p>Headline: Cisco Nexus 3500 switch does not propagate correct PTP clock received from upstream to downstream devices.</p> <p>Symptoms: PTP clients receive 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 |
|----------------------------|---|
| CSCwd75851 | <p>Headline: /nxos/xlog is filled 100% with repeated copy run start and log files are not rolled over.</p> <p>Symptoms: When configuration changes are automated and multiple sessions try to save the configuration changes simultaneously and repeatedly, a syslog is seen.</p> <p>Workarounds: Avoid simultaneous configuration sessions and excessive/repeated config save operation.</p> |
| CSCwh00127 | <p>Headline: Kernel Panic due to HR Timeout and SMC.</p> <p>Symptoms: The following kernel panic logs are seen on N3K-C3548P-XL. \$%KERN-0-SYSTEM_MSG: [11269926.144849] NMI watchdog: BUG: soft lockup - CPU#2 stuck for 22s! [swapper/2:0] - kernel %KERN-0-SYSTEM_MSG: [11269926.144869] NMI watchdog: BUG: soft lockup - CPU#0 stuck for 22s! [swapper/0:0] - kernel</p> <p>VDC-1 %\$ %VPC-2-PEER_KEEP_ALIVE_RECV_FAIL: In domain 1, VPC peer keep-alive receive has failed VDC-1 %\$ %KERN-0-SYSTEM_MSG: [11269926.144849] NMI watchdog: BUG: soft lockup - CPU#2 stuck for 22s! [swapper/2:0] - kernel VDC-1 %\$ %KERN-0-SYSTEM_MSG: [11269926.144869] NMI watchdog: BUG: soft lockup - CPU#0 stuck for 22s! [swapper/0:0] - kernel VDC-1 %\$ %KERN-0-SYSTEM_MSG: [11269926.148346] nxos_panic: Kernel panic - not syncing: softlockup: hung tasks - kernel VDC-1 %\$ %KERN-0-SYSTEM_MSG: [11269926.148415] ttyS console device is disabled - kernel VDC-1 %\$ %KERN-0-SYSTEM_MSG: [11269926.150327] END: PANIC REPORT GENERATED AT 1689769096 - kernel</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 10.4(1)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. |

| Product ID | Description | | | | | | | | | | | |
|-----------------|---|-----------------|-------------------|-------------------|-------------|-------------|-----------------|-----|-----|---------|------|------|
| N3K-C36180YC-R | <p>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.</p> <p>From Cisco NX-OS Release 10.3(3)F, the following AC ports are supported on Cisco Nexus 36180YC-R (N3K-C36180YC-R):</p> <p>AC port-side exhaust (NXA-PAC-750W-PE)</p> <p>AC port-side intake (NXA-PAC-750W-PI)</p> <p>The following table provides information about spares support:</p> <table border="1"> <thead> <tr> <th rowspan="2">Minimum/Maximum</th> <th>Port-side-Intake</th> <th>Port-side-Exhaust</th> </tr> <tr> <th>Fan Speed %</th> <th>Fan Speed %</th> </tr> </thead> <tbody> <tr> <td>Typical/Minimum</td> <td>50%</td> <td>70%</td> </tr> <tr> <td>Maximum</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table> <p>For information about N3K-C36180YC-R, see Cisco Nexus 3600 Hardware Installation Guide.</p> | Minimum/Maximum | Port-side-Intake | Port-side-Exhaust | Fan Speed % | Fan Speed % | Typical/Minimum | 50% | 70% | Maximum | 100% | 100% |
| Minimum/Maximum | Port-side-Intake | | Port-side-Exhaust | | | | | | | | | |
| | Fan Speed % | Fan Speed % | | | | | | | | | | |
| Typical/Minimum | 50% | 70% | | | | | | | | | | |
| Maximum | 100% | 100% | | | | | | | | | | |

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>

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 [Install and Upgrade Guides](#).

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 Guide• Cisco Nexus 9000 and 3000 Series NX-OS Switch License Navigator• Cisco Nexus Smart Licensing Using Policy User Guide | Licensing Information |

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