



# Cisco Nexus 3000 Series NX-OS Release Notes, Release 10.4(2)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(2)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
December 14, 2023	Cisco NX-OS Release 10.4(2)F became available.

## New and Enhanced Software Features

Cisco NX-OS Release 10.4(2)F does not include any new software features for the Cisco Nexus 3000 Series.

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(2)F for Cisco Nexus 3000 series.

Enhanced Features		
Product Impact	Feature	Description
Ease of use	ARP cache limit per interface	From Cisco NX-OS Release 10.4(2)F, the <b>ip arp cache intf-limit</b> command allows you to configure the number of maximum ARP cache entries allowed per interface.  See <a href="#">Cisco Nexus 3548 Switch NX-OS Unicast Routing Configuration Guide</a> and <a href="#">Cisco Nexus 3600 Switch NX-OS Unicast Routing Configuration Guide</a> , Release 10.4(x).
Feature Set	Configuration Replace multiline support	The configuration replace feature is now supported for LDAP on Cisco NX-OS devices.  See <a href="#">Cisco Nexus 3548 Switch NX-OS System Management Configuration Guide</a> and <a href="#">Cisco Nexus 3600 Switch NX-OS System Management Configuration Guide</a> , Release 10.4(x).

## Hardware Features

The following new hardware feature is introduced in Cisco NX-OS Release 10.4(2)F for Cisco Nexus 3000 Series.

### SFP-10/25G-LR on N3K-C36180YC-R

The SFP-10/25G-LR is a Small Form-Factor Pluggable transceiver module designed for use in 10 Gigabit and 25 Gigabit Ethernet links over single mode fiber. It supports a link length of up to 10 kilometers. SFP-10/25G-LR is now supported on N3K-C36180YC-R.

## 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.10.4.2.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
<a href="#">CSCwe67479</a>	<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>
<a href="#">CSCwi44292</a>	<p>Headline: Pre-upgrade check on nxos64-msll images does not display the new version correctly during downgrade.</p> <p>Symptoms: During downgrade from impacted NXOS version to a previous version, pre-upgrade check displays New BIOS version as blank in 10.4(2)F on the following impacted platforms:</p> <ul style="list-style-type: none"><li data-bbox="423 1083 683 1108">• N3K-C36180YC-R</li></ul> <p>Workarounds: None.</p>

## Resolved Issues

Bug ID	Description
<a href="#">CSCwh88614</a>	<p>Headline: Evaluation of n9k-standalone-sw for HTTP/2 Rapid Reset Attack vulnerability</p> <p>Symptoms: This bug has been filed to evaluate the Cisco Nexus 3000 Series Switches and Nexus 9000 Series Switches in standalone NX-OS mode against the following HTTP/2 vulnerability disclosed on October 10, 2023: CVE-2023-44487 - HTTP/2 Rapid Reset</p> <p>Cisco has reviewed this product and concluded that it is affected by this vulnerability. This advisory is available at the following link:  <a href="https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-http2-reset-d8Kf32vZ">https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-http2-reset-d8Kf32vZ</a></p> <p>Workarounds: Customers who do not require NX-API to support the HTTP/2 protocol can disable that as follows:</p> <ol style="list-style-type: none"> <li>1. Connect to the device CLI.</li> <li>2. Save all current NX-API configuration as this configuration will be lost in the course of the following process: <code>switch# show run   inc ^nxapi</code>.</li> <li>3. Enable the Bash shell feature and connect to the Bash shell.  <code>switch# conf t</code>  Enter configuration commands, one per line. End with CNTL/Z.  <code>switch(config)# feature bash-shell</code>  <code>switch(config)# run bash</code>  <code>bash-4.4\$</code></li> <li>4. Create a backup of the NX-API configuration script.  <code>bash-4.4\$ sudo cp -p /var/nginx/script/nginx_fe.conf.tpl /var/nginx/script/nginx_fe.conf.tpl.orig</code></li> <li>5. Disable the HTTP/2 protocol in the NX-API configuration script and quit the Bash shell.  <code>bash-4.4\$ sudo sed -i 's/ http2//' /var/nginx/script/nginx_fe.conf.tpl</code>  <code>bash-4.4\$ exit</code>  <code>exit</code></li> <li>6. (Optional) Disable the Bash shell feature if you do not need it.  <code>switch(config)# no feature bash-shell</code></li> <li>7. Restart the NX-API feature.  <code>switch(config)# no feature nxapi</code>  <code>switch(config)# feature nxapi</code></li> <li>8. Re-apply the configuration you saved in step 2.  To re-enable the HTTP/2 protocol for the NX-API feature, follow the same procedure as above, but skip step 4 and in step 5 use the following command sequence instead of what is listed above:  <code>bash-4.4\$ sudo sed -i 's/ssl;/ssl http2;/' /var/nginx/script/nginx_fe.conf.tpl</code>  <code>bash-4.4\$ exit</code>  <code>exit</code></li> </ol>

Bug ID	Description
<a href="#">CSCwh94275</a>	<p>Headline: Nexus 3600 - Stale MPLS Labels after a route change.</p> <p>Symptoms: Packet drops within MPLS setup. The issue may be confirmed by spotting the differences in the BRIB and LFIB for prefixes which are visible using the command - show bgp vpnv4 unicast &lt;prefix&gt; and show forwarding mpls option_b   in &lt;prefix&gt;.</p> <p>Workarounds: The current workaround is intrusive - which is to flap the BGP VPNv4 neighborship to the PEs that advertised the prefixes that have the stale label.</p>

## Device Hardware

The following tables list the Cisco Nexus 3500 and Cisco Nexus 3600 Series hardware that Cisco NX-OS Release 10.4(2)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> <ul style="list-style-type: none"> <li>• AC port-side exhaust (NXA-PAC-750W-PE)</li> <li>• AC port-side intake (NXA-PAC-750W-PI)</li> </ul> <p>The following table provides information about spares support:</p> <ul style="list-style-type: none"> <li>• The Typical/Minimum port-side intake and fan speed percentage is 50% and the maximum port-side intake and fan speed percentage is 100%.</li> <li>• The Typical/Minimum port-side exhaust and fan speed percentage is 70% and the maximum port-side exhaust and fan speed percentage is 100%.</li> </ul> <p>For information about N3K-C36180YC-R, see <a href="#">Cisco Nexus 3600 Hardware Installation Guide</a>.</p>

## 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:

<https://cisco.github.io/cisco-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
<a href="#">Cisco Nexus 3000 Series switch documentation</a>	Cisco Nexus 3000 Series documentation
<a href="#">Cisco NX-OS Software Strategy and Lifecycle Guide</a>	Cisco NX-OS Software Release and Image-naming Convention
<a href="#">Cisco Nexus 3000 and 9000 Series NXAPI REST SDK User Guide and API Reference</a>	Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference
<ul style="list-style-type: none"> <li>• <a href="#">Cisco NX-OS Licensing Guide</a></li> <li>• <a href="#">Cisco Nexus 9000 and 3000 Series NX-OS Switch License Navigator</a></li> <li>• <a href="#">Cisco Nexus Smart Licensing Using Policy User Guide</a></li> </ul>	Licensing Information

## Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to [nexus9k-docfeedback@cisco.com](mailto:nexus9k-docfeedback@cisco.com). We appreciate your feedback.

## Legal Information

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks).

Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

© 2023 Cisco Systems, Inc. All rights reserved.