



Cisco Nexus 3600 NX-OS Release Notes, Release 9.2(2)

This document describes the features, caveats, and limitations for Cisco NX-OS Release 9.2(2) software for use on Cisco Nexus 3636C-R and 36180YC-R switches. Use this document in combination with documents listed in [Related Documentation](#).

[Table 1](#) shows the online change history for this document.

Table 1. Online History Change

Date	Description
January 31, 2019	Updated Open Caveats .
December 14, 2018	Added Licensing Information
November 5, 2018	Created the release notes for Release 9.2(2).

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Introduction

Cisco NX-OS software is a data center-class operating system designed for performance, resiliency, scalability, manageability, and programmability at its foundation. The Cisco NX-OS software provides a robust and comprehensive feature set that meets the requirements of virtualization and automation in mission-critical data center environments. The modular design of the Cisco NX-OS operating system makes zero-impact operations a reality and enables exceptional operational flexibility.

The Cisco Nexus 3000 Series switches, which includes Cisco Nexus 3100, 3200, 3400, 3500, and 3600 platform switches, and Cisco Nexus 9300 and 9500 platform switches run on the same binary image, also called the “unified” image.

Cisco NX-OS Release 9.2(1) is the first release that adopts unified version numbering. As more platforms have been added, there is no need to have a “**platform**” designator as used in the past.

An example of a previous release number is: 7.0(3)I7(4). In this format, **the ‘I’** is the platform designator.

Moving forward for the previously identified platforms, we will be adopting the simplified 3-letter versioning scheme. For example, (unified-release-major.major/minor..maintenance).

Note: In order to accommodate upgrade compatibility from an older software version that is expecting a platform designator, when the install all command is entered or the show install all impact command is entered, the version string appears as 9.2(1)I9(1). The “**I9(1)**” portion of the string can be safely ignored. It will later appear as 9.2(1).

Licensing Information

Temporary licenses with an expiry date are available for evaluation and lab use purposes. They are strictly not allowed to be used in production. Please use a permanent or subscription license that has been purchased through Cisco for production purposes.

For more information, see the [Cisco NX-OS Licensing Guide](#).

System Requirements

This section includes the following sections:

- Supported Device Hardware
- Supported Optics

Supported Device Hardware

[Table 2](#) lists the Cisco Nexus 3600 switch hardware that Cisco NX-OS Release 9.2(2) supports. For additional information about the supported hardware, see the [Cisco Nexus 3600 NX-OS Mode Switch Hardware Installation Guide](#).

Table 2. Cisco Nexus 3600 Switch Hardware

Product ID	Description
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Product ID	Description
N3K-C3636C-R	The Cisco Nexus 3636C-R is a 1 rack unit (RU) switch with 36 100-Gigabit QSFP28 ports, 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.

Supported Optics

See the [Cisco Transceiver Modules Compatibility Information](#) for a list of supported optical components.

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>.

New and Changed Information

This section lists the following topic:

- New Hardware Features in Cisco NX-OS Release 9.2(2)
- New Software Features in Cisco NX-OS Release 9.2(2)

New Hardware Features in Cisco NX-OS Release 9.2(2)

Cisco NX-OS Release 9.2(2) supports the following new hardware:

- There are no new hardware features in Cisco NX-OS Release 9.2(2).

New Software Features in Cisco NX-OS Release 9.2(2)

Cisco NX-OS Release 9.2(2) includes the following new software features:

Fundamentals Features

- POAP over IPv6—Support added for POAP over IPv6.

For more information, see the [Cisco Nexus 3600 NX-OS Fundamentals Configuration Guide, Release 9.2\(x\)](#).

Interfaces Features

- Breakout support—Added 4x25 Gb breakout support for N3K-C3636C-R and N3K-C36180YC-R switches.

For more information, see the [Cisco Nexus 3600 NX-OS Interfaces Configuration Guide, Release 9.2\(x\)](#).

Resolved Caveats—Cisco NX-OS Release 9.2(2)

Programmability Features

- Perl Modules—Support added for Perl modules.
- NX-API Developer Sandbox— Various enhancements have been added to the NX-API Developer Sandbox.

For more information, see the [Cisco Nexus 3600 NX-OS Programmability Guide, Release 9.2\(x\)](#).

Unicast Routing Features

- BGP—Added the following features:
 - BGP best-path algorithm— Added the option to ignore the Interior Gateway Protocol (IGP) metric for next hop during best-path selection.
 - BGP path selection in route maps for advertising BGP additional paths to peers – Added the ability to specify backup paths, the second best path, or multipaths as advertised paths.
 - IPv4 BGP prefix independent convergence (PIC) edge – Introduced this feature to ensure fast convergence to a BGP backup path when an external (eBGP) edge link or an external neighbor node fails. BGP PIC edge supports only the IPv4 address family.
 - RFC 5549 IPv6 – Added support for Cisco Nexus 3600 platform switches.
- Policy-based routing – Added the ability to drop packets when the configured next hop becomes unreachable, when setting the IPv4 or IPv6 next-hop address.

VXLAN Features

- VXLAN: DHCP relay- Support added for Cisco Nexus 3636C-R and 36180YC-R switches.

For more information, see the [Cisco Nexus 3600 NX-OS VXLAN Configuration Guide, Release 9.2\(x\)](#).

Resolved Caveats—Cisco NX-OS Release 9.2(2)

The following table lists the resolved bugs in Cisco NX-OS Release 9.2(2). You can use the bug ID to access the [Cisco Bug Search Tool](#) and see additional information about the bug.

Bug ID	Description
CSCvh65567	Can't delete ACL completely
CSCvi81453	bgp- [28867] Cannot bind local socket for peer 2002:1:1:1::109: Cannot assign requested address
CSCvj81662	After range of VLAN delete/add, NGOAM session for couple of VLANs down-BGP IMET route missing
CSCvk09517	Anycast prefix with label advertised diff areas is not seen as labelled prefix
CSCvk18949	cevQSFPUnknown for QSFP-40/100-SRBD in entPhysicalVendorType in entPhysicalTable ENTITY - MIB
CSCvk22717	linkFlapErrDisabled on back-to-back specific ports 19-22, 27-36 for ToR
CSCvk27282	N3K-C36180YC-R: xcvrAbsen on Link flap due to MIFPGA failing to read SPROM
CSCvm45182	// 7.0(3)F3(3) // Running slot 1 quoted "show hardware internal.." crashes box

Open Caveats—Cisco NX-OS Release 9.2(2)

The following table lists the open caveats in Cisco NX-OS Release 9.2(2). Click the bug ID to access the [Cisco Bug Search Tool](#) and see additional information about the bug.

Bug ID	Description
CSCuz98451	OTM URIB Assert Error on Boot
CSCvb82259	Cisco Nexus 3000 Series switches take more than 10 secs to populate the S,G entry.
CSCvf76134	Multicast-heavy: traffic for /64 IPv6 LPM do not work in N9300-EX post ISSU 7.0(3)I6(1)->7.0(3)I7(2)
CSCvg65669	After reload license is not checked out despite having "port-license acquire" cli under port.
CSCvk20530	RC/BF: QSFP-40/100-SRBD aka 100G40G-BIDI failed in BV ports, ports in error disable after link flap
CSCvn11908	QSFP-4SFP25G-CU5M in N3K-C3636C-R/N3K-C36180YC-R with 4x25G breakout flap in steady state

Behavior Changes

This section lists limitations related to Cisco NX-OS Release 9.2(2).

Interface Behavior Changes

- Output format for the exec command CLI show vpc orphan-ports has changed from 7.0(3)F3(4) release to 9.2(2) release.

Programmability Behavior Changes

- Release 9.2(2) brings in the new kernel and the new processes.
- Interface counter statistics are grouped together in the XML/JSON output. The output for the show interface counters command in JSON format has changed.
- NX-API does not support insecure HTTP by default.
- NX-API does not support weak TLSv1 protocol by default.

Security Behavior Changes

- Stronger ciphers are used in Release 9.2(2).
- A new command, no service password-recovery is now supported.
- Only one version out of v4 and v6 versions of the uRPF command can be configured on an interface. If one version is configured, all the mode changes must be done by the same version and another version is blocked on that interface.

Limitations

This section lists limitations related to Cisco NX-OS Release 9.2(2).

- IPv4 traffic might drop when only IPv6 uRPF is enabled on the interface. For more information, see [CSCvh99632](#).
- The PTP process restart and system switchover accumulates high corrections for a few seconds. For more information, see [CSCvg49023](#).
- The LDP neighbor might flap on switchover in a scaled setup with many interfaces. Increase the discovery hello hold time for MPLS under the MPLS LDP configuration. For more information, see [CSCvg71349](#).

Upgrade Paths to Release 9.2(2)

- CoPP (Control Plane Policing) cannot be disabled. If you attempt to disable it, an error message appears. For more information, see [CSCvi09329](#).
- The skip CoPP policy option has been removed from the Cisco NX-OS initial setup utility because using it can impact the control plane of the network. For more information, see [CSCvc44819](#).
- On Cisco Nexus N3K-C3636C-R and N3K-C36180YC-R switches, auto-negotiation may not work when bringing up 100G links using QSFP-100G-CR4 cable. To work around this issue, you must hard-code the speed on all ports of the Cisco Nexus N3K-C3636C-R, on ports 49-64 of the Cisco Nexus N3K-C36180YC-R and disable auto-negotiation. For more information, see [CSCvi82402](#).

Upgrade Paths to Release 9.2(2)

See the following upgrade paths for upgrading from an earlier release to Release 9.2(2):

- Release 9.2(1) -> Release 9.2(2)
- Release 7.0(3)F3(3) -> Release 7.0(3)F3(4) -> Release 9.2(2)
- Release 7.0(3)F3(3c) -> Release 9.2(2)
- Release 7.0(3)F3(4) -> Release 9.2(2)

Note: An upgrade from a release prior to 7.0(3)F3(3) to Release 9.2(2) is not supported. You must upgrade to either Release 7.0(3)F3(3), 7.0(3)F3(3c), or 7.0(3)F3(4) and then upgrade to Release 9.2(2).

Related Documentation

The entire Cisco Nexus 3600 NX-OS documentation set is available at the following URL:

<https://www.cisco.com/c/en/us/support/switches/nexus-3000-series-switches/tsd-products-support-series-home.html>

The *Cisco Nexus 3600 NX-OS Hardware Installation Guide* is available at the following URL:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus3600/hw/installation/guide/b_n3600_hardware_inst_all_guide.html

The *Cisco Nexus 3600 NX-OS Verified Scalability Guide* is available at the following URL:

<https://www.cisco.com/c/en/us/support/switches/nexus-3000-series-switches/products-installation-and-configuration-guides-list.html>

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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For information on obtaining documentation and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Open a service request online at:

<https://tools.cisco.com/ServiceRequestTool/create/launch.do>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

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