



Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release Notes, Release 7.0(3)F2(2)

This document describes the Cisco IP fabric for media solution, new software features, and caveats for Cisco NX-OS Release 7.0(3)F2(2) software for use on the following switches:

- Cisco Nexus 9508 switch with the NgK-X9636C-R and NgK-X9636Q-R line cards

Use this document in combination with documents listed in the "Related Documentation" section.

Table 1 shows the online change history for this document.

Table 1 Online History Change

Date	Description
June 29, 2017	Created the release notes for Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2).

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IP Fabric for Media

Today, the broadcast industry uses a serial digital interface (SDI) router and SDI cables to transport video and audio traffic. The SDI cables can carry only a single unidirectional signal. As a result, a large number of cables, frequently stretched over long distances, is required, making it difficult and time-consuming to expand or change an SDI-based infrastructure.

Cisco's IP fabric for media solution helps transition from an SDI router to an IP-based infrastructure. In an IP-based infrastructure, a single cable has the capacity to carry multiple bidirectional traffic flows and can support different flow sizes without requiring changes to the physical infrastructure. The solution uses Cisco Nexus 9000 Series switches in conjunction with the Cisco non-blocking multicast (NBM) algorithm (an intelligent traffic management algorithm) and with or without the Cisco DCNM Media Controller to provide a highly reliable (zero drop multicast), highly visible, highly secure, and highly available network.

Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2) supports these deployment methods:

- A spine-leaf topology with the DCNM Media Controller—A flexible architecture for large-scale deployments typically seen in an IP studio
- A single modular switch with the DCNM Media Controller—An architecture suitable for fixed deployments, with the controller providing features such as flow visibility, security, and monitoring.
- A single modular switch without the DCNM Media Controller—A simple deployment method for environments such as outside broadcasting (OB) vans

Supported Device Hardware

Table 2 lists the hardware that the Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2) supports. For additional information about the supported hardware, see the [Hardware Installation Guide](#) for your Cisco Nexus 9000 Series device.

Table 2 Cisco Nexus 9000 Series Hardware

Product ID	Hardware Description	Role in Topology
NgK-9508 with the following line cards: <ul style="list-style-type: none"> • NgK-X9636C-R • NgK-X9636Q-R 	Cisco Nexus 9508 8-slot switch NgK-X9636C-R: 36-port 100-Gigabit Ethernet QSFP28 line card supporting 1 x 100 and 1 x 40 Gigabit Ethernet NgK-X9636Q-R: 36-port 40-Gigabit Ethernet QSFP+ line card supporting 1 x 40 Gigabit Ethernet	Spine in spine-leaf topology with DCNM Media Controller Single modular switch with DCNM Media Controller Single modular switch without DCNM Media Controller Note: When the Cisco Nexus 9508 switch is used as a spine switch in a spine-leaf topology, the Cisco Nexus 9236C, 9272Q, 9216oYC-X, 93108TC-EX, and 9318oYC-EX switches can be used as leaf switches.

Required Software

Cisco DCNM Release 10.2.1 or later is required to access the Media Controller.

Leaf switches must run Cisco NX-OS 7.0(3)I6(1) or a later release when used with spine switches that are running Cisco NX-OS Release 7.0(3)F2(1) or a later release.

New Hardware Features

Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2) does not include new hardware features.

New Software Features

This section lists the new software features in Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2).

- Layer 2 with SVI host interfaces—Added support for connecting an endpoint to a Layer 2 port with an SVI.
Note: We recommend using a Layer 3 routed port to an endpoint.
- New deployment mode—Enables the Cisco Nexus 9508 switch (with the NgK-X9636C-R and NgK-X9636Q-R line cards) to operate as a single modular switch with the DCNM Media Controller.

Caveats

This section includes the following topics:

- Resolved Caveats
- Open Caveats
- Known Behaviors

Resolved Caveats

Table 3 lists the resolved caveats in Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2). Click the bug ID to access the Bug Search tool and see additional information about the bug.

Table 3 Resolved Caveats

Bug ID	Description
CSCve25514	C9508 needs to have default copp class map for http & https

Open Caveats

Table 4 lists the open caveats in Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2). Click the bug ID to access the Bug Search tool and see additional information about the bug.

Table 4 Open Caveats

Bug ID	Description
CSCve56569	PMN-Single Chassis: Enabling SVI causing existing flows to flap

Known Behaviors

This section lists known behaviors related to Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)F2(2):

- If you disable NBM and reenabling it when receivers are present, inconsistencies might occur in the flow programming and result in multicast traffic drops. If this occurs, run the following commands: **clear ip mroute**, **clear ip igmp groups**, and **clear ip pim route**.
- DCNM might have issues synchronizing with the switch when a front panel is used to connect to DCNM and the module reloads. As a best practice, always use two ports on different line cards to connect with DCNM.

For a list of guidelines and limitations for this release, see the [Cisco Nexus 9000 Series IP Fabric for Media Solution Guide](#).

Related Documentation

- [Cisco Nexus 9000 Series IP Fabric for Media Solution Guide](#)
- [Cisco Nexus 9000 Series NX-OS Release Notes, Release 7.0\(3\)F2\(2\)](#)
- [Cisco DCNM Installation Guide, Release 10.2\(x\)](#)
- The entire Cisco Nexus 9000 Series NX-OS documentation set is available at the following URL:

<http://www.cisco.com/c/en/us/support/switches/nexus-9000-series-switches/tsd-products-support-series-home.html>

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to nexusgk-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:

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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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