



Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release Notes, Release 7.0(3)I4(5)

This document describes the Cisco IP fabric for media solution, limitations, and caveats for Cisco NX-OS Release 7.0(3)I4(5) software for use on the following switches:

- Cisco Nexus 9236C switch
- Cisco Nexus 9272Q switch
- Cisco Nexus 92160YC-X switch
- Cisco Nexus 93108TC-EX switch
- Cisco Nexus 93180YC-EX switch

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
December 23, 2016	Created the release notes for Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)I4(5).

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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 IP fabric for media solution consists of a scalable spine and leaf architecture built using Cisco Nexus 9000 Series switches in conjunction with the Cisco non-blocking multicast (NBM) algorithm (an intelligent traffic management algorithm) and the Cisco DCNM Media Controller. The solution provides 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)I4(5) supports a spine-leaf topology that consists of multiple spine and leaf switches.

Supported Device Hardware

Table 2 lists the hardware that the Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)I4(5) 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	Role in Topology
N9K-C9236C	Cisco Nexus 9236C 1-RU switch with 36 40-/100-Gigabit QSFP28 ports (144 10-/25-Gigabit ports when using breakout cables)	Spine or leaf switch
N9K-C9272Q	Cisco Nexus 9272Q 2-RU switch with 72 40-Gigabit Ethernet QSFP+ ports (up to 35 of the ports [ports 37-71] also support breakout cables providing up to 140 10-Gigabit connections)	Spine or leaf switch
N9K-C92160YC-X	Cisco Nexus 92160YC-X 1-RU switch with 48 10-/25-Gigabit SFP+ downlink ports and 6 40-Gigabit QSFP+ uplink ports, with 4 of the uplink ports capable of supporting QSFP28 transceivers (100 Gigabits)	Leaf switch
N9K-C93108TC-EX	Cisco Nexus 93108TC-EX 1-RU switch with 48 10GBASE-T ports and 6 40/100-Gigabit QSFP28 ports	Leaf switch
N9K-C93180YC-EX	Cisco Nexus 93180YC-EX 1-RU switch with 48 10-/25-Gigabit Ethernet ports and 6 40/100-Gigabit QSFP28 ports	Leaf switch

Required Software

Cisco DCNM Release 10.1 is required to access the Media Controller.

Open Caveats

Table 3 lists the open caveats in Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)I4(5). Click the bug ID to access the Bug Search tool and see additional information about the bug.

Table 3 Open Caveats in Cisco Nexus 9000 Series NX-OS IP Fabric for Media Release 7.0(3)I4(5)

Bug ID	Description
CSCvc28780	<p>Enabling, disabling, and reenabling the nbm mode controller command does not restore the sender flow.</p> <p>Workaround: Stop the traffic and wait for the s,g timeout for the sender flows and then start again, or reload this node again using the nbm mode controller command.</p>

Upgrade and Downgrade Instructions

Cisco's IP fabric for media solution 7.0(3)I4(2) release was designed for a single-spine, non-controller deployment. If you want to migrate from a single-spine, non-controller deployment to a multiple-spine, controller deployment, you will need to upgrade your switches to Cisco NX-OS Release 7.0(3)I4(5) and completely change the configuration as the switches need to be reconfigured in NBM controller mode. You will also need to modify the TCAM allocation. Because most deployments are built using redundant networks, with minimal or no disruption to production, each side of the fabric can be upgraded one after the other.

To perform a software upgrade or downgrade, follow the installation instructions in the [Cisco Nexus 9000 Series NX-OS Software Upgrade and Downgrade Guide](#) and refer to the [Cisco Nexus 9000 Series NX-OS Release Notes, Release 7.0\(3\)I4\(5\)](#) for specific upgrade and downgrade information related to this release.

Related Documentation

- Cisco Nexus 9000 Series NX-OS Release Notes, Release 7.0(3)I4(5)
http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/release/notes/70345_nxos_rn.html
- 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 nexus9k-docfeedback@cisco.com. We appreciate your feedback.

Obtaining Documentation and Submitting a Service Request

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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