Release Notes for Cisco MDS 9000 Series

Release 8.4(2a)

This document describes the features, caveats, and limitations for the Cisco MDS NX-OS software for the use on the Cisco MDS 9000 Series Switches. Use this document in combination with documents listed in the .

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.

Note: Release notes are updated on an as needed basis with new information on restrictions and caveats. Refer to the following website for the most recent version of the Cisco MDS 9000 Series Release Notes.

Date	Description
April 04, 2023	Added CSCvw32460 caveat in the open Caveats section.
March 23, 2022	Added the CSCwb14523 caveat in the Open Caveats section.
January 14, 2022	Added the CSCvz61883 caveat in the Open Caveats section.
December 15, 2021	Added the CSCuv76123 caveat in the Open Caveats section.
September 20, 2021	Added the CSCvz09012 caveat in the Open Caveats section.
August 26, 2021	Added ISSD guideline for OBFL TxWait.
July 9, 2021	Added the CSCvu52058 caveat in the Open Caveats section.
May 21, 2021	Added Smart Licensing caveat in the General Downgrading Guidelines section.
November 24, 2020	Added the CSCvs87512 caveat in the Resolved Caveats section.
November 18, 2020	Added the CSCvw03816 caveat in the Open Caveats section.
November 5, 2020	Added the CSCvu86801 caveat in the Open Caveats section.
November 2, 2020	Added the CSCvv27832 caveat in the Open Caveats section.
October 9, 2020	Removed the CSCvt41379 caveat from the Open Caveats section and added the CSCvv98829 caveat in the Open Caveats section.
September 30, 2020	Added the CSCvv59174 caveat in the Open Caveats section.
September 29, 2020	Added the CSCvt41379 caveat in the Open Caveats section.
September 2, 2020	Added the CSCvv56650 caveat in the Open Caveats section.
August 14, 2020	Added the CSCvs97168 caveat in the Open Caveats section.
July 1, 2020	Initial release.

Introduction

The Cisco MDS 9000 Series of Multilayer Directors and Fabric Switches provide best-in-class high availability, scalability, security, and management, that enables to deploy high-performance storage-area networks. Layering a rich set of intelligent features onto a high-performance switch fabric, the Cisco MDS 9000 Series addresses the stringent requirements of large data center storage environments: high availability, security, scalability, ease of management, and seamless integration of new technologies.

About Software Images

The Cisco MDS NX-OS operating system is shipped with the Cisco MDS 9000 Series Switches. The Cisco MDS NX-OS software consists of two images: the kickstart image and the system image. These images can be upgraded or downgraded to different versions. The versions of both images must match for the system to boot.

Each model of Cisco MDS switch has unique kickstart and system images. For more information on the image names for each Cisco MDS switch, see the *Cisco MDS 9000 NX-OS Software Upgrade and Downgrade Guide, Release 8.x*.

To download new Cisco MDS 9000 Series software, including Cisco MDS NX-OS and Cisco DCNM management software, go to the Storage Networking Software download website at https://software.cisco.com/download/home.

Choosing Between Cisco MDS NX-OS Open Systems Releases

Cisco uses release numbering to indicate the maturity of a Cisco MDS NX-OS release train. Cisco MDS NX-OS major versions are incremented when significant software features or hardware support are added. Because of the focus on new features and hardware, all defects may not yet have been fixed. After an initial release, minor version numbers of the train are incremented, and only security patches and defect fixes are added, providing better stability to the new features and updated security.

Details about the new features and hardware supported by Cisco MDS NX-OS Release 8.4(2a) can be found in the “New Hardware and Software Features” section. For information about other releases, refer to the Release Notes on the Cisco MDS 9000 NX-OS and SAN-OS Software documentation page.

For Cisco recommended MDS NX-OS releases for each type of hardware, see the *Recommended Releases for Cisco MDS 9000 Series Switches* document.

Components Supported

For information on supported software and hardware components, see the *Cisco MDS 9000 Series Compatibility Matrix*.

FICON

Cisco MDS NX-OS Release 8.4(2a) is not IBM FICON qualified. For more information, see http://www.cisco.com/c/en/us/ support/storage-networking/mds-9000-nx-os-san-os-software/products-release-notes-list.html.

Upgrading Cisco MDS NX-OS Software Image

This section lists the guidelines recommended for upgrading Cisco MDS NX-OS software image and includes the following topics:

- General Upgrading Guidelines
- Open Systems Nondisruptive Upgrade Paths

For detailed instructions for performing a software upgrade using the switch CLI, see the *Cisco MDS 9000 NX-OS Software Upgrade and Downgrade Guide, Release 8.x*.

For detailed instructions for performing a software upgrade using Cisco DCNM, see the Cisco DCNM Release Notes.

General Upgrading Guidelines

This section lists the general guidelines for performing a software upgrade:

- Install and configure dual supervisor modules before the upgrade.
- Issue the show install all impact upgrade-image command to determine if the upgrade will be nondisruptive.
- Some features are impacted whether an upgrade is disruptive or nondisruptive:
  - **Fibre Channel Ports**: Fibre Channel ports can be nondisruptively upgraded without affecting traffic on the ports. See the Open Systems Nondisruptive Upgrade Paths section for all MDS NX-OS releases.
  - **Fibre Channel over Ethernet (FCoE) Ports**: FCoE ports can be nondisruptively upgraded without affecting traffic on the ports. See the Open Systems Nondisruptive Upgrade Paths section for all MDS NX-OS releases.
  - **IP Storage (IPS) Ports**: Traffic on IPS ports on Cisco MDS 9250i and Cisco MDS 24/10-Port SAN Extension Modules is disrupted during an upgrade or downgrade. Nodes that are members of VSANs traversing an FCIP ISL are impacted, and a fabric reconfiguration may occur. iSCSI initiators connected to the IPS ports lose connectivity to iSCSI targets while the upgrade is in progress.

    Note: In addition to these guidelines, review the information in the “Limitations and Restrictions” section before a software upgrade to determine if a feature may possibly behave differently following the upgrade.

- To upgrade or downgrade to a Cisco MDS NX-OS release version, the same release version of the kickstart and system images in the install all command must be used.
- If you are upgrading Cisco MDS 9700 Series Switches from Cisco MDS NX-OS Release 8.3(1), Release 8.3(2), Release 8.4(1), and Release 8.4(1a) to Release 8.4(2) or later, ensure that you perform a switchover before upgrading. For more information, see CSCvt87216.

Open Systems Nondisruptive Upgrade Paths

The software upgrade information in this section applies only to Fibre Channel switching traffic. Upgrading system software disrupts IP traffic and intelligent services traffic.

Note: If the SAN Analytics feature is enabled, then disable the SAN Analytics feature using the no feature analytics command before upgrading from Cisco MDS NX-OS 8.2(x) or Cisco MDS NX-OS 8.3(x) to Cisco MDS NX-OS Release 8.4(2a). However, you can upgrade from Cisco MDS NX-OS Release 8.4(1), Release 8.4(1a), and Release 8.4(2) to Cisco MDS NX-OS Release 8.4(2a) without disabling the feature.

Table 1. Nondisruptive Upgrade Paths to Cisco MDS NX-OS Release 8.4(2a)

Current Release	Nondisruptive Upgrade Paths and Ordered Upgrade Steps
All 8.x releases	Upgrade directly to MDS NX-OS Release 8.4(2a)
All 7.3(x) releases	1. Upgrade directly to MDS NX-OS Release 8.1(1b) 2. Upgrade to MDS NX-OS Release 8.4(2a)
6.2(29) and above releases	Upgrade to MDS NX-OS Release 8.4(2a)
6.2(13a) until 6.2(27)	1. Upgrade directly to MDS NX-OS Release 8.1(1b) 2. Upgrade to MDS NX-OS Release 8.4(2a)
All 6.2(x) releases prior to 6.2(13a)	1. Upgrade directly to MDS NX-OS Release 6.2(13a) 2. Upgrade to MDS NX-OS Release 8.1(1b) 3. Upgrade to MDS NX-OS Release 8.4(2a)

Downgrading Cisco MDS NX-OS Software Image

This section lists the guidelines recommended for ISSD of Cisco MDS NX-OS software image and includes the following topics:

- General Downgrading Guidelines
- Open Systems Nondisruptive Downgrade Paths

For detailed instructions for performing a software downgrade using the switch CLI, see the *Cisco MDS 9000 NX-OS Software Upgrade and Downgrade Guide, Release 8.x*.

General Downgrading Guidelines

Follow these general guidelines before performing a software downgrade:

- Disable all features that are not supported by the downgrade release. Use the show incompatibility system downgrade- image command to determine the features that needs to be disabled.
- Use the show install all impact downgrade-image command to determine if the downgrade is nondisruptive.
- The following features are impacted during a downgrade, whether it is a nondisruptive downgrade or a disruptive downgrade:
  - **Fibre Channel Ports**: Fibre Channel ports can be nondisruptively downgraded without affecting traffic on the ports.
  - **FCoE Port**: FCoE ports can be nondisruptively downgraded without affecting traffic on the ports.
  - **IPS Ports**: Traffic on IPS ports on Cisco MDS 9250i and Cisco MDS 24/10-Port SAN Extension Modules is disrupted during an upgrade or downgrade. Nodes that are members of VSANs traversing an FCIP ISL are impacted, and a fabric reconfiguration may occur. iSCSI initiators connected to the IPS ports lose connectivity to iSCSI targets while the upgrade is in progress.

Find the MDS NX-OS image that you want to downgrade to in the To MDS NX-OS Release column of the Table 3 and follow the steps in the order specified to perform the downgrade.

Note: The software downgrade information in the below tables applies only to Fibre Channel switching traffic. Downgrading system software disrupts IP and intelligent services traffic.

- Any hardware that is not supported by the downgrade release version will be powered down when the downgrade release starts running. Power off and or remove any unsupported components before downgrading. For more information about supported hardware see the *Cisco MDS 9000 Series Compatibility Matrix*.
- If you are downgrading to Cisco MDS NX-OS Release 8.1(x), Release 8.2(x), Release 8.3(x), or Release 8.4(1x) from Release 8.4(2x) and if smart license and VSAN policy for a role are configured, ensure that you disable Smart Licensing or disable VSAN policy for only the role before downgrading or performing a switchover. You can reenable these features after downgrading or performing the switchover. For more information, see CSCvy19014.
- If you are downgrading from Cisco MDS NX-OS Release 9.2(1) or later releases to a release prior to Cisco MDS NX-OS Release 9.2(1), ensure that you use the clear logging onboard txwait command after downgrading. Otherwise, logging to the OBFL TxWait file may cease with an error. For more information, see the *Cisco MDS 9000 Series Interfaces Configuration Guide, Release 9.x*.

ISSD Guidelines for Cisco MDS 9396S Switch

- Downgrading from Cisco MDS NX-OS Release 8.x to Cisco MDS NX-OS Release 7.3(0)D1(1) or Cisco MDS NX-OS Release 6.2(13a) is not supported on a Cisco MDS 9396S Switch which has DS-CAC-1200W as a power supply unit (PSU) and DS-C96S-FAN-I as port side intake fan tray.
- Downgrading from Cisco MDS NX-OS Release 8.x to Cisco MDS NX-OS Release 6.2(13) is not supported on the Cisco MDS 9396S Multilayer Fabric Switch. The minimum recommended image for Cisco MDS 9396S Multilayer Fabric Switch is 6.2(13a).

ISSD Guidelines for Cisco MDS 9250i Switch

- Downgrading from Cisco MDS NX-OS Release 8.x to Cisco MDS NX-OS Release 7.3(0)D1(1), or 6.2(13a) and lower is not supported on a Cisco MDS 9250i Switch which has only one online PSU.
- Downgrading from Cisco MDS NX-OS Release 8.x to Cisco MDS NX-OS Release 7.3(0)D1(1), or 6.2(13a) and lower on a Cisco MDS 9250i Switch with two online PSUs results in loss of N:N grid redundancy. The switch will run in non- redundant mode.
- Downgrading from Cisco MDS NX-OS Release 8.x to Cisco MDS NX-OS Release 7.3(0)D1(1), or 6.2(13a) and lower on a Cisco MDS 9250i Switch with three online PSUs results in loss of N:N grid redundancy. The switch will run in N+1 power redundant mode.

Open Systems Nondisruptive Downgrade Paths

- Downgrading directly from Cisco MDS NX-OS Release 8.1(1) and Release 8.1(1b) to releases before Cisco MDS NX-OS Release 6.2(9) is not supported. In such a scenario, we recommend that you first downgrade to Cisco MDS NX-OS Release 6.2(13a) or higher and then downgrade to the required release.
- Downgrading directly from Cisco MDS NX-OS Release 8.1(1) to Cisco MDS NX-OS Release 7.3(0)DY(1) is not supported. In such a scenario, we recommend that you first downgrade to Cisco MDS NX-OS Release 7.3(0)D1(1) and then upgrade to 7.3(0)DY(1).
- Downgrading directly from Cisco MDS NX-OS Release 8.1(1) to Cisco MDS NX-OS Release 7.3(1)DY(1) is not supported. In such a scenario, we recommend that you first downgrade to Cisco MDS NX-OS Release 7.3(0)D1(1) and then upgrade to 7.3(1)DY(1).

- Downgrading from Cisco MDS NX-OS Release 8.1(1) and Release 8.1(1b) is not supported if the FLOGI Scale Optimization feature is enabled on the Cisco MDS 9718 Switches.

Table 2. Nondisruptive Downgrade Paths from NX-OS Release 8.4(2a)

To MDS NX-OS Release	Nondisruptive Downgrade Path and Ordered Downgrade Steps
All 8.x releases	Downgrade to the target release
All 7.3(x) releases	1. Downgrade directly to MDS NX-OS Release 8.1(1b) 2. Downgrade to the target release
6.2(29) and above releases	Downgrade to the target release
6.2(13a) until 6.2(27)	1. Downgrade directly to MDS NX-OS Release 8.1(1b) 2. Downgrade to the target release
All 6.2(x) releases prior to 6.2(13a)	1. Downgrade to MDS NX-OS Release 8.1(1b) 2. Downgrade directly to MDS NX-OS Release 6.2(13a) 3. Downgrade to the target release

New Hardware and Software Features

New Hardware Features

This section lists the new hardware chassis and features introduced in Cisco MDS NX-OS Release 8.4(2a).

Supervisor 4 Module in Cisco MDS 9718 Multilayer Director

Support for the Cisco MDS 9700 Series Supervisor-4 Module (DS-X97-SF4-K9) is introduced for the Cisco MDS 9718 Multilayer Director.

For more information, see the Cisco MDS 9700 Series Supervisor-4 Module section in the *Cisco MDS 9700 Series Hardware Installation Guide*.

Cisco MDS 9718 Crossbar Fabric-3 Switching Module

Support for the Cisco MDS 9718 Crossbar Fabric-3 Switching Module (DS-X9718-FAB3) is introduced for the Cisco MDS 9718 Multilayer Director.

For more information, see the Cisco MDS 9718 Director Crossbar Fabric Switching Modules section in the *Cisco MDS 9700 Series Hardware Installation Guide*.

New Software Features

This section lists the new software features introduced in Cisco MDS NX-OS Release 8.4(2a).

Support for Migrating a Cisco MDS 9718 Series Supervisor-1E Module to a Supervisor-4 Module

Nondisruptive migration support was introduced to seamlessly migrate the Cisco MDS 9718 Supervisor-1E Modules (DS-X97- SF1-K9) to the new Supervisor-4 Modules (DS-X97-SF4-K9) on the Cisco MDS 9718 Multilayer Director.

For more information, see the Nondisruptive Migration for Supervisor Modules section in the *Cisco MDS 9700 Series Hardware Installation Guide*.

Support for Migrating Cisco MDS 9718 Crossbar Fabric-1 Switching Modules to Fabric-3 Modules

Nondisruptive migration support was introduced to seamlessly migrate the Cisco MDS 9718 Crossbar Fabric-1 Switching Modules (DS-X9718-FAB1) to the new Cisco MDS 9718 Crossbar Fabric-3 Switching Modules (DS-X9718-FAB3) on the Cisco MDS 9718 Multilayer Director.

For more information, see the Nondisruptive Migration from Crossbar Fabric-1 Switching Modules to Crossbar Fabric-3 Switching Modules section in the *Cisco MDS 9700 Series Hardware Installation Guide*.

Enhanced Software Features

Increased Configuration Limits

Increased the maximum FLOGI count to 8000 FLOGIs on Cisco MDS 9718 switches with Cisco MDS 9700 Series Supervisor- 1 Module (DS-X97-SF1-K9) or Cisco MDS 9700 Series Supervisor-4 Module (DS-X97-SF4-K9). For more information, see the *Cisco MDS NX-OS Configuration Limits, Release 8.x*.

Unsupported Features

Data Mobility Manager

Starting from Cisco MDS NX-OS Release 8.1(1), the Cisco MDS Data Mobility Manager is not supported on Cisco MDS 9000 Series Switches.

Zoning Features

LUN zoning, read-only zones, and broadcast zones are no longer supported. These features affect the following hardware:

- Cisco MDS 9250i Multiservice Fabric Switch
- Cisco MDS 9396S Multilayer Fabric Switch
- Cisco MDS 9700 48-port 16-Gbps Fibre Channel Module

If these features are already configured, completely remove all the configurations that include these features before attempting to bring up these modules. In addition, you cannot configure these features after you bring up these modules.

Slow Drain Detection and Congestion Isolation Enhancements

ER_RDY is not supported on FC interfaces running at 10 Gbps.

XRC Acceleration License

Starting from Cisco MDS NX-OS Release 8.1(1a), the Cisco Extended Remote Copy (XRC) acceleration license is obsoleted on Cisco MDS 9000 Series Switches due to improvements in the mainframe XRC feature.

FICON Tape Acceleration

FICON Tape Acceleration (FTA) is not supported on Cisco MDS 24/10 SAN Extension Module in Cisco MDS NX-OS Release 8.1(1a) but it is supported in Cisco MDS NX-OS Release 8.1(1b) and Release 8.4(1a).

Virtual Router Redundancy Protocol (VRRP)

From Cisco MDS NX-OS Release 8.3(1) and later, the VRRP feature is not supported on Cisco MDS 9000 Series Switches.

Deprecated Hardware

Starting from Cisco MDS NX-OS Release 8.1(1), the following hardware models are not supported:

- Cisco MDS 9513
- Cisco MDS 9509
- Cisco MDS 9506
- Cisco MDS 9500 Series Supervisor-2A Module
- Cisco MDS 24-Port 8-Gbps Fibre Channel Switching Module
- Cisco MDS 48-Port 8-Gbps Fibre Channel Switching Module
- Cisco MDS 32-Port 8-Gbps Advanced Fibre Channel Switching Module
- Cisco MDS 48-Port 8-Gbps Advanced Fibre Channel Switching Module
- Cisco MDS 10 Gbps 8-Port FCoE Module
- Cisco MDS 16-Port Storage Services Node (SSN-16)
- Cisco MDS 18/4-Port Multiservice Module (MSM)

Limitations and Restrictions

Fibre Channel Read Diagnostic Parameters

Fibre Channel RDP querying is not supported on NPV, Port Channel, or FCoE links.

FCIP Support

- In Cisco MDS NX-OS Release 8.1(1) or later, FCIP Write Acceleration is not supported between 24/10 San Extension Module and Cisco 18+4 MSM module and between 24/10 San Extension Module and Cisco SSN16 module.
- In Cisco MDS NX-OS Release 8.1(1) or later, FCIP Write Acceleration along with IVR is not supported on FCIP tunnels configured on Cisco MDS 9700 Series switches.
- FCIP tunnels using Cisco MDS 24/10 Port SAN Extension Module cannot be used across FSPF equal cost paths.
- On Cisco MDS 24/10 Port SAN Extension Module, configuring multiple ECMP port channels with FCIP members in the same VSAN is not a valid configuration. If this is configured, then the traffic will flow through only one of the port channels.

40GE IP Storage (IPS) Interfaces Support on Cisco MDS 24/10-Port SAN Extension Module

40GE IP storage interfaces are not supported.

iSCSI Support

iSCSI is not supported on Cisco MDS 9700 Directors with Cisco MDS 24/10 port SAN Extension Modules.

HVDC PSU Support

The Cisco MDS 9700 HVDC PSU (DS-CHV-3.5KW) is not supported in Cisco MDS NX-OS Releases 8.1(1) and 8.1(1a). Do not attempt to load these releases on devices equipped with these PSUs or the systems will fail to power up.

Cisco TrustSec FC Link Encryption

Cisco TrustSec FC Link Encryption support for the following modules is available only on certain ports as mentioned below:

- 48-port 32-Gbps Fibre Channel Switching Module (DS-X9648-1536K9)
- Cisco MDS 9132T Fibre Channel Switch
- Cisco MDS 9148T Fibre Channel Switch
- Cisco MDS 9396T Fibre Channel Switch

Caveats

Subscribing for Important Product Update Notifications

Cisco provides a subscription service to notify of important events related to the Cisco MDS software and hardware for the following categories:

- Cisco Security Advisories
- Field Notices
- End-of-Sale, End-of-Life, and End-of-Support Announcements
- Software Updates [New, Certified, Software Advisories, Deferred, Obsoleted]
- Updates to Known Bugs

We recommend that you at least subscribe to the Field Notices, Security Advisories, and Software Updates [New, Certified, Software Advisories, Deferred, Obsoleted] categories, if not all categories, so that you can receive notifications about any critical product issues.

To subscribe to a category for receiving notifications of important updates:

1. Go to https://cway.cisco.com/mynotifications, and log in to your account.
2. Click Create Subscription.
3. Follow the onscreen instructions.

Note: You must renew your notification subscriptions annually

Resolved Caveats

Table 3. Resolved Caveats in the Cisco MDS NX-OS Release 8.4(2a)

Caveat ID	Description	Known Impacted 8.x Releases
CSCvn09455	Syslog reports: TFTPing cores failed (No route to host). without cores present on device.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt36085	Port-channel member goes error disabled during ISSU but still is sent frames which are discarded.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt58972	'show interface' command parsing failure message and incorrect counters displayed for port channel.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt68111	Switch reload due to repeated 'zone' service signal 11 crash.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt70391	DM https download certificate has improper construction.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt70421	DM https download certificate valid date exceeds standards.	8.3(1) 8.1(1), 8.1(1a), 8.1(1b)
CSCvs87512	MDS fabric switch with cfs ipv4/ipv6 enabled reloads unexpectedly.	8.4(1), 8.4(1a)
CSCvt91294	Switch drops all incoming traffic.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu09101	configuration of " ssh name" brings down mgmt0 interface.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu28188	Customer is seeing " ntp syslog critical error" .	8.4(1)
CSCvn09455	Syslog reports: TFTPing cores failed (No route to host). without cores present on	8.4(1), 8.4(1a), 8.4(2)

Caveat ID	Description	Known Impacted 8.x Releases
	device.	8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt36085	Port-channel member goes error disabled during ISSU but still is sent frames which are discarded.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt58972	'show interface' command parsing failure message and incorrect counters displayed for port channel.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt68111	Switch reload due to repeated 'zone' service signal 11 crash.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt70391	DM https download certificate has improper construction.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt70421	DM https download certificate valid date exceeds standards.	8.3(1) 8.1(1), 8.1(1a), 8.1(1b)
CSCvs87512	MDS fabric switch with cfs ipv4/ipv6 enabled reloads unexpectedly.	8.4(1), 8.4(1a)
CSCvt91294	Switch drops all incoming traffic.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu09101	configuration of " ssh name" brings down mgmt0 interface.	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu28188	Customer is seeing " ntp syslog critical error" .	8.4(1)
CSCvu35171	MDS 9396S platform show tech detail is missing fcmac logs for ports 49- 96.	8.4(1a)
CSCvu35974	Service " zone" (PID 24029) hasn't caught signal 11 (core will be saved).	8.4(1), 8.4(1a), 8.4(2)

Caveat ID	Description	Known Impacted 8.x Releases
		8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu46747	MDS 9132T/9148T/9396T "show snmp user" output should not have "acl_user".	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2)
CSCvu53058	Inband carrier errors incrementing on MDS 9132T.	8.4(1a), 8.4(2)
CSCvu35171	MDS 9396S platform show tech detail is missing fcmac logs for ports 49- 96.	8.4(1a)
CSCvu35974	Service "zone" (PID 24029) hasn't caught signal 11 (core will be saved).	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu46747	MDS 9132T/9148T/9396T "show snmp user" output should not have "acl_user".	8.4(1), 8.4(1a), 8.4(2) 8.3(1), 8.3(2) 8.2(1), 8.2(2)
CSCvu53058	Inband carrier errors incrementing on MDS 9132T.	8.4(1a), 8.4(2)

Open Caveats

Table 4. Open Caveats in the Cisco MDS NX-OS Release 8.4(2a)

Caveat ID	Description	Known Impacted 8.x Releases
CSCuv76123	fcdomain for VSAN hung in “Principal Switch Selection ongoing”.	8.x 7.x 6.x
CSCvf08416	M9132T, M9396S: pam_ftp(ftp:auth): conversation failed syslog is displayed in the show tech details.	8.4(1), 8.4(2), 8.4(2a) 8.3(2), 8.3(1) 8.2(2), 8.2(1)
CSCvj93031	Show system login failures does not display IPv6 addresses.	8.4(1), 8.4(2), 8.4(2a) 8.3(2), 8.3(1)
CSCvo22835	While moving IOA flow between 2 clusters, all flows are briefly suspended.	8.4(1), 8.4(2), 8.4(2a) 8.3(2), 8.3(1) 8.2(2), 8.2(1) 8.1(1b), 8.1(1a), 8.1(1)
CSCvp48050	MDS 9700 Control Plane Packet drop seen during when	8.4(1), 8.4(2), 8.4(2a)

Caveat ID	Description	Known Impacted 8.x Releases
	switch comes up.	
CSCvp70681	MDS: Receiver stays in " idle" ; no streaming to one receiver; single threaded telemetry.	8.4(1), 8.4(2), 8.4(2a)
CSCvs15569	IKE negotiation fails when configured with authentication type rsa-signature.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvs23106	IPS_mgr running even after removal of DS-X9334-K9 card.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvs97168	Kickstart pre check fails as /var folder is full with nxapi logs.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvs99211	FLOGI PSS inconsistency seen with DPVM configuration.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt15761	Non-disruptive reload cmd is causing reinitializing of the error disabled ports on other line cards.	8.4(2), 8.4(2a)
CSCvt22913	FCIP Links flaps with IOA traffic while adding more links.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2)
CSCvt41379	97xx Chassis information missing and logging error message %PLATFORM-2-PS_UNSUPPORTED.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a)
CSCvt64521	IPSec enabled FCIP tunnels don't come up after switch or module reload if tunnels are more than 18.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvt70406	DM https download certificate is self signed.	8.4(2a) 8.3(1) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu28005	Timeout drops seen on 32G fabric switches after ISSU.	8.4(1), 8.4(1a), 8.4(2),

Caveat ID	Description	Known Impacted 8.x Releases
		8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvu52058	ISSU/D is disruptive on MDS fabric switches with error 0x40930073 after SFTP to bootflash.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a)
CSCvu86801	fc32_mac process is unresponsive while running diagnostic latency test on ISL.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a)
CSCvv27832	Kernel panic on DS-X97-SF4-K9 model supervisor.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a)
CSCvv56650	ISSU on MDS 9250i FCoE VFCs causes switchport to stop sending PFC Pauses leading to frame drops.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a)
CSCvv59174	NXAPI: cli should not return error for zone/zoneset not present - Traceback during AUTOZONE enable.	8.4(2a)
CSCvv98829	97xx Chassis information missing and logging error message %PLATFORM-2-PS_UNSUPPORTED.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a)
CSCvw03816	Port Speed coming as 8G when connecting 16G Brocade AG to MDS 9250i/9148s switches.	8.4(2a)
CSCvw32460	MDS 9718 Kernel panic due to kernel memory corruption when PC FOP index changes by 512	8.4(1), 8.4(1a), 8.4(2), 8.4(2a), 8.4(2b) 8.3(1), 8.3(2) 8.2(1), 8.2(2) 8.1(1), 8.1(1a), 8.1(1b)
CSCvz09012	End devices encounter errors or do not respond after MDS Fabric switch ISSU.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a)
CSCvz61883	Module hangs or resets after 450-460 days uptime due to 'machine check' error.	8.4(1), 8.4(1a), 8.4(2), 8.4(2a) 8.3(1), 8.3(2) 8.2(1), 8.2(2)
CSCwb14523	Service " zone" (PID XXXX) hasn't caught signal 6 (core will be saved).	9.2(1), 9.2(2) 8.4(2), 8.4(2a), 8.4(2b), 8.4(2c), 8.4(2d)

Related Documentation

The documentation set for the Cisco MDS 9000 Series includes the documents listed in this section. To find a document online, access the following URL:

http://www.cisco.com/en/US/products/ps5989/tsd_products_support_series_home.html

The documentation set for Cisco Prime Data Center Network Manager is available from the following URL: http://www.cisco.com/en/US/products/ps9369/tsd_products_support_series_home.html

Release Notes

http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-release-notes-list.html

Licensing Information

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/8_x/config/licensing/cisco_mds9000_licensing_guide_8x.html

Regulatory Compliance and Safety Information

http://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/hw/regulatory/compliance/RCSI.html

Compatibility Information

http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-device-support-tables-_list.html

Installation and Upgrade

http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-installation-guides-_list.html

Configuration Guides

http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-installation-and-_configuration-guides-list.html

Command-Line Interface

http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-command-reference-_list.html

Troubleshooting and Reference

http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/tsd-products-support-_troubleshoot-and-alerts.html

Obtaining Documentation and Submitting a Service Request

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