**DELL**Technologies

# Dell EMC SmartFabric OS10 Release Notes for PowerEdge MX

This document describes the new features, restrictions, and fixed and known issues in the Dell EMC SmartFabric OS10 Release 10.5.2.6.
**Current Release Version:** 10.5.2.6
**Release Date:** 2021-07-14
**Previous Release Version:** 10.5.2.4

The information in this document is applicable to all the switches listed in the Supported hardware section.

For documentation about the Dell EMC open network install environment (ONIE)-enabled hardware switches, see https://www.dellemc.com/networking.

# Document revision history

**Table 1. Revision History**

| Revision | Date | Description |
|----------|------|-------------|
| A00 | 2021–07–14 | 10.5.2.6 Release—Added new features for the release to the New and changed in 10.5.2.6 section. Added AR-39573, AR-39599, AR-39739, AR-39777, and AR-39802 to the Resolved issues in 10.5.2.6 section. |

# Supported hardware

The current release is supported on the following Dell EMC Switches:

- Dell EMC PowerEdge MX7000 with the following ethernet modules:
  - MX9116n Fabric Switching Engine
  - MX5108n Ethernet Switch

# New and changed in 10.5.2.6

| Functional Area | Feature Description | Summary of Benefits |
|-----------------|---------------------|---------------------|
| DHCP | **Enhancement to the DHCP relay component in OS10** | Enhances interface support for DHCP relay packet counters. These counters are used to provide telemetry and debugging support. |
| DHCP | **Enable support for DHCP Relay across VRFs without route leaking for SFD with Open-config model.** | Modifies the existing `helper-address` configuration to support any VRF name. |
| Telemetry | **Telemetry client authentication** | Support for telemetry client authentication using TLS. |
| Precision Time Protocol (PTP) | **Standards compliance** | OS10 complies with the following standards:<br>- G. 8273.2<br>- G. 8275.1<br>- IEEE 1588-2008 |

| Functional Area | Feature Description | Summary of Benefits |
|---|---|---|
| | | ⓘ **NOTE:** This feature is only supported on the MX9116n switch. |

See the OS10.5.2 product support pages ( www.dell.com/support) for user documentation pertaining to the new features.

# Known Software Behavior - Dell EMC PowerEdge MX

ⓘ **NOTE:** The software behaviors that are mentioned here are applicable to OS10 revision 10.5.0.1 and later.

## Ethernet Modules

- When upgrading from earlier releases to 10.5.0.7, aaa authentication configuration with nonlocal authentication methods as the first target in the startup configuration gets rejected and replaced with the default aaa authentication configuration: `aaa authentication login default local`.
- If you configure multiple authentication methods on Dell EMC PowerEdge MX7000 Ethernet modules - MX9116n Fabric Switching Engine and MX5108n Ethernet Switch, you must configure local authentication as one of the methods in the list. Before 10.5.1.6, `local authentication` had to be the first method in the list.
- From 10.5.1.6, if you configure multiple authentication methods on Dell EMC PowerEdge MX7000 Ethernet modules - MX9116n Fabric Switching Engine and MX5108n Ethernet Switch - you must configure local authentication as one of the methods in the list.

## False Errors on FC Ports

- The `total errors` count in the `show interface fibrechannel` command output displays incorrect values during FC port flaps, IOM reboot, or port conversion from ETH to FC, followed by bringing up of the FC port.
  - ⓘ **NOTE:** This behavior is applicable only to the MX9116n.

## Fibre Channel

- After you change the FC Map on FIP snooping enabled active VLAN sessions, use the `shut` and `no shut` commands to reestablish the FCoE sessions.
- The maximum number of members in an FC Zone is 255.
  - ⓘ **NOTE:** This behavior is applicable only to the MX9116n.
- For the `default-zone` settings to work properly, ensure that the maximum number of logged-in FC and FCoE nodes is less than 120.
  - ⓘ **NOTE:** This behavior is applicable only to the MX9116n.
- FCoE-generated Access Control Lists (ACLs) take precedence over user-configured ACLs. A user-configured ingress ACL entry cannot deny FCoE and FIP snooping frames.
- After you remove the vfabric configuration from an interface, to configure the MTU to default value, configure the nondefault MTU and then configure the default MTU.
- In a FIP snooping bridge, FIP and FCoE frames ingressing on a PFC mismatch interface are dropped.
  - ⓘ **NOTE:** This behavior is only applicable to the MX9116n and MX5108n.
- PFC mismatch on a port channel member port drops FIP and FCoE frames ingressing on that member port, but the learned Enode/Session/FCF information that is associated with the port channel is retained. This results in FCoE show commands displaying misleading information. To resolve this issue, check and correct the PFC configuration on both the ends.
- When you configure a port channel as VLT port channel, the port channel goes down operationally and comes up in the local device. The physical interfaces are operationally up. This leads to the switch removing the FCoE sessions. The remote server is not aware of the port channels being up and down, so the server maintains the FCoE sessions. As these sessions are not available in the switch, the FCoE frames are dropped in the switch. To resolve this, manually flap the port channel.

## Login delay

- When logging into a switch, it may take 6 to 10 seconds for the CLI prompt to display.

## MTU

- After upgrading to 10.5.1.6 in Full Switch mode, the MTU defaults to 9216 on all VLANs and Ethernet Interfaces which do not already have a user configured MTU.

## Obscure password

- Obscure password (`service obscure-password`) is enabled by default when upgrading to 10.5.1.6 if the setting is left untouched before upgrade.
- If obscure password configuration is explicitly disabled before upgrade, it remains in disabled state after upgrade.

## Source MAC address handling

- Learning of source MAC address from received LLDP and LACP packets is disabled.

## VLAN scale

- If the number of configured VLANs is more than 500, it is recommended to have IGMP/MLD snooping enabled only on the required VLANs and do not exceed a maximum count of 500 enabled VLANs. Alternatively, disable IGMP/MLD snooping globally.
  - (i) **NOTE:** IGMP/MLD snooping is disabled by default in MX-Series SFS mode but is enabled in Full Switch mode. Please see the *Dell EMC SmartFabric OS10 User Guide* for more information.

# Resolved issues in 10.5.2.6

The following high severity issues have been resolved in this release.

| Issue ID | Functional Area | Description |
|---|---|---|
| AR-39573 | VLT | User configured cluster `security-profile` does not take effect after upgrading the operating system and this impacts VLT and DNV cluster convergence with peers that use the same `security-profile`. |
| AR-39599 | Security | Updated the old default X.509v3 certificate with a new X.509v3 default certificate. |
| AR-39739 | LACP | In certain scenarios, LACP port channel interfaces remain inactive when there is a flap on the interface. |
| AR-39777 | VLT | VLT fails to converge after installing a custom SSL certificate. |
| AR-39802 | Common vulnerabilities and exposures (CVEs) | The following CVEs have been addressed:<br>- CVE-2021-23840<br>- CVE-2021-23841<br>- CVE-2021-23839. |

| Issue ID | Functional Area | Description |
|---|---|---|
| | | The CVE database can be accessed here: https://cve.mitre.org/cve/search_cve_list.html. |

# Known issues in 10.5.2.6

The following high severity issue remains unresolved in this release.

| Issue ID | Functional Area | Description | Workaround/Resolution |
|---|---|---|---|
| AR-39661 | Upgrades | When upgrading 5 or more fabrics together, the upgrade job status may fail for one or more IOMs with a `Timer Expired` error, but the upgrade completes successfully. This issue is seen when upgrading the ONIE using DUP. | If the upgrade job status fails, check the version details on the IOMs on which the upgrade job failure is reported; if it is an older version, re-initiate the upgrade on the failed IOM. |

# PowerEdge MX Installation Instructions

(i) **NOTE:** The default X.509v3 certificate used for VLT peer and SFS cluster convergence expires on July 27, 2021. When the certificate expires, if there is a network event such as a reload or a flap, the VLT peers and SFS cluster members will cease to communicate. As a result, network traffic will be affected. See *Section 3, Preparing for an upgrade* in the Dell EMC SmartFabric OS10 Installation, Upgrade, and Downgrade Guide for details.

(i) **NOTE:** OS downgrade or rollback is not recommended for MX-series switches.

See the *OS10 Firmware Update Matrix* section in the latest version of the Dell EMC OpenManage Enterprise-Modular Edition for PowerEdge MX7000 Chassis User's Guide for instructions to update the MX9116n Fabric Switching Engine, and MX5108n Ethernet switch to the latest version.

For additional information on PowerEdge MX Networking, see the Dell Infohub.

# Support resources

The Dell EMC Support site provides a range of documents and tools to assist you with effectively using Dell EMC devices. Through the support site you can obtain technical information regarding Dell EMC products, access software upgrades and patches, download available management software, and manage your open cases. The Dell EMC support site provides integrated, secure access to these services.

To access the Dell EMC Support site, go to www.dell.com/support/. Sign in with a previously created account or create a new account. To display information in your language, scroll down to the bottom of the page and select your country from the drop-down menu.

● To obtain product-specific information, enter the 7-character service tag or 11-digit express service code of your switch and click **Submit**.

  To view the service tag or express service code, pull out the luggage tag on the chassis or enter the `show chassis` command from the CLI.

● To submit service requests or to contact technical support by phone or chat, click **Contact Us**, then click **Technical Support**.

To access product documentation and resources that might be helpful to configure and troubleshoot the OS10 Networking operating system, see the Dell EMC Networking OS10 Info Hub.

To search for drivers and downloads, see www.dell.com/drivers/.

To participate in Dell EMC community blogs and forums, see www.dell.com/community.

## Notes, cautions, and warnings

ⓘ **NOTE:** A NOTE indicates important information that helps you make better use of your product.

⚠ **CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**

⚠ **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**