MXG610s Fibre Channel Switch Module Setup Guide

Supporting fabric OS 8.1.0_lnx and 9.0.1a

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DELL Technologies

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.

Contents

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About this guide

This guide provides site preparation recommendations, step-by-step procedures for rack mounting and desk mounting, inserting modules, and connecting to a power source.

CAUTION: To avoid electrostatic discharge (ESD) damage, wear grounding wrist straps when handling this equipment.

NOTE: Only trained and qualified personnel can install this equipment. Read this guide before you install and power up this equipment. This equipment contains two power cords. Disconnect both power cords before servicing.

NOTE: This equipment contains optical transceivers, which comply with the limits of Class 1 laser radiation.

Figure 1. Class 1 laser product tag

NOTE: When no cable is connected, visible and invisible laser radiation may be emitted from the aperture of the optical transceiver ports. Avoid exposure to laser radiation and do not stare into open apertures.

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MXG610s Setup Guide

Topics:

MX7000 chassis preparation

Before you insert the switch module in the MX7000 chassis, meet the following conditions:

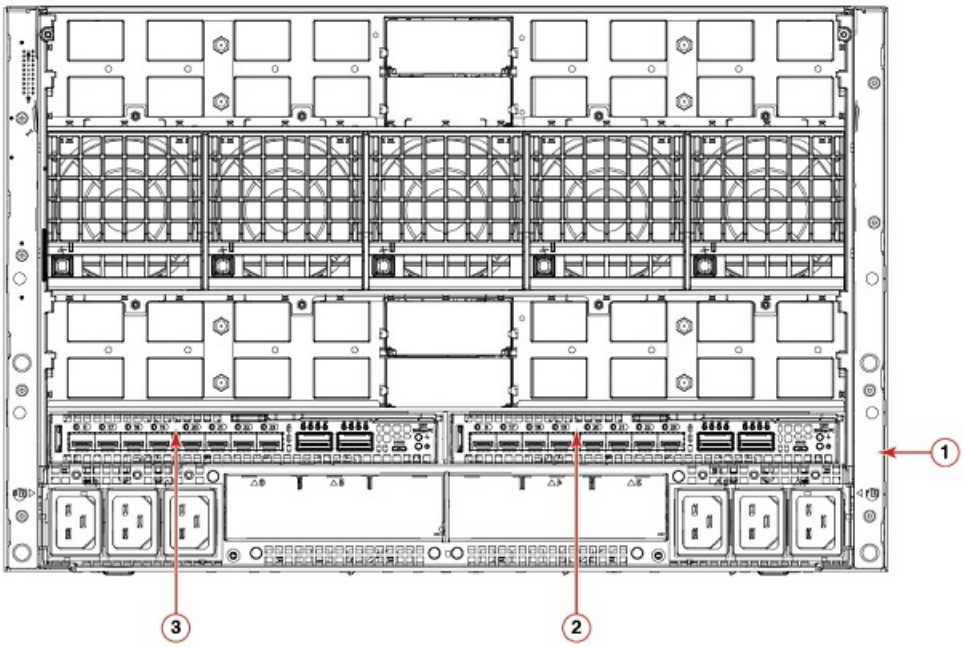
- The chassis is powered up and meets all its specific power requirements.
- The I/O module bay C1 or C2 is empty and ready to receive the switch module.
- If you are replacing an existing switch module, to maintain the proper cooling level in the chassis, insert the replacement switch module within one minute.

Switch module installation

Insert the switch modules in the MX7000 chassis slots and check that the modules are functioning properly.

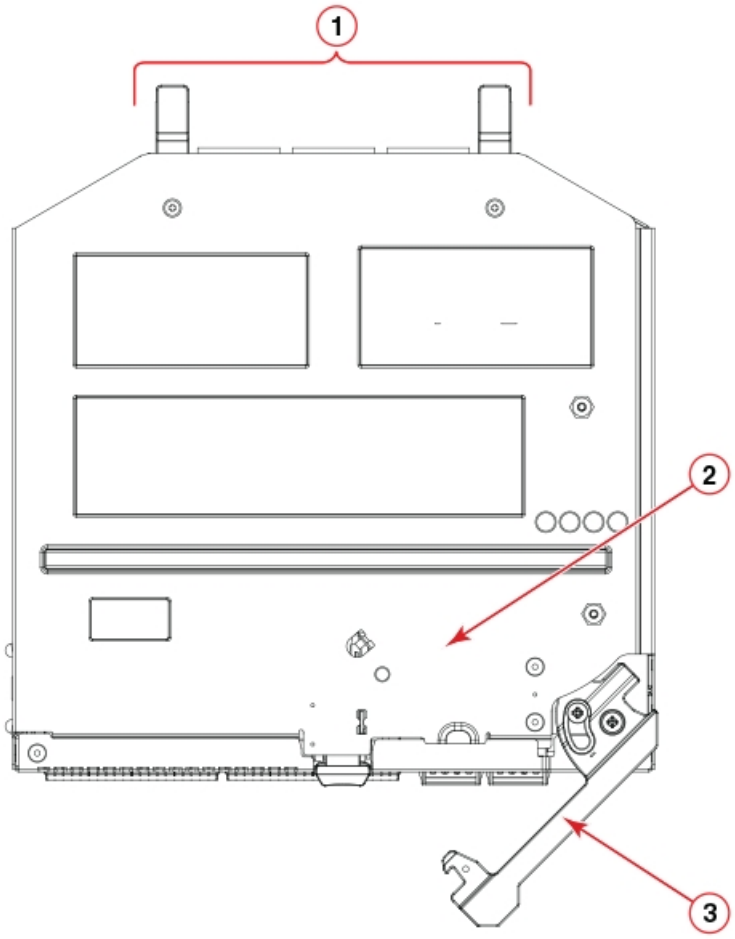
NOTE: The switch module works in slots C1 and C2. Do not insert the switch module in any other slot because this action may damage the chassis or switch module connector pins.

1. Remove the orange plastic protective cover for the backplane connector.



1. PowerEdge MX7000 chassis back view.
2. Switch module slot C2
3. Switch module slot C1

2. Orient the switch module port side facing you.
   The module latch is on the right side.



1. Backplane connectors
2. Switch module top view.
3. Switch module latch in the open position.

3. Open the release lever, and slide the switch module into the slot completely.

   You hear a click when the switch module is locked into the I/O module bay. If power is applied to the MX7000, locking the switch module in the module bay powers on the switch.

   When you apply power, the switch module runs POSTs which may take up to two minutes to complete. After the power/status LED light is steady green for at least two minutes, the module is ready to use.

4. Start from port 0, then port 17, and then the rest of the ports when cabling the SFP+ ports.

You are now ready to insert more SFP+/QSFP optical transceivers, if needed. Be sure to use only Brocade-branded SFP+/QSFP optical transceivers. The MXG610s does not recognize non-Broadcom products.

Serial connection

To log in to the switch module through the serial connection on the front panel, perform the following steps:

1. Connect the console cable with the micro-USB connector to the console port on the switch module and to a USB port on the workstation.

2. Disable any serial communication programs running on the workstation such as synchronization programs.
3. Open a terminal emulator application such as PuTTY, XShell, or SecureCRT on a Windows PC, or TERM, TIP, or C-Kermit in a LINUX environment. Configure the application as follows:
   - In a WIndows environment, use the following values:
     - Bits per second—9600
     - Databits—8
     - Parity—None
     - Stop bits—1
     - Flow control—None; must be disabled on the host side

     NOTE: Flow control is not supported on the serial connection when attached to a remote terminal. You must disable flow control on the customer-side remote terminal server in addition to the host-side clients.
   - In a UNIX environment using TIP, enter `tip /dev/ttyb -9600.` at the prompt.
   - If you are already using ttyb, use ttya instead and enter `tip /dev/ttya -9600` at the prompt.
4. Press **enter** when the terminal emulator application stops reporting information to display the login prompt.

   `Switch Console Login:`
5. Log in to the switch module as `admin`, using the default password: `password.`

   You are prompted to change the default admin and user passwords at initial login. Write down the new passwords, and keep this information in a secure location.

```
Fabric OS (swDir)
swDir login: admin
Password:
Please change your passwords now.
Use Control-C to exit or press 'Enter' key to proceed.
swDir:admin>
```

6. (Optional) Modify passwords.

   To skip modifying the password, press **Ctrl+C**.

   NOTE: Passwords are 8 to 40 characters long. They must begin with an alphabetic character. They can include numeric characters, the period (.), and the underscore (_) only. Passwords are case-sensitive, and do display when you enter them on the command line.

Optical transceivers and cabling installation

NOTE: When cabling SFP+ optical transceivers, start with port 0, then port 17, and then the other ports.

To insert the optical transceivers and the cable connections:

1. Insert the optical transceiver in an external port on the switch module until it is firmly seated and the latching mechanism clicks.

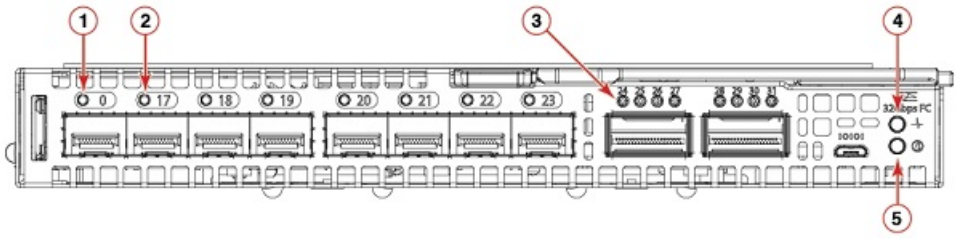
   Transceivers are keyed to ensure correct orientation. If a transceiver does not install easily, ensure that it is correctly oriented.
2. Insert the fiber optic cable in the SFP+ or QSFP optical transceiver until the latching mechanism clicks.

   Cable connectors are keyed to ensure correct orientation. If a cable connector does not install easily, ensure that it is correctly oriented.

For instructions specific to a cable type, see the cable manufacturer's documentation.

Port-side LEDs

Each switch module uses bicolored external LEDs to indicate operation status.



1. FC port 0 status LED
2. FC port 17 status LED
3. FC port 24 status LED
4. Module power status LED
5. Module identification LED

Table 1. Port-side LEDs

LED	Description
Module power and status LED	• Solid green—The switch is working correctly. • Blinking amber—The switch is working incorrectly. The temperature may be too high, a software error has occurred, or another error is discovered. • Off—There is no power supplied to the FC switch module. Reseat the module and ensure that the chassis power is on and it has adequate power for the I/O module.
Module identification LED	• Off—Module is not identified. • Blinking blue—Module is being identified.
FC port status LED	• Both off—No light or signal carrier—no module, no cable —for the media interface • Solid amber—Receiving light or signal carrier, but not yet online • Slow flashing amber, 2-second intervals—Disabled; results of diagnostics or the `portdisable` command. • Fast flashing amber, 1/2-second intervals—Error occurred, fault with port. • Solid green—Online; connected with external device over cable • Slow flashing green, 2-second intervals—Online but segmented; Loopback cable or incompatible switch. • Fast flashing green, 1/2-second intervals—Internal loopback, diagnostic. • Flickering green—Online and frames flowing through the port.

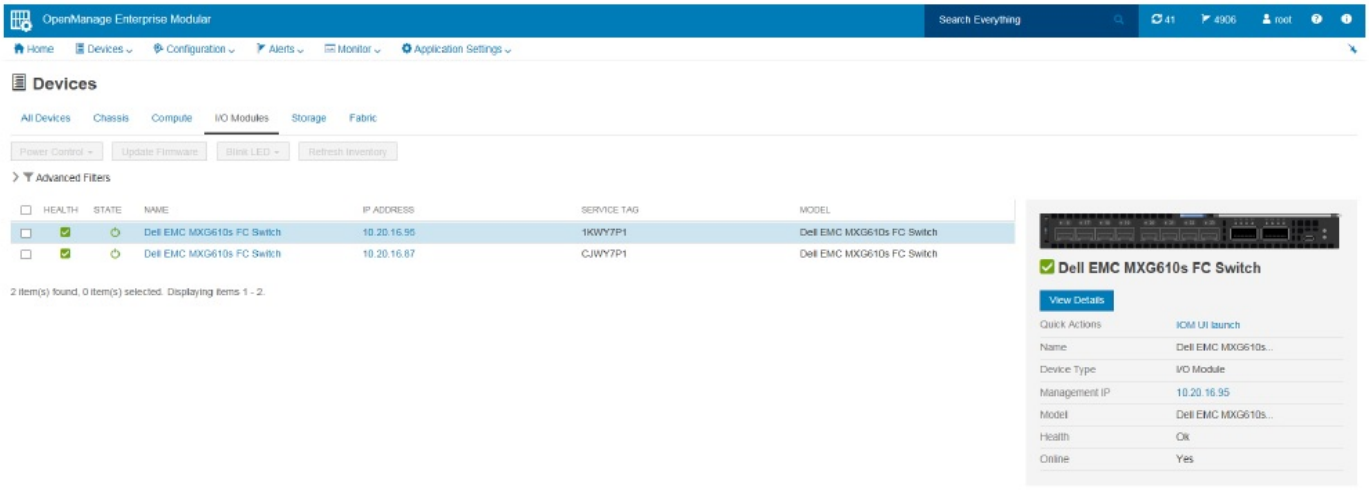
Static IP addresses

Dell EMC recommends configuring the switch module through the Dell EMC OpenManage Enterprise — Modular (OME-M) graphical user interface (GUI). Use this management GUI to configure the switch IP address, host name, and password. By default, the IP address mode is set to DHCP. Use the GUI to assign a static IP address. To configure the FC switch module, follow these steps:

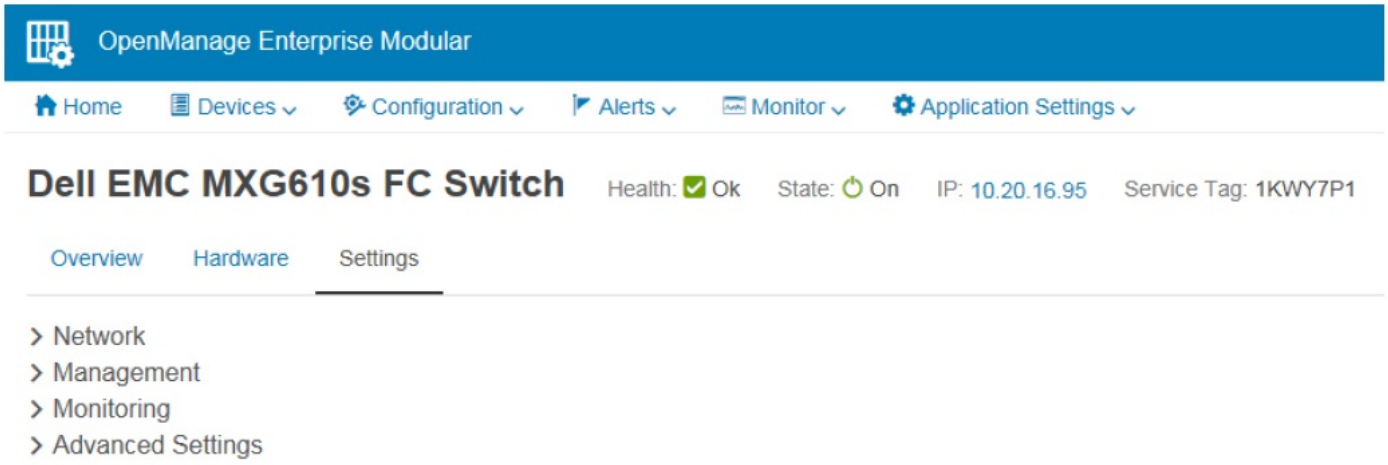
1. Log in to the OME-M GUI.

2. Select **Devices > I/O modules**.
   The I/O modules display.

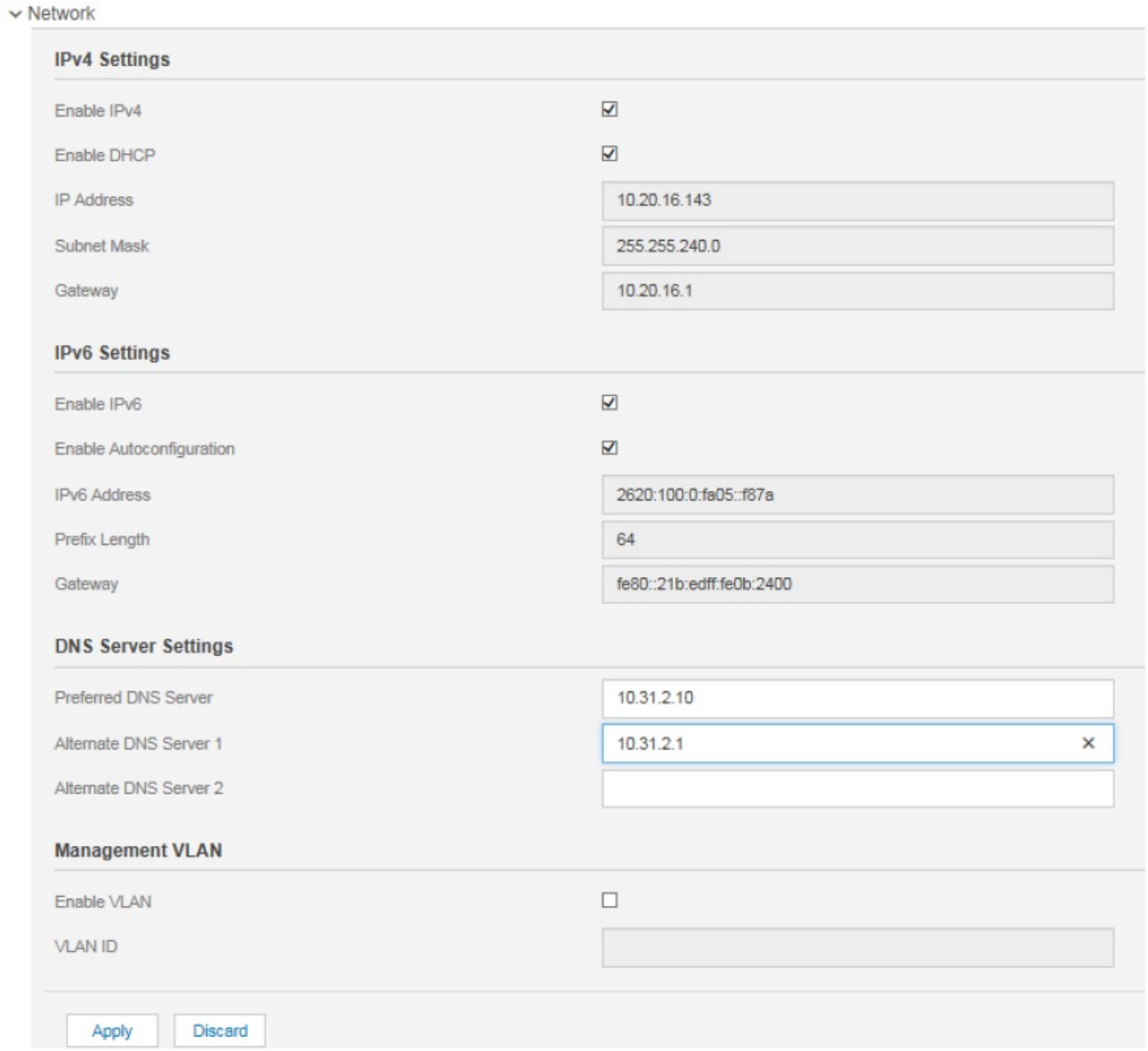
NOTE: You may also access the WebTools configuration UI to manage the switch module by typing the switch module IP address into any supported web browser.



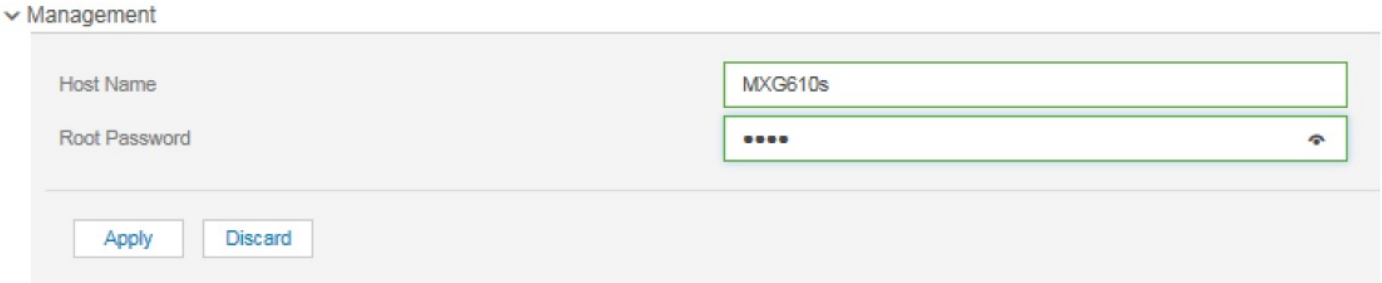
3. Select the I/O module name, IP address, or **View Details** on the right side of the display.
   The Overview tab is displayed. Select the **Settings** tab.



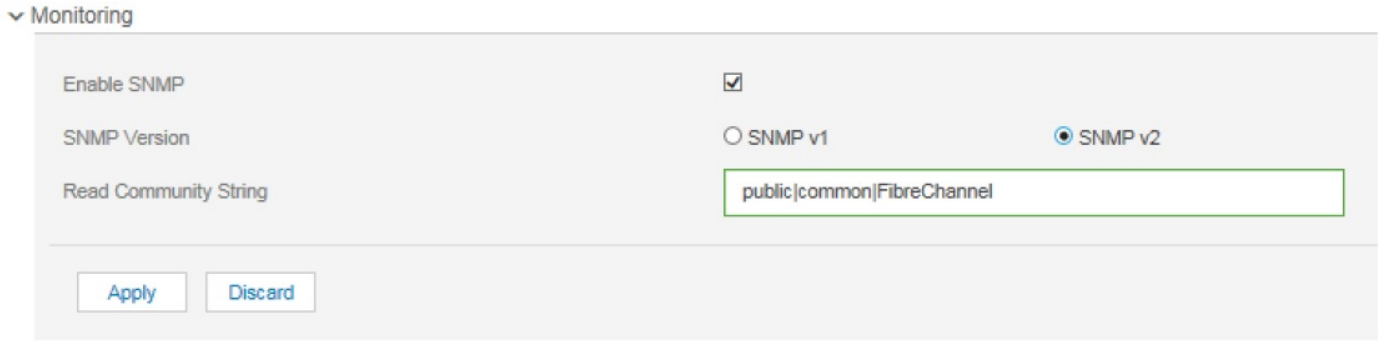
4. Click and expand the **Network** option. Select the required check boxes, and complete the IPv4 or IPv6 settings, DNS server settings, and optionally the management VLAN ID. Click **Apply**.



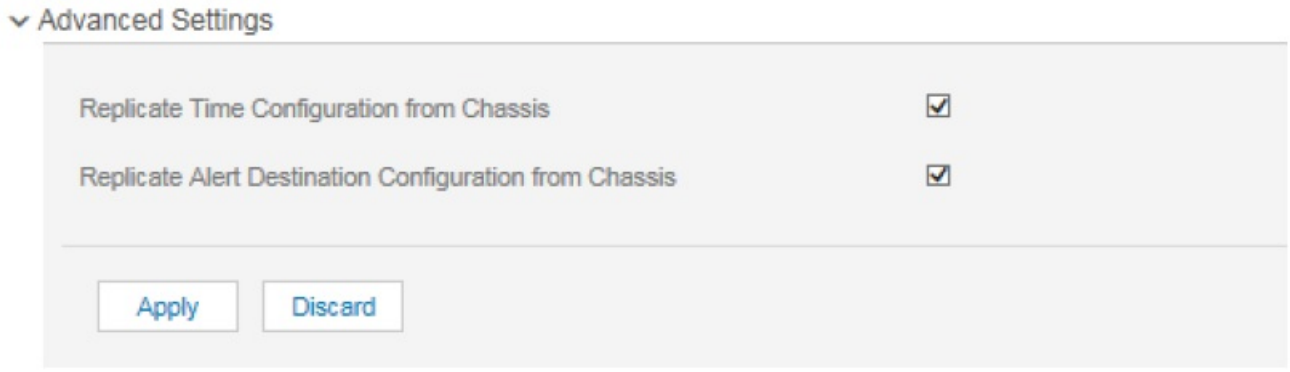
5. Click and expand the **Management** option. Specify a hostname and root password. Click **Apply**.



6. Click and expand the **Monitoring** option. Select the **Enable SNMP** check box, the SNMP version, and enter a read community string. Click **Apply**.



7. Click and expand the **Advanced Settings** option. Select the needed check boxes.



8. Click **Apply**.
   You have configured the IP address and other settings for the switch module.

Additional country-specific IEEE notices

Croatia:

In accordance with the Croatia Ordinance on the Management of Waste Electrical and Electronic Appliances and Equipment, electrical and electronic equipment (EEE) is to be collected separately and to be reused, recycled, or recovered at end of life. The above symbol indicates the necessity of separate collection for electrical and electronic waste. Users of EEE with the above product mark must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available. It is important to minimize any potential effects of EEE on the environment and human health due to the potential presence of hazardous substances in EEE.

Turkey:
EEE complies with Directive
EEE Yönetmeliğine Uygundur

Taiwan:

廢電池請回收

Please Recycle Batteries

設備名稱：SAN / LAN交換機，企業總監級　型號：所有銷售至台灣的型號						
單元	限用物質及其化學符號					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr+6)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
光纖通道交換機	−	○	○	○	○	○
IP 交換機	−	○	○	○	○	○
風扇，散風機組件	−	○	○	○	○	○
PCBA 卡	−	○	○	○	○	○
USB 快閃隨身碟	−	○	○	○	○	○
電源套件	−	○	○	○	○	○
SFP 光模組	−	○	○	○	○	○
鈑金	−	○	○	○	○	○
底盤裝置	−	○	○	○	○	○
機械支架和滑道	−	○	○	○	○	○
插槽填充物	−	○	○	○	○	○
電纜管理託盤	−	○	○	○	○	○
電纜梳線器	−	○	○	○	○	○
電纜和電源線	−	○	○	○	○	○
替換門	−	○	○	○	○	○
備考 1: "○" 表示該項限用物質的含量百分比未超過百分比含量基準值。 備考 2: "−" 表示該項限用物質為排除項目。						

Ukraine:

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057

[English translation: The equipment complies with requirements of the Technical Regulation, approved by the Resolution of Cabinet of Ministry of Ukraine as of 03 December 2008, № 1057, in terms of restrictions for the use of certain dangerous substances in electrical and electronic equipment]

China:

部件名称	有毒有害物质或元素					
	铅（Pb）	汞（Hg）	镉（Cd）	六价铬（Cr（VI））	多溴联苯（PBB）	多溴二苯醚（PBDE）
光纤通道交换机	×	○	○	○	○	○
IP 交换机	×	○	○	○	○	○
风扇/冷却组装件	×	○	○	○	○	○
线缆组件	×	○	○	○	○	○
USB 闪存盘	×	○	○	○	○	○
电源	×	○	○	○	○	○
光纤模块	×	○	○	○	○	○
钣金件	×	○	○	○	○	○
机箱部件	×	○	○	○	○	○
机柜支架及滑轨	×	○	○	○	○	○
插槽填充物	×	○	○	○	○	○
电缆整理盘	×	○	○	○	○	○
线缆梳线	×	○	○	○	○	○
线束及电源线	○	○	○	○	○	○
替换门	×	○	○	○	○	○
电池	○	○	○	○	○	○
软件/文档光盘	○	○	○	○	○	○

有毒/有害物质和元素表
Toxic / Hazardous Substances and Elements Table
此表是按照的规定编写 SJ/T 11364
This table is prepared in accordance with the provisions of SJ / T 11364

×: 表示此类部件内同质材料中的有害/有毒含量高于 GB/T 26572 的限量要求
Indicates that the concentration of such hazardous/toxic substance in all the units of homogeneous material of such component is higher than the GB/T 26572 Requirements for Concentration Limits.

○: 表示本使用此类物质或其含量低于上述限量要求
Indicates that no such substances are used or that the concentration is within the aforementioned limits.

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Dell EMC support

The Dell EMC support site provides documents and tools to help you use Dell EMC equipment and mitigate network outages. Through the support site you can obtain technical information, 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/. To display information in your language, scroll down to the bottom of the web 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, which is found on the pull-out tag, also known as a luggage tag, and click **Submit**.
- To receive more technical support, click **Contact Us**. On the Contact Information web page, click **Technical Support**.

To access switch documentation, go to www.dell.com/manuals/ and enter your switch type.

To search for drivers and downloads, go to the **Drivers & Downloads** tab for your switch.

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