

ARISTA

Quick Start Guide

**DANZ Monitoring Fabric
Service Node Appliance**
DCA-DM-SC2

Arista Networks

www.arista.com

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Overview

This guide is intended for network professionals who need to install the DMF Service Node Appliance. The following topics are covered in this section:

- [Scope](#)
- [Receiving and Inspecting the Equipment](#)
- [Installation Process](#)
- [Safety Information](#)
- [Obtaining Technical Assistance](#)
- [Specifications](#)

1.1 Scope

This guide is intended for properly trained service personnel and technicians who need to install the DMF Service Node Appliance



CAUTION: Only qualified or trained personnel should install, service, or replace this equipment.

Seul le personnel qualifié doit installer, service, ou remplacer cet équipement.

1.2 Receiving and Inspecting the Equipment

Upon receiving the appliance, inspect the packaging and record if there is any external damage. Retain the packing material if you suspect that any part of the shipment is damaged; the carrier might need the packing material to inspect.

If the packaging was not damaged during transit, unpack each box carefully. Ensure that you do not discard any accessories that may be packed in the same box as the appliance.

Review the packing list that comes with the appliance to ensure you have received all the items listed. Refer to the [Parts List](#) to verify that all components are included.

1.3 Installation Process

This section describes the steps required to install and use the appliance in a Data Center environment:

1. Select and prepare the installation site. ([Site Selection](#))
2. Assemble the installation tools listed. ([Tools and Parts Required for Installation](#))
3. Attach the mounting brackets and install the appliance in an equipment rack. ([Rack Installation](#))
4. Connect the appliance to the power source, console cables, and management network. ([Routing the Cables](#))
5. Configure the appliance. ([Configuring the appliance](#))

1.4 Safety Information

Refer to the Arista Networks document Safety Information and Translated Safety Warnings available at <https://www.arista.com/en/support/product-documentation>.



Important: Class 1 laser product: This product has provisions to install Class 1 laser transceivers which provide optical coupling to the communication network. Once a Class 1 laser product is installed, the equipment is a Class 1 laser product (Appareil à Laser de Classe 1). The customer is responsible for selecting and installing the Class 1 laser transceiver and for ensuring that the Class 1 AEL (allowable emission limit) per EN/IEC 60825, CSA E60825-1, and Code of Federal Regulations 21 CFR 1040 is not exceeded after the laser transceiver has been installed. Do not install laser products whose class rating is greater than 1. Refer to all safety instructions that accompanied the transceiver prior to installation. Only Class 1 laser devices certified for use in the country of installation by the cognizant agencies are to be utilized in this product. Ultimate disposal of this product should be in accordance with all applicable laws and regulations.

Produit laser de classe 1: Ce produit a des dispositions pour installer des émetteurs-récepteurs de laser de classe 1 qui offre de couplage au réseau de communication optique. Une fois un produit laser de classe 1 est installé, l'équipement est un produit laser de classe 1 (Appareil à laser de Classe 1). Le client est responsable pour sélectionner et installer l'émetteur/récepteur de laser de classe 1 et pour assurer que la classe 1 AEL (limite d'émission admissible) par EN/IEC 6-825, CSA E60825-1, et Code des règlements fédéraux 21 CFR 1040 ne soit pas dépassée après avoir installé l'émetteur/récepteur de laser. Ne pas installer des appareils à laser dont la cote de classe est supérieure à 1. Voir toutes les consignes de sécurité qui ont accompagné l'émetteur-récepteur avant l'installation. Seuls appareils laser de classe 1 certifiés pour une utilisation dans le pays d'installation par l'organisme compétent doivent être utilisées dans ce produit.



Important: DO NOT open the case of the appliance. There are NO user serviceable parts inside. Entrust any repair to a qualified technician.

N'ouvrez PAS le boîtier du routeur. Il n'y a AUCUNE pièce réparable par l'utilisateur à l'intérieur. Confiez toute réparation à un technicien qualifié.

1.5 Obtaining Technical Assistance

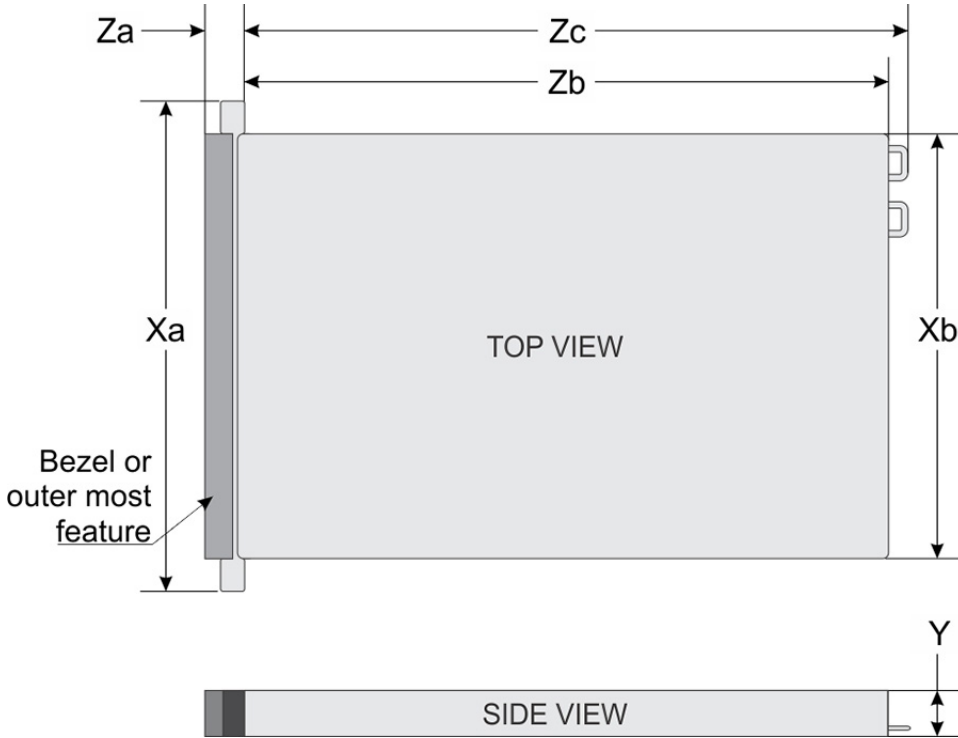
All customers, partners, resellers, or distributors holding a valid Arista Service Contract can obtain technical support in any of the following ways:

- **Email:** <mailto:support@arista.com>. This is the easiest way to create a new service request. Include a detailed description of the problem.
- **Web:** <https://www.arista.com/en/support/customer-support>. A support case may be created through the support portal on our website. You may also download the most current software and documentation, as well as view FAQs, Knowledge Base articles, Security Advisories, and Field Notices.
- **Phone:** +1-866-476-0000 or +1-408-547-5502.

1.6 Specifications

The following Appliance Specifications table lists the specifications of the Arista DCA-DM-SC2 DMF Service Node Appliance.

Figure 1-1: System Dimensions



| System | Dimensions |
|--------|--|
| Xa | 482.0 mm (18.97 inches) |
| Xb | 434.0 mm (17.08 inches) |
| Y | 42.8 mm (1.68 inches) |
| Za | 35.84 mm (1.41 inches) (with bezel) 22 mm (0.87 inches) (without bezel) |
| Zb | 677.8 mm (26.685 inches) (Ear to PSU surface) 691.07mm (27.207 inches) (Ear to butterfly L bracket housing) |
| Zc | 712.95 mm (28.069 inches) (Ear to PSU handle without velcro strap) |

Table 1: Weight Specifications

The table below shows the unit weight specifications with all drives/SSDs installed.

| Weight | Maximum weight (with all drives/SSDs) |
|--|--|
| 4 x 3.5-inch system 18.62 kg (41.05 pound) | 4 x 3.5-inch system 18.62 kg (41.05 pound) |
| 8 x 2.5-inch system 16.58 kg (36.55 pound) | 8 x 2.5-inch system 16.58 kg (36.55 pound) |

Table 2: Power Specifications

The table below shows the power supply specifications.

| Power Draw | Specifications |
|-------------------------------|--|
| Power Draw (Typical) 550 W AC | Platinum 50/60 Hz 100 240 V AC, auto-arranging |
| Power Draw (Typical) 450 W AC | Bronze 50/60 Hz 100 240 V AC, auto-arranging |

Table 3: Temperature Specifications

The table below shows the optimal working temperature specifications.

| Temperature | Specifications |
|--|---|
| Non-operational | -40°C to 65°C (-40°F to 149°F) |
| Temperature Ranges (For Altitude <3048 meters or 10000 feet) | 5°C to 40°C (41°F to 104°F) with no direct sunlight on the equipment. |
| Maximum temperature gradient (operating and non-operational) | 20°C in an hour* (36°F in an hour) |

Table 4: Relative Humidity Specifications

The table below shows the relative humidity specification during operations and storage.

| Relative Humidity | Specifications |
|--------------------------|---|
| Non-operational | 5% to 95%RH at a maximum wet bulb temperature of 33°C (91°F). Atmosphere must be non-condensing at all times. |
| Operational | 5%RH to 85%RH with 29°C maximum dew point. |

Table 5: Maximum Vibration Specifications

The table below shows the maximum vibration specifications during operations and storage.

| Maximum Vibration | Specifications |
|-------------------|---|
| Operating | 0.26G _{rms} at 5Hz to 350Hz (x, y, and z axes) |
| Storage | 1.88 G _{rms} at 10 Hz to 500 Hz for 15 min (all six sides tested). |

Table 6: Maximum Shock Specifications

The table below shows the maximum shock specifications during operations and storage.

| Maximum Shock | Specifications |
|---------------|--|
| Operating | Six consecutively executed shock pulses in the positive and negative x, y, and z axes of 6 G for up to 11 ms. |
| Storage | Six consecutively executed shock pulses in the positive and negative x, y, and z axes (one pulse on each side of the system) of 71 G for up to 2 ms. |

Table 7: Maximum Altitude Specifications



The table below shows the maximum altitude specifications during operations and storage.

| Maximum Altitude | Specifications |
|------------------|----------------------|
| Operational | 3048 m (10,000 ft) |
| Non-operational | 12,000 m (39,370 ft) |

Table 8: Standard Operating Temperature

| Standard Operating Temperature | Specifications |
|--|---|
| Continuous operation (for altitude less than 3048 m or 10,000 ft). | 5°C to 40°C (41°F to 104°F) with no direct sunlight on the equipment. |

Table 9: Expanded Operating Temperature

| Expanded Operating Temperature | Specifications |
|--------------------------------|--|
| Continuous operation | <p>5°C to 40°C at 5% to 85% RH with 29°C dew point.</p> <p> Note: Outside the standard operating temperature (10°C to 40°C), the system can operate continuously in temperatures as low as 5°C and as high as 40°C.</p> |
| 1% of annual operating hours | <p>-5°C to 45°C at 5% to 90% RH with 29°C dew point.</p> <p> Note: Outside the standard operating temperature (10°C to 40°C), the system can operate down to -5°C or up to 45°C for a maximum of 1% of its annual operating hours.</p> <p>For temperatures between 40°C and 45°C, de-rate maximum allowable temperature by 1°C per 125 m above 950 m (1°F per 228 ft).</p> |

Expanded operating temperature restrictions

- Do not perform a cold startup below 5°C.
- The operating temperature specified is for a maximum altitude of 3048 m (10,000 ft).
- 105 W/4C, 115 W/6C, 130 W/8C, 140 W/14C or higher wattage processors (TDP>140 W) are not supported.
- Redundant power supply configuration is required.
- Non-Arista qualified peripheral cards and/or peripheral cards greater than 25 W are not supported.
- NVMe drives are not supported.
- Apache Pass DIMM and NVDIMM are not supported.

Table 10: Operating Temperature Derating Specifications

The table below shows the operating temperature derating specifications.

| Operating Temperature Derating | Specifications |
|--------------------------------|--|
| Up to 35°C (95°F) | Maximum temperature is reduced by 1°C/300 m (1°F/547 ft) above 950 m (3,117 ft). |
| 35°C to 40°C (95°F to 104°F) | Maximum temperature is reduced by 1°C/175 m (1°F/319 ft) above 950 m (3,117 ft). |
| 40°C to 45°C (104°F to 113°F) | Maximum temperature is reduced by 1°C/125 m (1°F/228 ft) above 950 m (3,117 ft). |

Setup Preparation

This chapter contains the following topics:

- [Site Selection](#)
- [Tools and Parts Required for Installation](#)
- [Receiving and Inspecting the Equipment](#)
- [Electrostatic Discharge \(ESD\) Precautions](#)
- [Setting up Your System](#)
- [DMF Service Node Physical Appliance Setup](#)
- [DMF Service Node Appliance IP Configuration](#)

2.1 Site Selection

Read the safety instructions in your Safety, Environmental, and Regulatory Information booklet before you begin.

The following criteria should be considered when selecting a site to install the appliance:

- Before you begin, review the safety instructions located at <https://www.arista.com/en/support/product-documentation>.
- Begin installing the rails in the allotted space that is closest to the bottom of the rack enclosure.
- Other Requirements: Select a site where liquids or objects cannot fall onto the equipment and foreign objects are not drawn into the ventilation holes. Verify these guidelines are met:
 - Clearance areas to the front and rear panels allow for unrestricted cabling.
 - All front and rear panel indicators can be easily read.
 - Power cords can reach from the power outlet to the connector on the rear panel.



Note: All power connections must be removed to de-energize the unit.



Note: This unit is intended for installation in restricted access areas.

2.2 Tools and Parts Required for Installation

Each appliance comes with an accessory kit that contains [parts](#) that are required to install. In addition to the accessory kit, the following tools are required to install the appliance:

Four-post Rack

- #1 and #3 Phillips head screwdrivers (this may differ based on supplied accessories)
- Screws or rack-mounting nuts and bolts

Two-post Rack

- #1 and #3 Phillips head screwdrivers (this may differ based on supplied accessories)
- Screws or rack-mounting nuts and bolts

The accessory kit should include screws for attaching the appliance into an equipment rack. When installing the appliance to an equipment rack with unthreaded post holes, nuts and bolts are also required to secure the appliance to the rack posts.

2.3 Receiving and Inspecting the Equipment

Upon receiving the appliance, inspect the shipping boxes and record any external damage. Retain packing materials if you suspect that part of the shipment is damaged; the carrier may need to inspect them.

If the boxes were not damaged in transit, unpack them carefully. Ensure that you do not discard any accessories that may be packaged in the same box as the main unit.

Inspect the packing list and confirm that you received all listed items. Compare the packing list with your purchase order. The Appendix provides a list of components included with the appliance.

2.4 Electrostatic Discharge (ESD) Precautions

Observe these guidelines to avoid ESD damage when installing or servicing the appliance.

- Assemble or disassemble equipment only in a static-free work area.
- Use a conductive work surface (such as an anti-static mat) to dissipate static charge.
- Wear a conductive wrist strap to dissipate static charge accumulation.
- Minimize handling of assemblies and components.
- Keep replacement parts in their original static-free packaging.
- Remove all plastic, foam, vinyl, paper, and other static-generating materials from the work area.
- Use tools that do not create ESD.

2.5 Setting up Your System

Complete the following steps to set up your system:

1. Unpack the system.
2. Remove the I/O connector cover from the system connectors.



Note: While installing the system, ensure that it is properly aligned with the slot on the enclosure to prevent damage to the system connectors.

3. Install the system in the enclosure.
4. Turn on the enclosure.



Note: Wait for the chassis to initialize before you press the power button.

5. Press the power button on the system.

Alternatively, you can also turn on the system by using:

- The system iDRAC. For more information, see [Web Access into iDRAC \(System IPMI\)](#).
- The enclosure Chassis Management Controller (CMC), after the system iDRAC (IPMI) is configured on the CMC.

2.6 DMF Service Node Physical Appliance Setup

You may need the following items to perform the procedures in this section:

- Key to the system key-lock.

- #1 and #2 Phillips screwdriver.
- Wrist grounding strap connected to ground.
- Rack mount kit instructions located in the shipping box.

Before Working Inside your System

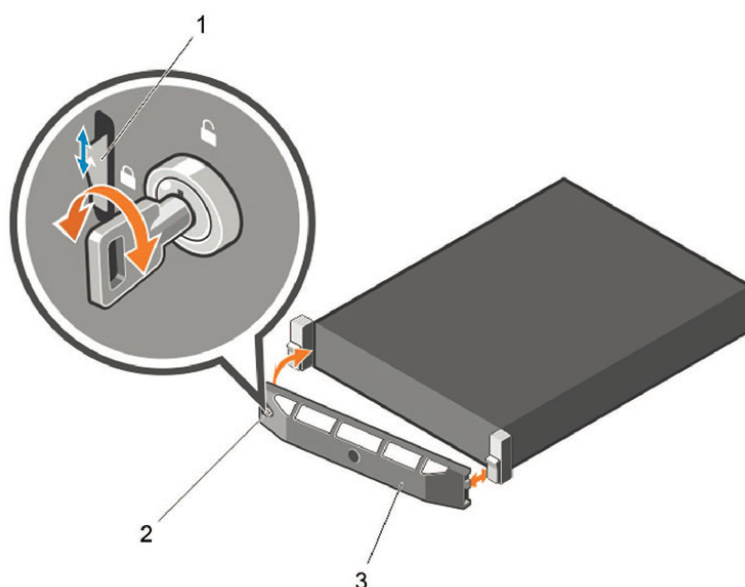
Follow these safety guidelines: Refer to [Safety Information](#) for more information.

1. Turn off the system, including all attached peripherals.
2. Disconnect the system from the electrical outlet and disconnect the peripherals.
3. Remove the system cover.

2.6.1 Front Bezel

Complete the following tasks to remove the front bezel.

Figure 2-1: Front Bezel

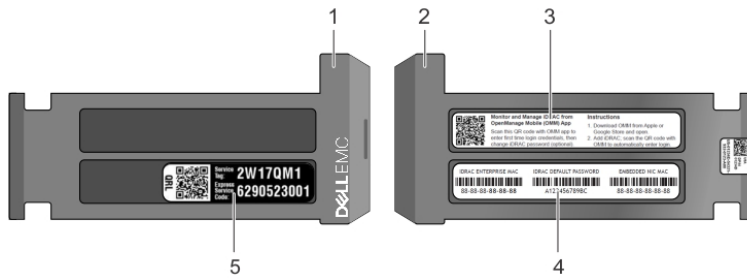


1. Unlock the key-lock at the left end of the bezel.
2. Lift the release latch next to the key-lock.
3. Rotate the left end of the bezel away from the front panel.
4. Unhook the right end of the bezel and pull the bezel away from the system.

2.6.2 Locate the iDRAC MAC Address for the DMF Service Node Appliance

The information tag is a slide-out label which contains system information such as Service Tag, NIC, MAC address for your reference. Record the MAC addresses in the DMF Service Node Worksheet.

Figure 2-2: Locating MAC Address of your System



- | | | | |
|---|--------------------------------|---|---|
| 1 | Information tag (front view) | 4 | iDRAC MAC address and iDRAC secure password label |
| 2 | Information tag (back view) | 5 | Service Tag |
| 3 | Open Manage Mobile (OMM) label | | |

2.6.3 Rear Panel Ethernet Connections

On the back panel of the DMF Service Node Appliance, locate the Ethernet Integrated 10/100/1000 Mbps NIC connectors.

Figure 2-3: Rear Panel

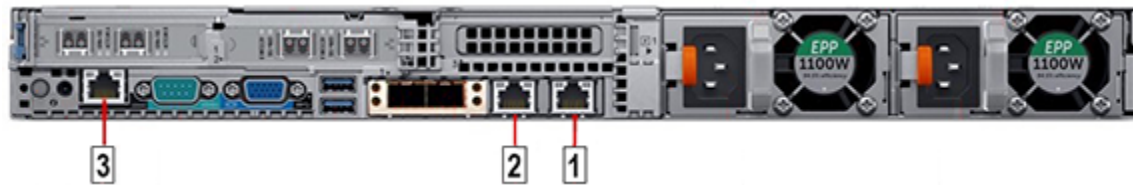


Table 11: Rear Panel Ethernet Connections

- | | | | |
|---|----------------------|---|--------------------------|
| 1 | Ethernet Connector 1 | 3 | iDRAC Ethernet interface |
| 2 | Ethernet Connector 2 | | |

2.6.4 DNS Entries

In order to manage your DMF Service Node, it is often easier to connect to them by hostname as opposed to IP address. Fully qualified domain names (FQDNs) should be allocated to:

- Each of the DMF Service Node Appliance host machines.
- Each of the DMF Service Node Appliance iDRAC interfaces.

Contact your DNS zone administrator for assistance.

2.7 DMF Service Node Appliance IP Configuration

The DMF Service Node Appliance Host and iDRAC IP addresses can be manually allocated as below:

Manual configuration (Requires terminal connected to VGA port)

- Manual IP Address Setup [Manual IP Address Setup](#).
- Web Access into Host via iDRAC [Web Access into iDRAC \(System IPMI\)](#).

2.7.1 Manual IP Address Setup



Note: Direct IP Address Setup requires a terminal connected to the VGA port of the appliance. Refer to Setting Up and Using iDRAC in the DMF Deployment Guide.

DMF Service Node Appliance Access

3.1 iDRAC

iDRAC is a GUI based IPMI running on a separate out of band CPU used for monitoring the hardware appliance.

- [Web Access into iDRAC \(System IPMI\)](#)
- [Changing the iDRAC Password](#)

3.1.1 Web Access into iDRAC (System IPMI)

iDRAC is supported on the following browsers:

- **Mozilla Firefox**
- **Google Chrome**

On the management station, open the Web browser and connect to the iDRAC7 using: `https://<hostname or IP of iDRAC>`.

For example: `https://192.168.0.120`.

The Login page appears.

Figure 3-1: iDRAC Login Page

Integrated Remote Access Controller 9
DMF-SCALE-450 | Enterprise

Type the User Name and Password and click Log In.

Username:

Password:

Domain:

Security Notice: By accessing this computer, you confirm that such access complies with your organization's security policy.

Log In

Login using the default username and password, which are:

- Username: **root**
- Password: **<password on the Service Tag>**



Note: Both the username and password are case sensitive.

3.1.2 Changing the iDRAC Password

The following options are available to change the iDRAC password:

- See [Changing the Password through the iDRAC Web Interface](#).

3.1.2.1 Changing the Password through the iDRAC Web Interface

To change the password through the iDRAC web interface, complete the following steps.

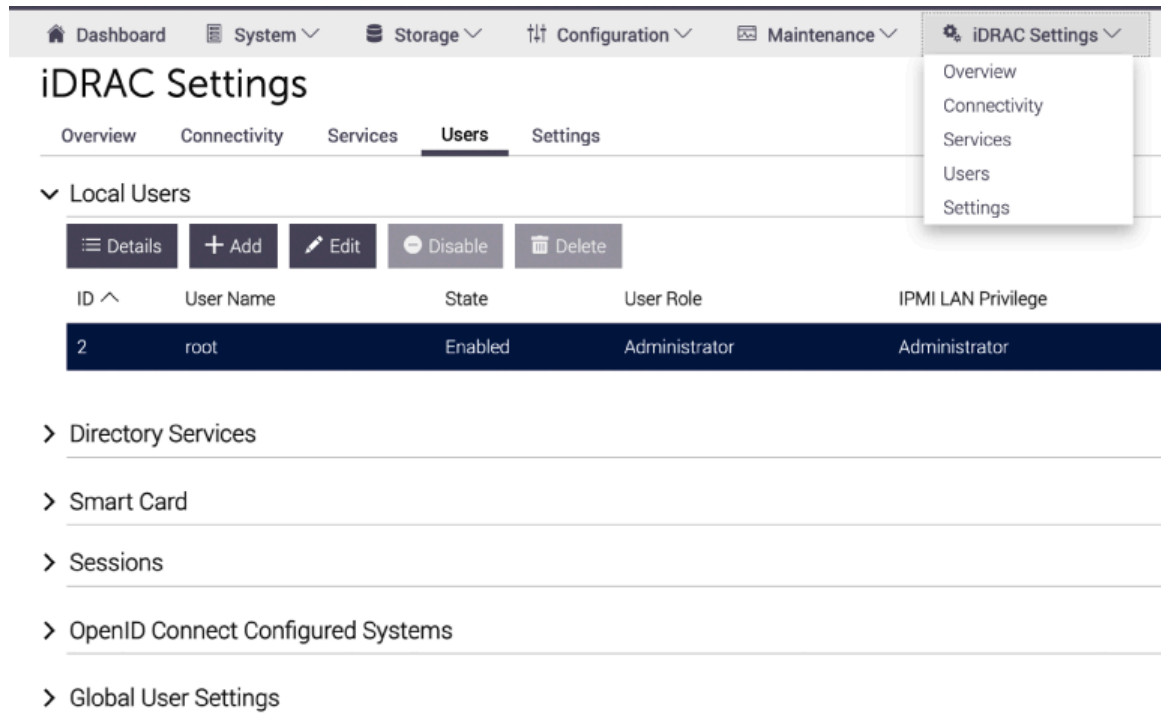
1. Log into iDRAC.

Figure 3-2: iDRAC Login Page

The image shows a screenshot of the iDRAC login page. At the top center, there is a white icon representing a server rack. Below the icon, the text "Integrated Remote Access Controller 9" is displayed in a large, white font. Underneath this, "DMF-SCALE-450 | Enterprise" is written in a smaller white font. A horizontal line separates the header from the login instructions. Below the line, the text "Type the User Name and Password and click Log In." is centered. Another horizontal line follows. The login form consists of three input fields: "Username:" with a white text box, "Password:" with a white text box and a small eye icon to its right, and "Domain:" with a white dropdown menu currently showing "This iDRAC". A horizontal line is below the form. At the bottom of the page, there is a "Security Notice" with a lock icon and the text "By accessing this computer, you confirm that such access complies with your organization's security policy." Below the notice is a "Log In" button.

2. Under "iDRAC Settings", go to **User**. Expand the Local Users and select the user for which the password is to be changed.

Figure 3-3: iDRAC Settings Page



The screenshot shows the iDRAC Settings page with a navigation menu at the top. The 'iDRAC Settings' menu is open, showing options: Overview, Connectivity, Services, Users, and Settings. The 'Users' tab is selected. Under 'Local Users', there are buttons for Details, Add, Edit, Disable, and Delete. A table lists the users, with the 'root' user selected. Below the table are expandable sections for Directory Services, Smart Card, Sessions, OpenID Connect Configured Systems, and Global User Settings.

| ID ^ | User Name | State | User Role | IPMI LAN Privilege |
|------|-----------|---------|---------------|--------------------|
| 2 | root | Enabled | Administrator | Administrator |

3. Click the **User ID** number of the root account to select it.

- Click **Edit**. The page appears, showing options for changing password for root user.

Figure 3-4: Changing the Password

The screenshot shows the 'Edit User' configuration page. At the top, there are three tabs: 'User Configuration' (selected), 'SSH Key Configurations', and 'Smart Card Configuration'. Below the tabs is the 'User Account Settings' section. The 'ID' is set to 2. The 'User Name' field contains 'root'. The 'Password' and 'Confirm Password' fields are masked with dots. The 'User Role' is set to 'Administrator'. There are nine checked checkboxes for user privileges: 'Login to iDRAC', 'Clear Logs', 'Access Virtual Media', 'Configure iDRAC', 'Control and Configure System', 'Test Alerts', 'Configure Users', 'Access Virtual Console', and 'Execute Debug Commands'. At the bottom right, there are 'Close' and 'Save' buttons.

- Enter the new password in the **Password** and click **Confirm Password**.
- Click **Save** to apply the password change.

Application Setup

4.1 Setting Up DMF Service Node

Pre-installation Checklist

Ensure that installation prerequisite has been satisfied as mentioned in the DMF Installation Prerequisites section of the DMF Deployment Guide.

4.1.1 Setup Steps for DMF Service Node

To set up DMF service node, please refer to Service Node Setup and Initial Configuration section of the Deployment Guide.

4.1.2 Log into the DMF Web Interface

After DMF Service Node configuration is completed and appliance on-boarded to DMF controller, log into the DMF GUI via DMF Controller IP/Hostname. Refer to the DMF User Guide for instructions on using DMF Service Node features.

Series Status Indicators

This section contains the following topics:

- [LCD Panel Features](#)
- [Status LED Indicators](#)
- [NIC Indicator Codes](#)
- [Power Supply Unit Indicator Codes](#)

A.1 LCD Panel Features

The system's LCD panel provides system information and status and error messages to indicate if the system is operating correctly or if the system needs attention.

The LCD back-light lights blue during normal operating conditions.

When the system needs attention, the LCD lights are amber and displays an error code followed by descriptive text.

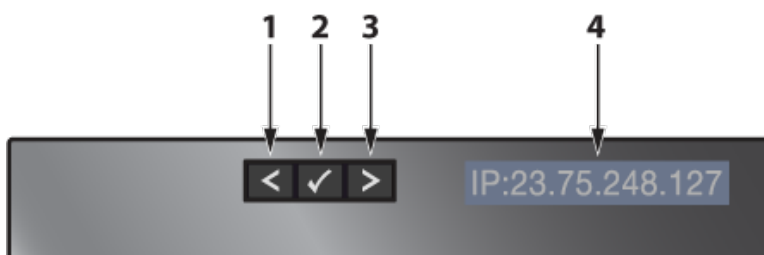


Note: If the system is connected to a power source and an error is detected, the LCD lights amber regardless of whether the system is turned on or off.

The LCD back-light turns OFF when the system is in standby mode and can be turned on by pressing either the Select, Left, or Right button on the LCD panel.

The LCD back-light remains OFF if LCD messaging is turned off through the iDRAC utility, the LCD panel, or other tools.

Figure A-1: LCD Panel Features



| Item | Button | Description |
|------|-------------|---|
| 1 | Left | Moves the cursor back in one-step increments. |
| 2 | Select | Selects the menu item highlighted by the cursor. |
| 3 | Right | Moves the cursor forward in one-step increments. During message scrolling: <ul style="list-style-type: none"> • Press and hold the right button to increase scrolling speed. • Release the button to stop. |
| 4 | LCD display | Displays system information, status and error messages or iDRAC IP address. |

A.2 Status LED Indicators


 **Note:** The indicators display solid amber if any error occurs.

Figure A-2: LCD Panel Features

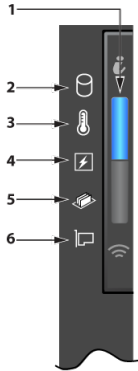


Table 12: Status LED Indicators and Descriptions

Item 1 is the health indicator that indicates the health status of the system. The indicator turns solid blue if the system is turned on and in good health. The indicator flashes amber if the system is turned on or in standby, and if any issue occurs (for example, a failed fan or drive).





Item 2 is the drive indicator that flashes amber if an error occurs related to drive.


Item 3 is the electrical indicator that flashes amber if an electrical error occurs (for example, voltage out of range, or a failed power supply unit or voltage regulator).

Item 4 is the temperature indicator that flashes amber if a thermal error occurs (for example, temperature out of range or fan failure).

Item 5 is the memory indicator that flashes amber if a memory error occurs.

Item 6 is the PCIe indicator that flashes amber if an error occurs related to the PCIe card.

| Icon | Description | Condition | Corrective Action |
|---|-----------------------|--|---|
|  | Drive Indicator | The indicator turns solid amber if there is a drive error. | <ul style="list-style-type: none"> • Check the System Event Log to determine if the drive has an error. • Run the appropriate Online Diagnostics test. Restart the system and run embedded diagnostics (ePSA). • If the drives are configured in a RAID array, restart the system, and enter the host adapter configuration utility program. |
|  | Temperature Indicator | The indicator turns solid amber if the system experiences a thermal error (for example, the ambient temperature is out of range, or there is a fan failure). | <p>Ensure that none of the following conditions exist:</p> <ul style="list-style-type: none"> • A cooling fan has been removed or has failed. • System cover, air shroud, memory module blank, or back filler bracket is removed. • Ambient temperature is too high. • External airflow is obstructed. |
|  | Electrical Indicator | The indicator turns solid amber if the system experiences an electrical error (for example, voltage out of range, or a failed power supply unit (PSU) or voltage regulator). | Check the System Event Log or system messages for the specific issue. If it is due to a problem with the PSU, check the LED on the PSU. Reseat the PSU. |
|  | Memory Indicator | The indicator turns solid amber if a memory error occurs. | Check the System Event Log or system messages for the location of the failed memory. Reseat the memory module. |

| Icon | Description | Condition | Corrective Action |
|---|----------------|--|--|
|  | PCIe Indicator | The indicator turns solid amber if a PCIe card experiences an error. | Restart the system. Update any required drivers for the PCIe card. Reinstall the card. |

A.2.1 iDRAC Direct LED Indicator Codes

The iDRAC Direct LED indicator lights up to indicate that the port is connected and is being used as a part of the iDRAC subsystem.

You can configure iDRAC Direct by using a USB to micro USB (type AB) cable, which you can connect to your laptop or tablet. The following table describes iDRAC Direct activity when the iDRAC Direct port is active:

Table 13: iDRAC Direct LED Indicator Codes

The iDRAC Direct LED indicator codes table describes the iDRAC status when it is solid green, flashing green, and when it is turned off.

| iDRAC Direct LED Indicator Code | Condition |
|--|--|
| Solid green for two seconds. | Indicates that the laptop or tablet is connected. |
| Flashing green (on for two seconds and off for two seconds). | Indicates that the laptop or tablet connected is recognized. |
| LED indicator off | Indicates that the laptop or tablet is unplugged. |

A.2.1.1 iDRAC Quick Sync 2 Indicator Codes

iDRAC Quick Sync 2 module (optional) is located on the left control panel of your system.

Figure A-3: iDRAC Quick Sync 2 Indicators



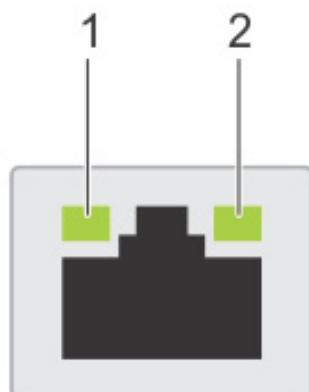
Table 14: iDRAC Quick Sync 2 Indicators and Descriptions

This table describes the Quick Sync status indicators. The indicator statuses are Off, which is the default state, Solid white, blinks white rapidly, blinks white slowly, blinks white five times rapidly and then turns off, solid amber, and blinking amber.

| iDRAC Quick Sync 2 indicator code | Condition | Corrective action |
|--|---|--|
| Off (default state) | Indicates that the iDRAC Quick Sync 2 feature is turned off. Press the iDRAC Quick Sync 2 button to turn on the iDRAC Quick Sync 2 feature. | If the LED fails to turn on, reseal the left control panel flex cable and check. |
| Solid white | Indicates that iDRAC Quick Sync 2 is ready to communicate. Press the iDRAC Quick Sync 2 button to turn off. | If the LED fails to turn off, restart the system. |
| Blinks white rapidly | Indicates data transfer activity. | |
| Blinks white slowly | Indicates that firmware update is in progress. | |
| Blinks white five times rapidly and then turns off | Indicates that the iDRAC Quick Sync 2 feature is disabled. | Check if iDRAC Quick Sync 2 feature is configured to be disabled by iDRAC. |
| Solid amber | Indicates that the system is in fail-safe mode. | Restart the system. |
| Blinking amber | Indicates that the iDRAC Quick Sync 2 hardware is not responding properly. | Restart the system. |

A.3 NIC Indicator Codes

Each NIC on the back of the system has indicators that provide information about the activity and link status. The activity LED indicator indicates if data is flowing through the NIC, and the link LED indicator indicates the speed of the connected network.

Figure A-4: NIC Indicators

- 1 Link LED Indicator 2 Activity LED indicator

Table 15: NIC Indicator Codes

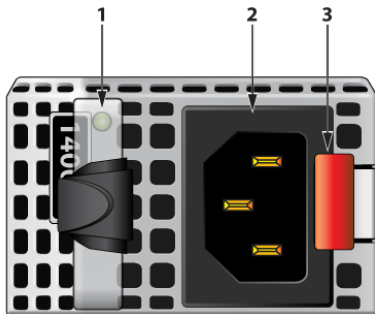
The NIC indicators table describes different NIC indicator codes and conditions of the connectivity.

| Status | Condition |
|--|---|
| Link and activity indicators are off. | The NIC is not connected to the network. |
| Link indicator is green, and the activity indicator is blinking green. | The NIC is connected to a valid network at its maximum port speed and data is being sent or received. |
| Link indicator is amber and the activity indicator is blinking green. | The NIC is connected to a valid network at less than its maximum port speed and data is being sent or received. |
| Link indicator is green, and the activity indicator is off. | The NIC is connected to a valid network at its maximum port speed and data is not being sent or received. |
| Link indicator is amber and the activity indicator is off. | The NIC is connected to a valid network at less than its maximum port speed and data is not being sent or received. |
| Link indicator is blinking green and the activity is off. | NIC identity is enabled through the NIC configuration utility. |

A.4 Power Supply Unit Indicator Codes

AC power supply units (PSUs) have an illuminated translucent handle that serves as an indicator. The indicator shows whether power is present or if a power fault has occurred.






Figure A-5: Power Supply unit Indicators



- 1 AC PSU status indicator/ 3 Release Latch
handle
- 2 Socket

Table 16: AC PSU Status Indicator Codes

This table describes the AC PSU status indicators and what condition is the PSU when the power indicator light is green, blinking green, blinking amber, and when it is not illuminated.

| Power Indicator Codes | Condition |
|-----------------------|---|
| Green | A valid power source is connected to the PSU, and the PSU is operational. |
| Blinking amber | Indicates a problem with the PSU. |
| Off | Power is not connected to the PSU. |
| Blinking green | <p>When the firmware of the PSU is being updated, the PSU handle blinks green.</p> <p> CAUTION: Do not disconnect the power cord or unplug the PSU when updating the firmware. If the firmware update is interrupted; the PSUs do not function.</p> |
| Turns off | <p>When hot-plugging a PSU, the PSU handle blinks green five times at a rate of 4 Hz and turns off. This indicates a PSU mismatch concerning efficiency, feature set, health status, or supported voltage.</p> <p> CAUTION: If two PSUs are installed, both the PSUs must have the same type of label; for example, Extended Power Performance (EPP) label. Mixing PSUs from previous generations of PowerEdge servers is not supported, even if the PSUs have the same power rating. This results in a PSU mismatch condition or failure to turn the system on.</p> <p> CAUTION: When correcting a PSU mismatch, replace only the PSU with the blinking indicator. Swapping the PSU to make a matched pair can result in an error condition and unexpected system shutdown. To change from a high output configuration to a low output configuration or vice versa, you must turn off the system.</p> <p> CAUTION: AC PSUs support both 240 V and 120 V input voltages except for Titanium PSUs, which support only 240 V. When two identical PSUs receive different input voltages, they can output different wattage, and trigger a mismatch.</p> <p> CAUTION: If two PSUs are used, they must be of the same type and have the same maximum output power.</p> |

Rack Installation

This section includes the following topics:

- [Rack Installation](#)
- [Two-Post Rack Mount Parts](#)

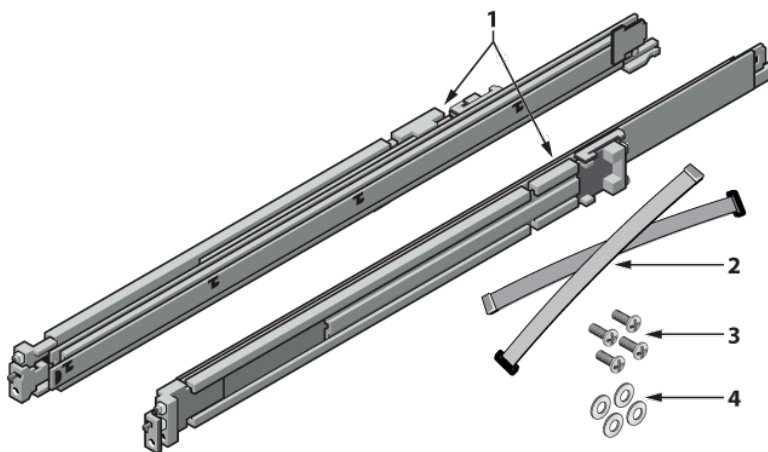
B.1 Rack Installation

Use the following steps to assemble the racking rails and attach the components to the system.

1. Identifying the Rail Kit Contents.

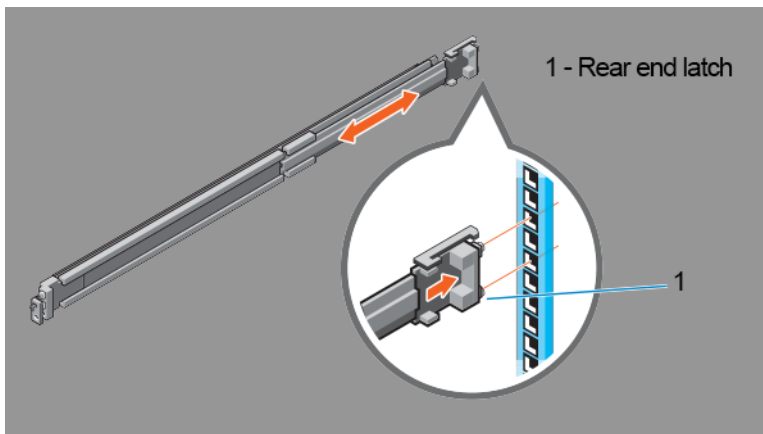
Locate the components for installing the rail kit assembly:

- Two sliding rail assemblies (1).
- Two hook and loop straps (2).



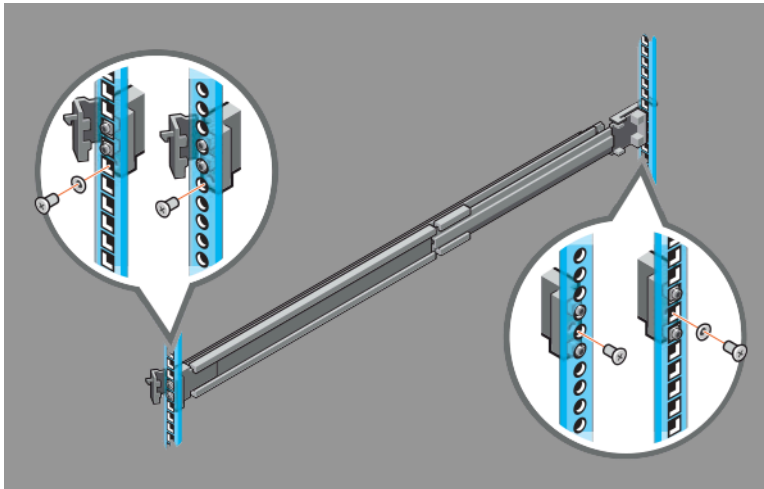
2. Installing and Removing Tool-less Rails (Square Hole or Round Hole Racks).

- a. Position the left and right rail end pieces labeled FRONT facing inward and orient each end piece to seat in the holes on the front side of the vertical rack flanges (1).
- b. Align each end piece in the bottom and top holes of the desired U spaces (2).
- c. Engage the back end of the rail until it fully seats on the vertical rack flange and the latch clicks into place. Repeat these steps to position and seat the front end piece on the vertical rack flange (3).
- d. To remove the rails, pull the latch release button on the end piece midpoint and unseat each rail (4).



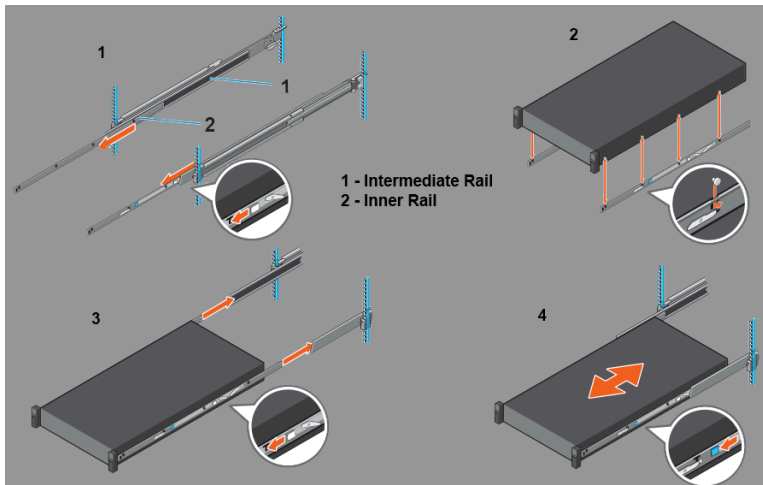
3. Installing and Removing Tooled Rails (Threaded Hole Racks).

- a. Remove the pins from the front and rear mounting brackets using a flat-tipped screwdriver (1).
- b. Pull and rotate the rail latch sub-assemblies to remove them from the mounting brackets (2).
- c. Attach the left and right mounting rails to the front vertical rack flanges using two pairs of screws (3).
- d. Slide the left and right back brackets forward against the rear vertical rack flanges and attach them using two pairs of screws (4).



4. Installing the System in a Rack.

- a. Pull the inner slide rails out of the rack until they lock into place (1).
- b. Locate the rear rail standoff on each side of the system and lower them into the rear J-slots on the slide assemblies (2).
- c. Rotate the system downward until all the rail standoffs are seated in the J-slots (3).
- d. Push the system inward until the lock levers click into place. Press the slide-release lock buttons on both rails and slide the system into the rack (4).



5. Removing the System From the Rack.

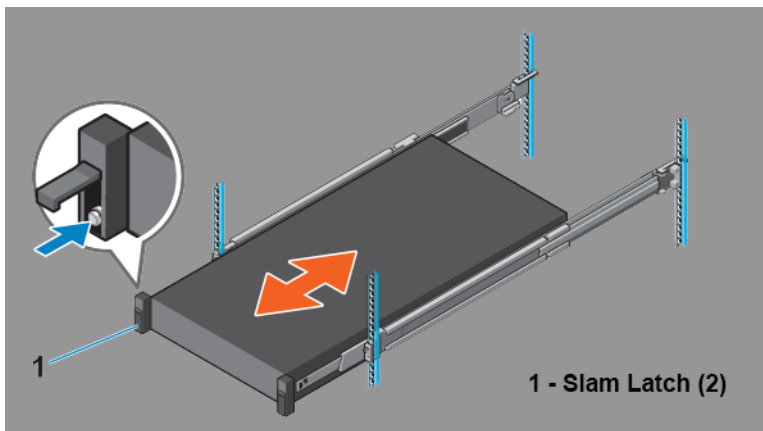
- a. Locate the lock levers on the sides of the inner rails (1).
- b. Unlock each lever by rotating it up to its release position (2).
- c. Grasp the sides of the system firmly and pull it forward until the rail standoffs are at the front of the J-slots. Lift the system up and away from the rack and place it on a level surface (3).

6. Engaging and Releasing the Slam Latch.



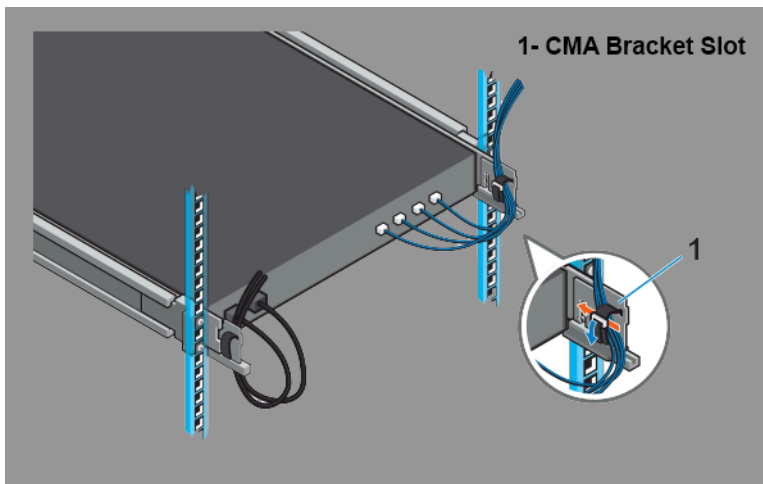
Note: For systems not equipped with slam latches, secure the system using screws, as described in Step C of this procedure.

- a. Facing the front, locate the slam latch on either side of the system (1).
- b. The latches engage automatically as the system is pushed into the rack and are released by pulling up on the latches (2).
- c. To secure the system for shipment in the rack or for other unstable environments, locate the hard-mount screw under each latch and tighten each screw with a #2 Phillips screwdriver (3).



7. Routing the Cables.

- a. Locate the outer brackets on the interior sides of both rack flanges (1).
- b. Bundle the cables gently, pulling them clear of the system connectors to the left and right sides (2).
- c. Thread the hook and loop straps through the tool slots on the outer brackets on each side of the system to secure the cable bundles (3).

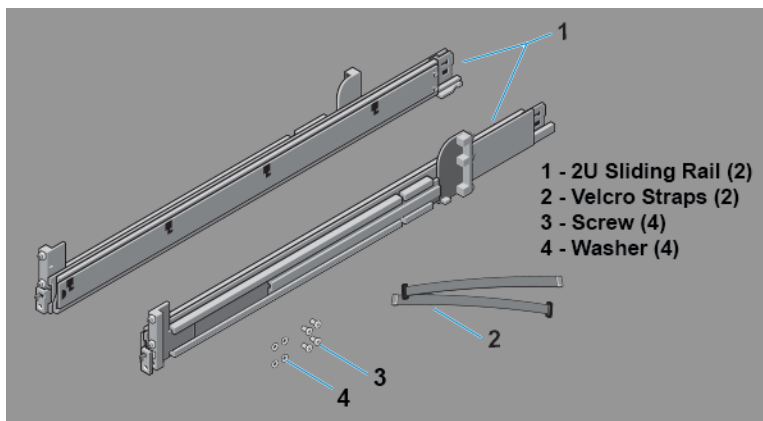


B.2 Two-Post Rack Mount Parts

The two-post rack mount kit includes:

- Two sliding rail assemblies.
- Two hook and loop straps.

Figure B-1: Two-Post Rack Mount Parts



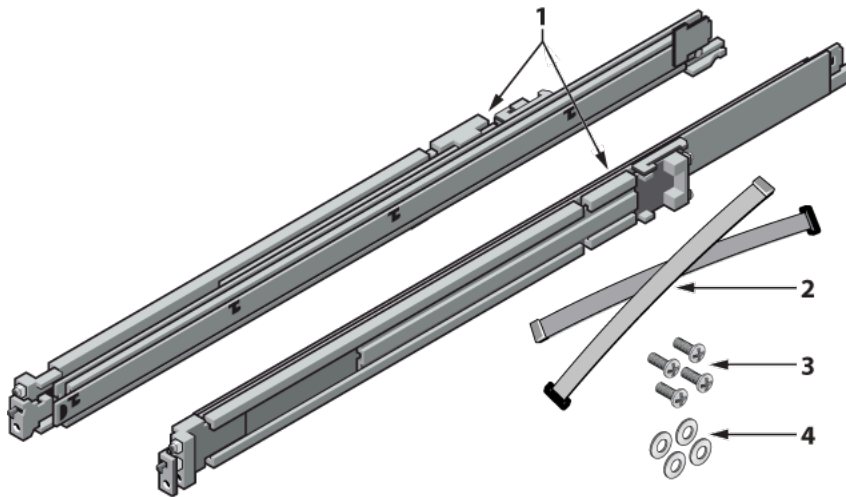
Parts List

This section lists the default and optional installation parts available in the accessory kit. Each appliance comes with an accessory kit that contains necessary parts that are required to install the appliance.

Four-post Rack Mount

The following accessories are available along with the appliance:

Figure C-1: Four-post Rack Mount Kit Parts



- | | | | |
|---|---------------|---|---|
| 1 | 2U Rail slide | 3 | Screws (for fixing rack plugs to rail rod and rail slide) |
| 2 | Velcro Straps | 4 | Washers |

• Cables

- RJ45 Ethernet cable
- Console cable
- Power cable (country-specific, included only if specified before purchase)

Front View of the System

Please refer to the DMF Service Node Specification section in the DMF Hardware Guide document available at arista.com.

D.1 Front Panel Features

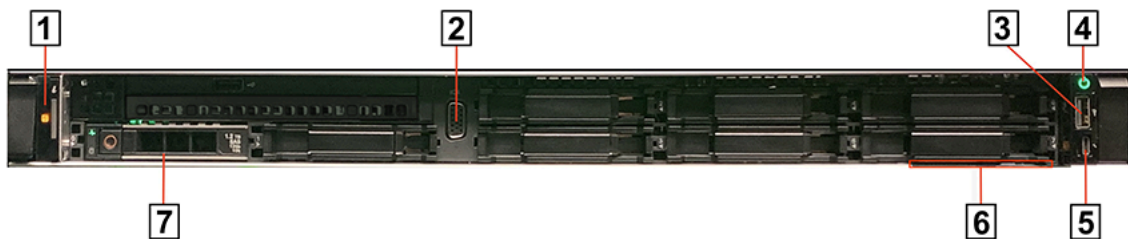
This front view displays the features available on the front panel of the DMF Service Node Appliance.

Figure D-1: DMF Service Node Front Panel with Bezel



- | | | |
|---|-----------------------------|---|
| 1 | Service Node Security Bezel | Bezel helps prevent unauthorized physical access to the front panel components. |
| 2 | LCD Menu Buttons | <p>Left - Moves the cursor back in one-step increments.</p> <p>Select - Selects the menu item highlighted by the cursor.</p> <p>Right - Moves the cursor forward in one-step increments.</p> |
| 3 | LCD Panel | Displays system information, status and error messages or iDRAC IP address. |

Figure D-2: DMF Service Node Front Panel

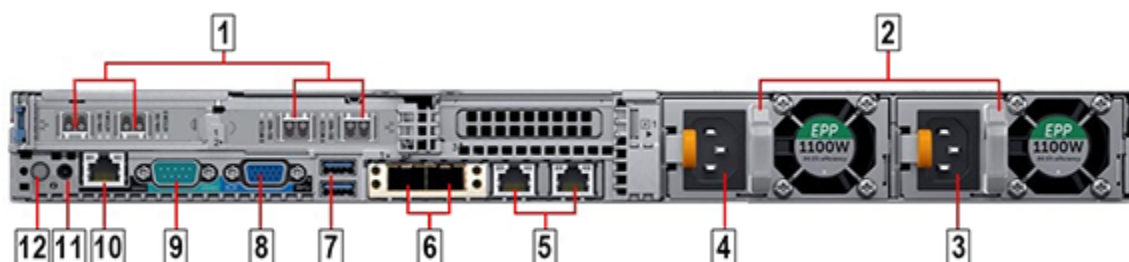


| | | |
|---|--|--|
| 1 | System Identification Button / Indicator | The identification buttons on the front and back panels can be used to locate a particular system within a rack. When one of these buttons is pressed, the system status indicator on the back flashes until one of the buttons is pressed again. Press to toggle the system ID on and off. If the system stops responding during POST, press and hold the system ID button for more than five seconds to enter BIOS progress mode. To reset the iDRAC (if not disabled in F2 iDRAC setup) press and hold the button for more than 15 seconds. |
| 2 | Video connector | Allows you to connect a VGA display to the system. |
| 3 | USB ports | Allows you to connect USB devices to the system. The port is USB 2.0-compliant. |
| 4 | Power-ON Indicator / Power Button | Indicates when the power of the Service node is ON. |
| 5 | Micro USB (not supported) | Allows to connect to your laptop or tablet. |
| 6 | Information tag | A slide-out label panel which contains system information such as Service Tag, NIC, MAC address, and so on for your reference. |
| 7 | Hard drive | 4x3.5" hard drive/SSD slots. |

Rear Panel Features

This section displays the rear panel of the DMF Service Node Appliance.

Figure E-1: DMF Service Node Rear Panel



| | | |
|----|--|--|
| 1 | Ethernet Connector | Integrated 1000/10000 Mbps NIC connector. Inband Ethernet Connector port 1(10-GbE SFP+Service interfaces SNI1, SNI2, SNI3 & SNI4) |
| 2 | PSU Status Indicators | Indicates the status of the power supply |
| 3 | PSU1 | Power Supply 1 |
| 4 | PSU2 | Power Supply 2 |
| 5 | Ethernet connector | Service Node Management port 1 (10/100/1000 Mb/s) |
| 6 | Ethernet connector | Not supported |
| 7 | USB ports | Allows you to connect USB devices to the system. The port is USB 2.0-compliant. |
| 8 | Video connector | Allows you to connect a VGA display to the system. |
| 9 | Serial Connector (Default Baud Rate 115200) | Allows you to connect a serial device to the system. |
| 10 | iDRAC Ethernet interface | Dedicated management port for the iDRAC port card. |
| 11 | System Identification Button | The identification buttons on the front and back panels can be used to locate a particular system within a rack. When one of these buttons is pressed, the system status indicator on the back flashes until one of the buttons is pressed again. Press to toggle the system ID ON and OFF. If the system stops responding during POST, press and hold the system ID button for more than five seconds to enter BIOS progress mode. To reset the iDRAC (if not disabled in F2 iDRAC setup) press and hold the button for more than 15 seconds. |
| 12 | System Identification Indicator | When one of the system identifier buttons is pressed, the system status indicator on the back flashes until one of the buttons is pressed again. |

RoHS Declaration Statements

For Taiwan BSMI RoHS Table, go to <https://www.arista.com/assets/data/pdf/AristaBSMIroHS.pdf>.