



**Hewlett Packard  
Enterprise**

# **HPE Edgeline EL8000 Converged Edge System Setup and Configuration Guide**

## **Abstract**

This document is for the person who installs, administers, and troubleshoots servers and storage systems. Hewlett Packard Enterprise assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels.

Part Number: P12853-001  
Published: August 2019  
Edition: 1

## Notices

The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Confidential computer software. Valid license from Hewlett Packard Enterprise required for possession, use, or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Links to third-party websites take you outside the Hewlett Packard Enterprise website. Hewlett Packard Enterprise has no control over and is not responsible for information outside the Hewlett Packard Enterprise website.

## Acknowledgments

Intel<sup>®</sup>, Itanium<sup>®</sup>, Pentium<sup>®</sup>, Xeon<sup>®</sup>, Intel Inside<sup>®</sup>, and the Intel Inside logo are trademarks of Intel Corporation in the U.S. and other countries.

Microsoft<sup>®</sup> and Windows<sup>®</sup> are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Adobe<sup>®</sup> and Acrobat<sup>®</sup> are trademarks of Adobe Systems Incorporated.

Java<sup>®</sup> and Oracle<sup>®</sup> are registered trademarks of Oracle and/or its affiliates.

UNIX<sup>®</sup> is a registered trademark of The Open Group.

# Overview

The HPE Edgeline EL8000 Converged Edge System is designed to help communication service providers capitalize on data-intensive, low-latency services for media delivery, connected mobility, and smart cities. With the ability to process the increasing amount of data in real time directly at the edge, the system boosts flexibility and reduces costs by using open standards. By reducing the need for proprietary edge systems, the HPE EL8000 enables enhanced performance and versatility for data-intensive real-time digital services while providing a compact, ruggedized design, modular blade and chassis options, and even one-click provisioning and remote system management.

The HPE EL8000 Chassis Manager is a remote management tool embedded in certain HPE Edgeline systems. The software allows system administrators to remotely configure, update, and monitor chassis health and activity. The embedded EL8000 CM management module has its own network connection and IP address to which administrators connect on their dedicated management network. Depending on hardware configuration, HPE Edgeline systems with the EL8000 CM can be connected to a management network using Ethernet or a wireless Wi-Fi connection. The EL8000 CM offers both a Web-based console (GUI) and a command line interface (CLI).

This guide includes setup and configuration information for the HPE EL8000 chassis. See [<link to e910 setup guide>](#) for information related to the ProLiant e910 blade setup, configuration, and operating system installation.

# Setup and configuration

## Checklist

Complete this checklist to set up, install, and configure your new HPE Edgeline EL8000 Chassis Manager 1.0.

1. Unbox the system and **identify the components**.
2. **Verify that the intended installation site conforms to space, airflow, temperature, and power requirements**.
3. Install applicable hardware option:  
**Front bezel option**
4. **Install one or more blades in the chassis if necessary**.
5. **Determine the rack depth compatibility** of the system, and then install it in a rack:
  - **Two-post rack**
  - **Four-post rack**
6. **Prepare to configure the system:**
  - a. Verify network connectivity.
  - b. Plan for network address.
7. **Connect to the Edgeline EL8000 Chassis Manager and configure the system using one of the available methods:**
  - **Connect using the WiFi Access Point**.
  - **Connect to the Edgeline EL8000 Chassis Manager web interface**.
  - **Connect to the Edgeline EL8000 Chassis Manager CLI using serial cable**.
8. **Register your system with HPE**.



**TIP:** Did you know that HPE has QR codes on all systems? Scan one to access important information on your mobile device:



[hpe.com/qref/el8000](http://www.hpe.com/qref/el8000)

Not interested in scanning the QR code? Click the following link to access the mobile pages for quick setup, maintenance, and troubleshooting information:

**<http://www.hpe.com/qref/el8000>**

# Planning the installation

## Safety and regulatory compliance

For safety, environmental, and regulatory information, see Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the HPE website (<http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts>).

## Site requirements

Before installing the system, verify that the following site requirements are met:

- Space and airflow requirements
- Temperature requirements
- Power requirements

HPE recommends that you install or position the system in a location with restricted access, where the access is secured and controlled. The users/technicians handling the system should be informed about the restrictions applied and precautions to be taken.

## Space and airflow requirement

To allow for servicing and adequate airflow, leave a minimum clearance of 20 cm (7.9 in.) around the system.

## Power requirement

Installation of this equipment must comply with local and regional electrical regulations governing the installation of information technology equipment by licensed electricians. This equipment is designed to operate in installations covered by NFPA 70, 1999 Edition (National Electric Code) and NFPA-75, 1992 (code for Protection of Electronic Computer/Data Processing Equipment). For electrical power ratings on options, see the product rating label or the user documentation supplied with that option.

## Temperature requirements

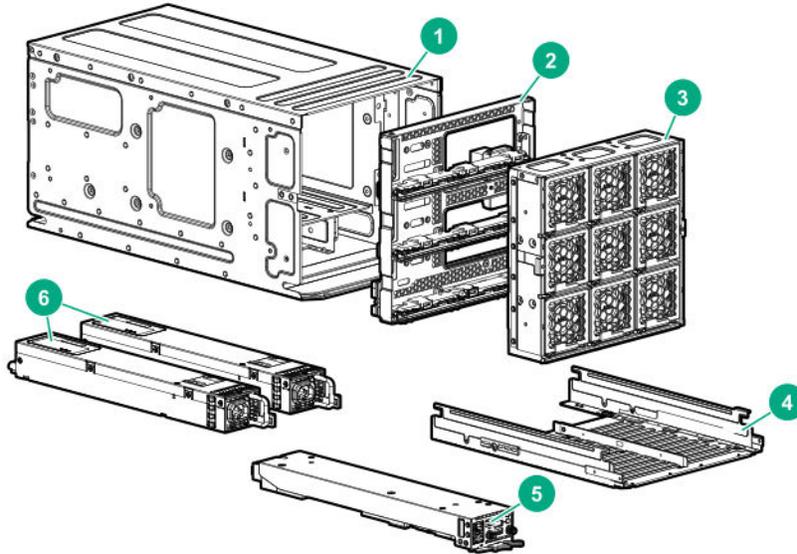
To ensure continued safe and reliable equipment operation, install or position the system in a well-ventilated, climate-controlled environment.

| Configuration                 | Temperature                                 |
|-------------------------------|---|
| Chassis with blades installed | Operating temperature of up to 55°C (131°F) |

# Component identification

This chapter describes the external and internal server features and components.

## System components

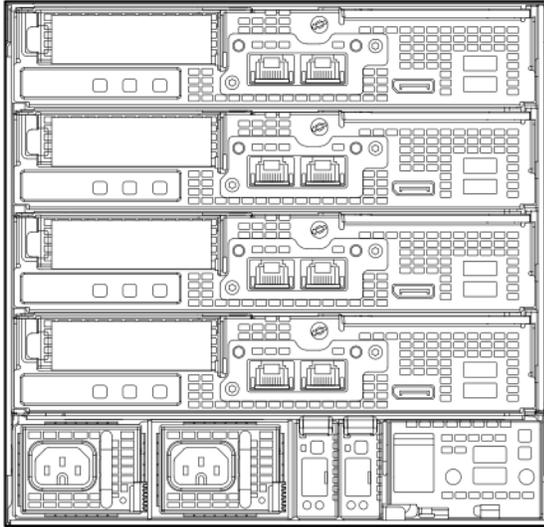


| Item | Description                   |
|------|-------------------------------|
| 1    | EL8000 Converged Edge Chassis |
| 2    | Midplane assembly             |
| 3    | Fan assembly                  |
| 4    | Server tray                   |
| 5    | Chassis manager               |
| 6    | Power supplies                |

## HPE Edgeline EL8000 Converged Edge system

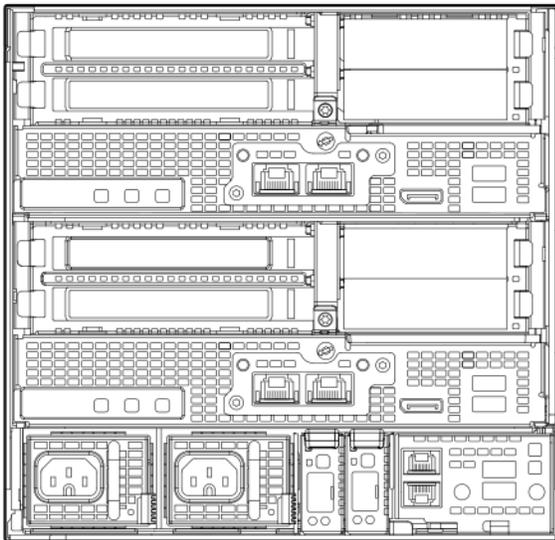
### EL8000 system with 1U server blades installed

The EL8000 system can accommodate up to four 1U HPE ProLiant e910 server blades.



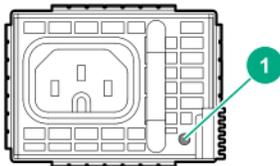
## EL8000 system with 2U server blades installed

The EL8000 chassis can accommodate up to two 2U HPE ProLiant e910 server blades.



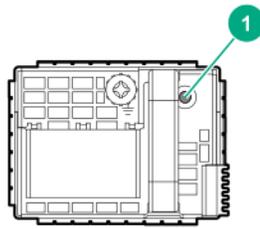
## Power supply LEDs

- AC power supply



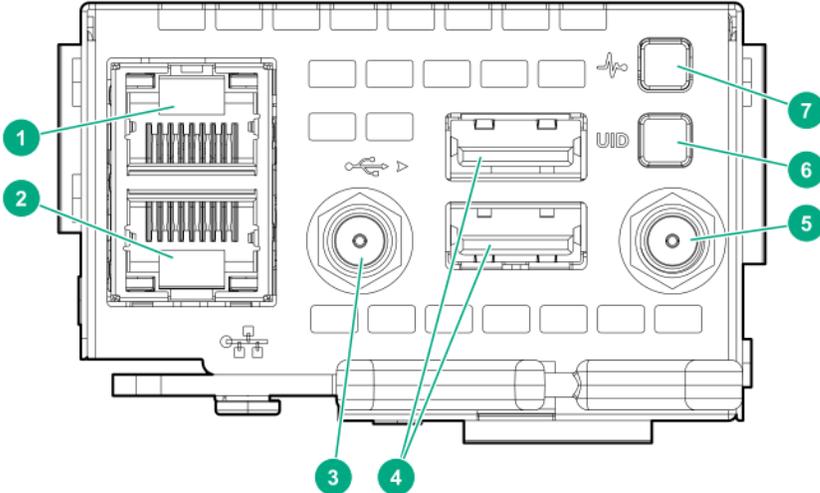
| Status         | Description  |
|----------------|--|
| Solid Green    | System On and normal operation   |
| Flashing Green | Standby power present (power supply off)   |
| Solid Amber    | Power supply failed (overvoltage/undervoltage, overtemperature, overcurrent, short-circuit), fan failed, or input overvoltage protection |
| Flashing Amber | Power supply error   |
| Off            | No power present or standby power failed (overvoltage/undervoltage, overtemperature, overcurrent, short-circuit, fan lock)               |

- DC power supply



| Status         | Description  |
|----------------|--|
| Solid Green    | System On and normal operation   |
| Flashing Green | Standby power present (power supply off)   |
| Solid Amber    | Power supply failed (overvoltage/undervoltage, overtemperature, overcurrent, short-circuit), fan failed, or input overvoltage protection |
| Flashing Amber | Power supply error   |
| Off            | No power present or standby power failed (overvoltage/undervoltage, overtemperature, overcurrent, short-circuit, fan lock)               |

# Chassis manager components



| Item | Description                    |
|------|--------------------------------|
| 1    | Management Network port        |
| 2    | Blade maintenance network port |
| 3    | Antenna 1                      |
| 4    | Chassis manager USB ports      |
| 5    | Antenna 2                      |
| 6    | Chassis UID Button/LED         |
| 7    | Chassis Health LED             |

# Rack mount option

There are two rack options available for installing the EL8000 chassis:

- Two-post rack mount option
- Four-post rack mount option

## Mounting rails on the two-post rack

The two-post rack is available in 19 in and 23 in depth.

### Prerequisites

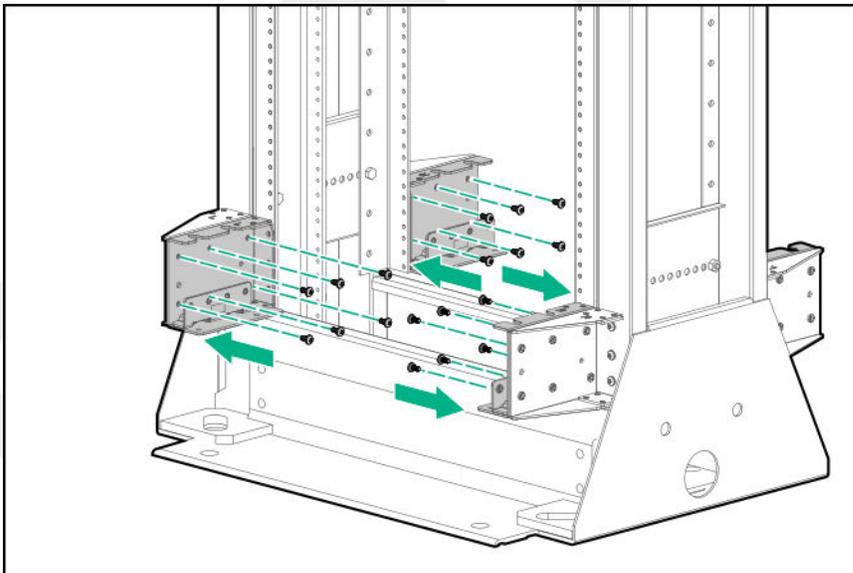
Before you perform this operation, make sure you have the following items available:

- Phillips screwdriver
- M2, M5 Screwdriver

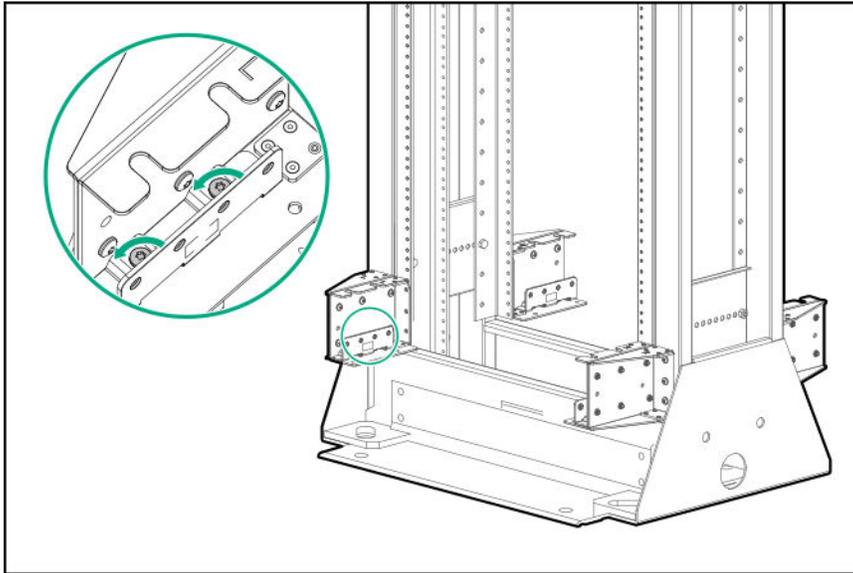
### Procedure

1. Install the brackets on rack columns.

When installing the rail kit on 19 in rack columns, remove the outer brackets and install only the inner brackets.

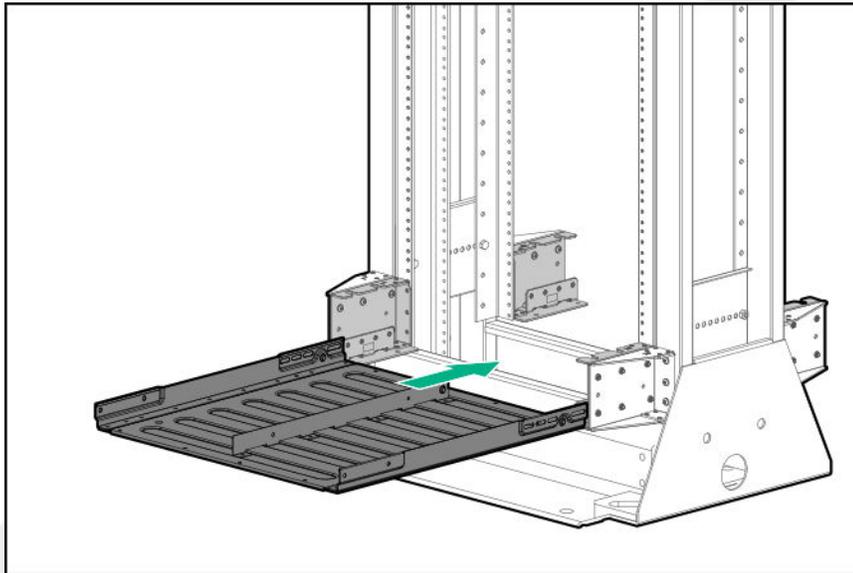


2. Loosen the screws on each bracket, so as to enable them to move freely.

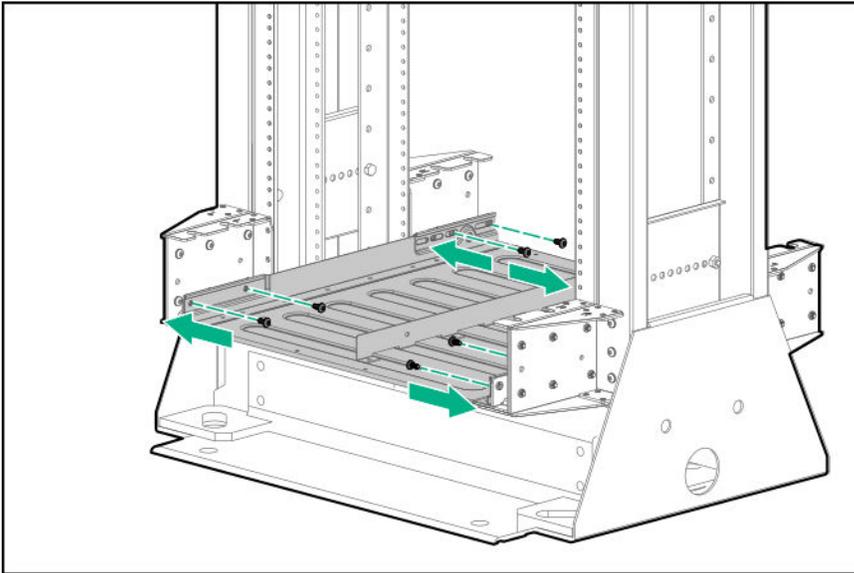


**3. Install the rack tray into the brackets:**

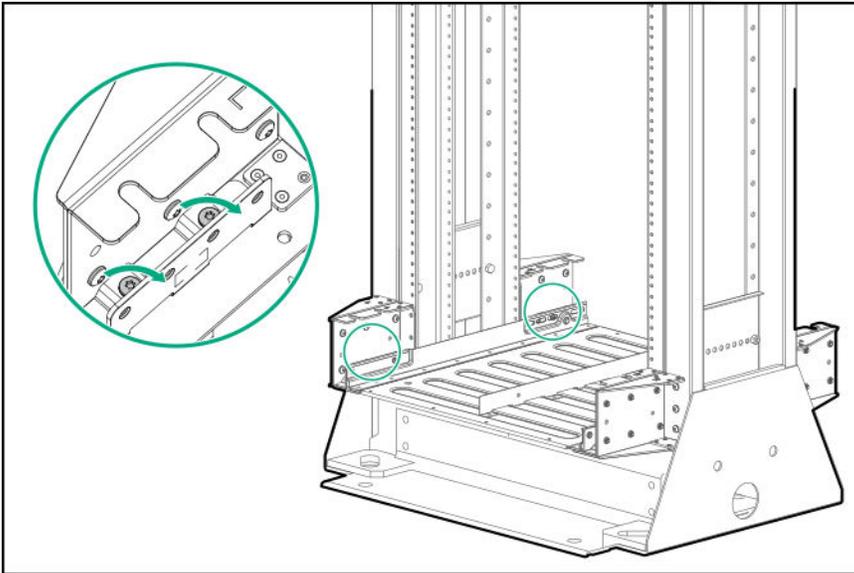
**a. Install the tray into the brackets.**



**b. Install two M5 screws in the front and rear brackets each, and then tighten them.**

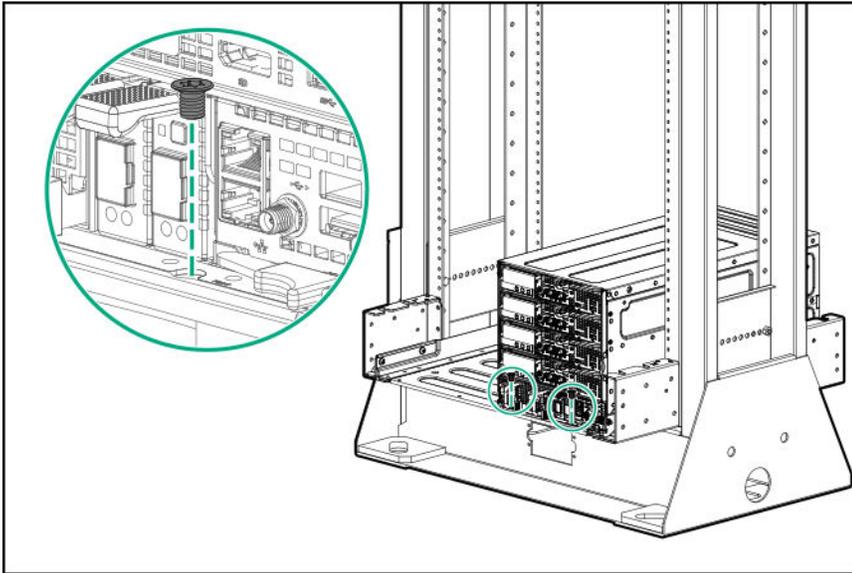


c. Tighten the eight screws that were loosened in step 2.

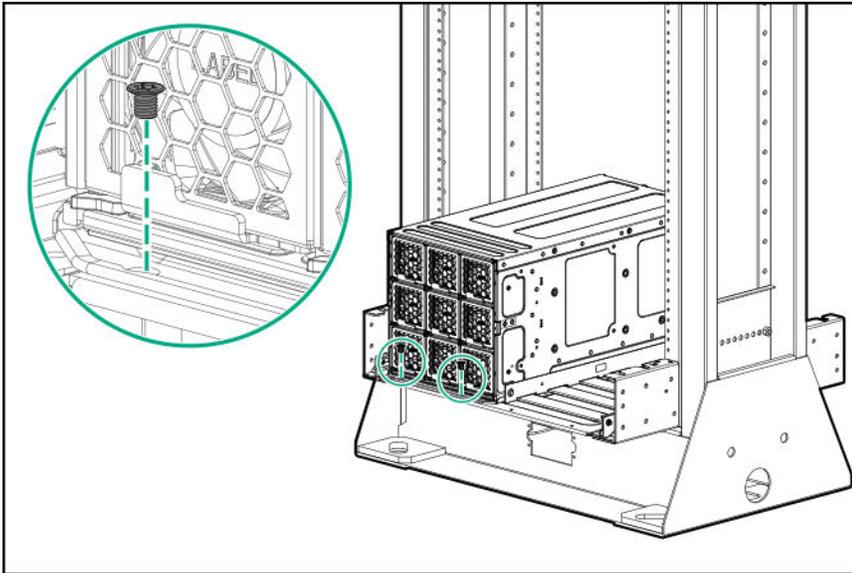


4. Install the chassis on the rack tray:

- a. Place the chassis on the rack tray.
- b. Secure the chassis with two M5 screws on the front.



c. Secure the chassis with two M5 screws on the rear.



## Mounting the rails on the four-post rack

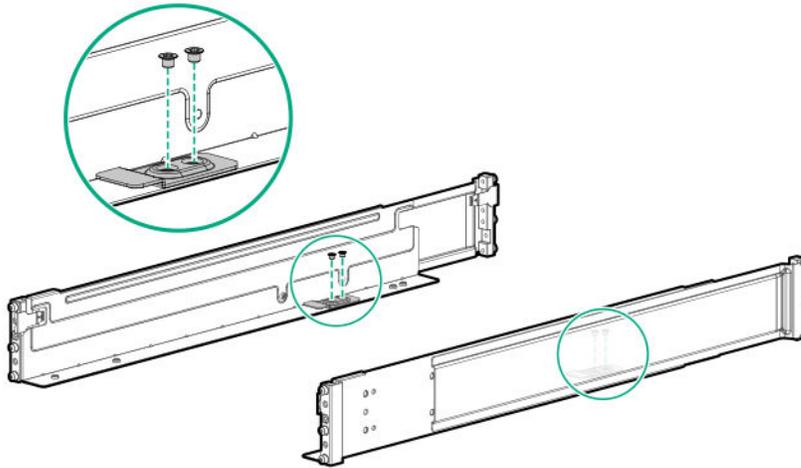
### Prerequisites

Before you perform this operation, make sure you have the following items available:

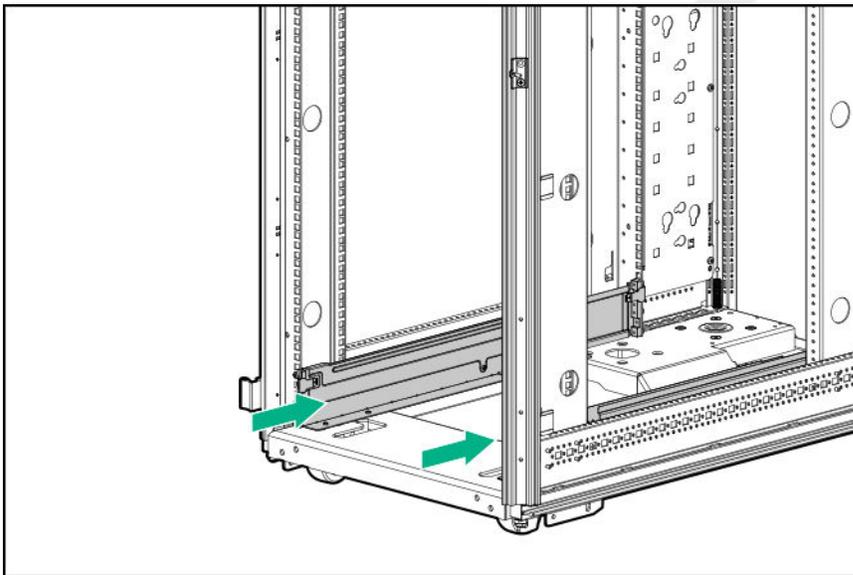
- Phillips screwdriver
- M2, M5 Screwdriver

### Procedure

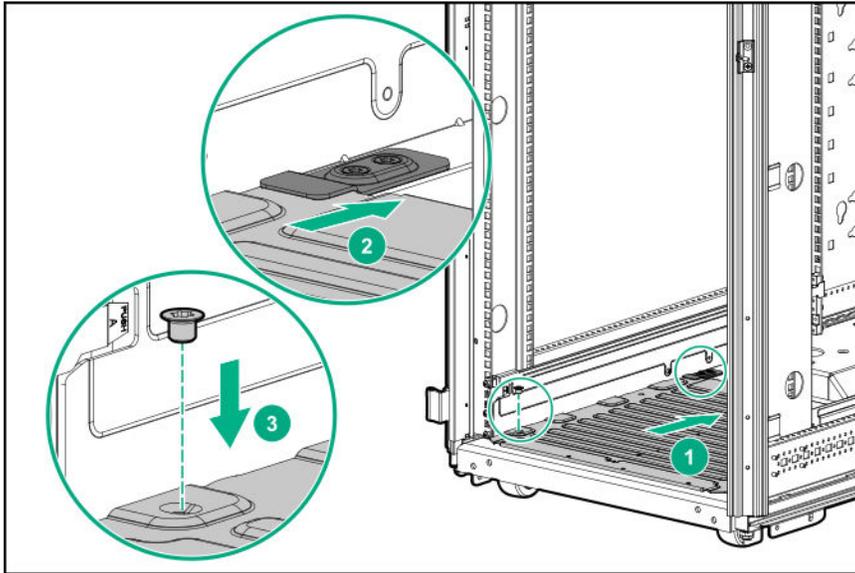
1. Identify the mounting location, install the tray bracket and stop the screw in correct location.



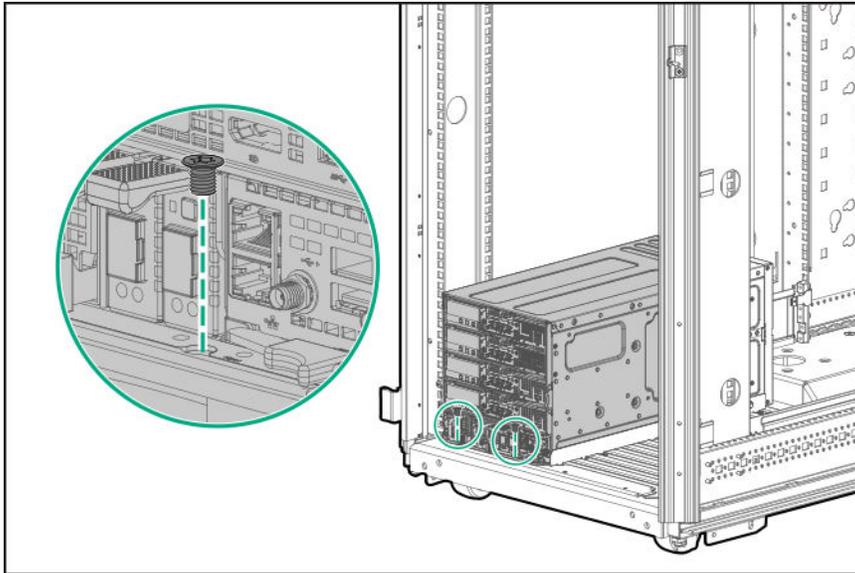
2. Install the rails into the rack.



3. Install the rack tray on the rails and secure it.  
Make sure that the tray slides under the bracket.



4. Place the chassis in the tray and secure it.



# Hardware options installation

This chapter provides detailed instructions on how to install hardware options.

For more information on supported options, see the product QuickSpecs on the website at:

<http://www.hpe.com/info/qs>

To view the warranty for your server and supported options, see [Warranty information](#) on page 34.

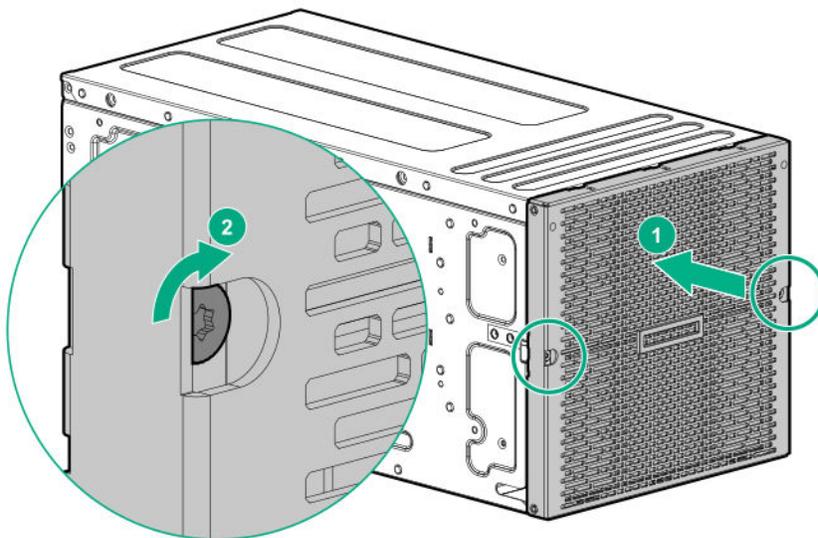
## Front bezel option

This option is available only for reverse airflow chassis.

### Installing the bezel

#### Procedure

Install the bezel.



# Associated hardware procedures

This chapter describes the hardware operations carried out prior to and after installing or removing a hardware option, or performing system maintenance or troubleshooting.

Before performing these hardware operations, review and observe system warnings and cautions.

## Power down the system

Before powering down the system for any upgrade or maintenance procedures, back up critical system data and programs.

Before performing chassis maintenance, shut down all blades installed in the system.

### Procedure

- Use one of the following methods to power down the system:
  - Press and release the Power On/Standby button of the blades installed in the system.  
This method initiates a controlled shutdown of applications and the OS before the system enters standby mode.
  - Press and hold the Power On/Standby button of the blades installed in the system for more than 4 seconds to force the system to power down.  
This method forces the system to power down without properly exiting applications and the OS. If an application stops responding, you can use this method to force a shutdown.

Verify the system is in standby mode and the system power LED is amber.

## Power up the system

If the system is connected to a power source, it powers up automatically by default. Generally, it has to be powered up only after a manual shutdown. However, using iLO, blades can be individually configured to not power up automatically.

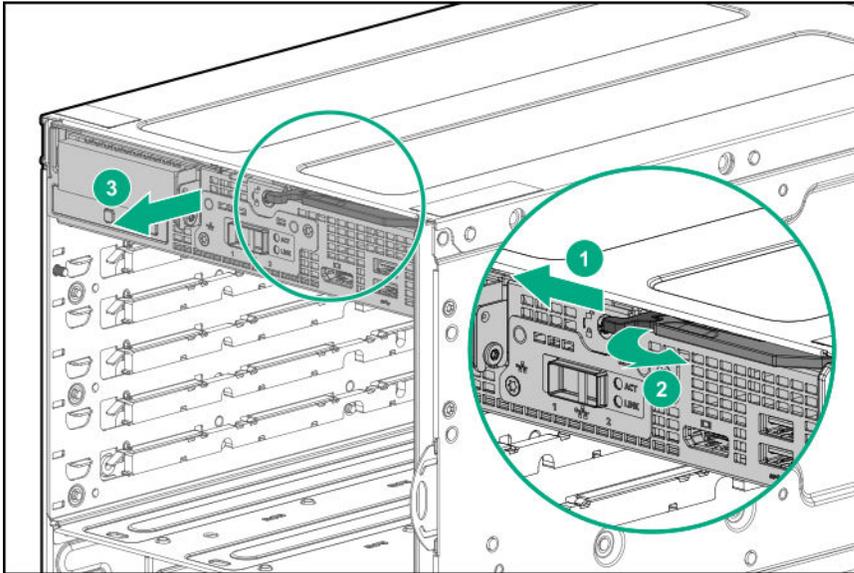
### Procedure

- Use one of the following methods to power up the system:
  - Press the Power On/Standby button of the blade installed in the system.
  - Remotely power up the system through iLO.

## Removing the blade from the chassis

### Procedure

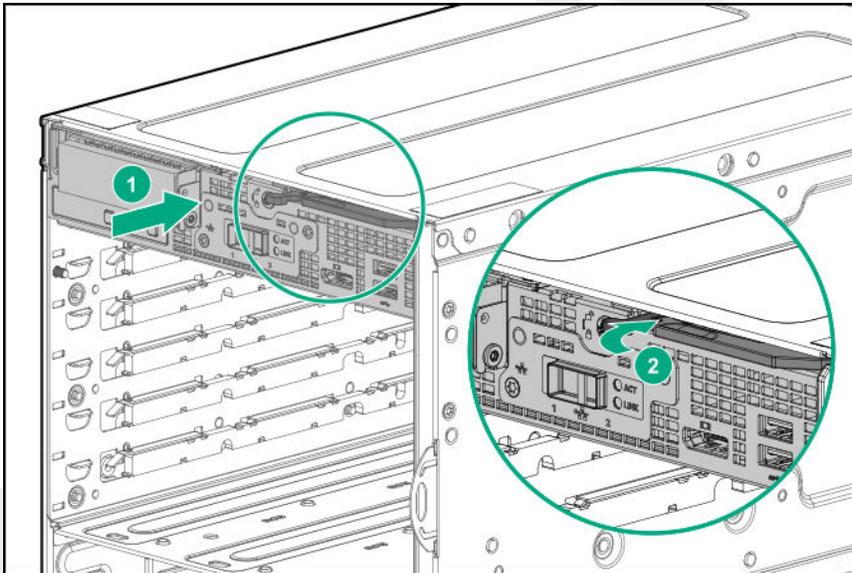
1. Power down the system.
2. Press the blade latch and open the latch.
3. Remove the blade.



## Installing the server blade into the chassis

### Procedure

Align the blade and install it in the chassis.



# Configuration

## Quick task: Be prepared



**TIP:** Gather all the materials and information you need before getting started.

“What do I need to know before I start configuring my Edgeline EL8000 Chassis Manager?”

**1**

Make sure you can get an Internet connection and a business network connection.

**2**

Not using DHCP? Plan your network addressing scheme before starting to configure the system.

## Prepare for configuration

Prepare to configure your new system by completing the tasks below.

### 1. Verify network connectivity

Ensure that the network connection is active, if needed.

### 2. Verify Internet connectivity

Verify Internet access from your business network. Make a note of the gateway IP address, you may need it later.

### 3. Plan for the network address

If you do not have DHCP enabled on the network, you must have networking details ready: An IP address to assign, subnet mask, gateway address, and DNS name. For initial setup, it is faster to allow automatic assignment of these details by connecting your system to a DHCP enabled network.

## Connecting to Edgeline EL8000 Chassis Manager the first time

Once the system is unboxed, connected to your management network, and powered up, there are a few options for accessing Edgeline EL8000 Chassis Manager the first time. You can initially configure Edgeline EL8000 Chassis Manager by connection to:

- The Edgeline EL8000 Chassis Manager web interface using the WiFi access point (WiFi AP).
- The Edgeline EL8000 Chassis Manager web interface through the management network.
- The Edgeline EL8000 Chassis Manager CLI using a DB9 null modem serial cable and a USB-to-RS232 adapter, and retrieving the DHCP assigned IP address or hostname.

## Connecting to the web interface using the WiFi Access Point

HPE recommends this method for initial configuration.

## Prerequisites

- Username and password noted from the chassis tag
- WiFi-enabled laptop or mobile device

## Procedure

1. Search for available WiFi connections on your device.

The WiFi SSID starts with **EL8000CM**, followed by a ten-digit alphanumeric serial number. The letters and numbers are the DNS Name printed on the Chassis Tag. For example, **EL8000CMMXQ92305J4**.

2. Select the WiFi connection and then enter the username and password.
3. After you connect to the WiFi, the message prompt `Logging into WiFi` appears for a while and the login page for Edgeline EL8000 Chassis Manager is displayed. Log in with the credentials printed on the chassis tag.

If the message prompt does not appear, open a browser window to 192.168.37.1 to access the Edgeline EL8000 Chassis Manager login page.

## Connecting to the web interface using Ethernet

When your setup devices are not WiFi-enabled, acquire the IP address or hostname through your management network.

### Prerequisites

- System hardware unboxed, installed, and powered up
- Username and password noted from the chassis tag
- Ethernet cable
- DHCP enabled network

### Procedure

1. Connect an Ethernet cable between the MGMT port on the system chassis and your management network.
2. Wait for the hostname of your new system to propagate onto your network through DDNS and have an IP address assigned through DHCP.
3. On a separate computer connected to your network, enter the address `https://<iLO hostname or IP address>` in a browser window. HTTPS (HTTP exchanged over an SSL encrypted session) is required for accessing the Edgeline EL8000 Chassis Manager web interface.

To use the hostname, enter the fully qualified domain name (if your computer is outside the domain) or just the hostname (if your computer is inside the domain).

4. Log in with the default credentials listed on the system chassis tag.

## Connecting to the CLI in a serial session

If ICMP ping or other tools are disabled on your management network, retrieve the IP address in a serial session.

## Prerequisites

- System hardware unboxed, installed, and powered up
- Username and password noted from the chassis tag
- Null modem serial cable with connectors or adapters suitable for your environment

**NOTE:** The null modem serial cable must be connected to a USB port on the chassis.

- DHCP enabled management network

## Procedure

1. Connect a USB to Serial Port Adapter to the USB port of the system.
2. Connect a null modem serial cable to the serial port of the adapter. Connect the other end to the system you are using to configure.
3. Use a standard SSH tool like PuTTY to start a terminal SSH session on the system you are using to configure. Use the following settings:

| Specification | Value   |
|---------------|---|
| Serial Line   | Appropriate for the system you are using to connect |
| Baud rate     | 115200  |
| Data bits     | 8   |
| Parity        | None  |
| Stop bit      | 1   |
| Flow control  | XON/XOFF  |

4. Log in by entering the default credentials shown on the chassis tag at the prompt.
5. To see the network details, enter the `show network` command.

## Edgeline EL8000 Chassis Manager web interface

Use the Edgeline EL8000 Chassis Manager web interface to manage your Edgeline EL8000. You can also use the Edgeline EL8000 Chassis Manager CLI.

### Browser requirements

The Edgeline EL8000 Chassis Manager web interface requires a browser that meets the following requirements:

- **JavaScript**—The Edgeline EL8000 Chassis Manager web interface uses client-side JavaScript extensively.

This setting is not enabled by default in all versions of Internet Explorer. To check or change this setting, see [Configuring the Internet Explorer JavaScript setting](#) on page 22.

- **Cookies**—Cookies must be enabled for certain features to function correctly.

- **Pop-up windows**—Pop-up windows must be enabled for certain features to function correctly. Verify that pop-up blockers are disabled.
- **TLS**—To access the Edgeline EL8000 Chassis Manager web interface, you must enable TLS 1.0 or later in your browser.

### Supported browsers

Edgeline EL8000 Chassis Manager supports the latest versions of the following browsers:

- Microsoft Edge
- Mozilla Firefox
- Google Chrome mobile and desktop
- Microsoft Internet Explorer 11

## Configuring the Internet Explorer JavaScript setting

Some versions of Internet Explorer have JavaScript disabled by default. Use the following procedure to enable JavaScript.

### Procedure

1. Start Internet Explorer.
2. Select **Tools > Internet options**.
3. Click **Security**.
4. Click **Custom level**.
5. In the **Scripting** section, set **Active scripting** to **Enable**.
6. Click **OK**.
7. Refresh your browser window.

## Logging in to the web interface

### Procedure

1. Enter `https://<EL8000CM host name or IP address>`

When you access the Edgeline EL8000 Chassis Manager web interface, you must use HTTPS (HTTP exchanged over an SSL encrypted session).

The Edgeline EL8000 Chassis Manager login page opens. If a login security banner is configured, the banner text is displayed above the login section.

2. Enter a local account **Username** and **Password**, and then click **Log In**.



**TIP:** When logging in to the Edgeline EL8000 Chassis Manager web interface for the first time:

- The default username is **Administrator**. The username is case sensitive.
- The default password is printed on the label attached to the chassis.

## About the Edgeline EL8000 Chassis Manager web interface controls

The left pane of the Edgeline EL8000 Chassis Manager web interface can be hidden from view at any time. Hiding the left pane gives more space for the main pages to be displayed, but hides the navigation tree.

- To hide the left pane, click **X** or click .
- To show the left pane, click .

### Logout, lock, and help

There are three icons shown at the bottom of the left pane when the pane is open:

- —This icon shows the currently logged-in username and a **Logout** option. Clicking **Logout** closes your web interface session and returns to the login screen.
- —This icon locks Edgeline EL8000 Chassis Manager and prevents configuration changes in the web interface and CLI. Clicking the icon opens a confirmation dialog. Click **Lock System** or **No, Go Back**. You are asked to verify your choice a second time.
- —This icon displays the online help for the Edgeline EL8000 Chassis Manager web interface.

### Confirmation, status, and error messages

Some pages of the Edgeline EL8000 Chassis Manager web interface require you to scroll down to see all the options available, or to reach an **Apply** button. Confirmation, status and error messages display at the top of the page, so remember to scroll back up to the top of the page after clicking **Apply**.

## Quick task: Configure the network connection



**TIP:** Verify your completed checklist!

Make sure you have everything from the **configuration preparation section of the setup checklist** before continuing.

“I just purchased my first Edgeline EL8000 Chassis Manager system and need to put it into production”

1

**Configure your preferred network connection and settings in Edgeline EL8000 Chassis Manager.**

2

**Use Edgeline EL8000 Chassis Manager to update the firmware.**

[Click here for detailed instructions.](#)

## Complete the network configuration using Edgeline EL8000 Chassis Manager

Complete the configuration by performing the following tasks.

The details for these tasks can be found in the *HPE EL8000 Edgeline Chassis Manager User Guide* at [Link tbd](#).

1. Configure all Edgeline EL8000 Chassis Manager network connection settings that you intend to use on the **Wired and Wireless Network** pages:

- Configure the WiFi access point on the **WiFi AP** page.

---

**NOTE:** The WiFi access point is enabled by default on the WiFi AP page. You can disable it if you do not want to use it in the future.

---

- Configure a WiFi network connection on the **WiFi** page.
- Configure the **Domain Name** on the **General** page.
- Choose and configure LAN addressing on the **IPv4** or **IPv6** pages.

[Click here for detailed instructions about configuring network settings.](#)

2. Update firmware or add files to the repository on the **Firmware** pages. Download firmware updates from the HPE Support Center at <http://www.hpe.com/support/hpesc>.

[Click here for detailed instructions about updating the firmware.](#)

3. [Register the product.](#)

## Edgeline EL8000 Chassis Manager Network Port-Network Summary

Edgeline EL8000 Chassis Manager provides multiple options for network connection.

To access the network settings, view or edit the network settings on the following pages:

- [Summary](#)
- [General](#)
- [IPv4](#)
- [IPv6](#)
- [WiFi](#)
- [WiFi AP](#)

### Viewing the network configuration summary

#### Procedure

Click **Wired and Wireless Network** in the navigation tree.

The **Summary** tab is displayed.

### Network configuration summary details

- **Name**—The name of the active Edgeline EL8000 Chassis Manager network interface.
- **Host Name**—The name assigned to the Edgeline EL8000 Chassis Manager subsystem. By default, the host name is EL8000CM, followed by the system serial number. This value is used for the network name and must be unique.

---

**NOTE:** You can configure the Edgeline EL8000 Chassis Manager host name on the **General** tab.

---

- **MAC Address**—The MAC address of the Edgeline EL8000 Chassis Manager network interface.
- **Permanent MAC Address**—The unchangeable MAC address of the Edgeline EL8000 Chassis Manager network interface.
- **FQDN**— The fully qualified domain name of the system.
- **IPv6 Default Gateway**— When IPv6 is enabled, the gateway is the default IP address Edgeline EL8000 Chassis Manager uses to access the network. When not enabled, this entry is blank.
- **Speed (Mbps)**—The speed of the wired network, measured in megabits per second.
- **WiFi Network**—The SSID of the WiFi network (if connected).

## IPv4 Summary details

- **Address**—The IPv4 address currently in use. If the value is 0 . 0 . 0 . 0, the IPv4 address is not configured.
- **Address Origin**—Indicates whether the address was supplied automatically by DHCP or is static.
- **Gateway**—The gateway address in use for the IPv4 protocol. If the value is 0 . 0 . 0 . 0, the gateway is not configured.
- **Subnet Mask**—The subnet mask of the IPv4 address currently in use. If the value is 0 . 0 . 0 . 0, no address is configured.

## IPv6 Summary details

- **Address**—The IPv6 address currently in use. If the value is blank, the IPv6 address is not configured.
- **Address State**—Indicates whether the address was supplied automatically or is static.
- **Gateway**—The gateway address in use for the IPv6 protocol. If the value is blank, the gateway is not configured.
- **Prefix Length**—The subnet mask of the IPv6 address currently in use.
- **Link Local Address**—The IPv6 address for the network segment.
- **Link Local Gateway**—The IPv6 address of the local network segment gateway. If the value is blank, the gateway is not configured.
- **Prefix Length**—The subnet mask of the IPv6 link-local address.

### IPv6 Address Policy table

This table shows whether IPv6 or IPv4 addresses are preferred.

## WiFi Summary details

---

**NOTE:** These details are for the network to which the Edgeline EL8000 Chassis Manager is connected, not the WiFi access point.

---

- **SSID**—The service set identifier which provides the name of the wireless network.
- **Strength**—A measure of how powerful the signal strength of the connection is to the WiFi network.

- **Status**—The status of the WiFi connection, connected or not connected.
- **Security**—The type of security in use on the WiFi connection.

## Configuring Host Name Settings

Use the **General** page to configure the **Host Name** and **Domain Name**. The host name and the domain name together constitute the fully qualified domain name.

### Procedure

1. Click **Wired and Wireless Network** in the navigation tree, and then click the **General** tab.
2. Enter the **Subsystem Name (Host name)**.  
The host name is the DNS name of the Edgeline EL8000 Chassis Manager subsystem. This name can be used only if DHCP and DNS are configured to connect to the Edgeline EL8000 Chassis Manager subsystem name instead of the IP address.
3. Enter the **Domain Name** if DHCP is not configured.
4. Click **Apply**.

### Host name and domain name limitations

The **Subsystem Name (Host name)** is initially set at the factory, and is listed on the chassis tag. This default host name is a combination of **EL8000CM** followed by the system serial number.

When reconfiguring the **Host Name Settings**, note the following:

- **Name service limitations**—The subsystem name is used as part of the DNS name.
  - DNS allows alphanumeric characters and hyphens.
  - Always start the hostname with a letter, and not with a number or a hyphen. Any combination of letters, numbers, and the hyphen can be used after the first letter.
  - Name service limitations also apply to the **Domain Name**.
- **Namespace issues**—To avoid these issues:
  - Do not use the underscore character.
  - Limit subsystem names to 15 characters.
  - Verify that you can ping the Edgeline EL8000 Chassis Manager processor by IP address and by DNS name.
  - Verify that NSLOOKUP resolves the Edgeline EL8000 Chassis Manager network address correctly and that no namespace conflicts exist.
  - Flush the DNS name if you make any namespace changes.

## Configuring IPv4 settings

### Prerequisites

Edgeline EL8000 Chassis Manager Admin privilege

## Procedure

1. Click **Wired and Wireless Network** in the navigation tree, and then click the **IPv4** tab.
2. Configure the **DHCPv4 Configuration** setting.
3. Configure the **IPv4 Address Configuration** settings.
4. Configure the **DNS Configuration** settings.
5. To save the changes you made on the **IPv4 Settings** page, click **Apply**.
6. When you are finished configuring the Edgeline EL8000 Chassis Manager network settings on the **Wired and Wireless Network** tabs, restart the Edgeline EL8000 Chassis Manager system.

It might take several minutes before you can re-establish a connection.

## DHCPv4 Configuration setting

The DHCPv4 setting is enabled by default.

### Enable DHCPv4

Enables Edgeline EL8000 Chassis Manager to obtain an IP address (and other network specific address settings) from a DHCP server.

---

**NOTE:** When DHCPv4 is enabled, the **IPv4 Address Configuration** section and **DNS Configuration** section are automatically assigned. When the system is rebooted, these automatic assignments might change.

---

## Static IPv4 Address Configuration settings

### IPv4 Address

The Edgeline EL8000 Chassis Manager IP address. The IP address is supplied automatically when DHCP is enabled. When DHCP is not enabled, enter a static IP address.

### IPv4 Subnet Mask

The subnet mask of the IP network. The subnet mask is supplied automatically when DHCP is enabled. When DHCP is not enabled, enter a subnet mask for the network.

### IPv4 Gateway

The Edgeline EL8000 Chassis Manager gateway IP address. The Edgeline EL8000 Chassis Manager gateway IP address is supplied automatically when DHCP is enabled. When DHCP is not enabled, enter an IP address for the gateway.

## IPv4 DNS Configuration settings

### Primary DNS Server

This value is supplied automatically when DHCP is enabled. If you are using a static IP address, no name servers are used.

### Secondary DNS Server

This value is supplied automatically when DHCP is enabled. If you are using a static IP address, no name servers are used.

### Tertiary DNS Server

This value is supplied automatically when DHCP is enabled. If you are using a static IP address, no name servers are used.

# Configuring IPv6 settings

## Prerequisites

Edgeline EL8000 Chassis Manager Admin privilege

## Procedure

1. Click **Wired and Wireless Network** in the navigation tree.
2. Click the **IPv6** tab.
3. Configure the **Global IPv6 Configuration** setting.
4. Configure the **IPv6 Configuration** settings.
5. Configure the **DNS Configuration** settings.
6. To save the changes you made on the **IPv6 Settings** page, click **Apply**.
7. If you are finished configuring the Edgeline EL8000 Chassis Manager network settings, restart Edgeline EL8000 Chassis Manager.  
It might take several minutes before you can re-establish a connection.

## IPv6 Configuration settings

### Global IPv6 Configuration

#### Client Applications use IPv6 first

When both IPv4 and IPv6 service addresses are configured for Edgeline EL8000 Chassis Manager client applications, this option specifies which protocol Edgeline EL8000 Chassis Manager tries first when it accesses a client application. This setting also applies to lists of addresses received from the name resolver when using FQDNs to configure NTP.

- Enable this option if you want Edgeline EL8000 Chassis Manager to use IPv6 first.
- Disable this option if you want Edgeline EL8000 Chassis Manager to use IPv4 first.

If communication fails using the first protocol, Edgeline EL8000 Chassis Manager automatically tries the second protocol.

This option is enabled by default.

### IPv6 Configuration

#### Enable IPv6 in Auto Mode

Enable this option to configure Edgeline EL8000 Chassis Manager to use an IPv6 DHCP server (if found). If no IPv6 DHCP server is available, IPv6 automatically falls back to using SLAAC. This option is enabled by default.

Edgeline EL8000 Chassis Manager creates its own link-local address even when this option is not enabled.

### IPv6 Static Address

When assigning static IPv6 addresses, enter the main IP address here.

### IPv6 StaticA ddress Prefix Length

When assigning static IPv6 addresses, enter the prefix length here.

## IPv6 Default Gateway

When assigning static IPv6 addresses, enter the default IPv6 gateway here.

## DNS Configuration

When assigning static IPv6 addresses, enter the **Primary**, **Secondary**, and **Tertiary DNS Server** addresses.

# Configuring WiFi settings

A WiFi connection presents an alternative when a wired connection is not feasible.

## Prerequisites

Edgeline EL8000 Chassis Manager Admin privilege

## Procedure

1. Click **Wired and Wireless Network** in the configuration tree, and then click the **WiFi** tab.

The Edgeline EL8000 Chassis Manager scans for WiFi signals and displays any SSIDs that are in range. The system will continue to scan until an SSID is found.

2. Click an **SSID**.

The credentials page displays.

---

**NOTE:** Hewlett Packard Enterprise strongly recommends only connecting to secure networks.

---

3. Enter the password, and modify other settings as needed.

4. To activate the WiFi connection, select **Enable**.

5. Click **Apply**.

The Edgeline EL8000 Chassis Manager connects to the WiFi.

6. Optional: To force a new check for available WiFi networks, click **Scan**.

While on this page, the system automatically scans for new WiFi networks every 10 seconds.

7. Optional: To manually add a non-broadcasting SSID, click **Add WiFi**.



### WARNING:

- **FCC warning:** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
  - **Canada warning:** This device complies with Industry Canada licence-exempt RSS standards. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
  - **French warning:** il est conforme aux normes d'exemption de licence RSS d'Industrie Canada. Son fonctionnement est assujetti aux deux conditions suivantes : 1) Ce dispositif ne doit causer aucune interférence dangereuse, et 2) ce dispositif doit accepter toute interférence reçue, y compris les interférences pouvant provoquer un fonctionnement indésirable.
-

## WiFi Configuration settings

- **SSID**—The service set identifier which provides the name of the wireless network.
- **Status**—The status of the WiFi connection, connected or not connected.
- **Security**—The type of security in use on the WiFi connection.
- **Strength**—A measure of how powerful the signal strength of the connection is to the WiFi network.
- **Enable/Disable**—If the connection is configured, this control allows you to connect to the associated WiFi address.
- **Configured**—Indicates whether the configuration for the WiFi address is completed.
- **Remove**—Provides a way to remove a WiFi address from the list.

## Viewing installed firmware information

### Procedure

Click **Firmware** in the navigation tree.

The **Firmware** page displays firmware information for various components.

## Firmware types

The firmware types listed on the **Firmware** page vary based on the system configuration.

For most configurations, the CPLD, Edgeline EL8000 Chassis Manager firmware, and base image are listed.

### Firmware details

The Firmware page displays the following information for each listed firmware type:

- **Firmware name** -The category name of the firmware.
- **Firmware version** -The currently installed version number of the firmware.

## Updating firmware

While firmware can be updated using components uploaded to the Edgeline EL8000 Chassis Manager Repository, you can also update firmware directly.

### Prerequisites

Admin privilege.

### Procedure

1. Click **Firmware** in the navigation tree, and then click **Update Firmware** in the right pane.
2. Select the **Local file** or **Remote file** option.
3. Depending on the option you selected, do one of the following:

- a. In the **File** box, click **Browse** (Internet Explorer, Edge, or Firefox) or **Choose File** (Chrome), and then specify the location of the firmware component.
  - b. In the **URL** box, enter the URL for a firmware component on an accessible web server.
4. Click **Flash**.

The firmware update status will be visible in the event log.

## Adding components to the Edgeline EL8000 Chassis Manager Repository

### Prerequisites

Admin privilege

### Procedure

1. Click **Firmware** in the navigation tree, and then click **Upload to Repository** in the right pane.
2. Select the **Local file** or **Remote file** option.
3. Depending on the option you selected, do one of the following:
  - a. In the **File** box, click **Browse** (Internet Explorer, Edge, or Firefox) or **Choose File** (Chrome), and then specify the location of the firmware component.
  - b. In the **URL** box, enter the URL for a firmware component on an accessible web server.
4. Click **Upload**.

The file is uploaded to the repository and displayed in the repository contents list.

## Installing a component from the Edgeline EL8000 Chassis Manager Repository

You can install new firmware from the Edgeline EL8000 Chassis Manager Repository page.

### Prerequisites

Admin privilege

### Procedure

1. Click **Firmware** in the navigation tree, and then click **Repository**.
2. Click the install component icon  next to the component you want to install.
3. Click **Yes, install now**.

The update begins immediately.

# Managing chassis power and resetting Edgeline EL8000 Chassis Manager

## Procedure

1. Click **Power and Thermal** in the navigation tree, and then click the **Management Power** tab.
2. To reset the chassis manager power supply, click **Auxiliary Reset** and then click **Yes, Reset Now**.  
Resetting the chassis manager power supply resets all chassis manager components, including the Ethernet switch connection to the blade iLO processors. An auxiliary reset causes a short disruption to the internal management and production networks, but does not affect blade power.
3. To reset the Edgeline EL8000 Chassis Manager, click **Reset EL8000CM**, and then click **Yes, Reset Now**.  
Using the Reset option does not make any configuration changes, but ends all active connections to the firmware. If a firmware file upload is in progress, it is terminated. If a firmware flash is in progress, you cannot reset until the process is finished. Wait a few minutes before attempting to log in to a new session.

## Prepare the system for daily use

Prepare your new system for service by completing the following tasks.

See the detailed steps for these tasks in the *HPE EL8000 Edgeline Chassis Manager User Guide* on the HPE Information Library at [link tbd](#).

- Access Edgeline EL8000 Chassis Manager from practically anywhere, or use a link on the **Blades** page to access the host operating system using iLO Remote Console (after acquiring a license).
- Add authorized user accounts in Edgeline EL8000 Chassis Manager on the **User Administration** page.

**NOTE:** The default Administrator account cannot be deleted.

- Add SSH keys for each user on the **Security** page.
- Replace the default self-signed certificate and create a trusted SSL certificate for Edgeline EL8000 Chassis Manager on the **SSL Certificate** page.
- Control the system and chassis power, and view temperatures, from the **Power and Thermal** pages.
- Back up the Edgeline EL8000 Chassis Manager configuration on the **Backup & Restore** page.
- Troubleshoot system issues by viewing the Health and Event logs on the **Logs** page.

## Registering the product

To experience quicker service and more efficient support, register the product at the [Hewlett Packard Enterprise Product Registration website](#).

# Troubleshooting

## HPE Edgeline Troubleshooting Guide

The *HPE Edgeline System Troubleshooting Guide* provides procedures for resolving common problems and comprehensive courses of action for fault isolation and identification, issue resolution, and software maintenance on the Edgeline System. The document is available in the [Hewlett Packard Enterprise Information Library](#).

DRAFT

# Warranty and regulatory information

## Warranty information

To view the warranty information for your product, see the links provided below:

### HPE ProLiant and IA-32 Servers and Options

[www.hpe.com/support/ProLiantServers-Warranties](http://www.hpe.com/support/ProLiantServers-Warranties)

### HPE Enterprise and Cloudline Servers

[www.hpe.com/support/EnterpriseServers-Warranties](http://www.hpe.com/support/EnterpriseServers-Warranties)

### HPE Storage Products

[www.hpe.com/support/Storage-Warranties](http://www.hpe.com/support/Storage-Warranties)

### HPE Networking Products

[www.hpe.com/support/Networking-Warranties](http://www.hpe.com/support/Networking-Warranties)

## Regulatory information

To view the regulatory information for your product, view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products*, available at the Hewlett Packard Enterprise Support Center:

[www.hpe.com/support/Safety-Compliance-EnterpriseProducts](http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts)

### Additional regulatory information

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

[www.hpe.com/info/reach](http://www.hpe.com/info/reach)

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

[www.hpe.com/info/ecodata](http://www.hpe.com/info/ecodata)

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

[www.hpe.com/info/environment](http://www.hpe.com/info/environment)

## Notices for Eurasian Economic Union



### Manufacturer and Local Representative Information

#### Manufacturer information:

Hewlett Packard Enterprise, 6280 America Center Drive, San Jose, CA 95002 U.S.

#### Local representative information Russian:

- **Russia**

ООО "Хьюлетт Паккард Энтерпрайз", Российская Федерация, 125171, г. Москва, Ленинградское шоссе, 16А, стр.3, Телефон: +7 499 403 4248 Факс: +7 499 403 4677

- **Kazakhstan**

ТОО «Хьюлетт-Паккард (К)», Республика Казахстан, 050040, г. Алматы, Бостандыкский район, проспект Аль-Фараби, 77/7, Телефон/факс: + 7 727 355 35 50

#### Local representative information Kazakh:

- **Russia**

ЖШС "Хьюлетт Паккард Энтерпрайз", Ресей Федерациясы, 125171, Мәскеу, Ленинград тас жолы, 16А блок 3, Телефон: +7 499 403 4248 Факс: +7 499 403 4677

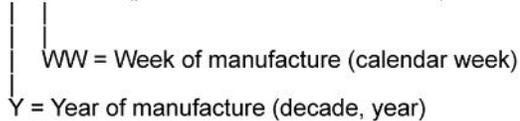
- **Kazakhstan**

ЖШС «Хьюлетт-Паккард (К)», Қазақстан Республикасы, 050040, Алматы қ., Бостандық ауданы, Әл-Фараби даңғылы, 77/7, Телефон/факс: +7 727 355 35 50

#### Manufacturing date:

The manufacturing date is defined by the serial number.

CCSYWWZZZZ (product serial number format)



If you need help identifying the manufacturing date, contact [tre@hpe.com](mailto:tre@hpe.com).

## Turkey RoHS material content declaration

Türkiye Cumhuriyeti: AEEE Yönetmeliğine Uygundur

## Ukraine RoHS material content declaration

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

## Federal Communications Commission notice for Class A equipment

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

---

**⚠ WARNING:**

1. This equipment complies with radio frequency (RF) exposure limits adopted by the Federal Communications Commission for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the authority of the user to operate the equipment.

---

## Canada, Industry Canada (IC) Notices

This device complies with Industry Canada license-exempt RSS standards. Operation is subject to the following conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, the radio transmitters in this device may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than what is necessary for successful communication.

**⚠ WARNING:** The device for operation in the band 5,150 MHz to 5,250 MHz is only for indoor use to reduce the potential for harmful interference to cochannel mobile satellite systems.

---

### Radio Frequency (RF) Exposure Information

This equipment complies with radio frequency (RF) exposure limits adopted by the Federal Communications Commission for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

This radio transmitter (IC:24448-EL8000530S) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device. For maximum antenna gain, refer to the table:

| Frequency (MHz) | Gain (dBi) | Antenna Type | Antenna Connector |
|-----------------|------------|--------------|-------------------|
| 2400-2500       | 2.38       |              |                   |
| 5150-5250       | 3.25       | Dipole       | R-SMA             |
| 5250-5350       | 3.25       |              |                   |
| 5470-5725       | 3.78       |              |                   |
| 5725-5850       | 3.94       |              |                   |

### Canada, avis d'Industry Canada (IC)

Cet appareil est conforme aux normes d'exemption de licence RSS d'Industry Canada.

Son fonctionnement est soumis aux deux conditions suivantes:

1. Cet appareil ne doit pas causer d'interférence.
2. Cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Conformément aux réglementations d'Industry Canada, les émetteurs radio de cet appareil ne peuvent fonctionner qu'à l'aide d'une antenne dont le type et le gain maximal (ou minimal) pour ces émetteurs - transmetteurs sont approuvés par Industry Canada. Pour réduire le risque d'interférence éventuelle pour les autres utilisateurs, le type et le gain de l'antenne doivent être choisis de manière à ce que la puissance isotrope rayonnée é quivalente (p.i.r.e.) minimale nécessaire à une bonne communication soit fournie.

**⚠ WARNING:** Les dispositifs fonctionnant dans la bande 5 150 MHz - 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

#### Informations sur l'exposition à la fréquence radio (FR)

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Cet émetteur radio (IC: 24448-EL8000530S) a été approuvé par Industrie Canada pour fonctionner avec les types d'antennes énumérés ci-dessous avec le gain maximal autorisé indiqué. Les types d'antenne non inclus dans cette liste, ayant un gain supérieur au gain maximal indiqué pour ce type, sont strictement interdits d'utilisation avec cet appareil. Le gain d'antenne maximal (voir le tableau ci-dessous

| La fréquence (MHz) | Gain (dBi) | Type d'antenne | Connecteur d'antenne |
|--------------------|------------|----------------|----------------------|
| 2400-2500          | 2.38       |                |                      |
| 5150-5250          | 3.25       | Dipôle         | R-SMA                |
| 5250-5350          | 3.25       |                |                      |
| 5470-5725          | 3.78       |                |                      |
| 5725-5850          | 3.94       |                |                      |

# Specifications

## Environmental specifications

**Table 1: Standard specifications**

| Specification                            | Value  |
|--|--|
| <b>Temperature range<sup>1</sup></b>     | —  |
| Operating                                | 10°C to 35°C (50°F to 95°F) <sup>2</sup>                   |
| Nonoperating                             | -30°C to 60°C (-22°F to 140°F)                             |
| <b>Relative humidity (noncondensing)</b> | —  |
| Operating                                | 8% to 90% at 28°C (82.4°F) maximum wet bulb temperature    |
| Non-Operating                            | 5% to 95% at 38.7°C (101.7°F) maximum wet bulb temperature |

<sup>1</sup> All temperature ratings shown are for sea level. An altitude derating of 1.0°C per 304.8 m (1.8°F per 1,000 ft) to 3,048 m (10,000 ft) is applicable. No direct sunlight allowed. Maximum rate of change is 20°C per hour (36°F per hour). No restrictions on product configurations. Not rated for operation over 3,048 m (10,000 ft).

<sup>2</sup> Fan failure might reduce performance.

**Table 2: ASHRAE Class A4 specifications**

| Specification                            | Value   |
|--|---|
| <b>Temperature range<sup>1</sup></b>     | —   |
| Operating                                | 0°C to 45°C (32°F to 113°F)<br>10°C to 35°C (50°F to 95°F) when GPU is installed <sup>2</sup> |
| Nonoperating                             | -10°C to 60°C (-22°F to 140°F)  |
| <b>Relative humidity (noncondensing)</b> | —   |
| Operating                                | 8% to 90% at 28°C (82.4°F) maximum wet bulb temperature                                       |
| Non-Operating                            | 5% to 95% at 38.7°C (101.7°F) maximum wet bulb temperature                                    |

<sup>1</sup> All temperature ratings shown are for sea level. An altitude derating of 1.0°C per 125 m (1.8°F per 410 ft) to 900 m (2,953 ft) is applicable. No direct sunlight allowed. Maximum rate of change is 20°C per hour (36°F per hour). No restrictions on product configurations except for rotating hard drives. PCI cards must be rated for continuous operation with 60°C cooling air. Not rated for operation over 3,048 m (10,000 ft).

<sup>2</sup> Fan failure might reduce performance

**Table 3: NEBS specifications**

| Specification                            | Value   |
|--|---|
| <b>Temperature range<sup>1</sup></b>     | —   |
| Operating                                | 5°C to 40°C (32°F to 113°F) <sup>2</sup><br><br>40°C to 55°C (32°F to 131°F) when operating in abnormal conditions (allowed only once for up to 98 hours, no more than 15 days maximum per year) <sup>3</sup> |
| Nonoperating                             | -10°C to 60°C (-22°F to 140°F)  |
| <b>Relative humidity (noncondensing)</b> | —   |
| Operating                                | 8% to 90% at 28°C (82.4°F) maximum wet bulb temperature   |
| Non-Operating                            | 5% to 95% at 38.7°C (101.7°F) maximum wet bulb temperature  |

<sup>1</sup> All temperature ratings shown are for sea level. No altitude derating applicable. No direct sunlight allowed. Maximum rate of change is 20°C per hour (36°F per hour). No restrictions on product configurations. Not rated for operation over 1828 m (6,000 ft). In abnormal conditions components are allowed to be outside their maximum thermal limits, component throttling is allowed, and system must keep running.

<sup>2</sup> Maximum temperature reduced to 45°C (113°F) above 1828m up to 3960m.

<sup>3</sup> Abnormal conditions also allow for operation down to -5°C(23°F).

**Table 4: Extended Edgeline specifications**

| Specification                            | Value  |
|--|--|
| <b>Temperature range<sup>1</sup></b>     | —  |
| Operating                                | 0°C to 55°C (32°F to 131°F)                                |
| Nonoperating                             | -30°C to 60°C (-22°F to 140°F)                             |
| <b>Relative humidity (noncondensing)</b> | —  |
| Operating                                | 8% to 90% at 28°C (82.4°F) maximum wet bulb temperature    |
| Non-Operating                            | 5% to 95% at 38.7°C (101.7°F) maximum wet bulb temperature |

<sup>1</sup> All temperature ratings shown are for sea level. An altitude derating of 1.0°C per 305 m (1.8°F per 1,000 ft) to 3,048 m (10,000 ft) is applicable. No direct sunlight allowed. Maximum rate of change is 20°C per hour (36°F per hour). No restrictions on product configurations except for rotating hard drives. PCI cards must be rated for continuous operation with 60°C cooling air. Solid state drives must be rated for continuous operation with 65°C cooling air. Not rated for operation over 3,030 m (10,000 ft).

## Mechanical specifications

| Specification   | Value                  |
|-----------------|------------------------|
| Height          | 21.6cm (8.5 in) for 5U |
| Depth           | 43.18cm (17 in)        |
| Width           | 22.1cm (8.7 in)        |
| Weight, minimum |                        |
| Weight, maximum |                        |

## Power supply specifications

Depending on installed options, the system is configured with one of the following power supplies:

- HPE 1500W Platinum Hot Plug Power Supply
- HPE 1500W -48VDC Hot Plug Power Supply

For detailed power supply specifications, see the QuickSpecs on the Hewlett Packard Enterprise website (<http://www.hpe.com/info/proliant/powersupply>).

### HPE 1500W Platinum Hot-plug Power Supply

| Specification              | Value                                 |
|----------------------------|---------------------------------------|
| <b>Input requirements</b>  | —                                     |
| Rated input voltage        | 95VAC to 265 VAC                      |
| Rated input frequency      | 50 Hz to 60 Hz                        |
| Rated input current        | 9.1 A at 95VAC<br>4.4 A at 265 VAC    |
| Maximum rated input power  | 1500 W at 95 VAC<br>1500 W at 265 VAC |
| BTUs per hour              | 3067 at 95 VAC<br>2958 at 265 VAC     |
| <b>Power supply output</b> | —                                     |

*Table Continued*

| Specification            | Value                             |
|--------------------------|-----------------------------------|
| Rated steady-state power | 1500 W at 95 VAC to 265 VAC input |
| Maximum peak power       | 1500 W at 95 VAC to 265 VAC input |

## HPE 1500W -48VDC Hot Plug Power Supply

| Specification                     | Value  |
|-----------------------------------|--|
| <b>Input requirements</b>         | —  |
| Rated input voltage               | -40 VDC to -72 VDC<br>-48 VDC nominal input  |
| Rated input current               | 22.1 A at -40 VDC input<br>18.2 A at -48 VDC input, nominal input<br>12.0 A at -72 VDC input |
| Rated input power (W)             | 882 W at -40 VDC input<br>871 W at -48 VDC input, nominal input<br>858 W at -72 VDC input    |
| Rated input power (BTUs per hour) | 3008 at -40 VDC input<br>29771 at -48 VDC input, nominal input<br>2929 at -72 VDC input      |
| <b>Power supply output</b>        | —  |
| Rated steady-state power (W)      | 1500 W at -40 VDC to -72 VDC   |
| Maximum peak power (W)            | 1500 W at -40 VDC to -72 VDC   |
| Maximum peak power                | 1500 W at -40 VDC to -72 VDC input   |



**WARNING:** To reduce the risk of electric shock or energy hazards:

- This equipment must be installed by trained service personnel.
- Connect the equipment to a reliably grounded secondary circuit source. A secondary circuit has no direct connection to a primary circuit and derives its power from a transformer, converter, or equivalent isolation device.
- The branch circuit overcurrent protection must be rated 27 A.

---

**⚠ CAUTION:** This equipment is designed to permit the connection of the earthed conductor of the DC supply circuit to the earthing conductor at the equipment.

If this connection is made, all of the following must be met:

- This equipment must be connected directly to the DC supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the DC supply system earthing electrode conductor is connected.
  - This equipment must be located in the same immediate area (such as adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same DC supply circuit and the earthing conductor, and also the point of earthing of the DC system. The DC system must be earthed elsewhere.
  - The DC supply source is to be located within the same premises as the equipment.
  - Switching or disconnecting devices must not be in the earthed circuit conductor between the DC source and the point of connection of the earthing electrode conductor.
-

# Electrostatic discharge

## Preventing electrostatic discharge

To prevent damaging the system, be aware of the precautions you must follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

### Procedure

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

## Grounding methods to prevent electrostatic discharge

Several methods are used for grounding. Use one or more of the following methods when handling or installing electrostatic-sensitive parts:

- Use a wrist strap connected by a ground cord to a grounded workstation or computer chassis. Wrist straps are flexible straps with a minimum of 1 megohm  $\pm 10$  percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.
- Use heel straps, toe straps, or boot straps at standing workstations. Wear the straps on both feet when standing on conductive floors or dissipating floor mats.
- Use conductive field service tools.
- Use a portable field service kit with a folding static-dissipating work mat.

If you do not have any of the suggested equipment for proper grounding, have an authorized reseller install the part.

For more information on static electricity or assistance with product installation, contact the **Hewlett Packard Enterprise Support Center**.

# Websites

## General websites

Hewlett Packard Enterprise Information Library

[www.hpe.com/info/EIL](http://www.hpe.com/info/EIL)

Hewlett Packard Enterprise Edgeline Documentation

[www.hpe.com/info/edgeline-docs](http://www.hpe.com/info/edgeline-docs)

Hewlett Packard Enterprise Edgeline Information

[www.hpe.com/info/edgeline](http://www.hpe.com/info/edgeline)

DRAFT

# Support and other resources

## Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:  
<http://www.hpe.com/info/assistance>
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:  
<http://www.hpe.com/support/hpesc>

### Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

## Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates:
  - Hewlett Packard Enterprise Support Center**  
[www.hpe.com/support/hpesc](http://www.hpe.com/support/hpesc)
  - Hewlett Packard Enterprise Support Center: Software downloads**  
[www.hpe.com/support/downloads](http://www.hpe.com/support/downloads)
  - Software Depot**  
[www.hpe.com/support/softwaredepot](http://www.hpe.com/support/softwaredepot)
- To subscribe to eNewsletters and alerts:  
[www.hpe.com/support/e-updates](http://www.hpe.com/support/e-updates)
- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page:  
[www.hpe.com/support/AccessToSupportMaterials](http://www.hpe.com/support/AccessToSupportMaterials)

---

**!** **IMPORTANT:** Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

---

## Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

<http://www.hpe.com/support/selfrepair>

## Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

### Remote support and Proactive Care information

#### HPE Get Connected

[www.hpe.com/services/getconnected](http://www.hpe.com/services/getconnected)

#### HPE Proactive Care services

[www.hpe.com/services/proactivecare](http://www.hpe.com/services/proactivecare)

#### HPE Proactive Care service: Supported products list

[www.hpe.com/services/proactivecaresupportedproducts](http://www.hpe.com/services/proactivecaresupportedproducts)

#### HPE Proactive Care advanced service: Supported products list

[www.hpe.com/services/proactivecareadvancedsupportedproducts](http://www.hpe.com/services/proactivecareadvancedsupportedproducts)

### Proactive Care customer information

#### Proactive Care central

[www.hpe.com/services/proactivecarecentral](http://www.hpe.com/services/proactivecarecentral)

#### Proactive Care service activation

[www.hpe.com/services/proactivecarecentralgetstarted](http://www.hpe.com/services/proactivecarecentralgetstarted)

## Warranty information

To view the warranty information for your product, see the links provided below:

#### HPE ProLiant and IA-32 Servers and Options

[www.hpe.com/support/ProLiantServers-Warranties](http://www.hpe.com/support/ProLiantServers-Warranties)

#### HPE Enterprise and Cloudline Servers

[www.hpe.com/support/EnterpriseServers-Warranties](http://www.hpe.com/support/EnterpriseServers-Warranties)

#### HPE Storage Products

[www.hpe.com/support/Storage-Warranties](http://www.hpe.com/support/Storage-Warranties)

#### HPE Networking Products

[www.hpe.com/support/Networking-Warranties](http://www.hpe.com/support/Networking-Warranties)

## Regulatory information

To view the regulatory information for your product, view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products*, available at the Hewlett Packard Enterprise Support Center:

[www.hpe.com/support/Safety-Compliance-EnterpriseProducts](http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts)

#### **Additional regulatory information**

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

[www.hpe.com/info/reach](http://www.hpe.com/info/reach)

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

[www.hpe.com/info/ecodata](http://www.hpe.com/info/ecodata)

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

[www.hpe.com/info/environment](http://www.hpe.com/info/environment)

## **Documentation feedback**

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback ([docsfeedback@hpe.com](mailto:docsfeedback@hpe.com)). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.