Abstract
This document describes new features, installation and update instructions, and known limitations for HPE Synergy 40Gb F8 Switch Module.
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.


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.
Release description and installation/update instructions

Interconnect module firmware installation and update instructions

For installation and update instructions, refer to documents available at http://www.hpe.com/info/synergy-docs.
Changes delivered in HPE Synergy 40Gb F8 Switch Module

Changes delivered in firmware version 1.5.0.100x

The firmware version 1.5.0.100x is designed to:

- Add CLI support for adding or configuring ports within a range in the VLAN `ports add range`.
- Add CLI support for configuring `SysName` in LLDP TLVs.
- Ensure that the enhanced `rfc1213IfInDiscards` counters do not increment the counter when layer 2 bridge control frames are received.
- Resolve an issue where the SNMP Walk of HPE Virtual Connect SE 40Gb F8 Module does not collect the complete data set.
- Include all changes from firmware version 1.4.1.1003.

Changes delivered in firmware version 1.4.1.1003

The firmware version 1.4.1.1003 is designed to:

- Resolve an issue where traffic across stacking links might not be forwarded correctly after the HPE Synergy 40Gb F8 Switch Module is restarted unexpectedly.
- Include all changes from firmware version 1.4.0.1003.

Changes delivered in firmware version 1.4.0.1003

The firmware version 1.4.0.1003 is designed to:

- Resolve an issue where an Interconnect fails to receive IPv4 address from externally managed DHCP Server that does not accept DHCP Request from a non-zero IP address.
- Resolve an issue where transient I2C read errors may cause unexpected link toggles on Interconnect Link (L1 - L4) ports.
- Resolve an issue with five frame setup with large number of 4x10 breakout cables where subordinate HPE Synergy 40Gb F8 switch module would intermittently reboot when synchronizing statistics with the HPE Synergy 40Gb F8 active switch module.
- Resolve an issue where IPv6 global address changes after every HPE Synergy 40Gb F8 module reboot because the DHCP Unique Identifier (DUID) was not used.
- Include all changes from firmware version 1.3.3.1002.

Changes delivered in firmware version 1.3.3.1002

The firmware version 1.3.3.1002 is designed to:
• Resolve an issue where network connectivity is lost on one or more VLANs when configured with port-channel on downlink server ports and more than 92 member ports using the same VLANs on a 4 or 5 frame HPE Synergy environment.

• Resolve an issue where uplink ports in an LACP LAG or MLAG on the Subordinate HPE Synergy 40Gb F8 Switch Module may be set to Blocking instead of Forwarding even though they are up in the LAG or MLAG resulting in traffic loss.

• Include all changes from firmware version 1.3.1.1003.

Changes delivered in firmware version 1.3.1.1003

The firmware version 1.3.1.1003 is designed to:

• Enable switch ASIC internal parity error detection and correction.

• Resolve an issue where network scanning software sends an invalid SNMP OID string over the management network causing an Ethernet traffic outage.

• Include all changes from firmware version 1.3.0.1005.

IMPORTANT: Hewlett Packard Enterprise strongly recommends application of this firmware upgrade at the earliest opportunity.

Changes delivered in firmware version 1.3.0.1005

The firmware version 1.3.0.1005 is designed to:

• Add support for 16 Active ports in a LAG/MLAG.

• Add support for hostname/domain name to set FQDN.

• Add support to enforce a maximum of eight CLI sessions.

• Resolve an issue where SSH reports Enabled when it is disabled in CLI.

• Resolve an issue where transient I2C read errors cause unexpected link toggle on uplink ports.

• Resolve an issue after an HPE Synergy 40Gb F8 module replacement (hot swap) where downlink ports default to enabled causing potential traffic outage with NIC Teaming until the module is configured.

Customer Advisory: a00046446

• Resolve an issue when one or more downlink ports connected to HPE Synergy 10Gb Interconnect Link Module may remain unlinked after an HPE Synergy 40Gb F8 Module reboot.

• Resolve an issue where downlink ports in admin down state show no reason code.

• Resolve an issue where user is unable to create switched VLAN interface.

• Resolve an issue where dump tech-support does not collect logs from both Interconnect modules in a Dual Unit Stack.

• Include all changes from firmware version 1.2.2.1001 *.

* Firmware version 1.3.0.1005 does not contain changes/fixes from 1.2.3.1001. Customers updating from 1.2.3.1001 must update to 1.3.1.1003 or later.

Changes delivered in firmware version 1.2.3.1001

The firmware version 1.2.3.1001 is designed to:
• Enable switch ASIC internal parity error detection and correction.
• Include all changes from firmware version 1.2.2.1001.

Changes delivered in firmware version 1.2.2.1001

The firmware version 1.2.2.1001 is designed to:

• Resolve an issue where MAC learning fails after a Master > Subordinate interconnect module role failover.
• Resolve an issue where SNMP version 1 or version 2 functionality is disabled in 1.2.0.1005 and prevented users from receiving SNMP traps.
• Resolve an issue where a temporary or transient network outage could occur on a single interconnect module.
• Include all changes from firmware version 1.2.0.1005.

Changes delivered in firmware version 1.2.0.1005

The firmware version 1.2.0.1005 is designed to:

• Add support to change "admin" account password.
• Add support for auto-split/unsplit functionality.
• Add support for MLAG with local port affinity functionality in the switch.
• Add support for Pause Flood Detection on Uplinks.
• Add support for Pause Flood Detection and Protection on Downlinks.
• Add support for the following transceivers:
  453154-B21 HP BladeSystem c-Class Virtual Connect 1G SFP RJ-45 Transceiver
  453151-B21 HP BladeSystem c-Class Virtual Connect 1G SFP SX Transceiver
• Resolve the intermittent connectivity issue across the stacking links when MAC tables between the 2 ICMs are out of sync after a MAC address move.
• Resolve the intermittent loss of egress traffic through switch module when Cisco Top of Rack Switch vPC peer-link is shut down when the master HPE Synergy switch module is connected to secondary-role Cisco vPC switch.
• Resolve the temporary loss of connectivity that may occur on the subordinate module due to LACP timeout when using short timers when a master module in the stacking domain is reset.
• Resolve the issue where Uplink Failure Detection (UFD) does not properly enable downlinks after active switch module is reset and standby switch becomes active.
• Resolve the issue with UFD Failure where uplinks shows up when upstream ports are shut.
• Include all changes from firmware version 1.1.0.1010 and 1.1.1.1003.

Changes delivered in firmware versions 1.1.0.1010 and 1.1.1.1003

The firmware versions 1.1.0.1010 and 1.1.1.1003 are designed to:

• Resolve the issue where broadcast, unknown unicast and multicast traffic will fail after master module is reset and uplinks in an MLAG are toggled.
• Resolve issues with map vlan command in priority-map.
- Resolve the issue where Master and Subordinate ICMs MAC address tables are not in sync.

- Resolve the issue where QSFP+ to SFP+ adapters and 4X10Gb splitter cables do not link properly when inserted in uplink ports Q7 or Q8.

- Resolve the issue where LLDP "Configured Management Ipv4 Address" may intermittently have null value after interconnect module reset.

- Resolve the issue with auto-save trigger and default-value save commands.

- Resolve the issue that might occur when SSH session is terminated intermittently.

- Resolve the issue that occurs when configuring "spanning-tree mst max-instance" with a value greater than 16.

- Resolve the issue where 'password validate rules' were not being enforced.

- Remove support for HPE B-series 16Gb SFP+ Short Wave Transceiver (QK724A).

- Include all changes from firmware version 1.0.2.1006.

**Changes delivered in firmware version 1.0.2.1006**

The firmware version 1.0.2.1006 is designed to:

- Add support for stacking link connections and multi-module link aggregations (MLAG).
  
  Customer Notice: c05368344

- Resolve the issue where QSFP+ transceivers (BiDi, LR4) were not linking.
  
  Customer Advisory a00005013

- Include all changes from firmware version 1.0.1.1004.

**Changes delivered in firmware version 1.0.1.1004**

The firmware version 1.0.1.1004 is designed to:

Resolving the issue where a re-installation of firmware version 1.0.0.1014 to the module may result in a temporary data traffic outage.

Customer Advisory: c05358816

Resolve the issue with potential LACP LAG flapping when short timers are used on uplink set.
Issues and suggested actions

The issues and known limitations in this release are described here.

**Issues and suggested actions in firmware version 1.5.0.100x**

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and will report stacking failures.
  
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

  Customer Advisory: [a00046665](#)

- Interface counters for unknown unicast traffic `InUnknownProtos` and `OutUnknownProtos` are not supported by the Synergy Switch module and will therefore always show zero.
  
  Suggested Action: None.

- ISSU Firmware downgrade to 1.3.X version will require the subordinate module to be reinserted after firmware activation.
  
  Suggested Action: None.

**Issues and suggested actions in firmware version 1.4.1.1003**

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and will report stacking failures.
  
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

  Customer Advisory: [a00046665](#)

- Interface counters for unknown unicast traffic `InUnknownProtos` and `OutUnknownProtos` are not supported by Synergy Switch module and will therefore always show zero.
  
  Suggested Action: None.

- ISSU Firmware downgrade to 1.3.X version will require the subordinate module to be reinserted after firmware activation.
  
  Suggested Action: None.

**Issues and suggested actions in firmware version 1.4.0.1003**

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and will report stacking failures.
  
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

  Customer Advisory: [a00046665](#)

- Interface counters for unknown unicast traffic `InUnknownProtos` and `OutUnknownProtos` are not supported by Synergy Switch module and will therefore always show zero.
  
  Suggested Action: None.

- ISSU Firmware downgrade to 1.3.X version will require the subordinate module to be reinserted after firmware activation.
  
  Suggested Action: None.
Issues and suggested actions in firmware version 1.3.3.1002

HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and will report stacking failures.

Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

Customer Advisory: a00046665

Issues and suggested actions in firmware version 1.3.1.1003

- Network connectivity is lost on one or more VLANs when configured with port-channel on downlink server ports and more than 92 member ports using the same VLANs on a 4 or 5 frame HPE Synergy environment.
  Suggested Action: Reconfigure to use fewer than 93 member ports in a VLAN.

- Uplink ports in an LACP LAG or MLAG on the Subordinate HPE Synergy 40Gb F8 Switch Module may be set to Blocking instead of Forwarding even though they are up in the LAG or MLAG resulting in traffic loss.
  Suggested Action: Reset the Switch Module or disable/enable the uplink ports in the LAG/MLAG.

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and will report stacking failures.
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

Customer Advisory: a00046665

Issues and suggested actions in firmware version 1.3.0.1005

- Network connectivity is lost on one or more VLANs when configured with port-channel on downlink server ports and more than 92 member ports using the same VLANs on a 4 or 5 frame HPE Synergy environment.
  Suggested Action: Reconfigure to use fewer than 93 member ports in a VLAN.

- Uplink ports in an LACP LAG or MLAG on the Subordinate HPE Synergy 40Gb F8 Switch Module may be set to Blocking instead of Forwarding even though they are up in the LAG or MLAG resulting in traffic loss.
  Suggested Action: Reset the Switch Module or disable/enable the uplink ports in the LAG/MLAG.

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and will report stacking failures.
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

Customer Advisory: a00046665

- ISSU in-compatible upgrade fails from 1.2.0.1005.
  Suggested Action: Perform firmware upgrade using ISSU full-compatible mode.

Issues and suggested actions in firmware version 1.2.3.1001

- Network connectivity is lost on one or more VLANs when configured with port-channel on downlink server ports and more than 92 member ports using the same VLANs on a 4 or 5 frame HPE Synergy environment.
  Suggested Action: Reconfigure to use fewer than 93 member ports in a VLAN.

- Uplink ports in an LACP LAG or MLAG on the Subordinate HPE Synergy 40Gb F8 Switch Module may be set to Blocking instead of Forwarding even though they are up in the LAG or MLAG resulting in traffic loss.
  Suggested Action: Reset the Switch Module or disable/enable the uplink ports in the LAG/MLAG.
- In rare cases, after an HPE Synergy 40Gb F8 Module reboot, one or more downlink ports connected to HPE Synergy 10Gb Interconnect Link Module may remain unlinked.
  
  Suggested Action: Reset the HPE Synergy 10Gb Interconnect Link Module.

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and reports stacking failures.
  
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

Customer Advisory: a00046665

- After an HPE Synergy 40Gb F8 Module replacement (hot-swap), downlink ports default to enabled. This causes potential traffic outage with NIC Teaming until the module is configured.

  Suggested Action: Disable the NIC port in the operating system until the configuration is applied to the module during a module replacement action.

Customer Advisory: a00046446

- ISSU in-compatible upgrade fails from 1.2.0.1005.
  
  Suggested Action: Perform firmware upgrade using ISSU full-compatible mode.

- Interface VLAN command returns Fatal Error: Command Failed
  
  Suggested Action: None.

Issues and suggested actions in firmware version 1.2.2.1001

- Network connectivity is lost on one or more VLANs when configured with port-channel on downlink server ports and more than 92 member ports using the same VLANs on a 4 or 5 frame HPE Synergy environment.

  Suggested Action: Reconfigure to use fewer than 93 member ports in a VLAN.

- Uplink ports in an LACP LAG or MLAG on the Subordinate HPE Synergy 40Gb F8 Switch Module may be set to Blocking instead of Forwarding even though they are up in the LAG or MLAG resulting in traffic loss.

  Suggested Action: Reset the Switch Module or disable/enable the uplink ports in the LAG/MLAG.

- In rare cases, after an HPE Synergy 40Gb F8 Module reboot, one or more downlink ports connected to HPE Synergy 10Gb Interconnect Link Module may remain unlinked.

  Suggested Action: Reset the HPE Synergy 10Gb Interconnect Link Module.

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and reports Stacking failures.

  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.

Customer Advisory: a00046665

- After an HPE Synergy 40Gb F8 Module replacement (hot-swap), downlink ports default to enabled. This causes potential traffic outage with NIC Teaming until the module is configured.

  Suggested Action: Disable the NIC port in the operating system until the configuration is applied to the module during a module replacement action.

Customer Advisory: a00046446

- ISSU in-compatible upgrade fails from 1.2.0.1005.

  Suggested Action: Perform firmware upgrade using ISSU full-compatible mode.

- Interface VLAN command returns Fatal Error: Command Failed
Suggested Action: None.

**Issues and suggested actions in firmware version 1.2.0.1005**

- Network connectivity is lost on one or more VLANs when configured with port-channel on downlink server ports and more than 92 member ports using the same VLANs on a 4 or 5 frame HPE Synergy environment.
  Suggested Action: Reconfigure to use fewer than 93 member ports in a VLAN.

- Uplink ports in an LACP LAG or MLAG on the Subordinate HPE Synergy 40Gb F8 Switch Module may be set to Blocking instead of Forwarding even though they are up in the LAG or MLAG resulting in traffic loss.
  Suggested Action: Reset the Switch Module or disable/enable the uplink ports in the LAG/MLAG.

- After an update to 1.2.0.1005, SNMP version or version 2 is disabled and cannot be enabled. This event prevents SNMP version or version 2 management tools from collecting data.
  Suggested Action: Utilize SNMP version 3 for SNMP management.

- A temporary or transient network outage could occur on a single interconnect module in a Redundant/Stacked or Non-Redundant Configuration.
  Suggested Action: None.

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and reports Stacking failures.
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.
  Customer Advisory: a00046665

- Interface VLAN command returns Fatal Error: Command Failed
  Suggested Action: None.

**Issues and Suggested actions in firmware versions 1.1.0.1010 and 1.1.1.1003**

- When a master module in the stacking domain is reset, a temporary loss of connectivity may occur on the subordinate module due to LACP timeout when using short timers.
  Suggested Action: Configure interfaces to use long LACP timers.

- A temporary or transient network outage could occur on a single interconnect module in a Redundant/Stacked or Non-Redundant Configuration.
  Suggested Action: None.

- HPE 40Gb QSFP+ Bidirectional Transceiver Part Number 841716-B21 will not function as a stacking port and reports Stacking failures.
  Suggested Action: Replace the bidirectional transceivers with an HPE 40Gb DAC/AOC cable.
  Customer Advisory: a00046665
• After an HPE Synergy 40Gb F8 Module replacement (hot-swap), downlink ports default to enabled. This causes potential traffic outage with NIC Teaming until the module is configured.

  Suggested Action: Disable the NIC port in the operating system until the configuration is applied to the module during a module replacement action.

• Interface VLAN command returns Fatal Error: Command Failed

  Suggested Action: None.

Issues and suggested actions in firmware version 1.0.2.1006

• When a master module in the stacking domain is reset, a temporary loss of connectivity may occur on the subordinate module due to LACP timeout when using short timers.

  Suggested Action: Configure interfaces to use long LACP timers.

• SSH session may intermittently terminate when issuing certain commands.

  Suggested Action: None.

• After an HPE Synergy 40Gb F8 Module replacement (hot-swap), downlink ports default to enabled, causing potential traffic outage with NIC Teaming until the module is configured.

  Suggested Action: Disable the NIC port in the operating system until the configuration is applied to the module during a module replacement action.

Issues and suggested actions in firmware version 1.0.1.1004

• Issue with QSFP+ transceivers (BiDi, LR4) not linking.

  Customer Advisory: a00005013

• SSH session may intermittently terminate when issuing certain commands.

Issues and suggested actions in firmware version 1.0.0.1014

• Issue with QSFP+ transceivers (BiDi, LR4) not linking.

  Customer Advisory: a00005013

• Potential issue where a re-installation of firmware version 1.0.0.1014 to the module may result in a temporary data traffic outage.

  Customer Advisory: c05358816

• Potential LACP LAG flapping when short timers are used.

  Suggested Action: Configure interfaces to use long LACP timers.

• SSH session may intermittently terminate when issuing certain commands.
More firmware update information

For more information on updating firmware, refer to the *HPE Synergy 40Gb F8 Switch Module Command Line Interface Guide* available on the [Hewlett Packard Enterprise Information Library](https://www.hpe.com/en/).

The following list indicates Not-Compatible versus Compatible firmware updates:

- Update from 1.0.2.1006 to
  - All other versions: Not-Compatible

- Update from 1.1.0.1010 to
  - 1.1.1.1003: Compatible
  - All other versions: Not-Compatible

- Update from 1.1.1.1003 to
  - 1.1.0.1010: Compatible
  - All other versions: Not-Compatible

- Update from 1.2.0.1005 to
  - 1.2.2.1001: Compatible
  - All other versions: Not-Compatible

- Update from 1.2.2.1001 to
  - 1.2.0.1005: Compatible
  - All other versions: Not-Compatible

- Update from 1.2.3.1001 to
  - 1.3.1.1003: Compatible
  - 1.3.3.1002: Compatible
  - 1.4.0.1003: Compatible
  - 1.4.1.1003: Compatible
  - All other versions: Not-Compatible

- Update from 1.3.0.1005 to
  - All other versions: Not-Compatible

- Update from 1.3.1.1003 to
  - 1.3.3.1002: Compatible
  - 1.4.0.1003: Compatible
  - 1.4.1.1003: Compatible
  - All other versions: Not-Compatible

- Update from 1.3.3.1002 to
  - 1.3.1.1003: Compatible
  - 1.4.0.1003: Compatible
- 1.4.1.1003: Compatible
- All other versions: Not-Compatible

- Update from 1.4.0.1003 to
  - 1.4.0.1003: Compatible
  - 1.4.1.1003: Compatible
  - All other versions: Not-Compatible

- Update from 1.4.1.1003:
  - 1.4.0.1003: Compatible
  - 1.4.1.1003: Compatible
  - All other versions: Not-Compatible

- Update from 1.5.0.100x to
  - 1.5.0.100x: Compatible
  - All other versions: Not-Compatible

**NOTE:**
- Compatible firmware update is a warm reboot of the management plane that does not impact the switching or data plane.
- Not-Compatible firmware update is a cold reboot of the interconnect module that impacts both management and data plane.

**Upgrading firmware from 1.1 to higher software versions**

When firmware upgrade performed from version 1.1.0.1010 or 1.1.1.1003 to a later version, the firmware update for the HPE Synergy 40Gb F8 Switch Module results in a Not-Compatible update. A Not-Compatible firmware update results in a cold reboot of the interconnect module and impacts both management and data plane. The following is the recommended procedure for firmware installation.

**Procedure**

1. Upgrade a Standby interconnect module by performing the following steps:
   a. Download the firmware from `tftp://IP_Address/filename`.
   b. Upgrade the firmware to local `<filename>`.
   c. Power off the interconnect module.

2. Upgrade an Active interconnect module by performing the following steps:
   a. Download the firmware from `tftp://IP_Address/filename`.
   b. Upgrade the firmware to local `<filename>`.
   c. Reload the interconnect module.

Websites

General websites
Hewlett Packard Enterprise Information Library
www.hpe.com/info/EIL
Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix
www.hpe.com/storage/spock
Storage white papers and analyst reports
www.hpe.com/storage/whitepapers

Hewlett Packard Enterprise documentation websites
HPE OneView Global Dashboard documentation
www.hpe.com/info/ovglobaldashboard-docs
HPE OneView documentation
www.hpe.com/info/oneview/docs
HPE Synergy documentation
www.hpe.com/info/synergy-docs
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/hpsc

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/hpsc
  Hewlett Packard Enterprise Support Center: Software downloads
  www.hpe.com/support/downloads
  Software Depot
  www.hpe.com/support/softwaredepot

- To subscribe to eNewsletters and alerts:
  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

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
HPE Proactive Care services
www.hpe.com/services/proactivecare
HPE Proactive Care service: Supported products list
www.hpe.com/services/proactivecaresupportedproducts
HPE Proactive Care advanced service: Supported products list
www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information
Proactive Care central
www.hpe.com/services/proactivecarecentral
Proactive Care service activation
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
HPE Enterprise and Cloudline Servers
www.hpe.com/support/EnterpriseServers-Warranties
HPE Storage Products
www.hpe.com/support/Storage-Warranties
HPE Networking Products
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
**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**

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

**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**

**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). 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.