Abstract
This document describes how to use Integrated Smart Update Tools to update firmware and operating system drivers on HPE ProLiant servers. This document is intended for individuals who understand the configuration and operations of Microsoft Windows, Windows Server, Linux, smart components, and the risk of data loss from performing updates.
# Contents

**iSUT introduction** .................................................................................................................. 4
  - Integrated Smart Update Tools .................................................................................. 4
  - iSUT operating modes ......................................................................................... 4
  - Dual boot environment notes ............................................................................. 5

**Downloading iSUT** .............................................................................................................. 6
  - Downloading iSUT ............................................................................................... 6
  - Downloading SUM ............................................................................................... 6
  - Downloading iSUT RPM keys ............................................................................ 6

**Installing iSUT** .................................................................................................................... 7
  - Configuring iSUT with the SUM GUI ..................................................................... 7
  - Installing iSUT with the SUM GUI ....................................................................... 7
  - Verifying iSUT installation .................................................................................. 8
  - Setting the staging directory ............................................................................. 8
  - Reinstalling iSUT with the SUM GUI ................................................................... 8

**Issuing iSUT commands** ..................................................................................................... 9
  - iSUT command-line basics .................................................................................. 9
  - Changing the iSUT mode ..................................................................................... 9
  - Reviewing staged components .......................................................................... 9

**Command-line parameters** ............................................................................................... 10
  - activate .................................................................................................................. 10
  - clearstaging .......................................................................................................... 10
  - deploy ...................................................................................................................... 11
  - deployreboot ......................................................................................................... 11
  - exportconfig ......................................................................................................... 12
  - help ........................................................................................................................ 12
  - importconfig ......................................................................................................... 12
  - set ................................................................................................................................ 13
  - stage ........................................................................................................................ 14
  - start .......................................................................................................................... 15
  - status ....................................................................................................................... 15
  - stop ........................................................................................................................... 15
  - verify ......................................................................................................................... 16
  - version ...................................................................................................................... 16

**iSUT log files** ....................................................................................................................... 17
  - About log files ....................................................................................................... 17
  - Collecting log files in Windows ............................................................................ 17
Uninstalling iSUT

Uninstalling iSUT in Windows

Uninstalling iSUT in Linux

iSUT troubleshooting

Baseline URI not Detected as a Supported Baseline

iSUT unexpectedly installs a CHIF driver

Cannot Clear the iSUT Staging Directory

iSUT is installed, but does not issue commands

iSUT does not recognize a configuration file

iSUT Cannot Stage Files

iSUT Cannot Mount Baseline ISO through iLO Virtual Media

iSUT Cannot Start Deployment

iSUT Cannot Reboot a Server

Components in an iLO task queue are marked as Exception

iSUT does not Launch SUM

iSUT Does Not Support the Version of SUM

An Unprivileged Account installed iSUT

iSUT Unexpectedly Changes the Command

Websites and support

Websites

Support and other resources

Accessing Hewlett Packard Enterprise Support

Accessing updates

Customer self repair

Remote support

Warranty information

Regulatory information

Documentation feedback
iSUT introduction

Integrated Smart Update Tools

Integrated Smart Update Tools is a software utility used with iLO 4, iLO 5, HPE OneView, iLO Amplifier Pack, Service Pack for ProLiant (SPP), and Smart Update Manager (SUM) to stage, install, and activate firmware and driver updates.

**NOTE:**
HPE OneView or iLO Amplifier Pack manage the iLO while iSUT runs on each server and deploys the updates. The same administrator might not manage both applications. Create a process that notifies the administrators when updates are available.

- **Integrated Smart Update Tools**: Polls iLO to check for requests from HPE OneView or iLO Amplifier Pack for updates through the management network and orchestrates staging, deploying, and activating updates. You can adjust the polling interval by issuing the appropriate command-line option provided by iSUT. Performs inventory on target servers, stages deployment, deploys updates, and then reboots the servers.

- **iLO 5 with integrated Smart Update** (Gen10 servers only): Loads Install Sets to the iLO Repository on iLO 5 nodes. iSUT deploys OS-based updates from the iLO Repository.

- **iLO Amplifier Pack**: Displays available updates for servers. Communicates with iSUT (or SUT 1.x) to initiate updates using the iLO Redfish interface. iSUT reports the status of updates to iLO Amplifier Pack via iLO Restful Interface.

- **HPE OneView**: Displays available updates for servers. Communicates with iSUT (or SUT 1.x) to initiate updates, reports the status on the Firmware section of the Server Profile page of HPE OneView. HPE OneView provides automated compliance reporting in the dashboard.

- **SPP**: A comprehensive systems software and firmware update solution, which is delivered as a single ISO image.

- **SUM**: A tool for firmware and driver maintenance for HPE ProLiant servers and associated options.

**NOTE:**
Do not manage one node with iLO Amplifier Pack and HPE OneView at the same time.

**iSUT operating modes**

iSUT runs in the following Auto modes:

- **OnDemand mode** (default): OnDemand mode enables the administrator to write commands in the CLI window that:
  - Stages updates
  - Deploys updates
  - Reboots servers

- **Auto mode**: iSUT runs in the following Auto modes:
AutoStage
- Stages available components to the host server through iLO Virtual Media.
- Uses SUM to inventory the server.
- Copies needed components to the server for deployment.

AutoDeploy
- Performs all the tasks in AutoStage mode.
- Deploys available components on the host server.

AutoDeployReboot
- Performs all the tasks in AutoDeploy mode.
- If required, reboots the host server.

NOTE:
If the deployment succeeds, iSUT verifies the updates by default. Use the command `sut /deploy noautoverify`.

Use the `status` command to view which mode iSUT is running.

**Dual boot environment notes**

If you have an environment where servers boot to both Windows and Linux operating systems.

If you run iSUT in one operating system, and then are going to run it in on another, change the staging directory to the correct path. Use the following command:

```
sut -set stagingdirectory=<staging_directory_path>
```

**IMPORTANT:**
iSUT requires permission to write to the staging directory.

For more information on command-line parameters, see [Command-line parameters](#).
Downloading iSUT

iSUT is available through the SUT downloads page.

Procedure

Download iSUT from https://www.hpe.com/servers/sut.

Downloading SUM

Procedure

2. Click Download.
3. Select the SUM version you want to download.
4. In the Delivery Options area, select the SUM file you want to download.

Downloading iSUT RPM keys

Procedure

2. Extract the file 26C2B797.pub.
3. Import the key to the RPM.
   rpm --import 26C2B797.pub
Installing iSUT

Configuring iSUT with the SUM GUI

For more information on using SUM, see the SUM documentation at http://www.hpe.com/info/sum-docs.

Prerequisites

Directory containing the iSUT components.

Procedure

1. Launch SUM in GUI mode.
2. On the Baseline Library Screen, click Add Baseline, and then map to the directory that contains the configured iSUT components.
3. To sort the iSUT components, click Configurable.
4. Click Components.
5. Click Configurable or Configured. Components labeled Configurable have no configuration settings. Components labeled Configured have saved configuration settings.
6. Change the configuration parameters, and then click Save in SUM or Save and Export.

Installing iSUT with the SUM GUI

You can also use the SUM CLI, CLI with Input File, and interactive CLI modes to install iSUT. For more information on using SUM, see the SUM documentation, see www.hpe.com/info/sum-docs.

Install iSUT on a server that is managed by a different HPE OneView instance.

Prerequisites

Directory with the iSUT components.

Procedure

1. Launch SUM in GUI mode.
2. On the Baseline Library screen, add a baseline, and then map to the directory that contains the configured iSUT components.
3. On the Nodes Library screen, add the nodes where you are installing iSUT and assign the baseline with the iSUT components.
4. On the Nodes Library screen, perform inventory on the nodes where you are installing iSUT.
5. Install the components.
Verifying iSUT installation

Procedure

Issue the following command on the host.

sut -status

If iSUT is installed, the system displays iSUT settings. For example, mode and baseline version.

Setting the staging directory

If you do not want to use the default iSUT staging directory, issue a set parameter to assign the staging directory.

Procedure

1. Open a command-line window.
2. Enter the command sut /set stagingdirectory=<directory_path>.

iSUT creates a backup configuration file that iSUT can use in future sessions.
For more information on using the backup configuration file, see exportconfig on page 12.

More information

set on page 13

Reinstalling iSUT with the SUM GUI

You can reinstall iSUT with SUM and overwrite the currently installed version of iSUT. You can reinstall iSUT to change the configuration for multiple servers at the same time.

Prerequisites

Directory with iSUT components configured.

Procedure

1. Launch SUM in GUI mode.
2. On the Baseline Library screen, add a baseline, and then map to the directory that contains the configured iSUT components.
3. On the Nodes Library screen, add the nodes where you are installing SUM and assign the baseline with the iSUT components.
4. On the Nodes Library screen, perform inventory on the nodes where you are installing iSUT.
5. Install the components. Use the Advanced Deployment mode and Force the component updates.
Issuing iSUT commands

iSUT command-line basics

The following example is the basic iSUT syntax.

sut [-command] (Linux)

NOTE:
Running iSUT on a server with iLO configured in High Security mode needs iLO Administrator credentials. Use the sut -set command to store iLO credentials in the host so that iSUT can use the iLO credentials for iLO communication. If you do not want iSUT to store the iLO credentials, provide the credentials with each iSUT command. Providing credentials with each command will not work with sut -deploy or sut -deployreboot commands if the baseline also contains the iSUT component. When using Auto mode, always use the sut -set command so that iSUT performs the deploy operation in Auto mode when iLO is configured in High Security mode.

Changing the iSUT mode

Prerequisites

iSUT installed on the server.

Procedure

1. Open a command line on the server.
2. Issue the set parameter.
   
sut -set mode={mode_type}

Reviewing staged components

Use the /status parameter to display a list of all components staged by iSUT.

Procedure

From a command line, type sutesxi -status.

iSUT generates a list of components available for deployment, and required user actions.
Command-line parameters

The following parameters are valid for the command line.

activate

Syntax
/activate (Windows)
-activate (Linux)

Description
Reboots the server if a reboot is required to activate the firmware/software. The command asks for reboot confirmation.

Options
sut /activate force
Provide this option to avoid the reboot confirmation step.

Restrictions
Valid in the following state:

InstalledPendingReboot

Example input
sut /activate
sut -activate

clearstaging

Syntax
/clearstaging (Windows)
-clearstaging (Linux)

Description
Clears everything in the current staging directory.

Restrictions
Not valid in the following states:

• Staging
• Staged
• Installing
• Activating
  • InstalledPendingReboot

Example input
sut /clearstaging
sut -clearstaging

**deploy**

**Syntax**

 `/deploy` *(Windows)*  
 `-deploy` *(Linux)*

**Description**

Deploys components, and then enables verification after reboot to check whether components are deployed correctly.

**Options**

  * noautoverify
    
    Passing parameter prevents iSUT from verifying the component installation automatically after deployment.

**Example input**

sut /deploy
sut -deploy

**deployreboot**

**Syntax**

 `/deployreboot` *(Windows)*  
 `-deployreboot` *(Linux)*

**Description**

Deploys components and then reboots the server if a reboot is required. After reboot, verifies if the updates are deployed correctly.

**Options**

  * noautoverify
    
    Passing parameter prevents iSUT from verifying the component installation automatically after deployment is completed and re-booted.

**Example input**

sut /deployreboot
sut -deployreboot
exportconfig

Syntax
/exportconfig <filename> (Windows)
-exportconfig <filename> (Linux)

Description
Uses the configuration file name as a parameter and writes all iSUT setting values to the file.

Restrictions
Valid in all states.

Example input
sut /exportconfig <filename>
sut -exportconfig <filename>

More information
importconfig on page 12

help

Syntax
/help (Windows)
-help (Linux)

Description
Displays command-line help information.

Example input
sut /help
sut /?
sut -help
sut -?

importconfig

Syntax
/importconfig <path_to_config_file> (Windows)
-importconfig <path_to_config_file> (Linux)

Description
Uses the configuration file parameters and applies the settings.
Restrictions
This command is allowed in the following states:

- StageFailed
- InstallFailed
- Activated
- ActivatedFailed
- InstalledPendingReboot

Example input

sut /importconfig <path_to_config_file>
sut -importconfig <path_to_config_file>

set

Syntax

/set (Windows)
/set (Linux)

Description
Changes iSUT options.

Options

sut -set mode=<OnDemand,AutoStage,AutoDeploy,AutoDeployReboot>

Selects the mode iSUT uses.

- AutoStage: Stages components to the server.
- AutoDeploy: Stages and deploys the components.
- AutoDeployReboot: Stages, deploys, and if necessary, reboots the server.
- OnDemand: iSUT deploys updates when the admin issues commands.

sut -set stagingdirectory=<directory_path>

Specifies the directory where iSUT stages components.

sut -set rebootmessage <message>

iSUT displays the reboot message.

sut -set rebootdelay <seconds>

The number of seconds before iSUT reboots the node.

sut -set pollingintervalinminutes=<time_minutes>

How frequently iSUT requests information from SUM, HPE OneView or iLO Amplifier Pack.

sut -set savelogs=<true/false>

Sets whether iSUT saves the log files.
**sut -set enableiloqueuedupdates=<true/false>**

Default = true. Valid for iLO 5 nodes only. If true, iSUT polls the iLO for any updates in the iLO Installation Queue.

**sut -set ilousername=<username> ilopassword=<password>**

Enter iLO credentials, to enable the iSUT perform updates, when iLO 5 is in one of the High Security modes.

To hide the password characters, provide iLO username and press Enter, which prompts you enter the password as below:

```
sut -set ilousername=<username>
```

Please provide the iLO password: <******>

The iLO credentials are stored in the iSUT database, and will be used to run any On Demand commands in High Security mode.

**sut -set ignorewarnings=true**

Ignores warnings iSUT encounters during deployment.

**sut -set tpmbypassflag=true**

Bypasses TPM warnings.

**Example input**

```
sut /set mode=OnDemand
sut -set mode=AutoStage
```

---

**stage**

**Syntax**

```
/stage (Windows)
-stage (Linux)
```

**Description**

Determines which components must be applied on the node and copies the components to the staging directory.

---

**NOTE:**

For Gen10 servers, the `stage` parameter displays the details of the iLO installation queue.

**Restrictions**

iSUT requires permissions to write to the staging directory.

**Example input**

```
sut /stage
sut -stage
```
**start**

**Syntax**
/start (Windows)
-start (Linux)

**Description**
If iSUT is in Auto mode, starts the iSUT service.

**Restrictions**
iSUT mode must be in the following modes:

- AutoStage
- AutoDeploy
- AutoDeployReboot

**Example input**
sut /start
sut -start

**status**

**Syntax**
/status (Windows)
-status (Linux)

**Description**
Displays the current state of the iSUT engine.

**Example input**
sut /status
sut -status

**stop**

**Syntax**
/stop (Windows)
-stop (Linux)

**Description**
Stops the iSUT service.
Example input
sut /stop
sut -stop

**verify**

Syntax
/verify (Windows)
-verify (Linux)

Description
Verifies that the update happened successfully. Changes state to activated if the update is successful. Only required if you passed the noautoverify parameter with the deploy or deployreboot command.

Example input
sut /verify
sut -verify

**version**

Syntax
/version (Windows)
-version (Linux)

Description
Displays the installed version of iSUT.

Example input
sut /version
sut -version
iSUT log files

About log files

After iSUT automatically generates updates after:

- Deploying updates.
- Staging updates.
- Verifying updates.

iSUT saves the log files in the following locations:

- Windows:
  - OnDemand mode: C:\Users\Administrator\AppData\Local\sut\logs
  - Auto mode: C:\Users\System32\config\systemprofile\AppData\Local\sut\logs

- Linux: /var/tmp/sut/sum

Collecting log files in Windows

Procedure

1. Use one of the following commands:

   - Windows: `gatherlogs_x64.exe /debuglogdir <directory_location>`.
     By default iSUT saves the logs to `%temp%/sut/sum`.
   - Linux: `./gatherlogs.sh --debuglogdir /var/tmp/sut/sum`
Uninstalling iSUT

Uninstalling iSUT in Windows

Make sure that iSUT is not installed on your servers.

Procedure

1. On your Windows server, open Programs and Features.
2. Select Integrated Smart Update Tools for Windows, and then click Uninstall.

Uninstalling iSUT in Linux

Make sure that iSUT is not installed on your server.

Procedure

1. Use the following to find the iSUT filename.
   - rpm -q sut | grep -i sut
2. Use the following command to uninstall iSUT:
   - rpm -e sut
iSUT troubleshooting

Baseline URI not Detected as a Supported Baseline

**Symptom**
The URI provided is not detected as a supported baseline ISO.

**Cause**
The directory contents do not match the SPP structure.

**Action**
1. Verify that the SPP ISO is valid.
2. Reissue the request.

iSUT unexpectedly installs a CHIF driver

**Symptom**
iSUT installs a CHIF driver when you did not select it for installation.

**Cause**
iSUT requires the CHIF driver to perform tasks.

**Action**
No action.

Cannot Clear the iSUT Staging Directory

**Symptom**
While staging components, iSUT cannot clear the staging directory.

**Solution 1**

**Cause**
The user does not have execution permissions for the directory or file.

**Action**
Make sure that the administrator has write permissions for the directory.

**Solution 2**

**Cause**
Other processes are using the staged files.
Action
Verify that other processes are not using the staged files.

**iSUT is installed, but does not issue commands**

**Symptom**
iSUT installed succeeds, but command do not function.

**Cause**
A user account without administrator or root user privileges installed iSUT.

**Action**
Uninstall iSUT and reinstall with an administrator account or root user.

**iSUT does not recognize a configuration file.**

**Symptom**
iSUT does not recognize the specified configuration file.

**Cause**
The path to the configuration file includes spaces.

**Action**
Remove all empty spaces from the directory path to a configuration file.

**iSUT Cannot Stage Files**

**Symptom**
iSUT cannot stage files.

**Solution 1**

**Cause**
iSUT files require more space than available on the disk.

**Action**
Clear disk space on staging drive and retry the staging operation.

**Solution 2**

**Cause**
The component is not in the baseline SPP.
Action

Verify that the component is in the baseline SPP.

Solution 3

Cause

SPP fails security validation on Windows.

Action

Update the Windows root certificates. Manually update the GlobalSign Root CA and AddTrust External Root CA certificates.

iSUT Cannot Mount Baseline ISO through iLO Virtual Media

Symptom

Mounting the baseline ISO through the iLO Virtual Media failed.

Cause

• The baseline is not accessible.
• The HTTPS server hosting the baseline ISO is busy.
• There is no HPE iLO Advanced license installed.

Action

1. Check to see if another baseline ISO is already mounted through iLO Virtual Media.
2. Verify that an HPE iLO Advanced license is installed.
3. Verify that the staging directory URI is accessible.
4. Retry the operation.

iSUT Cannot Start Deployment

Symptom

iSUT cannot deploy updates.

Solution 1

Cause

The staging directory is not accessible or has been deleted.
Action
Verify the staging directory is valid.

Solution 2
Cause
Windows 2008 R2 cannot process applications signed with (SHA)-256.

Action
Install the update for Windows 2008 SP2. For more information, see https://support.microsoft.com/en-us/kb/2763674.

iSUT Cannot Reboot a Server
Symptom
iSUT cannot reboot a server after deploying updates to the server.

Action
Manually reboot the server.

Components in an iLO task queue are marked as Exception
Symptom
iSUT marks the component state in iLO task queue as Exception with message ID as InvalidFile

Cause
This message can occur if components do not include an HPE signature.
Windows certificates are not current.

Action
1. Make sure that the certificates are up-to-date on the system.

   Linux: Import the HPE rpm keys at http://downloads.linux.hpe.com/SDR/keys.html. Use the rpm --import command.

iSUT does not Launch SUM
Symptom
SUM does not execute.
Solution 1

Cause
The SUM binary does not exist in the staging location.

Action
Make sure that SUM exists in the SPP ISO.

Solution 2

Cause
The SUM binary does not have the correct permissions.

Action
Make sure that the SUM binary has the correct permissions.

iSUT Does Not Support the Version of SUM

Symptom
iSUT cannot launch SUM.

Cause
The version of SUM is too old.

Action
Verify that the version of SUM is supported. For more information, see the Integrated Smart Update Tools Release Notes.

An Unprivileged Account installed iSUT

Symptom
iSUT installed succeeds, but command do not function.

Cause
A user account without administrator or root user privileges installed iSUT.

Action
Uninstall iSUT and reinstall with an administrator account or root user.

iSUT Unexpectedly Changes the Command

Symptom
A requested command changes during processing.
Cause
A user sent a request while iSUT processed another request.

Action
Reissue the command that changed. Make sure that one command ends before issuing another command.
# Websites and support

## Websites

<table>
<thead>
<tr>
<th>Hewlett Packard Enterprise Information Library</th>
<th><a href="http://www.hpe.com/info/EIL">www.hpe.com/info/EIL</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Update Manager</td>
<td><a href="http://www.hpe.com/servers/sum">www.hpe.com/servers/sum</a></td>
</tr>
<tr>
<td>Smart Update Manager Downloads</td>
<td><a href="http://www.hpe.com/servers/sum-download">www.hpe.com/servers/sum-download</a></td>
</tr>
<tr>
<td>Smart Update Manager Information Library</td>
<td><a href="http://www.hpe.com/info/sum-docs">www.hpe.com/info/sum-docs</a></td>
</tr>
<tr>
<td>Smart Update Tools</td>
<td><a href="http://www.hpe.com/servers/sut">www.hpe.com/servers/sut</a></td>
</tr>
<tr>
<td>Smart Update Tools Information Library</td>
<td><a href="http://www.hpe.com/info/sut-docs">www.hpe.com/info/sut-docs</a></td>
</tr>
<tr>
<td>Service Pack for ProLiant</td>
<td><a href="http://www.hpe.com/servers/spp">www.hpe.com/servers/spp</a></td>
</tr>
<tr>
<td>Service Pack for ProLiant documentation</td>
<td><a href="http://www.hpe.com/info/spp/documentation">www.hpe.com/info/spp/documentation</a></td>
</tr>
<tr>
<td>Service Pack for ProLiant downloads</td>
<td><a href="http://www.hpe.com/servers/spp/download">www.hpe.com/servers/spp/download</a></td>
</tr>
<tr>
<td>Service Pack for ProLiant custom downloads</td>
<td><a href="http://www.hpe.com/servers/spp/custom">www.hpe.com/servers/spp/custom</a></td>
</tr>
<tr>
<td>HPE SDR site</td>
<td>downloads.linux.hpe.com</td>
</tr>
</tbody>
</table>

For additional websites, see Support and other resources.

## 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/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
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
  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 for your product or to view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products reference document, go to the Enterprise Safety and Compliance website:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

**Additional warranty information**

**HPE ProLiant and x86 Servers and Options**

www.hpe.com/support/ProLiantServers-Warranties

**HPE Enterprise 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.