Hewlett Packard Enterprise

HPE Insight Remote Support and HPE Insight Online Setup Guide for HPE ProLiant Servers and HPE BladeSystem c-Class Enclosures

Abstract
This document provides instructions for configuring and using the embedded remote support feature on HPE ProLiant Gen8 and Gen9 servers and HPE BladeSystem c-Class enclosures. This document is intended for system administrators, Hewlett Packard Enterprise representatives, and Hewlett Packard Enterprise Authorized Channel Partners who are involved in configuring and using HPE remote support tools and HPE Insight Online. The HPE remote support tools include Insight Online direct connect and Insight Remote Support central connect.
Acknowledgments

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1 Overview

HPE embedded remote support

HPE iLO 4, HPE Intelligent Provisioning, and HPE Onboard Administrator include the embedded remote support feature, which allows you to register HPE ProLiant Gen8 and Gen9 servers and BladeSystem c-Class enclosures for HPE remote support.

Connecting a server or enclosure to Hewlett Packard Enterprise allows it to be remotely supported and to send diagnostic, configuration, telemetry, and contact information to Hewlett Packard Enterprise. No other business information is collected, and the data is managed according to the Hewlett Packard Enterprise privacy statement, which you can review at the following website: http://www.hpe.com/info/privacy.

When you use the embedded remote support feature, choose from the following configuration options: Insight Online direct connect and Insight Remote Support central connect.

Insight Online direct connect

Register a server or enclosure directly with Insight Online without the need to set up an Insight Remote Support centralized host server in your local environment. Insight Online will be your primary interface for remote support information.

Insight Online is a Hewlett Packard Enterprise Support Center feature that enables you to view your remotely monitored devices anywhere, anytime. It provides a personalized dashboard for simplified tracking of IT operations and support information, including a mobile dashboard for monitoring when you are on the go.

Figure 1 (page 6) shows the direct connect configuration with a server.

Figure 1 Insight Online direct connect

Insight Remote Support central connect

Register a server or enclosure with Hewlett Packard Enterprise through an Insight Remote Support centralized host server in your local environment. All configuration and service event information is routed through the host server. This information can be viewed by using the local Insight RS Console or the web-based view in Insight Online (if it is enabled in Insight RS).

NOTE: This document uses the name Insight RS to refer to the software that is specific to the Insight Remote Support central connect configuration.

If you do not want to use the embedded remote support feature to register your servers or enclosures, you can register them in the Insight RS Console. For instructions, see the Insight Remote Support monitored devices configuration guide.

If you have many servers or enclosures to register, it is faster to register them from the Insight RS Console.

Figure 2 (page 7) shows the central connect configuration with a server.
Device support

Embedded remote support registration is supported for the following device types:

Insight Online direct connect
- ProLiant Gen8 servers
- ProLiant Gen9 servers
- BladeSystem c-Class enclosures

Insight Remote Support central connect
- ProLiant Gen8 servers
- ProLiant Gen9 servers
- BladeSystem c-Class enclosures

If you use HPE OneView to manage your environment, use HPE OneView to register for remote support. For more information, see the HPE OneView user guide.

HPE Proactive Care service

HPE Proactive Care service customers must register their servers for remote support to receive the following Proactive Care features: Proactive Scan Report and Firmware and Software Version Report.

- The direct connect option requires the installation of AMS.
- The central connect option requires the installation of AMS or the SNMP/WBEM agents.

For more information, see the following website: [http://www.hpe.com/services/proactivecarecentral](http://www.hpe.com/services/proactivecarecentral).
2 Preparing for registration

Prerequisites for remote support registration

1. Install a supported browser to use when you log in to the remote support solution components.
2. If you do not have an HP Passport account, create one at the following website: http://www.hpe.com/info/insightonline and make a note of your login credentials.

   In most cases, your HP Passport user ID is the same as the email address you used during the HP Passport registration process. If you changed your user ID in the Hewlett Packard Enterprise Support Center, be sure to log in with your user ID and not your email address.

3. Navigate to the following website and verify that the product you will register for remote support has an active Hewlett Packard Enterprise warranty or contract: http://www.hpe.com/info/hpesc.

4. Collect the following information for use during the Insight Online direct connect registration procedure or the Insight Remote Support central connect host server configuration procedure:
   • Contact information. Hewlett Packard Enterprise uses this information when a support case is created.
   • Site information (site name, address, and time zone). Hewlett Packard Enterprise uses this information when service personnel or a part must be sent to your location.
   • Web proxy information (if a web proxy is used to access the Internet).
   • Channel Partner IDs for your authorized service provider, reseller/distributor, and installer, if you want to allow Channel Partners to view your device information. The installer is required only for Insight Remote Support central connect.

   The Partner ID is the Location ID assigned to the Channel Partner during the partner registration process. If you do not know a Channel Partner ID, contact the partner to obtain that information.

5. For ProLiant server registration: Obtain the iLO hostname or IP address and login credentials (login name and password).

   You can use any local or directory-based user account that has the Configure iLO Settings privilege.

6. For ProLiant server registration: Verify that sensitive information is not used in the names of your ProLiant servers. When you register a server for remote support, the server name is displayed in Insight Online and Insight RS.

7. For BladeSystem c-Class enclosure registration: Obtain the OA hostname or IP address and login credentials (user name and password).

   You can use any local or directory-based user account that has the Administrator privilege.

8. Set up ProLiant servers for remote support registration.

9. Set up BladeSystem c-Class enclosures for remote support registration.

10. Verify access to Insight Online.

Supported browsers

The HPE embedded remote support solution supports the following browsers:

**iLO**
- Microsoft Internet Explorer: 11
- Mozilla Firefox: Latest version
- Google Chrome: Latest version

**OA**
- Microsoft Internet Explorer: 8, 9, 10, 11
- Mozilla Firefox: Latest version
Google Chrome: Latest version (versions 42 to 44 are not supported)

Microsoft Internet Explorer: 10, 11
Mozilla Firefox: 42
Google Chrome: 48

Microsoft Internet Explorer: 8 or later
Mozilla Firefox: 18 or later
Google Chrome: 24 or later

Setting up a ProLiant server for remote support registration

The method you use to set up a ProLiant server for remote support registration depends on whether you will use iLO or Intelligent Provisioning to perform the registration procedure.

Method 1: Setting up a ProLiant server for registration through the iLO web interface

Required files

Ensure that you have the required files to set up or update a ProLiant server. Depending on your configuration, you might need the following files:

Service Pack for ProLiant (All supported OS except for Ubuntu)
The SPP includes the iLO firmware, drivers, utilities, and AMS. You can also download the individual components separately.

Download the SPP from the following website: http://www.hpe.com/servers/spp.

Management Component Pack (Ubuntu)
The MCP includes the iLO drivers and AMS but it does not contain the iLO firmware.

Download the MCP from the following website: http://www.hpe.com/support/SDR-Linux.

iLO firmware
For ProLiant Gen8 servers, the minimum supported versions follow:
- Version 1.40 or later is required for Insight Online direct connect registration.
- Version 1.10 or later is required for Insight Remote Support central connect registration.

For ProLiant Gen9 servers, the minimum supported version follows:
- Version 2.00 or later is required for Insight Online direct connect and Insight Remote Support central connect registration.

For ProLiant Gen8 and Gen9 servers: To address third-party software vulnerabilities, Hewlett Packard Enterprise recommends using iLO 4 2.03 or later.

Download the iLO firmware from the following website: http://www.hpe.com/info/hpesc.

HP ProLiant iLO 3/4 Channel Interface Driver
Download the iLO driver from the following website: http://www.hpe.com/info/hpesc.

Agentless Management Service (optional)
Download AMS from the following websites:
Setting up a ProLiant server

1. Install the server hardware.
2. Connect iLO to the network.
3. Use Intelligent Provisioning to perform the initial server setup tasks.
   During this process, you can configure hardware settings, install an operating system, and configure iLO settings. When you configure iLO, record the iLO IP address. Intelligent Provisioning will prompt you to register for remote support. If you want to use iLO to register for remote support, select Register Later on the Intelligent Provisioning remote support registration page.
4. Optional: Install AMS if it is not already installed.
   Hewlett Packard Enterprise recommends installing AMS. AMS is installed automatically if you use the Intelligent Provisioning Recommended installation method for Windows installation.
   Using AMS is one way in which iLO can obtain the server name. If iLO cannot obtain the server name, the displayed server name in Insight Online and Insight RS is derived from the server serial number.
5. If you did not install AMS, do one of the following to ensure that the server name is displayed correctly in Insight Online and Insight RS:
   - For Windows systems only, start the operating system. Insight Online and Insight RS will use the Windows computer name to identify the server.
   - Configure the Server Name on the Administration → Access Settings page in the iLO web interface.
6. On Windows servers, install the ProLiant iLO 3/4 Channel Interface Driver if it is not already installed.
   This driver is installed automatically if you use the Intelligent Provisioning Recommended installation method for Windows installation.
   This driver ships standard with SUSE Linux Enterprise Server 11 and 12 and Red Hat Enterprise Linux 6 and 7, and it is automatically loaded.
7. Verify that a supported version of the iLO 4 firmware is installed.
   To address third-party software vulnerabilities, Hewlett Packard Enterprise recommends using iLO 4 2.03 or later.
8. Verify that the time zone is set in iLO.
   If the Time Zone value is incorrect, Insight Online will display incorrect time stamps for events and data collections.
9. Verify that a DNS server is configured in iLO.
   By default, iLO is set to use DHCP to configure DNS servers and other network settings.

More information
Verifying iLO driver installation (servers only)
Required files

Method 2: Setting up a ProLiant server for registration through Intelligent Provisioning

Required files

Ensure that you have the required files to set up or update a ProLiant server. Depending on your configuration, you might need the following files:
SPP
The SPP includes the iLO firmware, drivers, utilities, and AMS. You can also download the individual components separately.
Download the SPP from the following website: http://www.hpe.com/servers/spp.

iLO firmware
For ProLiant Gen8 servers, the minimum supported versions follow:
• Version 1.40 or later is required for Insight Online direct connect registration.
• Version 1.10 or later is required for Insight Remote Support central connect registration.

For ProLiant Gen9 servers, the minimum supported version follows:
• Version 2.00 or later is required for Insight Online direct connect and Insight Remote Support central connect registration.

For ProLiant Gen8 and Gen9 servers: To address third-party software vulnerabilities, Hewlett Packard Enterprise recommends using iLO 4 2.03 or later.
Download the iLO firmware from the following website: http://www.hpe.com/info/hpesc.

Intelligent Provisioning software
For ProLiant Gen8 servers:
• Version 1.60 or later is required for Insight Online direct connect registration.
• Version 1.20 or later is required for Insight Remote Support central connect registration.

For ProLiant Gen9 servers:
• Version 2.01 or later is required for Insight Online direct connect and Insight Remote Support central connect registration.

Download the Intelligent Provisioning software from the following website: http://www.hpe.com/servers/intelligentprovisioning.

Setting up a ProLiant server
1. Install the server hardware.
2. Connect iLO to the network.
3. Verify that a supported version of Intelligent Provisioning is installed.
4. Verify that a supported version of the iLO 4 firmware is installed.
   To address third-party software vulnerabilities, Hewlett Packard Enterprise recommends using iLO 4 2.03 or later.
5. Verify that the time zone is set in iLO.
   If the Time Zone value is incorrect, Insight Online will display incorrect time stamps for events and data collections.
6. Verify that a DNS server is configured in iLO.
   By default, iLO is set to use DHCP to configure DNS servers and other network settings.

More information
Required files
Setting up a BladeSystem c-Class enclosure for remote support registration

Required files

Ensure that you have the required files to set up or update a BladeSystem c-Class enclosure. Depending on your configuration, you might need the following files:

SPP
The SPP includes the OA firmware. You can also download this component separately. Download the SPP from the following website: [http://www.hpe.com/servers/spp](http://www.hpe.com/servers/spp).

OA firmware
For BladeSystem c-Class enclosures, the minimum supported versions follow:

- Version 4.11 or later is required for Insight Online direct connect registration.
- Version 3.60 or later is required for Insight Remote Support central connect registration.

To address third-party software vulnerabilities, Hewlett Packard Enterprise recommends using OA 4.30 or later.

Download the OA firmware from the following website: [http://www.hpe.com/info/hpesc](http://www.hpe.com/info/hpesc).

Setting up a BladeSystem c-Class enclosure

1. Verify that a supported version of the OA firmware is installed on all OA modules in the enclosure.
   To address third-party software vulnerabilities, Hewlett Packard Enterprise recommends using OA 4.30 or later.

2. For Insight Remote Support central connect only: Install a valid Insight Remote Support certificate if the OA is operating in FIPS mode.
   Certificates must have an RSA key length of 2,048 bits, and the signature hash algorithm must be SHA1, SHA-224, SHA-256, SHA-384, or SHA-512.

3. Verify that a DNS server is configured in OA.
   The Enable Dynamic DNS setting is enabled by default in OA.

For more information, see the OA user guide.

More information

Required files

Verifying access to Insight Online


2. Enter your HP Passport user ID and password, and then click Sign in.
   If you do not have an HP Passport account, follow the onscreen instructions to create one.
   The Hewlett Packard Enterprise Support Center website is displayed with the Insight Online My IT Environment tab selected. During the initial setup, your IT Environment shows no entries in the Devices, Service events, and Contracts and warranties sections.
3 Insight Online direct connect

Prerequisites for Insight Online direct connect registration

- The “Preparing for registration” steps are complete.
- The server you want to register is not in use as an Insight RS host server.

Hewlett Packard Enterprise does not support Insight Online direct connect registration of a server that is used as an Insight RS host server. If you register an active host server for Insight Online direct connect, all of the devices monitored by that host server will be unable to communicate with Hewlett Packard Enterprise to receive remote support.

For information about transitioning a host server to an Insight Online direct connect managed server, see “Registering a ProLiant server used as a host server for Insight Online direct connect” (page 38).

- The device you want to register meets the Insight Online direct connect network requirements.

Insight Online direct connect network requirements

Insight Online direct connect relies on communication between your environment and Hewlett Packard Enterprise to deliver support services. Ensure that your environment meets the port requirements shown in Figure 3 (page 13).

Figure 3 Network requirements for Insight Online direct connect

Registering a ProLiant server for Insight Online direct connect

You can use iLO or Intelligent Provisioning to register a ProLiant server for Insight Online direct connect.

You can use RIBCL XML scripts to register a group of ProLiant servers. For more information, see the iLO scripting and command-line guide.

More information

Method 1: Using iLO to register for Insight Online direct connect
Method 2: Using Intelligent Provisioning to register for Insight Online direct connect

Method 1: Using iLO to register for Insight Online direct connect

When you register for Insight Online direct connect, you must complete steps in both the iLO web interface and the Insight Online portal.
Prerequisites

- Your environment meets the prerequisites for Insight Online direct connect registration.
- Your iLO user account has the Configure iLO Settings privilege.
- You have an HP Passport account. For more information, see http://www.hpe.com/info/insightonline.

Registering for Insight Online direct connect (step 1)

1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
3. Select Connect this server directly to HPE.
4. Enter your HP Passport user ID and password.
5. Optional: Enter the following information if the server uses a web proxy server to access the Internet:
   - Web Proxy Server—Enter the host name or IP address.
   - Web Proxy Port
   - Web Proxy Username
   - Web Proxy Password
6. To accept the licensing terms and conditions, select the **I accept the terms and conditions** check box.

7. Click **Register**.

   iLO notifies you that Step 1 of the registration process is finished, and prompts you to complete Step 2.

   ![Registration](image)

   Allow up to 5 minutes for your registration request to be fully processed.

Registering for Insight Online direct connect (step 2)

Complete Step 2 of the registration process, as described in “Completing registration in Insight Online” (page 21).

To streamline the process when you have multiple servers to register, complete Step 1 for all of the servers, and then complete Step 2 for all of the servers during one Insight Online session.

Confirming that registration is complete

1. Navigate to the **Remote Support** → **Registration** page in the iLO web interface.
2. Select the **Confirm that you have completed the HPE Connected Products registration process** check box, and then click **Apply**.

   iLO notifies you that the registration process is finished.

Completing the post-registration steps

Optional: If you want to receive email alerts about system events, configure AlertMail on the **Administration** → **Management** → **AlertMail** page in the iLO web interface.

**Method 2: Using Intelligent Provisioning to register for Insight Online direct connect**

When you register for Insight Online direct connect, you must complete steps in both Intelligent Provisioning and the Insight Online portal.
Prerequisites

- Your environment meets the prerequisites for Insight Online direct connect registration.
- You have an HP Passport account. For more information, see [http://www.hpe.com/info/insightonline](http://www.hpe.com/info/insightonline).

Registering for Insight Online direct connect (step 1)

1. Start the initial configuration and registration tasks for Intelligent Provisioning, or navigate to the Perform Maintenance page in Intelligent Provisioning, and then select HPE Insight Remote Support.

   The remote support registration page opens after you complete Step 1 and Step 2 of the Intelligent Provisioning initial configuration and registration tasks. It opens immediately if you navigated to the Perform Maintenance page.

2. Select **Connect this server directly to HPE**.

3. Enter your HP Passport user ID and password.

4. Optional: If the server uses a web proxy server to access the Internet, click **Show proxy information**, and then enter the following:
   - **Web Proxy Server**—Enter the hostname or IP address.
   - **Web Proxy Port**
   - **Web Proxy Username**
   - **Web Proxy Password**
5. Click **Register**.
Intelligent Provisioning notifies you that Step 1 of the registration process is finished, and prompts you to complete Step 2.

Allow up to 5 minutes for your registration request to be fully processed.

**Registering for Insight Online direct connect (step 2)**
Complete Step 2 of the registration process, as described in “Completing registration in Insight Online” (page 21).
To streamline the process when you have multiple servers to register, complete Step 1 for all of the servers, and then complete Step 2 for all of the servers during one Insight Online session.

**Confirming that registration is complete**
1. Return to the remote support registration page in Intelligent Provisioning, and then click **Confirm**.
   Intelligent Provisioning notifies you that the registration process is finished.
2. To proceed to the Intelligent Provisioning home page, click the **Continue** right arrow.

**Completing the post-registration steps**
To ensure successful remote support operation, complete the following steps after you install the system software:
1. Optional: Verify that the server operating system is running and AMS is installed.
   Hewlett Packard Enterprise recommends installing AMS.
   AMS is installed automatically if you use the Intelligent Provisioning **Recommended** installation method for Windows installation.
   Using AMS is one way in which iLO can obtain the server name. If iLO cannot obtain the server name, the displayed server name in Insight Online and Insight RS is derived from the server serial number.
2. If you did not install AMS, do one of the following to ensure that the server name is displayed correctly in Insight Online and Insight RS:
   - For Windows systems only, start the operating system. Insight Online and Insight RS will use the Windows computer name to identify the server.
   - Configure the **Server Name** on the **Administration→Access Settings** page in the iLO web interface.

3. Verify that the ProLiant iLO 3/4 Channel Interface Driver is installed.
   This driver is installed automatically if you use the Intelligent Provisioning **Recommended** installation method for Windows installation.
   This driver ships standard with SUSE Linux Enterprise Server 11 and 12 and Red Hat Enterprise Linux 6 and 7, and it is automatically loaded.

4. Optional: If you want to receive email alerts about system events, configure AlertMail on the **Administration→Management→AlertMail** page in iLO.
   For more information, see the iLO 4 user guide.

More information

**Verifying iLO driver installation (servers only)**

**Registering a BladeSystem c-Class enclosure for Insight Online direct connect**

When you register for Insight Online direct connect, you must complete steps in both the OA web interface and the Insight Online portal.

**Prerequisites**

- Your environment meets the prerequisites for Insight Online direct connect registration.
- You have an HP Passport account. For more information, see [http://www.hpe.com/info/insightonline](http://www.hpe.com/info/insightonline).

**Registering for Insight Online direct connect (step 1)**

1. Log in to the OA web interface (https://<OA hostname or IP address>).
2. Navigate to the **Enclosure Information→Enclosure Settings→Remote Support** page.
3. Select **Register this enclosure directly to HPE**.
4. Enter your HP Passport user ID and password.

5. Optional: Enter the following information if the enclosure uses a web proxy server to access the Internet:
   - **Web Proxy Server**—Enter the host name or IP address.
   - **Web Proxy Username**
   - **Web Proxy Password**
   - **Web Proxy Port**

6. Select the **I accept the terms and conditions of the HPE Software License Agreement and the HPE Insight Management Additional License Authorization** check box.
7. Click **Register**.

OA notifies you that Step 1 of the registration process is completed, and prompts you to complete Step 2.

Allow up to 5 minutes for your registration request to be fully processed.

Registering for Insight Online direct connect (step 2)

Complete Step 2 of the registration process, as described in **“Completing registration in Insight Online” (page 21)**.

To streamline the process when you have multiple enclosures to register, complete Step 1 for all of the enclosures, and then complete Step 2 for all of the enclosures during one Insight Online session.

Confirming that registration is complete

1. Navigate to the **Enclosure Information**→**Enclosure Settings**→**Remote Support** page in the OA web interface
2. Select the confirmation check box, and then click **Apply**.
   
   OA prompts you to confirm the request.
3. When prompted to confirm the request, click **OK**.
   
   OA notifies you that the registration process is finished.
Completing the post-registration steps

Optional: If you want to receive email alerts about system events, configure AlertMail on the **Enclosure Information**→**Enclosure Settings**→**AlertMail** page in the OA web interface.

### Completing registration in Insight Online

When you register for remote support by using the Insight Online direct connect configuration, you use iLO, Intelligent Provisioning, or OA to complete Step 1 of the two-step registration process. To complete Step 2 of the registration process, log in to Insight Online and provide additional information.

To streamline the process when you have multiple servers or enclosures to register, complete Step 1 for all of the servers or enclosures, and then complete Step 2 for all of the servers or enclosures during one Insight Online session.

2. Log in with your HP Passport credentials.
3. Click Devices with incomplete registration.
4. Select one or more devices on the **Step 1: Select target devices** page, and then click Next.
   - If the selected devices share site, support and partner information, you can complete registration for up to 15 devices at a time.
5. Enter site and support information on the **Step 2: Provide site and support information** page, and then click Next.
6. Do one of the following on the **Step 3: Provide HPE Authorized Channel Partner information** page:
   - If Hewlett Packard Enterprise supports your IT infrastructure, accept the default settings.
   - If a Hewlett Packard Enterprise Authorized Channel Partner supports your IT infrastructure, enter the **Partner location ID** for an authorized service partner and an authorized reseller/distributor.
     - To verify that you entered the correct partner, click Check ID.
7. Optional: To allow Hewlett Packard Enterprise or an Authorized Channel Partner to contact you about optimizing your IT environment, select the **Optimize my IT environment** check box.
8. To continue to the **Step 4: Validate and Submit** page, click Next.
9. Review the information you entered, and then click Submit registration.
   - The **Complete device registration** window displays a summary of the registration status.
10. Click Done.

### Unregistering a ProLiant server from Insight Online direct connect

You can use iLO or Intelligent Provisioning to unregister a ProLiant server from Insight Online direct connect.

You can use RIBCL XML scripts to unregister a group of ProLiant servers. For more information, see the iLO scripting and command-line guide.

More information

Method 1: Using iLO to unregister from Insight Online direct connect
Method 2: Using Intelligent Provisioning to unregister from Insight Online direct connect
Method 1: Using iLO to unregister from Insight Online direct connect

Prerequisites
Your iLO user account has the Configure iLO Settings privilege.

Unregistering a server from Insight Online direct connect
1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
3. Click Unregister.
4. When prompted to confirm the request, click OK.
   iLO notifies you that the server is no longer registered.

Method 2: Using Intelligent Provisioning to unregister from Insight Online direct connect
1. Start Intelligent Provisioning.
2. Navigate to the Perform Maintenance page, and then select HPE Insight Remote Support.
3. Click Unregister.
   Intelligent Provisioning notifies you that the server is no longer registered.

Unregistering a BladeSystem c-Class enclosure from Insight Online direct connect
1. Log in to the OA web interface (https://<OA hostname or IP address>).
3. Click Unregister.
4. When prompted to confirm the request, click OK.
   OA notifies you that the enclosure is no longer registered.

Editing the web proxy settings
If the web proxy settings change after a server or enclosure is registered for remote support, update the settings to enable the device to continue to send remote support data to Hewlett Packard Enterprise.

More information
Editing the web proxy settings (ProLiant servers)
Editing the web proxy settings (BladeSystem c-Class enclosures)

Editing the web proxy settings (ProLiant servers)
The method you use to edit the web proxy settings for a ProLiant server depends on whether you will use iLO or Intelligent Provisioning to perform the procedure.

More information
Method 1: Using iLO to edit the web proxy settings
Method 2: Using Intelligent Provisioning to edit the web proxy settings

Method 1: Using iLO to edit the web proxy settings
1. Navigate to the Remote Support → Registration page.
2. Update the following settings, as needed:
   - **Web Proxy Server**—Enter the hostname or IP address.
   - **Web Proxy Port**
   - **Web Proxy Username**
   - **Web Proxy Password**

3. Click **Apply**.

Method 2: Using Intelligent Provisioning to edit the web proxy settings

1. Start Intelligent Provisioning.
2. Navigate to the **Perform Maintenance** page and select **HPE Insight Remote Support**.
3. Click **Update Proxy**.
4. Update the following settings, as needed:
   - **Web Proxy Server**—Enter the hostname or IP address.
   - **Web Proxy Port**
   - **Web Proxy Username**
   - **Web Proxy Password**
5. Click **Update Proxy**.

Editing the web proxy settings (BladeSystem c-Class enclosures)

1. Navigate to the **Enclosure Information**→**Enclosure Settings**→**Remote Support** page.
2. Update the following settings, as needed:
   - **Web Proxy Server**—Enter the hostname or IP address.
   - **Web Proxy Username**
   - **Web Proxy Password**
   - **Web Proxy Port**
3. Click **Apply**.
4 Insight Remote Support central connect

Prerequisites for Insight Remote Support central connect registration

- The “Preparing for registration” steps are complete.
- The network environment is set up for Insight Remote Support.
- The host server is set up.

Setting up the Insight Remote Support central connect environment

Insight Remote Support relies on communication between your environment and Hewlett Packard Enterprise to deliver support services.

1. Verify that the server you will use for the Insight RS host server meets the requirements listed in the Insight Remote Support release notes.

   NOTE: The host server is called the Hosting Device in the Insight RS software.

2. Ensure that your environment meets the port requirements shown in Figure 4 (page 24).

   Figure 4 Network requirements for Insight Remote Support central connect

3. Verify communication between the Insight RS host server and the remote support web service by using a web browser on the Insight RS host server to navigate to the following website: https://api.support.hpe.com/v1/version/index.html. If connectivity between the server and HPE is set up correctly, the web browser displays the version of some of the data center components (for example, 14.3.0.188).

Setting up the Insight RS host server

1. Configure the host server.

   Ensure that the version of the Insight RS software on the host server supports the ProLiant servers and BladeSystem c-Class enclosures that you want to register for Insight Remote Support central connect. For more information, see the following website: http://www.hpe.com/support/InsightRS-Support-Matrix.

2. Use the Insight RS console to configure the RIBCL protocol for ProLiant servers that will be registered for Insight Remote Support central connect.
3. Optional: If you will use HPE SIM with Insight RS, configure the HPE SIM adapter.

More information
Running the Hosting Device Setup Wizard
Configuring the RIBCL protocol
Configuring the host server

Registering a ProLiant server for Insight Remote Support central connect

You can use iLO or Intelligent Provisioning to register a ProLiant server for Insight Remote Support central connect.

You can use RIBCL XML scripts to register a group of servers. For more information, see the iLO scripting and command-line guide.

More information
Method 1: Using iLO to register for Insight Remote Support central connect
Method 2: Using Intelligent Provisioning to register for Insight Remote Support central connect

Method 1: Using iLO to register for Insight Remote Support central connect

Prerequisites

- Your environment meets the prerequisites for Insight Remote Support central connect registration.
- Your iLO user account has the Configure iLO Settings privilege.

Registering for Insight Remote Support central connect

1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
3. Select Connect this server through an HPE remote support host server.
4. Enter the **Host server hostname or IP address** and **Port** number. The default port is 7906.

5. Click **Register**. iLO notifies you that the registration process is finished.

**Method 2: Using Intelligent Provisioning to register for Insight Remote Support central connect**

**Prerequisites**

Your environment meets the prerequisites for Insight Remote Support central connect registration.

**Registering for Insight Remote Support central connect**

1. Start the initial configuration and registration tasks for Intelligent Provisioning, or navigate to the **Perform Maintenance** page in Intelligent Provisioning, and then select **HPE Insight Remote Support**.

   The remote support registration page opens after you complete Step 1 and Step 2 of the Intelligent Provisioning initial configuration and registration tasks. It opens immediately if you navigated to the **Perform Maintenance** page.

2. Select **Connect this server through my Connected Products host server**.
3. Enter the host server host name or IP address and port number.
   The default port is 7906.

4. Click **Register**.
   Intelligent Provisioning notifies you that the registration process is finished.

5. To proceed to the Intelligent Provisioning home page, click the **Continue** right arrow.

Completing the post-registration steps
To ensure successful remote support operation, complete the following steps after you install the system software:

1. Optional: Verify that the server operating system is running and AMS is installed.
   Hewlett Packard Enterprise recommends installing AMS.
   AMS is installed automatically if you use the Intelligent Provisioning **Recommended** installation method for Windows installation.
   Using AMS is one way in which iLO can obtain the server name. If iLO cannot obtain the server name, the displayed server name in Insight Online and Insight RS is derived from the server serial number.

2. If you did not install AMS, do one of the following to ensure that the server name is displayed correctly in Insight Online and Insight RS:
   - For Windows systems only, start the operating system. Insight Online and Insight RS will use the Windows computer name to identify the server.
   - Configure the **Server Name** on the **Administration**→**Access Settings** page in the iLO web interface.

3. Verify that the ProLiant iLO 3/4 Channel Interface Driver is installed.
   This driver is installed automatically if you use the Intelligent Provisioning **Recommended** installation method for Windows installation.
   This driver ships standard with SUSE Linux Enterprise Server 11 and 12 and Red Hat Enterprise Linux 6 and 7, and it is automatically loaded.

More information
**Verifying iLO driver installation (servers only)**
Registering a BladeSystem c-Class enclosure for Insight Remote Support central connect

Prerequisites
Your environment meets the prerequisites for Insight Remote Support central connect registration.

Registering for Insight Remote Support central connect

1. Log in to the OA web interface (https://<OA hostname or IP address>).
2. Navigate to the Enclosure Information→Enclosure Settings→Network Access page, and then click the Protocols tab.

3. If the Enable XML Reply check box is not selected, select it, and then click Apply. If this option is not enabled, the Insight RS host server cannot collect data from OA.
5. Select Register this enclosure through an HPE Insight Remote Support centralized hosting device.

Enter Insight Remote Support hosting device information
- Hostname or IP Address: [Enter value]
- Port: 7005

Note: Please verify that you have installed and configured Insight RS 7.5.5 or later on a centralized hosting device.
6. Enter the Insight RS host server **Hostname or IP Address** and **Port** number. The default port is 7906.

7. Click **Register**. 
   OA notifies you that the registration process is finished.

**Unregistering a ProLiant server from Insight Remote Support central connect**

1. Log in to the Insight RS Console.
2. Do one of the following:
   - To stop monitoring a server temporarily, select the server on the **Devices**→**Device Summary** tab in the Insight RS Console, and then select **ACTIONS**→**DISABLE SELECTED**.
     Unregistering the server directly from iLO or Intelligent Provisioning is the same as temporarily disabling the server in the Insight RS Console.
   - To stop monitoring a server permanently, delete the server from the Insight RS Console. To delete the server, select it on the **Device Summary** tab, and then select **ACTIONS**→**DELETE SELECTED**.
3. Do one of the following:
   - Navigate to the **Remote Support**→**Registration** page in the iLO web interface.
   - Navigate to the **Perform Maintenance**→**HPE Insight Remote Support** page in Intelligent Provisioning.
4. Verify that the server is not registered.

**Unregistering a BladeSystem c-Class enclosure from Insight Remote Support central connect**

1. Log in to the Insight RS Console.
2. Do one of the following:
   - To stop monitoring a BladeSystem c-Class enclosure temporarily, select the enclosure on the **Devices**→**Device Summary** tab in the Insight RS Console, and then select **ACTIONS**→**DISABLE SELECTED**.
   - To stop monitoring a BladeSystem c-Class enclosure permanently, delete the enclosure from the Insight RS Console. To delete the enclosure, select it on the **Device Summary** tab, and then select **ACTIONS**→**DELETE SELECTED**.
3. Navigate to the **Enclosure Information**→**Enclosure Settings**→**Remote Support** page in the OA web interface.
   Disabling or deleting the enclosure from the Insight RS Console does not unregister the enclosure in OA. To update the remote support status in OA, you must use OA to unregister the enclosure from Insight RS.
4. Click **Unregister**.
5. When prompted to confirm the request, click **OK**.
   OA notifies you that the enclosure is not registered.
5 Service events and collections

You can use iLO and OA to work with service events and collections. These features are not available in the Intelligent Provisioning software.

Service event transmission

When a service event occurs, information about the event is sent to Hewlett Packard Enterprise. If a service event transmission failure occurs, two additional attempts are made. If the event cannot be sent after three attempts:

**ProLiant servers**
- An SNMP trap (cpqSm2IrsCommFailure 9020) is generated. This SNMP trap is defined in the cpqsm2.mib file. For more information, see the iLO user guide.
- The failure is logged in the Service Event Log.
- The failure is logged in the iLO Event Log.
- The service event is recorded in the Active Health System Log.
- A failure message is recorded in the Active Health System Log.

**BladeSystem c-Class enclosures**
- The failure is logged in the Service Event Log.
- The failure is logged in the OA Syslog.

Sending a test service event

You can send a test service event to verify that your remote support configuration is working correctly. The procedure to use depends on the software you will use to initiate the test: iLO or OA.

More information

Sending a test service event by using iLO
Sending a test service event by using OA

Sending a test service event by using iLO

**Prerequisites**
Your iLO user account has the Configure iLO Settings privilege.

**Sending a test event**
1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
3. Click **Send Test Event**.
4. When prompted to confirm the request, click **OK**.

   When the transmission is completed, the test event is listed in the Service Event Log, the Insight RS Console (central connect only), and Insight Online.

   If the test is successful, the **Submit Status** in the Service Event Log displays the text **No Error**.

   The **Time Generated** column in the Service Event Log shows the date and time based on the configured iLO time zone.
5. For Insight Remote Support central connect only: To verify that the test event is displayed, check the Insight RS Console.

6. To verify that the test event is displayed, check Insight Online.

More information
Viewing a test service event by using the Insight RS Console (Insight Remote Support central connect only)
Viewing a test service event by using Insight Online

Sending a test service event by using OA

1. Log in to the OA web interface (https://<OA hostname or IP address>).
3. Click Send Test Event.

When the transmission is completed, the test event is listed in the Service Event Log, the Insight RS Console (Insight Remote Support central connect only), and Insight Online.

The Time Generated column in the Service Event Log shows the date and time based on the configured OA time zone.

4. For Insight Remote Support central connect only: To verify that the test event is displayed, check the Insight RS Console.

5. To verify that the test event is displayed, check Insight Online.

More information
Viewing a test service event by using the Insight RS Console (Insight Remote Support central connect only)
Viewing a test service event by using Insight Online

Viewing a test service event by using Insight Online

1. Navigate to the following website: http://www.hpe.com/info/insightonline.
2. Log in with your HP Passport credentials.
3. To view a summary of the recorded service events, click Service events.

Insight Online converts the iLO or OA service event Time Generated value to Coordinated Universal Time (UTC).
4. To view test events, select View ➔ Test events.
Test events are closed automatically because no further action is necessary.

TIP: To view activities that occurred after you logged in to Insight Online, click the refresh button (C).

Viewing a test service event by using the Insight RS Console (Insight Remote Support central connect only)

1. Log in to the Insight RS Console (https://<Insight RS host server IP address>:7906).
2. Navigate to the Devices page.
3. Find your server or enclosure, and then click the device name.
4. Click the Service Events tab.
   The list of service events is displayed.
   Insight RS converts the iLO or OA service event Time Generated value to the time zone of the browser used to access the Insight RS Console.
   Test events are closed automatically because no further action is necessary.

Remote Support data collection

Data collection information

Depending on your remote support configuration (direct connect or central connect), iLO, OA, or the Insight RS host server sends configuration information to Hewlett Packard Enterprise for analysis and proactive services in accordance with your warranty and service agreements.

- For Insight Online direct connect, this data is transmitted every 30 days. You cannot edit or delete the data collection schedule.
- For Insight Remote Support central connect, the data transmission frequency is configured in the Insight RS Console. For more information, see the Insight RS online help.
Active Health System reporting (servers only)

Depending on whether you use Insight Online direct connect or Insight Remote Support central connect, iLO or the Insight RS host server sends server health, configuration, and run-time telemetry information to Hewlett Packard Enterprise. This information is used for troubleshooting issues and closed-loop quality analysis.

- For Insight Online direct connect configurations, this data is transmitted every seven days. You cannot edit or delete the Active Health System reporting schedule.
- For Insight Remote Support central connect, this data is transmitted every seven days. You can change the day of the week for Active Health System reporting transmission in the Insight RS Console. For more information, see the Insight RS online help.

Sending data collection information

You can send data collection information to Hewlett Packard Enterprise manually when a device configuration changes and you do not want to wait for the next scheduled data collection transmission. The procedure to use depends on the software you will use to send data collection information: iLO or OA.

More information

Sending data collection information by using iLO
Sending data collection information by using OA

Sending data collection information by using iLO

Prerequisites

Your iLO user account has the Configure iLO Settings privilege.

Sending data collection information

1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
3. Click Send Data Collection.
4. When prompted to confirm the request, click OK.

   When the transmission is completed, the Last Data Collection Transmission and Last Data Collection Transmission Status are updated. The date and time are based on the configured iLO time zone.

5. Optional: To verify that the data collection time stamp is accurate, check Insight Online.
6. Optional: To verify that the data collection information is displayed, check the Insight RS Console.
Sending data collection information by using OA

1. Log in to the OA web interface (https://<OA hostname or IP address>).
3. Click Send Data Collection.
   
   When the transmission is completed, the Last Data Collection Transmission and Last Data Collection Status are updated. The date and time are based on the configured OA time zone.

4. Optional: To verify that the data collection time stamp is accurate, check Insight Online.
5. Optional: To verify that the data collection information is displayed, check the Insight RS Console.

More information

Viewing data collection status in Insight Online
Viewing data collection status in the Insight RS Console (Insight Remote Support central connect only)

Sending Active Health System reporting information (servers only)

Prerequisites

Your iLO user account has the Configure iLO Settings privilege.

Sending Active Health System Information

1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
3. Click Send Active Health System Report.
4. When prompted to confirm the request, click OK.

   The collected data includes Active Health System information from the last seven days.

   When the transmission is completed, the Last Active Health System Reporting Transmission and Last Active Health System Reporting Transmission Status are updated. The date and time are based on the configured iLO time zone.
5. Optional: To verify that the Active Health System information is displayed, check the Insight RS Console.

More information
Viewing data collection status in the Insight RS Console (Insight Remote Support central connect only)

Viewing data collection status
You can view data collection status information in Insight Online, the Insight RS Console (Insight Remote Support central connect only), iLO, and OA.

More information
Viewing data collection status in Insight Online
Viewing data collection status in the Insight RS Console (Insight Remote Support central connect only)
Viewing data collection status in iLO
Viewing Active Health System reporting status in iLO
Viewing data collection status in OA

Viewing data collection status in Insight Online
The Insight Online device overview page displays the time stamp of the last data collection transmission.
1. Log in to the Hewlett Packard Enterprise Support Center ([http://www.hpe.com/info/insightonline](http://www.hpe.com/info/insightonline)).
2. Navigate to the Devices page.
3. Click the name of a device.

The **Overview** page displays the date and time of the last data collection transmission in the **Configuration** section.

![Configuration screenshot]

**TIP:** To view activities that occurred after you signed in to Insight Online, click the refresh button (Ç).

Viewing data collection status in the Insight RS Console (Insight Remote Support central connect only)

1. Log in to the Insight RS Console (https://<Insight RS host server IP address or FQDN>:7906).
2. Navigate to the **Devices** page.
3. Find your server or enclosure, and then click the device name.
4. Click the **Collections** tab.

The **Collections** tab displays the following names for data collection information and Active Health System reporting information: **Server Basic Configuration Collection** and **Active Health Service Collection**. To expand a collection, click the plus sign (+) to the left of the **Result** icon. To view additional information or download the collection files, click **More Details**.

Insight RS converts the iLO or OA data transmission date and time values to the time zone of the browser used to access the Insight RS Console.

![Collections tab screenshot]

Viewing data collection status in iLO

1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
2. Navigate to the **Remote Support**→**Data Collections** page.
Data Collection details

- **Last Data Collection Transmission**—The date and time of the last data collection.
- **Last Data Collection Transmission Status**—The status of the last data transmission.
- **Data Collection Frequency (days)** (Insight Online direct connect only)—The frequency at which data is sent to Hewlett Packard Enterprise.
- **Next Data Collection Scheduled** (Insight Online direct connect only)—The next date and time when data will be sent to Hewlett Packard Enterprise.

Viewing Active Health System reporting status in iLO

1. Log in to the iLO web interface (https://<iLO hostname or IP address>).
2. Navigate to the **Remote Support → Data Collections** page.

Active Health System reporting details

- **Last Active Health System Reporting Transmission**—The date and time of the last Active Health System report.
- **Last Active Health System Reporting Transmission Status**—The status of the last data transmission.
- **Active Health System Reporting Frequency (days)** (Insight Online direct connect only)—The frequency at which Active Health System data is sent to Hewlett Packard Enterprise.
- **Next Active Health System Reporting Scheduled** (Insight Online direct connect only)—The next date and time when Active Health System data will be sent to Hewlett Packard Enterprise.

Viewing data collection status in OA

1. Log in to the OA web interface (https://<OA hostname or IP address>).
2. Navigate to the **Enclosure Settings → Remote Support → Data Collections** page.

Data Collection details

- **Last Data Collection Transmission**—The date and time when data was last sent to Hewlett Packard Enterprise.
- **Last Data Collection Status**—The status of the last data transmission.
- **Next Scheduled Data Collection** (Insight Online direct connect only)—The next date and time when data will be sent to Hewlett Packard Enterprise.
6 Reregistering ProLiant servers and BladeSystem c-Class enclosures

This chapter describes the procedures for reregistering devices that were previously registered for remote support.

More information

- Registering a ProLiant server used as a host server for Insight Online direct connect
- Changing a ProLiant server or BladeSystem c-Class enclosure from central connect to direct connect
- Changing a ProLiant server or BladeSystem c-Class enclosure from direct connect to central connect

Registering a ProLiant server used as a host server for Insight Online direct connect

Hewlett Packard Enterprise does not support Insight Online direct connect registration of a ProLiant server that is used as an Insight RS host server. If you register an active host server for Insight Online direct connect, all of the devices monitored by that host server will be unable to communicate with Hewlett Packard Enterprise to receive remote support.

Use this procedure to stop using a ProLiant server as a host server, unregister the server from Insight Remote Support central connect, and then register the server for Insight Online direct connect.

1. Optional: If you plan to configure a new host server to monitor the devices previously monitored by the Insight RS Console on the ProLiant server, export a Bulk CSV file containing the list of monitored devices.
2. Unregister the monitored devices from the Insight RS host server on the ProLiant server.
3. Unregister the ProLiant host server from Insight RS.
4. Uninstall Insight RS from the ProLiant server.
5. Use iLO or Intelligent Provisioning to register the ProLiant server for Insight Online direct connect.
6. Optional: Install Insight RS on a different server, and then configure a new host server.
7. Optional: Import the Bulk CSV file into Insight RS on the new host server.

For more information about the Insight RS tasks in this procedure, see the Insight Remote Support monitored devices configuration guide and the Insight Remote Support installation and configuration guide.

More information

- Unregistering a ProLiant server from Insight Remote Support central connect
- Registering a ProLiant server for Insight Online direct connect

Changing the remote support configuration of a ProLiant server or BladeSystem c-Class enclosure

Hewlett Packard Enterprise does not support registering a ProLiant server or BladeSystem c-Class enclosure for Insight Remote Support central connect and Insight Online direct connect at the same time. If you register a device using both configurations, it will have two communication paths to Hewlett Packard Enterprise and Insight Online. Device information might be overwritten each time data is sent to Hewlett Packard Enterprise.
Changing a ProLiant server or BladeSystem c-Class enclosure from central connect to direct connect

1. Unregister the device from Insight Remote Support central connect.
2. Determine the correct time to register the device for Insight Online direct connect.
   If iLO or OA and the Insight RS host server use different time zones, and iLO or OA uses an earlier time zone than the Insight RS host server, do not reregister the device immediately. Wait until the iLO or OA time is the same as or later than the time at which you unregistered the device from Insight Remote Support central connect.
   For example, you might have an Insight RS host server set to the local time in Paris, France, and an iLO or OA system set to the local time in California. If you unregister the device from Insight Remote Support central connect at 5 p.m. local time in Paris, France, you must wait until 5 p.m. local time in California to register the device for Insight Online direct connect. If you do not wait, the reregistered device will not be displayed in Insight Online.
3. Register the device for Insight Online direct connect.

More information
Unregistering a ProLiant server from Insight Remote Support central connect
Unregistering a BladeSystem c-Class enclosure from Insight Remote Support central connect
Registering a ProLiant server for Insight Online direct connect
Registering a BladeSystem c-Class enclosure for Insight Online direct connect

Changing a ProLiant server or BladeSystem c-Class enclosure from direct connect to central connect

1. Unregister the device from Insight Online direct connect.
2. Determine the correct time to register the device for Insight Remote Support central connect.
   If iLO or OA and the Insight RS host server use different time zones, and the Insight RS host server uses an earlier time zone than iLO or OA, do not reregister the device immediately. Wait until the Insight RS host server time is the same as or later than the time at which you unregistered the device from Insight Online direct connect.
   For example, you might have an iLO or OA system set to the local time in Paris, France, and a host server set to the local time in California. If you unregister the device from Insight Online direct connect at 5 p.m. local time in Paris, France, you must wait until 5 p.m. local time in California to register the device for Insight Remote Support central connect. If you do not wait, the reregistered device will not be displayed in Insight Online (if enabled).
3. Register the device for Insight Remote Support central connect.

More information
Unregistering a ProLiant server from Insight Online direct connect
Unregistering a BladeSystem c-Class enclosure from Insight Online direct connect
Registering a ProLiant server for Insight Remote Support central connect
Registering a BladeSystem c-Class enclosure for Insight Remote Support central connect
7 Troubleshooting

Server not identified by server name in Insight Online or Insight RS

Symptom
A server is not identified as <server name> in Insight Online or Insight RS. Instead, it is identified in Insight Online as <product name>_<serial number> and in Insight RS as <serial number>.

Cause
The server was registered for remote support before iLO discovered the server name.

Action
1. Do one of the following:
   - Verify that AMS is enabled and the operating system is running.
   - Update the Server Name on the Administration→Access Settings page in the iLO web interface.
   - For Windows systems only: Start the operating system. Insight Online and Insight RS will use the Windows computer name to identify the server.

2. For Insight Remote Support central connect only: Depending on your configuration, do one of the following:
   - For configurations with iLO firmware 1.30 or later, no additional action is required. iLO automatically detects the server name and forwards it to Insight RS and Insight Online.
   - ProLiant Gen8 servers only: For configurations with iLO firmware versions earlier than 1.30, the server name is updated automatically the next time data collection information is transmitted. Data collection occurs every 30 days and can be initiated immediately from the Remote Support→Data Collections page in the iLO web interface.

3. If you had an active Insight Online session when you performed Step 1, click the refresh button (C) to update the Insight Online view with the server information.

More information
Sending data collection information by using iLO

Server OS name and version not listed in Insight RS or Insight Online

Symptom
The server OS name and version are not listed in Insight RS or Insight Online.

Cause
The server was registered for remote support when the OS and AMS were not running (for example, during an Intelligent Provisioning registration). In this situation, iLO cannot determine which OS is installed.

Action
To update the OS information, iLO must acquire the OS information from AMS.
1. Verify the following:
   - For ProLiant Gen8 servers: iLO firmware 1.20 or later (Insight Remote Support central connect) or 1.40 or later (Insight Online direct connect) is installed.
   - For ProLiant Gen9 servers: iLO firmware 2.00 or later is installed.
   - AMS is enabled and the OS is running.
   - For Insight Remote Support central connect only: A supported version of Insight RS is installed on the host server. For more information, see [http://www.hpe.com/support/InsightRS-Support-Matrix](http://www.hpe.com/support/InsightRS-Support-Matrix).
   - For Insight Remote Support central connect only: The RIBCL credentials for the server have been entered in the Insight RS Console and are associated with the ProLiant server.

2. Initiate the data collection process from the Remote Support→Data Collections page in the iLO web interface. For instructions, see “Sending data collection information by using iLO” (page 33). The OS name and version are forwarded to Insight RS and Insight Online during the data collection process.

3. If you had an active Insight Online session when you performed Step 2, click the refresh button (C) to update the Insight Online view.
   - If AMS is installed and the OS was running during the most recent data collection transmission, the OS name and version are listed on the Device Configuration Details page in Insight Online.

Server information is overwritten when data is sent to Hewlett Packard Enterprise

Symptom
Server information is overwritten in Insight RS and Insight Online when data is sent to Hewlett Packard Enterprise.

Cause
The server is registered for both central connect and direct connect remote support, and data collection information is being sent to Hewlett Packard Enterprise through two different communication paths.

Action
Do one of the following:

- To continue using Insight Remote Support central connect, unregister the server from Insight Online direct connect, and then rediscover the server on the Insight RS host server. For instructions, see “Unregistering a ProLiant server from Insight Online direct connect” (page 21) and the Insight Remote Support monitored devices configuration guide.
- To continue using Insight Online direct connect, unregister the server from Insight Remote Support central connect as described in “Unregistering a ProLiant server from Insight Remote Support central connect” (page 29).

OS information displayed incorrectly in Insight Online

Symptom
OS information is displayed at the top of the Insight Online device page, but in the device Configuration section, it is listed as Unknown.
Action
Click the refresh button ( ).

Certificate error when navigating to iLO web interface

Symptom
When you navigate to the iLO web interface, a certificate error appears.

Solution 1

Action
If you are using Internet Explorer, complete the following procedure:
1. Click the Continue to this website (not recommended) link.
2. Log in to iLO.
3. Optional: To prevent the certificate warning from appearing in future iLO web interface sessions, install an SSL certificate.

Solution 2

Action
If you are using Firefox, complete the following procedure:
1. Click I Understand the Risks, and then click Add Exception.
2. In the Add Security Exception dialog box, enter https://<iLO hostname or IP address> in the Location box.
3. Click Confirm Security Exception.
   The security exception is saved and the iLO login screen appears.
4. Log in to iLO.
5. Optional: Install an SSL certificate.

Solution 3

If you are using Chrome, complete the following procedure:
1. When the security warning appears, click Advanced.
2. Click Proceed to <iLO hostname or IP address> (unsafe).
3. Log in to iLO.
4. Optional: To prevent the certificate warning from appearing in future iLO web interface sessions, install an SSL certificate.

Solution 4

1. Log in to iLO with an account that has the Configure iLO Settings privilege.
2. Generate a CSR.
   b. Click Customize Certificate.
   c. On the SSL Certificate Customization page, enter the following:
      • Country (C)—The two-character country code that identifies the country where the company or organization that owns this iLO subsystem is located. Enter the two-letter abbreviation in capital letters.
      • State (ST)—The state where the company or organization that owns this iLO subsystem is located.
• **City or Locality (L)**—The city or locality where the company or organization that owns this iLO subsystem is located.

• **Organization Name (O)**—The name of the company or organization that owns this iLO subsystem.

• **Organizational Unit (OU)**—(Optional) The unit within the company or organization that owns this iLO subsystem.

• **Common Name (CN)**—The FQDN of this iLO subsystem. The FQDN is entered automatically in the **Common Name (CN)** box.

To enable iLO to enter the FQDN into the CSR, configure the **Domain Name** on the **Network General Settings** page. For information about configuring the network settings, see the iLO user guide.

d. Click **Generate CSR**. A message notifies you that a certificate is being generated and that the process might take up to 10 minutes.

e. After a few minutes (up to 10), click **Generate CSR** again to display the CSR. The CSR contains a public and private key pair that validates communications between the client browser and iLO. Key sizes up to 2,048 bits are supported. The generated CSR is held in memory until a new CSR is generated, iLO is reset to the factory default settings, or a certificate is imported.

f. Select and copy the CSR text.

3. **Obtain a certificate from a CA**
   a. Open a browser window and navigate to a third-party CA.
   b. Follow the onscreen instructions and submit the CSR to the CA.

   When you submit the CSR to the CA, your environment might require the specification of Subject Alternative Names (SAN). This information is typically included in the **Additional Attributes** box. If necessary, enter the iLO DNS short name and IP address in the **Additional Attributes** box by using the following syntax: `san:dns=<IP address>&dns=<server name>`. The CA generates a certificate in the PKCS #10 format.

c. After you obtain the certificate, make sure that:
   - The CN matches the iLO FQDN. The iLO FQDN is listed as the **iLO Hostname** on the **Information**→**Overview** page.
   - The certificate is a Base64-encoded X.509 certificate.
   - The first and last lines are included in the certificate.

4. **Import the certificate**.
   a. Navigate to the **Administration**→**Security**→**SSL Certificate** page.
   b. Click the **Import Certificate** button.
   c. Paste the certificate into the text box, and then click **Import**. iLO supports SSL certificates that are up to 3 KB (including the 609 bytes or 1,187 bytes used by the private key, for 1,024-bit and 2,048-bit certificates, respectively).

5. **Reset iLO**. For instructions, see the iLO user guide.
Connection error during Insight Online direct connect registration

Symptom
The following error occurs when you try to register a server for Insight Online direct connect:
Cannot connect to remote host.

Cause
The DNS settings are not configured correctly in iLO.

Action
Verify that the DNS information is configured correctly in iLO.
For instructions, see the iLO user guide.

Connection error during OA direct connect registration

Symptom
The following error occurs when you try to register an enclosure for Insight Online direct connect:
Failed to resolve HPE Insight Remote Support direct connect web service. Please verify DNS settings, proxy settings and connectivity.

Solution 1

Cause
There is a problem with the OA DNS settings.

Action
Verify that the DNS settings are configured correctly in OA. You can use the OA web interface or CLI to perform this task.

• Log in to the OA web interface and navigate to the **Active Onboard Administrator**→**TCP/IP Settings** page. Verify that the DNS configuration is correct. To edit the configuration, click the **Click here to modify the TCP/IP settings** link at the bottom of the screen.

• Log in to the OA CLI and execute the **SHOW NETWORK** command. Verify that the DNS configuration is correct. To edit the configuration, use the **ADD OA DNS** command.

For more information, see the OA user guide.

Solution 2

Cause
There is a problem with the OA proxy settings.

Action
Verify that the web proxy settings are configured correctly.
For more information, see “Editing the web proxy settings (BladeSystem c-Class enclosures)” (page 23).

Solution 3

Cause
There is a problem with the OA network connectivity.
Action
Verify that your configuration meets the network requirements for Insight Online direct connect.
For more information, see “Insight Online direct connect network requirements” (page 13).

iLO session ends unexpectedly during iLO Insight Online direct connect registration

Symptom
The iLO web interface session ends unexpectedly with the error 
Session Expired when you try to register a server for Insight Online direct connect.

Cause
The DNS settings are not configured correctly in iLO.

Action
Verify that the DNS settings are configured correctly.
For more information, see the iLO user guide.

Insight Online direct connect stopped working on a server with a replaced system board

Symptom
A server that was registered for Insight Online direct connect had the system board replaced and the remote support connection is no longer working.

Cause
The server system board was replaced, and the server is no longer recognized by Insight Online.

Action
Reregister the server:
1. Use the system RBSU or UEFI System Utilities to program the system product number and serial number in the SMBIOS.
   For more information, see the RBSU user guide or the UEFI System Utilities user guide.
2. Register the server as if it were a new remote support registration.
   For more information, see “Registering a ProLiant server for Insight Online direct connect” (page 13).

Duplicate central connect device records exist in Insight Online

Symptom
Duplicate records are created in Insight Online when the same central connect device is discovered twice.
Cause
Duplicate records for a device might be created in Insight Online in the following cases:

- Insight RS discovered an incomplete set of details about the device. It discovered the OS and network information, but did not discover the serial number or product number. When Insight RS rediscovered the device, it obtains a complete set of information about the device.
- A device has SNMP trap forwarding set to the host server. Insight RS did not discover the device before the host server received an event.

Action
None. Duplicate records cannot be removed at this time.

SSL Bio Error during Insight RS registration

Symptom
The following error occurs when you try to register a server for Insight Remote Support central connect: SSL Bio Error.

Action
1. Navigate to the Information → Diagnostics page in the iLO web interface.
2. Click Reset iLO.
   Clicking Reset iLO does not make any configuration changes, but it terminates any active connections to iLO and completes any firmware updates in progress. The Configure iLO Settings privilege is required to reset iLO on the Diagnostics page.
3. When the reset is finished, log in to the iLO web interface and retry the registration procedure.

Device warranty is incorrectly listed as expired in Insight RS

Symptom
A device with a valid warranty is listed with an expired warranty in Insight RS.

Solution 1

Cause
Invalid information was entered on the Site Information page in the Hosting Device Setup Wizard.

Action
Verify that you entered valid information on the Site Information page.

Solution 2

Cause
You did not enter a Country/Region in your HP Passport account.

Action
Update your HP Passport account to include a Country/Region.
Service events and collections display an incorrect time stamp in the Insight RS Console

Symptom
There are discrepancies between an event time and the event processed time.

Cause
The time or time zone setting on the monitored device is incorrect.

When you view service events and collections in the Insight RS Console, any displayed time is converted to the time zone set in the browser. This feature ensures that users can see the event timing using their local time zone.

Action
Check the time and time zone setting on the monitored device. If the time zone is set using a time server or DHCP, verify that the time server or DHCP is correctly configured and set to the appropriate time.

This issue does not affect service delivery by Hewlett Packard Enterprise or a Hewlett Packard Enterprise Authorized Service Partner because the host server time is used as a reference.

Certificate error when navigating to Insight RS Console

Symptom
When you navigate to the Insight RS Console, a certificate error appears.

Solution 1

Action
If you are using Internet Explorer, complete the following procedure:
1. Click the Continue to this website (not recommended) link.
2. In the address bar, click Certificate Error, and then click View certificates.
3. In the Certificate dialog box, click Install Certificate.
4. In the Certificate Import Wizard, click Next.
5. Select the Place all certificates in the following store option.
6. Click Browse, select Trusted Root Certification Authorities, and then click OK.
7. Click Next, and then click Finish.
8. To confirm the certificate installation, click Yes in the Security Warning dialog box.

Solution 2

Action
If you are using Firefox, complete the following procedure:
1. Click I Understand the Risks, and then click Add Exception.
2. In the Add Security Exception dialog box, enter https://<Insight RS host server hostname or IP address>:7906/ in the Location box.
3. Click Confirm Security Exception.

Solution 3

Action
If you are using Chrome, complete the following procedure:
1. On the Privacy error screen that appears, click the lock with the red X icon in the menu bar, and then click **Certificate information**.

2. In the **Certificate** dialog box, click the **Details** tab, and then click **Copy to File**.

3. Proceed through the Certificate Export Wizard and save the certificate. Then, click **OK** to close the **Certificate** dialog box.

4. Use the Microsoft Management Console to import the certificate as a trusted root certificate.
   a. On the **Start** menu, select **Run**, enter **MMC**, and then click **OK**.
   b. From the Microsoft Management Console, select **File**→**Add/Remove Snap-in**.
   c. In the **Available snap-ins** pane, select **Certificates**, and then click **Add**.
   d. In the **Certificates snap-in** dialog box, select how you want to manage certificates, click **Finish**, and then click **OK**.
   e. In the left menu, select **Trusted Root Certification Authorities**. In the **Object Type** pane, right-click **Certificates** and select **All Tasks**→**Import**.
   f. In the Certificate Import Wizard, import the saved certificate. Place the certificate in the **Trusted Root Certification Authorities** store.
   
5. Click **Finish**.
8 Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website: [www.hpe.com/assistance](http://www.hpe.com/assistance)
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website: [www.hpe.com/support/hpesc](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, go to either of the following:
  - Hewlett Packard Enterprise Support Center Get connected with updates page: [www.hpe.com/support/e-updates](http://www.hpe.com/support/e-updates)
  - Software Depot website: [www.hpe.com/support/softwaredepot](http://www.hpe.com/support/softwaredepot)

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

Websites

<table>
<thead>
<tr>
<th>Website</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPE Proactive Care</td>
<td><a href="http://www.hpe.com/services/proactivecarecentral">http://www.hpe.com/services/proactivecarecentral</a></td>
</tr>
<tr>
<td>Website</td>
<td>Link</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>HPE remote support</td>
<td><a href="http://www.hpe.com/info/insightremotesupport/docs">http://www.hpe.com/info/insightremotesupport/docs</a></td>
</tr>
<tr>
<td>ProLiant Gen8 servers</td>
<td><a href="http://www.hpe.com/info/proliantgen8/docs">http://www.hpe.com/info/proliantgen8/docs</a></td>
</tr>
<tr>
<td>ProLiant Gen9 servers</td>
<td><a href="http://www.hpe.com/info/proliantgen9/docs">http://www.hpe.com/info/proliantgen9/docs</a></td>
</tr>
<tr>
<td>BladeSystem c-Class enclosures</td>
<td><a href="http://www.hpe.com/info/BladeSystem/docs">http://www.hpe.com/info/BladeSystem/docs</a></td>
</tr>
<tr>
<td>ProLiant servers with Community and Regional Linux distributions</td>
<td><a href="http://www.hpe.com/info/communitylinux">http://www.hpe.com/info/communitylinux</a></td>
</tr>
<tr>
<td>SPP</td>
<td><a href="http://www.hpe.com/info/spp/documentation">http://www.hpe.com/info/spp/documentation</a></td>
</tr>
<tr>
<td>iLO 4</td>
<td><a href="http://www.hpe.com/info/ilo/docs">http://www.hpe.com/info/ilo/docs</a></td>
</tr>
<tr>
<td>OA</td>
<td><a href="http://www.hpe.com/support/oa/docs">http://www.hpe.com/support/oa/docs</a></td>
</tr>
<tr>
<td>HPE SIM</td>
<td><a href="http://www.hpe.com/info/insightmanagement/sim/docs">http://www.hpe.com/info/insightmanagement/sim/docs</a></td>
</tr>
<tr>
<td>Intelligent Provisioning</td>
<td><a href="http://www.hpe.com/info/intelligentprovisioning/docs/">http://www.hpe.com/info/intelligentprovisioning/docs/</a></td>
</tr>
<tr>
<td>HPE Privacy statement</td>
<td><a href="http://www.hpe.com/info/privacy">http://www.hpe.com/info/privacy</a></td>
</tr>
<tr>
<td>HPE OneView</td>
<td><a href="http://www.hpe.com/info/oneview/docs">http://www.hpe.com/info/oneview/docs</a></td>
</tr>
</tbody>
</table>

**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: [www.hpe.com/support/selfrepair](http://www.hpe.com/support/selfrepair)

**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.
A Using Agentless Management and the Agentless Management Service

Agentless Management uses out-of-band communication for increased security and stability. With Agentless Management, health monitoring and alerting is built into the system and begins working the moment a power cord is connected to the server. This feature runs on the iLO hardware, independent of the operating system and processor. Additional operating system data is collected when AMS is installed.

If AMS is not installed:

- iLO will not display a full set of data on the Information—System Information pages.
- iLO might not display the correct server name in Insight Online and Insight Remote Support.

Table 1 (page 52) lists the information collected by the available server configurations.
## Table 1 Information provided by Agentless Management and Insight Management Agents

<table>
<thead>
<tr>
<th>Component</th>
<th>Agentless Management without AMS&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Agentless Management with AMS&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Insight Management Agents&lt;sup&gt;1, 2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Server health</strong></td>
<td>• Fans</td>
<td>• Fans</td>
<td>• Fans</td>
</tr>
<tr>
<td></td>
<td>• Temperatures</td>
<td>• Temperatures</td>
<td>• Temperatures</td>
</tr>
<tr>
<td></td>
<td>• Power supplies</td>
<td>• Power supplies</td>
<td>• Power supplies</td>
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<tr>
<td></td>
<td>• Memory</td>
<td>• Memory</td>
<td>• Memory</td>
</tr>
<tr>
<td></td>
<td>• CPU</td>
<td>• CPU</td>
<td>• CPU</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>• Smart Array</td>
<td>• Smart Array</td>
<td>• Smart Array</td>
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<tr>
<td></td>
<td>• SMART Drive Monitoring (connected to Smart Array)</td>
<td>• SMART Drive Monitoring (connected to Smart Array, Smart HBA, and AHCI)</td>
<td>• SMART Drive Monitoring (connected to Smart Array, Smart HBA, and AHCI)</td>
</tr>
<tr>
<td></td>
<td>• Internal and external drives connected to Smart Array</td>
<td>• Internal and external drives connected to Smart Array</td>
<td>• SMART Drive Monitoring (supported servers only)</td>
</tr>
<tr>
<td></td>
<td>• Smart Storage battery monitoring (supported servers only)</td>
<td>• Smart Storage battery monitoring (supported servers only)</td>
<td>• NVMe drives&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td><strong>Network</strong></td>
<td>• MAC addresses for embedded NICs</td>
<td>• MAC and IP address for standup and embedded NICs</td>
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<td></td>
<td>• Physical link connectivity and link up/link down traps for NICs that have NC-SI over MCTP</td>
<td>• Link up/link down traps&lt;sup&gt;4&lt;/sup&gt;</td>
<td>• Link up/link down traps</td>
</tr>
<tr>
<td></td>
<td>• Fibre Channel adapters that support Hewlett Packard Enterprise vendor-defined MCTP commands</td>
<td>• NIC teaming information</td>
<td>• NIC teaming information</td>
</tr>
<tr>
<td></td>
<td>Supported with iLO 4 2.50 and later.</td>
<td>• Supported Fibre Channel adapters</td>
<td>• VLAN information</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>• iLO data</td>
<td>• iLO data</td>
<td>• iLO data</td>
</tr>
<tr>
<td></td>
<td>• Firmware inventory</td>
<td>• Firmware inventory</td>
<td>• OS information (host SNMP MIB)</td>
</tr>
<tr>
<td></td>
<td>• Device inventory</td>
<td>• OS information (host SNMP MIB)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>• Performance data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Driver/service inventory</td>
<td>• User-configurable thresholds</td>
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<td></td>
<td></td>
<td>• Logging events to OS logs&lt;sup&gt;5&lt;/sup&gt;</td>
<td>• Logging events to OS logs</td>
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<td></td>
<td></td>
<td>• Clustering information</td>
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<td><strong>Prefailure warranty alerts</strong></td>
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<td>• Drives (physical and logical)</td>
<td>• Drives (physical and logical)</td>
<td>• Drives (physical and logical)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• CPU</td>
</tr>
</tbody>
</table>

<sup>1</sup> The **Agentless Management without AMS** column represents the basic iLO configuration without AMS or the Insight Management Agents. Server configurations with AMS or the Insight Management Agents provide the same information as the basic iLO configuration, as well as the information that is listed in the **Agentless Management with AMS** and **Insight Management Agents** columns.

<sup>2</sup> Supported servers only. For more information, see the server specifications.

<sup>3</sup> Supported with iLO 4 2.30 and later.

<sup>4</sup> The data supplied by Agentless Management is not as extensive as the data supplied by the SNMP agents.

<sup>5</sup> iLO 4 1.05 and later supports AMS-based OS logging for Linux (/var/log/messages), Windows, and VMware. iLO 4 1.10 and later supports Smart Array logging.
Verifying AMS status

Use the procedures in this section to verify the AMS status.

Verifying AMS status: iLO web interface
1. Navigate to the Information→System Information page.
2. Click the Summary tab.
   AMS is listed in the Subsystems and Devices table. The possible values follow:
   - Not available—AMS is not available because it was not detected, the server is in POST, or the server is powered off.
   - OK—AMS is installed and running.

Verifying AMS status: Windows
1. Open the Windows Control Panel.
   If the AMS Control Panel is present, then AMS is installed.
2. Open the AMS Control Panel.
3. Click the Service tab.
   If AMS is enabled, the following message appears:
   Agentless Management Service (AMS) is enabled.

Verifying AMS status: SUSE and Red Hat Enterprise Linux
1. To verify that AMS is installed, enter the following command: `rpm –qi hp-ams`
2. To verify that AMS is running, enter the following command: `service hp-ams status`

Verifying AMS status: VMware
1. Verify that AMS is installed.
   a. Access the VMware host from the VMware vSphere Client.
   b. Navigate to the Inventory→Configuration→Health Status tab for the server.
   c. Click the plus sign (+) next to Software Components.
      The software installed on the host is listed. The AMS component includes the string `hp-ams`.
      NOTE: The full name of the AMS component is different for each supported version of ESX/ESXi.
2. To verify that AMS is running, enter the following command: `/etc/init.d/hp-ams.sh status`

Verifying AMS status: Ubuntu
1. To verify that AMS is installed, enter the following command: `dpkg –l hp-ams`
2. To verify that AMS is running, enter the following command: `sudo service hp-ams status`
B Verifying iLO driver installation (servers only)

The HPE remote support solution requires installation of the ProLiant iLO 3/4 Channel Interface Driver.

This driver is installed automatically if you use the Intelligent Provisioning Recommended installation method for Windows.

This driver ships standard with SUSE Linux Enterprise Server 11 and 12 and Red Hat Enterprise Linux 6 and 7, and it is automatically loaded.

Verifying driver installation: Windows

1. Navigate to Device Manager→System Management.
2. Verify that the following items are installed:
   - HP ProLiant iLO 4 Management Controller (CHIF)
   - HP ProLiant iLO 4 Management Controller (CORE)

Verifying driver installation: Linux and VMware

1. Open a Terminal window.
2. Enter the command \texttt{lsmod}.
3. Verify that the \texttt{hpilo} module is running.
C Service events

Table 2 (page 55) lists the possible service events for servers.

<table>
<thead>
<tr>
<th>Event ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Generic Test Service Event</td>
</tr>
<tr>
<td>100</td>
<td>Fan Failed Service Event</td>
</tr>
<tr>
<td>101</td>
<td>System Battery Failed Service Event</td>
</tr>
<tr>
<td>200</td>
<td>Power Supply Failed Service Event</td>
</tr>
<tr>
<td>300</td>
<td>Physical Disk Drive Service Event</td>
</tr>
<tr>
<td>301</td>
<td>Smart Array Controller Accelerator Battery Failure Event</td>
</tr>
<tr>
<td>302</td>
<td>Smart Array Controller Accelerator Board Status Changed Event</td>
</tr>
<tr>
<td>303</td>
<td>Smart Array Controller Status Changed Event</td>
</tr>
<tr>
<td>304</td>
<td>SAS Physical Drive Status Changed Event</td>
</tr>
<tr>
<td>305</td>
<td>ATA Disk Drive Status Changed Event</td>
</tr>
<tr>
<td>306</td>
<td>Fibre Channel Host Controller Status Changed Event</td>
</tr>
<tr>
<td>400</td>
<td>Memory Module Failed or Predicted to Fail Event</td>
</tr>
<tr>
<td>500</td>
<td>Storage System Fan Status Changed Event</td>
</tr>
<tr>
<td>501</td>
<td>Storage System Power Supply Status Changed Event</td>
</tr>
</tbody>
</table>

Table 3 (page 55) lists the possible service events for enclosures.

<table>
<thead>
<tr>
<th>Event type</th>
<th>Device type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>Fan</td>
<td>The fan module has a FAILED status with a severity status of CRITICAL. The device has failed.</td>
</tr>
<tr>
<td>System</td>
<td>Onboard Administrator</td>
<td>The OA module has a DEGRADED status with a severity status of WARNING MINOR. There was an error when reading the FRU information on the OA module.</td>
</tr>
<tr>
<td>System</td>
<td>Onboard Administrator</td>
<td>The OA module has a DEGRADED status with a severity status of WARNING MINOR. Use the OA logs to determine the cause (unrecognized error).</td>
</tr>
<tr>
<td>System</td>
<td>Interconnect</td>
<td>The Interconnect module has a DEGRADED status with a severity status of WARNING MINOR. There was an error when reading the FRU information on the Interconnect module.</td>
</tr>
<tr>
<td>System</td>
<td>Interconnect</td>
<td>The Interconnect module has a DEGRADED status with a severity status of WARNING MINOR. Use the OA logs to determine the cause (unrecognized error).</td>
</tr>
<tr>
<td>System</td>
<td>Interconnect</td>
<td>The Interconnect module has a FAILED status with a severity status of CRITICAL. It is in a thermal danger state.</td>
</tr>
</tbody>
</table>
### Table 3 Enclosure events (continued)

<table>
<thead>
<tr>
<th>Event type</th>
<th>Device type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>Power Supply</td>
<td>The power supply has a DEGRADED status with a severity status of WARNING MINOR. There was an error when reading FRU information on the power supply module.</td>
</tr>
<tr>
<td>System</td>
<td>Power Supply</td>
<td>The power supply has a DEGRADED status with a severity status of WARNING MINOR.</td>
</tr>
<tr>
<td>System</td>
<td>Power Supply</td>
<td>The power supply has a DEGRADED status with a severity status of WARNING MINOR. Use the OA logs to determine the cause (unrecognized error).</td>
</tr>
<tr>
<td>System</td>
<td>Power Supply</td>
<td>The power supply has a FAILED status with a severity status of CRITICAL.</td>
</tr>
<tr>
<td>System</td>
<td>Power Supply</td>
<td>The power supply has a FAILED status with a severity status of CRITICAL. The device has failed.</td>
</tr>
<tr>
<td>Test</td>
<td>Enclosure</td>
<td>Test event</td>
</tr>
</tbody>
</table>
D Configuring the host server

This appendix provides an overview of the host server configuration procedure. The host server is called the Hosting Device in the Insight RS software.

For more information about configuring the host server, see the Insight Remote Support installation and configuration guide at the following website: [http://www.hpe.com/info/insightremotesupport/docs](http://www.hpe.com/info/insightremotesupport/docs).

Running the Hosting Device Setup Wizard

Prerequisites

- Insight RS is installed on the server you will configure as the host server.
  You can download Insight RS from HPE Software Depot at the following website: [http://www.hpe.com/support/softwaredepot](http://www.hpe.com/support/softwaredepot).
  For installation instructions, see the Insight Remote Support installation and configuration guide.

- Optional: If you want to use HPE SIM with Insight RS, HPE SIM is installed on the server you will configure as the host server.
  You can download HPE SIM from the following website: [http://www.hpe.com/info/hpesim](http://www.hpe.com/info/hpesim).
  For installation instructions, see the HPE SIM installation and configuration guide.

- You have an HP Passport account.

- The following information is available:
  - Your contact information.
  - Your site information (site name, address, and time zone).
  - Web proxy information (if you use a web proxy to access the Internet).
  - HP Passport account information.
  - Channel Partner IDs for your authorized service provider, reseller/distributor, and installer (if you want to allow Channel Partners to view your device information).

- You have access to the Administrator account or an account that is a direct member of the host server Administrators Group.

Using the wizard

1. Log in to the Insight RS Console (https://<Insight RS host server IP address or FQDN>:7906).
   If you are accessing Insight RS from the host server, you can double-click the Insight Remote Support icon on the Desktop to access the Insight RS Console.
   If you have not configured your browser to trust the Insight RS Console web page, a certificate error appears.

2. If a certificate error message appears, do one of the following:
   - **Internet Explorer**—Click **Continue to this website (not recommended)** to continue to the Insight RS Console.
   - **Chrome**—Click **Advanced**, and then click **Proceed to <server name>** to continue to the Insight RS Console.
   - **Firefox**—Click **I Understand the Risks**, and then click **Add Exception**. Enter [https://<Insight RS host server IP address or FQDN>:7906](https://<Insight RS host server IP address or FQDN>:7906) in the Location box, and then click **Confirm Security Exception**.
   You can run the setup wizard and use Insight RS without importing a certificate.
For information about configuring your browser so you will not receive a certificate error message, see "Certificate error when navigating to Insight RS Console" (page 47).

3. Navigate to the HPE Insight Remote Support Setup Wizards page, and start the Hosting Device Setup Wizard.


5. Configure the following options on the Receiving Remote Support page, and then click Next:
   - **Choosing to optimize my environment**—Select the Yes, I consent... check box to allow Hewlett Packard Enterprise or an Authorized Channel Partner to contact you about optimizing your Hewlett Packard Enterprise environment.
   - **Remote support software updates**—Select the method to use for applying Insight RS software updates.
     You can choose from the following methods: Automatically Download and Install (default), Automatically Download, and Manually Apply.
     Hewlett Packard Enterprise recommends using the Automatically Download and Install method.

6. On the Contact Information page, enter your company contact information and language preference, and then click Next.

   **NOTE:** You can enter special support delivery instructions in the Special instructions for support delivery box. The text that you enter is included with service events and is visible to Hewlett Packard Enterprise support or Authorized Channel Partners when Insight RS submits an event. For example, you could enter a message similar to the following: If you get an event from my site on New Year's Day, call my pager instead, at +1-555-555-5555.

7. On the Site Information page, enter your site information and time zone, and then click Next.

   **IMPORTANT:** Verify that your site information is entered correctly. The Insight RS software does not automatically validate address details such as the city, state, and postal code.

8. On the Registering HPE Insight Remote Support page, do one of the following:
   - Click Test Connection.
   - If needed, select the Use Web Proxy to access Internet (optional) check box, enter a web proxy, and then click Test Connection.

   If the connection is successful, the Internet Status changes to Connected.

9. Click Register With HPE.
   The HPE Registration Status changes to Registered.

10. Click Next.
   The Integration with HPE Insight Online page opens.
   Use this page to enable the feature for viewing your devices by using Insight Online.

11. Enter your HP Passport user name and password, and then click Register with HPE Insight Online.
   Upon successful validation, the HPESC Registration Status changes to Registered.

12. To open the HPE Authorized Channel Partners page, click Next.
13. Do one of the following:
   - Accept the default settings if support for your IT infrastructure is provided by Hewlett Packard Enterprise.
   - If support is provided by a Hewlett Packard Enterprise Authorized Channel Partner, enter the following information:
     - Default Hewlett Packard Enterprise Authorized Service Partner
     - Default Hewlett Packard Enterprise Authorized Reseller/Distributor
     - Default Installer
     For each Hewlett Packard Enterprise Authorized Channel Partner, enter the Partner ID in the Partner ID box, click Check ID, and then verify that the correct partner is listed. The Partner ID is the Location ID assigned to the Channel Partner during the partner registration process.
   - The information you enter on this page is used as the default information for newly discovered devices.
14. Click Next.
   - The Conclusion page opens.
15. Click Finish.

Configuring the RIBCL protocol
Hewlett Packard Enterprise recommends configuring the RIBCL protocol before registering a ProLiant server for Insight RS.
1. Log in to the Insight RS Console (https://<Insight RS host server IP address or FQDN>:7906).
2. From the main menu, select Discovery, and then click the Credentials tab.
3. From the Select and Configure Protocol list, select iLO Remote Insight Board Command Language Protocol (RIBCL), and then click New.
4. Enter the user name and password of an iLO user account on the ProLiant server you want to register for Insight Remote Support.
5. Click Add.

TIP: If you use the same credentials to access iLO on all ProLiant servers, you configure the RIBCL protocol only once. If you use different credentials to access iLO on each ProLiant server, you must configure the RIBCL protocol for each server.
For information about configuring Named Credentials that can be reused when configuring one or more devices, see the Company Information—Named Credentials page in the Insight RS Console.

Configuring the HPE SIM Adapter
If you installed HPE SIM on the host server before installing Insight RS, the HPE SIM Adapter is installed automatically but must be enabled.
If you installed HPE SIM after installing Insight RS, you must install the HPE SIM Adapter manually from the Software Updates tab on the Administrator Settings page.
For information about installing and configuring the HPE SIM Adapter, see the Insight RS online help.
## Glossary

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<tr>
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<th>Description</th>
</tr>
</thead>
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<tr>
<td>AMS</td>
<td>Agentless Management Service.</td>
</tr>
<tr>
<td>CA</td>
<td>Certificate authority.</td>
</tr>
<tr>
<td>CN</td>
<td>Common Name.</td>
</tr>
<tr>
<td>CSR</td>
<td>Certificate Signing Request.</td>
</tr>
<tr>
<td>DHCP</td>
<td>Dynamic Host Configuration Protocol.</td>
</tr>
<tr>
<td>DNS</td>
<td>Domain Name System.</td>
</tr>
<tr>
<td>Fibre Channel adapter</td>
<td>A Fibre Channel PCI host bus adapter (HBA) located in a controller node. The Fibre Channel adapter connects a controller node to a host or to a drive chassis.</td>
</tr>
<tr>
<td>FQDN</td>
<td>Fully Qualified Domain Name.</td>
</tr>
<tr>
<td>FRU</td>
<td>Field replaceable unit. An assembly component that is designed to be replaced on site, without the system having to be returned to the manufacturer for repair.</td>
</tr>
<tr>
<td>Hosting Device</td>
<td>A supported Windows ProLiant server that hosts the Insight RS software.</td>
</tr>
<tr>
<td>HPE SIM</td>
<td>HPE Systems Insight Manager.</td>
</tr>
<tr>
<td>HPONCFG</td>
<td>HPE Lights-Out Online Configuration Utility.</td>
</tr>
<tr>
<td>iLO</td>
<td>Integrated Lights-Out.</td>
</tr>
<tr>
<td>Insight RS</td>
<td>The software associated with the Insight Remote Support central connect configuration.</td>
</tr>
<tr>
<td>Insight RS Console</td>
<td>The Insight Remote Support user interface that is installed on the Hosting Device.</td>
</tr>
<tr>
<td>iSCSI</td>
<td>Internet small computer system interface. Like an ordinary SCSI interface, iSCSI is standards-based and efficiently transmits block-level data between a host computer (such as a server that hosts Exchange or SQL Server) and a target device (such as a storage system). By carrying SCSI commands over IP networks, iSCSI is used to facilitate data transfers over intranets and to manage storage over long distances.</td>
</tr>
<tr>
<td>MAC</td>
<td>Media Access Control.</td>
</tr>
<tr>
<td>MIB</td>
<td>Management Information Base. A database of managed objects accessed by network management protocols. An SNMP MIB is a set of parameters that an SNMP management station can query or set in the SNMP agent of a network device (for example, a router).</td>
</tr>
<tr>
<td>NIC</td>
<td>Network interface card. A device that handles communication between a device and other devices on a network.</td>
</tr>
<tr>
<td>OA</td>
<td>Onboard Administrator.</td>
</tr>
<tr>
<td>PKCS</td>
<td>Public-key cryptography standards.</td>
</tr>
<tr>
<td>RBSU</td>
<td>ROM-Based Setup Utility.</td>
</tr>
<tr>
<td>RIBCL</td>
<td>Remote Insight Board Command Language.</td>
</tr>
<tr>
<td>RSA</td>
<td>An algorithm for public-key cryptography.</td>
</tr>
<tr>
<td>SCSI</td>
<td>Small Computer Systems Interface. A standard, intelligent parallel interface for attaching peripheral devices to computers, based on a device-independent protocol.</td>
</tr>
<tr>
<td>SHA</td>
<td>Secure Hash Algorithm.</td>
</tr>
<tr>
<td>SLES</td>
<td>SUSE Linux Enterprise Server.</td>
</tr>
<tr>
<td>SMBIOS</td>
<td>System Management BIOS.</td>
</tr>
<tr>
<td>SPP</td>
<td>Service Pack for ProLiant.</td>
</tr>
<tr>
<td>SSL</td>
<td>Secure Sockets Layer.</td>
</tr>
<tr>
<td>UEFI</td>
<td>Unified Extensible Firmware Interface.</td>
</tr>
<tr>
<td>UTC</td>
<td>Coordinated Universal Time.</td>
</tr>
<tr>
<td>WBEM</td>
<td>Web-Based Enterprise Management.</td>
</tr>
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