



Hewlett Packard
Enterprise

HPE InfoSight for servers

User Guide

Abstract

This guide provides information about using HPE InfoSight for servers to predict and prevent problems. This document is intended for system administrators who support and maintain a infrastructure stack.

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Contents

- Overview..... 5**
 - Nimble Storage history..... 6
 - Machine learning and predictive analytics 6
 - Customizing table views..... 7

- Using the HPE InfoSight web interface..... 8**
 - Logging in to HPE InfoSight..... 8
 - User management..... 8
 - Creating users in HPE InfoSight..... 8
 - Deleting users in HPE InfoSight..... 9
 - Using the HPE InfoSight controls..... 9
 - Managing organizations..... 10
 - Creating organizations..... 10
 - Renaming an organization..... 10

- Managing servers in iLO Amplifier Pack..... 12**
 - Adding a single server..... 12
 - Deleting a server..... 13

- Viewing the Operational dashboard..... 14**
 - Server Health Status tile..... 15
 - Server Power Status tile..... 16
 - Connectivity tile..... 16
 - Health Issues tile..... 17
 - Warranty/Support Status tile..... 18
 - Server Generations tile..... 18

- Viewing the Wellness dashboard..... 19**
 - Exporting the Wellness dashboard table..... 19
 - Wellness dashboard Summary details..... 19
 - Wellness dashboard details..... 20
 - Wellness dashboard issue details..... 20

- Viewing the Infrastructure page..... 22**
 - Viewing the Summary tab..... 22
 - Summary tab details..... 22
 - Downloading the server list..... 23
 - Viewing the Monitoring Services/Support tab..... 23
 - Monitoring Services/Support tab details..... 23
 - Downloading the server list..... 24
 - Viewing the server details page..... 24
 - Individual server summary..... 25
 - Overview tab details..... 25
 - Wellness Alerts tab details..... 26

Event Logs tab details.....	27
Server Hardware tab details.....	28
Firmware & Software tab details.....	28
Viewing the Resources menu.....	29
Creating an HPE Support Case.....	29
Troubleshooting.....	31
Received an error message stating There are no systems associated with your user profile. Click here to get started	31
Heartbeat status on the Monitoring Services/Support page shows never.....	31
Heartbeat status is current, but AHS status shows never or delayed.....	31
How do I merge multiple organizations in HPE InfoSight for servers?.....	32
Websites.....	33
Support and other resources.....	34
Accessing Hewlett Packard Enterprise Support.....	34
Accessing updates.....	34
Customer self repair.....	35
Remote support.....	35
Warranty information.....	35
Regulatory information.....	35
Documentation feedback.....	36

Overview

The HPE InfoSight portal is a secure web interface hosted by HPE. It provides a graphical interface and predictive device support automation.

HPE InfoSight uses Artificial Intelligence (AI) to simplify operations by examining your environment, which is done by compiling data from your site. Data is the foundation for enabling a self-managing, self-healing, and self-optimizing data center.

HPE is at the forefront of this new data paradigm. A decade ago, HPE started designing systems with sensors across the infrastructure stack. Trillions of collected data points are available for analysis by HPE InfoSight, which enables customers to take advantage of the global learning from the collected data. AI is the key to unlocking the power of this data.

HPE InfoSight for servers:

- Combines the machine learning and predictive analytics of HPE InfoSight with the health and performance monitoring of Active Health System (AHS) and HPE iLO to optimize performance and predict and prevent problems
- Provides automatic collection and analysis of the sensor and telemetry data from AHS to derive insights from the behaviors of the install base to provide recommendations to resolve problems and improve performance
- This first release delivers a foundational set of capabilities that will be augmented over time
- Supports Gen10, Gen9, and Gen8 HPE ProLiant servers, HPE BladeSystem servers, HPE Synergy compute modules, and HPE Apollo systems with iLO 4 and iLO 5

iLO

iLO is a remote server management processor embedded on the system boards of supported HPE servers. iLO enables the monitoring and controlling of servers from remote locations. iLO management is a powerful tool that provides multiple ways to configure, update, monitor, and repair servers remotely. For more information on iLO, go to <https://www.hpe.com/servers/ilo>.

Active Health System

AHS does not collect personally identifiable information or any data stored on the server from the operation of the server.

AHS provides:

- Continuous health monitoring of over thousands of system parameters
- Logging of all configuration changes
- Consolidated health and service alerts with precise time stamps
- Agentless monitoring that does not affect application performance

AHS does not collect information about your operations, finances, customers, employees, or partners. For more information on AHS, go to <https://www.hpe.com/servers/ahs>.

iLO Amplifier Pack

iLO Amplifier Pack is an advanced server inventory and firmware and driver update solution. iLO Amplifier Pack uses iLO functionality to enable rapid discovery, detailed inventory reporting, and firmware and driver updates. iLO Amplifier Pack performs rapid server discovery and inventory for thousands of supported

servers to update firmware and drivers. iLO Amplifier Pack passes the collected data from your environment to HPE InfoSight. For more information on iLO Amplifier Pack, go to <https://www.hpe.com/servers/iLOAmplifierPack>.

HPE Passport

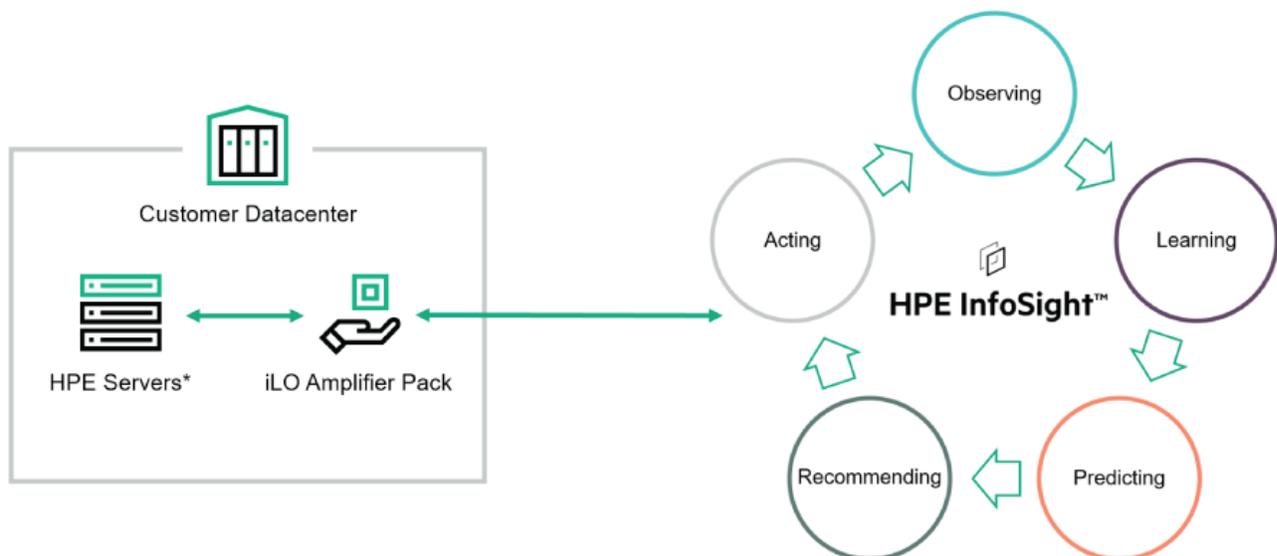
HPE InfoSight uses the HPE Passport authentication service to authorize user access to the secure website. Successful authentication provides access to the HPE InfoSight service. To gain access to your devices, you place a claim token on your iLO Amplifier Pack system. If you do not have an HPE Passport account, go to <https://www.hpe.com/info/insightonline> and follow the prompts.

Nimble Storage history

Nimble Storage created HPE InfoSight, a cloud-based solution to anticipate and prevent infrastructure issues through advanced AI, predictive analytics, and data science techniques that are applied across a giant global dataset. HPE InfoSight provides Nimble Storage the unique ability to expand simplification and vastly increase reliability beyond storage management, providing predictive analytics from storage arrays up the stack into the network, server, and virtualization layers.

Machine learning and predictive analytics

There are five key steps in the machine learning and predictive analytics process of HPE InfoSight that are built on top of each other:



- **Observing**—Observe what is going on in your environment.
- **Learning**—Learn from that observation and combine those observations from your environment along with the observations of other environments that are deploying similar capabilities.
- **Predicting**—Predict outcomes based on the telemetry data,
- **Recommending**—Recommend changes in your environment. Changes in HPE capabilities and products and changes in host-based capabilities, are intelligent decisions that prevent issues, improve performance, and optimize resources.
- **Acting** —Act on those recommendations, resulting in a much better experience not only for HPE products, but the whole tool chain inside the data center.

Performing the five keys steps iteratively over time, HPE InfoSight gets smarter every second and sees beyond the limits of other tools because of its unique approach to data collection and analysis.

Customizing table views

Sorting tables

Click a column heading to sort the event log table by that column.

To change the display to ascending or descending order, click the column heading again.

Filtering tables

To access the filters, click  in the column heading that you want to filter on.

To filter the table, enter information, and then click **Apply**. When entering filter criteria, follow the format seen in the table column.

Searching for an event

To search for events based on dates, event ID, or description text, click , and then enter text in the search box.

Using the HPE InfoSight web interface

For prerequisites and getting started tasks, see the *HPE InfoSight for servers Getting Started Guide* at <https://www.hpe.com/support/infosight-servers-docs> .

Logging in to HPE InfoSight

Prerequisites

HPE Passport Account

Procedure

1. Log in to <https://infosight.hpe.com> with your HPE Passport account.

NOTE: If you monitor Nimble or 3Par systems, the Nimble **Operational** dashboard is displayed.

2. Optional: To select the organization to view, click the **Organization** drop-down menu, and then select the organization you want to view.

User management

The HPE Passport account used for the initial HPE InfoSight login and iLO Amplifier Pack claim token procedures is the administrator account.

HPE InfoSight user management enables you to create additional user accounts for viewing managed systems. The accounts created by the administrator are called tenant accounts.

Tenant user account types

- **Users with read-only access (User)**—These users can view systems pertaining to an organization in HPE InfoSight for servers, but cannot invite or add other users, or edit organization name.
- **Administrators with full functionality (Admin)**—These users can view all systems. They can also obtain claim tokens and manage users from the following pages:
 - The **Device Enrollment** page to obtain claim tokens
 - The **User** page to create or delete users
 - The **User** page to change user types

HPE recommends at least two administrator accounts in case one user is locked out or loses access to HPE InfoSight.

⚠ CAUTION: At this time, a user can be an administrator for only one organization. If a user is added as an administrator to a second organization, they no longer have access to the first organization. The user must be demoted to a user account type in one of the organizations to have access to both organizations.

Creating users in HPE InfoSight

Prerequisites

Administrator role

Procedure

1. Click the Settings icon, and then click **Users**.
2. Click **Invite User**, and then enter the email address of the user you want to add.
3. Select the user role.
4. Click **Send Invite**.



TIP:

Let the new user know that they must have an HPE Passport account to access HPE InfoSight.

Deleting users in HPE InfoSight

Prerequisites

Administrator role

Procedure

1. Click the Settings icon, and then click **Users**.
2. Select the user you want to delete.
3. Click **Delete**.

NOTE: The user will be deleted from HPE InfoSight, but they will still have their HPE Passport account. However, they will not be allowed to log in to HPE InfoSight.

Using the HPE InfoSight controls

When you log in to the HPE InfoSight interface, the HPE InfoSight controls are available from any page.



- **Search icon**—Click this icon to enter the search criteria. For example, a server serial number.
- **Settings icon**
 - **Terms of Use**—Click to open a new browser window with the HPE InfoSight Terms of use.
 - **Device Enrollment**—Click to obtain a claim token for iLO Amplifier Pack.
 - **My Organization**—Click to modify your organization name. Administrators only.
 - **Users**—Click to invite additional users access to your managed servers. For more information, see [Creating users in HPE InfoSight](#). Administrators only.
- **User icon**

- **Current user**—Click to see a list of currently logged in users.
- **Past bulletins**—Click to view past bulletins.

When you log on to the HPE InfoSight portal, important information about system changes, maintenance, and new features is displayed in the bulletins section. This menu provides access to all the previously displayed login notifications. HPE recommends that you read the bulletins at login time, or stay up-to-date by accessing this menu regularly.

Managing organizations

Creating organizations

By default, the first enrolled user of an organization is created as an administrator.

Prerequisites

- HPE Passport account.
- The HPE Compute/Servers devices that you want to access are not part of an existing organization.
- You are not a member of a server organization. If you are already a member of a server organization, you cannot create a server organization.

Procedure

1. Click the Settings icon, and then click **My Organization**.
2. Click **New Organization**.
3. Enter the organization name, and then click **Save**.

To avoid confusion, name the organization clearly. Hewlett Packard Enterprise recommends the following convention: *Company Name* or *Company Name - Sub Organization*.

If needed, you can rename an organization later without affecting the registered servers or users. For more information, see [Renaming an organization](#).

4. Optional. To add users to the organization, click **Invite User**, and then enter the HPE Passport email address of the user you want to add.
 - a. Select the user role.
 - b. Click **Send Invite**.



TIP: Let the new user know that they must have an HPE Passport account to access HPE InfoSight.

Renaming an organization

You can rename any organization that you are an administrator of. Renaming an organization will not affect the registered servers or existing users.

Prerequisites

Administrator role

Procedure

1. Click the Settings icon, and then click **My Organization** under **Servers**.

2. Select the organization you want to rename and click the edit icon ().

3. Rename the organization.

To avoid confusion, name the organization clearly. Hewlett Packard Enterprise recommends the following convention: *Company Name* or *Company Name - Sub Organization*.

4. Click **Save**.

5. Notify all users in the organization of the new organization name.

Managing servers in iLO Amplifier Pack

Adding and deleting servers from HPE InfoSight for servers is done in iLO Amplifier Pack. For additional information and to access documentation for iLO Amplifier Pack, go to <https://www.hpe.com/servers/iLOAmplifierPack>.

The following procedures explain how to add and delete a single server in iLO Amplifier Pack. For information on adding multiple servers to iLO Amplifier Pack, see the *HPE InfoSight for servers Getting Started Guide* at <https://www.hpe.com/support/infosight-servers-docs>.

❗ **IMPORTANT:** You must be logged in to iLO Amplifier Pack to complete the following procedures.

NOTE: HPE InfoSight for servers will be updated within a few minutes after completing the following procedures for adding or deleting a server.

Adding a single server

Prerequisites

- User privileges
 - Configure Manager with Security
 - Configure Manager
 - Configure User
 - Configure Devices
- HPE ProLiant Gen8 or Gen9 server with iLO 4 version 2.30 or later
- HPE ProLiant Gen10 server with iLO 5 version 1.10 or later

Procedure

1. Log in to iLO Amplifier Pack.
2. Click **Assets** from the left navigation menu, and then click **Servers**.
3. Click **Add Server**.
4. Select the **Add Server** option.
5. Enter the iLO IPv4 or IPv6 address.
6. Enter the username for an iLO user account on the node.
7. Enter the user account password.
8. Optionally select the server group you want the server to be a part of.
9. Click **Add**.
10. Log in to HPE InfoSight and verify that the server is listed.

Deleting a server

Prerequisites

- User privileges
 - Configure Manager with Security
 - Configure Manager
 - Configure Users
 - Configure Devices

Procedure

1. Log in to iLO Amplifier Pack.
2. Click **Assets** from the left navigation menu, and then click **Servers**.
3. Select the check box for the server you want to delete.
4. Click **Actions**, and then select **Delete**.
5. Click **Apply** to delete the server or click **Close** to return to the **Servers** page.
6. Optional: Log in to HPE InfoSight and verify that the server is no longer listed.

Viewing the Operational dashboard

The **Operational** dashboard includes a series of graphs and charts. The tiles display quick views of the performance for your servers. The following tiles are displayed:

- **Server Health Status tile**
- **Health Issues tile**
- **Server Power Status tile**
- **Warranty/Support Status tile**
- **Connectivity tile**
- **Server Generations tile**

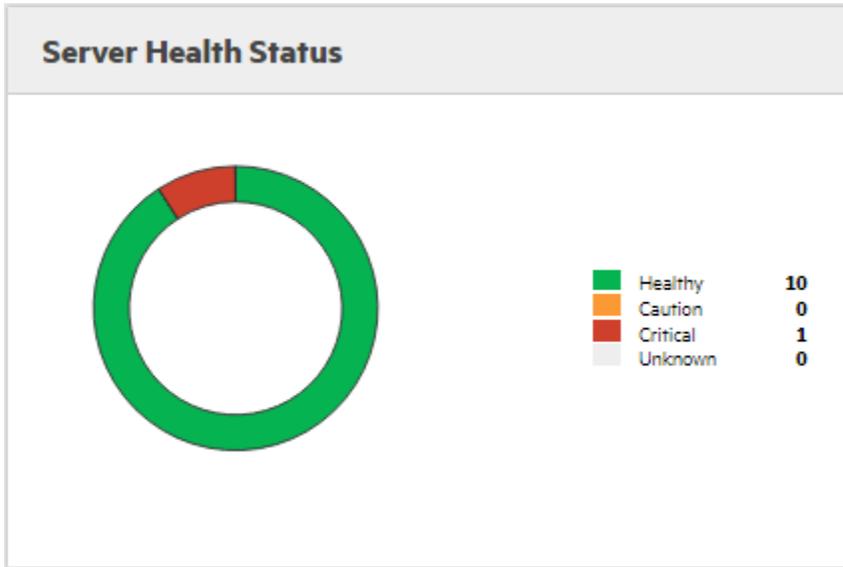
Procedure

1. To access the **Operational** dashboard, click **Dashboards**, and then select **Operational** in the **Servers** section.
2. Optional: For tiles with graphs:
 - Move the cursor over a graph section to view the percentage of the monitored servers in a specific status or category.
 - Click a percentage in the graph to navigate to the **Server List** for all servers meeting the status criteria.
3. Optional: For tiles with a status legend, click a status name in the legend to navigate to the **Server List** for the servers reporting a status value.
4. Optional: In the **Health Issues** tile, click a red icon to view the list of servers reporting a specific type of health issue.
5. Optional: In the **Connectivity** tile, click the **Heartbeat** or **Call Home** icon to view the connectivity status for individual servers.

A popup window displays the individual server details.

If there are connectivity errors, the **Heartbeat** or **Call Home** icon displays a red badge. To view individual details for servers that successfully connected through heartbeat or call home, click the server link in the server detail window. This feature is not available on servers that have never made a successful connection.

Server Health Status tile



Displays a roll-up of the current server health statuses of all servers. The status types are Healthy, Warning, Critical, and Unknown. The legend displays the number of servers in each state.

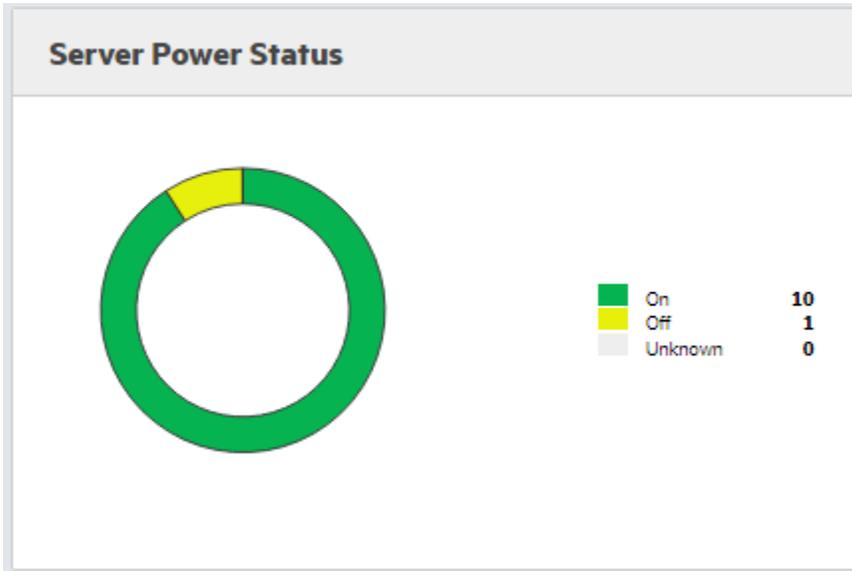
Health Status icons

- **Healthy**—There are no issues with the server.
- **Caution**—The server is still operating, but with reduced functionality.
- **Critical**—The server is not operating.
- **Unknown**—No AHS log or heartbeat information has been received.

To determine the root cause of a caution or critical status, view the Server details page, and view the event logs.

Click a status in the legend to access the Server details page filtered on the **Status** column.

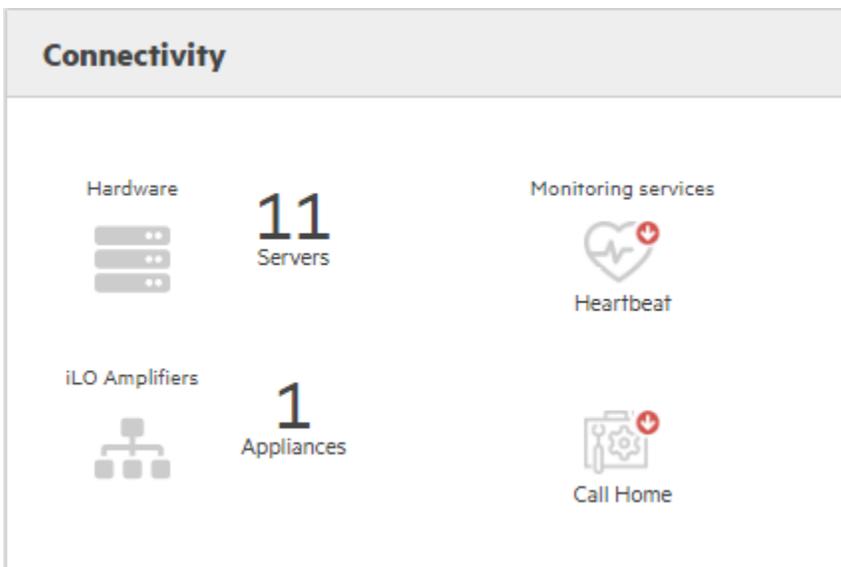
Server Power Status tile



Displays a roll-up of the power statuses of all servers. The power status types are On, Off, and Unknown. The legend displays the number of servers in each state. Click a status in the legend to access the **Server List** page filtered on the **Power Status** column.

The Unknown status is seen when data was not reported regarding server power state in the latest heartbeat file.

Connectivity tile



Hardware

The number of servers monitored by HPE InfoSight for servers.

iLO Amplifiers

The number of iLO Amplifier Pack appliances linked to HPE InfoSight for servers.

Heartbeat

If any servers missed providing a heartbeat, a red arrow is displayed on the **Heartbeat** icon. This icon is clickable to the **Server List** page.

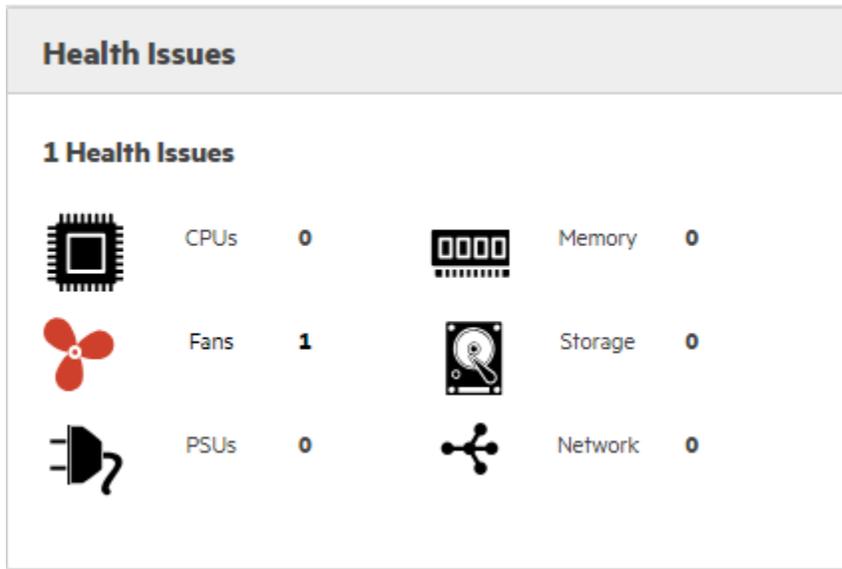
The heartbeat is received from iLO and is based on iLO REST API calls. The heartbeat is received every 10 minutes.

Call Home

The **Call Home** icon shows an aggregated status of the AHS log collection for all servers. If any servers have an AHS log that failed to connect, a red arrow is displayed on the **Call Home** icon. This status is clickable to the **Server List** page.

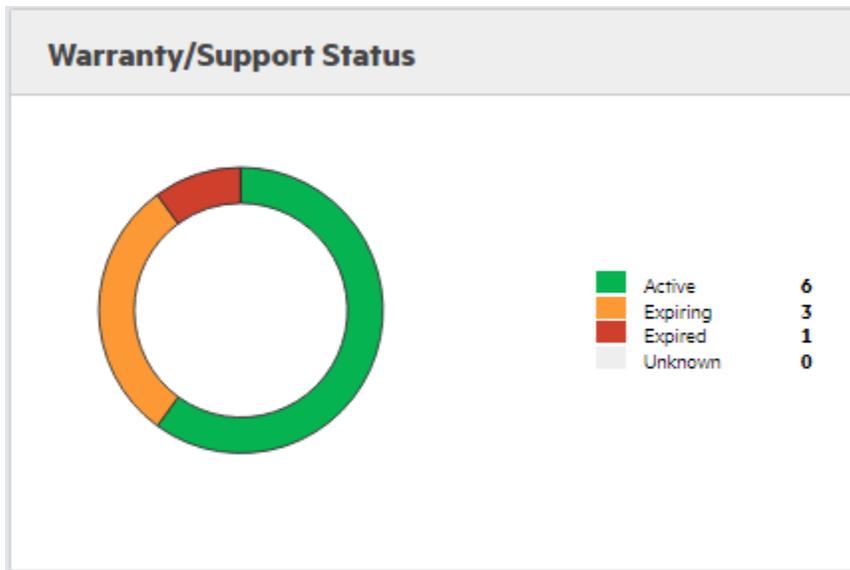
The AHS log is received from iLO Amplifier every 24 hours.

Health Issues tile



Displays the number of health issues detected locally on managed servers. Information about these issues is provided to HPE InfoSight through the AHS log, which includes iLO IML and iLO Event Log data. If an icon is red, there are critical health issues associated with that type of component. The number of servers with an issue is listed beside the icon. Click a red icon to access the **Server List** page.

Warranty/Support Status tile

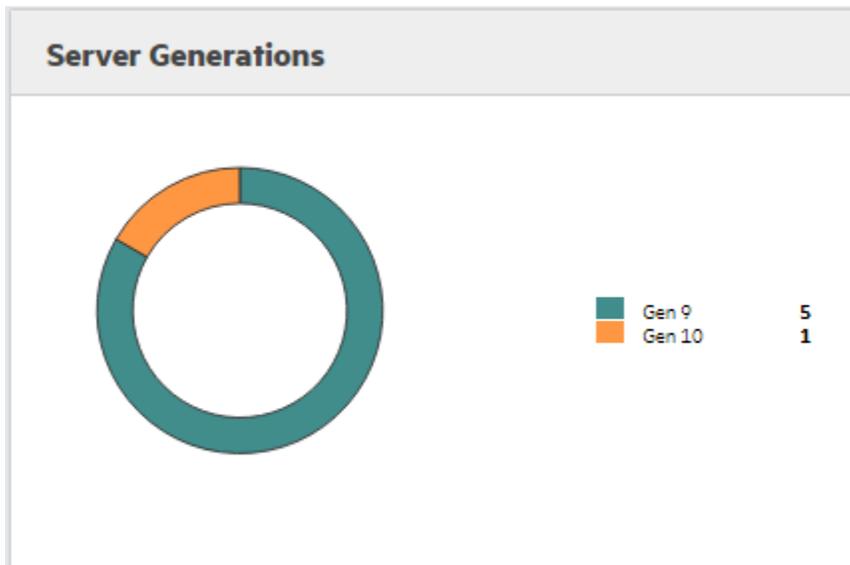


This tile displays the following information:

- **Active**—Servers with active service level agreements.
- **Expiring**—Servers with agreements expiring in the next 90 days.
- **Expired**—Servers with expired agreements.
- **Unknown**—Servers for which agreement information cannot be determined.

Click a status in the legend to access the **Server List** page.

Server Generations tile



The total number of monitored servers in each product generation. If you hover over the graph, the percentage of servers in each server generation is displayed. The legend displays the number of servers in each server generation. Click a generation in the legend to view the **Server List** for servers that belong to that generation.

Viewing the Wellness dashboard

The **Wellness** dashboard displays issues that might need administrator attention. Use this page to monitor the overall health of all your managed servers.

Issues displayed are reflective of insights and recommendations derived from analyzing the most recent server configuration. These insights and recommendations are not inclusive of all health or performance problems that the server may be experiencing. The best source for the current server health status is the iLO web interface for each server.

The **Wellness** dashboard displays errors or warnings found with the registered servers. The information is displayed in table format.

Procedure

1. To access the **Wellness** dashboard, click **Dashboards**, and then select **Wellness** in the **Servers** section.
2. Optional: To view information about a specific device type and status, click the appropriate status icon in the summary table.
3. Optional: To view more information about a detected issue, click the arrow in the first column of the table. The information displayed includes possible solutions to the issue.
4. Optional: Use the dashboard sorting and filtering features to customize the view. For more information, see [Customizing table views](#).
5. Optional: To view individual server details, click the serial number.

Exporting the Wellness dashboard table

Procedure

1. To export the issue details, click **Export**. The information is exported in CSV format.
2. Save the file in the location of your choice.

Wellness dashboard Summary details

	Critical	Caution	Informational
 Fans			
 Power Supplies			
 Processors	2		
 Storage	1		
 Memory	1		
 Networking			
 Security	2	4	

The **Wellness** dashboard displays a summary of all of the Critical, Caution, and Informational issues for each hardware component.

To access **Issue Details** about a specific device type and status, click the appropriate status icon. The **Issue Details** table displays the device type and status selected in the summary table. Use the dashboard sorting and filtering features to customize the view. For more information, see [Customizing table views](#).

Wellness dashboard details

	CREATION TIME	SEVERITY	CONDITION	SERIAL NUMBER
▶	11/23/2018 10:08:52	Caution	Security Override Switch ON	SGH727VLW2
▶	11/22/2018 10:10:52	Caution	Firmware Update Failure	XL450G9FB2805
▶	11/22/2018 10:10:52	Critical	IPMI Over LAN Enabled	SGH725TFWY
▶	11/22/2018 10:10:52	Caution	Flash Wear Out Attack	SGH712V6F5

The **Wellness** dashboard displays the following details for each issue:

- **Creation time**—The date and time the issue occurred.
- **Severity**—The issue severity, which is pulled from the AHS log.
- **Condition**—A description of the issue.
- **Serial Number**—The server serial number.

You can click the server serial number to navigate to the **Server List** page.

For more information about sorting and filtering the table, see [Customizing table views](#).

Wellness dashboard issue details

11/22/2018 10:10:52	Caution	Flash Wear Out Attack	SGH712V6F5
Server Serial Number:		Product Name:	ProLiant XL170r Gen9
Device:	Not Available	Location:	Bangalore_DC
Description:	<p>Symptom: Multiple successful firmware updates noticed in past 24 hours. This could potentially be a flash wear out attack.</p> <p>Cause: Multiple firmware updates</p> <p>Action: Please check device's iLO Event Logs for more details.</p> <p>Support Documentation: Not Available</p>		

When you view issue details, the following information is displayed.

- **Server Serial Number**—The serial number of the server experiencing the issue.
- **Product Name**—The device type.
- **Location**—The server physical location.
- **Device**—Details about the device configuration:
 - **Socket**
 - **Configuredspeed**
 - **Maximumspeed**
 - **Family**

- **Stepping**
- **Version**
- **Description**—Includes the following information:
 - **Symptom**—The symptom seen on the device for the current issue.
 - **Cause**—The issue cause.
 - **Action**—The troubleshooting steps to perform to fix the issue.
 - **Support Documentation**—Links to pertinent documentation, videos, and assistance.

Viewing the Infrastructure page

The Infrastructure page for servers provides details about the individual managed servers.

The default table view displays **All Servers**. To view the table information for one server, click **All Servers**, enter the server serial number, and then press **Enter**.

Viewing the Summary tab

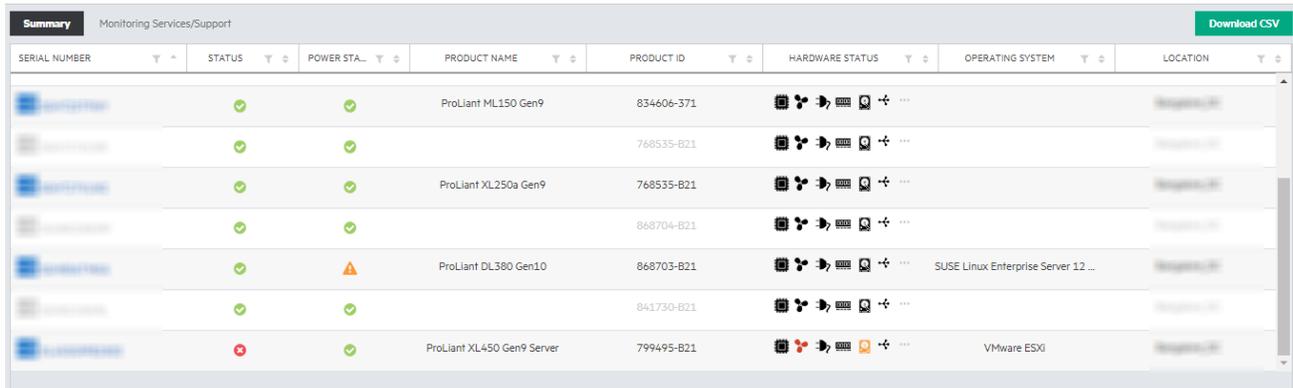
Procedure

1. Click **Infrastructure**, and then, under **Compute**, click **Servers**.

The **Summary** tab is displayed.

2. Optional. Use the sorting and filtering features to customize the table. For more information, see [Customizing table views](#).

Summary tab details



The screenshot shows a table titled 'Summary' with the subtitle 'Monitoring Services/Support'. A 'Download CSV' button is in the top right corner. The table has columns for SERIAL NUMBER, STATUS, POWER STA..., PRODUCT NAME, PRODUCT ID, HARDWARE STATUS, OPERATING SYSTEM, and LOCATION. The table contains seven rows of server data. The first three rows have blue serial numbers, indicating heartbeat information was received. The fourth row has a gray serial number, indicating heartbeat information was received but AHS log has not yet been received. The fifth row has a blue serial number. The sixth row has a gray serial number. The seventh row has a blue serial number and shows a power status icon with a red 'X'.

SERIAL NUMBER	STATUS	POWER STA...	PRODUCT NAME	PRODUCT ID	HARDWARE STATUS	OPERATING SYSTEM	LOCATION
834606-371	✓	✓	ProLiant ML150 Gen9	834606-371	🔌🔌🔌🔌🔌🔌🔌🔌		Manitoba, CA
768535-B21	✓	✓		768535-B21	🔌🔌🔌🔌🔌🔌🔌🔌		Manitoba, CA
768535-B21	✓	✓	ProLiant XL250a Gen9	768535-B21	🔌🔌🔌🔌🔌🔌🔌🔌		Manitoba, CA
868704-B21	✓	✓		868704-B21	🔌🔌🔌🔌🔌🔌🔌🔌		Manitoba, CA
868703-B21	✓	⚠️	ProLiant DL380 Gen10	868703-B21	🔌🔌🔌🔌🔌🔌🔌🔌	SUSE Linux Enterprise Server 12 ...	Manitoba, CA
841730-B21	✓	✓		841730-B21	🔌🔌🔌🔌🔌🔌🔌🔌		Manitoba, CA
799495-B21	✗	✓	ProLiant XL450 Gen9 Server	799495-B21	🔌🔌🔌🔌🔌🔌🔌🔌	VMware ESXi	Manitoba, CA

The **Summary** tab table includes the following information:

- **Serial Number**—The server serial number.

This information is provided by the AHS log.

If HPE InfoSight has received heartbeat and AHS log information for a server, the serial number is listed in blue. You can click a blue serial number to navigate to the server details page.

Servers listed in gray indicate that heartbeat information was received, but the AHS log has not yet been received.

- **Status**—The server health status.

This information is provided by the heartbeat status and is the rolled up health status of the server. For more information about status types, see [Health Issues tile](#).

- **Power Status**—The server power status.

This information is provided by the heartbeat status and is the rolled up status of the power supplies of the server. For more information about power status types, see [Server Power Status tile](#).

- **Product Name**—The server model and generation.

This information is provided by the AHS log.

- **Product ID**— The server model.

This information is provided by the AHS log.

- **Hardware Status**—The server hardware status.

This information is provided by the heartbeat status. It displays the status for the CPU, fan, power supply, memory, storage, network, and other. The other category reflects the health status of components not found in the other categories. The color of the icons indicates the severity of any issues found. A red icon means that something in the category has a critical status, whereas an orange icon means that something in the category has a caution.

To see tooltip detail, hover mouse over an icon.

- **Operating System**—The server operating system.

This information is provided by the AHS log.

NOTE: AMS is required to receive operating system version information.

- **Location**— The physical location of the server.

This information is provided by iLO Amplifier Pack.

For more information about sorting, filtering, and searching, see [Customizing table views](#).

Downloading the server list

Procedure

1. To download the server list into a CSV file, click **Download CSV**. The information is exported in CSV format.
2. Save the file in the location of your choice.

Viewing the Monitoring Services/Support tab

Procedure

1. Click **Infrastructure**, and then, under **Compute**, click **Servers**.
2. Click the **Monitoring Services/Support** tab.
3. Optional: Use the sorting and filtering features to customize the table. For more information, see [Customizing table views](#).

Monitoring Services/Support tab details

Summary		Monitoring Services/Support		Download CSV				
SERIAL NUMBER	WARRANTY / SUPPORT		HEARTBEAT DATA		HEALTH LOG DATA		DATA SOURCE	
	STATUS	END DATE	STATUS	LAST DATA SENT	STATUS	LAST DATA SENT	TYPE	ID
	Expiring	12/7/2018	Stale	2 months ago (10/25/2...	Missing	2 months ago (10/25/2...	iLO Amplifier	
	Active	6/30/2019	Stale	2 months ago (10/25/2...	Missing	Never	iLO Amplifier	
	Expired	5/20/2018	Stale	2 months ago (10/25/2...	Missing	Never	iLO Amplifier	
	Active	8/20/2019	Stale	2 months ago (10/25/2...	Missing	2 months ago (10/25/2...	iLO Amplifier	
	Active	8/20/2019	Stale	2 months ago (10/25/2...	Missing	2 months ago (10/25/2...	iLO Amplifier	

- **Serial Number**—The server serial number.

This information is provided by the AHS log.

If HPE InfoSight has received heartbeat and AHS log information for a server, the serial number is listed in blue. You can click a blue serial number to navigate to the server details page.

Servers listed in gray indicate that heartbeat information was received, but the AHS log has not been received.

- **Warranty / Support**—The warranty status and end date. The warranty status types include:
 - Active
 - Expired
 - Expiring
 - Unknown

For more information about warranty / support statuses, see [Warranty/Support Status tile](#).

- **Heartbeat Data**—The server status and date and time data was last received. The heartbeat is received every 10 minutes and includes. The heartbeat statuses include:
 - **Missing**—Displayed if the heartbeat data has never been received.
 - **Delayed**—Displayed if the heartbeat data has not been received for at least 25 minutes.
 - **Stale**—Displayed if the heartbeat data has not been received for at least 45 minutes.
 - **Good**—Displayed if the heartbeat data is received as expected.
- **Health Log Data**—The AHS log is received once daily and includes status and date and time log was last received.

If the **Health Log Data** status is listed as **Missing**, the AHS log is not being received.

- **Data Source**—Includes the **Type** and **ID** of where the data is being retrieved, which is iLO Amplifier Pack.

Downloading the server list

Procedure

1. To download the server list into a CSV file, click **Download CSV**. The information is exported in CSV format.
2. Save the file in the location of your choice.

Viewing the server details page

Procedure

1. Click a server serial number in any HPE InfoSight for servers table.

If HPE InfoSight has received heartbeat and AHS log information for a server, the serial number is listed in blue. You can click a blue serial number to navigate to the server details page.

Servers listed in gray indicate that heartbeat information was received, but the AHS log has not been received.

For more information on the system details page, see [Summary tab details](#).

The **Server <serial number>** page opens. Summary information is displayed along with tabs where you can view additional server details.

2. Click one or more server details tabs to navigate to the information you want to view.

Some server details tabs have additional tabs.

3. Optional. To sort or filter the table, see [Customizing table views](#).

Individual server summary

Summary

SUMMARY	WARRANTY/SUPPORT STATUS	HARDWARE STATUS	MONITORING SERVICES
Server SN: [REDACTED] Product Name: ProLiant DL380 Gen9 Product ID: [REDACTED] Location: [REDACTED]	Status: Active End Date: 12/7/2018	CPU Fans PSUs Memory Storage NICs Other [Icons for each category]	[Heartbeat icon] 2 months ago 10/25/2018 1:50:27 AM [AHS Log icon] 2 months ago 10/25/2018 7:11:48 AM

Displays the server serial number, product name, product ID, and location. The location information is pulled into HPE InfoSight from HPE iLO Amplifier Pack.

Warranty/Support Status

Displays the status and end date of the server warranty.

Hardware Status

Displays a roll-up status of CPUs, Fans, PSUs, Memory, Storage, NICs, and Other. The status icon color shows the status of the hardware. For more information, see [Summary tab details](#).

Monitoring Services

Displays the date and time for the last heartbeat status and date and time the AHS log was last received. For more information, see [Connectivity panel](#).

Server details tabs

- [Overview tab details](#)
- [Wellness Alerts tab details](#)
- [Event Logs tab details](#)
- [Server Hardware tab details](#)
- [Firmware & Software tab details](#)

Overview tab details

The **Overview** tab displays high-level server details received from the AHS log. You can find current setup information including hardware and firmware information. The following tiles are displayed:

System Board tile

- **Serial Physical**— The serial number of the server.
- **Product ID**— The model number of the server.

- **PCA Part Number**— The part number of the system board.
- **Build Date**—The date recorded in AHS for when the system was manufactured.

Processors tile

- **Processor**—The type of processor. There might be more than one processor.
- **Stepping**—The version or revision of the CPU.

Memory tile

Displays the type of DIMMs is installed and how many. There might be more than one DIMM listed.

Power Supply tile

Displays the information about the installed power supply units.

Storage tile

- **Slot**—The number of the slot the storage component is installed.
- **Firmware**—The Firmware version installed on the storage component.
- **Slot Drive Information**—The number and sizes of drives connected to each storage controller/device.

Networking tile

The name and firmware revision of each networking device in the system.

BIOS tile

- **BIOS Vendor**—BIOS vendor.
- **BIOS Version**—BIOS version.
- **BIOS Date**—BIOS date.

iLO tile

- **Firmware**—iLO firmware version and build date.
- **License**—the iLO license type.

Wellness Alerts tab details

The **Wellness Alerts** tab displays issues received from the AHS log. The following information is displayed:

- **Creation time**—The date and time the issue occurred.
- **Severity**—The issue severity, which is pulled from the AHS log.
- **Condition**
 - **Symptom**—The symptom seen on the device for the current issue.
 - **Cause**—The issue cause.
 - **Action**—The troubleshooting steps to perform to fix the issue.
 - **Support Documentation**—Links to pertinent documentation, videos, and assistance.

For information about sorting and filtering the table, see [Customizing table views](#).

Event Logs tab details

Information that is available on the **Event Logs** tab is pulled from the Integrated Management Log (IML) and the iLO Event Log. This information is divided between two additional tabs.

Integrated Management Log details

The IML provides a record of historical events that have occurred on the server. Events are generated by the system ROM and by services such as the iLO drivers. Logged events include server-specific information such as health and status information, firmware updates, operating system information, and ROM-based POST codes.

Entries in the IML can help you diagnose issues or identify potential issues. Preventative action might help to avoid disruption of service.

The **Integrated Management Log** tab content is obtained from the AHS log that is received from iLO Amplifier Pack.

The table includes the following information:

- **Severity**—The severity of the event.
 - **Critical**—The event indicates a service loss or an imminent service loss. Immediate attention is needed.
 - **Caution**—The event is significant but does not indicate performance degradation.
 - **Informational**—The event provides background information.
 - **Unknown**—The event severity could not be determined.
- **Description**—The component type and detailed characteristics of the recorded event.
- **Timestamp**—The date and time when the latest event of this type occurred.
- **Classification**—The HPE classification for the event; the type of event.
- **Support**—If available, learn more links are provided and are clickable to specific information for the event listed. Learn more links are only for events that have a warning or critical severity.

iLO Events Log tab details

The **iLO Event Log** tab content is obtained from the AHS log that is received from iLO Amplifier Pack.

The table includes the following information:

- **Severity**—The importance of the detected event.
 - **Critical**—The event indicates a service loss or imminent service loss. Immediate attention is needed.
 - **Caution**—The event is significant but does not indicate performance degradation.
 - **Informational**—The event provides background information.
 - **Unknown**—The event severity could not be determined.
- **Description**—The description identifies the component and detailed characteristics of the recorded event.
- **Timestamp**—The date and time when the latest event of this type occurred.
- **Classification**—The HPE classification for the event; the type of event, for example, **iLO**.

Server Hardware tab details

The **Server Hardware** tab contains information for each server hardware component. This information comes from the AHS inventory data. The data is divided into the following subtabs:

- **System Board**—Information about the system board, embedded systems, and USB devices.
- **Processor**—Information about each processor included in the server.
- **Memory**—Information about each DIMM. If multiple DIMMs are installed, click **Expand All** to view the full list.
- **Power Supply**—Information about each installed power supply.
- **Network**—Information about each installed NIC.
- **Smart Array Controller & Drivers**—Information about each installed smart array.
- **Embedded SDcard**—Information about each embedded SDcard.

Firmware & Software tab details

The **Firmware & Software** tab contains information about the installed firmware and drivers. The **Firmware** section displays firmware information for various server components, including the installed version. The **Drivers** section lists the versions of all installed drivers. If the server is powered off, the information on this page is current as of the last power off. Firmware information is updated only when the server is powered on and POST is complete.

NOTE: The driver data is only available if AMS is installed and running on the server.

Viewing the Resources menu

The **Servers** section of the **Resources** menu provides access to:

- **Documentation**—Link to HPE InfoSight for servers documentation.
- **Download SPP**—Link to the Service Pack for ProLiant (SPP) download page.
The SPP is a comprehensive systems software and firmware update solution.

Procedure

1. To view the **Resources** menu, click **Resources**.
The **Resources** menu opens.
2. Optional. To view HPE InfoSight for servers documentation, click **Documentation**.
The HPE InfoSight for servers documentation page is displayed.
3. Optional. To download Service Pack for ProLiant (SPP), click **Download SPP**.
The SPP **Drivers & software** page is displayed.

Creating an HPE Support Case

Procedure

1. Click **Resources**, and then under **Servers**, click **Support**.
The **Support Case Manager** page is displayed.
2. Enter your **Contract or warranty ID**.
Enter any of the following identifiers:
 - Product serial number (for a warranty)
 - Service Agreement ID (SAID)
 - Support Account Reference (SAR)
 - Packaged support ID
 - Nickname

NOTE: If you do not know the contract ID, click **Browse your contract & warranty products**, and select your product from the list.

3. Click **Submit case**.
The **Case details** page is displayed.
4. Enter a case title, operating system and version, vendor, severity, and provide as much detail as you can. Describe the problem and the steps you have taken to resolve issue.

NOTE: Datacenter Care customers: If you use a Principal SAID to submit a case, enter the device serial number in the **Problem description** field.

5. Click **Submit**.

Troubleshooting

Received an error message stating **There are no systems associated with your user profile. Click here to get started**

Symptom

Received an error message stating **There are no systems associated with your user profile. Click here to get started.**

Action

This is a defect that is not harmful in any way and only reflects the number of storage units you are monitoring. This will be resolved in an upcoming release and can be ignored.

Heartbeat status on the **Monitoring Services/Support** page shows never

Symptom

Heartbeat status on the **Monitoring Services/Status** page shows never; however, the data source shows iLO Amplifier Pack.

Cause

The server heartbeat data is either:

- Not being received from iLO Amplifier Pack.
- or
- iLO Amplifier Pack might have an issue receiving the heartbeat status from iLO.

Action

1. Check the iLO Amplifier Pack for details. Access the **Server Details** page, and then click **InfoSight Summary**.

This tab displays the upload status and details of logs sent to HPE and the download status and details of logs received from iLO.

2. In HPE InfoSight, verify that information is being received correctly from iLO Amplifier Pack by viewing the Server details page. For more information, see [Viewing the server details page](#).

Heartbeat status is current, but **AHS** status shows never or delayed

Symptom

Heartbeat status is current, but AHS status shows never or delayed for more than one day.

Cause

The data received from AHS might be too large to capture and send, or there could be an issue with the download from iLO.

Action

1. Access iLO Amplifier Pack.
2. To determine if the AHS log was omitted because the file size was too large, click **View Details**, and then click **InfoSight Summary**.

This tab displays the status of AHS download from iLO and AHS upload to HPE InfoSight.

How do I merge multiple organizations in HPE InfoSight for servers?

Symptom

How do I merge multiple organizations in HPE InfoSight for servers?

Cause

You cannot merge multiple organizations.

Action

To have multiple organizations merged, create a support case at <http://www.hpe.com/support/hpesc>.

Websites

Product websites

HPE InfoSight login

<https://infosight.hpe.com>

HPE InfoSight

<https://www.hpe.com/info/infosight>

HPE InfoSight for servers

<https://www.hpe.com/servers/infosight>

HPE InfoSight for servers documentation

<https://www.hpe.com/support/infosight-servers-docs>

iLO Information Library

iLO 4 and iLO 5

<http://www.hpe.com/info/ilo/docs>

iLO Amplifier Pack

www.hpe.com/support/ilo-ap-docs

HPE ProLiant Servers Information Library

HPE ProLiant Gen8 servers

<http://www.hpe.com/info/proliantgen8/docs>

HPE ProLiant Gen9 servers

<http://www.hpe.com/support/proliantgen9/docs>

HPE ProLiant Gen10 servers

<http://www.hpe.com/support/proliantgen10/docs>

HPE ProLiant Gen10 and HPE Synergy compute module troubleshooting

<http://www.hpe.com/info/Gen10-troubleshooting>

General

Hewlett Packard Enterprise Information Library

www.hpe.com/info/EIL

Support and other resources

Accessing Hewlett Packard Enterprise Support

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

Information to collect

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

Accessing updates

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

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

Customer self repair

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

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

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

Remote support

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

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

Remote support and Proactive Care information

HPE Get Connected

www.hpe.com/services/getconnected

HPE Proactive Care services

www.hpe.com/services/proactivecare

HPE Proactive Care service: Supported products list

www.hpe.com/services/proactivecaresupportedproducts

HPE Proactive Care advanced service: Supported products list

www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information

Proactive Care central

www.hpe.com/services/proactivecarecentral

Proactive Care service activation

www.hpe.com/services/proactivecarecentralgetstarted

Warranty information

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

HPE ProLiant and IA-32 Servers and Options

www.hpe.com/support/ProLiantServers-Warranties

HPE Enterprise and Cloudline Servers

www.hpe.com/support/EnterpriseServers-Warranties

HPE Storage Products

www.hpe.com/support/Storage-Warranties

HPE Networking Products

www.hpe.com/support/Networking-Warranties

Regulatory information

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

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

Additional regulatory information

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

www.hpe.com/info/reach

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

www.hpe.com/info/ecodata

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

www.hpe.com/info/environment

Documentation feedback

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