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## HPE InfoSight for HPE SimpliVity Getting Started

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#### Support

All documentation and knowledge base articles are available on HPE InfoSight at **<u>https://infosight.hpe.com</u>**. To register for HPE InfoSight, click the *Sign up* link on the HPE Sign In page.

#### Email: support@nimblestorage.com

For all other general support contact information, go to https://www.hpe.com/us/en/services/nimble-storage.html.



## Contents

HPE InfoSight for HPE SimpliVity	4
Prerequisites	4
Differences between HPE OmniStack versions	5
Additional resources	6

Manage	e organizations	8
Me	erge organizations	. 8
Rei	ename an organization	.8
Cre	reate an organization	. 9
De	elete an organization	.9

HPE InfoSight registration	
Registration guidelines	
vSphere: HPE InfoSight Registration	
Enable the registration action (Windows)	
Enable the registration action (VCSA)	12
Register with HPE InfoSight	
Hyper-V: Register with HPE InfoSight	

Infrastructure details on HPE InfoSight	
View data center details	
View cluster details	
View details for top virtual machine contributors	
View HPE SimpliVity host details	
View HPE SimpliVity host summary	
Monitor HPE SimpliVity hosts	
View details for virtual machines	
View details for backups	
View details for cluster storage efficiency	
View details for cluster and host capacity	
View HPE SimpliVity Wellness Dashboard	
Configure HPE Wellness contact preferences	23

24
.24
.25
.26
.26
.26
•

Appendix A: Support and other resources	2	8
---	---	---

# HPE InfoSight for HPE SimpliVity

HPE InfoSight is an artificial intelligence (AI) platform that predicts and prevents problems before they arise across your infrastructure. This release of HPE InfoSight for HPE SimpliVity does not provide the AI abilities yet. But, the initial release of HPE InfoSight for HPE SimpliVity can:

- Open support cases automatically.
- Lower storage operational expenses.
- Allow access to monitor your data center infrastructure 24 hours a day, seven days a week.
- Support the same features that HPE OmniWatch provided in earlier versions of HPE SimpliVity.

When you use HPE InfoSight to monitor your HPE SimpliVity federation, you can:

- View the infrastructure of your federation, such as HPE SimpliVity datacenters, clusters, host, datastores, and virtual machines.
- Monitor virtual machine throughput, I/O, and latency.
- Review details on the cluster storage efficiency and see the predicted number of days when you could run out of storage capacity.
- Access details on the top virtual machine contributors, including logical size and average I/O in a 24 hour time span. Both of these details help you to determine whether a virtual machine is a top contrbutor to the physical storage use in a cluster.
- View the connectivity status of the HPE Simplivity node every 5 minutes and also the hardware status of the disks. (This feature is available starting with HPE OmniStack 4.1.0.)

For details on how to use the HPE InfoSight portal, see Navigating the HPE InfoSight Portal.

#### Supported hypervisors

Starting with HPE OmniStack 4.0.0, HPE InfoSight supports HPE OmniStack for vSphere and HPE OmniStack for Hyper-V.

#### HPE InfoSight and HPE OmniWatch

Starting with HPE OmniStack 4.0.0, HPE InfoSight includes all the original HPE OmniWatch functionality. In the HPE SimpliVity Plug-in for vSphere Client and the HPE OmniStack Add-in for Hyper-V, all references to HPE OmniWatch changed to HPE InfoSight.

#### Location of collected data

After you enable HPE InfoSight, the collected data is stored in an HPE data center that is configured specifically for HPE InfoSight. This data center is hosted within the HPE secure and private infrastructure.

#### Automated support case generation

For all versions of HPE OmniStack, automated support case generation continues to function as usual.

To ensure automatic support case generation continues, depending on your version of the HPE OmniStack software, enable HPE InfoSight or HPE OmniWatch with the management interfaces or the HPE OmniStack CLI.

### **Prerequisites**

Review the following prerequisites before using the HPE InfoSight portal:



- In the HPE SimpliVity Plug-in for vSphere Client or the HPE OmniStack Add-in for Hyper-V, ensure that HPE InfoSight is enabled or, if you are using an earlier version of the software, HPE OmniWatch is enabled.
  - For vSphere: In the HPE SimpliVity Plug-in for vSphere Client, navigate to the Configure tab for a cluster.

**NOTE:** Depending on the version of the HPE SimpliVity Plug-in for vSphere Client that you are using, the location of this action might be different.

- For Hyper-V: In the HPE OmniStack Add-in for Hyper-V, in the All Hosts view, in the Actions menu, select Configure HPE InfoSight.
- Verify that port 443 is open to outbound traffic:
  - For all versions of the HPE OmniStack software, open port 443 to https://infosight.hpe.com.
  - For HPE OmniStack 3.7.9 or later, open port 443 to https:/midway.ext.hpe.com/.
  - For HPE OmniStack 3.7.8, open port 443 to rsn.simplivity.com.

This setting is required to ensure the registration process works correctly.

- Your clusters use HPE OmniStack 3.7.8 and later for HPE OmniStack for vSphere or 4.0.0 and later for HPE OmniStack for Hyper-V.
- Register your HPE SimpliVity clusters with HPE InfoSight, as described in this guide.

For vSphere: If you are using HPE OmniStack 3.7.10 or earlier, enable the Registration action for Windows or vCenter Server Appliance (VCSA), as described in this guide.

### **Differences between HPE OmniStack versions**

HPE InfoSight supports HPE OmniStack 3.7.8 and later for HPE OmniStack for vSphere.

HPE InfoSight supports HPE OmniStack 4.0.0 and later for HPE OmniStack for Hyper-V.

Depending on the version of the software that a federation uses, you could experience different behaviors with HPE InfoSight.

#### Differences for HPE OmniStack 4.1.2

HPE Infosight Server integration with HPE SimpliVity - This feature integrates HPE Infosight Server capability with your HPE SimpliVity infrastructure so that the Active Health Status of server hardware components can be monitored periodically on the HPE Infosight portal.

If any hardware component fails, a support ticket is automatically opened in SFDC for the Support Teams' attention.

You can use this feature by registering your server iLO information in the HPE SimpliVity Plug-in for vSphere web client or by using the below CLI commands.

- svt-ilo-credential-show
- svt-ilo-credential-store
- dsv-support-ahs

#### Differences for HPE OmniStack 4.1.0

HPE SimpliVity hosts support the heartbeat feature. The hosts report every 5 minutes. The data includes the hardware disk status. You can see this information on the Host Summary and Host Monitoring page.



#### **Differences for HPE OmniStack 4.0.0**

The management interfaces support the Registration, Set Proxy, and Test Connectivity actions.

#### Differences for HPE OmniStack 3.7.9

- Required: Enable the Registration action in the HPE SimpliVity Plug-in for vSphere Client.
- Default server where collected data is sent:

midway.ext.hpe.com

Test connectivity

If the connectivity test fails, use the following procedure:

• On a machine that has access to public DNS, use the following command:

# nslookup midway.ext.hpe.com

• Create entries for three of the IPv4 addresses in the nslookup results, one from each subnet: For example:

16.230.110.14 midway.ext.hpe.com 16.228.110.20 midway.ext.hpe.com 16.228.110.21 midway.ext.hpe.com

Proxy server

For set up instructions, see this knowledge base article, <u>https://support.hpe.com/hpsc/doc/public/display?</u> <u>docLocale=en\_US&docId=mmr\_sf-EN\_US000061074&withFrame</u>.

#### **Differences for HPE OmniStack 3.7.8**

Registration

Required: enable the Registration action in the HPE SimpliVity Plug-in for vSphere Client.

• Default server where collected data is sent:

rsn.simplivity.com

Test connectivity

If the connectivity test fails, add a DNS entry for the following object:

216.34.120.132 rsn.simplivity.com simplivity.axeda.com

Proxy server

For set up instructions, see this knowledge base article, <u>https://support.hpe.com/hpsc/doc/public/display?</u> docLocale=en\_US&docId=mmr\_sf-EN\_US000061074&withFrame.

### **Additional resources**

#### Warranty and entitlement information for HPE SimpliVity nodes

To view warranty and entitlement information for HPE SimpliVity nodes, see the following Support Alerts - Customer Advisory Note: <u>https://support.hpe.com/hpesc/docDisplay?docId=sf000099285en\_us</u>.

#### **Registration and connectivity issues**

If you experience issues with registration or connectivity issues, see the following resources:



#### • HPE SimpliVity - Troubleshooting HPE InfoSight Connectivity Issues

• The following video guide is also available:

#### How to Register HPE SimpliVity with InfoSight

For additional assistance, contact <u>Customer Support (https://www.hpe.com/support/hpesc)</u>.

#### Frequently asked questions

To find additional information about HPE SimpliVity on HPE InfoSight, see **Frequently Asked Questions (FAQ)** at the end of this guide.



## Manage organizations

### **Merge organizations**

#### About this task

A best practice is to use one organization to view all your HPE devices. If you have multiple organizations, consider merging them. Merging organizations merges the users and systems from one organization to another.

Some reasons to merge organizations include:

- You created multiple organizations accidentally and you want to view all your federations in one place.
- Your company acquires another company and you want to merge their data with the corporate organization.

Before you merge organizations, keep the following considerations in mind:

- You must be an administrator for both organizations.
- After you complete the merge, the source organization is permanently removed.
- If conflicts occur during the merge, the items in the target organization are retained.
- Users in the target organization retain their roles. For example, if a user is assigned to the Admin role in the source organization and to the User role in the target organization, the user is assigned to the User role in the merged organization.

#### Procedure

- 1. From the Settings menu, select My Organization.
- Click Merge Organizations. The MERGE ORGANIZATIONS window opens.
- 3. Select an organization from the Source menu.
- 4. Click **Merge** and follow the prompts.

### **Rename an organization**

#### About this task

You must be an administrator for the organization that you want to rename.

Renaming an organization has no effect on the enrolled devices or existing users.

- 1. From the Organization selector, select the organization you want to rename.
- 2. Click Settings and then click My Organization.
- 3. Click Edit.
- 4. In Edit Organization, rename the organization and click Save.
- 5. Notify all users in the organization of the new organization name.

### **Create an organization**

#### About this task

The first user in your company who logs in to HPE InfoSight creates an organization. As a best practice, enroll all devices with a single organization. Doing so provides a global view of all your HPE products, including your federations.

Depending on your environment, it might become necessary to use more than one organization. For example, a very large company could have a need to use different organizations for different subsidiaries.

Review the following considerations:

- Organizations are composed of users and systems.
- By default, the first enrolled user of an organization is created as an administrator.
- Only administrators can create new organizations.
- Once a new organization is created, you can edit it, merge it into another organization, or delete it.

#### Procedure

- 1. Click the Settings icon and then click My Organization.
- 2. Click Create Organization.
- Enter an organization name and a description, and then click Create Organization and Enroll Devices.
   The text that you enter for the description displays with the organization name in the Organization selector.
- In Device Enrollment, select the HPE SimpliVity tab to obtain a claim token that you need to register hosts in a federation.

### **Delete an organization**

#### About this task

Deleting an organization with registered systems removes access to all historical data. In most cases, merging organizations is the preferred action instead of deleting them. As part of the merge process, the source organization is removed permanently; however, access to the historical data is retained.

Some reasons for deleting an organization include:

- You have an organization that has no registered systems.
- Someone created an additional organization accidentally and you do not need the extra organization.
- You are not interested in retaining any historical data in an organization.

- **1.** From the Organization selector, select the organization you want to delete.
- 2. Click the Settings icon and then click My Organization.
- 3. Click Permanently Delete this Organization.

- 4. In Confirm Organization Delete, enter the word **DELETE** in uppercase and then click **Yes, permanently delete this** organization.
- 5. In the confirmation window, click **OK**.

# HPE InfoSight registration

### **Registration guidelines**

#### Use existing organization and tenant

If you have an existing organization and tenant for one HPE product, continue to use that account for HPE SimpliVity. You can use a single organization to view multiple HPE products in HPE InfoSight.

#### Enroll devices

Enrollment of HPE SimpliVity devices is required before you can view menu options for HPE SimpliVity. To enroll devices from an existing organization and tenant, go to Settings and select **Device Enrollment**.

#### For versions earlier than 4.1.0 – Wait 24 hours after enrollment

Menu options for HPE SimpliVity are available approximately 24 hours AFTER you enroll devices. HPE InfoSight collects the Telemetry data before enabling the use of the HPE SimpliVity menu options.

#### For 4.1.0 and later – Wait five minutes to one hour after enrollment

Menu options for HPE SimpliVity are available after HPE InfoSight receives the first heartbeat after enrollment.

This process can take between five minutes to one hour. HPE InfoSight processes the heartbeat data before it enables the use of the HPE SimpliVity menu options. If the device is being registered for the first time, only the host monitoring page shows valid data. Other pages fill up with data within 24 to 48 hours once HPE InfoSight gets additional telemetry information from the host.

### vSphere: HPE InfoSight Registration

- If you are using HPE OmniStack for vSphere 3.7.10 or earlier, enable the Registration action in the HPE SimpliVity Plug-in for vSphere Client before you try to register your systems.
- If you are using HPE OmniStack for vSphere 4.0.0 or later, use the HPE SimpliVity Plug-in for vSphere Client to register your systems.

#### Enable the registration action (Windows)

#### About this task

Use this procedure if:

- The clusters that you want to register with HPE InfoSight are using HPE OmniStack for vSphere 3.7.10 or earlier.
- You installed the HPE SimpliVity Plug-in for vSphere Client on a Windows system.

- In the HPE SimpliVity Plug-in for vSphere Client, verify that HPE OmniWatch is enabled: From the Configure tab, click Clusters > HPE OmniWatch
- 2. Enable the registration action in the com.simplivity.client.properties file:



- a. Locate the file in C:\ProgramData\VMware\vCenterServer\cfg\vsphere-client. If the file does not exist, create it.
- **b.** Add the following entry to the properties file:

# Enable display of InfoSight registration com.simplivity.common.enableInfoSightRegistration=true

3. Restart the VMware vSphere-ui service.

#### What to do next

To register your systems, use the procedure in **Register with HPE InfoSight**.

#### Enable the registration action (VCSA)

#### About this task

Use this procedure if:

- The clusters that you want to register with HPE InfoSight are using HPE OmniStack for vSphere 3.7.10 or earlier.
- You installed the HPE SimpliVity Plug-in for vSphere Client on a vCenter Server Appliance (VCSA).

#### Procedure

- In the HPE SimpliVity Plug-in for vSphere Client, verify that HPE OmniWatch is enabled.
   From the Configure tab, click Clusters > HPE OmniWatch.
- 2. Log in to VCSA with root credentials. Enable shell commands with these commands:

>shell.set --enable True
>shell

- 3. Run commands in the following order:
  - a. cd /etc/vmware/vsphere-client/

#### **b.** 1s

If **com.simplivity.client.properties** file does not exist proceed to step c. If it does exist, go to step g.

- c. touch com.simplivity.client.properties
- d. chown vsphere-client:users com.simplivity.client.properties
- e. chmod 644 com.simplivity.client.properties
- f. 1s -all

This command verifies that properties are the same as the webclient.properties.

- g. vim com.simplivity.client.properties
- h. Add the following text:

```
# Enable display of InfoSight registration
com.simplivity.common.enableInfoSightRegistration=true
```

i. Save the file and exit:

Pres ESC and enter :wq.

j. Stop and start the vsphere-ui service:

```
service-control --stop vsphere-ui
service-control --start vsphere-ui
```

4. Reload the vCenter Server Web user interface.

#### What to do next

To register your systems, use the procedure in Register with HPE InfoSight.

#### **Register with HPE InfoSight**

#### About this task

Use this procedure to register your HPE SimpliVity hosts with HPE InfoSight.

After registration is complete, wait 24 to 48 hours to view your federation details in the HPE InfoSight portal.

NOTE: The HPE InfoSight portal displays HPE SimpliVity menus only after you register an HPE SimpliVity device.

Do not create a new organization and tenant for your HPE SimpliVity products. Instead, follow the instructions in this topic to register HPE SimpliVity devices.

#### Procedure

1. If not done already, create an HPE Passport account as described at: <u>https://cf.passport.hpe.com/hppcf/</u> <u>createuser.do</u>

You can use an existing account instead, if you have one.

- Log in to HPE InfoSight with your HPE Passport account: <u>https://infosight.hpe.com</u>.
   For new accounts, verify your account through the automatic message sent to your mailbox from HPE InfoSight.
- **3.** Obtain a claim token:
  - If you are using a new account, click **HPE SimpliVity Registration** to obtain a claim token. To copy the claim token, click **Copy to clipboard**.
  - If you logged in with an existing account, in Settings, select **Device Enrollment**. In the HPE SimpliVity tab, copy the claim token by clicking **Copy to clipboard**.
- 4. Log in to vSphere Client (HTML5) with the HPE SimpliVity Plug-in for vSphere Client installed.
- 5. From vSphere Client Home, click HPE SimpliVity Federation, then click HPE Infosight.
- **6.** In the HPE InfoSight Registration section, paste the claim token you obtained in the HPE InfoSight portal in to the HPE InfoSight Claim Token box.
- 7. Click Register.

### Hyper-V: Register with HPE InfoSight

#### About this task

Use this procedure to register your HPE OmniStack for Hyper-V hosts with HPE InfoSight.



After registration is complete, wait 24 to 48 hours to view your federation details in the HPE InfoSight portal.

#### Procedure

1. If not done already, create an HPE Passport account as described at: <u>https://cf.passport.hpe.com/hppcf/</u> <u>createuser.do</u>

You can use an existing account instead, if you have one.

2. Log in to HPE InfoSight with your HPE Passport account: https://infosight.hpe.com.

For new accounts, verify your account through the automatic message sent to your mailbox from HPE InfoSight.

- **3.** Obtain a claim token:
  - If you are using a new account, click **HPE SimpliVity Registration** to obtain a claim token. To copy the claim token, click **Copy to clipboard**.
  - If you logged in with an existing account, in Settings, select **Device Enrollment**. In the HPE SimpliVity tab, copy the claim token by clicking **Copy to clipboard**.
- 4. Log in to a VMM console with the HPE OmniStack Add-in for Hyper-V imported.
- 5. Log in to the HPE OmniStack Add-in for Hyper-V.
- **6.** From the All Hosts view, in the All Hosts Action menu, select Set HPE InfoSight Registration. Registration applies to all the clusters in the federation.
- 7. In the Set HPE InfoSight Registration window, paste the claim token you obtained in the HPE InfoSight portal in to the HPE InfoSight Claim Token box.
- 8. Click Register.

# Infrastructure details on HPE InfoSight

### View data center details

#### About this task

The Data Centers view displays details on the amount of data stored, used physical space, and space saved with HPE SimpliVity technology.

#### Procedure

#### 1. Click Infrastructure > Data Centers.

This view displays the following details for each data center:

- The number of clusters and hosts in a data center.
- The number of virtual machines on the hosts in the data center.
- The amount of data stored.
- The used physical space.
- Space savings due to HPE SimpliVity technology.
- In green, the number of clusters that are at 90% full or greater (Depleted Clusters), if any.
- 2. To see details on the hosts, or virtual machines in a cluster, click the links with the numeric summaries at the top.
- 3. To filter data, use the Sort Data Centers by menu and select a option.
- 4. To download the data for all the clusters in a file, click **Download CSV**.

### **View cluster details**

#### About this task

The Clusters view displays details for all the clusters in a federation.

To access this view, use the following procedure:

#### Procedure

#### 1. Click Infrastructure > Clusters.

This view displays the following details for each data center:

- The names of the clusters.
- The number of virtual machines in each cluster.
- Logical space, including: amount of virtual machine data, local and remote backups, and total data stored.
- Physical space (used and total).
- Compression ratio.
- Deduplication ratio.



- HPE SimpliVity efficiency ratio.
- Total space saved with HPE SimpliVity technology.
- 2. To view additional details about a specific cluster, click a cluster name.
- 3. To filter data, click For All Clusters, enter a name, and click the Search icon.
- 4. To filter data in any column with a filter icon, click the filter icon, enter details, and click Apply.
- 5. To sort the data, click the up or down arrows in each column header.
- 6. To download the data for all the clusters in a file, click **Download CSV**.

### View details for top virtual machine contributors

#### About this task

The Top Virtual Machine Contributors view displays details for the virtual machines based on the following information:

- Top virtual machine contributors based on their logical storage usage (the chart on the left).
- The highest read and write activity (I/O) within a 24 hour time span (the chart on the right).

The chart of virtual machines displayed on the left ia sorted by logical size. The chart of average I/O on the right is sorted independently from the chart of virtual machines. If a virtual machine is displayed near the top of both charts, it is an indication that the virtual machine is a top contributor to the physical storage use in the cluster.

To access this view, use the following procedure:

#### Procedure

#### 1. Click Infrastructure > Clusters.

2. Click the row with the cluster you want to examine.

The Top Virtual Machines view displays a cluster summary and the following details on the top virtual machine contributors:

- The number of virtual machines in the cluster.
- Used and free physical space in the cluster.
- The number of hosts
- Total logical size, including data, local, and remote backups for top contributors.
- Average for the top ten virtual machines with the highest I/O activity.
- 3. To view additional details, hover your cursor over the data in the TOP VIRTUAL MACHINES section.

### View HPE SimpliVity host details

#### About this task

The hosts view displays details on all the hosts in a federation, and allows you to manage email notification subscriptions. You can subscribe to receive notifications when a heartbeat is missing or if there is a failure in SSD/ HDD drives. (This feature is only available for systems running 4.1.0 and later.)



To access this view, use the following procedure:

#### Procedure

1. Click Infrastructure > HPE SimpliVity Hosts.

This view displays the following details for each host:

- Serial number.
- The name of the Virtual Controller on the host.
- The name of the cluster for the host.
- The hardware model for the host.
- The version of the software installed on the host.
- The version of the hypervisor management system software used in the federation.
- The version of the hypervisor software used in the federation.
- The entitlement status for the host.
- The end date for the entitlement.
- The date when HPE InfoSight last received data for the host.
- 2. To filter data, click For All HPE SimpliVity Hosts, enter a name, and click the Search icon.
- 3. To filter data in any column with a filter icon, click the filter icon, enter details, and click Apply.
- **4.** To sort the data, click the up or down arrows in each column header.
- 5. To download the data for all the clusters in a file, click **Download CSV**.
- To view details on a specific Virtual Controller, click the name.
   For versions earlier than 4.1.0, hardware status and heartbeat monitoring is disabled.
- 7. To manage email subscriptions, click Manage Subscriptions.
- 8. Use the toggle to subscribe or unsubscribe to the email notifications.If you are an administrator, you can view the subscription status for everyone in your organization.

### View HPE SimpliVity host summary

#### About this task

The HPE SimpliVity Host Summary view displays basic details for all hosts in the federation.

For the hardware status conditions:

- For versions earlier than 4.1.0, the hardware status is not supported so the icons are disabled.
- HDD and SSD information is not supported on systems running HPE OmniStack earlier than 4.1.0.
- If a model does not have HDD/SSD, the HDD and SSD status is disabled.
- If all disks are healthy, the status is black.
- If any disks are unhealthy, the status is red.
- Use the tool tip to show the number of disks that are unhealthy.



#### Procedure

#### 1. Click Infrastructure > HPE SimpliVity Hosts.

This view displays the following details for each host:

- Serial Number with Information icon that shows if a node is connected to iLO. Click the link to show the hardware status of this node.
- Virtual Controller
- Cluster Name
- Model
- Software version with Information icon that indicates if a newer version of HPE SimpliVity software is available. Click the link to go to the HPE SimpliVity Release page.
- Hypervisor Management System version
- Number of HDD and SSD and their sizes
- 2. To filter data, click For All HPE SimpliVity Hosts, enter a name, and click the Search icon.
- 3. To filter data in any column with a filter icon, click the filter icon, enter details, and click Apply.
- 4. To sort the data, click the up or down arrows in each column header.
- 5. To download the data for all the clusters in a file, click **Download CSV**.
- 6. To view details on a specific Virtual Controller, click the name.For versions earlier than 4.1.0, hardware status and heartbeat monitoring is disabled.

### **Monitor HPE SimpliVity hosts**

#### About this task

Use the Monitoring Status/Support option to view host health and to determine how current the Telemetry and Heartbeat data is.

The icons that indicate how current the data is are described in the following table.

Metric	Check Icon	Exclamation Icon	X Icon
Telemetry	Telemetry received in the last two days	Telemetry is older than two days	Telemetry is older than three days
Heartbeat	Heartbeat received in the last 30 minutes	Heartbeat is older than 30 minutes	Heartbeat is older than 24 hours

- 1. Click Infrastructure > HPE SimpliVity Hosts.
- 2. Click Monitoring Status/Support.
- 3. To filter data, click For All HPE SimpliVity Hosts, enter a name, and click the Search icon.
- 4. To filter data in any column with a filter icon, click the filter icon, enter details, and click Apply.



- 5. To sort the data, click the up or down arrows in each column header.
- 6. To download the data for all the clusters in a file, click **Download CSV**.
- To view details on a specific Virtual Controller, click the name.
   For versions earlier than 4.1.0, the hardware status and heartbeat monitoring is disabled.

### View details for virtual machines

#### About this task

The Virtual Machines view displays details on all the virtual machines in a federation.

To access this view, use the following procedure:

#### Procedure

- 1. Click Infrastructure.
- 2. Under HyperConverged, select Virtual Machines.

This view displays the following details for each virtual machine:

- Virtual Machine Name: The virtual machine name.
- Cluster Name: The name of the cluster where the virtual machine is located.
- Logical Space: Logical space, including the size of the virtual machine data, the size of local and remote backups, and total size.
- Backups: Backup counts for local, remote, and external backups.
- I/O (Past 24 Hours): I/O activity for past 24 hours (reads and writes).
- Last Report Date: The last date when HPE InfoSight received data.
- 3. To view additional details about a specific virtual machine, click a virtual machine name.
- 4. To filter data, click For All Virtual Machines, enter a name, and click the Search icon.
- 5. To filter data in any column with a filter icon, click the filter icon, enter details, and click Apply.
- 6. To sort the data, click the up or down arrows in each column header.
- 7. To download the data for all the virtual machines in a CSV file, click Download CSV.

### View details for backups

#### About this task

The Backups view displays details for the backups associated with virtual machines in a federation.

To access this view, use the following procedure:

- 1. Click Infrastructure.
- 2. Under HyperConverged, select Backups.



- 3. Select any of the following tabs:
  - Local Backups: Backups are stored in the same cluster where the virtual machines reside.
  - Remote Backups: Backups are stored in a cluster that is different from the one where the virtual machines resides.
  - External Backups: The backup is stored on an external store (for example, HPE StoreOnce Catalyst).

This view displays the following details for each backup type:

- Local Backups:
  - Virtual Machine Name: The name of a virtual machine.
  - Cluster Name: The name of the cluster where the virtual machine resides.
  - Local Backup Count: The number of backups stored in the cluster where the virtual machine resides.
  - Local Backup Logical Size: The logical size of the backup stored in the cluster where the virtual machine resides.
  - Latest Report Date: The last date when HPE InfoSight received backup data.
- Remote Backups:
  - Virtual Machine Name: The name of a virtual machine.
  - Remote Cluster Name: The name of the remote cluster where backup is stored.
  - Remote Local Backup Count: The number of backups stored in the remote cluster.
  - Remote Local Backup Logical Size: The logical size of the backup stored in the remote cluster.
  - Latest Report Date: The last date when HPE InfoSight received data.
- External Backups:
  - Virtual Machine Name: The name of a virtual machine.
  - External Store Name: The name of the external store where backup is stored.
  - External Local Backup Count: The number of backups stored on the external store.
  - External Local Backup Logical Size: The logical size of the backup stored on the external store.
  - Latest Report Date: The last date when HPE InfoSight received data.
- 4. To view additional details about backups for a specific virtual machine, click a virtual machine name.
- 5. To filter data, click For All Backups, enter a name, and click the Search icon.
- 6. To filter data in any column with a filter icon, click the filter icon, enter details, and click Apply.
- 7. To sort the data, click the up or down arrows in each column header.
- 8. To download the data from any Backup tab, click **Download CSV**.

### View details for cluster storage efficiency

#### About this task

The Cluster Storage Efficiency view displays details on the space available in all the clusters in a data center. It provides a view of the used and physical space for all data centers, specific data centers, and each individual cluster.



To access this view, use the following procedure:

#### Procedure

1. Click Dashboards > Storage Efficiency.

This view displays the following details:

- Summary of the used space for all clusters.
- Physical space for all clusters.
- Space savings for all the clusters in all the data centers
- For each cluster:
  - The cluster name.
  - The data center name.
  - The number of days until no space available.
  - Physical capacity, including: (space used, total size, and space saving from using HPE SimpliVity.
  - Percentage of growth in the selected number of days (90, 60, or 30).
- 2. To change the data center displayed, use the All Data Centers menu.
- 3. To view additional details about each cluster, click the cluster name.
- **4.** To change the time range, click the appropriate range (1 week, month, 3 months, 6 months, 1 year, or customize the range).
- 5. To download the data in a file, click **Download CSV**.

### View details for cluster and host capacity

#### About this task

The Cluster and Host Capacity views display the following details:

- Current and predicted usage at the cluster level.
- Current usage at the host level.

The values in this view are based on data collected previously.

To access this view, use the following procedure:

- 1. Click Dashboards > Storage Efficiency.
- In the section below the Usage chart, click a cluster name.
   The Cluster Prediction tab displays the following details for the cluster:
  - Total capacity.
  - Current usage.
  - Predicted usage.



The Host Usage tab displays the following details for a host:

- Total capacity for each host in the cluster.
- Current usage for each host in the cluster.
- **3.** To change the time range, click the appropriate range (1 week, month, 3 months, 6 months, 1 year, or customize the range).

### View HPE SimpliVity Wellness Dashboard

#### About this task

The HPE SimpliVity Wellness Dashboard displays the wellness of the HPE SimpliVity hosts under the organization. The data sent back is used for detecting issues on the host by way of signature matching.

It helps the Support team and the customers to view all the issues instantaneously for their systems on the InfoSight portal and enables corrective action to be taken as per the recommended resolution.

To access this view, use the following procedure:

#### Prerequisites

The dashboard displays issues with severity as Critical, Caution, and Informational. It gives the host information and also details about the issues occurring on the system together with their plausible resolutions.

#### Procedure

#### 1. Click SimpliVity > HPE SimpliVity Wellness Dashboard.

The view displays the following details:

- Issue Creation Time Range: This is a filter to display issues based on their creation time in the range of 1 week, 1 month, 3 months, 6 months, or 1 year. It also filters based on acknowledged issues.
- Issue Summary: The Issue Summary is the overall count of the issues in the respective category of their severity and states the count of issues that are in Critical, Caution or Informational condition.
- Issue Details: Displays a detailed view of all the issues.
- 2. The Filters section is where you can filter issues based on Severity, Cluster Name, Host Name, and Serial Number.
- **3.** To search for issues, enter text in the Search box.
- 4. To mark a selected issue as acknowledged, click Acknowledge. This means that either the issue is resolved or sent to the Support or Development Team to debug. You can choose to acknowledge any issue.
- 5. To mark the issue unacknowledged, click Unacknowledge.
- 6. To exclude an issue from the HPE SimpliVity Wellness Dashboard, click Clear.
- 7. View the Column Details as described in the following table:



Column	Description
ISSUE CREATION TIME	The time the issue is generated on the HPE SimpliVity host.
SEVERITY	The categorization of the issue, one of Critical, Caution, or Informational.
CLUSTER NAME	Cluster name of the HPE SimpliVity host.
HPE SIMPLIVITY HOST	HPE SimpliVity Host Serial Number and Host Name.
CONDITION	Description of the issue seen on the HPE SimpliVity host.
RESOLUTION	Suggested resolution for the issue, including KB article references if applicable.
DETAIL	Detailed description of the issue.
CATEGORY	Category such as Software, Hardware, or External.
ACKNOWLEDGED	The email ID of the user who acknowledged the issue and the date and time of the acknowledgment.

8. To export the report in CSV format, click **Export**.

### **Configure HPE Wellness contact preferences**

#### About this task

The **Configure** view is used to collect the customer contact information from the HPE InfoSight portal. This information is provided to HPE Support when HPE InfoSight for HPE Simplivity creates an automatic support case. The **Configure** view displays details of the HPE Wellness alert preferences for support case creation, if defined.

To add or change the details of contacts, you must have Admin rights. If you do not have Admin rights and contact details are defined, the **Configure** view displays the contact details but you cannot change them. If you do not have Admin rights and no contact details are defined, the **Configure** button is disabled.

To access this view, use the following procedure:

- 1. Click Main Menu > Simplivity > HPE SimpliVity Wellness Dashboard > Streaming Wellness.
- 2. Click the **Configure** button. The **Configure** window appears.
- 3. Add contact details. Ensure that you complete the boxes marked with a red asterisk.
- Optional: Provide contact information for an alternative contact in the organization. To do this, click Add Alternate Contact Information and provide the Email Address, Work Phone, First Name, and Last Name of an alternative contact.
- 5. Click the Submit button.

# Frequently Asked Questions (FAQ)

### **Connectivity and registration**

#### What firewall rules do I need in my infrastructure?

• All versions of HPE OmniStack:

Open port 443 to https://infosight.hpe.com for registration signature validation. Test the connectivity with this command:

curl -v https://infosight.hpe.com

• HPE OmniStack 3.7.8 and earlier

Open port 443 to rsn.simplivity.com. Test the connectivity with this command:

curl -v https://rsn.simplivity.com

• HPE OmniStack 3.7.9 or later:

Open port 443 to https:/midway.ext.hpe.com/. Test the connectivity with the svt-supportagent- test command or this command:

curl -v https://midway.ext.hpe.com

## What if get an error such as "could not resolve host" or "Hostname was NOT found," or I know that DNS is not available in my environment?

Add entries in the etc/hosts file if DNS is not available.

#### Can I use a proxy server to establish connectivity?

Yes:

• HPE OmniStack 3.7.8:

To set a proxy, use the HPE SimpliVity Plug-in for vSphere Client

• HPE OmniStack 3.7.9:

A defect exists in the HPE SimpliVity Plug-in for vSphere Client. Use the knowledge base article **HPE SimpliVity -Troubleshooting HPE InfoSight Connectivity Issues** to word around this issue.

If you are using HPE OmniStack 3.7.9 and have set a proxy, you cannot use the HPE SimpliVity Plug-in to register hosts with HPE InfoSight. Instead use the following CLI command:

svt-portal-token-capture -token 'the token' -proxy proxy\_server\_url:port

#### Where can I find additional information?

Refer to the following Knowledge Base articles:

#### <u>HPE SimpliVity - Troubleshooting HPE InfoSight Connectivity Issues</u>

The following video guide is also available:

#### How to Register HPE SimpliVity with InfoSight

• For information about the HPE SimpliVity Plug-in defect in HPE OmniStack 3.7.9, see:



#### https://support.hpe.com/hpsc/doc/public/display?docLocale=en\_US&docId=mmr\_sf-EN\_US000061074&withFrame

#### If I register my hosts but do not see data in the HPE InfoSight portal, what should I do?

- For hosts running 4.1.0 and later, heartbeat data is sent every 5 minutes. Therefore, it might take 5 minutes to 1 hour before you start seeing your data on the hosts monitoring tab in the HPE InfoSight portal.
- For hosts running 4.0.0 and earlier, data is sent to HPE InfoSight every 24 hours. Therefore, it may take a day or two before you see your data in the HPE InfoSight portal.
- If you do not see your data after 24 hours, try disabling and re-enabling HPE InfoSight or HPE OmniWatch with the HPE SimpliVity Plug-in or the HPE OmniStack CLI.

### Data

#### How often is data sent home?

- Telemetry is sent home on a daily basis.
- Alerts are sent home in near real time.
- Heartbeat is sent home every 5 minutes.
- For HPE OmniStack 4.1.2 and later and with iLO5 Firmware version greater than 1.4, after registering Server iLO information, AHS Heartbeat information is sent every 10 minutes and one AHS File is sent daily.

#### What type of data is sent home?

- Cluster, host, virtual machine and virtual controller names.
- Host serial numbers & Host IP Addresses.
- Virtual machine sizes and backup information.
- Datastore details (name, physical capacity, free space, memory size)

We DO NOT send home user identifying information.

#### Is the data that is sent home encrypted?

Data is sent home over HTTPS using TLS 1.2 encryption on port 443.

#### Can I use HPE InfoSight for Servers in addition to using HPE InfoSight for HPE SimpliVity?

Yes. HPE InfoSight for Servers can be used to monitor HPE SimpliVity hosts. This feature is supported for HPE OmniStack 4.1.2 and later.

#### Does HPE SimpliVity use or integrate with Insight Remote Support?

Today we recommend using HPE OmniWatch/HPE InfoSight, and not using Insight Remote Support. The alerts we send home today cover both hardware and software which is why we recommend using HPE OmniWatch/ HPE InfoSight.

#### Does HPE InfoSight require the iLO Amplifier Pack?

No, HPE SimpliVity does not use the iLO Amplifier Pack.



#### Why do the names of my virtual machines look different?

If the names of your virtual machines contain special characters, you might see names that are slightly different than what you expect. In some cases, HPE InfoSight replaces special characters with different characters.

### Alerts

#### What features are available for real-time alerts?

The same case automation that existed with HPE OmniWatch is available with HPE InfoSight.

### **Comparison with other HPE products**

#### Does HPE InfoSight for HPE SimpliVity support VM Vision?

No, HPE InfoSight for HPE SimpliVity does not include this feature.

However, HPE SimpliVity is a VM-centric solution. The Intelligent Workload Optimizer (IWO) which is part of the HPE SimpliVity product, not only monitors virtual machine workloads, but it also moves workloads to optimize performance.

#### Does HPE InfoSight for HPE SimpliVity support Cross Stack Analytics?

No, HPE InfoSight for HPE SimpliVity does not include this feature.

HPE SimpliVity is a hyperconverged solution where compute, storage, and networking are integrated into a single system that is optimized for virtualized workloads.

### Features

## Does the view of top virtual machine contributors tell me how much space will be freed up by deleting a virtual machine or its backups?

No. This feature provides guidance regarding which virtual machines may be consuming the most resources. It does not guarantee how much space would be available if you deleted a virtual machine or its backups.

#### Why can't I see my remote backups?

If you are using HPE OmniStack 3.7.9 or earlier and are also using linked mode vCenter Servers, remote backups are not visible in HPE InfoSight.

#### How does capacity predicted time to full work? What about situations where there is an imbalanced cluster?

The top-level prediction is done at a cluster level. Intelligent Workload Optimizer (IWO) is constantly working to optimize the workloads on each host and underlying workloads may move over time.

Even though the top-level prediction is done at a cluster level, you can still view capacity utilization at a the host level.

If the capacity of a host reaches 90% full or greater, HPE InfoSight opens a support case automatically.

#### I just registered my systems - why don't I see any history on the storage efficiency dashboard yet?

History data accumulates one day at a time after registration.

#### How long does it take to see my capacity predictions?

After registration, all hosts in a cluster need to send home data on a daily basis for at least 30 days before you can view capacity predictions.



#### I decommissioned some hosts. Why do I still see them in the host list?

HPE InfoSight continues to show data for 30 days after connectivity is lost. You can see the last time we received data from a system using the Latest Report Date field.

# Appendix A: Support and other resources

- Support and other resources
- Documentation feedback

#### Support and other resources

Accessing Hewlett Packard Enterprise Support:

For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:

#### https://www.hpe.com/info/assistance

#### 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:
  - My HPE Software Center: Software downloads

#### https://www.hpe.com/software/hpesoftwarecenter

• To subscribe to eNewsletters and alerts:

#### https://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:

#### https://www.hpe.com/support/AccessToSupportMaterials

(I) **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.

#### **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 initiates a fast and accurate resolution based on the service level of your product. 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.

HPE Get Connected

#### https://www.hpe.com/services/getconnected

HPE Pointnext Tech Care

#### https://www.hpe.com/services/techcare

HPE Datacenter Care

#### https://www.hpe.com/services/datacentercare

#### Warranty information

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

HPE ProLiant Servers and Options https://www.hpe.com/support/ProLiantServers-Warranties

HPE Enterprise and Cloudline Servers https://www.hpe.com/support/EnterpriseServers-Warranties

HPE Storage Products https://www.hpe.com/support/Storage-Warranties

HPE Networking Products https://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: <u>https://</u> 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: <u>https://www.hpe.com/info/</u><u>reach</u>

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see: <u>https://www.hpe.com/info/ecodata</u>

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see: <u>https://www.hpe.com/info/environment</u>

