Abstract
This document describes changes in HPE OneView for VMware vCenter to help administrators understand the benefits of obtaining the 9.0 software update. This document is intended for administrators who configure, manage, and troubleshoot HPE OneView for VMware vCenter.
Notices

The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.


Links to third-party websites take you outside the Hewlett Packard Enterprise website. Hewlett Packard Enterprise has no control over and is not responsible for information outside the Hewlett Packard Enterprise website.

Acknowledgments

Microsoft® and Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
Contents

HPE OneView for VMware vCenter Description................................................. 4
  Introduction......................................................................................................... 4
  Update recommendation..................................................................................... 4
  Supersedes.......................................................................................................... 4
  Devices supported............................................................................................... 4
  Enhancements to HPE OneView for VMware vCenter......................................... 5
    Navigation change in VMware vSphere Client/Web Client.................................. 6
  HPE OneView 3.10 and 4.0 support.................................................................... 6
  HPE OneView for VMware vCenter compatibility matrix.................................... 6
  Installation instructions...................................................................................... 7
  Administrator Console web browser language preference................................ 7
  Known Issues...................................................................................................... 7
  Important Notes and Suggested Actions.......................................................... 8

Documentation feedback.................................................................................... 13

Websites............................................................................................................... 14

Support and other resources............................................................................. 15
  Accessing Hewlett Packard Enterprise Support.................................................. 15
  Accessing updates.............................................................................................. 15
  Customer self repair............................................................................................ 16
  Remote support................................................................................................... 16
  Warranty information.......................................................................................... 16
  Regulatory information....................................................................................... 17
  Documentation feedback.................................................................................... 17
HPE OneView for VMware vCenter Description

Introduction
HPE OneView for VMware vCenter is a single integrated application that you use to manage Hewlett Packard Enterprise ProLiant servers and storage systems. The application consists of two modules.

• **HPE OneView for VMware vCenter for Server**
  Adds HPE ProLiant and HPE BladeSystem hardware monitoring into the HPE OneView for VMware vCenter console. Provides server hardware management capabilities, including comprehensive monitoring, firmware update, vSphere/ESXi image deployment, remote control, end-to-end monitoring for Virtual Connect, and power optimization for Hewlett Packard Enterprise servers in the VMware environment.

  **IMPORTANT:**
  The HPE OneView for VMware vCenter for Server and the HPE OneView for VMware vCenter for Storage are no longer a separate installation. However, the HPE OneView for VMware vCenter for Server services do not activate unless credentials are provided.

• **HPE OneView for VMware vCenter for Storage**
  Provides storage configuration and status information for mapping VMs, datastores, and hosts to LUNs on Hewlett Packard Enterprise storage systems. The HPE OneView for VMware vCenter for Storage enables you to register HPE Storage Systems and switching peer persistence. Supports provisioning on HPE 3PAR StoreServ, HPE StoreVirtual, and HPE MSA 1040/2040/2042/1050/2050/2052 storage systems. Supported provisioning tasks include creating, expanding, or deleting a datastore, and creating a VM. Displays view-only information for the HPE StoreOnce Backup systems.

For information on how to install and use HPE OneView for VMware vCenter for Server and HPE OneView for VMware vCenter for Storage, see the following documents:

• **HPE OneView for VMware vCenter Installation Guide**
• **HPE OneView for VMware vCenter Help System**
• **HPE OneView for VMware vCenter User Guide**

Update recommendation
Recommended

Supersedes
HPE OneView for VMware vCenter v8.3.

Devices supported
For device support information, see the following:
Enhancements to HPE OneView for VMware vCenter

HPE OneView for VMware vCenter 9.0 includes the following changes:

General

• Migrated to HTML5 vSphere Client/Web Client for User Interface
• Support for HPE OneView 4.0.0
• Edit option for HPE OneView Controllers for the user role
• Edit deployment plan supported for Image Streamer.

HPE OneView for VMware vCenter for Server

• General

  Added vCenter Pro-active High Availability provider that will allow you to evacuate VMs from HPE OneView, managed host that have reported hardware alerts.

  ◦ HPE Insight Control server provisioning credentials enhancements.

• New hardware support

  ◦ Supports HPE Synergy D3940 Storage Module
  ◦ Supports HPE Synergy 12Gb SAS Connection Module

HPE OneView for VMware vCenter Storage Module

• New hardware support

  ◦ Supports MSA 2050 and 2052 SAS
  ◦ Supports MSA 1050 Storage Systems

• New firmware support
- Supports HPE 3PAR StoreServ OS 3.3.1 MU1 (FC, iSCSI)
  - Supports Datastore creation with compression enabled (Datastore size must be \( \geq 16\text{GB} \)).
- Supports HPE StoreVirtual OS 12.7 (iSCSI), 13.5 (FC, iSCSI)

**Navigation change in VMware vSphere Client/Web Client**

Navigation change in VMware vSphere 6.5 Client/Web Client brings about tab reorganization. **HPE Storage and HPE Server** menu/tab is now available under the **Monitor, Manage/Configure** tab.

**HPE Storage** and **HPE Server** system information is available in **Global Inventory Lists**.

**HPE OneView 3.10 and 4.0 support**

<table>
<thead>
<tr>
<th>IMPORTANT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPE OneView for VMware vCenter 9.0 is compatible with HPE OneView 3.10 and 4.0 versions of c7000 and HPE Synergy enclosure.</td>
</tr>
</tbody>
</table>

**HPE OneView for VMware vCenter compatibility matrix**

*Compatibility Matrix* table lists the HPE OneView for VMware vCenter compatibility with HPE OneView and with the related products.

**Table 1: Compatibility Matrix**

<table>
<thead>
<tr>
<th>HPE OneView for VMware vCenter Release</th>
<th>HPE OneView version support</th>
<th>HPE Insight Control server provisioning version — Maximum version(s) supported</th>
<th>HP SUM version — Maximum version(s) supported</th>
<th>SPP snap version — Maximum version(s) supported</th>
<th>VMware vSphere/ESXi</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.2.1</td>
<td>2.0, 3.00.07</td>
<td>7.6</td>
<td>7.6</td>
<td>spp.base.iso_2016.10.0</td>
<td>vSphere version: 5.5u3d/6.0u2/6.5 ESXi images: 5.5u3b/6.0u2/6.5</td>
</tr>
<tr>
<td>8.3</td>
<td>3.00.08, 3.1</td>
<td>7.6</td>
<td>8.0.0</td>
<td>SNAP1SPP2017.07</td>
<td>vSphere version: 5.5, 6.0u3, 6.5u1 ESXi images: 5.5u1, 5.5u2, 5.5u3, 6.0u3, 6.5u1</td>
</tr>
<tr>
<td>9.0</td>
<td>3.10, 4.00.00</td>
<td>7.6</td>
<td>NA</td>
<td>SNAP1SPP2017.10</td>
<td>vSphere version: 6.0u3, 6.5u1 ESXi images: 6.0u3, 6.5u1</td>
</tr>
</tbody>
</table>
Installation instructions

For installation instructions, see the HPE OneView for VMware vCenter Installation Guide. This version supports upgrades from HPE OneView for VMware vCenter 8.2.1 and 8.3.

NOTE:
HPE ProLiant Gen10 and Synergy Gen10 support ESXi 6.0 or newer.

NOTE:
vCenter 6.5 is needed when supporting ESXi 6.5. vCenter 6.0 and earlier does not support ESXi 6.5 OS.

HPE Insight Control server provisioning

If you want to use Grow Cluster feature in HPE OneView for VMware vCenter (vSphere Client/Web Client), you must install HPE Insight Control server provisioning software, available for download from HPE Insight Control website. Post installation, configure the plugin with the IP address and credentials of the HPE ICsp server.

Administrator Console web browser language preference

The HPE OneView for VMware vCenter Administrator Console supports English language for displaying the web pages. In case of multiple languages, set to use English as the first preference.

Known Issues

• Grow Cluster for Gen10 server hardware is supported only using Image Streamer. Due to ICSP limitation Gen10 server hardware is not supported for Grow Cluster using HPE Insight Control server provisioning.

• Edit Cluster OS Deployment plan operation follows fail fast approach. The entire operation will be aborted immediately if one host fails.

• The available capacity value of a storage pool is an estimated value and may not match the actual available capacity.

• Attempts to perform firmware updates through SUT with the Apply Recommended Actions, does not include the SUT status in the task bar. The task bar only reports the status of the associated OneView related tasks.

• The Elapsed and Estimated time to complete the refresh action is inaccurate at certain times, even though the refresh continues to progress in the background.

• A refresh option is unavailable for vCenters. However, a refresh can be triggered either from the Storage Systems action or an implicit refresh is triggered by editing a vCenter or when adding a new vCenter.

• HPE Enclosures page cannot be loaded when you use VMware vSphere Client 6.5u1 for the first time. You have to restart the vSphere Client to solve this.

• If you are using the VMware vSphere Client 6.5u1 for the first time, when you right click on the cluster in the HPE Server Management Actions you can't see any options. You have to restart the vSphere Client to solve this.

• HPE OneView for VMware vCenter requires each 3PAR StoreServ storage system to use a single certificate for all services. Therefore, the new 3PAR StoreServ firmware 3.2.1 onwards, the feature enabling different certificates on different services is not supported.

• If the provisioning operations available under All HPE Storage Actions appear as Loading, restart vsphere-ui service.
• If you are using the VMware vSphere Client 6.0 flex HPE Storage Inventories link in the HPE Storage Overview page fails to navigate to HPE Storage Systems page. You have to manually navigate to HPE Storage Systems from the home page.

• When you expand the Peer Persistent Datastore and HPE Oneview is configured in HPE OneView for VMware vCenter, secondary volume size change is not going to be reflected in the HPE Oneview until you manually refresh the secondary volume in the HPE Oneview.

• If any of the HPE OneView for VMware vCenter server Monitor pages are left idle for more than 30 minutes, then the session times out and displays the following error message " Internal server error has occurred. Please try after some time."

If you encounter this issue, navigate to the VMware vCenter Home screen and navigate back to the page that you were working with.

• Apply recommended actions may not fix few consistency issues reported at Cluster/Host level on 1st iteration.

Clicking Apply recommended actions 2nd time will resolve the issues and make the Cluster/Host consistent.

• Registering the host with vCenter using Hostname[FQDN] is not working in this release due to HPE OneView limitation. This will not happen irrespective of what value user selects for “Use Hostname to register” flag in Grow Cluster wizard.

Once the Grow Cluster is successfully completed, user can remove the host and add it to the vCenter manually using FQDN.

• If there are any connection issues between HPE OneView, Deployment Manger or vCenter, then Grow Cluster Wizard will fail with connectivity failure error messages or fail to list Server Profile Templates.

User can check the connectivity status under vCenter Administration > Server Integrations. If the physical connectivity is restored, then the user can re-register Deployment Manger or vCenter using HPE OneView Configuration option.

Important Notes and Suggested Actions

• If OS deployment plan consistency issue is reported, trigger Apply Recommended Actions at host level to update the OS deployment plan for the selected host.

• If Server Profile is not set to manage storage volumes at the time of cluster creation, then Apply Recommended Actions task for adding shared volume attachment using SPT fails.

  **Suggested Action:** Manually enable Server Profile to manage Shared Volumes before attaching the Volume to the SPT by using Apply Recommended Actions.

• Create Datastore task failure. As per design If any failure while presenting the volume fails the Create Datastore Task and not deleting the created volume. This becomes an unmanageable volume in the Storage System. The volume size of the Storage System is considerable when you try to create a datastore on Linear Storage Pool.

  **Suggested Action:** If there is any failure occurs when you create datastore, it requires manual clean up in the Storage System.

• Grow Cluster using Boot from SAN fails when UEFI optimized boot mode is used instead of the legacy BIOS. The issue is observed when the environment is using:
- ProLiant Gen9 servers
- SPT as cluster settings for Grow Cluster
- Boot from SAN
- Managed Volume
- Virtual MAC
- FCOE network with HP59XX series switch

In this environment, UEFI optimised boot mode fails because VFC is not created for virtual MAC.

**Suggested Action:** To resolve this issue, use Legacy BIOS instead of UEFI as the boot mode option.

**NOTE:**
Grow cluster supports only the “Managed volume” option for Boot from SAN cases.

- HPE OneView for VMware vCenter version 9.0 does not support MSA 1040/2040/2042/1050/2050/2052 SAS storage systems using vsphere version 6.5.
  **Suggested Action:** Alternatively users can use VMware provided options to create, expand, or delete any datastores on MSA 1040/2040/2042/1050/2050/2052 SAS storage systems.

- HPE MSA SAS models do not support HPE OneView for VMware vCenter provisioning when using in vCenter 6.0 Update 1 and Update 2. This is due to the host port name change in the VMware 6.0 release. This only applies to the SAS models and to HPE OneView for VMware vCenter provisioning.
  **Suggested Action:** Update the vCenter and ESXi version to 6.0 Update 3 to use provisioning operation on HPE MSA SAS hardware.

- HPE Delete Datastore operation on a managed Datastore may fail with the error message, The Array for Datastore is not managed.
  **Suggested Action:** Refresh the HPE OneView for VMware vCenter cache and retry the operation.

- Configure all the vCenters in linked mode using the Administrator Console for the configured storage systems to appear on the HPE Infrastructure page on the vSphere Client/Web Client.

- Grow cluster deployment using Intelligent Provisioning version 2.20 or 2.30 and Insight Control server provisioning on HPE ProLiant BL660c Gen9 server with multiple LOMs may fail in both UEFI and in the Legacy mode.
  **Suggested Action:** Perform any one of the following three actions to resolve this issue:
  - Disable the LOM2 in BIOS before deploying.
  - Use LOM2 Port 1 as your deployment NIC. Do not assign network to LOM1 port.
  - Add the server and deploy the operating system only through PXE and not through Intelligent Provisioning.

- Boot order is not manageable in UEFI or UEFI optimized mode with Gen9 BL460c server ROM
  **Suggested Action:** Update the server ROM to a version that supports UEFI boot order management. See the HPE OneView Support Matrix for supported versions.
- Sometimes, in the administrator UI, network and management information page keeps showing loading icon without getting the information. This doesn’t impact the regular functionality of HPE OneView for VMware vCenter in the vCenter.

  **Suggested Action:** Reboot the appliance and browse to administrator UI. As prompted, setup the Admin password again to existing/any new password.

- Intermittently, after you update the appliance with star file, ICSP credentials do not appear on screen.

  **Suggested Action:** User need to re-enter the ICSP credentials to resolve the issue.

- Creating a user account and assigning it administrator privileges can cause Idle sessions to accumulate on vCenter servers.

  **Suggested Action:** Use the administrator account that was created by VMware during the install instead of creating a user account and assigning it administrator privileges.

- Special characters

  - VMware does not support multi-byte or special characters to be used for credentials. The credentials specified for the Administrator Console User during the installation of HPE OneView for VMware vCenter should not contain such characters.
  - When using the Active Management operations, the names for VMs or Datastores specified in the wizards should not contain multi-byte or special characters.

- The Physical NIC labels of some blade servers may be incorrect if the plug-in has not discovered the enclosure's Onboard Administrator. This can happen for the first few minutes after the plug-in is installed or when new hardware is added.

- After successfully deploying a server, the Recent Tasks window will indicate that the deployment was successful. A task to add the target server to vCenter is initiated by HPE OneView for VMware vCenter, but this event is not displayed in the Recent Tasks window until the vSphere Client/Web Client is refreshed.

- When working with datastores using an StoreVirtual Storage System, the time required for HPE OneView for VMware vCenter Storage Module to create and delete both iSCSI and Fibre Channel datastores is proportional to the number of paths utilized by the StoreVirtual Storage System. To view the paths in VMware’s Storage Adapters GUI page, select the following:

  - **vSphere Client/Web Client:** Host > Manage > Storage > Storage Adapters

- Erasing a job on a server can reset the date and time on that server to a default value.

  **Suggested Action:** Set the date and time as described in the RDP knowledge base article at [Multipath SAN Deployment Support](https://rdp.hpe.com/).

- An attempt to use the Management Deployment Wizard to add hosts to vCenter results in a License not available to perform the operation error.

  **Suggested Action:** Manually add hosts.

- The network diagram display is incomplete.

  - When a VM is not accessible by the Hypervisor (such as if the VM is on a datastore which has been detached from the host), the HPE OneView for VMware vCenter network diagram is incomplete.
Suggested Action: Reattach the datastore to the host to get a complete network diagram.

- On a configuration with large number of VMs and datastores, it can take a long time for HPE OneView for VMware vCenter to draw the network diagram. You might see a dialog box prompt indicating that it is taking too long to run the script on the page and be prompted to continue to run the script or stop running it.

Suggested Action: Click Yes to stop the script from running, which prevents the diagram from completing, or click No to wait for the complete diagram to appear.

- HPE OneView for VMware vCenter cannot communicate with a node if proxy authentication is required to reach the node.
  Suggested Action: Disable the proxy setting to enable HPE OneView for VMware vCenter to communicate with the node.

- The ASR status for servers running the CIM Providers is displayed with a white status icon. The current CIM providers do not monitor ASR.

- Software iSCSI storage is not displayed in the Network Diagram. The Network Diagram displays hardware configured in Virtual Connect only. iSCSI storage devices that use software HBAs are not displayed.

- If the vSphere Client/Web Client is left idle on the Management tab, clicking another link might display the error message This program cannot display the webpage. This issue is seen intermittently.
  Suggested Action: Click the link again to display the page.

- For volumes mapped to specific iSCSI ports on MSA 1040/2040/2042/1050/2050/2052 Storage systems, the Paths tab (Manage/Configure > HPE Storage) shows all the ports that are configured on the array rather than the specific iSCSI ports.
  Suggested Action: Verify the actual port details using one of the following methods:
  - Use an SSH connection to the MSA 1040/2040/2042/1050/2050/2052 array and execute the command show maps.
  - Use the MSA 1040/2040/2042/1050/2050/2052 web-based Storage Management Utility by selecting Volume > Maps.

- Creation of Datastore fails on Linear Storage Pool of HPE MSA 1050/2050/2052 array.
  Starting with HPE MSA 1050/2050/2052, firmware does not support Linear (thickly provisioned) storage pools. Any linear storage pools present will become read-only as part of the migration to HPE MSA 1050/2050/2052 array. Due to this users will not be able to run provision operations on any linear storage pools on HPE MSA 1050/2050/2052 array.
  Suggested Action: For methods to recover data and clean up linear storage pools and the associated entities, see the HPE MSA 1050/2050/2052 User Guide.

- Creation or Expansion of Datastore fails on HPE MSA 1050/2050/2052 array.
  Cause: If the pool health is degraded due to pool space consumption crossing high threshold, datastore creation and expansion operations are blocked on the pool.
  Suggested Action: Login to HPE MSA 1050/2050/2052 SMU/CLI to check pool health and event log for high threshold alarm and take corrective actions to make the pool healthy before creating or expanding datastores residing on that pool.
For more information, see the *HPE MSA 1050/2050/2052 User Guide*.

• If multiple vCenter servers are added to appliance and if any of the vCenter is inaccessible or in a shutdown state, data may be missing in **Client/Web Client > HPE Storage > Consistency tab** and few other pages.

  **Suggested Action:** Remove vCenter from the appliance which is not accessible or in a shutdown state and restart the appliance.
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.
Websites

General websites
Hewlett Packard Enterprise Information Library  
www.hpe.com/info/EIL

Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix  
www.hpe.com/storage/spock

Storage white papers and analyst reports  
www.hpe.com/storage/whitepapers

For additional websites, see Support and other resources.
Support and other resources

Accessing Hewlett Packard Enterprise Support

• For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
  
  http://www.hpe.com/assistance

• To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:
  
  http://www.hpe.com/support/hpesc

Information to collect

• Technical support registration number (if applicable)
• Product name, model or version, and serial number
• Operating system name and version
• 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:
IMPORTANT:
Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

Customer self repair

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

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

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

Remote support

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

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

Remote support and Proactive Care information
HPE Get Connected
www.hpe.com/services/getconnected
HPE Proactive Care services
www.hpe.com/services/proactivecare
HPE Proactive Care service: Supported products list
www.hpe.com/services/proactivecaresupportedproducts
HPE Proactive Care advanced service: Supported products list
www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information
Proactive Care central
www.hpe.com/services/proactivecarecentral
Proactive Care service activation
www.hpe.com/services/proactivecarecentralgetstarted

Warranty information

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

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