



Hewlett Packard
Enterprise

HPE Cloud Optimizer

Software Version: 3.00
Linux operating system

Release Notes

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This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)

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HPE Cloud Optimizer Release Notes

for the Linux operating system

Software version: 3.00

Publication date: January 2016

HPE Cloud Optimizer is a web-based analysis and visualization tool that analyzes performance trends of elements in virtualized environments. It enables virtualization monitoring by providing an overview of the environment, near-real-time and historical data analysis and triaging using an interactive dashboard. It also enables monitoring for cloud and hypervisor environments. HPE Cloud Optimizer helps you visualize performance data for elements in the context of each other to rapidly analyze bottlenecks. HPE Cloud Optimizer provides performance monitoring, graphing, and reporting in a single interface.

Some of the key features of HPE Cloud Optimizer are as follows:

- Triage analysis with the Workbench and capability to trend server utilization across days, weeks, and a month.
- Analyze the capacity, usage, and allocation trends for various resources in a virtualized environment.
- Right sizing recommendation based on historical resource utilization and reclaiming unused resources.
- Predict the impact of business initiatives.
- Determine the impact of adding or deleting the resources in your environment to proactively plan your hardware requirements

Note: HPE Cloud Optimizer supports the VMware vCenter Server versions 5.0, 5.1, 5.5, and 6.0.

This document is an overview of the features provided by HPE Cloud Optimizer. It contains important information not included in the manuals or Online Help. You can find information about the following in this document:

- [What's New in This Release?](#)
- [Support Matrix](#)
- [Installation Notes](#)
- [Known Problems and Workarounds](#)
- [Limitations](#)
- [Documentation Updates](#)

- [Localization Support](#)
- [Open Source and Third-Party Components](#)

What's New in This Release?

- **HP Virtualization Performance Viewer (HP vPV) is now HPE Cloud Optimizer**

HP vPV has evolved from a virtualization performance and health monitoring tool into a comprehensive performance and capacity management tool for both virtualized and cloud IT components.

- **Support for HPE Helion Monitoring**

HPE Cloud Optimizer provides support for HPE Helion OpenStack 2.0. You can use HPE Cloud Optimizer to perform capacity planning and performance monitoring of HPE Helion environment.

- **Improved Cloud Consumer Experience**

HPE Cloud Optimizer provides an enhanced cloud consumer experience with improved user interface and business metric analysis capabilities.

- **Integration with HPE IT Business Analytics**

HPE Cloud Optimizer supports integration with HPE IT Business Analytics by providing resource utilization and allocation information.

- **Enhanced Storage Reclamation Capabilities**

HPE Cloud Optimizer supports the following features that enhance the storage reclamation capabilities:

- Identify orphaned virtual disks
- Identify Data Stores with high device latency and space
- Identify VMs with multiple snapshots
- Identify old VM snapshots

- **Enhanced Capacity Analysis**

HPE Cloud Optimizer capacity analysis capabilities have been enhanced with the following new features:

- Exclude low performing Host-Datastore combinations from capacity analysis
- Enhanced placement capabilities
Low performing Data stores are not being considered while giving placement

suggestions.

- Forecasting logic enhanced to faster reflect the effect of VM addition and deletion

- **Enhanced Authentication Capabilities**

HPE Cloud Optimizer offers enhanced authentication capabilities with the support for the following features:

- Ability to single-sign on (SSO) in HPE Cloud Optimizer for HPE Cloud Service
- Automation (CSA) administration
- Support for Active Directory Lightweight Directory Services (AD LDS)
- User Interface based LDAP configuration

- **Other Enhancements**

- Ability to create hybrid business groups
In addition to creating a business group of Hypervisors, VM, and datastores, you can create a business group of servers. Servers include Physical Servers and VMs.
- Improved SHR content pack with SHR 9.40 support
- Configurable memory sizing capability

Support Matrix

You can find the Support Matrix for this product that lists all the software and hardware requirements. The support matrix may be updated between releases, and so is only available at the HPE Support web site: [HPE Support matrices](#).

Note: Most of the support areas require that you register as an HPE Passport user and sign in. Many also require an active support contract. To find more information about support access levels, go to: [Access levels](#).

To register for an HPE Passport ID, go to: [HPE Passport Registration](#).

The support matrix includes the following information:

- **Requirements**

- Hardware
- Operating System
- Databases

- Application Servers
- Web Browsers and Plug-ins
- **Compatibility**
 - Languages
 - Internationalization Variances
 - Virtualization Products
 - High-Availability Products
 - HPE Software Integrations
 - HPE Software Coexistence
 - Performance and Sizing

Installation Notes

Installation requirements, as well as instructions for installing HPE Cloud Optimizer are documented in the *HPE Cloud Optimizer Installation Guide* provided in PDF (.pdf) format. You can find the Installation Guide on the product installation media at the location - `paperdocs\vpv\InstallGuide.pdf`. You can install the product using the HPE Cloud Optimizer Virtual Appliance, or Linux-based installer.

Virtual Appliance

The OVA file for the virtual appliance version of HPE Cloud Optimizer is signed using GNU Privacy Guard (GPG). You can use the GPG signature to verify that the binaries you have downloaded are from HPE and are not tampered. To verify the signature, follow the steps mentioned in the section Verification using GPG, available at the URL: <https://h20392.www2.hp.com/portal/swdepot/displayProductInfo.do?productNumber=HPLinuxCodeSigning>.

To log in to the virtual appliance, the user name is **root** and password is **vperf*viewer**.

Note:

- Unlike on the US English keyboard layout, the location of the asterisk (*) key may be different on localized keyboards. Check this when typing the password.
- If there is a firewall on the system where HPE Cloud Optimizer is installed, ensure that port 8081 is open to ensure that HPE Cloud Optimizer is accessible from the browser. For accessing in the HTTPS mode, port 8444 must be open. For more

information on port settings, see the *HPECloud Optimizer Online Help*.

For more information on Installing HPE Cloud Optimizer, see the *HPECloud Optimizer Installation Guide*.

After installing HPE Cloud Optimizer, launch the user interface using the URL:
<http://<servername>:8081/PV> OR <https://<servername>:8444/PV>.

Known Problems and Workarounds

Known Problems and Workarounds

Problem	For non-English locals, when the Online Help is accessed from the HPE Cloud Optimizer user interface, the following error appears: <i>"An error occurred while processing the request. Please try again."</i>
Workaround	Follow these steps: <ol style="list-style-type: none">1. Log on as a root user.2. Run the command: cd /opt/OV/www/webapps/PV/html/help/<lang_code>/WebHelp/vPVHelp3. Extract the contents of vPV.zip.4. Run the command: cd /opt/OV/www/webapps/PV/html/help/<lang_code>/WebHelp/CSA_vPVHelp/5. Extract the contents of CSA_vPV_Help.zip. Where <lang_code>(language code) can be : spa(spanish), deu(german), rus(russian), fra(french), kor(korean), jpn(japan) or zho(simplified chinese). Example: For Korean: <ol style="list-style-type: none">1. Log on as a root user.2. Run the command: cd /opt/OV/www/webapps/PV/html/help/kor/WebHelp/vPVHelp3. Extract the contents of vPV.zip.4. Run the command: cd /opt/OV/www/webapps/PV/html/help/kor/WebHelp/CSA_vPVHelp/

	5. Extract the contents of CSA_vPV_Help.zip .
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Problem	<p>Remaining capacity does not get updated in Modeler and Placement for the deleted VMs.</p> <p>Description: After you delete the VMs, the remaining capacity of the corresponding Hosts and Clusters remain unchanged. This limitation results in additional capacity not being updated immediately and exists across VMware, Hyper-V, and KVM hypervisors.</p> <p>However, Treemap and Workbench are updated.</p>
Workaround	<p>Follow these steps:</p> <ol style="list-style-type: none"> 1. Run the following command to edit <code>cron jobs</code> file: <pre># crontab -e</pre> 2. Append the following entry in the file: <pre>00 1,7,13,19 * * * /opt/OV/bin/ovc -restart pvcd >/dev/null 2>&1</pre> 3. Save the file. <p>This <code>cron job</code> runs every day at 1 AM, 7 AM, 1 PM, and 7 PM and restart <code>pvcd</code>. It is recommended to reduce the <code>pvcd restart</code> frequency to once in a day for instances beyond 4000.</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p>Note: If REST APIs are accessed during restarting of <code>pvcd</code>, REST APIs fail to return data. Every time <code>pvcd</code> is restarted, connection to the vCenter or other datasource is reset. This may result in data gaps and give spikes in resource usage of the datasource.</p> </div>

Problem	For KVM hypervisor, newly added VMs are not updated as additional capacity. When new VMs are added to a KVM host, remaining capacity is not updated in Modeler or Placement. However, newly added VMs are updated in Treemap and Workbench.
Workaround	None

Problem	Under extreme load conditions, data gaps are observed while Vertica
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	DB purge takes place (everyday). This data gap varies from 3 to 5 intervals per 24 hours (maximum) based on the number of instances or load of the HPE Cloud Optimizer system.
Workaround	None

Problem	When querying the performance metrics for datastore, if the value returned is larger than 32-bit, the VMware vCenter services fail.
Workaround	If you have vCenter version 5.0, you can apply the Update 1 for 5.0, which contains the fix for the issue. For more information, see the VMware vCenter Server Release Notes available at https://www.vmware.com/support/vsphere5/doc/vsp_vc50_u1_rel_notes.html#clientissues .

Problem	When a VM is on the Network File System (NFS) datastore and belongs to the Distributed Virtual Switch (DVS) port group, no data is collected. Hence, on the HPE Cloud Optimizer console, there is no data available on the Treemap.
Workaround	None

Problem	Installation of HPE Operations Manager (HPOM) integration package fails on HPOM for Unix with the following error: "/etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgupld/post/cvp_upload.sh: [: not found"
Workaround	Follow the steps: 1. Log on to the node as root. 2. Go to the following locations: /etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgupld/post/ or /etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgdwn/post/ 3. Open the cvp_upload.sh or cvp_download.sh file. Replace #!/bin/sh with #!/usr/xpg4/bin/sh. 4. Save and close the file.

Problem	The following metrics are not collected for Hyper- V Host, VM,or
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	<p>Datastore for Windows 2008 R2 SP1:</p> <p>Host Class</p> <ul style="list-style-type: none"> • CPUReadyTime • CPUPhysReadyUtil <p>Guest Class</p> <ul style="list-style-type: none"> • SystemOSName • MemoryDemand • CPUReadyTime • CPUUserModeUtil • CPUSysModeUtil • IPAddress <p>DataStore Class</p> <ul style="list-style-type: none"> • DiskSnapShotUsed • DiskVMDKUSed • DiskProvisioned • DiskOthersUsed <p>These metrics which are not collected cannot be used in Workbench. Also, Hyper-V (Placement and Optimization) and Forecast do not show data for these metrics.</p>
Workaround	None
Problem	Alert messages are not localized when the HPE Cloud Optimizer server locale is changed to another locale.
Workaround	<p>To display alert messages in the specified locale, follow the steps:</p> <ol style="list-style-type: none"> 1. Log on to HPE Cloud Optimizer server as root. 2. Run the following commands: <pre> ovc -kill ovc -start </pre>
Problem	When a vCenter is down and started after 15 to 20 minutes, HPE Cloud Optimizer does not collect performance data for that vCenter.
Workaround	If a vCenter is down and started after 15 to 20 minutes, performance data is not collected. HPE Cloud Optimizer reports only configuration

	<p>data for the vCenter. When the vCenter is up and running, HPE Cloud Optimizer will automatically re-establish the connection and collect the performance data. The collection may take some time, depending upon the configuration of the environment and its responsiveness.</p> <p>If you want to immediately restart the performance data collection, run the following command:</p> <pre>ovc -restart pvcd</pre>
Problem	If the hosts in Hyper-V domain take more time for collection than the default interval, treemap does not show correct information.
Workaround	<p>You can increase the collection interval if the hosts does not complete the collection in the default interval. To increase the collection interval, follow these steps:</p> <ol style="list-style-type: none"> 1. Open the <code>vPVWinVirtCollector.properties</code> file. 2. Update <code>CollectionIntervalInSeconds=600</code>. By default, the value is set to 300 seconds. 3. Restart the HP vPV Collector Service.
Problem	If VMware tools are not installed, HPE Cloud Optimizer does not collect the MAC address. Hence, HPE Cloud Optimizer is not able to register the details of HPE ComputeSensor running on a VM.
Workaround	Enable VMware tools for the VM in VMware vSphere Client. For more information, see the VMware documentation.
Problem	HPE Cloud Optimizer does not support some of the features when accessing with IPv6 address.
Workaround	Use the host name to access HPE Cloud Optimizer instead of IP address.
Problem	If HPE Cloud Optimizer and Service Health Reporter (SHR) are installed on same system, Service Health Reporter (SHR) does not work after uninstalling HPE Cloud Optimizer.
Workaround	Restart <code>ovtomcatB</code> using command <code>/opt/OV/bin/ovc -restart ovtomcatB</code> .
Problem	The collection daemon does not start after reboot. The <code>ovc -status</code>

	<p>shows <i>pvcd</i> in aborted state, after rebooting.</p> <p>OR</p> <p>Vertica Database does not start after rebooting.</p>
Workaround	<p>If the HPE Cloud Optimizer Virtual Appliance is shutdown abruptly, sometimes the database does not start. Due to this, <i>pvcd</i> exits on rebooting.</p> <p>Restart the <i>pv</i> process (<i>pvcd</i>, Tomcat, and Vertica) after rebooting the machine. Run the command, <code>pv restart</code> from the HPE Cloud Optimizer console.</p>
Problem	<p>When a CSA administrator reassigns a VM subscription from one user to another user, the earlier CSA user continues to see the VM name in his inventory when he logs on to HPE Cloud Optimizer.</p> <p>For example, the CSA administrator has reassigned the VM subscription from User1 to User2. User1 continues to see the VM name in his inventory when he logs on to HPE Cloud Optimizer. However, User2 is also able to view his VM subscription correctly.</p>
Workaround	<p>The CSA administrator is recommended to clear the cache using the Clear Cache button available in the CSA Integration section in the Settings > Integrations tab.</p>
Problem	<p>The Physical Server collector identifies a host as a KVM host even if the KVM hypervisor is uninstalled from the host.</p>
Workaround	<p>To resolve the issue, perform the following steps:</p> <ol style="list-style-type: none">1. Log on to the Physical Server machine.2. Go to the following location: <code>/dev/KVM</code>3. Back up a copy of the KVM folder.4. Delete the KVM folder.5. Restart the HP Compute Sensor Service.

Limitations

- When a target is removed from HPE Cloud Optimizer, it continues to show data for that target for three successive collection intervals. After that, no data is shown for that target and the instance count is also updated.

- HPE Cloud Optimizer Collector Service collects only Hyper-V hosts monitored by SCVMM excluding the ESX servers from collection.
- When a datastore is mounted across multiple clusters, in HPE Cloud Optimizer, the datastore is associated only with the first cluster. So, in Treemap and Workbench, you can view the details of the datastore only under the first cluster.
- Installation of the Physical Server collector is not supported on the machine where Real Time Guest OS Drill Down is configured.

Documentation Updates

The first page of this release notes contains the following identifying information:

- Software Version number, which indicates the software version.
- Publication date, which changes each time the document is updated.

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Localization Support

HPE supplies localized software for HPE Cloud Optimizer in the following languages:

- English
- Simplified Chinese
- Japanese
- French
- Spanish
- Russian

- Korean
- German

The latest localized documentation for HPE Cloud Optimizer can be downloaded from the [SSO portal](#).

Open Source and Third-Party Components

The source code for the Open Source components for HPE Cloud Optimizer is available via requests. To obtain the source code please contact HPE support or send an email to hpvpv.feedback@hpe.com.

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