



Cloud Optimizer

Software Version: 3.02
Linux operating system

Release Notes

Document Release Date: August 2017
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Cloud Optimizer Release Notes

for the Linux operating system

Software version: 3.02

Publication date: August 2017

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. Cloud Optimizer helps you visualize performance data for elements in the context of each other to rapidly analyze bottlenecks. Cloud Optimizer provides performance monitoring, graphing, and reporting in a single interface.

Some of the key features of 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: Cloud Optimizer supports the VMware vCenter Server versions 5.0, 5.1, 5.5, 6.0 and 6.5. For the latest support matrix information, see the [Software Product Support Matrix](#).

This document is an overview of the features provided by 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, workarounds, and limitations "
- "Limitations"
- "Documentation Updates "
- "Localization Support "
- "Open Source and Third-Party Components "

What's New in This Release?

Introduced in the Release

- Cloud Optimizer now enables you to back up and restore the database to prevent data loss in the event of a database failure. You can *Backup* and *Restore* Cloud Optimizer configurations and Vertica database. For more information, see the *Administrator Tasks* section of the *Cloud Optimizer Online Help*.
- Cloud Optimizer now alerts user when the license expiry date approaches. Also, in case the instance count exceeds the license count, collection continues and Cloud Optimizer alerts user.

Integration with other Products

- Support for vCenter 6.5
- Support for HPE BSM/OMi MP for Cloud Optimizer 1.24
- Support for Vertica 8.1
- Support for Operations Agent 12.04
- Support for OpenStack Mitaka with API version v2

Upgrade Component

HPE ComputeSensor is upgraded to version 12.04.

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 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\HPCO_InstallGuide.pdf`.

Note: If there is a firewall on the system where Cloud Optimizer is installed, ensure that port 8081 is open to ensure that 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 OptimizerOnline Help*.

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

After installing Cloud Optimizer, launch the user interface using the URL:

<http://<servername>:8081/PV> OR <https://<servername>:8444/PV>.

Defects Fixed in this Release

Following defects are fixed in this release:

S/I	Global ID	Summary
1	QCCR8D84876	Wrong MemUsage metric shown in Treemap under a Business Group.
2	QCCR8D87808	Enhance CO collection to be dynamic about requirement for <code>config.vpxd.stats.maxQueryMetrics</code> set to -1.
3	QCCR8D89401	CO is not collecting Events when event type <code>AlarmStatusChangedEvent</code> is enabled.
4	QCCR8D89636	VMWare Events Collection is not stable.
5	QCCR8D88937	VMs are not accurately cataloged into Datacenter group.
6	QCCR8D94836	Making Datastore Browsing <code>maxRetries</code> as configurable.
7	QCCR8D95347	VMs across all Datastores shows Space Provisioned as "0.00".
8	QCCR8D96272	In IE browser, Real Time Guest OS Drill down from Treemap goes into a loop.
9	QCCR8D96405	In CSA Consumer Dashboard if there are more VMs with long names, the VM names are garbled.
10	QCCR8D95987	Reconciliation fails with SHR.
11	QCCR8D95988	SHR Integration: ESX hosts Reports are blank.
12	QCCR8D95991	SHR Integration : Duplicate Entries for Hosts.
13	QCCR8D95915	OOTB Cloud Optimizer Reports are empty.
14	QCCR8D95989	Intermittently, incorrect number of total hosts are observed in dashboard.
15	QCCR8D87729	Default System User and Vertica Credentials in Cloud Optimizer.
16	QCCR8D94127	Supportability: Collector logs lot of messages in the log files.
17	QCCR8D94680	QueryPerf failed with an exception (Client received SOAP Fault).
18	QCCR8D95626	Upgrade to the latest Tomcat Version.
19	QCCR8D94742	Add "DEBUG" parameter with instructions to <code>vPWinVirtCollector.properties</code> file.
20	QCCR8D94023	Intermittently, Clusters CPU and Memory usage is not visible in Treemap.
21	QCCR8D94422	Delay in getting VMWare Alerts from CO Server into OM Environment.

Known problems, workarounds, and limitations

Following table includes problems, workarounds, and limitations:

Problem	The Cloud Optimizer Node Discovery policy adds and deletes nodes from HPOM for Linux (OML) and HPE OMi server frequently.
Workaround	<p>Update the Discovery instance deletion threshold to a higher value.</p> <p>The following Discovery configuration variable makes Cloud Optimizer Discovery to update HPOM or HPE OMi if the data change is consistent for 12 hours. This is when Discovery runs every 30 mins.</p> <pre>[agtrep] INSTANCE_DELETION_THRESHOLD=<24></pre> <p>Use the following command to set the value:</p> <pre>/opt/OV/bin/ovconfchg -ns agtrep -set INSTANCE_DELETION_THRESHOLD <24></pre> <p>For more information, see the KB Article KM02373991.</p>

Problem	<p>For non-English locals, when the Online Help is accessed from the Cloud Optimizer user interface, the following error appears:</p> <p><i>"An error occurred while processing the request. Please try again."</i></p>
Workaround	<p>Follow these steps:</p> <ol style="list-style-type: none"> 1. Log on as a root user. 2. Run the command: <code>cd /opt/OV/www/webapps/PV/html/help/<lang_code>/WebHelp/vPVHelp</code> 3. Extract the contents of vPV.zip. 4. Run the command: <code>cd /opt/OV/www/webapps/PV/html/help/<lang_code>/WebHelp/CSA_vPVHelp/</code> 5. Extract the contents of CSA_vPV_Help.zip. <p>Where <lang_code>(language code) can be : spa(spanish), deu(german), rus(russian), fra(french), kor(korean), jpn(japan) or zho(simplified chinese).</p> <p>Example:</p> <p>For Korean:</p>

	<ol style="list-style-type: none"> 1. Log on as a root user. 2. Run the command: <code>cd /opt/OV/www/webapps/PV/html/help/kor/WebHelp/vPVHelp</code> 3. Extract the contents of vPV.zip. 4. Run the command: <code>cd /opt/OV/www/webapps/PV/html/help/kor/WebHelp/CSA_vPV_Help</code> 5. Extract the contents of CSA_vPV_Help.zip.
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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 Cloud Optimizer console, there is no data available on the Treemap.
Workaround	None

Problem	<p>Installation of HPE Operations Manager (HPOM) integration package fails on HPOM for Unix with the following error:</p> <pre>"/etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgupld/post/cvp_upload.sh: [: not found"</pre>
Workaround	<p>Follow the steps:</p> <ol style="list-style-type: none"> 1. Log on to the node as root. 2. Go to the following locations: <ul style="list-style-type: none"> <code>/etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgupld/post/</code> or <code>/etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgdwn/post/</code> 3. Open the <code>cvp_upload.sh</code> or <code>cvp_download.sh</code> file. Replace <code>#!/bin/sh</code> with <code>#!/usr/xpg4/bin/sh</code>. 4. Save and close the file.

Problem	The following metrics are not collected for Hyper-V Host, VM, or Datastore for
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	<p>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 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 Cloud Optimizer server as root. 2. Run the following commands: <ul style="list-style-type: none"> <code>ovc -kill</code> <code>ovc -start</code>
Problem	When a vCenter is down and started after 15 to 20 minutes, 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. Cloud Optimizer reports only configuration data for the vCenter. When the vCenter is up and running, Cloud Optimizer will automatically re-establish the connection and collect the performance data. The collection may take some time,

	<p>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, Cloud Optimizer does not collect the MAC address. Hence, 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	Cloud Optimizer does not support some of the features when accessing with IPv6 address.
Workaround	Use the host name to access Cloud Optimizer instead of IP address.
Problem	If Cloud Optimizer and Service Health Reporter (SHR) are installed on same system, Service Health Reporter (SHR) does not work after uninstalling Cloud Optimizer.
Workaround	Restart <code>ovtomcatB</code> using command <code>/opt/OV/bin/ovc -restart ovtomcatB</code> .
Problem	<p>The collection daemon does not start after reboot or upgrade. <code>ovc -status</code> shows <code>pvcd</code> in aborted state.</p> <p>OR</p> <p>Vertica Database does not start after rebooting.</p>
Workaround	<p>If the Cloud Optimizer Virtual Appliance is shutdown abruptly, sometimes the database does not start. Due to this, <code>pvcd</code> exits on rebooting.</p> <p>Restart the <code>pv</code> process (<code>pvcd</code>, Tomcat, and Vertica) after rebooting the machine. Run the command, <code>pv restart</code> from the 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 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 Cloud Optimizer. However, User2 is also able to view his VM subscription correctly.</p>
Workaround	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.

Problem	The Physical Server collector identifies a host as a KVM host even if the KVM hypervisor is uninstalled from the host.
Workaround	<p>To resolve the issue, perform the following steps:</p> <ol style="list-style-type: none"> 1. Log on to the Physical Server. 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.

Problem	<p>After upgrading the VA through VAMI interface, the following error appears intermittently:</p> <p><i>"Invalid Server Response"</i></p>
Workaround	Login to the VA VM and reboot.

Problem	Context sensitive Help launch does not open the respective content.
Cause	This issue is due to the updated Tomcat version <code>HP0vTomcatB-7.00.078-1.x86_64</code> .
Workaround	<p>To resolve the issue, follow the steps:</p> <ol style="list-style-type: none"> 1. Log on to Cloud Optimizer server as root. 2. Go to the following location: <ul style="list-style-type: none"> <code>/opt/OV/nonOV/tomcat/b/conf/catalina.properties</code> 3. Add the following: <ul style="list-style-type: none"> <code>tomcat.util.http.parser.HttpParser.requestTargetAllow={}</code> 4. Run the following command to restart Tomcat: <ul style="list-style-type: none"> <code>ovc -restart ovtomcatB</code> <p>OR</p> <p>Access the required Help content through the Help topics menu.</p>

Problem	Physical Server as a Datasource is not working on Windows.
Workaround	None

Limitations

- The Licensed Instance Count for Physical Servers shows incorrect value in the Settings page.
- Cloud Optimizer 3.02 coexists only with Operations Agent 12.01 and above. The OS drill-down on a node with Operations Agent is not supported. If you have HPOM or HPE OMi integration, you must upgrade Operations Agent to 12.01 or above.
- Cloud Optimizer does not collect datastore or disk metrics for VMs and Hypervisor for the following configurations:
 - i. KVM Hypervisor is acting as compute node in OpenStack.
 - ii. VMs created on KVM Hypervisor are not under Storage pool.
 - iii. The disk file name on the Storage pool is different from the VM name.
- When a target is removed from 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.
- 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 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.
- In non-root user mode Guest OS drill-down is not supported.

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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You must have Adobe Reader installed to view files in PDF format (*.pdf). To download Adobe Reader, go to the [Adobe](#) web site.

Localization Support

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

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

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

Open Source and Third-Party Components

The source code for the Open Source components for Cloud Optimizer is available via request. To obtain the source code, contact HPE support.

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Feedback on Release Notes (Cloud Optimizer 3.02)

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