



# HP Virtualization Performance Viewer

Software Version: 2.20  
Linux operating system

## Release Notes

Document Release Date: June 2015  
Software Release Date: June 2015

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This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com))

This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com))

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# HP Virtualization Performance Viewer Release Notes

for the Linux operating system

**Software version:** 2.20

**Publication date:** June 2015

HP Virtualization Performance Viewer (HP vPV) 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. HP vPV helps you visualize performance data for elements in the context of each other to rapidly analyze bottlenecks. HP vPV provides performance monitoring, graphing, and reporting in a single interface.

Some of the key features of HP vPV 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.
- Analyze the impact of increasing the workload.
- Determine the impact of adding or deleting the resources in your environment to proactively plan your hardware requirements

**Note:** HP vPV 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 HP vPV. 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?

- **Unified Enclosure View**

The **Unified Enclosure View** is a unique and intuitive representation of the virtual infrastructure overlaid on the actual physical layout of the Enclosures and Server Hardware managed by HP OneView. The Unified Enclosure View view allows you to leverage the power of both HP vPV and HP OneView to achieve end to end capacity planning and provisioning. Using the Unified Enclosure View, you can perform the following tasks:

- Get a comprehensive virtualized view of the selected Enclosure or Server Hardware
- Visualize the physical and virtual connection between Server Hardware and Hypervisor and Non-Hypervisor hosts
- Model the impact of removing a Server Hardware on the capacity of the cluster to which it belongs
- Perform risk assessment on the sustainability of the cluster on removing an Enclosure

- **Advanced Capacity Modeling Capabilities**

HP vPV's capacity modeling capabilities have been enhanced with the new **Find Capacity** functionality that helps you find compute capacity in your virtualized VMware environments using a simple and intuitive interface. If HP vPV is integrated with HP OneView, you can find additional capacity in both un-configured Server Hardware and Hypervisor Hosts.

- **Enhanced KVM capabilities**

With HP vPV 2.20, you can better manage your KVM environments. Monitoring of the KVM environment has been enhanced with an enriched metric set, capacity planning, forecast, alerting, and placement capabilities.

- **Business Metric Analyzer**

The Business Metric Analyzer adds another dimension to HP vPV's strong business grouping functionality. With the Business Metric Analyzer, you can perform the following tasks:

- Correlate the user-defined business metrics of a group with the pre-defined infrastructure performance and utilization metrics

- Analyze the impact of change in business metric values on the performance and utilization metrics.

- **Resource Meter**

The Resource Meter feature in HP vPV allows you to calculate the billing cost for the CPU, Memory, and Storage resources used by your business applications and services. You can use the Resource Meter to:

- Track the CPU, Memory, and Storage utilization of a set of VMs over a specific time interval
- Charge back the respective business groups that are using the services
- Calculate the potential savings or expense on a given sizing recommendation

- **Support for Amazon Web Services (AWS)**

HP vPV 2.20 includes support for Amazon Web Services (AWS) Elastic Compute Cloud (EC2) performance monitoring.

By adding support to manage the performance and capacity of AWS EC2, HP vPV moves closer to its vision of a managing multiple hypervisors and competing clouds. With AWS monitoring, you can ensure the reliability, availability, and performance of your Amazon EC2 instances and AWS solutions.

- **Performance and Usability Enhancements**

HP vPV 2.20 includes significant performance and usability improvements. The key enhancements are:

- Support for larger configurations of up to 10,000 Operating System instances
- New and improved **Settings** user interface to perform HP vPV tasks such as Adding DataSources, Integrating with other products, and Creating Business Groups
- Interactive installation guide that helps you proceed with HP vPV installation quickly and smoothly

- **X86 Virtualization Technology Evolution to HP vPV**

With the HP vPV 2.20 release, existing HP Operations Smart Plugin for Virtualization (VI SPI) and HP OpsBridge Management Pack for Virtualization (VI Management Pack) users can start to use a monitoring only edition of HP vPV for x86 virtualization technologies (VMware vSphere, Microsoft Hyper-V, KVM and Xen). For x86 virtualization technologies, you can continue to use the VI-SPI and VI Management Pack till the obsolescence of HP Operations Agent 11.1x. For non-x86 virtualization technologies (HPVM, AIX, Solaris), you can continue to use the VI SPI and VI Management Pack.

Some of the key benefits that you get with the technology evolution to HP vPV are:

- Improved scalability and interoperability
- Improved coverage of metrics

While the technology evolution entitles you to an equivalent capability replacement in HP vPV, you can get enhanced performance troubleshooting and capacity optimization of physical, virtual, and cloud technologies with the premium edition of HP vPV. For more details visit [hp.com/go/vpv](http://hp.com/go/vpv).

## 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 HP Support web site: [HP Support matrices](#).

**Note:** Most of the support areas require that you register as an HP 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 HP Passport ID, go to: [HP 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
  - HP Software Integrations



- HP Software Coexistence
- Performance and Sizing

## Installation Notes

Installation requirements, as well as instructions for installing HP vPV are documented in the *HP Virtualization Performance Viewer 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 HP vPV Virtual Appliance, or Linux-based installer.

### Virtual Appliance

The OVA file for the virtual appliance version of HP vPV is signed using GNU Privacy Guard (GPG). You can use the GPG signature to verify that the binaries you have downloaded are from HP 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 HP vPV is installed, ensure that port 8081 is open to ensure that HP vPV is accessible from the browser. For accessing in the HTTPS mode, port 8444 must be open. For more information on port settings, see the *HP Virtualization Performance Viewer Online Help*.

For more information on Installing HP vPV, see the *HP Virtualization Performance Viewer Installation Guide*.

After installing HP vPV, 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	When querying the performance metrics for datastore, if the value returned is larger than 32-bit, the VMware vCenter services fail.
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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 <a href="https://www.vmware.com/support/vsphere5/doc/vsp_vc50_u1_rel_notes.html#clientissues">https://www.vmware.com/support/vsphere5/doc/vsp_vc50_u1_rel_notes.html#clientissues</a> .
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 HP vPV console, there is no data available on the Treemap.
Workaround	None
Problem	Installation of HP Operations Manager (HPOM) integration package fails on HPOM for Unix with the following error:  "/etc/opt/0V/share/conf/OpC/mgmt_sv/integration/cfgupld/post/cvp_upload.sh: [[: not found"
Workaround	Follow the steps: <ol style="list-style-type: none"><li>1. Log on to the node as root.</li><li>2. Go to the following locations:  /etc/opt/0V/share/conf/OpC/mgmt_sv/integration/cfgupld/post/ or  /etc/opt/0V/share/conf/OpC/mgmt_sv/integration/cfgdwn/post/</li><li>3. Open the cvp_upload.sh or cvp_download.sh file. Replace #!/bin/sh with #!/usr/xpg4/bin/sh.</li><li>4. Save and close the file.</li></ol>

<p>Problem</p>	<p>The following metrics are not collected for Hyper- V Host, VM,or Datastore for Windows 2008 R2 SP1:</p> <p><b>Host Class</b></p> <ul style="list-style-type: none"> <li>• CPUReadyTime</li> <li>• CPUPhysReadyUtil</li> </ul> <p><b>Guest Class</b></p> <ul style="list-style-type: none"> <li>• SystemOSName</li> <li>• MemoryDemand</li> <li>• CPUReadyTime</li> <li>• CPUUserModeUtil</li> <li>• CPUSysModeUtil</li> <li>• IPAddress</li> </ul> <p><b>DataStore Class</b></p> <ul style="list-style-type: none"> <li>• DiskSnapShotUsed</li> <li>• DiskVMDKUSed</li> <li>• DiskProvisioned</li> <li>• DiskOthersUsed</li> </ul> <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>
<p>Workaround</p>	<p>None</p>
<p>Problem</p>	<p>Alert messages are not localized when the HP vPV server locale is changed to another locale.</p>
<p>Workaround</p>	<p>To display alert messages in the specified locale, follow the steps:</p> <ol style="list-style-type: none"> <li>1. Log on to HP vPV server as root.</li> <li>2. Run the following commands:</li> </ol> <pre style="margin-left: 40px;"> ovc -kill ovc -start </pre>

Problem	When a vCenter is down and started after 15 to 20 minutes, HP vPV does not collect performance data for that vCenter.
Workaround	<p>If a vCenter is down and started after 15 to 20 minutes, performance data is not collected. HP vPV reports only configuration data for the vCenter. When the vCenter is up and running, HP vPV 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"> <li>1. Open the <code>vpvWinVirtCollector.properties</code> file.</li> <li>2. Update <code>CollectionIntervalInSeconds=600</code>. By default, the value is set to 300 seconds.</li> <li>3. Restart the HP vPV Collector Service.</li> </ol>
Problem	If VMware tools are not installed, HP vPV does not collect the MAC address. Hence, HP vPV is not able to register the details of HP ComputeSensor running on a VM.
Workaround	Enable VMware tools for the VM in VMware vSphere Client. For more information, see the VMware documentation.
Problem	Data collection fails when both HP vPV versions 1.20 and 2.00 are integrated with HP Service Health Reporter (SHR) version 9.20 on Windows operating system.
Workaround	None
Problem	HP vPV does not support some of the features when accessing with IPv6 address.
Workaround	Use the host name to access HP vPV instead of IP address.
Problem	If HP vPV and Service Health Reporter (SHR) are installed on same system, Service Health Reporter (SHR) does not work after uninstalling HP vPV.
Workaround	Restart <code>ovtomcatB</code> using command <code>/opt/OV/bin/ovc -restart ovtomcatB</code> .

<p>Problem</p>	<p>The collection daemon does not start after reboot. The <code>ovc -status</code> shows <i>pvcd</i> in aborted state, after rebooting.</p> <p><b>OR</b></p> <p>Vertica Database does not start after rebooting.</p>
<p>Workaround</p>	<p>If the HP vPV 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 HP vPV console.</p>
<p>Problem</p>	<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 vPV.</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 vPV. However, User2 is also able to view his VM subscription correctly.</p>
<p>Workaround</p>	<p>The CSA administrator is recommended to clear the cache using the <b>Clear Cache</b> button available in the <b>CSA Integration</b> section in the <b>Settings &gt; Integrations</b> tab.</p>
<p>Problem</p>	<p>The Physical Server collector identifies a host as a KVM host even if the KVM hypervisor is uninstalled from the host.</p>
<p>Workaround</p>	<p>To resolve the issue, perform the following steps:</p> <ol style="list-style-type: none"> <li>1. Log on to the Physical Server machine.</li> <li>2. Go to the following location: <code>/dev/KVM</code></li> <li>3. Back up a copy of the <b>KVM</b> folder.</li> <li>4. Delete the <b>KVM</b> folder.</li> <li>5. Restart the HP Compute Sensor Service.</li> </ol>

## Limitations

- HP vPV version 2.20 has limited support for Internet Explorer version 9.0. You can only access few features such as Treemap, Workbench, and Admin.
- When a target is removed from HP vPV, 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.

- HP vPV 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 HP vPV, 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.
- The Unified Enclosure View when launched from the Treemap does not appear properly for non-VMware Server Hardwares. To resolve the issue, click any other Server Hardware in the Unified Enclosure View and then click the Server Hardware that was selected in the Treemap.
- HP vPV is partially localized in French, Spanish, Russian, Korean, and German locales.

## 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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6. Click **Search**.

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

HP supplies localized software for HP vPV in the following languages:

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

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

## Open Source and Third-Party Components

The source code for the Open Source components for HP vPV is available via requests. To obtain the source code please contact HP support or send an email to [hvpv.feedback@hp.com](mailto:hvpv.feedback@hp.com).

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