HP Virtualization Performance Viewer

For the Linux operating system

Software Version: 2.00

Installation Guide

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Contents

Chapter 1: Introduction

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.

Key features of HP vPV are as follows:

- Monitor the health and performance of the virtualized environment from Dashboard view.

- Triage analysis with the Workbench and capability to trend server utilization across days, weeks, and a month.

- Proactive monitoring of the entities that may cause disruptions in the environment. Use Treemap to identify and view the problems at a glance.

- 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 resources in your environment.

- Estimate the future capacity utilization in order to proactively plan your hardware requirements.

Conventions Used in this Document

The following conventions are used in this document when referring to the location of files on the HP Virtualization Performance Viewer (HP vPV) system:

Convention	Description	Value
<install_dir>	The directory where HP vPV is installed.	On Linux systems, the installation directory is `/opt/OV`.
<data_dir>	The common data directory where data files and log files related to HP Software products are stored.	The data directory is `/var/opt/OV`.

Chapter 2: Installation Requirements

During installation, the installer performs the following tasks:

- Checks if your system meets the disk space requirements. For information on the disk space, see "Hardware Requirements".

- Checks if your system has any other HP software product installed. For example: HP vPV co-exists with HP Operations Agent version 11.13.

- Provides a detailed log of the system disk space and other HP software products detected.

- Provides a list of components installed.

Note: HP vPV supports only x64-bit version of the Linux operating system.

Hardware Requirements

The minimum hardware requirements for installing HP vPV are:

Item	Value
CPU	2 vCPU
Memory	4 GB
Disk	40 GB
/opt/	700 MB
/var/	24 GB

Installing on a slower system or one with less memory may result in slow performance.

The following table lists the hardware requirements for using HP vPV with the Premium and Express licenses:

License	vCPU	RAM	Disk Space	Instances Monitored
Express	2	4 GB	40 GB	2000[*]
Premium	2	4 GB	40 GB	1000

[*]HP vPV can monitor more than 2000 instances by increasing the RAM and CPU. For more information, see the *HP Virtualization Performance Viewer Sizing Guide*.

Supported Browsers

The following table lists the web browsers that are required to access HP vPV:

Operating Systems	Supported Browsers
Microsoft Windows	Firefox 24 (ESR)
	Internet Explorer 10
	Internet Explorer 9 (limited support)
	Google Chrome (latest version)
Linux	Firefox 24 (ESR)

To view the HP vPV home page, install Adobe® Flash Player 10.2 or above and enable JavaScript support for the Internet Explorer (IE) or Mozilla Firefox browser by adding HP vPV to your list of Trusted Sites.

Support Matrix

The following table lists the support matrix for HP vPV:

Deliverable	Platforms/Versions
Linux Installer	RHEL 6.2, 6.3, 6.4
	CentOS 6.2, 6.4
Virtual appliance	CentOS 6.5

Chapter 3: Installing HP vPV

The following section details the different methods to install HP vPV:

- "Deploy the HP vPV Virtual Appliance"

- "Install HP vPV on Linux Nodes"

> **Note:** HP vPV does not support upgrade from the previous versions to version 2.00.

Pre-requisites

Following are the prerequisites for installing HP vPV:

- Ensure that port 8081 is open to make HP vPV accessible from the remote browser, if there is a firewall on the system where HP vPV is installed.

- Ensure that port 8444 is open to access in Hypertext Transfer Protocol Secure (HTTPS) mode.

- Ensure that the port used for accessing HP vPV (8081, by default) is open in the firewall, if there is a firewall between HP vPV and Microsoft System Center Virtual Machine Manager (SCVMM) server.

- Ensure that the port 5480 is open to access the Virtual Appliance Management Interface (VAMI).

Deploy the HP vPV Virtual Appliance

HP vPV is available as a Virtual Appliance for easy deployment in vCenter. You can use the VMware vSphere Client user interface to deploy the virtual appliance.

The supported VMware vCenter Server versions are 5.0, 5.1, and 5.5.

To deploy the HP vPV virtual appliance, follow these steps:

1. Open VMware vSphere Client.

2. Type the credentials and click **Login**.

3. Select **File > Deploy OVF Template**. The **Deploy OVF Template** window opens.

4. Click **Browse** to browse to the location where you have saved the HP vPV virtual appliance file.

5. Click **Next**. The window shows the details of virtual appliance.

6. Click **Next**. The End User License Agreement details appear.

7. Click **Accept** and then click **Next**.

8. Type a name for the virtual appliance in the **Name** field.

9. Select where to deploy the virtual appliance from the **Inventory Location** tree. Click **Next**.

10. Select the host or cluster where you want the virtual appliance to run. Click **Next**.

11. Select the specific host where to run the virtual appliance. Click **Next**.

12. Select the storage location where you want to store the virtual machine files. Click **Next**.

13. Select the disk format in which you want to store the virtual disks. Click **Next**.

14. Type the required Networking Properties and click **Next**. The window shows the details of the deployment.

15. Select the **Power on after deployment** check box.

16. Click **Finish**. The deployment task starts. After deployment, the virtual appliance name appears in the tree in the VMware vSphere Client user interface.

> **Note:** For more information, see the VMware documentation. The steps are subject to change based on VMware.

Logging in to the Virtual Appliance

You can log in to the HP vPV Virtual Appliance using the username as **root**. The default password is **vperf*viewer** and it is recommended to change the password after logging in.

Install HP vPV on Linux Nodes

Pre-requisites for Linux-Based Installer

Following are the prerequisites for the Installer version of HP vPV:

- Install Libvirt and all its dependencies on the HP vPV server.

  Libvirt is an open source management tool to manage virtualized platforms such as Linux, KVM, Xen, and so on.

  Libvirt can be installed on following versions of the different Linux distributions:

Linux Types	OS Versions
CentOS	6.2 6.3 6.4 (64-bit)
RHEL	6.2 6.3 6.4 (64-bit)

- Install Expect and all its dependencies on the HP vPV server.

  Expect is a tool that communicates with interactive programs such as ssh.

- For HP vPV standalone installation, install latest unixODBC package, if it is not already available.

  The unixODBC Driver Manager is an open source ODBC driver manager for providing application developers predictable APIs to access Data Sources.

- To install HP vPV, the following runtime libraries and packages are required:

  - On x64 systems:

    - glibc-2.3.4-2.36.i686.rpm

    - libgcc-3.4.6-8.i386.rpm

    - libstdc++-3.4.6-8.i386

    - unixODBC-2.2.14-12.el6_3.x86_64.rpm

  - To check the packages, use the following command:

    ```
    rpm -qa | grep -i <packagename>
    ```

    In this instance, `<packagename>` is the name of the package to be checked for.

  - C++ runtime:

    - For systems with kernel version 2.6:

      /usr/lib/libstdc++.so.5

    - For systems with kernel version 2.6 on Itanium :

      /usr/lib/libstdc++.so.6

  - Curses runtime library:

/usr/lib/libncurses.so.5

- unixODBC runtime library:

/usr/lib64/libodbc.so

- Make sure that the m4 utility is installed at the path **/usr/bin/m4**.

- Set the executable (x) bit for the libvirt library at one of the following paths as appropriate for your environment:

  ○ **/usr/lib64/libvirt.so**

  ○ **/usr/lib64/libvirt.so.0**

  ○ **/usr/lib/libvirt.so**

  ○ **/usr/lib/libvirt.so.0**

> **Note:** HP vPV uses HP Vertica during installation. HP Vertica does not support Logical Volume Manager (LVM) disk.
>
> **Pre-requisites:**
>
> - Swap size must be 2.00 GB.
>
> - Enable SELinux in permissive mode.
>
> To install HP vPV using HP Vertica on a LVM disk, follow these steps:
>
> 1. Create a virtual disk.
>
> 2. Format the filesystem to **ext4**.
>
> 3. Mount the virtual disk to **/var/opt/OV**.
>
> 4. Open the **/etc/fstab** file.
>
>   Add the following entry:
>
>    ```
>    </dev/sdb1> /var/opt/OV ext4 defaults 0 0
>    ```
>
>   where **</dev/sdb1>** is the virtual disk that you have created.
>
> 5. Run `mount` command to check if **/var/opt/OV** is mounted.
>
> 6. Install HP vPV version 2.00. For more information on Installing HP vPV, see "Attended Installation" on the next page or "Unattended Installation" on page 15.

You can install HP vPV by using any of the following procedures:

- "Attended Installation"

- "Unattended Installation"

> **Note:** To install HP vPV on your system, you must log on as root user.

Attended Installation

To install HP vPV through Graphical and command line interface, follow these steps:

Installing HP vPV through Graphical Interface

To install HP vPV using X11 interface, perform the following tasks:

1. Login as a root user.

2. Place the HP vPV CD/DVD-ROM media in the CD/DVD drive. If necessary, mount the CD/DVD-ROM.

3. To start installation, if you want to use the X11 terminal window, export the DISPLAY variable to point to an X11 terminal type the following command:

   `export DISPLAY=<IP_Address/system_name>:0.0`

   where, *<IP_Address/system_name>* is the IP address or the system name of the X11 terminal.

4. Type the following:

   `<CD/DVD-ROM> HPPV_1.xx.xxx_setup.bin`

   where, *<CD/DVD-ROM>* is the drive letter of the CD/DVD ROM.

   The HP vPV Installation wizard appears. This window displays an introductory message.

   > **Note:** If you are installing HP vPV for the first-time on your Linux system, the `ovinstallparams.ini` file containing the installation parameters is created in the system's `temporary` directory. During installation, HP Installer checks for the `ovinstallparams.ini` file. If HP Installer detects the `ovinstallparams.ini` file on your system, a message asking if you want to reuse the values in the file appears.
   >
   > - Click **Yes** to use the values in the configuration file as default values.
   >
   > - Click **No** to overwrite the existing configuration file.

If HP Installer does not find the file, the system creates the `ovinstallparams.ini` file with default values in the `temporary` directory. To save the `ovinstallparams.ini` data, copy the file to an alternate location, before installing other HP products.

5. On the HP vPV Installation wizard, click **Next**. The License Agreement screen appears.

6. Read the terms of license agreement. To continue with installation, select **I accept the terms of License Agreement** option. The installation wizard performs install checks.

7. Click **Next**. The Pre-Install Summary screen appears. The screen displays the list of components that will be installed.

8. Click **Install**.

Note: If the installation fails, you can roll back or quit installation. The **Roll Back** option removes the components which are already installed.

Clicking **Quit** stops the installation, but does not uninstall the components installed till then.

When you start HP vPV installation next time, the Installer prompts you to confirm if you want to resume the installation or uninstall HP vPV.

9. Click **Details** tab and expand the components tree to view the list of components.

10. To view the log file on your system, click **View Log Files.**

11. Click **Done** to complete the installation.

Note: If the system needs to be restarted, the following message appears after installation is complete: 'You may need to restart your system for the configuration changes made to the system to take effect. Would you like to quit this installation?'.

It is recommended that you restart your system after installation.

Installing HP vPV through Command Line Interface

Note: Localization is not supported when installing HP vPV in console mode. As a result, some text may be illegible.

To install HP vPV through Command Line interface, follow these steps:

1. Login as a root user.

2. Insert the HP vPV CD/DVD-ROM media into the CD/DVD drive. If necessary, mount the CD/DVD-ROM.

3. Run the following command:

   If you are installing HP vPV on a stand-alone system:

   <CD/DVDROM_mount>/**HPPV_1.xx.xxx_setup.bin -i console**

   where, *<CD/DVD-ROM>* is the drive letter of the CD/DVD ROM.

   If you have configured the locale of the system to one of the following languages: English, Japanese, and Simplified Chinese, the installer prompts you to select the language at the beginning of the installation. You will have the option of choosing the language to which your system locale is set. If the system locale is set to any other language apart from these, the installer displays only 'English'.

4. When the prompt, **I accept the terms of the License Agreement** for the License information appears, type **Y** to accept the terms and continue installation. The installer checks all the Install Requirements.

5. Click **Enter** to continue. The pre-installation summary appears.

6. Click **Enter** to continue.

   When the installation is complete, you will receive a message which states that the installation was completed successfully.

Unattended Installation

To carry out unattended installation, follow these steps:

1. Login as a root user.

2. Insert the HP vPV CD/DVD-ROM media into the CD/DVD drive. If necessary, mount the CD/DVD-ROM.

3. Go to the directory where the CD/DVD-ROM is mounted.

4. Type the following syntax at the command prompt:

   ./HPPV_1.xx.xxx_setup.bin -i silent

   > **Note:** If the installer finds a working installation of HP vPV, it will uninstall HP vPV when

> you run the `-i silent` command. If not, it will install HP vPV.

5. To verify the installation, check the log files.

Verify the Installation

On successful installation:

- The Linux systems display the application directory and data directory paths.

- To view install log files see the following:

  For Linux: `/tmp/HPPV_1.xx.xxx_HPPVInstaller.txt`

   `/var/tmp/HPPVInstaller/PerfUtil-mm-dd-yyyy.log.0`

  In this instance, `mm` indicates the month, `dd` indicates the day, and `yyyy` indicates the year. The file name indicates the time stamp when the install was performed.

Chapter 4: Getting Started

After installing HP vPV, you can start using the product by accessing the user interface. To launch HP vPV, you can use the following URL:

http://<system>:<port>/PV OR **https://<system>:<port>/PV**.

If authentication is enabled, log in using the user name and password. The Admin page opens for the first time.

To start using the product, add the data sources to be monitored. For more information on adding data sources, see the *HP Virtualization Performance Viewer Online Help*.

Chapter 5: Configuring HP vPV

The following section details different methods to configure HP vPV:

- Configure Secure Communication with Tomcat Server

- Add a vCenter server running on a non-default port

Configure Secure Communication with Tomcat Server

The HTTP and HTTPS protocols are by default enabled for HP vPV. The default port numbers for HTTP and HTTPS are 8081 and 8444 respectively. You can choose to use either of the protocols. However, to ensure security for administration-related tasks, you must access HP vPV in the secure communications mode. To access HP vPV in the secure mode, use the following URL:

https://<systemname>:8444/PV

To access HP vPV in the non secure mode, use the following URL:

http://<systemname>:8081/PV

You can also change the default port settings for both HTTP and HTTPS communications.

Changing Port Settings

The default HTTP port number to access HP vPV is 8081 and the default port number for secure connection is 8444. All client systems are authorized to connect to HP vPV server. To change the default port number for the HP vPV server, follow these steps:

1. Check for the availability of the port number you want to use, by running the following commands at the command prompt:

   cd <bin_dir>

   ovtomcatbctl -checkport <portnumber>

   A message indicating if the port is available or in use appears. For example, if you are checking for the availability of the port number 8081, the message, "Port Number 8081 is not in use" appears, if the port number is available. If the Port Number 8081 is not available, a message indicating that the port number is used by another program or service appears.

2. Stop HP vPV by running the following command at the command prompt:

   pv stop

3. To change http or https port numbers for HP vPV server, run the following command at the command prompt:

cd <bin_dir>

ovconfchg -ns NONOV.TomcatB -Set HTTPPort <port number>

ovconfchg -ns NONOV.TomcatB -Set HTTPSPort <port number>

4. Start the HP vPV server.

Disabling Secure Communications

To disable secure communications, perform the following steps:

1. Stop HP vPV, if HP vPV is running.

2. Run the following command at the command prompt:

    cd <bin_dir>

    ovconfchg -ns NONOV.TomcatB -set EnableHTTPS False

    > **Note:** To enable secure communication again, set the value to **True**, instead of **False**, in the preceding command.

3. Restart HP vPV.

Using SSL or HTTPS with the Tomcat Web Server

To use SSL or HTTPS protocols with the Tomcat web server, you need to obtain a server certificate for Tomcat after installing HP vPV. You can replace the certificate obtained after HP vPV installation in the following scenarios:

- When you connect to HP vPV using HTTPS protocol, the certificate and name of the system are compared to ensure that the names match. If the names are not similar, most browsers alert the users so that they can decide to either continue or cancel the connection. If the name used by HTTPS users is different from the name used by the HP vPV installation, you must obtain a different certificate.

- You may need to obtain a new certificate when you want to fill the fields in the certificate that are left blank during HP vPV installation. The certificate contains many fields to provide information, such as, the issuer of the certificate and other fields that warrant the safety provided by the certificate. The HP vPV installation certificate leaves most of these fields blank.

- When you want to change the default certificate password to avoid unauthorized changes, you must replace the existing certificate.

To replace the Tomcat SSL certificate, perform the following steps:

1. Delete the existing certificate by running the following command at the command prompt.

   keytool -delete -alias ovtomcatb -keystore /var/opt/OV/certificates/tomcat/b/tomcat.keystore

   The keytool path on Linux is */opt/OV/nonOV/jre/b/bin*

2. Restart HP vPV.

3. Create a new certificate. To create a new certificate, run `Keytool` by entering the following commands at the command prompt:

   keytool -genkey -alias ovtomcatb -keyalg RSA -keystore /var/opt/OV/certificates/tomcat/b/tomcat.keystore

4. Restart HP vPV.

Add a vCenter server running on a non-default port

vCenter Server system requires port 443, for connections from the vSphere and Software Development Kit (SDK) clients. By default, vCenter collector of HP vPV 2.0 uses port 443 for data collection from vCenter server. If this default port 443 is re-configured in your environment due to any reason, it is recommended to use the `iptables` to route the traffic.

During the HP vPV 2.0 installation, run the `iptables` command and setup port forwarding rules for each of the target.

Follow the steps:

1. Log on as a root user.

2. Run the following command:

   ```
   iptables -t nat -A OUTPUT -p tcp -m tcp -d <target vcenter(s) ip> --dport 443
   -j DNAT --to-destination <target vcenter(s) ip>:<target port>
   ```

   In this instance, **<target vcenter(s) ip>** is the ip address of the target vCenter and **<target port>** is the port number of the target.

Using HP vPV Commands

After you install HP vPV, you can use the following commands to administer the HP vPV workspace through the command prompt.

<bin_dir>/pv <Options>

You can replace *<Options>* with any of the following variables:

- **status** - To check the HP vPV status.

- **start** - To start HP vPV.

All the applications that use OvTomcatB are started when you run **pv start** command.

- **stop** - To stop HP vPV.

  All the applications that use OvTomcatB are stopped when you run **pv stop** command.

- **restart** - To stop and then start HP vPV.

- **trace on** - To start generating detailed trace files.

- **trace off** - To stop generating detailed trace files.

- **version** - To display the version of HP vPV installed on your system.

Chapter 6: License Management

After you install HP vPV, you can purchase the appropriate licenses based on your business requirements. These licenses enable you to access all the features of the product. To purchase the respective license, click **You have Evaluation/Community license. Click to buy license link.** The link navigates to the **Buy License** page. Enter your details in the **Contact Me** tab and click **Submit**. Make sure email client is configured in your browser.

To access the License tab on the HP vPV user interface:

1. Log in to the HP vPV user interface to import licenses.

2. Select **Admin** from the HP vPV home page.

The License Management tab provides information about your HP vPV licenses. You can also use this tab to start using your Evaluation License as well as import a HP vPV license. For more information on importing licenses, see "Importing Licenses".

> **Note:** If you install an Express license on the HP vPV server which uses a Community license, then the Community license expires.
>
> If you want to retain the Community license, create a separate HP vPV server to install the Express license.

For more information on the difference between the licenses and the features available, see "Types of Licenses"

User Interface

The following table lists the sections available in the License Management tab.

Section	Description
License Status	Displays information regarding the installed licenses. The two tables available are: • Active License Features • Installed Licenses
Manage License	To import permanent licenses.

The **Active License Details** table lists the following information about your current HP vPV License:

• Capacity or number of instances available corresponding to each license.

• Number of instances that can be monitored, based on the installed license

- Data Retention

The **Installed Licenses** table lists the following information regarding the active and all installed licenses for HP vPV:

- Type of license installed

- Date of license expiry

Types of Licenses

The following table lists the available features for the Community, Express, Premium, and Evaluation HP vPV Licenses:

Feature	Community License	Express License	Premium License	Evaluation License
Number of Instances	25 instances	6000 Tested up to 6000 instance. Larger configurations can be supported. For more information, see the HP vPV Sizing Guide.		
Data Retention	Up to 24 hours	90 days	90 days	60 days
Enterprise Directory Integration	No	Yes	Yes	Yes
Reports	Yes	Yes	Yes	Yes
HP OM, HP PM and HP BSM Integration	No	Yes	Yes	Yes
HP CSA Integration	No	No	Yes	Yes
Guest Operating System drill down for advanced troubleshooting	No	No	Yes	Yes
Current Capacity Reports (Only for VMware™ vSphere and Microsoft™ HyperV)	No	No	Yes	Yes
Best-fit Capacity Optimization (Only for VMware™ vSphere and Microsoft™ HyperV)	No	No	Yes	Yes
Virtual Machine Placement (Only for VMware™ vSphere)	No	No	Yes	Yes
Capacity Demand Forecast (Only for VMware™ vSphere and Microsoft™ HyperV)	No	No	Yes	Yes

Feature	Community License	Express License	Premium License	Evaluation License
Alerting (Only for VMware™ vSphere)	No	Yes	Yes	Yes
Capacity Modeler (Only for VMware™ vSphere)	No	No	Yes	Yes
Dashboard	No	No	Yes	Yes

Note: The number of instances denote only the VMs and hosts.

All product features are available for the Evaluation License. The only difference between the Evaluation License and Premium License is the validity.

Evaluation License

After installing HP vPV, by default, your active license will be Community License. To start using your Evaluation License, click **Start Evaluation**. The page refreshes and displays information regarding your Evaluation License.

After the Evaluation License expires (after 60 days), the system changes your license automatically to Community License.

Note: Data collection works only when the sum of instances from all data sources is less than or equal to the maximum instance capacity of the license. If the total instance count exceeds the maximum instance capacity of the license, then connection for all the data sources fails. For example, if you install a Premium license for 100 instances, and try to connect two hosts with 60 instances each, then the collection fails for both the hosts.

License Validity

The following table lists the validity of the different HP vPV licenses:

License	Validity
Community	Not Applicable
Evaluation	60 days
Premium	Depends on the date when license is ordered
Express	Depends on the date when license is ordered

Importing Licenses

After you purchase a license, you must import it before you start using HP vPV.

To import licenses for HP vPV, follow these steps:

1. Go to the **License Management** tab in Admin page.

2. Type your license key in the **License Key** field of the Manage License section.

3. Click **Import License.** The License Status section refreshes to display the details of the license imported.

    To clear the license key typed in, click **Reset**.

Chapter 7: Removing HP vPV

You can remove HP vPV installed on Linux systems by using the procedure described in the following section:

HP vPV Virtual Appliance

To remove the HP vPV virtual appliance, power off the VM and delete the VM.

Remove HP vPV from Linux Nodes

To remove HP vPV from a Linux system:

1. Log on as root user.

2. Go to `/opt/OV/Uninstall/HPPV.`

3. Run the uninstall command:

   - To use an X11 interface, export the `DISPLAY` variable to point to an X11 terminal if necessary. Then run the command:

     `./setup.bin`

   - To use a command line interface, run the command:

     `./setup.bin -i console`

4. Select **Uninstall**.

Removing Configurations and User Graph Templates

Removing HP vPV does not remove configurations or user graph templates. You need to manually remove the files from the data directory.

Removing HP vPV Files using the Clean-up Script

After removing HP vPV, you must run the following clean-up script. This script is available in the `<install_dir>\support`:

- `clnup_pv.sh` for Linux

The clean-up script removes the following files from `<data_dir>\conf\perf`:

- `OVPMconfig.ini`

- `OVPMUsers.xml`

- `OVPMSystems.xml`

- `ovpm.tcf`

- `VPI_GraphsUserFavorites.txt`

- `OVPMReportTemplate.htm`

- All folders starting with the name "`VPI_`".

- All PV database related files

> **Note:** If you plan to reinstall HP vPV on the same system, make sure you delete the following folders after you finish running the clean-up script:
>
> - /opt/OV/
>
> - /opt/vertica/
>
> - /var/opt/OV/

Chapter 8: Troubleshooting HP vPV

The following section details how to troubleshoot HP vPV:

Vertica database is filled to near capacity due to the increase in the log file size.

Symptom	The Vertica database is filled to near capacity due to the increase in the log file size.
Causes	Vertica database consolidates and retains the log data in a **.gz** file daily. By default, this process (called 'rotate') continues for 52 weeks.

Resolution	To create more space on the Vertica database implement any one of the two solutions below:
	
	Solution 1
	
	1. Go to **/opt/vertica/config/logrotate/**.
	
	2. Open the **pv** file.
	
	3. In the pv file, under **# and keep for 52 weeks** change the value of **rotate** from 52 to the number of weeks for which you want to save the rotated log files.
	
	For example: **rotate 3**
	
	In this instance, the Vertica database will retain the **.gz** files for 3 weeks.
	
	4. Repeat **step 3** for all instances of **# and keep for 52 weeks**.
	
	5. Save and close the file.
	
	Solution 2
	
	1. Login as a root user.
	
	2. Run the following commands on the HP vPV server:
	
	`cd /opt/vertica/bin`
	
	`./admintools -t logrotate -d pv -r weekly -k <number_of_weeks>`
	
	where, *<number_of_weeks>* is the number of weeks for which you want to retain the rotated logs.

Unable to Access HP vPV

Symptom	Unable to access HP vPV through the default network port settings.

Causes	• Your system has **ovTomcatB** configured to run with the non-root user or non-local system account privileges and you have HP vPV installed on such a system. • You cannot access HP vPV using the default http (8081) or https (8444) ports if these ports are in use by other applications.
Resolution	• Check if **ovTomcatB** is configured to run with the non-root user or non-local system account privileges. If so, modify the settings to run **ovTomcatB** with the Administrator or root user privileges. • Try accessing HP vPV by using the following URL: `http://<IP address/system name>:<port number>/PV` where, *<IP address/system name>* is the IP address or the system name of the HP vPV server and *<port number>* is the port number of the HP vPV server. If the HP vPV Home page does not appear, check if the default ports are in use. • To change the port settings, follow these steps: 1. Run the following command at the command prompt to change the port numbers for HTTP, HTTPS, and ShutdownPorts: *<bin_dir>ovconfchg -ns NONOV.TomcatB -set HTTPPort <port number>* *<bin_dir>ovconfchg -ns NONOV.TomcatB -set HTTPSPort <port number>* *<bin_dir>ovconfchg -ns NONOV.TomcatB -set ShutdownPort <port number>* 2. Restart HP vPV.

Unable to connect to HP vPV server through HTTPS protocol

Symptom	HP vPV is unable to connect to the server through secure communication (HTTPS) protocol.
Cause	The connection times out when HP vPV is not able to connect through the secure client in the default timeout interval of one second.
Resolution	Use the parameter **SECURE_CLIENT_CONNECT_TIMEOUT** to adjust the timeout interval to connect to HP vPV server depending on your Internet connectivity or infrastructure setup.

Deployment of HP vPV fails

Symptom	The deployment of the HP vPV Virtual Appliance fails.
Cause	This may happen when the time on the ESX server is set to a future time.
Resolution	Ensure that the time on the ESX server is set correctly.

Unable to view content on HP vPV home page

Symptom	The HP vPV Home page does not display anything except the header.
Cause	JavaScript is not supported or Adobe® Flash Player is not installed in your browser. Adobe® Flash Player version 10.3 is the minimum required version.
Resolution	Install Adobe® Flash Player and enable JavaScript support for the Internet Explorer (IE) or Mozilla Firefox browser by adding HP vPV to your list of Trusted Sites. • To add HP vPV Web server URL to a trusted site, perform the following steps: For IE browser a. From the Tools menu, click **Internet Options**. The Internet Options pop-up window appears. b. Click **Security** tab. c. Select the **Trusted Sites** icon. d. Click **Sites**. The Trusted Sites pop-up window appears. e. Type the HP vPV web server URL and click **Add**. The typed URL appears in the list of trusted sites. f. Click **Close**. g. Click **OK**. h. Restart the browser. For Mozilla Firefox browser a. From the **Edit** menu, click **Preferences**. The Options pop-up window appears. b. Click **Privacy** tab. c. Click **Exceptions**. d. Type the HP vPV web server URL in the box under Address of web site. e. Click **Allow**. f. Click **Close**. g. Click **OK**. h. Restart the browser.

Resolution	• If Adobe® Flash Player is not installed in your browser, HP vPV Home page does not appear. The browser displays a message stating that you must Install Adobe Flash Player to view the HP vPV Home Page. Click the message to download Adobe® Flash Player.
	• If JavaScript is not enabled in your browser, HP vPV Home page does not appear in the IE browser even after adding it as a trusted site. The browser displays a message stating that JavaScript is not enabled in your browser and you must enable JavaScript to view the page.
	To enable JavaScript support, perform the following steps:
	For IE browser
	a. From the Tools menu, click **Internet Options**. The Internet Options pop-up window appears.
	b. Click the **Security** tab. Check if the security level in your browser settings is set to High.
	c. Make sure the **Trusted Sites** icon is selected and click **Custom Level**. The Security Settings pop-up window appears.
	d. Scroll down to Scripting section and select the **Enabled** option under **Active Scripting**.
	e. Click **OK**.
	f. Click **Apply**.
	For Mozilla Firefox browser:
	a. From the Tools menu, click **Options**.
	b. Click **Content**.
	c. Select the **Enable JavaScript** check box.
	d. Click **OK**.

HTTP Status 404 - /PV Error

Symptom	When trying to access HP vPV, you get the HTTP Status 404 - /PV Error message.
Cause	The message appears if the *<INSTALLDIR>/www/webapps/PV* directory is empty.
Resolution	Extract the Perf.war file again from *<Install_Dir>/newconfig/PV* to *<Install_dir>/www/webapps/PV*. Run the command *pv deploywar*.

What are the log files available with HP vPV?

The following table lists the log files available with HP vPV:

Component	Description	Location
`pvcd` (PV Collection Daemon)	`pvcd` daemon uses XPL tracing mechanism. A default pvcdXPL.itc (trace configuration) is available in `/opt/OV/support` directory. To start the tracing, run `/opt/OV/support/ovtrccfg -app pvcd -cf /opt/OV/newconfig/conf/xpl/trc /pvcdXPL.itc` The XPL trace files are present at `/tmp/pvcd_*.trc`. To stop tracing, run `/opt/OV/support/ovtrccfg -app pvcd -off`	If tracing is enabled, `/tmp/ directory` contains the trace files (use - `ls /tmp/pvcd_ *.trc`)
	`pvcd` and `pvconfig` tools log important status and error messages, if any, in `System.txt`.	`/var/opt/OV/log/System.txt`
Collectors	vCenter and OpenStack collector status log file `/var/opt/OV/log/status.virtserver`	`/var/opt/OV/log/status.virt server`
	KVM collector status log file	`/var/opt/OV/log/status.kvm`
	XEN collector status log file	`/var/opt/OV/log/tmp/status. xen`
Database Transaction	Vertica catalog file to view database transactions	`/var/opt/OV/databases/pv/ca talog/pv/v_pv_node0001_ catalog/vertica.log`
User Interface	Local trace and log messages are logged in `ovpmtrace.0.txt` and `ovpm.0.log`	`/var/opt/OV/log`

Appendix: RPMs Packaged with the HP vPV Virtual Appliance

The RPMs packaged with the HP vPV Virtual Appliance are as follows:

- setup-2.8.14-20.el6.noarch

- basesystem-10.0-4.el6.noarch

- tzdata-2012j-1.el6.noarch

- glibc-common-2.12-1.107.el6.x86_64

- ncurses-libs-5.7-3.20090208.el6.x86_64

- libattr-2.4.44-7.el6.x86_64

- zlib-1.2.3-29.el6.x86_64

- audit-libs-2.2-2.el6.x86_64

- popt-1.13-7.el6.x86_64

- db4-4.7.25-17.el6.x86_64

- nspr-4.9.2-1.el6.x86_64

- bzip2-libs-1.0.5-7.el6_0.x86_64

- libselinux-2.0.94-5.3.el6.x86_64

- sed-4.2.1-10.el6.x86_64

- glib2-2.22.5-7.el6.x86_64

- gawk-3.1.7-10.el6.x86_64

- sqlite-3.6.20-1.el6.x86_64

- libxml2-2.7.6-8.el6_3.4.x86_64

- libstdc4.4.7-3.el6.x86_64

- dbus-libs-1.2.24-7.el6_3.x86_64

- grep-2.6.3-3.el6.x86_64

- findutils-4.4.2-6.el6.x86_64

- cyrus-sasl-lib-2.1.23-13.el6_3.1.x86_64

- libblkid-2.17.2-12.9.el6.x86_64

- keyutils-libs-1.4-4.el6.x86_64

- libgssglue-0.1-11.el6.x86_64

- libgpg-error-1.7-4.el6.x86_64

- vim-minimal-7.2.411-1.8.el6.x86_64

- checkpolicy-2.0.22-1.el6.x86_64

- sysvinit-tools-2.87-4.dsf.el6.x86_64

- perl-Pod-Escapes-1.04-129.el6.x86_64

- perl-Module-Pluggable-3.90-129.el6.x86_64

- perl-libs-5.10.1-129.el6.x86_64

- pth-2.0.7-9.3.el6.x86_64

- keyutils-1.4-4.el6.x86_64

- grubby-7.0.15-3.el6.x86_64

- upstart-0.6.5-12.el6.x86_64

- libusb-0.1.12-23.el6.x86_64

- nss-softokn-3.12.9-11.el6.x86_64

- xz-lzma-compat-4.999.9-0.3.beta.20091007git.el6.x86_64

- MAKEDEV-3.24-6.el6.x86_64

- net-tools-1.60-110.el6_2.x86_64

- tar-1.23-11.el6.x86_64

- pinentry-0.7.6-6.el6.x86_64

- e2fsprogs-libs-1.41.12-14.el6.x86_64

- which-2.19-6.el6.x86_64

- diffutils-2.8.1-28.el6.x86_64

- dash-0.5.5.1-4.el6.x86_64

- groff-1.18.1.4-21.el6.x86_64

- coreutils-libs-8.4-19.el6.x86_64

- cracklib-2.8.16-4.el6.x86_64

- coreutils-8.4-19.el6.x86_64

- module-init-tools-3.9-21.el6.x86_64

- redhat-logos-60.0.14-12.el6.centos.noarch

- libpciaccess-0.13.1-2.el6.x86_64

- rpcbind-0.2.0-11.el6.x86_64

- nss-3.14.0.0-12.el6.x86_64

- nss-tools-3.14.0.0-12.el6.x86_64

- libuser-0.56.13-5.el6.x86_64

- pciutils-libs-3.1.10-2.el6.x86_64

- mingetty-1.08-5.el6.x86_64

- ustr-1.0.4-9.1.el6.x86_64

- libffi-3.0.5-3.2.el6.x86_64

- newt-0.52.11-3.el6.x86_64

- ca-certificates-2010.63-3.el6_1.5.noarch

- python-libs-2.6.6-36.el6.x86_64

- libssh2-1.4.2-1.el6.x86_64

- curl-7.19.7-35.el6.x86_64

- rpm-4.8.0-32.el6.x86_64

- python-pycurl-7.19.0-8.el6.x86_64

- gnupg2-2.0.14-4.el6.x86_64

- pygpgme-0.1-18.20090824bzr68.el6.x86_64

- yum-metadata-parser-1.1.2-16.el6.x86_64

- yum-plugin-fastestmirror-1.1.30-14.el6.noarch

- bind-libs-9.8.2-0.17.rc1.el6.x86_64

- fipscheck-lib-1.2.0-7.el6.x86_64

- kbd-misc-1.15-11.el6.noarch

- policycoreutils-2.0.83-19.30.el6.x86_64

- iproute-2.6.32-23.el6.x86_64

- util-linux-ng-2.17.2-12.9.el6.x86_64

- udev-147-2.46.el6.x86_64

- plymouth-0.8.3-27.el6.centos.x86_64

- dracut-004-303.el6.noarch

- rsyslog-5.8.10-6.el6.x86_64

- cyrus-sasl-2.1.23-13.el6_3.1.x86_64

- cronie-anacron-1.4.4-7.el6.x86_64

- crontabs-1.10-33.el6.noarch

- nfs-utils-1.2.3-36.el6.x86_64

- selinux-policy-3.7.19-195.el6.noarch

- kernel-firmware-2.6.32-358.el6.noarch

- dhclient-4.1.1-34.P1.el6.centos.x86_64

- system-config-firewall-base-1.2.27-5.el6.noarch

- bfa-firmware-3.0.3.1-1.el6.noarch

- iwl100-firmware-39.31.5.1-1.el6.noarch

- b43-openfwwf-5.2-4.el6.noarch

- aic94xx-firmware-30-2.el6.noarch

- iwl1000-firmware-39.31.5.1-1.el6.noarch

- authconfig-6.1.12-13.el6.x86_64

- gettext-0.17-16.el6.x86_64

- grub-0.97-81.el6.x86_64

- wget-1.12-1.8.el6.x86_64

- passwd-0.77-4.el6_2.2.x86_64

- audit-2.2-2.el6.x86_64

- acl-2.2.49-6.el6.x86_64

- ql2400-firmware-5.08.00-1.el6.noarch

- ql2100-firmware-1.19.38-3.1.el6.noarch

- libertas-usb8388-firmware-5.110.22.p23-3.1.el6.noarch

- ql2500-firmware-5.08.00-1.el6.noarch

- zd1211-firmware-1.4-4.el6.noarch

- rt61pci-firmware-1.2-7.el6.noarch

- ql2200-firmware-2.02.08-3.1.el6.noarch

- ipw2100-firmware-1.3-11.el6.noarch

- ipw2200-firmware-3.1-4.el6.noarch

- vmware-studio-vami-tools-2.6.0.0-631426.x86_64

- vmware-studio-vami-servicebase-2.6.0.0-631426.x86_64

- vmware-studio-vami-service-system-2.6.0.0-0.x86_64

- vmware-studio-vami-service-oaconfig-1.0.0.0-0.x86_64

- vmware-studio-appliance-config-2.6.0.0-130820235403.noarch

- vmware-studio-vami-login-2.6.0.0-631426.x86_64

- libgcc-4.4.7-3.el6.x86_64

- filesystem-2.4.30-3.el6.x86_64

- ncurses-base-5.7-3.20090208.el6.x86_64

- nss-softokn-freebl-3.12.9-11.el6.x86_64

- glibc-2.12-1.107.el6.x86_64

- bash-4.1.2-14.el6.x86_64

- libcap-2.16-5.5.el6.x86_64

- info-4.13a-8.el6.x86_64

- libcom_err-1.41.12-14.el6.x86_64

- chkconfig-1.3.49.3-2.el6.x86_64

- libacl-2.2.49-6.el6.x86_64

- nss-util-3.14.0.0-2.el6.x86_64

- libsepol-2.0.41-4.el6.x86_64

- shadow-utils-4.1.4.2-13.el6.x86_64

- gamin-0.1.10-9.el6.x86_64

- readline-6.0-4.el6.x86_64

- xz-libs-4.999.9-0.3.beta.20091007git.el6.x86_64

- libidn-1.18-2.el6.x86_64

- file-libs-5.04-15.el6.x86_64

- tcp_wrappers-libs-7.6-57.el6.x86_64

- pcre-7.8-6.el6.x86_64

- lua-5.1.4-4.1.el6.x86_64

- bzip2-1.0.5-7.el6_0.x86_64

- libuuid-2.17.2-12.9.el6.x86_64

- expat-2.0.1-11.el6_2.x86_64

- krb5-libs-1.10.3-10.el6.x86_64

- elfutils-libelf-0.152-1.el6.x86_64

- libtirpc-0.2.1-5.el6.x86_64

- libselinux-utils-2.0.94-5.3.el6.x86_64

- cpio-2.10-11.el6_3.x86_64

- gdbm-1.8.0-36.el6.x86_64

- perl-version-0.77-129.el6.x86_64

- perl-Pod-Simple-3.13-129.el6.x86_64

- perl-5.10.1-129.el6.x86_64

- libgcrypt-1.4.5-9.el6_2.2.x86_64

- dbus-glib-0.86-5.el6.x86_64

- libnih-1.0.1-7.el6.x86_64

- gmp-4.3.1-7.el6_2.2.x86_64

- file-5.04-15.el6.x86_64

- xz-4.999.9-0.3.beta.20091007git.el6.x86_64

- libutempter-1.1.5-4.1.el6.x86_64

- procps-3.2.8-25.el6.x86_64

- psmisc-22.6-15.el6_0.1.x86_64

- db4-utils-4.7.25-17.el6.x86_64

- libss-1.41.12-14.el6.x86_64

- m4-1.4.13-5.el6.x86_64

- libgomp-4.4.7-3.el6.x86_64

- binutils-2.20.51.0.2-5.36.el6.x86_64

- ncurses-5.7-3.20090208.el6.x86_64

- less-436-10.el6.x86_64

- gzip-1.3.12-18.el6.x86_64

- cracklib-dicts-2.8.16-4.el6.x86_64

- pam-1.1.1-13.el6.x86_64

- hwdata-0.233-7.9.el6.noarch

- plymouth-scripts-0.8.3-27.el6.centos.x86_64

- cvs-1.11.23-15.el6.x86_64

- logrotate-3.7.8-16.el6.x86_64

- nss-sysinit-3.14.0.0-12.el6.x86_64

- openldap-2.4.23-31.el6.x86_64

- libcap-ng-0.6.4-3.el6_0.1.x86_64

- ethtool-3.5-1.el6.x86_64

- libevent-1.4.13-4.el6.x86_64

- libsemanage-2.0.43-4.2.el6.x86_64

- slang-2.2.1-1.el6.x86_64

- plymouth-core-libs-0.8.3-27.el6.centos.x86_64

- openssl-1.0.0-27.el6.x86_64

- python-2.6.6-36.el6.x86_64

- libcurl-7.19.7-35.el6.x86_64

- rpm-libs-4.8.0-32.el6.x86_64

- rpm-python-4.8.0-32.el6.x86_64

- python-urlgrabber-3.9.1-8.el6.noarch

- gpgme-1.1.8-3.el6.x86_64

- newt-python-0.52.11-3.el6.x86_64

- python-iniparse-0.3.1-2.1.el6.noarch

- yum-3.2.29-40.el6.centos.noarch

- mysql-libs-5.1.66-2.el6_3.x86_64

- fipscheck-1.2.0-7.el6.x86_64

- centos-release-6-4.el6.centos.10.x86_64

- iptables-1.4.7-9.el6.x86_64

- iputils-20071127-16.el6.x86_64

- initscripts-9.03.38-1.el6.centos.x86_64

- libdrm-2.4.39-1.el6.x86_64

- kbd-1.15-11.el6.x86_64

- dracut-kernel-004-303.el6.noarch

- openssh-5.3p1-84.1.el6.x86_64

- postfix-2.6.6-2.2.el6_1.x86_64

- cronie-1.4.4-7.el6.x86_64

- nfs-utils-lib-1.1.5-6.el6.x86_64

- iptables-ipv6-1.4.7-9.el6.x86_64

- dhcp-common-4.1.1-34.P1.el6.centos.x86_64

- kernel-2.6.32-358.el6.x86_64

- selinux-policy-targeted-3.7.19-195.el6.noarch

- openssh-server-5.3p1-84.1.el6.x86_64

- iwl5150-firmware-8.24.2.2-1.el6.noarch

- iwl6050-firmware-41.28.5.1-2.el6.noarch

- iwl6000g2a-firmware-17.168.5.3-1.el6.noarch

- iwl6000-firmware-9.221.4.1-1.el6.noarch

- bind-utils-9.8.2-0.17.rc1.el6.x86_64

- man-1.6f-32.el6.x86_64

- libxml2-python-2.7.6-8.el6_3.4.x86_64

- gdb-7.2-60.el6.x86_64

- efibootmgr-0.5.4-10.el6.x86_64

- sudo-1.8.6p3-7.el6.x86_64

- e2fsprogs-1.41.12-14.el6.x86_64

- attr-2.4.44-7.el6.x86_64

- iwl5000-firmware-8.83.5.1_1-1.el6_1.1.noarch

- ivtv-firmware-20080701-20.2.noarch

- xorg-x11-drv-ati-firmware-6.99.99-1.el6.noarch

- atmel-firmware-1.3-7.el6.noarch

- iwl4965-firmware-228.61.2.24-2.1.el6.noarch

- iwl3945-firmware-15.32.2.9-4.el6.noarch

- rt73usb-firmware-1.8-7.el6.noarch

- ql23xx-firmware-3.03.27-3.1.el6.noarch

- rootfiles-8.1-6.1.el6.noarch

- vmware-studio-init-2.6.0.0-130820235404.noarch

- vmware-studio-vami-cimom-2.6.0.0-631426.x86_64

- vmware-studio-vami-service-core-2.6.0.0-0.x86_64

- vmware-studio-vami-service-network-2.6.0.0-0.x86_64

- vmware-studio-vami-service-update-2.6.0.0-0.x86_64

- vmware-studio-vami-lighttpd-2.6.0.0-631426.x86_64

We appreciate your feedback!

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Installation Guide (Virtualization Performance Viewer 2.00)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to docfeedback@hp.com.