Hewlett Packard
Enterprise

HPE Cloud Optimizer

Software Version: 3.00

Getting Started Guide

Legal Notices

Warranty

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Acknowledgements

Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
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Chapter 1: Introduction

HPE Cloud Optimizer is a web-based analysis and visualization tool that analyzes the 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 provides essential recommendations in capacity analysis and optimization such as right-sizing, placement of VMs, forecast for resources based on their usage, and impact of adding or deleting resources in your environment.

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. You can use HPE Cloud Optimizer to do the following:

Capacity Analysis and Optimization

- **Capacity Overview** provides right size recommendation for the resources in the environment.
- **Placement** provides suggestions for adding new VMs based on available or reclaimable capacity.
- **Forecast** helps you to project future capacity utilization levels of different resources for a predefined time period. Using the Forecast feature, you can determine the Days to Capacity information to make optimal allocation and placement.
- **Modeler** helps to determine the impact of adding or deleting resources in your environment. You can estimate the future capacity utilization to proactively plan your hardware requirements.

Performance Monitoring

- **Dashboard** provides quick and easy navigation to other HPE Cloud Optimizer views.
- **Treemap** provides a graphical representation of the health of the environment. You can also identify and view the problems at a glance. Treemap provides a quick analysis of the entities such as Datacenter, Host, or VMs.
- **Workbench** helps you visualize and triage the performance of the monitored resources. You can troubleshoot problems that occurred in the past for a specific time period. You can draw and view graphs with the help of available metrics. Additionally, you can save frequently used graphs as favorites.
- **Alerts** help you to identify and troubleshoot the problems generated in your virtualized environment.

- **Real Time Guest Drill Down** detects overloads in the environment. You can drill down to determine the performance overload issue in VMs.
- **Filter** allows to filter domain specific entities based on the metric values.

Business Group and Resource Meter

- **Business Group** helps you to customize the operational view of your virtual infrastructure, based on your business applications and services. Using Business Grouping, you can categorize and group your Servers, Hypervisors, or Datastores based on the needs and priorities of your organization.
- **Resource Meter** helps you to track the CPU, Memory, and Storage allocation of a set of VMs over a specific time interval. It also enables us to charge back the respective groups, which use the services.

Chapter 2: Installing HPE Cloud Optimizer

HPE Cloud Optimizer is available as an Installer for Linux platforms and also as a virtual appliance for easy deployment in the VMware vCenter. This document provides information on deploying HPE Cloud Optimizer using the virtual appliance. For more information on prerequisites and installation using Installer, see the *HPE Cloud Optimizer Installation Guide*.

You can use the VMware vSphere client interface to deploy the HPE Cloud Optimizer virtual appliance.

Download the HPE Cloud Optimizer virtual appliance from: http://www.hpe.com/software/cloudoptimizer. You can install the HPE Cloud Optimizer virtual appliance using the **Deploy OVF Template** functionality of the VMware vSphere client.

Deploying the HPE Cloud Optimizer Virtual Appliance

HPE Cloud Optimizer is available as a Virtual Appliance for easy deployment on the VMware vCenter server. 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, 5.5, and 6.0.

> **Note**: For the latest support matrix information, see the HPE Software Product Support Matrix.

To deploy the HPE Cloud Optimizer virtual appliance, follow these steps:

1. Open the 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 go to the location where you have saved the HPE Cloud Optimizer 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 you want the virtual appliance to run. 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. Specify 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 HPE Cloud Optimizer Virtual Appliance using the username as **root**. The default password is **vperf*viewer** and it is recommended to change the password after logging in.

> **Note**: You can upgrade to HPE Cloud Optimizer 3.00 only from HP vPV 2.10 and 2.20. See the *Installation Guide* for detailed information on upgrading.

Chapter 3: Accessing the HPE Cloud Optimizer Interface

After HPE Cloud Optimizer is installed successfully, you have to activate the Evaluation License. You can use all the features of the product after activating the Evaluation License.

To activate the Evaluation License:

1. Go to the **Settings** > **License Management**.
2. Click **Start Evaluation License**.

   The evaluation license is activated.

> **Note**: The evaluation license expires after 60 days and the community license is activated. For more information on licensing, see the *License Management* section in *HPE Cloud Optimizer Installation Guide*.

Access the HPE Cloud Optimizer interface using the following URL:

 https://<system_name>:<port_number>/PV

In this instance,

`<system_name>` is the IP address or host name of the HPE Cloud Optimizer server.
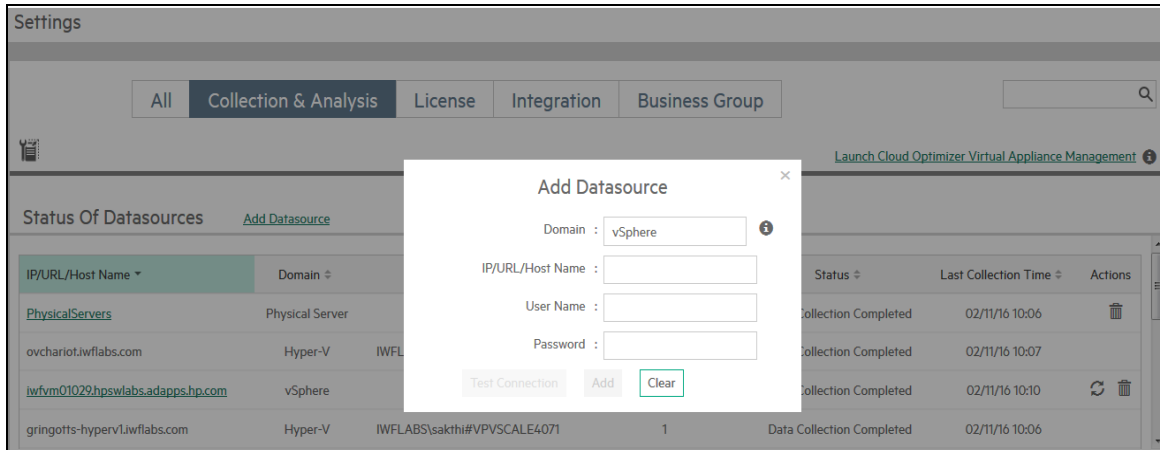
`<port_number>` is the port number on which HPE Cloud Optimizer is configured. The default port number is 8444.

PV is case sensitive.

> **Note:** If you access HPE Cloud Optimizer using the HTTP protocol (**http://<system_name>:<port_number>/PV**), you are automatically redirected to the secure HPE Cloud Optimizer URL (**https://<system_name>:<port_number>/PV**).
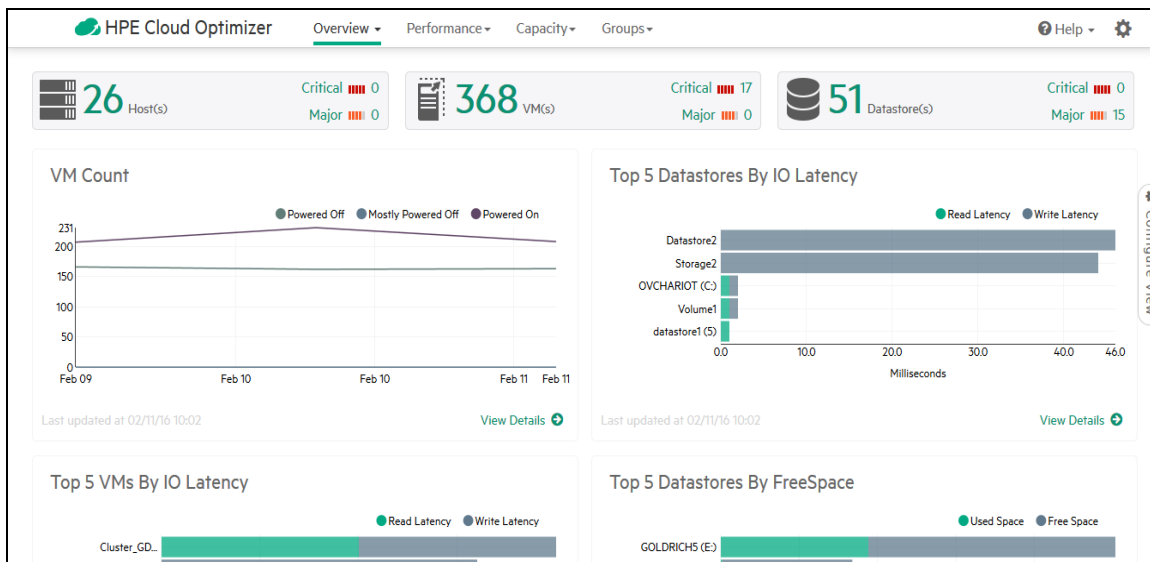
Adding Datasources

To add datasources in HPE Cloud Optimizer, go to **Settings** > **Collection & Analysis**. Provide the details of the datasources that HPE Cloud Optimizer must monitor.

HPE Cloud Optimizer supports the following datasources:

- VMware vCenter
- HPE OneView
- Hyper-V
- KVM
- Xen
- Physical Server
- OpenStack
- AWS

After adding datasources (5 minutes), the HPE Cloud Optimizer interface appears as:

For more information on adding datasources, open **Collection & Analysis** from **Settings** page and click ⊘ ▾**Help** or see *Cloud Optimizer Online Help*. This opens the context-sensitive help for the Collection & Analysis.

Troubleshooting

See the *Installation Guide* for any issues regarding License, Upgrade, or Linux installation.

Chapter 4: HPE Cloud Optimizer Community

You can get HPE Cloud Optimizer related information from the HPE Cloud Optimizer Community through the following sources:

HPE Cloud Optimizer Blogs

You can view more information and use cases for HPE Cloud Optimizer in HPE Cloud Optimizer Blog

HPE Cloud Optimizer Videos

You can view HPE Cloud Optimizer demonstration videos and tutorials in HPE Cloud Optimizer Videos.

HPE Cloud Optimizer Community Forum

You can access the HPE Cloud Optimizer community forum to get help and ask any questions that you may have. You can address any queries regarding HPE Cloud Optimizer in the HPE Cloud Optimizer forum.

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We appreciate your feedback!