

FoglightTM

FoglightTM for Virtualization, Standard Edition 6.5.1
Installation and Configuration Guide

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Installation and Configuration Guide

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Introduction to this Guide

This *Installation and Configuration Guide* provides instructions for installing, configuring, and starting Foglight for Virtualization, Standard Edition.

About Quest Software, Inc.

Established in 1987, Quest Software (Nasdaq: QSFT) provides simple and innovative IT management solutions that enable more than 100,000 global customers to save time and money across physical and virtual environments. Quest products solve complex IT challenges ranging from database management, data protection, identity and access management, monitoring, user workspace management to Windows management. For more information, visit www.quest.com.

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Refer to our Web site for regional and international office information.

Contacting Quest Support

Quest Support is available to customers who have a trial version of a Quest product or who have purchased a Quest product and have a valid maintenance contract. Quest Support provides unlimited 24x7 access to our Support Portal at <http://www.quest.com/support>.

From our Support Portal, you can do the following:

- Retrieve thousands of solutions from our Knowledge Base

- Download the latest releases and service packs
- Create, update, and review Support cases

View the *Global Support Guide* for a detailed explanation of support programs, online services, contact information, policies, and procedures. The guide is available at: <http://www.quest.com/support>.

Installing Foglight for Virtualization, Standard Edition

This chapter provides instructions for installing and configuring the Foglight for Virtualization, Standard Edition.

Foglight for Virtualization, Standard Edition is delivered as a fully configured virtual machine, which can be installed on one of three platforms: VMware vSphere, Microsoft Hyper-V, or Red Hat Enterprise Virtualization platform. Before beginning installation, review the [System Requirements](#) and ensure that your target system meets the requirements.

Refer to the appropriate section for installation instructions:

- “[Installing as a VMware Virtual Machine](#)” on page 7
- “[Installing as a Microsoft Hyper-V Virtual Machine](#)” on page 10
- “[Installing as a Red Hat Enterprise Virtualization Machine](#)” on page 12

System Requirements

The Foglight for Virtualization, Standard Edition installation guidelines vary depending on how many virtual machines (VMs) are being monitored. The table below outlines the system requirements for installing Foglight for Virtualization, Standard Edition.

Number of VMs	1 to 200	200 to 1000	1000 to 3000
Virtual Machine			
Number of CPUs	4	4	4
Memory Allocation	8 GB	10 GB	12 GB -16 GB
Memory Reservation	8 GB	10 GB	12 GB -16 GB
Allocated Storage	64 GB	64 GB	64 GB
Database Selection			
Internal or External	Either	Either	Either

Number of VMs	1 to 200	200 to 1000	1000 to 3000
External Database Server Average CPU Use Network Storage	Less than 90% Optional	Less than 80% Optional	Less than 80% Not Recommended
VMware vCenter Average CPU Use 5 Minute Interval Statistics Level Minimum Privileges	Less than 90% 2 or 3 Read Only +Browse Datastore	Less than 80% 2 or 3 Read Only + Browse Datastore	Less than 80% 2 Read Only + Browse Datastore
vCenter Database Server Average CPU Use Network Storage	Less than 90% Optional	Less than 80% Optional	Less than 80% Not Recommended

Java Software Requirements:

- Java Version 1.6 or later

VMware Software Requirements:

- VMware Player 1.0.0 or later
- VMware Workstation 5 or later
- VMware ESX Server 3.x or later
- Virtual Center 2.5 or later, or VMware Server 1.03 or later

Hyper-V Software Requirements:

- Systems Center Operations Manager 2007 R2 and Systems Center Virtual Machine Manager 2008 R2
- Or
- Systems Center Operations Manager 2012 and Systems Center Virtual Machine Manager 2012

Red Hat Software Requirements:

- Red Hat Enterprise Virtualization Manager 3.0 or higher

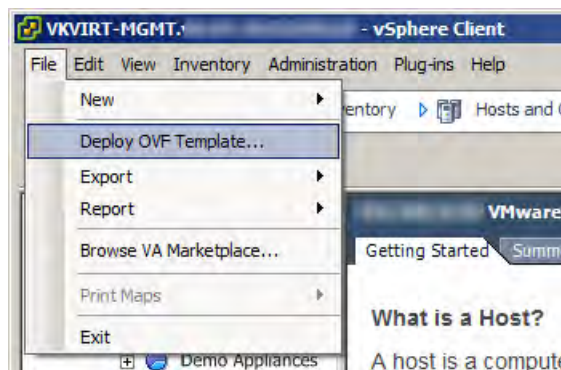
Installing as a VMware Virtual Machine

Installing the VMware virtual machine involves downloading the virtual appliance, and then deploying it to your VMware environment using the VMware Deploy OVF Template option.

Note This procedure contains instructions for deploying the virtual appliance using the Deploy OVF Template Wizard. For complete information about this wizard and other vSphere Client features, see your vSphere Client documentation.

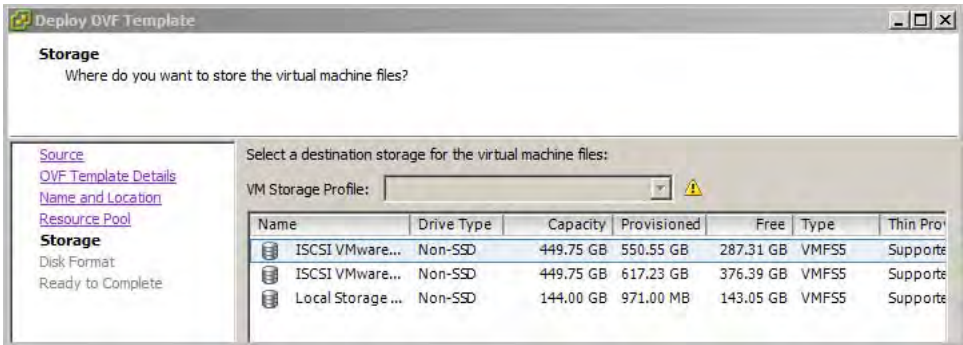
To download and deploy the Foglight for Virtualization, Standard Edition virtual appliance:

- 1 Download the VMware version of Foglight for Virtualization, Standard Edition from the following location:
<http://www.vkernel.com/downloads/all/>
- 2 Unzip the compressed (.zip) file to a Windows server or workstation. The zipped file contains the OVF file, three VMDK files, the Hyper-V Collector directory, a Read Me file, the end user license agreement, and the user documentation.
- 3 Open the VMware vSphere Client and click **File > Deploy OVF Template**.



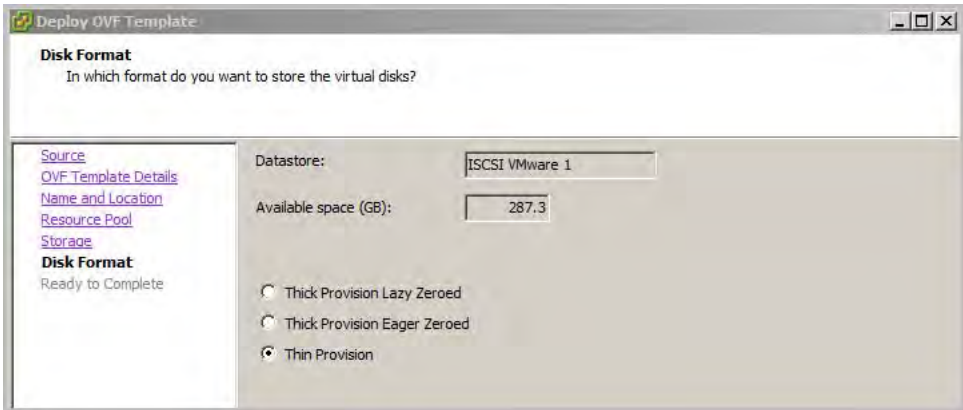
The Deploy OVF wizard appears.

- 4 Click **Browse** to navigate to the location of the extracted OVF file and select it.
Click **Next**.
- 5 On the OVF Template Details page, verify the Product and Version number.
Click **Next**.
- 6 On the Name and Location page, type a name for the virtual machine, and select a destination folder.
Click **Next**.
- 7 On the Resource Pool page, select a location within the infrastructure hierarchy.
Click **Next**.
- 8 On the Storage page, select the datastore that the VM will reside within.



Click **Next**.

- 9 On the Disk Format page, select the type of datastore provisioning.



Click **Next**.

- 10 Review the deployment settings and click **Finish**.

Powering On and Initializing the Virtual Machine

After installing the OVF, you must power on, and initialize the virtual machine.

Open vCenter, select the Foglight for Virtualization, Standard Edition virtual machine you just installed, and click **Power on the virtual machine**.

Once the appliance is started, it initializes the operating system, and starts Foglight for Virtualization, Standard Edition. The DHCP server automatically obtains the IP address. By default, pool.ntp.org is used as the Network Time Protocol (NTP) server. These options can be changed after Foglight for Virtualization, Standard Edition has started successfully.

Wait until the IP address of Foglight for Virtualization, Standard Edition appears in the vCenter Summary tab. After the IP address appears, it will take several more minutes to start the application server. Once that is completed, you can access Foglight for Virtualization, Standard Edition using the IP address and a standard web browser.

If there is no DHCP server available, you must manually enter the IP address before proceeding with the configuration steps below. Open a console window and respond to the questions about the IP address and the network time server.

Setting a Static IP Address or Changing the Network Time Server

- 1 Open a VI Client console window and log in as `root`, with `password` for the password.
- 2 Change the directory to: `/usr/local/vkernel/scripts`.
- 3 Run the `changeIp.sh` script. Follow the prompts to set the desired IP address and network time server.

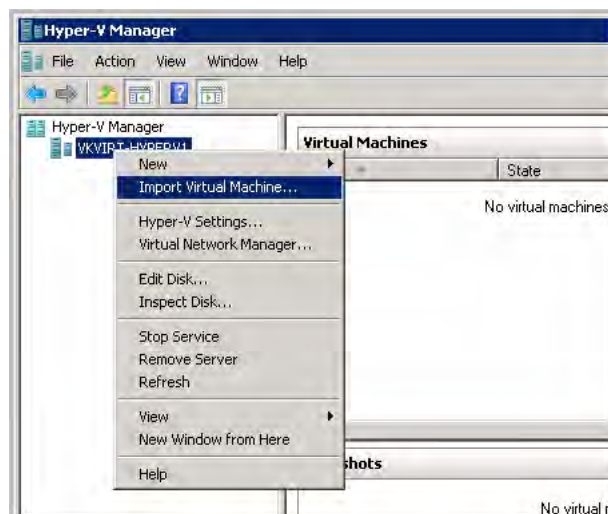
Once that is completed, you can access Foglight for Virtualization, Standard Edition using the IP address and a standard browser.

Installing as a Microsoft Hyper-V Virtual Machine

Foglight for Virtualization, Standard Edition is delivered as a fully configured Hyper-V virtual machine that can be installed directly using the Microsoft Hyper-V Manager.

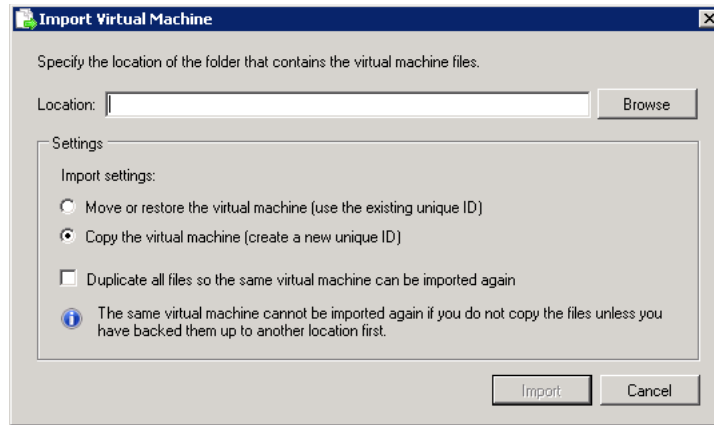
To download and install Foglight for Virtualization, Standard Edition:

- 1 Download the Microsoft Hyper-V version of Foglight for Virtualization, Standard Edition from the following location:
<http://www.vkernel.com/downloads/all/>
- 2 Unzip the compressed file (.zip) to a Windows server or workstation. The zipped file contains the required VHD directories, the Hyper-V Collector directory, a Read Me file, the end user license agreement, and the user documentation.
- 3 Open the Microsoft Hyper-V Manager, right-click on the desired Hyper-V host and select **Import Virtual Machine**. Refer to the Microsoft documentation for more information on running the Hyper-V Manager.



The Import Virtual Machine dialog appears.

4 Select Copy the virtual machine (create a new unique ID).



5 Click Browse to browse to and select the location of the extracted VHD directories.

6 In the Import Virtual Machine dialog box, click Import.

The virtual machine is imported and appears in the list of virtual machines for the host.

7 Right-click the Foglight for Virtualization, Standard Edition virtual machine and select Settings.

8 In the left pane, select the Network Adapter.

9 In the right pane, specify the appropriate network adapter configuration information.

10 Click OK.

Power On and Initialize the Virtual Machine

Open the Hyper-V Manager, select the Foglight for Virtualization, Standard Edition virtual machine you just installed and click **Start**.

Once the appliance is started, it initializes the operating system and starts Foglight for Virtualization, Standard Edition. The IP address is obtained from the DHCP server automatically. By default, `pool.ntp.org` is used as the Network Time Protocol (NTP) server. These options can be changed after Foglight for Virtualization, Standard Edition has started successfully.

Once the virtual machine is running, right-click on the Foglight for Virtualization, Standard Edition virtual machine and click **Connect**.

- 1 The console opens. Log in as `root`, with `password` for the password.
- 2 Run the `ifconfig` command.
- 3 Access Foglight for Virtualization, Standard Edition using the IP address (`inet addr:`) and a standard web browser.

If there is no DHCP server available, you must manually enter the IP address before Foglight for Virtualization, Standard Edition will be usable. Respond to the questions about the IP address and the network time server.

Setting a Static IP Address or Changing the Network Time Server

- 1 Open the Hyper-V Manager and connect to the virtual machine.
- 2 Log in as `root` with `password` for the password.
- 3 Change the directory to: `/usr/local/vkernel/scripts`.
- 4 Run the `changeIp.sh` script. Follow the prompts to set the desired IP address and network time server.

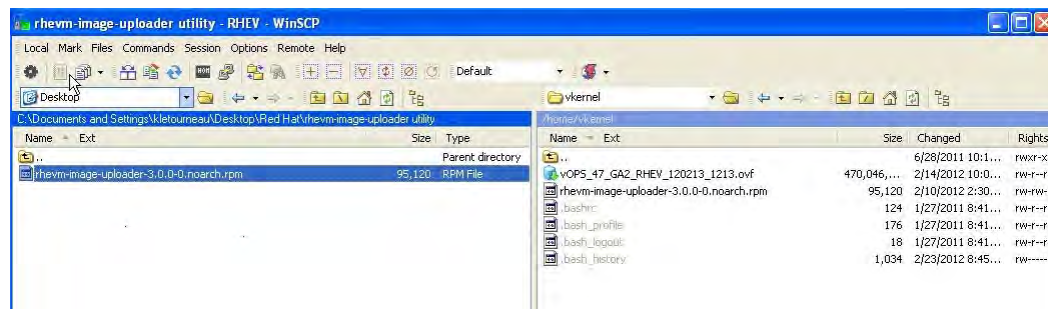
After you complete these steps, you can access Foglight for Virtualization, Standard Edition using the IP address and a standard web browser.

Installing as a Red Hat Enterprise Virtualization Machine

Foglight for Virtualization, Standard Edition is delivered as a fully configured Red Hat Enterprise Virtualization (RHEV) machine. It is installed directly using the RHEVM.

To download and install Foglight for Virtualization, Standard Edition and the *rhev-image-uploader*:

- 1 Download the Red Hat virtual machine for Foglight for Virtualization, Standard Edition from the following location:
<http://www.vkernel.com/downloads/all/>
- 2 Save the Open Virtualization Format file (*.ovf*) to a Windows server or workstation.
- 3 Red Hat provides a utility named *rhev-image-uploader* that allows you to upload and import the appliance into an RHEV system. You must first install the *rhev-image-uploader*, which can be found on the Red Hat Network, at the following location:
<http://rhn.redhat.com/errata/RHEA-2012-0118.html>
- 4 Downloaded the *rhev-image-uploader* and transfer it to the RHEVM server using a utility such as *WinSCP*.
 - a Connect to the RHEVM server with an account you have previously created. WinSCP opens to your account's home directory.
 - b Drag and drop the *rhev-image-uploader* into the user directory on the right.



- 5 After the package has been copied to the RHEVM server, log onto the console as `root`, change to the user directory of the account you used in the previous step, and run the following command:

```
#yum localinstall rhevm-image-uploader-3.0.0_0000-0.noarch.rpm
```

Substitute the current package number and version in place of `3.0.0_0000-0`.

- 6 After the utility has been installed, edit the file `/etc/rhevm/imageuploader.conf` and set the correct values for `user`, `passwd`, and `rhevm`.

Using Red Hat Enterprise Virtualization Manager Reports

The Red Hat Enterprise Virtualization Manager Reports functionality depends on the presence of the history database, which is installed separately. Both the history database and the Red Hat Enterprise Virtualization Manager Reports are optional components. They are not installed by default when you install the Red Hat Enterprise Virtualization Manager.

Install Required Packages

Use `yum` to initiate installation of the `rhevm-reports-dwh` package, or the `rhevm-reports` package if you also intend to install Red Hat Enterprise Virtualization Manager Reports. You must run this command as the root user on the system hosting the Red Hat Enterprise Virtualization Manager.

To install both the data warehouse package and the Red Hat Enterprise Virtualization Manager Reports package, run the following command:

```
# yum install rhevm-reports
```

Confirm Package Installation

The required packages are downloaded. After all the packages have been downloaded they are listed for review. You are prompted to confirm that you want to continue with the installation. Confirm the operation. `yum` installs the packages. Some further configuration is required before the reports functionality can be used.

Configure History Database

You need to use the `rhevm-dwh-setup` command to configure the Extract, Transform, and Load (ETL) process, and the database scripts used to create and maintain a working history database.

You must run this command as the root user on the system hosting the Red Hat Enterprise Virtualization Manager.

```
# rhevm-dwh-setup
```

For the history database installation to take effect it is necessary to restart the `jbossas` service. The `rhevm-dwh-setup` command prompts you to confirm whether to stop the JBoss service. Type **yes** and press **Enter**.

The `jbossas` service is stopped, and the `rhevm_history` database is created and configured. Finally, the `jbossas` service is restarted.

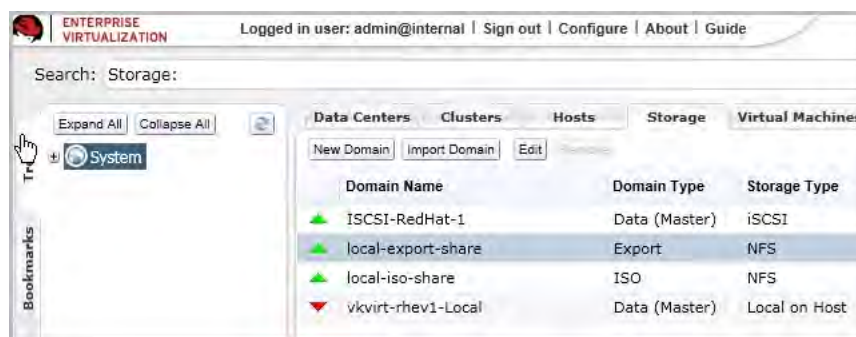
After this process is complete, the Red Hat Enterprise Virtualization Manager is configured to log information to the `rhevm_history` database for reporting purposes. The `rhevm_history` database

is required by Foglight for Virtualization, Standard Edition for the collection of performance metrics.

Note The `rhevm-etl` service must be running for this collection to occur.

Selecting the RHEV Export Domain

The next step is to determine which export domain to use. The `rhevm-image-uploader` utility needs the name of an RHEV export domain to upload the appliance to. You can use the RHEVM admin interface to learn which export domains are currently available, or to configure a new one in case no export domain is available yet.



After the utility is installed and configured, and you have identified the export domain, importing the appliance is a three-step process.

To import the appliance:

- 1 Upload the appliance into the export domain with the `rhevm-image-uploader` utility. From the RHEVM, run the command:

```
#rhevm-image-uploader -e <export domain> --name <name> upload <filename.ovf>
```

where `<export domain>` is the name of the export domain, and `<name>` is the VM that you want to create from this appliance.
- 2 Create a VM from the appliance in the export domain.
 - a Open the RHEV admin interface and select the **Storage** tab.
 - b Locate and select the export domain from [step 1](#), and click **Import**.
 - c Click **OK** on the confirmation dialog box. The import operation starts and runs in the background.
- 3 Attach the VM to the `rhevm` network. At minimum, the appliance needs access to the `rhevm` management network.

The `rhevm-image-uploader` utility does not create any network interfaces. Therefore, you must manually create a network interface and add it to the `rhevm` network.

- a In the RHEV admin interface, click the **Virtual Machines** tab.
- b Locate and select the virtual machine created in [step 2](#).
- c Click **Network Interfaces**, then click **New**.

- d Use the default values provided and click **OK**.

Power On and Initialize the Virtual Machine

Right-click on the Virtual Machine and click **Run**.

Setting a Static IP Address or Changing the Network Time Server

- 1 Right-click on the VM and select **Console**.
- 2 Log in as `root` with `password` for the password.
- 3 Change the directory to: `/usr/local/vkernel/scripts` and run the `changeIp.sh` script. Follow the prompts to set the desired IP address and network time server.

Connecting to the RHEVM postgres Database Remotely

Remote access to postgres SQL database needs to be configured.

To configure remote access from the console of the RHEVM server:

- 1 Allow remote host to connect:

```
#vim /var/lib/pgsql/data/pg_hba.conf
```

Add the remote host (or network) and set to `trust` level of access.

For example: `hostallall192.168.16.0/24trust`
- 2 Configure postgres to listen on all addresses:

```
#vim /var/lib/pgsql/data/postgres.conf
```

Edit the `listen_address` value, and remove the preceding `#`:

```
listen_address = '*'
```
- 3 Restart postgres.

```
#service postgresql restart
```

Configuring the Foglight for Virtualization, Standard Edition

To begin using Foglight for Virtualization, Standard Edition, open a standard web browser (Mozilla Firefox or Microsoft Internet Explorer, with Adobe Flash 10 or later, are recommended) and type the IP address of the Foglight for Virtualization, Standard Edition virtual machine.

The page loads and request a username and password. The default username is `vkernel` and the default password is `vkernel`.

License Agreement

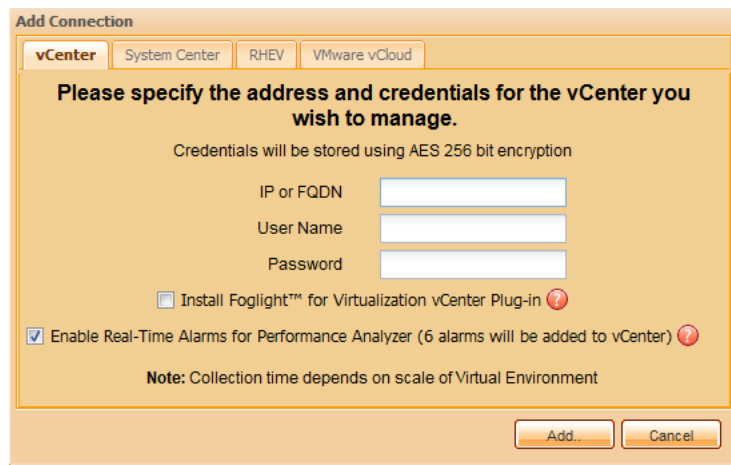
Read the license agreement and then click **Accept Agreement** to proceed.

Connection Management

The environment connection screen appears and the Add Connection dialog box opens. You must have at least one connection to complete the configuration.

VMware Connection

- 1 On the Add Connection dialog box, click the **vCenter** tab.



- 2 Type the IP address or FQDN and the credentials for the system.

For vCenter, credentials should have Read-Only, Browse Datastore, and Datastore DeleteFile permissions for the entire environment. If you are using the automated feature for implementing recommendations, the appropriate permissions are required.

The credentials used for the vCenter where the Foglight for Virtualization, Standard Edition appliance is installed must also have Virtual Machine State permissions in order for the appliance to be updated automatically.

- 3 Foglight for Virtualization, Standard Edition can be accessed and used from within vCenter using a vKernel plug-in. Select the **Install Foglight for Virtualization vCenter Plug-in** check box if you want the Foglight for Virtualization, Standard Edition plug-in installed in vCenter.

Note If the virtual infrastructure client is open during this process, it must be closed and reopened in order for the plug-in to become visible.

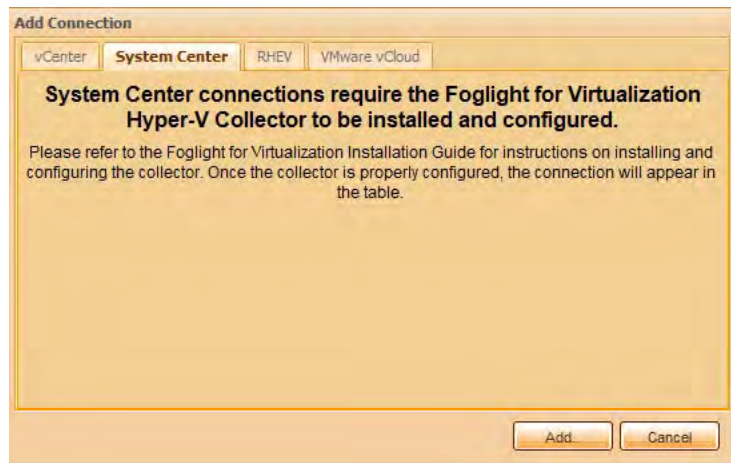
- 4 The Foglight for Virtualization, Standard Edition Performance Analyzer uses vCenter alarms for real-time monitoring of the state of the virtual environment.

Note Six specific vKernel utilization alarms must be installed in vCenter in order to provide the real-time functionality. The vCenter credentials must have Alarm permissions in order to create the alarms. Leave the **Enable Real-Time Alarms for Performance Analyzer** box checked if you want to use the real-time analysis capability of Performance Analyzer. If you leave the box checked, the alarms are installed automatically.

- 5 After a connection is established, the overall configuration can be completed.
- 6 Click **Finish Setup**.

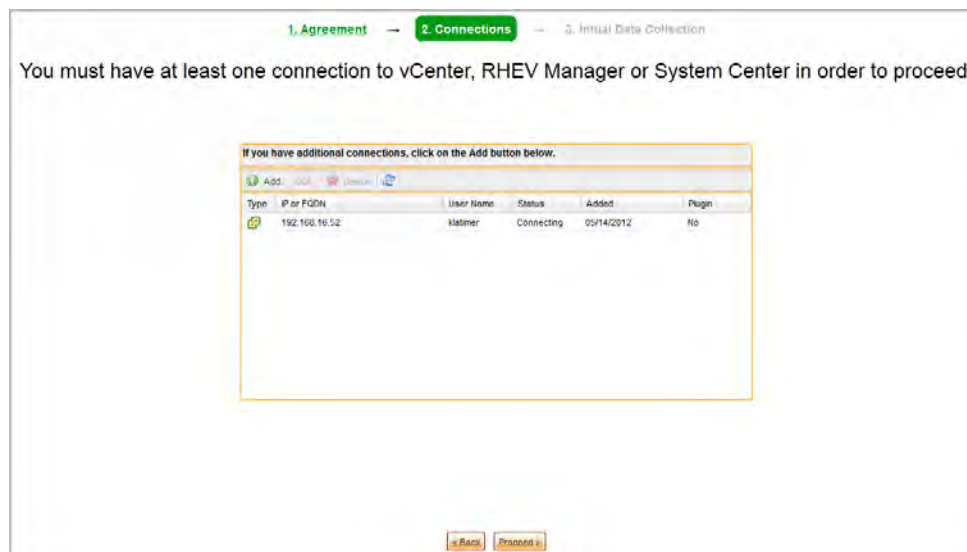
Microsoft System Center Connection

- 1 Select the **System Center** tab on the Add Connection dialog box.



- 2 To establish the Microsoft Hyper-V connection, the Hyper-V Collector must be installed, as described in [“Installing and Configuring the VKernel Hyper-V Collector”](#) on page 26.

After the Hyper-V Collector is installed and configured, it appears in the connection list and the overall configuration can be completed.

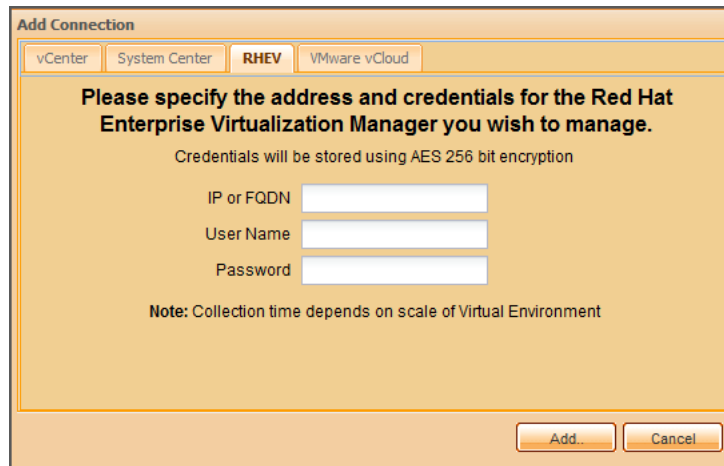


- 3 Click **Proceed**.

The appliance collects all the required virtual environment information. Depending on the size of the virtual environment, this can take anywhere from fifteen minutes to several hours.

RHEV Connection

- 1 On the Add Connection dialog box, click the **RHEV** tab.
- 2 Configure the Red Hat connection with the IP address or FQDN of the RHEVM server. Provide the credentials for an account with SuperUser rights to the RHEVM application.

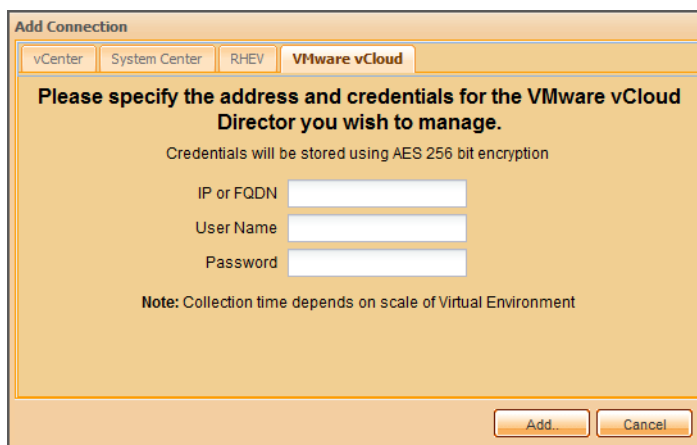


The screenshot shows the 'Add Connection' dialog box with the 'RHEV' tab selected. The dialog has a title bar 'Add Connection' and four tabs: 'vCenter', 'System Center', 'RHEV', and 'VMware vCloud'. The 'RHEV' tab is active. The main content area has a title 'Please specify the address and credentials for the Red Hat Enterprise Virtualization Manager you wish to manage.' followed by a note 'Credentials will be stored using AES 256 bit encryption'. Below this are three input fields: 'IP or FQDN', 'User Name', and 'Password'. A note at the bottom states 'Note: Collection time depends on scale of Virtual Environment'. At the bottom right are 'Add...' and 'Cancel' buttons.

- 3 Click **Add**.

VMware vCloud Connection

- 1 On the Add Connection dialog box, click the **VMware vCloud** tab.



The screenshot shows the 'Add Connection' dialog box with the 'VMware vCloud' tab selected. The dialog has a title bar 'Add Connection' and four tabs: 'vCenter', 'System Center', 'RHEV', and 'VMware vCloud'. The 'VMware vCloud' tab is active. The main content area has a title 'Please specify the address and credentials for the VMware vCloud Director you wish to manage.' followed by a note 'Credentials will be stored using AES 256 bit encryption'. Below this are three input fields: 'IP or FQDN', 'User Name', and 'Password'. A note at the bottom states 'Note: Collection time depends on scale of Virtual Environment'. At the bottom right are 'Add...' and 'Cancel' buttons.

- 2 Type the IP address or FQDN and the credentials for the system.
For VMware vCloud, credentials should have Read-Only and Browse Datastore permissions for the entire environment. If you are using the automated feature for implementing recommendations, the appropriate permissions are required.

The credentials used for the VMware vCloud where the Foglight for Virtualization, Standard Edition appliance is installed must also have Virtual Machine State permissions in order for the appliance to be updated automatically.

- 3 Foglight for Virtualization, Standard Edition can be accessed and used from within VMware vCloud using a vKernel plug-in. Select the **Install Foglight for Virtualization vCenter Plug-in** check box if you want the vKernel plug-in installed in VMware vCloud.

Note If the virtual infrastructure client is open during this process, it must be closed and reopened in order for the vKernel plug-in to become visible.

- 4 The Foglight for Virtualization, Standard Edition Performance Analyzer uses vCloud alarms for real-time monitoring of the state of the virtual environment.

Note Six specific vKernel utilization alarms must be installed in vCloud in order to provide the real-time functionality. The vCenter credentials must have Alarm permissions in order to create the alarms. Leave the **Enable Real-Time Alarms for Performance Analyzer** box checked if you want to use the real-time analysis capability of Performance Analyzer. If you leave the box checked, the alarms are installed automatically.

- 5 After a connection is established, the overall configuration can be completed.

- 6 Click **Finish Setup**.

Initial Data Collection

After the appliance is configured, it collects all of the required virtual environment information. Click **OK** to continue.



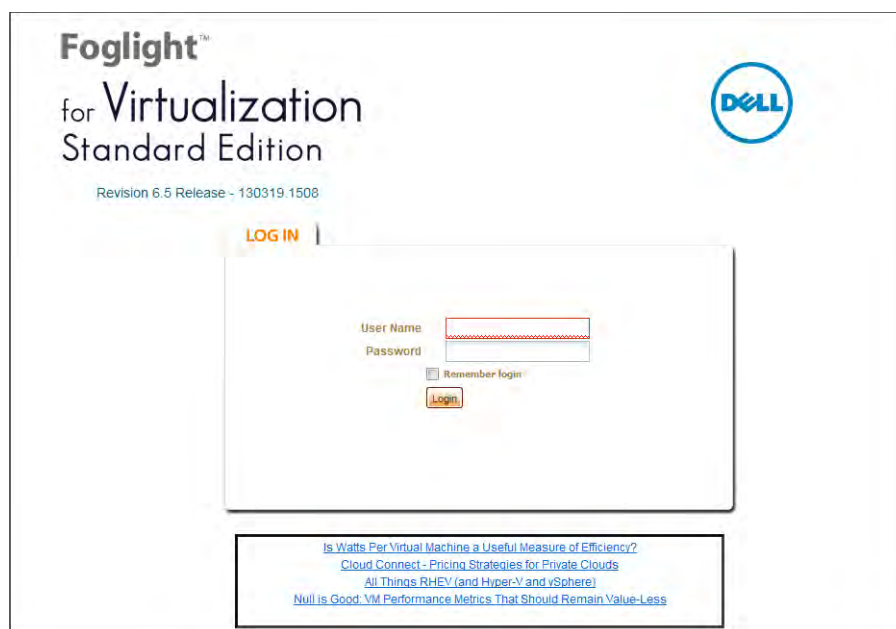
After the databases have been initialized, you are prompted to login to Foglight for Virtualization, Standard Edition.

Logging in to Foglight for Virtualization, Standard Edition

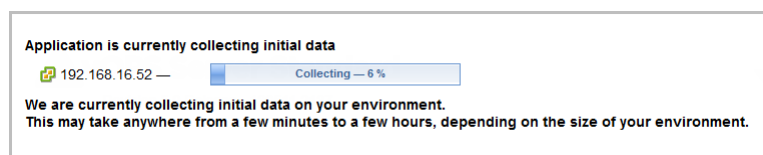
This section describes how to log in to Foglight for Virtualization, Standard Edition.

To log in to Foglight for Virtualization, Standard Edition:

- 1 Open a standard Web browser (for example, Mozilla Firefox, Microsoft Internet Explorer, or Chrome with Adobe Flash 10 or later).
- 2 Navigate to the IP address of the Foglight for Virtualization, Standard Edition virtual machine.
- 3 Enter your username and password in the LOG IN page. The default username is `vkernel` and the default password is `vkernel`.



If the appliance has recently been configured, it may still be collecting the required virtual environment information. Depending on the size of the virtual environment, this can take anywhere from fifteen minutes to several hours.



After the initial collection is complete, a Welcome dialog box appears.

- 4 Click **OK**.

The Get Started dashboard appears. This dashboard is the default view that you see when you log in to Foglight for Virtualization, Standard Edition. For more information on the Get Started dashboard and the other dashboards that are available, see the *Foglight for Virtualization, Standard Edition User Guide*.

Managing Licenses

When you click any top level tab other than Dashboard, the **Request a License** dialog box opens and prompts you to license the module you are trying to access.

Note A 30-day free trial of the complete Foglight for Virtualization, Standard Edition is available.

Select either **Trial License** or **Purchased License** and click **Next**.

For more information, see either [Activating a Trial License](#) or [Activating a Purchased License](#).

Activating a Trial License

After the initial configuration, when you click any top level tab other than Dashboard, the Request a License dialog box opens and prompts you to license the module you are trying to access.


To activate a trial license:

- 1 Click a top level tab other than Dashboard.

The Request a License dialog box opens.

- 2 Select **Trial License** and click **Next**.

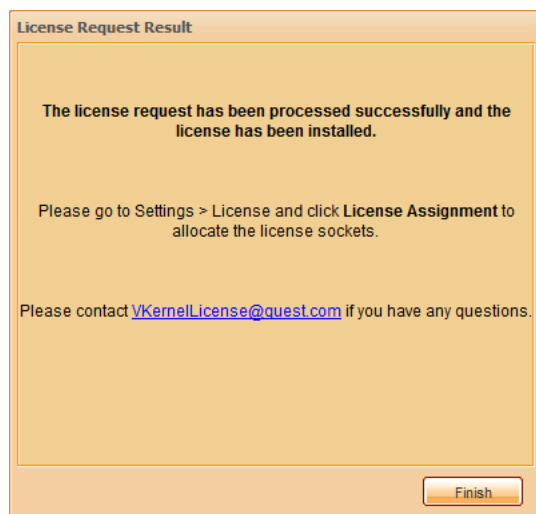
The Request a Trial License dialog box opens.



The dialog box titled "Request a Trial License" has a light orange background. It contains a message: "You are not currently licensed to use this module. Please fill out the information below to request a trial license. Contact VKernellLicense@quest.com regarding any difficulties." Below the message are several input fields: "First Name:" with the value "John", "Last Name:" with the value "Doe", "E-mail:" with the value "jdoe@comcast.net", "Company Name:" with the value "John Doe Consulting", "Work Phone:" with the value "123 456-7890", "Country:" with a dropdown menu showing "United States", and "State/Province:" with a dropdown menu showing "New Hampshire". At the bottom right of the dialog box are two buttons: "Request the License" and "Cancel".

- 3 Type the required information, and click **Request the License**.

Your trial license is processed and installed immediately.



- 4 Click **Finish** to begin using Foglight for Virtualization, Standard Edition.

To allocate socket licenses, see “[Allocating Socket Licenses](#)” on page 24.

Activating a Purchased License

After the initial configuration, when you click any top level tab other than Dashboard, the Request a License dialog box opens and prompts you to license the module you are trying to access.

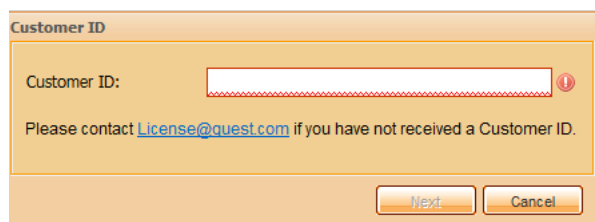
To activate a purchased license:

- 1 Click a top level tab other than Dashboard.

The Request a License dialog box opens.

- 2 Select **Purchased License** and click **Next**.

The Customer ID dialog box opens.



- 3 Type the customer ID in the box and click **Next**.

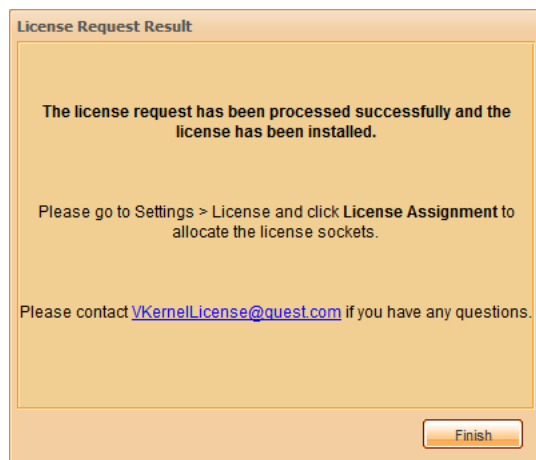
The License Socket Count dialog box opens.

- 4 Review the information provided. If necessary, adjust the value in the **Total Sockets Required for This Server** box.

For example, if you have purchased 300 sockets, but the server you are installing the license on only requires 150 sockets, type 150 in the box.

- 5 Click **Request the License** to submit the licensing request.

A message box opens while the request is processed, then the results of the license request are displayed.




6 Click Finish.

To allocate socket licenses, see “[Allocating Socket Licenses](#)” on page 24.

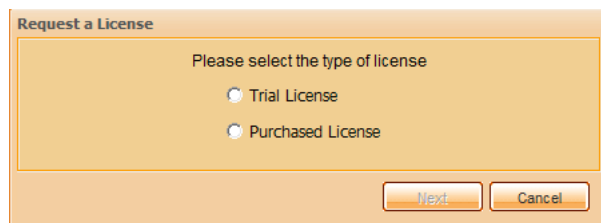
Activating a Purchased License after Installing a Trial License

Alternately, if you have been using a trial license and want to add a purchased license, you can do so from the **Settings > License** tab.

To install a purchased license:

- 1 Click the Configure Gear icon  at the top-right corner of the browser interface to access the settings.
- 2 Click the **License** tab.
- 3 Click **Request A License**.


The Request a License dialog box opens.



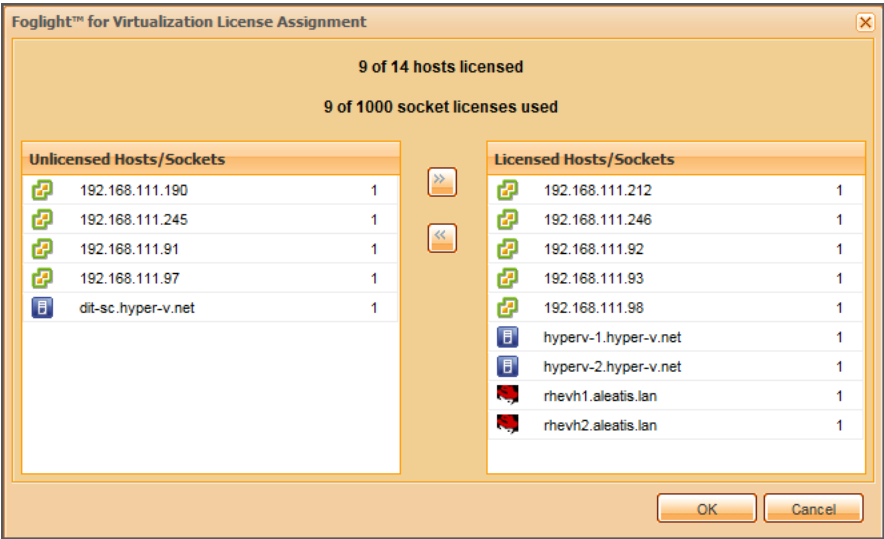
- 4 Follow [step 2](#) through [step 6](#) of the procedure “[To activate a purchased license:](#)” on page 22.


Allocating Socket Licenses

To allocate the license sockets:

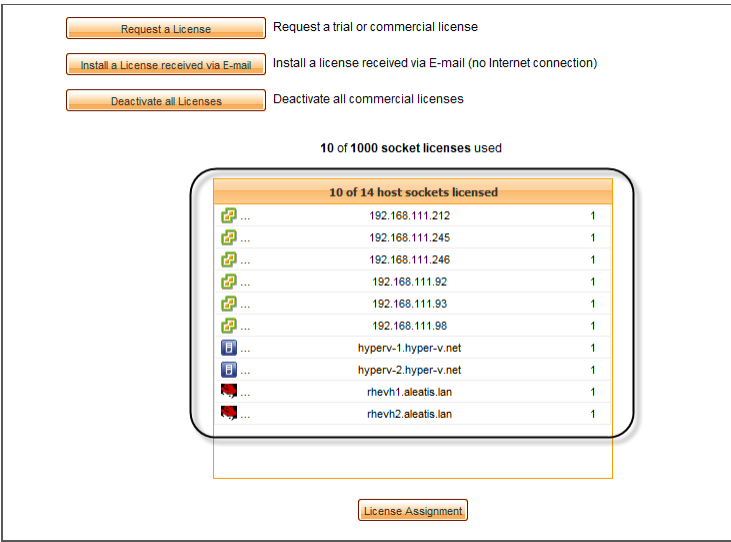
- 1 Click the Configure Gear icon  at the top-right corner of the browser interface to access the settings.
- 2 Click the **License** tab.
- 3 Click **License Assignment**.

The Foglight for Virtualization License Assignment dialog box opens.



- 4 Select the host or socket from the Unlicensed Hosts/Sockets list on the left.
- 5 Click the right arrow  to move them to the Licensed Hosts/Sockets list on the right.
- Note** The text that indicates the number of host and socket licenses used updates automatically.
- 6 When finished, click **OK**.

The License tab updates to display the licensed hosts and sockets.



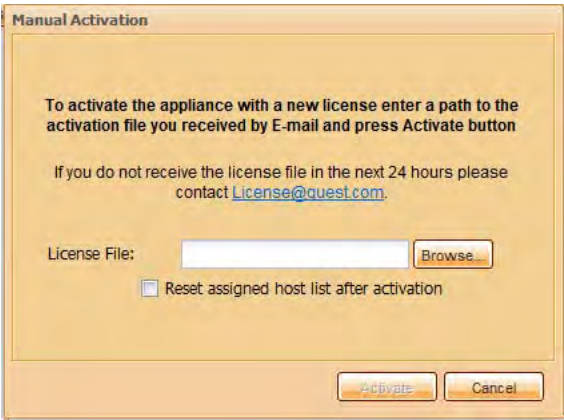
Installing a License Received by E-mail

If you have requested and received a license by e-mail, you can install that license through the **Settings > License** tab.

To install an e-mailed license:

- 1 On the **Settings > License** tab, click **Install License received via E-mail**.

The Manual Activation dialog box opens.



- 2 Click **Browse** to navigate to and select the license file you received by e-mail.

Optional — if you want to reset the list of assigned hosts when you import the license, select the **Reset assigned host list after activation** check box.

- 3 Click **Activate**.

Deactivating All Licenses

To deactivate all commercial licenses that have been installed on the Foglight for Virtualization, Standard Edition appliance, click **Deactivate all Licenses**. A message box opens, prompting you to confirm the action.

Installing and Configuring the VKernel Hyper-V Collector

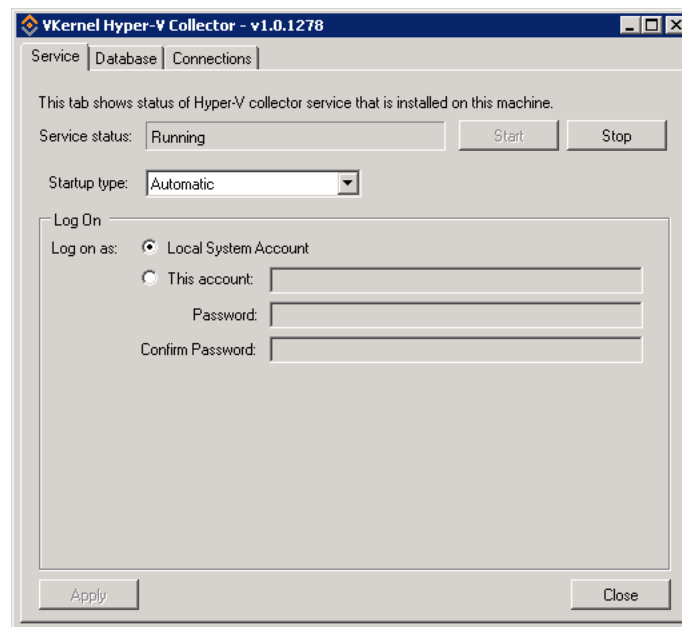
To install the VKernel Hyper-V Collector:

- 1 Select the Microsoft Windows server where the VKernel Hyper-V Collector is to be installed.
- 2 Locate the *.msi* file from the Hyper-V Collector folder extracted from the **Foglight for Virtualization, Standard Edition** executable.
- 3 Copy the *.msi* file to the selected server.
- 4 Double-click on the *.msi* file to install the VKernel Hyper-V Collector.

To configure the VKernel Hyper-V Collector:

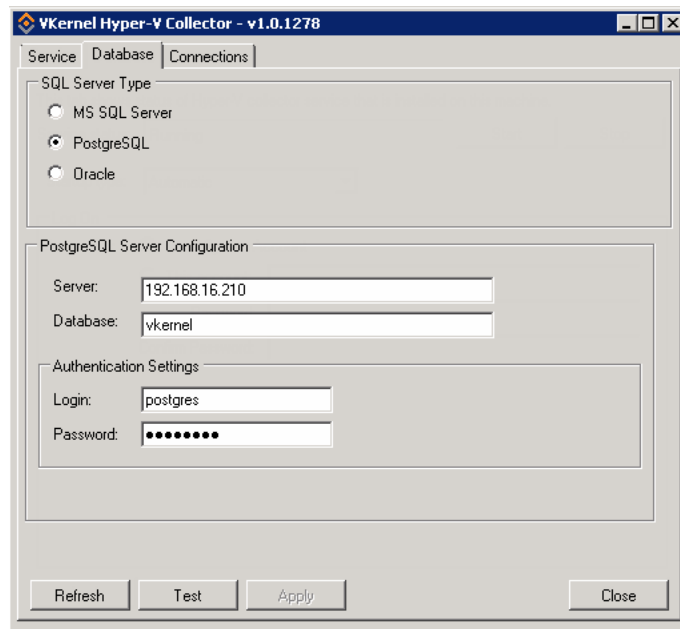
- 1 After installing the VKernel Hyper-V Collector, navigate to **All Programs > VKernel Hyper-V Collector** and start the collector.

The VKernel Hyper-V Collector dialog box opens, with the Service tab selected.



The Service tab shows the status of the VKernel Hyper-V Collector service and the credentials for the service.

- 2 Click the **Database** tab.

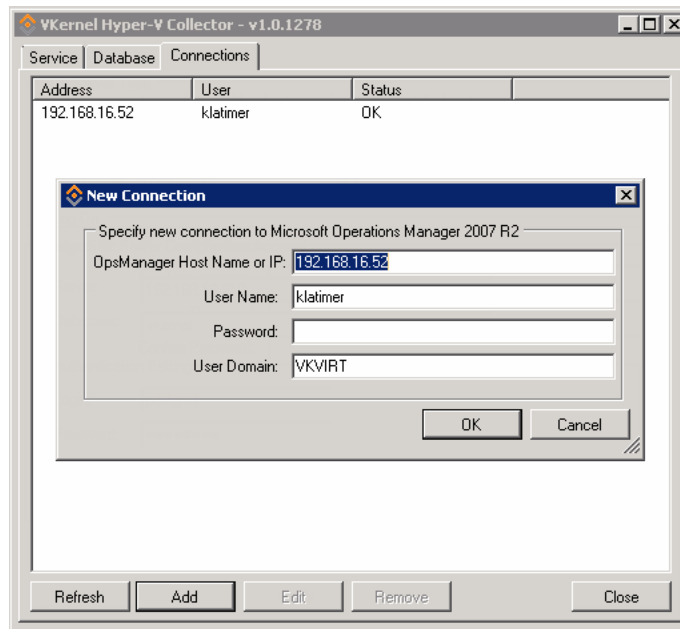


The Database tab shows the Foglight for Virtualization, Standard Edition database connection information.

- a Select the **SQL Server Type**.
- b In the PostgreSQL Server Configuration area, type the appropriate server information and credentials.

If you are using the Embedded PostgreSQL database, the Server address should be the address of the Foglight for Virtualization, Standard Edition virtual machine. For the embedded PostgreSQL database, the account and password are `postgres` and `postgres`.

- 3 Click **Apply**.
- 4 Click the **Connections** tab.



The Connections tab specifies the connection to the Systems Center Operations Manager.

If the connection parameters were specified properly, a new connection appears on the connection list. The VKernel Hyper-V Collector service starts immediately.

- 5 Review the connection information and edit if necessary.
- 6 Click **Close**.

Upgrading the Hyper-V Collector

There are two ways in which you can upgrade a Hyper-V Collector. Choose the method that best suits your needs.

Important It is important to note that both methods involve re-installing the VKernel management packs. This is a key part of the procedure when upgrading the Hyper-V collector.

- **Option 1** - Remove the VKernel management packs, create a new connection, and then re-load the packs. For further details, see “[Option 1](#)” on page 28.
- **Option 2** - Import the management packs manually. For further details, see “[Option 2](#)” on page 29.

Option 1

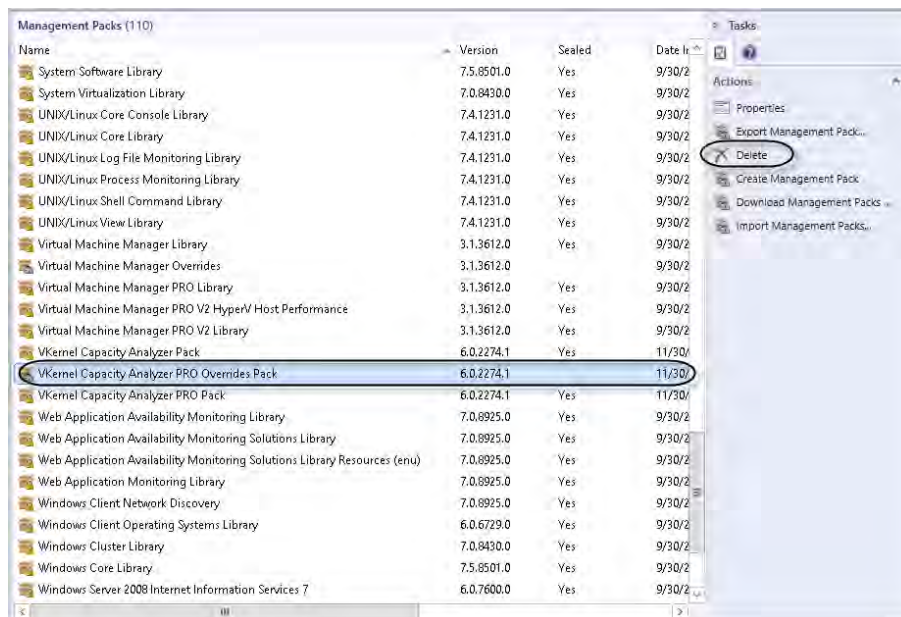
- 1 Open the Systems Centre Operations Manager console and navigate to **Administration > Management Packs**.

There are three management packs that you will need to remove:

- VKernel Capacity Analyzer Pack
- VKernel Capacity Analyzer PRO Overrides Pack

- VKernel Capacity Analyzer PRO Pack

2 Highlight one of the three management packs and click **Delete**.



3 Click **Yes** to confirm the deletion.

4 Repeat [step 2](#) and [step 3](#) for the remaining two management packs.

5 Navigate to **All Programs > VKernel Hyper-V Collector** and start the collector.

The VKernel Hyper-V Collector dialog box opens, with the Service tab selected.

6 Click the **Connections** tab.

7 Click **Add** to establish a new connection to the Systems Center Operations Manager.

You are prompted to install the three missing management packs.

8 Click **Yes** to confirm.

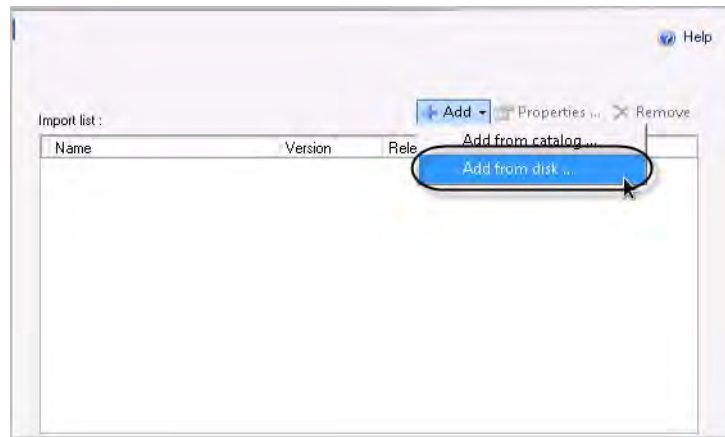
The management packs are imported to the Systems Center Operations Manager.

Option 2

1 Open the Systems Centre Operations Manager console and navigate to **Administration > Management Packs**.

2 Under the Tasks pane on the right-hand side, click **Import Management Packs**.

3 From the **Add** drop-down list, select **Add from disk**.

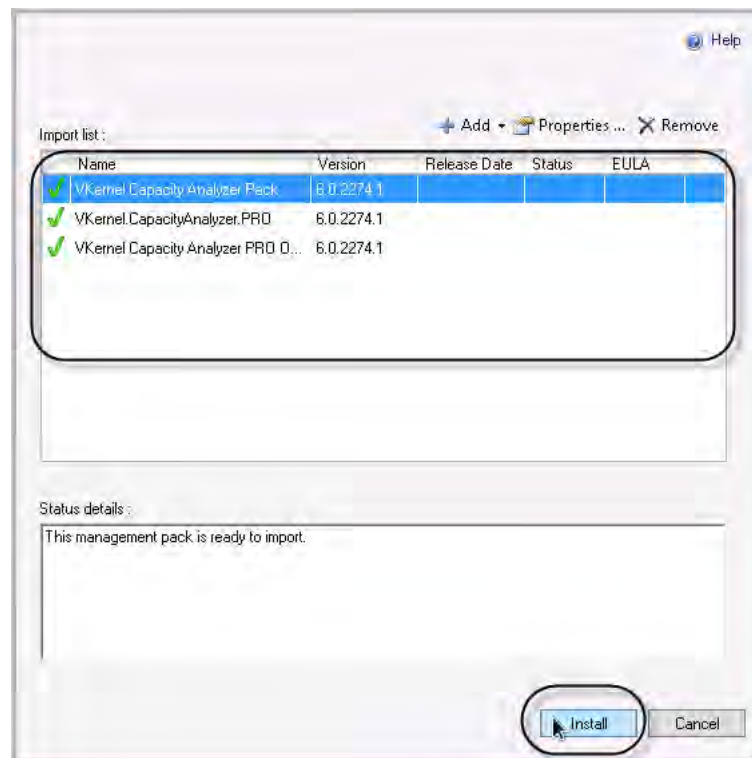


Because you have chosen to import management packs from a disk and not from the catalog, you are prompted to search the catalog for any dependencies the management packs may have.

- 4 Click **No** to not search for dependencies.
- 5 Select the following three management packs and click **Open**:
 - VKernel Capacity Analyzer Pack
 - VKernel Capacity Analyzer PRO Overrides Pack
 - VKernel Capacity Analyzer PRO Pack

The three management packs are displayed in the Import list.

6 Click *Install*.



System Center Integration

The VKernel Hyper-V Collector is required in order to propagate the Foglight for Virtualization, Standard Edition alarms into the Microsoft System Center Virtual Machine Manager. For more information, see “[Installing as a Microsoft Hyper-V Virtual Machine](#)” on page 10.

Next Steps

For information about how to get started with Foglight for Virtualization, Standard Edition, see the *Foglight for Virtualization, Standard Edition User Guide*

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