10

Integration with System Center Operations Manager 2012 SP1

In this chapter, we will cover:

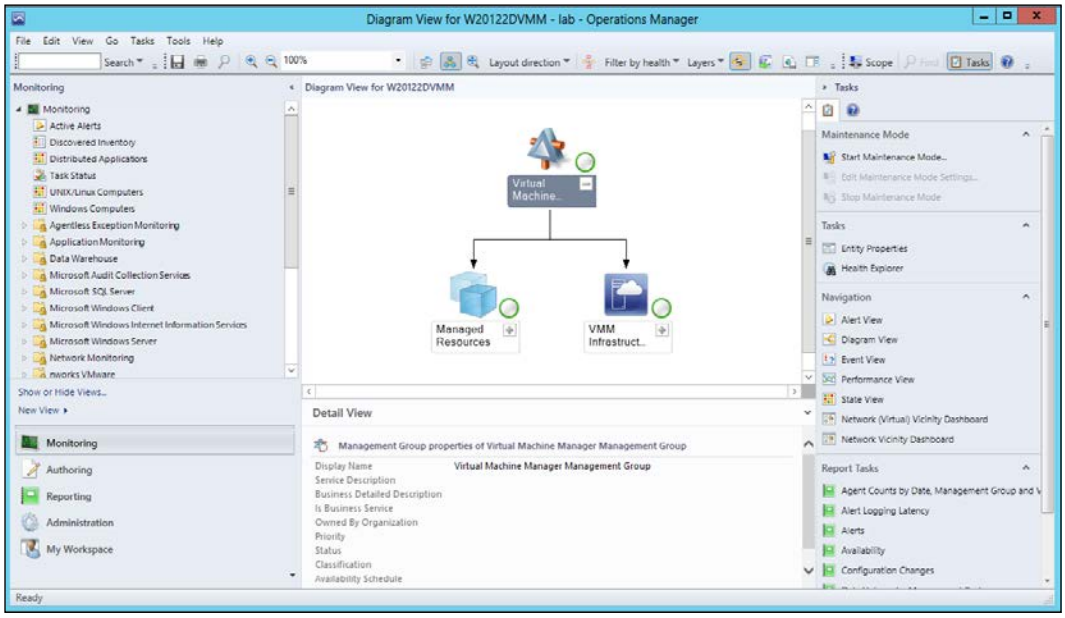
- Installing System Center Operations Manager 2012 SP1
- Installing management packs
- Managing Discovery and Agents
- Configuring the integration between Operations Manager 2012 and VMM 2012
- Enabling reporting in VMM
- Monitoring VMware vSphere infrastructure from the Operations Manager using management packs

Introduction

This chapter provides tips and techniques to allow administrators to integrate Operations Manager 2012 with Virtual Machine Manager 2012 to monitor the health and performance of virtual machine hosts and their virtual machines, as well as to use the Operations Manager reporting functionality.

In a hybrid hypervisor environment (for example, Hyper-V, VMware), using Operations Manager **management packs** (**MPs**) (for example, Veeam MP), you can monitor the Hyper-V hosts and the VMware hosts, which allow you to use only the System Center Console to manage and monitor the hybrid hypervisor environment.

You can also monitor the health and availability of the VMM infrastructure, management, database, and library servers. The following screenshot will show you the diagram views of the virtualized environment through the Operations Manager:



Installing System Center Operations Manager 2012 SP1

This recipe will guide you through the process of installing a System Center Operations Manager for the integration with VMM.

Operations Manager has an integrated product and company knowledge for proactive tuning. It also allows the user to compute the OS, applications, services, and out-of-the-box network monitoring, reporting, and many more features extensibility through management packs, thus providing a cross-platform visibility.

The deployment used on this recipe assumes a small environment with all components being installed on the same server. For datacenters and enterprise deployments, it is recommended to distribute the features and services across multiple servers to allow for scalability. For a complete design reference and complex implementation of SCOM 2012, follow up the Microsoft Operations Manager deployment guide available at `http://go.microsoft.com/fwlink/?LinkId=246682`.

When planning, use *Operations Guide for System Center 2012—Operations Manager* (`http://go.microsoft.com/fwlink/p/?LinkID=207751`) to determine the hardware requirements.

Getting ready

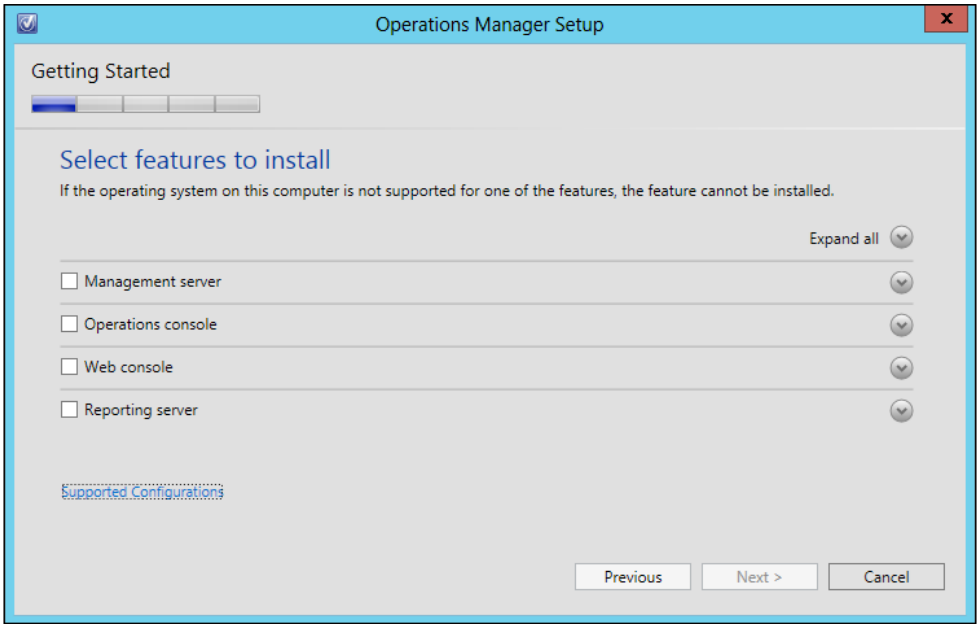
Before starting, check out the system requirements and design planning for System Center Operations Manager 2012 SP1 at `http://technet.microsoft.com/en-us/library/jj656654.aspx`.

My recommendation is to deploy on a Windows Server 2012 and the SQL Server 2012 SP1 version.

How to do it...

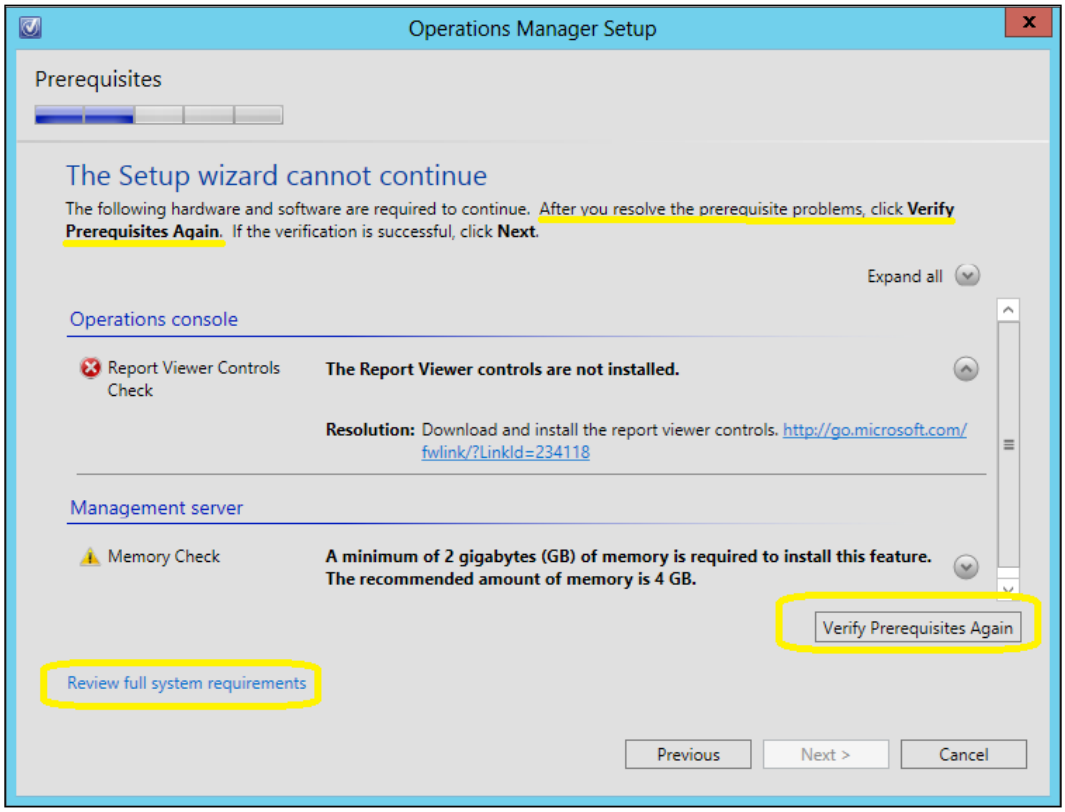
Carry out the following steps to install Operations Manager 2012 SP1:

1. Browse to the SCOM installation folder and click on **Setup**.
2. Click on **Install**.
3. On the **Select the features to install** page, select the components that apply to your environment, and then click on **Next** as shown in the following screenshot:



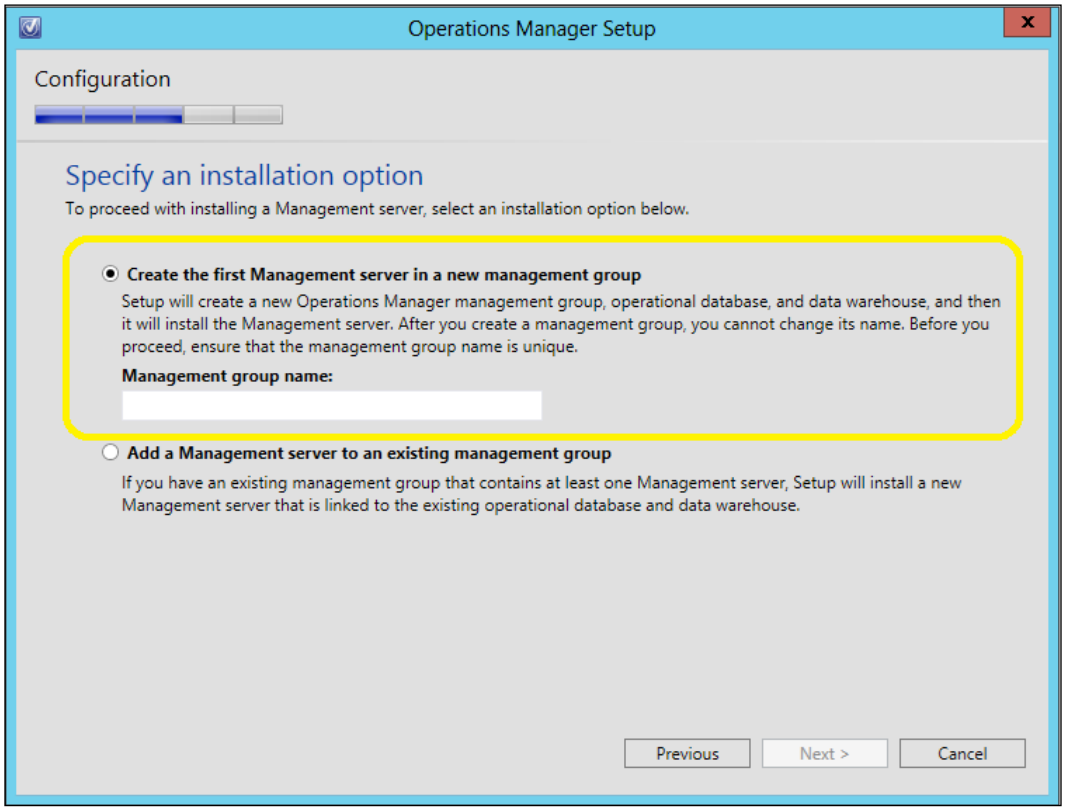
The recommendation is to have a dedicated server, but it all depends on the size of the deployment. You can select all of the components to be installed on the same server for a small deployment.

4. Type in the location where you'd install Operations Manager 2012 SP1, or accept the default location and click on **Next**.
5. The installation will check if your system has passed all of the requirements. A screen showing the issues will be displayed if any of the requirements are not met, and you will be asked to fix and verify it again before continuing with the installation, as shown in the following screenshot:



6. If all of the prerequisites are met, click on **Next** to proceed with the setup.

7. On the **Specify an installation option** page, if this is the first Operations Manager, select the **Create the first Management Server in a new management group** option and provide a value in the **Management group name** field. Otherwise, select the **Add a management server to an existing management group** option as shown in the following screenshot:

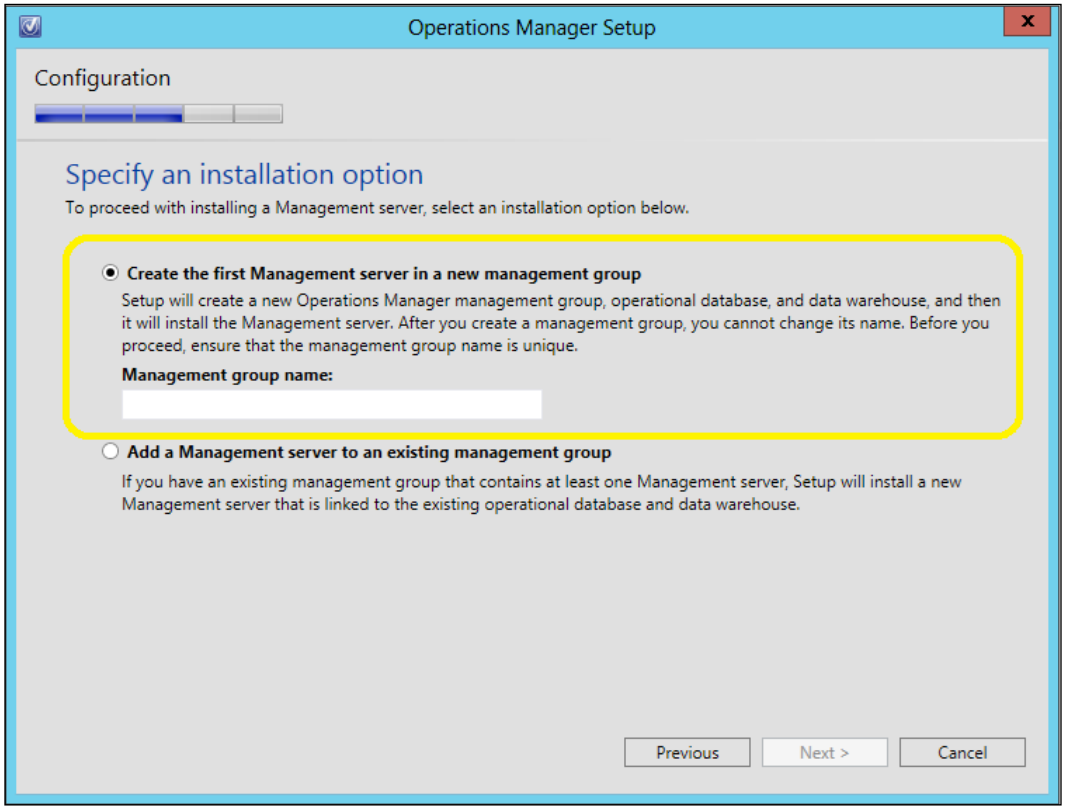


8. Click on **Next** to continue, accept the EULA, and click on **Next**.
9. On the **Configure the operational database** page, type the server and instance name of the server and the SQL Server port number.

It is recommended to keep the default values in the **Database name**, **Database size (MB)**, **Data file folder**, and **Log file folder** boxes.

10. Click on **Next**.

The installation account needs DB owner rights on the database.

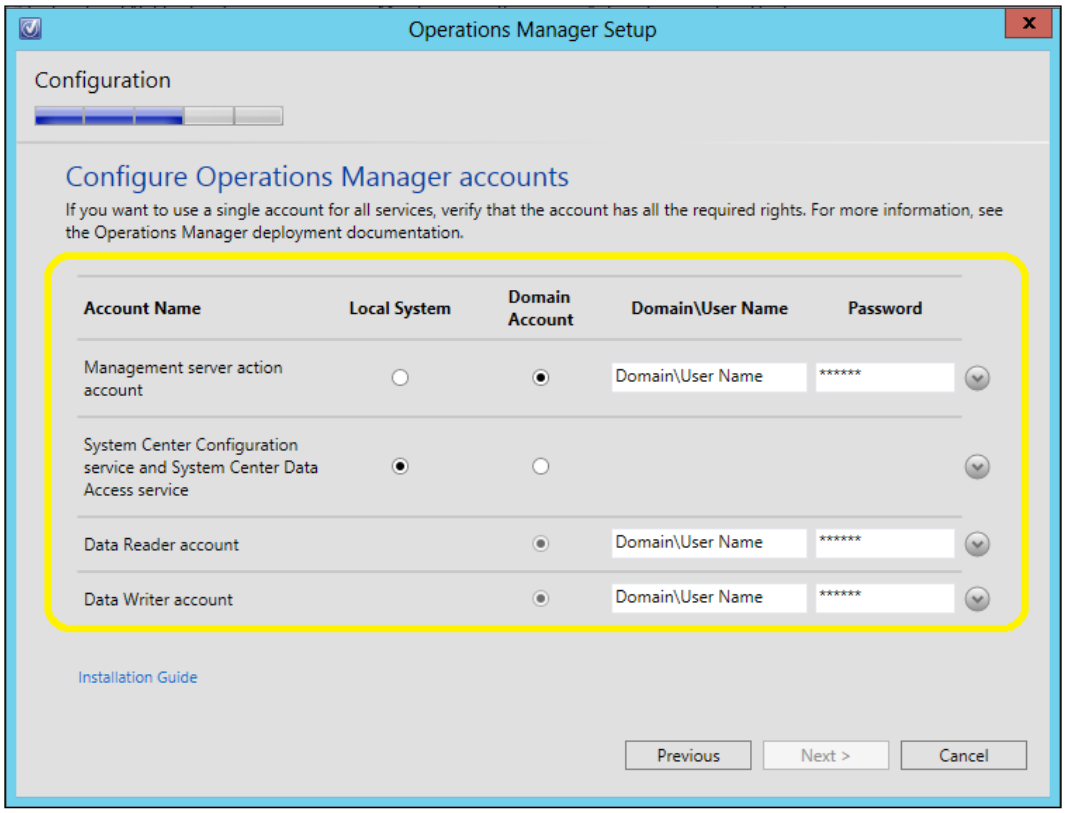


11. On the **SQL Server instance for Reporting Services** page, select the instance where you want to host the **Reporting Services** (**SSRS**).

Make sure the SQL Server has the SQL Server Full-Text Search and Analysis server component installed.

12. On the **Configure Operations Manager accounts** page, provide the domain account credentials (for example, `lab\svc-scom`) for the Operations Manager services.

You can use a single domain account. For account requirements, see the Microsoft Operations Manager deployment guide at `http://go.microsoft.com/fwlink/?LinkId=246682`.



13. On the **Help improve System Center 2012 – Operations Manager** page, select the desired options and click on **Next**.
14. On the **Installation Summary** page, review the options and click on **Install**, and then on click on **Close**. The Operations Manager console will open.

How it works...

When deploying SCOM 2012, it is important to consider the placement of the components. Work on the SCOM design before implementing it. See the *OpsMgr 2012 Design Guide* available at `http://blogs.technet.com/b/momteam/archive/2012/04/13/opsmgr-2012-design-guide.aspx`.

On the **Configure Operational Database** page, if you are installing the first management server, a new operational database will be created. If you are installing additional management servers, an existing database will be used.

On the **SQL Server instance for Reporting Services** page, make sure you have previously configured the Reporting Services at SQL setup using the **Reporting Services Configuration Manager** tool, and that the **SQL Server Agent** is running.

During the OpsMgr setup, you will be required to provide the **Management Server Action Account** credentials and the **System Center Configuration service and System Center Data Access service** account credentials too. The recommendation is to use a domain account so that you can use the same account for both the services.

The setup will automatically assign the local computer `Administrators` group to the Operations Manager administrator's role.

The single-server scenario combines all roles onto a single instance and supports the following services: monitoring and alerting, reporting, audit collection, agentless-exception management, and data.

If you are planning to monitor the network, it is recommended to move the SQL Server `tempdb` database to a separate disk that has multiple spindles.

There's more...

To confirm the health of the management server, carry out the following steps:

1. In the OpsMgr console, click on the **Administration** workspace.
2. In **Device Management**, select **Management Servers** to confirm that the installed server has a green check mark in the **Health State** column.

See also

- The *Deploying System Center 2012 – Operations Manager* article available at `http://technet.microsoft.com/en-us/library/hh278852.aspx`

Installing management packs

After installing Operations Manager, you need to install some management packs and agents on the Hyper-V servers and on the VMM server.

This recipe will guide you through the installation, but first make sure you have installed the Operations Manager Operations console on the VMM management server.

You need to import the following management packs for the VMM 2012 SP1 integration:

- Windows Server operating system
- Windows Server 2008 operating system (Discovery)
- Internet Information Services 2003
- Internet Information Services 7
- Internet Information Services library
- SQL Server Core Library

Getting ready

Before you begin, make sure the correct version of PowerShell is installed, that is, PowerShell v2 for SC 2012 and PowerShell v3 for SC2012 SP1.

How to do it...

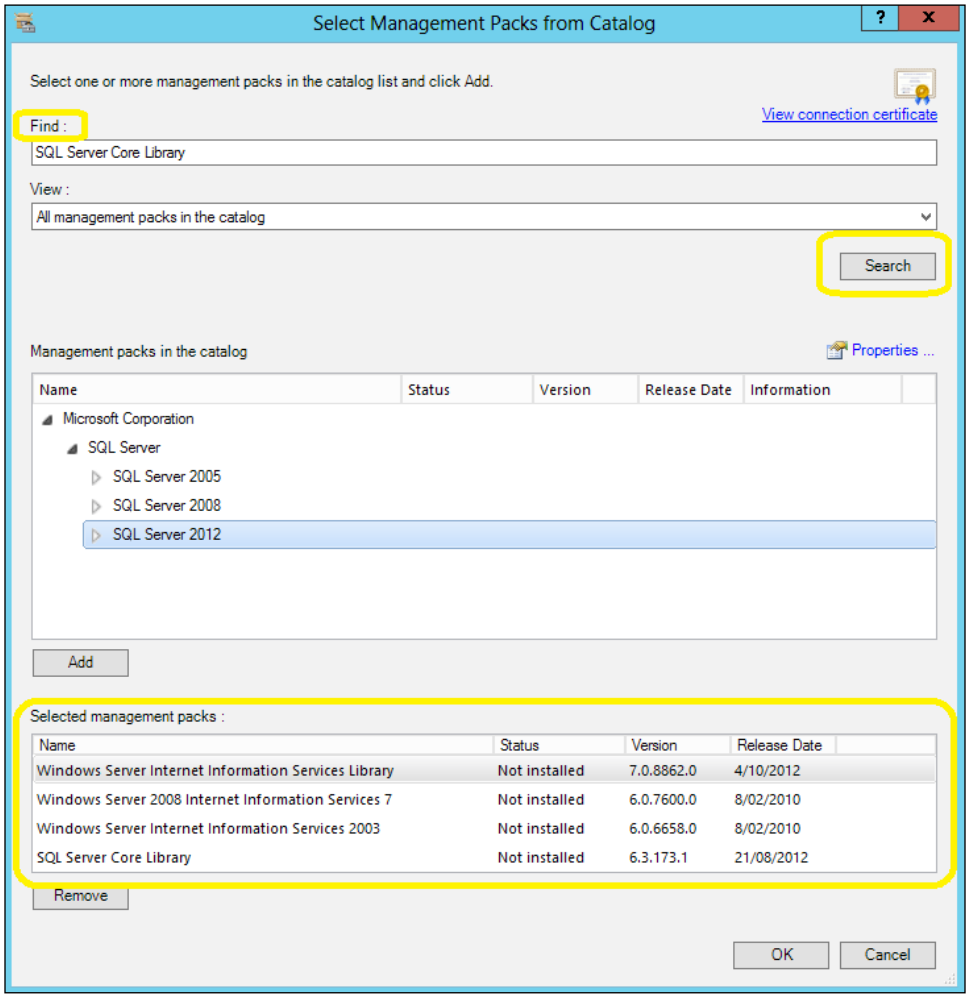
Carry out the following steps to install the required MPs in order to integrate with VMM 2012 SP1:

1. In the OpsMgr console, click on the **Administration** workspace on the bottom-left pane.
2. On the left pane, right-click on **Management Packs** and click on **Import Management Packs**.
3. In the **Import Management Packs** wizard, click on **Add**, and then click on **Add from catalog**.
4. In the **Select Management Packs from Catalog** dialog box, for each of the following management packs, repeat the steps 5 to 7:
   - Windows Server operating system
   - Windows Server 2008 operating system (Discovery)
   - Internet Information Services 2003
   - Internet Information Services 7
   - Internet Information Services library
   - SQL Server Core Library

There are numerous management packs for Operations Manager. You can use this recipe to install other OpsMgr MPs from the catalog web service. You can also download the MPs from the **Microsoft System Center Marketplace**, which contains the MPs and documentation from Microsoft and some non-Microsoft companies. Save them to a shared folder and then import. See `http://systemcenter.pinpoint.microsoft.com/en-US/home`.

5. In the **Find** field, type in the management pack to search in the online catalog and click on **Search**.

6. The **Management packs in the catalog** list will show all of the packs that match the search criterion. To import, select the management pack, click on **Select**, and then click on **Add** as shown in the following screenshot:



In the **View** section, you can refine the search by selecting, for example, to show only those management packs released within the last three months. The default view lists all of the management packs in the catalog.

7. Click on **OK** after adding the required management packs.
8. On the **Select Management Packs** page, the MPs will be listed with either a green icon, a yellow icon, or a red icon. The green icon indicates that the MP can be imported. The yellow information icon means that it is dependent on other MPs that are available in the catalog, and you can fix the dependency by clicking on **Resolve**. The red error icon indicates that it is dependent on other MPs, but the dependent MPs are not available in the catalog.
9. Click on **Import** if all management packs have their icon statuses as green.
10. On the **Import Management Packs** page, the progress for each management pack will be displayed. Click on **Close** when the process is finished.

How it works...

You can import the management packs available for Operations Manager using the following:

- The OpsMgr console: You can perform the following actions in the **Management Packs** menu of the **Administration** workspace:
  - Import directly from Microsoft's online catalog
  - Import from disk/share
  - Download the management pack from the online catalog to import at a later time
- The Internet browser: You can download the management pack from the online catalog to import at a later time, or to install on an OpsMgr that is not connected to the Internet

While using the OpsMgr console, verify whether all management packs show a green status. Any MP displaying the yellow information icon or the red error icon in the import list will not be imported.

If there is no Internet connection on the OpsMgr, use an Internet browser to locate and download the management pack to a folder/share. Then copy the management pack to the OpsMgr server and use the option to import from disk/share.

See also

- The *Installing System Center Operations Manager 2012 SP1* recipe
- Visit Microsoft System Center Marketplace available at `http://go.microsoft.com/fwlink/?LinkId=82105`

Managing Discovery and Agents

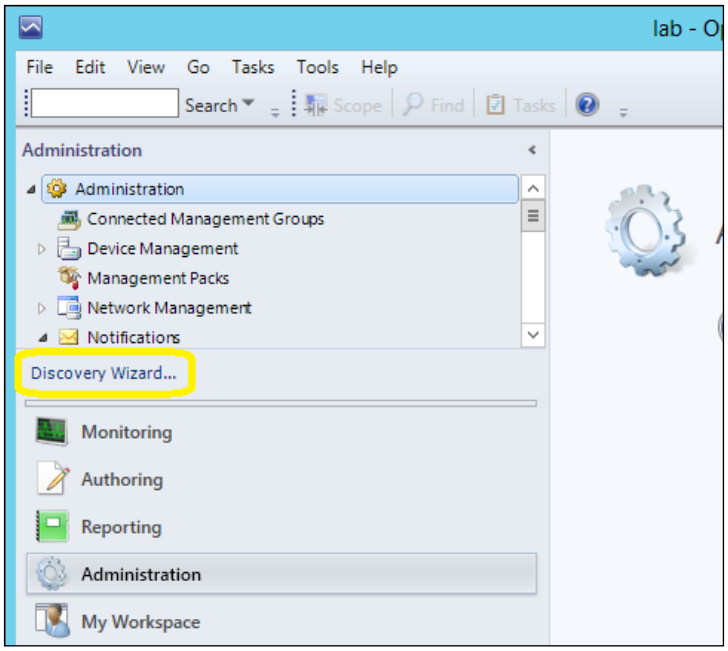
After installing the Operations Manager, you need to deploy the agents and start monitoring servers, network devices, services, and applications.

We also need to install the agents on the VMM management server and on all Hyper-V servers. This is required in order to integrate VMM with Operations Manager.

How to do it...

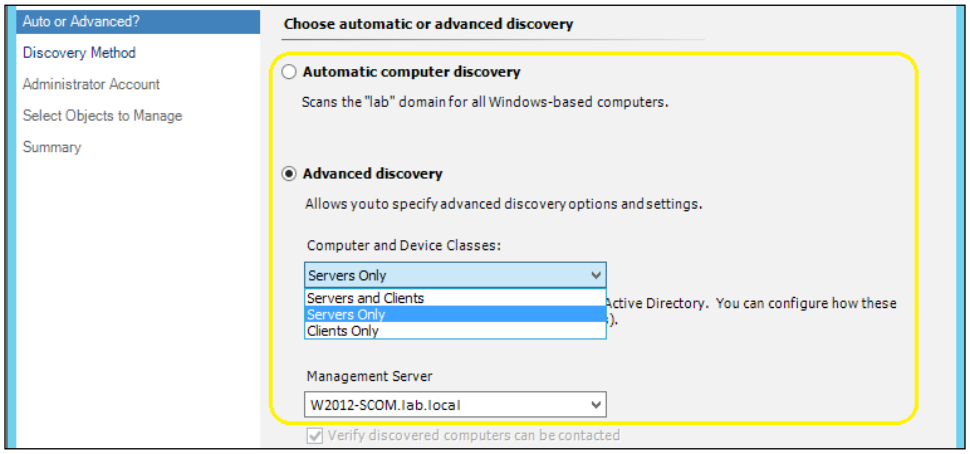
Carry out the following steps to install the OpsMgr agent on a Windows OS by using the **Discovery Wizard** tool:

1. On the OpsMgr console, click on **Administration** on the left, and then click on **Discovery Wizard...** as shown in the following screenshot:

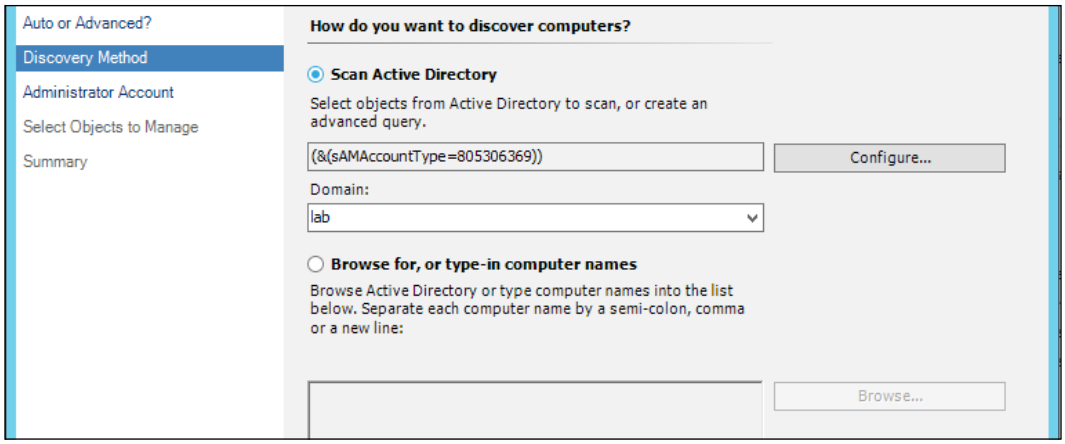


2. On the **What would you like to manage?** page (shown on clicking the **Discovery Type** tab), click on **Windows computers**.
3. On the **Auto or Advanced?** page, select either **Automatic computer discovery** (to scan all of the Windows computers on the domain) or **Advanced discover**.
4. If you have selected **Advanced discovery**:
   - From the **Computer and Device Classes** drop-down list, select either **Servers and Clients**, **Servers Only**, or **Clients Only**
   - From the **Management Server** drop-down list, select the OpsMgr management server or the gateway server

   This is shown in the following screenshot:



5. Click on **Next** to discover.
6. On the **Discovery Method** page (show in the next screenshot), select **Scan Active Directory** or **Browse for, or type-in computer names**.
7. If you have selected **Scan Active Directory**, click on **Configure**. In the **Find Computers** dialog box, in the **Computers** tab or in the **Advanced** tab, provide the information of the search criteria and click on **OK**. Then select the domain from the **Domain** list.
8. If you selected **Browse for, or type-in computer names**, click on **Browse**, provide the computer names separated by a semicolon, comma, or a new line character (for example, **Hyperv01**, **w2012-vmm**), and then click on **OK**.



9. Click on **Next** and then on the **Administrator Account** page. Select **Use selected Management Server Action Account** or **Other user account** and provide the **User name** value, **Password**, and the **Domain** value (from the drop-down list).

Click on **This is a local computer account, not a domain account** if it is not a domain account.

10. Click on **Discover**, and on the **Discovery Results** page, select the computers on which you want to install the agent and be monitored by OpsMgr. Or click on **Select All** and in **Management Mode**, select **Agent** and then click on **Next**.

Do not select any virtual cluster node to be managed.

11. On the **Summary** page, confirm the installation path and in the **Agent Action Account** section, select either **Local System** (default) or **Other**. In either case you will need to provide the **User name**, **Password**, and **Domain** values.

If you choose a path different from the default, make sure you create the root of the path on the target computers, or else the agent installation fails.

12. Click on **Finish**, and in the **Agent Management Task Status** dialog box you will see the agent **Status** column changing from **Queued** to **Success.** This indicates that the computers are ready to be managed. Lastly, click on **Close**.

How it works...

In this recipe, as we are targeting the VMM server and the Hyper-V hosts, select **Servers Only**. You can use the same steps to install the agents on any Windows OS computer.

Note that if the AD does not contain the computers' names, you need to select the **Servers and Clients** option, and then select the **Verify discovered computers can be contacted** checkbox.

Discovery is the process in which OpsMgr searches the environment for all manageable objects and deploys an agent to monitor it. You can use the discovery process at any time to add the newly installed computers or roles/features to be managed.

For the OpsMgr agent to be installed, the account used to run the process requires local administrator rights on the target computer.

You can manually install the agents, or you can embed the agent in the host image of the monitored computer.

See also

- For information on port requirements for OpsMgr agents, refer to the link `http://go.microsoft.com/fwlink/p/?LinkId=230474`
- The *Install Agent on UNIX and Linux Using the Discovery Wizard* article available at `http://technet.microsoft.com/en-us/library/hh230722.aspx`
- The *Install Agent Using the MOMAgent.msi Setup Wizard* article available at `http://technet.microsoft.com/en-us/library/hh212915.aspx`
- The *Configuring Agents* article available at `http://technet.microsoft.com/en-us/library/hh212883.aspx`

Configuring the integration between Operations Manager 2012 and VMM 2012

This recipe will guide you through the process of configuring the connectivity between VMM and System Center Operations Manager 2012/SP1.

By integrating VMM with Operations Manager (OpsMgr), you can use the OpsMgr console to monitor the health and availability of the VMs and Hyper-V servers, VMM management and database servers, library servers, and diagram views of the virtualized environment.

In order to establish a connection with VMM, you need to configure the Operations Manager servers to work with VMM. This configuration is done on the VMM console.

Getting ready

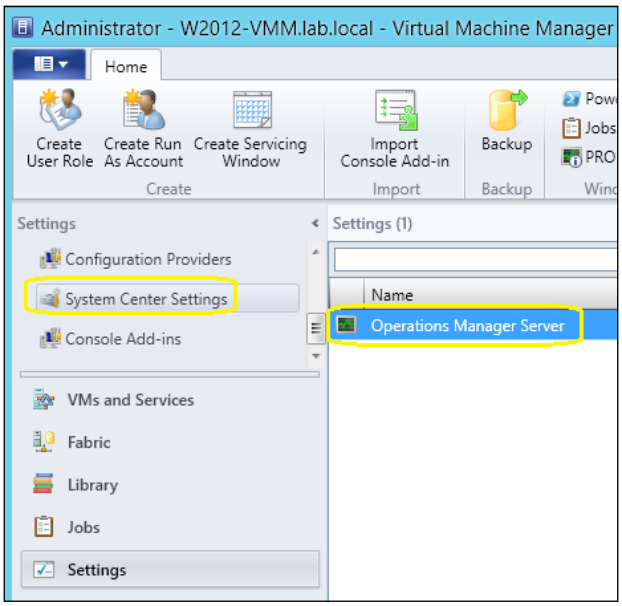
Before starting, make sure that you do the following:

- Install the Operations Manager console on the VMM management server as it is required for the integration between VMM and SCOM
- Install the required OpsMgr management packs as discussed in the *Installing management packs* recipe in this chapter

How to do it...

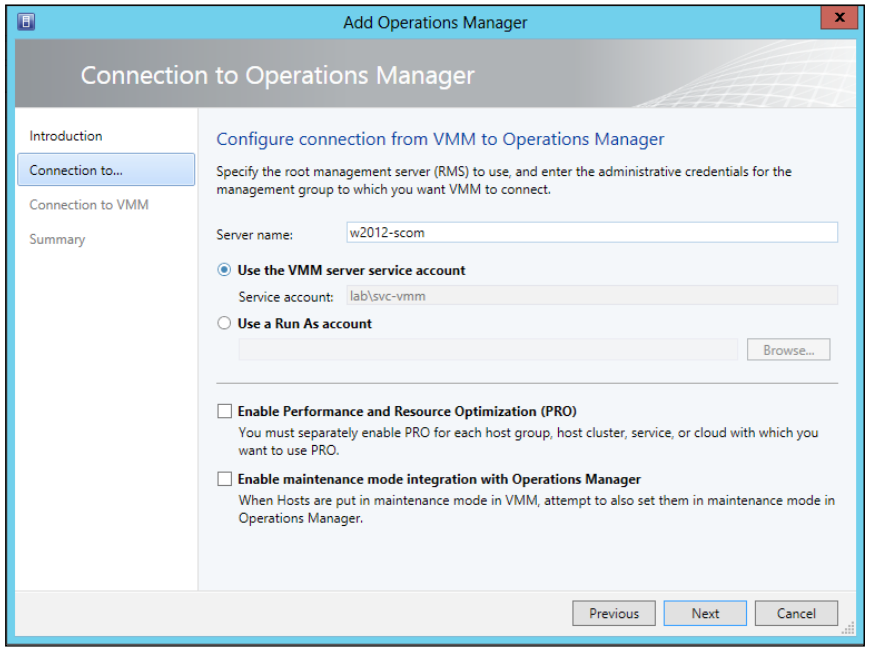
Carry out the following steps to set up the integration between SCOM 2012 and VMM 2012:

1. If you installed the Operations Manager on a separate server (recommended), install the Operations Manager agent on the VMM management server.
2. In the VMM console, in the **Settings** workspace to the left of the window, click on **System Center Settings**, and then right-click on **Operations Manager Server** as shown in the following screenshot:



3. On the **Introduction** page, click on **Next**.
4. On the **Configure connection from VMM to Operations Manager** page, in the **Server name** field, type the OpsMgr management server name (for example, `w2012-scom`).

5. Select the account that is going to be used to connect to for the purpose of integration. You can use the VMM server service account or specify a Run As account as shown in the following screenshot:



Do not select **Enable Performance and Resource Optimization (PRO)** and **Enable maintenance mode integration with Operations Manager** at this point, or else the operation will not succeed and will show the following error: **Operations Manager discovery failed with error: "Exception of type 'Microsoft.VirtualManager.EnterpriseManagement.Common.DiscoveryDataInvalidRelationshipSourceExceptionOM10' was thrown."**.

6. Click on **Next**, then type the account credentials for Operations Manager to connect with the VMM management server (for example, `lab\svc-scom`), and then click on **Next**.

This account will be added to the administrator user role in VMM.

7. On the **Summary** page, click on **Finish**.

How it works...

The process consists of registering the Operations Manager on the VMM management server using the VMM console.

During the connection process, the account informed to connect Operations Manager to VMM will be added to the administrator user role in VMM.

To verify that the VMM to OpsMgr integration was completed, open OpsMgr and select the **Monitoring** workspace. In the navigation pane, confirm that you see:

- **Virtual Machine Manager**: This includes the health and performance information for virtual machines, hosts, and VMM servers
- **Virtual Machine Manager View**: This displays diagrams for the managed systems

Note that the OpsMgr diagrams will not be displayed right after the connection is established. It may require long hours to get updated.

Do not enable the PRO or maintenance mode at the integration setup. Enable both later, after the connection is completed.

There's more...

Now that you have enabled the integration with Operations Manager, let's see what more you can do.

Enabling PRO tips and maintenance mode integration in VMM 2012

Performance and Resource Optimization (**PRO**) is a feature supported in VMM 2012 and SP1 when integrated with Operations Manager. Carry out the following steps to enable the PRO tips in VMM:

1. In the VMM console, in the bottom-left pane, open the **Settings** workspace.
2. Click on **System Center Settings**, select and right-click on **Operations Manager Server**.
3. On the **Details** page, select **Enable Performance and Resource Optimization (PRO)**.
4. Select **Enable maintenance mode integration with Operations Manager** and then click on **OK**.

When in maintenance mode, the OpsMgr's agent suppresses alerts, notifications, rules, monitors, automatic responses, state changes, and new alerts. It also automatically places VMs in the maintenance mode when they are moved to the VMM library.

5. Click on **Test PRO**.

Allow some time for the task to complete before clicking on **Test PRO** and after setting up PRO.

6. Confirm the results either in the VMM console (the **Jobs** workspace) or in the Operations console in Operations Manager.

Note that Dynamic Optimization is now performed and configured in VMM in place of the host load balancing that was performed by PRO in VMM 2008 R2. VMM does include PRO monitors to monitor a VM's **dynamic memory** (**DM**) allocation and maximum VM memory aggregations on Hyper-V hosts.

See also

- The *Configuring Dynamic Optimization and Power Optimization in VMM* recipe in *Chapter 9*, *Managing Hybrid Clouds, Fabric Updates, Creating Clusters, and SP1 New Features*
- The *Installing System Center Operations Manager 2012 SP1* recipe

Enabling reporting in VMM

After integrating VMM with Operations Manager for monitoring, you can also enable the integration to provide reporting, which you will give you the ability to create and view reports related to Hyper-V servers, VMs, and VMM-related components (for example, the management and library servers).

Operations Manager only supports SQL Server Reporting Services in the native mode.

Getting ready

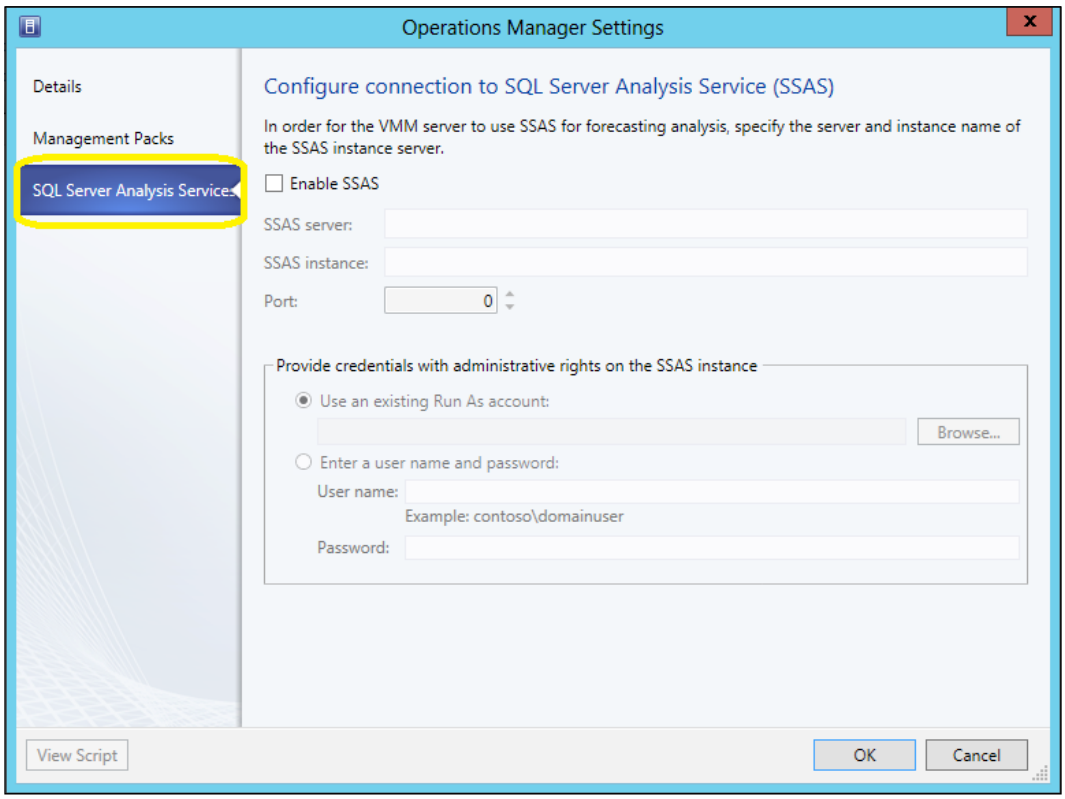
In order to enable the reporting, you will need to have **SQL Server Analysis Service** (**SSAS**) preinstalled on the Operations Manager Reporting server (for example, `lab\w2012-scom`).

You also need to install **Analysis Management Objects** (**AMO**) on all of the VMM management servers for the SQL Server version you have installed. For SQL 2012 SP1, see `http://www.microsoft.com/en-us/download/details.aspx?id=35580`.

How to do it...

Carry out the following steps to configure the SQL Server Analysis Services in VMM:

1. Open the VMM console. On the bottom-left pane, click to open the **Settings** workspace, and then in the **Settings** pane to the left, click on **System Center Settings**.
2. Select and then right-click on **Operations Manager Server**.
3. In the **Operations Manager Settings** dialog box (shown in the following screenshot), click on the **SQL Server Analysis Services** tab on the left pane.
4. Select **Enable SSAS**.



5. Type the **SSAS server**, **SSAS instance**, and **Port** values.
6. On the **Provide credentials with administrative rights on the SAS instance** page, select **Use an existing Run As account**, click on **Browse**, and provide the Run As account, or select **Enter a user name and password** and provide the username (for example, `lab\svc-scom`) and password.
7. Click on **OK** to confirm.

How it works...

The process to set up the SQL Serve Analysis Services integration with VMM requires a VMM administrator user role. The account must belong to the **Operations Manager Report Security Administrator** profile.

On the setup wizard, provide the SSAS instance name, which must be the same as that of the SQL Server Reporting Services. You need to type the instance name even if it is already the default instance: **MSSQLSERVER**. The default port is 0 (zero).

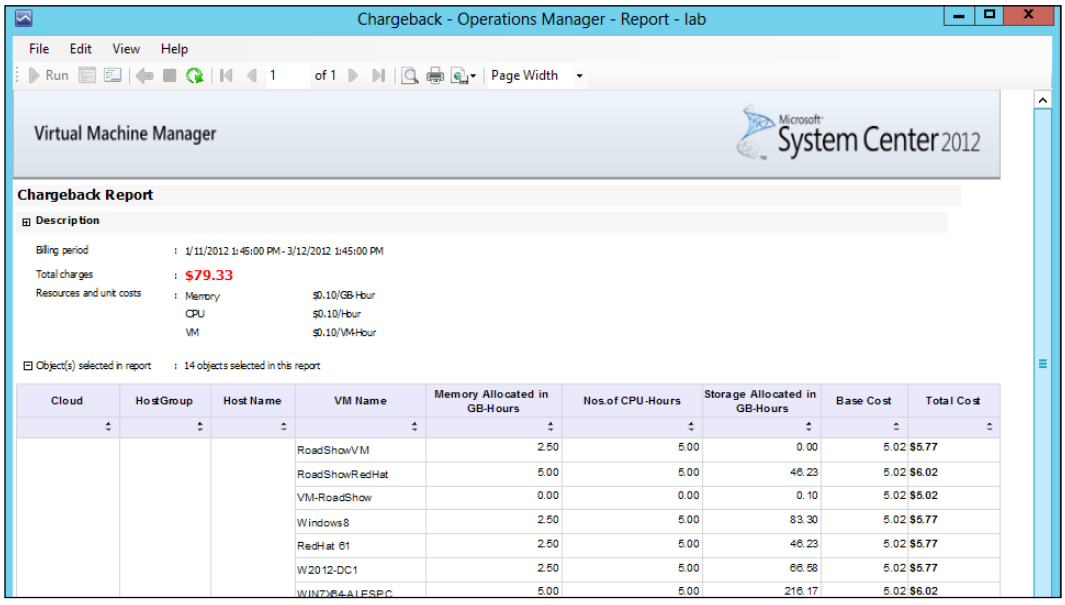
Also, make sure that SQL Server Reporting Services allows report access by using the default HTTP port 80.

There's more...

You can view reports in the Operations Manager console's **Reporting** workspace by browsing through the OpsMgr report server (for example, **https://W2012-reports.lab.local/reports**).

You can choose from the predefined reports or create your own:

- **Capacity Utilization report**: This specifies the detailed usage for hosts and other objects
- **Chargeback report**: This specifies the chargeback information to cost centers for virtual machines as shown in the following screenshot:



- **Host Group Forecasting report**: This calculates host activity based on history
- **Host Utilization report**: This shows the number of VMs running, plus their usage (CPU/memory/disk)
- **Host Utilization Growth report**: This shows the percentage change in resource usage and the number of virtual machines that are running on selected hosts during a specified time period
- **Power Savings report**: This shows summary/detailed information about the power saved for each host in a host group
- **SAN Usage Forecasting report**: This calculates the SAN usage based on history
- **Virtual Machine Allocation report**: This shows information about a VM's allocation
- **Virtual Machine Utilization report**: This shows information about resource utilization by VMs
- **Virtualization Candidates report**: This helps identify the physical computers that are good candidates for conversion to VMs

See also

- The *Using Reporting in VMM* article available at `http://technet.microsoft.com/en-us/library/hh882401.aspx`

Monitoring VMware vSphere infrastructure from the Operations Manager using management packs

With management packs, you can extend Operations Manager (OpsMgr) and its possibilities.

On a hybrid hypervisor environment, where there is a mix of Hyper-V and VMware ESXi servers, the Veeam MP extends the OpsMgr for monitoring, alerting, and for undertaking remedial actions on VMware vSphere.

Veeam MP uses vSphere API to gather information to allow monitoring and reporting against all layers of the VMware stack, which include layers from the underlying hardware though network, storage, hosts, clusters, datacenters, up to vCenter. Examples of the key metrics for the VMware admins include latency, CPU ready, disk and memory pressure against a host.

Getting ready

For this recipe, **Veeam Management Pack for VMware (SCOM)** is required. You can download it from `http://www.veeam.com/vmware-microsoft-esx-monitoring/resources.html`. At the time of writing this book, Veeam offered a free 10-socket license of the Veeam MP for deep VMware monitoring in System Center 2012.

Veeam recommends a dedicated server for the collector server. However, for a small deployment, you can install it on the OpsMgr management server. Such a scenario is what I will describe in this recipe, a single-server install.

You also need a service account (with local administrator rights on the collector server) and the user account (used to connect to VMware vCenter, which requires at least the read-only privilege), depending on which MP tasks you allow over the entire vSphere hierarchy and not only to specific objects.

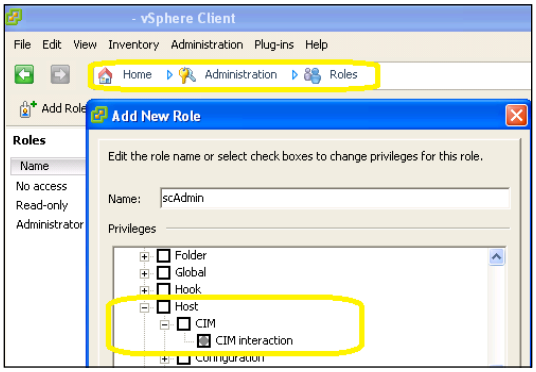
For a complete list of system requirements, check `http://www.veeam.com/vmware-microsoft-esx-monitoring/resources.html`.

How to do it...

Carry out the following steps to install Veeam MP to monitor VMware:

1. Install the OpsMgr on the VMware vCenter Server as described in the *Managing Discovery and agents* recipe.
2. On the VMware vCenter page, assign CIM interaction to the created user role (for example, `lab\scAdmin`) by editing the role settings. Click on **User Role** | **All Privileges** | **Host**, and then on **CIM** to enable **CIM interaction**.

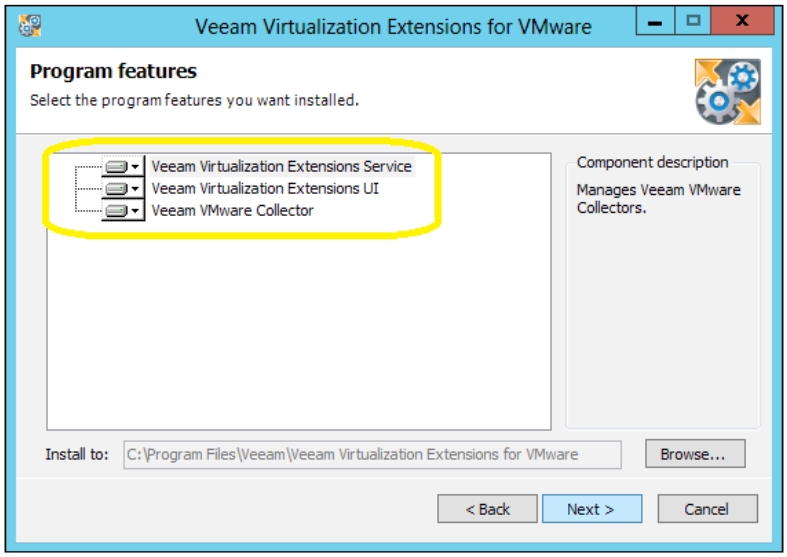
This step is necessary only if you require hardware information, such as the temperature and power utilization to be collected from the VMware hosts.



3. Download the Veeam management pack (**VES_6.0.iso**) from `http://www.veeam.com/vmware-microsoft-esx-monitoring.html`, and extract it to a local disk folder (for example, `C:\VeeamMP`).

If you are installing it on a dedicated server, you need to install an OpsMgr agent.

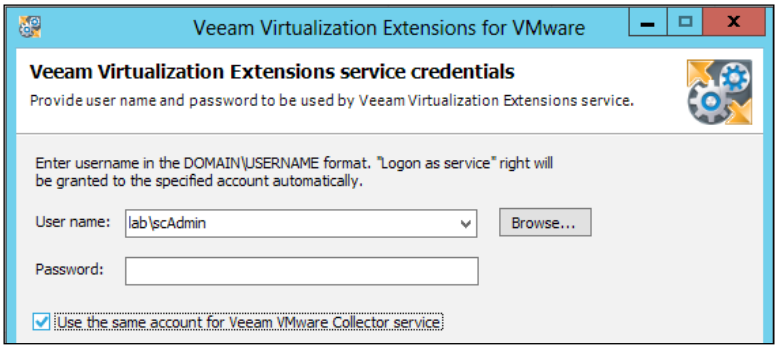
4. Browse to `C:\VeeamMP`, right-click on **setup**, and click on **Run as Administrator**. Then click on **Veeam VES Suite**.
5. Click on **Next** to start the installation, accept the EULA, and then click on **Next**.
6. On the **Program Features** page, (shown as follows) confirm that all components will be installed on a local drive and click on **Next**:



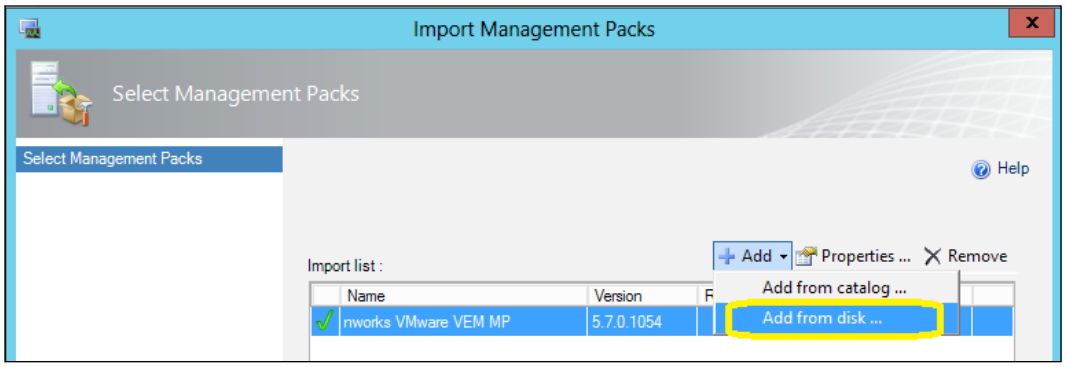
If you desire, change the installation directory.

7. On the **Provide License** page, click on **Browse** to locate the required license file and then click on **Next**.
8. On the **System Configuration Check** page, the installer will perform a system configuration check. If all of the prerequisites are met, click on **Next** to continue. Otherwise, click on **Install** to install the missing components.
9. On the **Ports Selection** page, confirm the ports, then click on **Next**, and then click on **Finish**.

10. On the **Veeam Virtualization Extensions service credentials** page, provide a domain account with local administrator rights: **User name** (for example, `lab\scAdmin`) and **Password**. Select **Use the same account for Veeam VMware Collector service**, if you are using the same account for the collector service (as shown in the following screenshot), and click on **Next**:

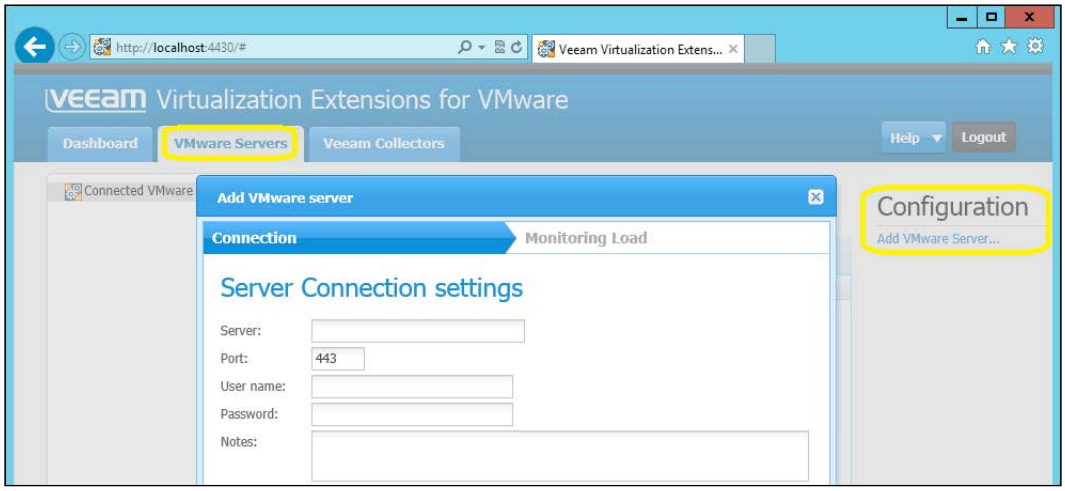


11. On the **Ready to Install** page, click on **Install** and then click on **Finish**.
12. To complete the installation, click on **Yes, to logoff/logon**.
13. Carry out the steps provided in the *Installing management packs* recipe in this chapter, but select the **Add from disk** option. Then browse to the installation folder (for example, `C:\VeeamMP\SCOM 2012 MP`), select all of the management packs and the `Veeam.Virt.Extensions.RequiredOverrides.xml` file, and click on **Import**.
14. Click on **Install** to confirm the installation, and then click on **Close**.



15. Open Internet Explorer and type `http://localhost:4430/` to access the **Veeam Virtualization Extensions for VMware** page.

16. On the **VMware Servers** tab, on the right panel, click on **Add VMware Server...** and then on the **Add VMware server** wizard, type the VMware server connection settings as shown in the following screenshot:



You should now be able to see information appearing in the **Veeam for VMware** node in the **Monitoring** Tab.

How it works...

Create a domain account that can be used as a service account for the MP and to access the VMware infrastructure.

During the single-server installation, the application setup will register the Veeam collector component with **Veeam Virtualization Extensions Service**. It will then be visible in the Veeam web console and two new application logs will be created, namely, `Veeam Collector` and `Veeam VMware`.

When the install finishes and the Veeam collector service starts, there will be no monitoring jobs assigned (it will show as **Inactive**) until you add the VMware servers. After adding the ESXi hosts, the Veeam collector server will collect all of the information from the VMware ESX hosts servers, and then show the information on the OpsMgr's monitoring workspace. It is possible to install this role on the dedicated monitored servers or even on the OpsMgr management servers.

Installation of Veeam components is not supported on the VMware vCenter Server.

Note that the collection server requires an OpsMgr agent installed, unless you install it on the OpsMgr management server. Either way, you also need to enable the agent proxy settings for each collector server.

There's more...

After installing Veeam MP, importing MPs, and adding the VMware servers, you also need to configure the proxy settings and configure the OpsMgr tasks.

Configuring proxy settings for an agent

Carry out the following steps for each Veeam collector server if the OpsMgr agent is installed:

1. In the OpsMgr console, in the **Administration** workspace, expand **Device Management** and then **Agent Managed**.
2. Double-click on the collector server in the right pane, and in the **Security** tab of the **Agent Properties** dialog box, select **Allow this agent to act as a proxy and discover managed objects on other computers**.
3. Click on **OK** and allow time for the settings to propagate through the system.

Configuring proxy settings for a management server

If you have installed the Veeam collector server on the OpsMgr management server, you also need to enable the proxy. To do this, carry out the following steps:

1. In the OpsMgr console, in the **Administration** workspace, expand **Device Management** and then **Management Servers**.
2. On the right pane, double-click on the management server, and in the **Management Server Properties** dialog box, in the **Security** tab, select **Allow this server to act as a proxy and discover managed objects on other computers**.
3. Click on **OK** and allow time for the settings to propagate through the system.

Configuring OpsMgr Agent task to adjust the registry settings

Carry out the following steps to configure an OpsMgr Agent task, which is included in the Veeam MP to automatically adjust the registry settings to maximize efficiency when processing large data volumes for the OpsMgr Health Service.

1. In the OpsMgr console, in the **Monitoring** workspace, expand **Veeam for VMware** and then **Veeam Collectors**.
2. On the **Actions** pane, click on the **Configure OpsMgr agent** task and select the Veeam collector server.

This task will cause the System Center Management service to restart.

See also

- Check out the Veeam Deployment Planning Calculator at `http://www.veeam.com/support/nworks_deployment.html`