OpenManage Integration Version 7.0 for Microsoft System Center

Installation Guide

DELL EMC

Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Introduction

OpenManage Integration for Microsoft System Center (OMIMSSC) provides integrations into the System Center suite of products that enable full lifecycle management of the Dell EMC servers by using the integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller (LC).

OMIMSSC offers operating system deployment, hardware patching, firmware update, and server maintenance. With OMIMSSC, you can either integrate with Microsoft System Center Configuration Manager (SCCM) for managing the Dell EMC servers in traditional data center, or use the integration with Microsoft System Center Virtual Machine Manager (SCVMM) for managing the Dell EMC servers in virtualized and cloud environments.

This guide provides information on software prerequisites, and system requirements to either install the OMIMSSC integration with SCCM or with SCVMM.

For information on SCCM and SCVMM, see the Microsoft documentation.

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About OMIMSSC components

The following is the list of the OMIMSSC components and their names that have been used in this guide:

- OpenManage Integration for Microsoft System Center Appliance virtual machine, also known as Appliance is hosted on a Hyper-V as a virtual machine based on CentOS and performs the following tasks:
  - Interacts with the Dell EMC servers through iDRAC by using Web Services Management (WSMan) commands.
  - Enables you to administer the OMIMSSC Appliance through the Admin Portal.
- OMIMSSC Integration Gateway also known as Integration Gateway (IG) is a set of web services installed on the Windows server and performs the following tasks:
  - Runs SCCM or SCVMM Powershell commands, and acts as an intermediate gateway between SCCM or SCVMM and Appliance.
  - Customizes WinPE for Appliance.
- OpenManage Integration for Microsoft System Center console, also known as the OMIMSSC console
  - OMIMSSC console plug-in for SCCM, also known as the OMIMSSC console extension for SCCM
  - OMIMSSC console Add-in for SCVMM, also known as the OMIMSSC console extension for SCVMM

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Planning for installing OMIMSSC console extensions

Based on your requirements you can choose to install either OMIMSSC console extension for SCCM, or OMIMSSC console extension for SCVMM by performing the tasks mentioned in the following topics.

Topics:

Planning for installing OMIMSSC on SCCM

About this task

To install OMIMSSC on SCCM, perform the following tasks:

Steps

1. Verify that the system requirements for installing OMIMSSC on SCCM console are met. For more information, see the Software prerequisites and requirements for OMIMSSC.
2. Download the file from support site. For more information, see Downloading from support site.
3. Create and setup the Appliance VM. For more information, see Creating and setting Appliance VM.
4. To download the following OMIMSSC components, launch the admin portal:
   a. Download and install the IG. For more information, see Downloading and installing IG.
   b. Download and install the OMIMSSC console extension for SCCM. For more information, see Installing OMIMSSC console extension for SCCM.
5. Enroll the SCCM console with OMIMSSC by providing the details. For more information, see the Enrolling MSSC console.
6. Launch the OMIMSSC console extension for SCCM from SCCM console. For more information, see Launching OMIMSSC console extension for SCCM.

Planning for installing OMIMSSC on SCVMM

About this task

To install OMIMSSC on SCVMM, perform the following tasks:

Steps

1. Verify that the system requirements for installing OMIMSSC on the SCVMM console are met. For more information, see the Software prerequisites and requirements for OMIMSSC.
2. Download the file from support site. For more information, see Downloading from support site.
3. Create and setup the Appliance VM. For more information, see Creating and setting Appliance VM.
4. To download the following OMIMSSC components, launch the admin portal:
   a. Download and install the IG. For more information, see Downloading and installing IG.
   b. Download and install the OMIMSSC console extension for SCVMM. For more information, see Downloading and installing OMIMSSC console extension for SCVMM.
5. Enroll the SCCM console with OMIMSSC by providing the details. For more information, see the Enrolling MSSC console.

6 Import the OMIMSSC console extension for SCVMM. For more information, see the Importing OMIMSSC console extension for SCVMM.

7 Launch the OMIMSSC console extension on SCVMM. For more information, see the Launching OMIMSSC console extension for SCVMM.

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System requirements for OMIMSSC

Topics:

Account privileges

Requirements for all the accounts used in OMIMSSC.

Integration Gateway account (IG service account used for performing operations from IG to MSSC console) for OMIMSSC console extensions, the user must be a member of:

- Domain user group
- Administrator privileges on SCCM or SCVMM
- Local Administrator group

OMIMSSC console extension for SCCM, the user must have administrative rights on SCCM and is a member of:

- Domain user group
- Local Administrator group

OMIMSSC console extension for SCVMM, the user must be a member of:

- Domain user group
- Local Administrator group
- SCVMM server Administrator user should not be an SCVMM service account.

Common system requirements for OMIMSSC

Before installing OMIMSSC, ensure that you complete the following software prerequisite installations based on the three listed OMIMSSC components:

- OMIMSSC Appliance:
  - Install Windows Server, and enable the Hyper-V role.
  - You can now enroll any number of SCCM, or SCVMM consoles with one Appliance, as OMIMSSC now supports multiconsole enrollment. Based on number of consoles you plan to enroll here are the hardware requirements:

Table 2. Hardware requirements

Components	Per SCCM or SCVMM console	N number of SCCMs or SCVMMs
RAM	8 GB	8 GB*N

Processor counts	4	4*N

- IG:
  - Install one of the following versions of Windows Server:
    - Windows server 2012 R2
    - Windows Server 2012
    - Windows Server 2016
  - Microsoft .NET version 3.5
  - Windows Assessment and Deployment Kit (ADK)
  - PowerShell

Management systems are systems on which OMIMSSC and its components are installed. List of ADK, DTK, and the WinPE versions supported are:

Table 3. System requirements for management system

OS version on IG system	SCCM or SCVMM versions of admin console	ADK version	PowerShell	Microsoft .NET version
Windows Server 2012	Microsoft System Center Configuration Manager 2012 SP1 , Microsoft System Center Virtual Machine Manager 2012 SP1	8.0	3.0	3.5
Windows Server 2012 R2	Microsoft System Center Configuration Manager 2012 SP2 , Microsoft System Center Configuration Manager 2012 R2 , Microsoft System Center Configuration Manager 2012 R2 SP1 , Microsoft System Center Configuration Manager 2012 SP2 , Microsoft System Center Virtual Machine Manager 2012 R2	8.1	4.0	4.5
Windows Server 2016	Microsoft System Center Configuration Manager Version 1610 ,	10.0	4.0	

	Microsoft System Center Virtual Machine Manager 2016			

- Admin portal:

  Install any of the following supported browsers:

  - Internet Explorer 10 or later
  - Mozilla Firefox 30 or later
  - Google Chrome 23 or later
  - Microsoft Edge

To follow specific OMIMSSC system requirements, you can now follow the requirements mentioned in bellow link as per the console you use:

- System requirements of OMIMSSC console extension for SCCM
- System requirements of OMIMSSC console extension for SCVMM

System requirements of OMIMSSC console extension for SCCM

To access OMIMSSC console extension for SCCM:

- Install the SCCM admin console.

  NOTE: The installer only checks whether the SCCM admin console is installed and does not check whether the same version of SCCM is installed on the site server where the Appliance writes the discovery records in the database. Ensure that you have installed the correct version of the admin console.

Verifying permissions for using OMIMSSC console extension for SCCM

Postinstallation checks:

About this task

OMIMSSC console extension for SCCM user should have administrative rights on SCCM. To check for the privileges of the account, perform the following steps:

Steps

1. On the system where OMIMSSC is installed, provide the **Write** permission for the *<Configuration Manager Admin Console Install Dir>\XmlStorage\Extensions\DLCPlugin* folder.

   And provide the **Write** permissions using PowerShell. For more information, see Providing read and execute permissions to users.
2. Configure user access to Windows Management Instrumentation (WMI). For more information, see the Configuring user access to WMI.
3. Provide share and folder permissions to write files to the DDR inbox. For more information, see the Providing share and folder permissions.

Providing read and execute permissions to users

Nonadministrator users are required to complete the following prerequisites on the site server, and SMS provider Server before installing OMIMSSC component:

1 In PowerShell, run this command: `Enable-PSRemoting`.
2 In the confirmation message, type `Y`.
3 In PowerShell, run this command: `Set-ExecutionPolicy RemoteSigned`.
4 In the confirmation message, type `Y`.

Configuring user access to WMI

About this task
To configure user access to WMI remotely:

NOTE: Make sure that firewall of the system does not block the WMI connection.

Steps
1 To access the Distributed Component Object Model (DCOM) remotely using **dcomcnfg.exe**, provide user permissions to the Integration Gateway. For more information, see Providing user permissions for DCOM.
2 To access the DCOM Config Windows Management and Instrumentation (WMI) components using **dcomcnfg.exe**, provide user permissions to the Dell Provisioning Server. For more information, see Providing user permissions for DCOM Config WMI.
3 Set the namespace security and grant permissions. For more information, see Setting namespace security and granting permissions.
4 Go back to Configuring an account for use with discovery.

Providing user permissions for DCOM

About this task
To grant user permissions for DCOM:

Steps
1 Launch **dcomcnfg.exe**.
2 From the left pane, in the **Component Services** console, expand **Computers**, right-click the **Integration Gateway**, and select **Properties**.
3 On **COM Security**:
   - From **Access Permissions**, click **Edit Limits** and select **Remote Access**.
   - From **Launch and Activation Permission**, click **Edit Limits** and select **Local Launch**, **Remote Launch**, and **Remote Activation**.
4 Go to step 2 of the Configuring user access to WMI.

Providing user permissions for DCOM Config WMI

About this task
To grant user permissions for DCOM Config WMI:

Steps
1 Launch **dcomcnfg.exe**.
2 Expand **My Computer** > **DCOM Config**.
3 Right-click **Windows Management and Instrumentation**, and select **Properties**.
4 On **Security**, from **Launch and Activation Permission**, click **Edit** and select the **Remote Launch and Remote Activation permissions**.
5 Go to step 3 of the Configuring user access to WMI.

Setting namespace security and granting permissions

About this task

To set namespace security and grant permissions:

Steps

1. Launch **wmimgmt.msc**.
2. In the **WMI Control** pane, right-click **WMI Control**, select **Properties**, and then select **Security**.
3. Navigate to **ROOT\SMS Namespace**.
4. Select the **Execute Methods**, **Provide Write**, **Enable Account**, and the **Remote Enable permissions**.
5. Navigate to **Root\cimv2\DLCI**.
6. Select the **Execute Methods**, **Provide Write**, **Enable Account**, and the **Remote Enable** permissions.
7. Go to step 4 of Configuring an account for use with discovery.

Alternatively, the Configuration Manager user becomes a member of the **SMS_Admin** group, and you can grant **Remote Enable** to the existing permissions of the group.

Providing share and folder permissions

About this task

To grant share and folder permissions to write files to the DDR inbox:

Steps

1. From the Configuration Manager console, under **Administration**, grant the user permission to write to the **SMS_<sitecode>** share.
2. Using **File Explorer**, go to the share location **SMS_<sitecode>** share, and then to the **ddm.box** folder. Grant full control to the domain user for the following folders:
   - **SMS_<sitecode>**
   - Inboxes
   - **ddm.box**

System requirements of OMIMSSC console extension for SCVMM

- For IG on SCVMM:
  - SC2012 VMM R2 UR12 Console or SC2012 VMM SP1 UR11 Console or SC2016 VMM UR2.1 or later is installed.
    - Failover Clustering feature is enabled.
  - System requirements specific for SC2012 VMM R2 Console:
    - If you are upgrading from SC2012 VMM SP1 to SC2012 VMM R2, then upgrade to Windows PowerShell 4.0.
  - System requirements specific for SC2012 VMM SP1 Console:

> **NOTE: If you are updating to SC2012 VMM SP1, then consider the following: When importing an add-in to SC2012 VMM UR5 or later, the console may crash. For information about the issue and resolving the issue, see issue 5 in the knowledge base URL: Support.microsoft.com/kb/2785682. Do this update irrespective of the version of the update rollup that is installed.**

Network requirements

Ports used in Appliance:

The following is a list of ports that are used by various OMIMSSC components: hence, include these ports in the firewall exception list.

Table 4. Ports information

Usage	Protocol	Port Number	Configurable
iDRAC communication	WSMan	443	No
FTP command client	FTP	21	No
DNS client	DNS	53	No
Dell Online Data Access	HTTP	80	No
Administration Console	HTTP	80	No
HTTPS server	HTTPS	443	No
PostgreSQL	Postgres	5432	No
Integration Gateway	HTTPS	8455	Yes. Configurable during the Integration Gateway installation
Autodiscovery	HTTPS	4433	No
iDRAC—These ports are enabled for iDRAC to access the CIFS share created by the Integration Gateway.	HTTPS	135 through to 139, and 445	No

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Installing, configuring and maintaining OMIMSSC

Topics:

Downloading OMIMSSC from web

About this task

To download the OMIMSSC, perform the following steps:

Steps

1 Download the Appliance file from the Dell Digital store.

If you are unable to download your license key(s), contact Dell Support by going to **www.dell.com/support/softwarecontacts** to locate the regional Dell Support phone number for your product.

2 Extract the VHD file and Set up the Appliance.

Setting up Appliance

Prerequisites

Ensure that the following requirements are met on the Hyper-V where you are setting up Appliance:

- Virtual switch is configured and available.
- User credentials of the system on which Microsoft System Center (MSSC) is set up.
- FQDN of SCCM or SCVMM
- FQDN and user credentials for IG
- Shared network location to store the configuration files
- Allocate the memory for the Appliance VM based on number of MSSC consoles you plan to enroll. For more information, see the Common requirements.

About this task

To set up Appliance:

Steps

1 Deploy the Appliance VM by performing the following steps:

a In **Windows Server**, in **Hyper-V Manager**, from the **Actions** menu, select **New** and click **Virtual Machine Manager**.

The **New Virtual Machine Wizard** is displayed.

b In **Before You Begin**, click **Next**.

c In **Specify Name and Location**, provide a name for the virtual machine.

If you want to store the VM in a different location, then select **Store the virtual machine in a different location**, click **Browse**, and traverse to the new location.

d In **Specify Generation**, select **Generation 1**, and then click **Next**.

e In **Assign Memory**, assign the memory capacity mentioned in the prerequisite.

f In **Configure Networking**, in **Connection**, select the network that you want to use, and then click **Next**.

g In **Connect Virtual Hard Disk**, select **Use an existing virtual hard disk**, traverse to the location where the **OMIMSSC—v7** VHD file is present, and select the file.

h In **Summary**, confirm the details that you have provided and click **Finish**.

i Set the **Number of virtual processors** count value to 2, since by default the processor count is set to 1.

To set the processor count:

1 Right-click Appliance, and select **Settings**.

2 In **Settings**, select **Processor**, and set **Number of virtual processors** to 2.

2 To verify that the Appliance VM is configured appropriately, select and then right-click the Appliance VM, click **Settings**, and then perform the following tasks:

a Check if the allocation of memory for the Appliance is as per the requirement mentioned in the Common requirements. Else provide the memory in **Startup RAM**, and click **Apply**.

b Check if the processor count is as per the requirement mentioned in the Common requirements. Else provide the number of processor counts in **Number of Virtual processors** count under **Processors**.

c Check if the **Virtual hard disk** field under IDE Controller: **IDE Controller 0** > **Hard Drive** the **Virtual hard disk** referring to the **OMIMSSC—v7** file else, click **Browse** and navigate to the location where the VHD file is unzipped and select the **OMIMSSC—v7** file and click **Apply**.

d Check if **Network Adapter** > **Virtual Switch** is connected to a physical NIC card, else configure the NIC card, and select the appropriate NIC card from the **Virtual Switch** drop-down menu and click **Apply**.

3 From the **Hyper-V Manager** menu, right-click the Appliance VM and perform the following tasks:

a Click **Connect**, and then click **Start**.

If the newly created virtual machine with the selected virtual hard disk of Appliance fails to boot with any kernel panic exception, edit the virtual machine settings, and enable the dynamic memory option for this virtual machine.

To enable the dynamic memory option for a virtual machine, perform the following tasks:

a Right-click the Appliance VM, click **Settings**, and then click **Memory**.

b Under **Dynamic Memory**, select the **Enable Dynamic Memory** check box, and provide the details.

4 Perform the following tasks once Appliance starts:

NOTE: It is recommended that you wait for five minutes before you log in as an Admin so that all services are initiated.

a In **localhost login**: Type admin.

b In **Enter new Admin password**: Type a password.

c In **Please confirm new Admin password**: retype the password, and press **Enter** to continue.

d In **Appliance**, select **Configure Network**, press **Enter**, and perform the following substeps:

1 In **Select Action**, select **DNS configuration**, and press **Enter**.

2 In **DNS configuration**, in **Hostname**, type the FQDN of the host, and then press **OK**.

For example, Hostname.domain.com

NOTE: You can change the IP address of Appliance by selecting Device configuration option. You cannot change the IP address or host name of Appliance after this point.

3 In **Select Action**, press **Save&Quit**.

e (Optional) If you plan to use multiple SCCMs and SCVMMs, provide the number of consoles you plan to enroll in the **Configure Enrollment Params** option by proving the details.

f From Appliance, note the admin portal URL.

Launching admin portal to download OMIMSSC components

1 Launch the admin portal from the browser.

2 Log in to the admin portal by using the same credentials that were used while logging in to Appliance.

Format: Https://<IP address>

3 In **Local Intranet Site**, add the admin portal URL.

4 Download IG and OMIMSSC console extension for SCCM or OMIMSSC console extension for SCVMM.

Installing IG for OMIMSSC

To install the IG for SCCM or IG for the SCVMM console, perform the following steps:

Prerequisites

- Ensure that either SCCM or SCVMM admin console is already installed on the management server.
- Ensure that the effective PowerShell execution policy is set for the local machine as **RemoteSigned** after verifying your organization's Powershell execution policy guidelines, and the *Integration Gateway Service* account is set as **Unrestricted**. For information about policy settings, see the following MSDN articles:
  - PowerShell Execution Policy: Technet.microsoft.com/en-us/library/hh847748
  - PowerShell Group Policy: Technet.microsoft.com/library/jj149004

Steps

1 In the admin portal, click **Download Installer** and save the installer to a known location.

2 Install IG through an IG account that has been already set by performing the following steps:

> **NOTE:**
> - Make sure that one IG is associated to one console.
> - Using the IG account, log in to the system where you plan to install the IG.

a Run the **OMIMSSC Integration Gateway** installer.

b In the OMIMSSC **Integration Gateway Installer Welcome** page, click **Next**.

c In **License Agreement**, select **I accept the terms in the license agreement**, and then click **Next**.

d In **License: Open-Source Software**, see the open-source related information, and click **Next**.

e In **Prerequisites Status**, perform the following tasks and click **Next**.

1 To view the latest prerequisites status, click **Scan for Prerequisite** and confirm the status.

2 To install prerequisites, click **Install Prerequisite**.

The following prerequisites are automatically installed by IG when you click **Install Prerequisite**:

- HTTP Activation under Microsoft .NET 4.5
- Windows Authentication in IIS under IIS 7.5
- URL Authorization in IIS under IIS 7.5
- IIS 6 Metabase compatibility under IIS 6 WMI compatibility, and IIS 6 Scripting Tools
- Failover Clustering

f In **Integration Gateway Configuration**, provide details of IG service account user and ensure that the prerequisites for the account are met.

Assign a port number for communication between Appliance and IG. The default port number that is enabled is 8455. However, you can configure a different port number based on your requirement. For more information on port numbers, see the Common system requirements for the OMIMSSC.

To change the IG share folder location, click **Select Share Folder** and traverse to a new location, and then click **Next**.

NOTE: Ensure that the shared folder that you create has a minimum disk space of 10 GB.

The default installation folder **Integration Gateway** is selected. To change the installation folder location, click **Change** and traverse to a new location. Once you complete the changes, click **Next**.

g In **Ready to Install the Program**, click **Next**.

The following shared directories are created during installation of IG and ensure that they are accessible by using IG credentials:

- Protection Vault
- DTK
- ISO
- LCDRIVER
- OMSA
- WIM
- UPDATE

h Once IG installation is complete, click **Finish**.

Next steps

Verify the installation of the IG. For more information, see Verifying installation of IG for OMIMSSC.

Verifying installation of IG for OMIMSSC

To verify IG installation, perform the following steps:

1 Check the connectivity between Appliance, SCCM or SCVMM, and IG with the following methods by using host names:

- Log in to Appliance as a read-only user. Then, ping the IG server and SCCM or SCVMM server from Appliance.
  - To log in to Appliance as a read-only user; enter user name as **readonly** and the Appliance admin password.
- Log in to the IG server and ping the Appliance and SCCM or SCVMM server.
- Log in to SCCM or SCVMM server and ping the Appliance and IG server.

If there is no response for the ping verify the following:

- Firewall is not blocking the communication.
- The DNS server IP is configured in **DNS configuration** of Appliance.
- Appliance exists in the DNS server.

2 Check if Internet Information Services (IIS) is running, and then launch a browser with the **Https://<IG server>:IG port number(default 8455)** URL to check if the IIS site is reachable.

If you are not able to open the IG services on a browser by using IG credentials, then ensure that:

- Firewall is not blocking the IG server and the IG port number.
- Any security tools such as anti-virus is not blocking IG port or IIS services.

3 Check if you can access the share folders in the **\\IGServerHostName** path during IG installation.

If files in the share folder are not accessible, check:

- Server Message Block (SMB) configuration of the IG server
- The IG server IP address is entered in the DNS server.

4 Check if the IG user is a part of the SCCM or SCVMM administrator group by accessing the SCCM or SCVMM console with IG credentials. If Administrator is displayed in the title bar of the SCCM or SCVMM service window, the IG user has administrator privileges.

5 (Not applicable for first-time users) Make sure that the Dell application profile is deleted before you start Setting up the Appliance. For more information, see the *Deleting OMIMSSC application profile* section from the Other uninstallation steps.

6 Check if all management systems have an entry in the DNS.

7 Check if the **Execution policy** for IG service user account is set to **Unrestricted**.

Installing OMIMSSC console extension for SCCM

Prerequisites

- Ensure that you install the OMIMSSC on the SCCM site server before using it in the SCCM admin console.
- It is recommended that you close Configuration Manager before installing, upgrading, or uninstalling the OMIMSSC console extension for SCCM.

Steps

1 Double-click **OMIMSSC_SCCM_Console_Extension.exe**.

The **Welcome** screen is displayed.

2 Click **Next**.

The license agreement is displayed.

3 Accept the license agreement, and click **Next**.

4 Click **Next**.

The **Ready to Install the Program** screen is displayed.

5 Click **Install**.

The progress bar is displayed. After installation, the completion message is displayed.

6 Click **Next**.

7 In **Installation Completed Successfully**, click **Finish**.

Installing OMIMSSC console extension for SCVMM

Prerequisites

- Install the OMIMSSC console in the system where the SCVMM console is installed. Once you install the OMIMSSC console, you can import the OMIMSSC console in to the SCVMM console.
- Ensure that SC2012 VMM R2, SC2012 VMM SP1, or the SC2016 VMM console is installed.

Steps

1 In the **Admin Portal**, click **Downloads**.

2 From the **OMIMSSC SCVMM console extension**, click **Download Installer** and save the file to a location.

3 Run the **OMIMSSC_SCVMM_Console_Extension.exe** installer.

> **NOTE: If you are using iDRAC firmware version 2.40.40.40 or later, Transport Layer Security (TLS) versions 1.1 or later is enabled by default. Before installing the console extension, install the update to enable TLS 1.1 and later as mentioned in the following KB article: Support.microsoft.com/en-us/kb/3140245. Based on your web browser, Dell recommends you to enable support for TLS 1.1 or later on your SCVMM server and SCVMM console to ensure that OMIMSSC operates as expected. And for more information about iDRAC, see Dell.com/idracmanuals.**

4 On the **OMIMSSC SCVMM Console Extension** Welcome page, click **Next**.

5 On the **License Agreement** page, select **I accept the terms in the license agreement**, and then click **Next**.

6 In the **Destination Folder** page, by default an installation folder is selected. To change the location, click **Change** and traverse to a new location, and then click **Next**.

7 On the **Ready to Install the Program** page, click **Install**.

8 On the **InstallShield Wizard Completed** page, click **Finish** to complete the installation of the OMIMSSC console extension for SCVMM.

9 Import the OMIMSSC console extension for SCVMM in to the SCVMM console.

Enrolling console

Prerequisites
Ensure that the following prerequisites are met:

- IG is already installed.
- OMIMSSC console extension for SCCM console or the OMIMSSC console extension for SCVMM is installed.
- Enroll the SCCM site server to use the OMIMSSC console extension on SCCM admin console.

About this task
To enroll an SCCM or SCVMM console with OMIMSSC, perform the following steps:

Steps

1 Open a browser, and provide Appliance URL.
The admin portal login page is displayed.

2 Click **Settings**, click **Console Enrollment**, and then click **Enroll**.
The **Enroll a Console** page is displayed.

3 Provide either the FQDN of SCCM or SCVMM console and IG, the credentials, and the IG port number.
By default IG port number is 8455.

NOTE: Ensure that the IG details you provide is not associated with any other SCCM or SCVMM console.

4 (Optional) Click **Create New** to create a Windows type credential profile to access IG and SCCM or SCVMM console.
For information on creating a credential profile, see the *OpenManage Integration for Microsoft System Center User's Guide*.

5 To verify the connections between the following components, click **Test Connection**:
- Appliance and IG
- IG and SCCM or SCVMM

Launching OMIMSSC console extension for SCCM

Prerequisites
Log in to Windows OS with the same credentials that is used to log in to the OMIMSSC console extension for SCCM.

Steps

In SCCM console, click **Assets and Compliance**, click **Overview**, and then click the **OMIMSSC console extension for SCCM**.

NOTE: If you are connecting to SCCM console using Remote Desktop Protocol (RDP), then the OMIMSSC session may be logged out if the RDP is closed. Hence, log in again after reopening the RDP session.

Launching OMIMSSC console extension for SCVMM

To launch OMIMSSC console extension for SCVMM:

1 Import the console extension to SCVMM. For more information, see Importing OMIMSSC console extension for SCVMM.
2 Add console extension in SCVMM. For more information, see Launching OMIMSSC console extension from SCVMM.

Importing OMIMSSC console extension for SCVMM

To import the OMIMSSC console extension for SCVMM, perform the following steps:

1 Launch the SVMM console either by using Administrator privilege or as a Delegated Admin.
2 Click **Settings**, and then click **Import Console Add-in**.
The **Import Console Add-in Wizard** is displayed.

3 Click **Browse** and select the .zip file for the console extension, click **Next**, and then click **Finish**.
Ensure that the add-in is valid.

4 Click **Fabric** in the left pane, and then click **DELL EMC OMIMSSC**in the ribbon.

Launching OMIMSSC console extension for SCVMM

1 In the SCVMM console, select **Fabric**, and then select the **All Hosts** server groups.

NOTE: To launch OMIMSSC, you can select any host group that you have permissions to access.

2 In the **Home** ribbon, select **OMIMSSC**.

6

Managing OMIMSSC and its components

Topics:

- Viewing Appliance details
- OMIMSSC user management
- Viewing or refreshing enrolled consoles
- Repairing or modifying installers and accounts
- Uninstalling OMIMSSC
- Migrating or upgrading from older versions of DLCI for Configuration Manager and DLCI for SCVMM
- Upgrading OMIMSSC

Viewing Appliance details

1 Launch the admin portal from a browser.

2 Log in to the admin portal by using the same credentials that were used while logging in to Appliance and click **Appliance Details**. The IP address and host name of Appliance is displayed.

OMIMSSC user management

1 Launch the admin portal from a browser.

2 Log in to the admin portal by using the same credentials that were used while logging in to Appliance and click **OMIMSSC User Management**. Details of users logged in to SCCM or SCVMM is displayed.

Viewing or refreshing enrolled consoles

About this task

You can view all the enrolled MSSC consoles with OMIMSSC by performing the following steps:

Steps

1 In admin portal, click **Settings**, and then click **Console Enrolment**.

All the enrolled consoles are displayed.

2 To view the latest list of enrolled consoles, click **Refresh**.

Repairing or modifying installers and accounts

To repair any of the installer files refer to the following topics:

- Repairing OMIMSSC console extension for SCCM
- Repairing OMIMSSC console extension for SCVMM
- Repairing OMIMSSC IG

To modify account details that are used in OMIMSSC refer to the following topics:

- If you want to modify only the IG account, see Repairing OMIMSSC console extension for SCCM.

- If you want to modify IG account and SCCM or SCVMM administrator account:
  a Modify IG account. For more information, see Repairing OMIMSSC IG.
  b Modify SCCM or SCVMM administrator account and IG account from OMIMSSC admin portal. For more information, see Modifying SCCM or SCVMM and IG accounts.

Repairing OMIMSSC console extension for SCCM

To repair the OMIMSSC files in case they are corrupt, perform the following steps:

1 Run the OMIMSSC console extension for SCCM installer.
The **Welcome** screen is displayed.
2 Click **Next**.
3 In **Program Maintenance**, select **Repair**, and then click **Next**.
The **Ready to Repair the Program** screen is displayed.
4 Click **Install**.
A progress screen displays the progress of installation. After installation is complete, the **InstallShield Wizard Completed** window is displayed.
5 Click **Finish**.

Repairing OMIMSSC console extension for SCVMM

To repair the OMIMSSC files in case they are corrupt, perform the following steps:

1 Run the **OMIMSSC console extension for SCVMM** installer.
2 In **Program Maintenance**, select **Repair**, and then click **Next**.
3 In **Ready to Repair or Remove the program**, click **Repair**.
4 When the repair task is complete, click **Finish**.

Repairing OMIMSSC IG

About this task
By using this option, you can reinstall the deleted or corrupt files, or recreate the folders required for OMIMSSC IG.

Steps
1 Run the OMIMSSC IG installer.
2 In **Program Maintenance**, select **Repair**, and then click **Next**.
3 In **Ready to Repair**, provide the IG user account password, and then click **Install**.
4 Click **Finish** after the repair task is complete.

Modifying IG and SCCM or SCVMM accounts

By using this option, you can change the passwords of SCCM, SCVMM, and IG accounts in OMIMSSC console.

About this task
You can modify the SCCM, the SCVMM administrator credentials, and IG credentials from the Admin Portal. This process is a sequential activity.

- For the IG account, perform the following prerequisites before modifying the account in OMIMSSC:
  a Modify the credentials in active directory.
  b Modify the credentials in IG installer.

- For SCCM or SCVMM account, modify the credentials in active directory, before modifying the account in OMIMSSC.

To modify the OMIMSSC IG account from installer:

Steps

1 Run the IG installer.
2 In **Program Maintenance**, select **Modify** and then click **Next**.
3 Change password and then click **Next**.
4 In **Modify the program**, click **Install**.
5 Click **Finish** after the modify task is complete.

Modifying credentials in OMIMSSC Admin Portal

1 In the OMIMSSC Admin Portal, click **Settings**, and then click **Console Enrollment**.
The enrolled consoles are displayed.
2 Select a console to edit, and click **Edit**.
3 Provide the new details and, click **Finish** to save the changes.

Uninstalling OMIMSSC

About this task
To uninstall OMIMSSC:

Steps

1 Deenroll the OMIMSSC console. For more information, see Deenrolling OMIMSSC console.
2 Remove IG. For more information, see Removing IG.
3 Remove the OMIMSSC console extension for SCCM or OMIMSSC console extension for SCVMM from **Uninstall a Program**. For more information, see Uninstalling OMIMSSC console extension for SCCMor Uninstalling OMIMSSC console extension for SCVMM.
4 Remove Appliance VM. For more information, see Removing Appliance VM.
5 Remove Appliance-specific accounts. For more information, see Other uninstallation tasks

Deenrolling OMIMSSC console

In case you have enrolled multiple consoles of SCCM or SCVMM with one Appliance, you can deenroll one console and still continue working with OMIMSSC. For complete uninstallation, see *OpenManage Integration for Microsoft System Center Installation Guide*.

About this task
To deenroll an OMIMSSC console, perform the following steps:

Steps

1 In OMIMSSC, click **Console Enrollment**.
All the consoles enrolled with Appliance are displayed.
2 Select the console and click **De-enroll** to remove the registration of the console and IG with Appliance.

> **NOTE:**
> - After deenrolling a console, the host servers associated with the console are moved to unassigned server list in OMIMSSC.

3 (Optional) In case the console is not reachable, click **Yes** when promoted to forcefully deenroll the console.
   - If you forcefully deenroll OMIMSSC when the IG is not reachable, manually delete the following:
     - **Application Profile** in SCVMM

- If an OMIMSSC session is already open during deenrollment, ensure that you close the SCCM or SCVMM session to complete the deenrollment.

Uninstalling OMIMSSC IG

To uninstall IG, perform the following steps:

1 Run the **OMIMSSC Integration Gateway** installer.
2 In the OMIMSSC **Integration Gateway Installer Welcome** page, click **Next**.
3 Click **Uninstall**.

Uninstalling OMIMSSC console extension for SCCM

Double-click **OMIMSSC_SCCM_Console_Extension.exe**, select **Remove**, and follow the instructions on the screen.

Uninstalling OMIMSSC console extension for SCVMM

To uninstall the OMIMSSC console extension for SCVMM:

1 In **Control Panel**, click **Programs**, and then click **Uninstall a Program**.
2 Select **Console Add-in for SCVMM**, and then click **Uninstall**.

Removing OMIMSSC console extension for SCVMM

1 In the SCVMM console, click **Settings**.
2 Right-click **OMIMSSC** and select **Remove**.

Other uninstallation steps

To remove the OMIMSSC console extension from SCVMM, delete the following accounts and profiles:

- Appliance-specific RunAsAccounts
- OMIMSSC Application Profile

Deleting Appliance-specific RunAsAccounts

About this task
To delete the Appliance-specific RunAsAccounts from the SCVMM console.

Steps
1 In the SCVMM console, click **Settings**.
2 Click **Run As Accounts**.
3 From the list of accounts, delete Appliance-specific accounts.
The Appliance-specific accounts are prefixed as **Dell_**.

Deleting OMIMSSC application profile

1 In the SCVMM console, click **Library**, **Profiles**, and then click the **Applications profiles**.
All the application profiles used in SCVMM are displayed.
2 Select and delete the **OMIMSSC Registration Profile**.

Removing Appliance VM

About this task
To remove Appliance VM:

Steps
1 In **Windows Server**, in **Hyper-V Manager**, right-click the Appliance VM and click **Turn Off**.
2 Right-click the Appliance VM and then click **Delete**.

Migrating or upgrading from older versions of DLCI for Configuration Manager and DLCI for SCVMM

To migrate or upgrade from an earlier version of DLCI products to OMIMSSC refer the following:

- To migrate from DLCI version 3.3 for SCCM, see *Migration Guide for OMIMSSC v7.0 from DLCI for SCCM 3.3*.
- To migrate from DLCI version 1.3 for SCVMM, see *Migration Guide for OMIMSSC v7.0 from DLCI for SCVMM 1.3*.

Upgrading OMIMSSC

After you install and setup OMIMSSC, if a service pack update is available for OMIMSSC, then by using the Service Pack Update feature of OMIMSSC you can install the service pack update.

About service pack updates

Once OMIMSSC is released, it is required to share any critical defect fixes or feature additions that are available as an upgrade or extension to the existing Appliance. You can update service packs and other updates for the Appliance operating system and OMIMSSC.

- You can place the service pack files directly in any HTTP server and use the service pack files for updates.
- You can incrementally apply these service packs; however, once applied you cannot roll them back.
- The service packs are cumulative, that is, the latest service pack has fixes from all the previous releases.

The two types of service packs by OMIMSSC:

- Appliance service packs.
- Infrastructure service packs.

To apply the service pack updates, perform the following steps:

1 Download the service pack from the Web. For more information, see Downloading Appliance service packs and infrastructure service packs.
2 Check the list of prerequisites for service pack updates. For more information, see Prerequisites for service pack updates.
3 Copy the downloaded service pack update to repository. For more information, see Copying service pack updates to repository.

4 Provide the repository URL information in admin portal. For more information, see Proving repository URL information.

5 Install the service pack updates. For more information, see Installing service pack updates.

Downloading appliance service packs and infrastructure service packs

Prerequisites

To download service packs from the digital entitlement site you require a valid subscription.

The Infrastructure service packs are available for free.

About this task

To download the service packs:

Steps

1 Log in to the digital entitlement portal with this URL: **Dell.com/support/licensing/us/en/19/Lkm/Index**.

2 Select **Available Software Downloads**, and then select **Dell Lifecycle Controller Integration for Microsoft System Center Virtual Machine Manager** and click **View**.

3 Download the service pack.

Prerequisites for service pack updates

Complete these prerequisites before you begin upgrade.

1 Verify that there are no jobs running. If there are any jobs running, wait until the jobs are completed.

2 Back up OMIMSSC Appliance, for more information see the Microsoft documentation.

Copying service pack updates to repository

You require a repository to place the downloaded service pack.

Prerequisites

Ensure all the files formats in the server pack are supported by the HTTP server. If not check with HTTP administrator to add the support. The following file formats are supported:

- .RPM
- .XML
- .TXT
- .BZ2

To enable `.BZ2` file format:

1 Open the IIS Manager on the server where the repo files are saved.

2 Expand the host name. Click **Sites** and then **Default Web Site**.

3 In **Action** pane click **Add**.

The **Add MIME Type** window is displayed.

4 Provide the **File name extension** as**.BZ2** and **MIME type** as **APP/BZ2** and click **OK**.

About this task

To prepare a repository:

Steps

1 Place the service packs files directly in the HTTP server.

2 Double-click the downloaded service pack, and extract the files to a location.

3 Copy the extracted files to the HTTP site.

Providing repository URL information for service pack updates

About this task
To provide URL information:

Steps

1 In **OMIMSSC**, select **Settings** > **Service Pack Updates**.

2 In **Repository URL**, provide the URL information in the format **Http://<servername>:<portname>/<repository path>** and if necessary provide proxy server details, and then click **Save**.

Installing service pack updates

Prerequisites

Check to see if the repository's URL information is available and included in the **Service Pack Updates** page, for more information see, Providing repository URL information.

About this task
To install service pack updates:

Steps

1 Once the service pack is placed in the HTTP site, in **OMIMSSC Admin Portal** > **Settings** > **Service Pack Updates**, click **Check for Updates**.

For OMIMSSC, the existing version and the service pack version available in the repository are displayed.

If necessary, you can view the Release Notes.

2 Click **Apply**, and then click **OK**.

3 Once the upgrade activity is complete, log in to the OMIMSSC Admin portal and then clear the browser's cache history.

Next steps

Postinstall:

To verify the Service Pack update:

1 In Admin Portal, in **About**, view the Service Pack update version details.

2 For more information, in Admin Portal, select **Settings** > **Logs**.

3 In the **upgradelogs** directory, to view or download the log files for the service pack upgrade, select the **<service pack version number>** directory, for example 1.2.0.207 directory to view or download the log files for the service pack upgrade.

4 If the service pack update has failed, then contact **dell.com/support**.

After the service pack update is complete, do the following:

- Upgrade the Integration Gateway.
- Upgrade the OMIMSSC console extension for SCVMM.

For more information, see *OpenManage Integration for Microsoft System Center Installation Guide.*

Upgrading IG

To upgrade IG:

Prerequisites
Make sure the shared folder created has a minimum disk space of 10 GB.

NOTE: The installation continues with a warning message even if there is no disk space of 10 GB space. However operating system deployment, and firmware update may fail.

Steps

1. From the OMIMSSC Admin portal, download the **OMIMSSC Integration Gateway** installer.
2. Run the **OMIMSSC_Integration_Gateway.exe** installer.
3. In the message prompting you to upgrade, click **Yes**.
4. In the OMIMSSC **Integration Gateway Welcome** page, click **Next**.
5. In **License Agreement**, select **I accept the terms in the license agreement**, and then click **Next**.
6. In **License: Open-Source Software**, refer the open-source related information and click **Next**.
7. In **Integration Gateway Configuration**, provide details of IG service account user and port number. To change the staging server location, click **Select Share Folder** and traverse to the new location and then click **Next**.

   Assign a port for communication between appliance and IG. The default port that is enabled is 8455. However, you can configure a different port number based on the requirement. **Execution policy** for IG service user account is set to **Unrestricted**.
8. In **Destination Folder**, default installation folder is selected, to change location click **Change** and traverse to the new location. Once you complete the changes, click **Next**.
9. In **Ready to Install the Program**, click **Install**.
10. Once the installation is complete, click **Finish**.

Upgrading OMIMSSC console extension for SCVMM

1. From the Admin portal, click **Download Installer** and save the installer to a location.
2. Run the OMIMSSC installer.
3. In the message prompting you to upgrade, click **Yes**.
4. On the OMIMSSC Welcome page, click **Next**.
5. On the **License Agreement** page, select **I accept the terms in the license agreement**, and then click **Next**.
6. In the **Destination Folder** page, by default an installation folder is selected. To change the location, click **Change** and traverse to the new location, and then click **Next**.
7. On the **Ready to Install the Program** page, click **Install**.
8. On the **InstallShield Wizard Completed** page, click **Finish** to complete the installation.
9. Delete the OMIMSSC console extension for SCVMM, and reimport the console extension. For information on removing the console, see Removing OMIMSSC console extension for SCVMM.

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Troubleshooting

Topics:

Account deletion in OMIMSSC console extension for SCVMM

SCVMM creates an account for Appliance with the name **OMIMSSC Registration Profile**. If this profile is deleted, then you cannot work with the Appliance.

Recommend you to not delete the account. However, reenroll the SCVMM console to OMIMSSC.

Compatibility issue of Appliance with ADK

Any existing functionality of OMIMSSC may fail after installing a software with an incompatible version of ADK.

As a workaround, upgrade the ADK version as per the prerequisites mentioned in *OpenManage Integration for Microsoft System Center Installation Guide*.

Connection lost between Appliance and Integration Gateway

When you restart the server in which OMIMSSC Integration Gateway is installed, connectivity is lost between the Appliance and Integration Gateway. This is because the execution policy of the Integration Gateway for the user is not active. Log in to the Integration Gateway server using the Integration Gateway user account to make the execution policy active. However, after login the connection is not restored until the following steps are completed.

About this task

To set the PowerShell execution policy:

Steps

1 Set PowerShell execution policy for local system as `RemoteSigned` and for the **Integration Gateway Service Account** as `Unrestricted`.

For information on policy settings, refer the following MSDN articles:

- **PowerShell Execution policy**: technet.microsoft.com/en-us/library/hh847748.aspx
- **PowerShell Group Policy**: technet.microsoft.com/library/jj149004

2 Once the execution policy is set, restart the Integration Gateway server.

Error accessing console extension after updating SCVMM R2

SCVMM displays an error for security reasons when OMIMSSC is installed and you apply an Update Rollup for SC2012 R2 VMM. As a result you cannot access OMIMSSC.

As a workaround, do the following:

1 Delete the folder at default path: **C:\Program Files\Microsoft System Center 2012 R2\Virtual Machine Manager\Bin\AddInPipeline\AddIns\<username>**.

2 Close and then open SCVMM.

3 Uninstall and then import the console extension as mentioned in Importing OMIMSSC console extension for SCVMM.

Error message while accessing OMIMSSC admin portal through Mozilla Firefox browser

When accessing the OMIMSSC admin portal by using Mozilla Firefox browser, you get the following warning message: "Secure Connection Failed".

As a workaround, delete the certificate created from a previous entry of the admin portal in the browser.

Failure to connect to OMIMSSC Appliance

After installing OMIMSSC console extension for SCVMM in SCVMM environment, on clicking the OMIMSSC console extension icon the following error is displayed: `Connection to server failed`.

As a workaround, do the following:

- Add the Appliance IP and FQDN as a trusted site.
- Add the Appliance IP and FQDN in **Forward Lookup Zones** and **Reverse Lookup Zones** in DNS.
- Check if there are any error messages in **C:\ProgramData\VMMLogs\AdminConsole** file.

IP address not assigned to Appliance

After creating and starting the Appliance, the IP address is not assigned or displayed on the black console.

As a workaround, check if the virtual switch is mapped to a physical switch, configured correctly, and then connect to Appliance.

No required permission to access SCVMM

If the SCVMM account that is used to open the SCVMM console does not meet the prerequisites, you get the following error: "`You should be an Administrator/Delegated Administrator to launch the Add-In`".

For information on the privileges required for SCVMM account and IG account, see Account privileges.

SCVMM error 21119 while adding servers to active directory

While adding servers to Active Directory, SCVMM error 21119 is displayed. `Error 21119: The physical computer with <SMBIOS GUID> did not join Active Directory in time. The comptuer was expected to join Active Directory using the computer name <host.domain>.`

About this task

As a workaround, do the following:

Steps

1. Wait for some time to see if the server is added to the Active Directory.
2. If the server is not added to the Active Directory, then manually add the servers to the Active Directory.
3. Add the server in to SCVMM.
4. Once the server is added in to SCVMM, rediscover the server in OMIMSSC console extension for SCVMM.

   The server will be listed under the **Host** tab.

Enrollment failure

If the test connection or enrollment fails, then you get an error message.

As a workaround, perform the following steps:

- Ping the SCCM or SCVMM server and the server where IG is installed from the Appliance by logging in to the Appliance as a read only user. If there is a response, then wait for some time and then continue with the enrollment. For information about read only user, see Verifying installation of IG on OMIMSSC.
- Make sure the Internet Information Services (IIS) Manager service is running on the server where IG is installed.
- Check the details of IG such as FQDN, credentials and port number provided in **Enrollment** page are valid and same as the one given during installation of IG.
- Make sure that the IG service account user is a part of SCVMM server administrator in the user roles of SCVMM and local administrator on the IG installed system.
- Make sure that the SCCM or SCVMM server is running.
- Specific to SCCM:
  - Verify that SCCM user is a part of SCCM server administrator.
- Specific to SCVMM:
  - Verify that SCVMM user is a part of SCVMM server administrator or delegated admin in user roles of SCVMM.
  - Make sure that the SCVMM server is not registered with any other Appliance. If you want to register the same SCVMM server with the Appliance, then delete the **OMIMSSC Registration Profile** application profile of the SCVMM server. For more information on uninstalling the Appliance, see *OpenManage Integration for Microsoft System Center Installation Guide*.
  - If you have done SCVMM roll up update, then check the Indigo TCP port of SCVMM Console in registry `(HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Microsoft System Center Virtual Machine Manager AdministratorConsole\Settings)`, it should be same as used during SCVMM Console installation (by default it is 8100).

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Accessing documents from the Dell EMC support site

You can access the required documents using the following links:

- For Dell EMC Enterprise Systems Management documents — **Dell.com/SoftwareSecurityManuals**
- For Dell EMC OpenManage documents — **Dell.com/OpenManageManuals**
- For Dell EMC Remote Enterprise Systems Management documents — **Dell.com/esmmanuals**
- For iDRAC and Dell EMC Lifecycle Controller documents — **Dell.com/idracmanuals**
- For Dell EMC OpenManage Connections Enterprise Systems Management documents — **Dell.com/OMConnectionsEnterpriseSystemsManagement**
- For Dell EMC Serviceability Tools documents — **Dell.com/ServiceabilityTools**
- For Client Command Suite Systems Management documents — **Dell.com/DellClientCommandSuiteManuals**
- a Go to **Dell.com/Support/Home**.
  b Click **Choose from all products**.
  c From **All products** section, click **Software & Security**, and then click the required link from the following:
    - **Enterprise Systems Management**
    - **Remote Enterprise Systems Management**
    - **Serviceability Tools**
    - **Dell Client Command Suite**
    - **Connections Client Systems Management**
  d To view a document, click the required product version.
- Using search engines:
    - Type the name and version of the document in the search box.

Contacting Dell

Prerequisites

NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

About this task

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

Steps

1 Go to **Dell.com/support.**
2 Select your support category.
3 Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4 Select the appropriate service or support link based on your need.