

Upgrading System Center 2012 – Service Manager to System Center 2012 SP1

Microsoft Corporation

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Applies To

System Center 2012 Service Pack 1 (SP1) - Service Manager

Feedback

Send suggestions and comments about this document to [sc2012docs@microsoft.com](mailto:sc2012docs@microsoft.com?subject=%20Upgrading%20to%20System%20Center%202012%20SP1%20–%20Service%20Manager,%20published%20January%2015,%202013).

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Revision History

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Upgrading System Center 2012 - Service Manager to System Center 2012 SP1

This guide will show you how to upgrade from System Center 2012 – Service Manager to Service Manager in System Center 2012 Service Pack 1 (SP1).

This upgrade guide has been written for Technology Adoption Program (TAP) customers. System Center 2012 SP1 is supported in production environments only for TAP customers. Microsoft does not support using preliminary versions of System Center 2012 Service Pack 1 (SP1) in a production environment for the general public.

Warning

If you are planning to upgrade two or more System Center components, it is imperative that you first consult the guide [Upgrade Sequencing for System Center 2012 SP1](http://go.microsoft.com/fwlink/p/?LinkId=268417). The order in which you perform component upgrades is important. Failure to follow the correct upgrade sequence might result in component failure for which no recovery options exist. The affected System Center components are:

1. Orchestrator

2. Service Manager

3. Data Protection Manager (DPM)

4. Operations Manager

5. Configuration Manager

6. Virtual Machine Manager

7. App Controller

You can only upgrade to System Center 2012 Service Pack 1 (SP1) from System Center 2012 – Service Manager (version 7.5.1561.0.0)

Important

It is assumed in this guide that you are performing an upgrade to System Center 2012 Service Pack 1 (SP1). For information about installing System Center 2012 – Service Manager on a computer where no previous version of Service Manager exists, see the [Deploying System Center 2012 – Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=209670).

Upgrade topics

 [Upgrade Planning for System Center 2012 SP1 - Service Manager](#zcad461803c124eb2a4bc99fd88d2f3e7)

Describes factors that you must consider before you start the Service Manager upgrade.

 [Setting Up a Service Manager 2012 Lab Environment with Production Data](#z34e9880c5faf4e67ac1b7043ab4dc8ad)

Describes how to setup Service Manager in a lab environment using production data.

 [Upgrade to System Center 2012 SP1 - Service Manager](#z1a2b34641ff84695875f839da201c366)

Describes the steps that you must take to upgrade System Center 2012 to System Center 2012 SP1.

 [After Upgrading to System Center 2012 SP1 - Service Manager](#za21c98a9c10a41db8d8c9eac164c2517)

Describes the steps that you must take after you have applied the Service Manager upgrade.

 [Failed Upgrade in System Center 2012 SP1 - Service Manager](#z41d834625e564eb38eb8b67d34060c86)

Describes the steps you can take if an upgrade fails.

Downloadable Documentation

You can download a [copy of this technical documentation from the Microsoft Download Center](http://go.microsoft.com/fwlink/?LinkId=246620). Always use the TechNet library for the most up-to-date information.

Upgrade Planning for System Center 2012 SP1 - Service Manager

This guide outlines the procedures necessary to upgrade to System Center 2012 Service Pack 1 (SP1).

An in-place upgrade from Service Manager to Service Manager SP1 is supported. An in-place upgrade is an upgrade of all Service Manager parts on the same hardware. Other approaches, such as side-by-side upgrades or rolling upgrades, are not supported.

Upgrading to Service Manager SP1 requires preparation. We recommend that you install Service Manager in a lab environment and then replicate your production databases into the lab. You then perform an upgrade of the new installation in the lab, and once that has proven successful, perform the same upgrade to Service Manager SP1 in the production environment.

Evaluation and Select Versions

The release of System Center 2012 – Service Manager was available in two different versions:

 Evaluation version (180-day time-out)

 Select license version

Service Manager SP1 is available as an Evaluation version (180-day time-out) or Select License edition. The following upgrade paths are supported to Service Manager SP1.

|  |  |  |
| --- | --- | --- |
| Current Version | Upgraded Version | Status |
| System Center 2012 – Service Manager Eval | System Center 2012 – Service Manager SP1 Eval | Evaluation period remains unchanged |
| System Center 2012 – Service Manager Select | System Center 2012 – Service Manager SP1 Select | Licensed |

Note

Upgrading from an evaluation version of Service Manager to an evaluation version of Service Manager SP1 does not extend the 180-day evaluation period.

Installation Location

The default folder for installing Service Manager and Service Manager SP1 is \Program Files\Microsoft System Center\Service Manager 2012. However, when you perform the upgrade to Service Manager SP1, the software is installed in the folder that Service Manager previously used. If Service Manager 2010 was previously upgraded to System Center 2012 – Service Manager, then the following folder might be used:

\Program Files\Microsoft System Center\Service Manager 2010.

Language Support

This release of Service Manager SP1 represents an ongoing progression of support for various languages. In System Center Service Manager 2010, you used the Latin1\_General\_100\_CI\_AS collation for the Turkish language. Service Manager and Service Manager SP1 supports the Turkish\_100\_CI\_AS collation. However, if you upgraded from System Center Service Manager 2010 to System Center 2012 – Service Manager, the collation that was used for the Turkish language (Latin1\_General\_100\_CI\_AS) would have been carried forward to System Center 2012 – Service Manager, and will be when you upgrade to System Center 2012 – Service Manager SP1.

Hardware Requirements for System Center 2012 – Service Manager SP1

System Center 2012 – Service Manager SP1 will function on the same hardware that you used for System Center 2012 – Service Manager.

All hardware requirements for System Center 2012 – Service Manager SP1 are fully documented in [Hardware Requirements for System Center 2012 - Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=253556).

Software Requirements for System Center 2012 – Service Manager SP1

To upgrade to System Center 2012 Service Pack 1 (SP1) SP1, you must first apply Cumulative Update 2 for System Center 2012 – Service Manager.

System Center 2012 – Service Manager SP1 has the same software requirements for the Service Manager console that System Center Service Manager 2010 does, except for the new requirement of Microsoft SQL Server 2012 Analysis Management Objects (AMO). Microsoft SQL Server 2012 AMO is supported on SQL Server 2008 and SQL Server 2012. In addition, the Service Manager console can now be installed on computers running Windows 8 and Windows Server 2012.

The Service Manager and data warehouse management servers, along with the Self-Service Portal, is supported with Windows Server 2012.

All software requirements for System Center 2012 – Service Manager SP1 are fully documented in [Software Requirements for System Center 2012 – Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=252844).

Testing the Upgrade in a Lab Environment

We recommend that you test the upgrade to System Center 2012 – Service Manager SP1 in a lab environment.

Upgrade Order and Timing

The order of your upgrades is important. Perform the upgrade steps in the following order:

1. Backup your databases and your management packs. See the topics "Backing Up Service Manager Databases" and "Backing Up Unsealed Management Packs" in the [Disaster Recovery Guide for System Center 2012 – Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=209671).

2. Start with the data warehouse management server. You will be stopping the data warehouse jobs, and you will not be able to start them again until after you have completed the upgrade.

3. After the upgrade to the data warehouse management server is complete, upgrade the initial Service Manager management server. If you created more than one Service Manager management server, the initial Service Manager management server is the first one that you created.

4. Upgrade the Service Manager consoles and any additional Service Manager management servers.

5. Restart the data warehouse jobs.

6. Deploy the new Self-Service Portal.

The timing of your upgrades is also important. After you upgrade your data warehouse management server, you must both update the Service Manager management server and deploy the new Self-Service Portal. After you upgrade your initial Service Manager management server, you must be prepared to upgrade your Service Manager console or Service Manager consoles, additional Service Manager management servers, and Self-Service Portal at the same time.

Operations Manager Compatibility

This section describes the compatibility between Operations Manager 2007 R2, System Center 2012 – Operations Manager and System Center 2012 – Service Manager SP1.

System Center Operations Manager 2007 R2

Operations Manager 2007 R2 agents must be removed from the Service Manager and data warehouse management servers before you attempt an upgrade. System Center 2012 – Service Manager SP1 includes a System Center 2012 – Operations Manager SP1 agent and it is automatically installed when you upgrade. After Service Manager Setup completes, you must manually configure the agent to communicate with the Operations Manager management server.

To validate that the Operations Manager Agent was installed, open Control Panel and verify that the Operations Manager Agent is present. To manually configure the Operations Manager agent, see [Configuring Agents](http://go.microsoft.com/fwlink/p/?LinkId=264988).

You can upgrade Service Manager servers in the presence of an Operations Manager 2007 R2 console.

System Center 2012 – Operations Manager

System Center 2012 – Operations Manager agents were not supported with System Center 2012 – Service Manager. However, the agent that is automatically installed by System Center 2012 – Service Manager SP1 is compatible with System Center 2012 – Operations Manager and System Center 2012 – Operations Manager SP1. After Service Manager Setup completes, you must manually configure the agent to communicate with the Operations Manager management server.

To validate that the Operations Manager Agent was installed, open Control Panel and verify that the Operations Manager Agent is present. To manually configure the Operations Manager agent, see [Configuring Agents](http://go.microsoft.com/fwlink/p/?LinkId=264988).

You can upgrade Service Manager servers in the presence of an System Center 2012 – Operations Manager console.

Database Impacts

With System Center 2012 – Service Manager SP1, you have the option to install Operations Manager and Configuration Manager data marts. Selecting this option will result in additional space requirements on the hard disk drive for the two databases, as well as associated file groups and log files.

Backing Up Service Manager Before Upgrading

Before you start any upgrade, we recommend that you back up your Service Manager and data warehouse databases and the encryption key. If you have already backed up your databases and encryption key, you can continue to run the upgrade. Otherwise, review the backup procedures in the [Disaster Recovery Guide for System Center 2012 – Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=209671) before you continue the upgrade.

Registering with the Service Manager Data Warehouse

If you have installed a data warehouse management server in your environment, as part of the upgrade process, you must be able to view the status of the data warehouse jobs. You cannot perform this task if you have not registered with the Service Manager data warehouse. If the Data Warehouse button is not visible in the Service Manager console, complete the procedure in "Registering with the Service Manager Data Warehouse to Enable Reporting" in the [Deployment Guide for System Center 2012 – Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=209670).

Encryption Keys

When you have finished running Setup to either install or upgrade to System Center 2012 – Service Manager SP1, you are prompted to open the Encryption Backup or Restore Wizard. If you have previously backed up the encryption keys, no additional action is required. If you never backed up the encryption keys, use the Encryption Key Backup or Restore Wizard to back up the encryption keys on the Service Manager management servers.

Authoring Tool Workflows

When you use the Service Manager SP1 version of the Authoring tool to create a workflow, then custom scripts using Windows PowerShell cmdlets called by the workflow fail. This is due to a problem in the Service Manager MonitoringHost.exe.config file.

To work around this problem, update the MonitoringHost.exe.config XML file using the following steps.

1. Navigate to %ProgramFiles%\Microsoft System Center 2012\Service Manager\ or the location where you installed Service Manager.

2. Edit the MonitoringHost.exe.config file and add the section in italic type from the example below in the corresponding section of your file. You must insert the section before <publisherPolicy apply="yes" />.

3. Save your changes to the file.

4. Restart the System Center Management service on the Service Manager management server.

<?xml version="1.0"?>

<configuration>

  <configSections>

    <section name="uri" type="System.Configuration.UriSection, System, Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089" />

  </configSections>

  <uri>

    <iriParsing enabled="true" />

  </uri>

  <runtime>

    <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">

      <dependentAssembly>

        <assemblyIdentity name="Microsoft.Mom.Modules.DataTypes" publicKeyToken="31bf3856ad364e35" />

        <publisherPolicy apply="no" />

        <bindingRedirect oldVersion="6.0.4900.0" newVersion="7.0.5000.0" />

      </dependentAssembly>

      <dependentAssembly>

        <assemblyIdentity name="Microsoft.EnterpriseManagement.HealthService.Modules.WorkflowFoundation" publicKeyToken="31bf3856ad364e35" />

        <publisherPolicy apply="no" />

        <bindingRedirect oldVersion="6.0.4900.0" newVersion="7.0.5000.0" />

      </dependentAssembly>

  <dependentAssembly>

         <assemblyIdentity name="Microsoft.EnterpriseManagement.Modules.PowerShell" publicKeyToken="31bf3856ad364e35" />

        <bindingRedirect oldVersion="6.0.4900.0" newVersion="7.0.5000.0" />

     </dependentAssembly>

      <publisherPolicy apply="yes" />

      <probing privatePath="" />

    </assemblyBinding>

    <gcConcurrent enabled="true" />

  </runtime>

</configuration>

Upgrading the SP1 Self-Service Portal

When you upgrade from System Center 2012 – Service Manager, you perform an in-place upgrade of the Self-Service Portal.

Service Manager Connectors

Any connectors that you created with System Center 2012 – Service Manager will continue to function after you upgrade to System Center 2012 – Service Manager SP1. For more information, see “Using Connectors to Import Data into Service Manager” in the [Administering System Center 2012 - Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=209669).

Remote SQL Server Reporting Services

When you installed System Center 2012 – Service Manager, you may have specified a different computer to host Microsoft SQL Server Reporting Services (SSRS) than the computer that hosted the data warehouse management server. If, in your environment, SSRS is remote from the data warehouse management server, you must use the following procedures to prepare the computer that hosts SSRS for the upgrade:

 Copy Microsoft.EnterpriseManagement.Reporting.Code.dll from the Service Manager installation media to the computer that is hosting SSRS.

 Add an Extension tag to the existing Data segment in the rsreportserver configuration file on the same computer.

If you used the default instance of SQL Server, use Windows Explorer to drag Microsoft.EnterpriseManagement.Reporting.Code.dll (which is located in the Prerequisites folder on your Service Manager installation media) to the folder \Program Files\Microsoft SQL Server\MSRS10.MSSQLSERVER\Reporting Services\ReportServer\Bin on the computer that is hosting SSRS. If you did not use the default instance, the path of the required folder is \Program Files\Microsoft SQL Server\MSRS10.<INSTANCE\_NAME>\Reporting Services\ReportServer\Bin. In the following procedure, the default instance name is used.

To copy the Microsoft.EnterpriseManagement.Reporting.Code.dll file

|  |
| --- |
| 1. On the computer that will host the remote SSRS, open an instance of Windows Explorer.  2. Locate the folder \Program Files\Microsoft SQL Server\MSRS10\_50.MSSQLSERVER\Reporting Services\ReportServer\Bin.  3. Start a second instance of Windows Explorer, locate the drive that contains the Service Manager installation media, and then open the Prerequisites folder.  4. In the Prerequisites folder, click Microsoft.EnterpriseManagement.Reporting.Code.dll and drag it to the folder that you located in step 2. |

To add an Extension tag to the Data segment in the rsreportserver.conf file

|  |
| --- |
| 1. On the computer that is hosting SSRS, locate the file rsreportserver.config in the following folder:  \Program Files\Microsoft SQL Server\MSRS10\_50.MSSQLSERVER\Reporting Services\ReportServer  2. Using an XML editor of your choice (such as Notepad), open the rsreportserver.config file.  3. Scroll through the rsreportserver.config file, and locate the <Data> code segment. There is only one <Data> code segment in this file.  4. Add the following Extension tag to the <Data> code segment where all the other Extension tags are:  <Extension Name="SCDWMultiMartDataProcessor" Type="Microsoft.EnterpriseManagement.Reporting.MultiMartConnection, Microsoft.EnterpriseManagement.Reporting.Code" />  5. Save the changes, and close the XML editor. |

Setting Up a Service Manager 2012 Lab Environment with Production Data

This section explains how to create a lab environment and populate it with production data so that upgrades can be performed and tested before an actual upgrade in the production environment. The procedures in this section show you how to configure System Center 2012 – Service Manager in a lab environment with production data. You then perform an in-place upgrade to System Center 2012 – Service Manager SP1. It is important to follow the steps in this section in sequence.

1. [How to Install an Additional Management Server in the Production Service Manager Management Group](#z03747a1ccdb947ce83d155ee9d6c8119)

2. Install any cumulative updates that you installed on the Primary Management server on the Secondary Management Server.

3. [How to Copy the Workflow Assembly Files](#z48fa12cae61b46588edaf9cc3af16dfc)

4. [How to Disable Service Manager Connectors in the Production Environment](#z4bf9b574f6d046f1a989aa0464f9a1ed)

5. [How to Disable Email Notifications in the Production Environment](#z1317d2e6b47b41c0826bf7a4b3adf11b)

6. Disable all workflows in the production environment that you do not want to be running in the lab environment.

7. [How to Stop Service Manager Services on the Secondary Management Server](#zb4f30bdbd45e4390b873509d0b012398)

8. [How to Back Up the Production Service Manager Database](#z4ebe6cb403524c71b2a90a235c0102d5)

9. [How to Enable Service Manager Connectors in the Production Environment](#z0b055821641a4f0996d914b1f84a950d)

10. [How to Disable Email Notifications in the Production Environment](#z1317d2e6b47b41c0826bf7a4b3adf11b)

11. Enable all workflows in the Production Service Manager environment that you disabled in step 6.

12. [How to Restore the Service Manager Database in the Lab Environment](#zacc6c46d337747ce9c94ce20997d376f)

13. [How to Prepare the Service Manager Database in the Lab Environment](#z7d3b8b1977f94a96a1178ffef08da01a)

14. If possible, block communications to SQL from the Secondary Management server to the production Service Manager Database server.

15. [How to Start Service Manager Services on the Secondary Management Server](#zc6eecbd1f8674050b66fde9427410bb7)

16. Verify that the lab environment works. Try to open the console on the Secondary Management server and see if you can connect to the console. Confirm that the Data Warehouse and Reporting do not appear. After you confirm that this works, complete the rest of the steps.

17. [How to Promote a Secondary Management Server in a Lab Environment](#zdf0bc01ca314441fa98327dfd92f95c0)

18. [How to Enable the Connectors in the Lab Environment](#z20ec2aaa9fee463ba1d79cb272d8dd73)

Note

Do not enable or delete the Operations Manager alert connector in the lab environment. This will cause the alert connector in the production environment to fail.

19. If you want to test the email notification and incoming email functionality, use a separate SMTP instance to send emails to eliminate flooding the inboxes of users with test emails. To test the incoming email feature, you can point to a test share and drop the eml files into this share when you are ready to test.

20. [How to Install a New Data Warehouse Server in the Lab Environment](#z239ee325d3964e8c8d1eadc7d28f3f04)

21. [How to Register the Data Warehouse Server in the Lab Environment](#zab0ec9baba354a29b933472dfd18276a)

22. Back up this lab environment; for example, back up the database and encryption keys and VM Snapshots This gives you the ability to recover in case the upgrade fails.

23. If you are able to successfully complete all the previous steps, you are ready to attempt the in-place upgrade.

24. Test everything. Document any discrepancies and fixes. Send feedback through the MS Connect web site.

25. Backup the Service Manager lab environment; for example, back up the database and encryption keys and VM Snapshots This gives you the ability to recover in case the upgrade fails.

26. The lab environment is now ready for System Center 2012 – Service Manager SP1 in-place upgrade.

How to Install an Additional Management Server in the Production Service Manager Management Group

The following procedure shows how to install an additional management server. You must deploy the initial Service Manager management server and Service Manager Database before deploying an additional management server.

Tip

You must be a member of the Service Manager Administrators user role in order to install an additional Service Manager management server.

In System Center 2012 – Service Manager, when you install a secondary management server, data retention settings are reset. Before you install a secondary management server, make a note of data retention settings. After you have installed the additional management server, adjust the data retention settings to their original values.

To install an additional management server

|  |
| --- |
| 1. By using an account that has administrator rights and that is also a member of the Service Manager Management group administrators, log on to the computer that will host the additional Service Manager Management server.  2. On the System Center 2012 – Service Manager installation media, double-click Setup.exe.  3. On the Microsoft System Center 2012 Service Manager page, click Install a Service Manager Management server.  4. On the Product registration page, type information in the boxes. In the Product key boxes, type the product key you received with Service Manager, or alternatively, select Install as an evaluation edition (180 day trial)?. Read the Microsoft Software License Terms, and, if applicable, click I have read, understood, and agree with the terms of the license agreement, and then click Next.  5. On the Installation location page, verify that sufficient free disk space is available, and then click Next. If necessary, click Browse to change the location where the additional Service Manager Management server will be installed.  6. On the System check results page, make sure that the prerequisite check passed or at least passed with warnings, and then click Next.  a. If the prerequisite checker determines that the Microsoft Report Viewer Redistributable has not been installed, click Install Microsoft Report Viewer Redistributable. After the Microsoft Report Viewer Redistributable 2008 (KB971119) Setup wizard completes, click Check perquisites again.  7. On the Configure the Service Manager Database page, in the Database server box, type the name of the computer that hosts the Service Manager database that you used for your initial Service Manager Management server, and then press TAB. When the name of the instance displays in the SQL Server instance box, click Use an existing database. For example, type Computer 2 in the Database server box.  8. Click the Database list, select the database name for the Service Manager database (the default name is ServiceManager), and then click Next.  9. On the Configure the Service Manager Management group page, verify that the management group name and management group administrators boxes have been populated. Click Next.  10. On the Configure the Account for Service Manager Services page, click Domain account, specify the user name, password, and domain for the account, and then click Test Credentials. After you receive a The credentials were accepted message, click Next. For example, enter the account information for the domain user SM\_Acct, and then click Next.  Note  The user name and password you provide here must be the same ones used for the Service Manager account on the data warehouse management server.  11. On the Help improve System Center page, indicate your preference for participation for both the Customer Experience Improvement Program and Error Reporting. Optionally, click Tell me more about the program, and then click Next.  12. On the Use Microsoft Update to help keep your computer secure and up-to-date page, indicate your preference for using Microsoft Update to check for Service Manager updates, and then click Next.  13. On the Installation summary page, click Install.  14. On the Setup completed successfully page, we recommend that you leave Open the Encryption Backup or Restore Wizard selected, and then click Close. |

How to Copy the Workflow Assembly Files

Use the following procedure to copy the workflow assembly files from the Service Manager Installation folder on the primary management server to the secondary management server that you created in the previous procedure.

To copy the workflow assembly files

|  |
| --- |
| 1. On the computer that is running the Service Manager Primary Server role, browse to the Service Manager Installation folder for example, C:\Program Files\Microsoft System Center 2012\Service Manager copy the workflow files (\*workflow\*.dll).  2. On the computer that is running the Service Manager Secondary server; browse to the Service Manager Installation folder; for example, C:\Program Files\Microsoft System Center 2012\Service Manager. Paste the copied workflow files into this folder. You should overwrite any existing files.  Note  You must place the workflow assembly files in the Service Manager installation folder. This is very important step if you want to test the custom workflows that depend on workflow assembly files. Failure to copy these files would lead to failed custom workflows in the lab environment. |

How to Disable Service Manager Connectors in the Production Environment

Use the following procedure to disable the Service Manager connectors in the production environment.

To disable a connector

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| --- |
| 1. In the Service Manager console, click Administration.  2. In the Administration pane, expand Administration, and then click Connectors.  3. In the Connectors pane, select the connector that you want to disable.  4. In the Tasks pane, under the connector name, click Disable.  5. In the Disable Connector dialog box, click OK. |

How to Disable Email Notifications in the Production Environment

Use the following procedure to disable incoming and outbound E-mail notifications in the production environment.

To disable the outbound E-mail notifications

|  |
| --- |
| 1. In the Service Manager console, click Administration.  2. In the Administration pane, expand Notifications, and then click Channels.  3. In the Channels pane, click E-Mail Notification Channel.  4. In the Tasks pane, under E-Mail Notification Channel, click Properties to open the Configure E-Mail Notification Channel dialog box.  5. Clear the Enable e-mail notifications check box. |

To disable incoming E-mail notifications

|  |
| --- |
| 1. In the Service Manager console, select Administration.  2. In the Administration pane, expand Administration, and then click Settings.  3. In the Settings pane, double-click Incident Settings.  4. In the Incident Settings dialog box, click Incoming E-mail.  5. Clear Turn on incoming e-mails processing, and then click OK. |

How to Stop Service Manager Services on the Secondary Management Server

Use the following procedure to stop the Service Manager services.

To stop the Service Manager services

|  |
| --- |
| 1. In the Run dialog box, in the Open text field, type services.msc, and then click OK.  2. In the Services window, in the Services (Local) pane, locate the following three services and for each one, click Stop:  a. System Center Data Access Service  b. System Center Management  c. System Center Management Configuration  3. Open Windows Explorer.  4. Locate the folder \Program Files\Microsoft System Center 2012\Service Manage.  5. Delete the Health Service State folder and all of its contents. |

How to Back Up the Production Service Manager Database

Use the following procedure to back up the production Service Manager database in Microsoft SQL Server 2008 R2.

To back up the Service Manager database

|  |
| --- |
| 1. After connecting to the appropriate instance of the Microsoft SQL Server Database Engine, in Object Explorer, click the server name to expand the server tree.  2. Expand Databases, and depending on the database, either select a user database or expand System Databases and select a system database.  3. Right-click the database, point to Tasks, and then click Back Up. The Back Up Database dialog box appears.  4. In the Database list box, verify the database name. You can optionally select a different database from the list.  5. You can perform a database backup for any recovery model (FULL, BULK\_LOGGED, or SIMPLE).  6. In the Backup type list box, select Full.  Note  After creating a full database backup, you can create a differential database backup. For more information, see [How to: Create a Differential Database Backup (SQL Server Management Studio)](http://go.microsoft.com/fwlink/p/?LinkId=134470).  7. Optionally, you can select Copy Only Backup to create a copy-only backup. A copy-only backup is a SQL Server backup that is independent of the sequence of conventional SQL Server backups. For more information, see [Copy-Only Backups](http://go.microsoft.com/fwlink/p/?LinkId=236002).  Note  When the Differential option is selected, you cannot create a copy-only backup.  8. For Backup component, click Database.  9. Either accept the default backup set name suggested in the Name text box, or enter a different name for the backup set.  10. Optionally, in the Description text box, enter a description of the backup set.  11. Specify when the backup set will expire and can be overwritten without explicitly skipping verification of the expiration data.  Note  For more information about backup expiration dates, see [BACKUP (Transact-SQL)](http://go.microsoft.com/fwlink/p/?LinkId=134324).  12. Choose the type of backup destination by clicking Disk or Tape. To select the paths of up to 64 disk or tape drives containing a single media set, click Add. The selected paths are displayed in the Backup to list box.  13. To view or select the advanced options, click Options in the Select a page pane.  14. Select an Overwrite Media option, by clicking either Back up to the existing media set or Back up to a new media set, and erase all existing backup sets.  15. In the Reliability section, select either Verify backup when finished or Perform checksum before writing to media, and then optionally select Continue on checksum error. For more information, see [Detecting and Coping with Media Errors During Backup and Restore](http://go.microsoft.com/fwlink/p/?LinkId=236004) |

How to Enable Service Manager Connectors in the Production Environment

Use the following procedure to enable the Service Manager connectors in the production environment.

To enable a connector

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| --- |
| 1. In the Service Manager console, click Administration.  2. In the Administration pane, expand Administration, and then click Connectors.  3. In the Connectors pane, select the connector that you want to enable.  4. In the Tasks pane, under the connector name, click Enable. |

How to Enable Email Notifications in the Production Environment

Use the following procedure to enable incoming and outbound E-mail notifications in the production environment.

To enable the outbound E-mail notifications

|  |
| --- |
| 1. In the Service Manager console, click Administration.  2. In the Administration pane, expand Notifications, and then click Channels.  3. In the Channels pane, click E-Mail Notification Channel.  4. In the Tasks pane, under E-Mail Notification Channel, click Properties to open the Configure E-Mail Notification Channel dialog box.  5. Select Enable e-mail notifications. |

To enable incoming E-mail notifications

|  |
| --- |
| 1. In the Service Manager console, select Administration.  2. In the Administration pane, expand Administration, and then click Settings.  3. In the Settings pane, double-click Incident Settings.  4. In the Incident Settings dialog box, click Incoming E-mail.  5. Select Turn on incoming e-mails processing, and then click OK. |

How to Restore the Service Manager Database in the Lab Environment

Use the following procedure to restore the production Service Manager database using Microsoft SQL Server 2008 R2.

To restore the Service Manager database

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| --- |
| 1. After connecting to the appropriate instance of the Microsoft SQL Server Database Engine, in Object Explorer, click the server name to expand the server tree.  2. Expand Databases, and depending on the database, either select a user database or expand System Databases and select a system database.  3. Right-click the database, point to Tasks, and then click Restore. The Back Up Database dialog box appears.  4. Click Database, which opens the Restore Database dialog box  5. On the General page, the name of the restoring database appears in the To database list box. To create a new database, enter its name in the list box.  6. In the To a point in time text box, either retain the default (Most recent possible) or select a specific date and time by clicking the browse button which opens the Point in Time Restore dialog box. For more information, see [How to: Restore to a Point in Time (SQL Server Management Studio)](http://go.microsoft.com/fwlink/p/?LinkId=236006).  7. To specify the source and location of the backup sets to restore, click either From database or From device.  8. In the Select the backup sets to restore grid, select the backups to restore. For more information see [Restore Database (General Page)](http://go.microsoft.com/fwlink/p/?LinkId=236009).  9. To view or select the advanced options, click Options in the Select a page pane.  10. In the Restore options panel, choose one of the following options most appropriate for your situation:   Overwrite the existing database   Preserve the replication settings   Prompt before restoring each backup   Restrict access to the restored database  For more information, see [Restore Database (Options Page)](http://go.microsoft.com/fwlink/p/?LinkId=236010)  11. Optionally, you can restore the database to a new location by specifying a new restore destination for each file in Restore the database files as. For more information see [Restore Database (Options Page)](http://go.microsoft.com/fwlink/p/?LinkId=236010).  12. In the Recovery state panel, select one of the following options most appropriate for your environment:   Leave the database ready to use by rolling back the uncommitted transactions. Additional transaction logs cannot be restored. (RESTORE WITH RECOVERY)  Note  Choose this option only if you are restoring all of the necessary backups at this time.   Leave the database non-operational, and do not roll back the uncommitted transactions. Additional transaction logs can be restored. (RESTORE WITH NORECOVERY)   Leave the database in read-only mode. Undo uncommitted transactions, but save the undo actions in a standby file so that recovery effects can be reverted. (RESTORE WITH STANDBY)  For more information see [Restore Database (Options Page)](http://go.microsoft.com/fwlink/p/?LinkId=236010). |

How to Prepare the Service Manager Database in the Lab Environment

Use the following procedure to prepare the Service Manager database in the lab environment. Perform this procedure on the computer that is hosting the Service Manager database that is being used by the secondary management server, the management server in your lab environment.

To configure the database

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| 1. On the computer hosting the Service Manager database for the secondary management server, click Start, click All Programs, click Microsoft SQL Server 2008 R2, and then click SQL Server Management Studio.  2. In the Connect to Server dialog box, follow these steps:  a. In the Server Type list, select Database Engine.  b. In the Server Name list, select the server name for your Service Manager or data warehouse databases.  c. In the Authentication list, select Windows Authentication, and then click Connect.  3. In the Object Explorer pane, expand Databases, and then click ServiceManager.  4. In the toolbar, click New Query.  5. In the center pane, type the following commands, and then click Execute.  sp\_configure 'clr enabled', 1  go  reconfigure  go  6. In the center pane, remove the commands you typed in the previous step, type the following commands, and then click Execute.  ALTER DATABASE ServiceManager SET SINGLE\_USER WITH ROLLBACK IMMEDIATE  7. In the center pane, remove the commands you typed in the previous step, type the following commands, and then click Execute.  ALTER DATABASE ServiceManager SET ENABLE\_BROKER  8. In the center pane, remove the commands you typed in the previous step, type the following commands, and then click Execute.  ALTER DATABASE ServiceManager SET MULTI\_USER |

To configure the service account

|  |
| --- |
| 1. In the Object Explorer pane, expand Security, and then expand Logins.  2. Right-click Logins, and then click New Login  3. Perform the following procedures in the Login – New wizard:  a. Click Search.  b. Type the username (domain\username) for the service account for Service Manager database in the lab environment, click Check Names, and then click OK.  Note  If the Data Access Account is running as LocalSystem, use the format <domain\computername$> in SQL Logins, where <computername> is the name of the management server.  c. In the Select a page pane, click User Mapping.  d. In the Users mapped to this login area, in the Map column, click the row that represents the name of the Service Manager database (ServiceManager is the default database name).  e. In the Database role membership for: ServiceManager area, make sure that the following entries are selected:   configsvc\_users   db\_accessadmin   db\_datareader   db\_datawriter   db\_ddladmin   db\_securityadmin   dbmodule\_users   public   sdk\_users   sql\_dependency\_subscriber  f. Click Ok |

To configure Service Manager tables

|  |
| --- |
| 1. In the Object Explorer pane, expand Databases, expand ServiceManager, and then expand Tables.  2. Right-click dbo.MT\_Microsoft$SystemCenter$ManagementGroup, and then click Edit Top 200 Rows.  3. In the center pane, locate the column SQLServerName\_ 48B308F9\_CF0E\_0F74\_83E1\_0AEB1B58E2FA.  4. In the first row and second rows of this column, type the computer name of the computer hosting the Service Manager database in the lab environment. In the case of named instances, type computer name\instance name.  5. Right-click dbo. MT\_Microsoft$SystemCenter$ResourceAccessLayer$SqlResourceStore, and then click Edit Top 200 Rows.  6. In the center pane, locate the column Server\_48B308F9\_CF0E\_0F74\_83E1\_0AEB1B58E2FA.  7. In the first row of this column, type the computer name of the computer hosting the SQL Server for the Service Manager database in the lab environment. In the case of named instances, type computer name\instance name.  8. Right-click LFX.DataSource, and then click Edit Top 200 Rows.  9. In the center pane, locate the column DataSourceAddress.  10. In the first row of this column, locate the entry that starts with Data Source = <server name>; Initial Catalog = ServiceManager; Persist Security Info=False. Type the name of the computer hosting SQL Server in the lab environment in place of <server name>.  11. Right-click dbo. MT\_Microsoft$SystemCenter$ResourceAccessLayer$SdkResourceStore, and then click Edit Top 200 Rows.  12. In the center pane, locate the column Server\_48B308F9\_CF0E\_0F74\_83E1\_0AEB1B58E2FA.  13. In all of the rows in this column, type the name of the computer hosting the Service Manager management server in the lab environment.  14. Right-click [dbo].[MT\_Microsoft$SystemCenter$ResourceAccessLayer$CmdbResourceStore], and then click Edit Top 200 Rows.  15. In all rows update the column Server\_48B308F9\_CF0E\_0F74\_83E1\_0AEB1B58E2FA, type the name of the SQL computer hosting the Service Manager database in the lab environment  16. In the toolbar, click New Query.  17. In the center pane, type the following command, and then click Execute.  Delete from dbo.MT\_Microsoft$SystemCenter$ResourceAccessLayer$DwSdkResourceStore  18. Close Microsoft SQL Server Management Studio. |

How to Start Service Manager Services on the Secondary Management Server

Use the following procedure to start the Service Manager services.

To Start Service Manager Services

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| 1. On the Windows desktop, click Start, and then click Run.  2. In the Run dialog box, in the Open field, type services.msc, and then click OK.  3. In the Services window, in the Services (Local) pane, locate the following three services and for each one, click Start:   System Center Data Access Service   System Center Management   System Center Management Configuration |

How to Promote a Secondary Management Server in a Lab Environment

Use the following procedure to promote the secondary management server.

To promote the secondary management server

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| 1. On the secondary management server, do the following:  a. Close the Service Manager console.  b. On the Windows desktop, click Start, and then click Run.  c. In the Run dialog box, in the Open text field, type services.msc, and then click OK.  d. In the Services window, in the Services (Local) pane, locate the following three services and for each one, click Stop:   System Center Data Access Service   System Center Management   System Center Management Configuration  e. Leave the Services window open.  f. Open Windows Explorer. Locate the \Program Files\Microsoft System Center 2012\Service Manager folder.  g. In this folder, delete the Health Service State folder and all of its contents.  2. Do the following on the ServiceManager database on the Test SQL Server instance:  a. On the Windows desktop, click Start, point to Programs, point to Microsoft SQL Server 2008, and then click SQL Server Management Studio.  b. In the Connect to Database Engine dialog box, follow these steps:  i. In the Server name box, type the name of the server that hosts the ServiceManager database.  ii. In the Authentication box, select Windows Authentication.  iii. Click Connect.  c. In the Object Explorer pane, expand Databases, and then click ServiceManager.  d. On the toolbar, click New Query.  e. In the SQLQuery1.sql pane (center pane), type the following, where <FQDN of your server> is the FQDN of the management server that you are promoting:  EXEC p\_PromoteActiveWorkflowServer '<FQDN of your server>'  On the toolbar, click Execute.  f. At the bottom of the SQLQuery1.sql pane (center pane), observe that Query executed successfully is displayed.  g. Exit Microsoft SQL Server Management Studio.  3. Do the following on the secondary management server:  a. On the Windows desktop, click Start, and then click Run.  b. In the Run dialog box, in the Open field, type services.msc, and then click OK.  c. In the Services window, in the Services (Local) pane, locate the following three services and for each one, click Start.   System Center Data Access Service   System Center Management   System Center Management Configuration  Your secondary management server is now the primary management server for the management group. |

How to Enable the Connectors in the Lab Environment

Use the following procedure to enable the Service Manager connectors in the lab environment. In this procedure, you will not be enabling the Operations Manager connector.

Warning

Do not enable or delete the Operations Manager alert connector in the lab environment. Doing so will cause the alert connector in the production environment to fail.

To enable a connector

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| --- |
| 1. In the Service Manager console, click Administration.  2. In the Administration pane, expand Administration, and then click Connectors.  3. In the Connectors pane, select the connector that you want to enable.  4. In the Tasks pane, under the connector name, click Enable. |

How to Install a New Data Warehouse Server in the Lab Environment

Use the following procedure to install a new data warehouse server in the lab environment.

To install a data warehouse management server and data warehouse databases

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| --- |
| 1. Log on to the computer by using an account that has administrative rights.  2. On the Service Manager installation media, double-click the Setup.exe file.  3. On the Microsoft System Center Service Manager 2012 page, click Install a Service Manager data warehouse management server.  4. On the Product registration page, type information in the boxes. In the Product key boxes, type the product key you received with Service Manager, or alternatively, select Install as an evaluation edition (180 day trial)?. Read the Microsoft Software License Terms, and, if applicable, click I have read, understood, and agree with the terms of the license agreement, and then click Next.  5. On the Installation location page, verify that sufficient free disk space is available, and then click Next. If necessary, click Browse to change the location in which the Service Manager data warehouse management server will be installed.  6. On the System check results page, make sure that prerequisites passed or at least passed with warnings, and then click Next.  7. On the Configure data warehouse databases page, Service Manager checks the computer you are using to see if it can host the data warehouse databases. For this configuration, confirm that the database server is the computer on which you are installing the data warehouse management server, and then click Next.  Warning  A warning message appears if you are using the default collation (SQL\_Latin1\_General\_CP1\_CI\_AS). Support for multiple languages in Service Manager is not possible when you are using the default collation. If later you decide to support multiple languages using a different collation, you have to re-install SQL Server. See “Microsoft SQL Server 2008 with SP1” in the [Planning for System Center 2012 - Service Manager](http://go.microsoft.com/fwlink/?LinkId=232700).  8. On the Configure the data warehouse management group page, follow these steps:  a. In the Management group name box, type a unique name for the group.  Warning  Management group names must be unique. Do not use the same management group name when you deploy a Service Manager management server and a Service Manager data warehouse management server. Furthermore, do not use the management group name that is used for Operations Manager.  b. Click Browse, enter the user account or group to which you want to give Service Manager administrative rights, and then click Next.  9. Service Manager will use the existing computer if SQL Server Reporting Services is present. On the Configure the reporting server for the data warehouse page, accept the defaults, and then click Next.  10. On the Configure the account for Service Manager services page, click Domain account, specify the user name, password, and domain for the account, and then click Test Credentials. After you receive a The credentials were accepted message, click Next.  11. On the Configure the reporting account page, specify the user name, password, and domain for the account, and then click Test Credentials. After you receive a The credentials were accepted message, click Next.  12. On the Help improve System Center page, indicate your preference for participation in the Customer Experience Improvement Program and in Error Reporting. Optionally, click Tell me more about the program, and then click Next.  13. On the Use Microsoft Update to help keep your computer secure and up-to-date page, indicate your preference for using Microsoft Update to check for Service Manager updates, and then click Next.  14. On the Installation summary page, click Install. |

To validate a data warehouse management server installation

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| --- |
| 1. On the computer hosting the data warehouse management server (the server you ran Setup on), run services.msc, and verify that the following services have been installed:   System Center Data Access Service   System Center Management   System Center Management configuration  2. On the computer hosting the data warehouse databases, click Start, point to Programs, point to Microsoft SQL Server 2008, and then click SQL Server Management Studio.  3. In the Connect to Server dialog box, select the following:  a. In the Server Type list, select Database Engine.  b. In the Server Name list, select the server and instance for your Service Manager data warehouse database. For example, select Computer 4.  c. In the Authentication list, select Windows Authentication, and then click Connect.  4. In the Object Explorer pane, expand Databases.  5. Verify that the DWDataMart, DWRepository, and DWStagingAndConfig databases are listed. |

How to Register the Data Warehouse Server in the Lab Environment

Use the following procedure to register the newly installed data warehouse server with the lab Service Manager environment.

To register a data warehouse

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| 1. Log on to the computer that hosts the Service Manager console. Use an account that is a member of the Service Manager and data warehouse management administrators group.  2. In the Service Manager console, click Administration.  3. In the Administration pane, expand Administration.  4. In the Administration view, in the Register with Service Manager’s Data Warehouse area, click Register with Service Manager Data Warehouse.  5. In the Data Warehouse Registration wizard, on the Before You Begin page, click Next.  6. On the Data Warehouse page, in the Server name box, type the fully qualified domain name of the computer hosting the data warehouse management server, and then click Test Connection. If the test is successful, click Next.  7. On the Credentials page, you can accept the default entry in the Run as account list, and then click Next, or you can enter credentials from a user or group of your own choosing.  Important  The account you specify will be assigned administrative credentials on the Service Manager management server and granted Read permission on the Service Manager database. You can specify different credentials from other Service Manager management groups when registering with the data warehouse.  8. On the Summary page, click Create.  9. On the Completion page, when The data warehouse registration succeeded is displayed, click Close.  10. A dialog box states that the report deployment process has not finished. This is to be expected. On the System Center Service Manager dialog box, click OK.  11. In a few minutes, after closing the Data Warehouse Registration wizard, the Data Warehouse button will be added to the Service Manager console. In the Service Manager console, click the arrow at the lower right corner of the Service Manager console buttons, and then click Show More Buttons.  You can use a Windows PowerShell command to complete this task. For information about how to use Windows PowerShell to register Service Manager management groups with the data warehouse, see [Add-SCDWMgmtGroup](http://go.microsoft.com/fwlink/p/?LinkId=203096) (http://go.microsoft.com/fwlink/?LinkId=203096). |

To validate the data warehouse registration process

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| --- |
| 1. On the computer hosting the data warehouse management server, start Windows PowerShell with administrative credentials.  2. At the Windows PowerShell command prompt, type the following commands, and then press ENTER:  Set-ExecutionPolicy RemoteSigned  Import-Module .\Microsoft.EnterpriseManagement.Warehouse.Cmdlets.psd1  3. Type the following command, and then press ENTER.  Get-SCDWMgmtGroup  4. If registration was successful, a table with two rows of data is displayed. One row displays data for the data warehouse management group, and a second row displays data for the Service Manager management group. If registration fails, only the data for the data warehouse management group is displayed. |

Determine when the deployment is complete

Because you need to allow enough time for the management pack deployment process to be completed, you will have to determine when that process is complete. You can use the following procedure in Service Manager to determine when the process is complete.

To determine when management pack deployment has completed

|  |
| --- |
| 1. Start the Service Manager console.  2. In the Service Manager console, click Data Warehouse.  3. In the Data Warehouse pane, expand Data Warehouse, and then click Data Warehouse Jobs.  4. In the Data Warehouse Jobs pane, click MPSyncJob.  5. In the Tasks pane, under Synchronization, click Details.  6. In the MP Sync Job dialog box, scroll to the right and examine the Status column.  Note  In the MP Sync Job dialog box, click Status to alphabetically sort the status column.  7. Scroll through the Status list. The management pack deployment process is complete when Associated or Imported is listed in the status column for all of the management packs. Make sure that there is no status of either Pending Association or Failed in the status list. In the Data Warehouse Jobs pane, the status of the MPSyncJob will have changed from Running to Not Started. This deployment process can take up to two hours to complete.  8. To refresh the MP Sync Job dialog box:  a. Press OK to close the dialog box.  b. In the Tasks pane, in the Data Warehouse Jobs area, click Refresh.  c. In the Data Warehouse Jobs pane, click MPSyncJobs.  d. In the Tasks pane, under Synchronization, click Details.  9. After the management packs have been deployed (as determined in step 7), make sure that the following 5 data warehouse jobs are displayed in the Data Warehouse Jobs pane:   Extract\_<Service Manager management group name>   Extract\_<data warehouse management group name>   Load.Common   Transform.Common   MPSyncJob  10. If these 5 data warehouse jobs are not displayed, perform the following procedure:  a. In the Data Warehouse Jobs pane, click MPSyncJob.  b. In the Tasks pane, under Synchronization, click Resume.  c. Assess if management pack deployment has completed by returning to step 4 above. |

Upgrade to System Center 2012 SP1 - Service Manager

You cannot start an upgrade to System Center 2012 – Service Manager SP1 if any data warehouse jobs or workflows are running. You can use the procedures in this section to stop the data warehouse job schedules and wait for them to complete before you upgrade the data warehouse management server. Before you upgrade the Service Manager management server, stop the Self-Service Portal, if it is installed, and then wait 10 minutes to let any running workflows finish before you start the upgrade.

Complete the procedures in the following table to upgrade to System Center 2012 – Service Manager SP1.

|  |  |
| --- | --- |
| Task | Description |
| [How to Prepare Service Manager 2012 for Upgrade to SP1](#z5bf76997344c4bdaabb342c604cd56b2) | Describes how to stop data warehouse jobs and how to suspend the Self-Service Portal. |
| [How to Upgrade to System Center 2012 SP1 - Service Manager](#ze2d73d0701a54de59bdfbf8c478a4298) | Describes how to upgrade the data warehouse management server, the Service Manager management server, and the Self-Service Portal. |

How to Prepare Service Manager 2012 for Upgrade to SP1

This topic describes how to prepare your System Center 2012 – Service Manager environment for an upgrade. To do this, perform the following procedures for upgrading the data warehouse management server:

1. List the data warehouse jobs that are running.

2. Disable the data warehouse job schedules.

3. Confirm that the data warehouse jobs have stopped running.

When the data warehouse jobs have completed, start the upgrade of the data warehouse management server.

After the data warehouse has been upgraded, perform the following procedures on the first Service Manager management server:

1. Wait 10 minutes, and then start the upgrade of the Service Manager management server.

To list the data warehouse jobs by using Windows PowerShell cmdlets

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| --- |
| 1. On the computer that hosts the data warehouse management server, click Start, click All Programs, click Microsoft System Center 2012, and then click Service Manager Shell.  2. Type the following commands, and then press ENTER after each command:  Set-ExecutionPolicy –force RemoteSigned  cd 'C:\Program Files\Microsoft System Center 2012\Service Manager'  Import-Module .\Microsoft.EnterpriseManagement.Warehouse.Cmdlets.psd1  Get-SCDWJob  3. A list of the data warehouse jobs appears. Use this list in the next procedure, "To disable data warehouse job schedules by using Windows PowerShell cmdlets.” |

To disable data warehouse job schedules by using Windows PowerShell cmdlets

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| 1. Type the following commands, and then press ENTER after each command:  Disable-SCDWJobSchedule –JobName Extract\_<data warehouse management group name>  Disable-SCDWJobSchedule –JobName Extract\_<Service Manager management group name>  Disable-SCDWJobSchedule –JobName Transform.Common  Disable-SCDWJobSchedule –JobName Load.Common  Disable-SCDWJobSchedule –JobName DWMaintenance  Disable-SCDWJobSchedule –JobName MPSyncJob  Start-SCDWJob –JobName MPSyncJob  The last command to start the MPSyncJob will enable the extraction, transformation, and load (ETL) jobs to run to completion. After that, because all the schedules have been disabled, the jobs will stop. To close the Windows PowerShell window, type exit. |

To confirm that the data warehouse jobs have stopped running

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| --- |
| 1. In the Service Manager console, click Data Warehouse.  2. In the Data Warehouse pane, expand Data Warehouse, and then click Data Warehouse Jobs.  3. In the Data Warehouse Jobs pane, observe the Status column for each data warehouse job. When the status for each job is listed as Not Started, proceed to the next procedure to stop the Self-Service Portal. If no Self-Service Portal exists in your environment, you can start the upgrade process in [How to Upgrade to System Center 2012 SP1 - Service Manager](#ze2d73d0701a54de59bdfbf8c478a4298). |

How to Upgrade to System Center 2012 SP1 - Service Manager

You can use the following procedures to upgrade your Service Manager environment to System Center 2012 – Service Manager SP1. These procedures include steps for upgrading the data warehouse management server, the Service Manager management server, and the Service Manager console.

Data Warehouse Management Server

Use the following procedure to upgrade the data warehouse management server.

Important

Make sure that you have stopped the data warehouse jobs before you continue. For more information, see [How to Prepare Service Manager 2012 for Upgrade to SP1](#z5bf76997344c4bdaabb342c604cd56b2).

To upgrade the data warehouse management server

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| 1. Log on to the computer that will host the data warehouse management server by using an account that is a member of the Administrators group. This account must also be a local administrator.  2. On the Service Manager installation media, double-click the Setup.exe to start the Service Manager Setup Wizard.  3. On the Microsoft System Center 2012 page, click Upgrade Service Manager data warehouse management server.  4. On the Prepare for upgrade page, select the two items indicating that you have read the appropriate sections in the System Center 2012 – Service Manager Upgrade Guide, and then click Next.  5. On the Product registration page, type the appropriate information in the boxes. Read the Microsoft Software License Terms; if applicable, click I have read, understood, and agree with the terms of the license agreement; and then click Next.  6. On the System check results page, ensure that the prerequisite check passed or at least passed with warnings, and then click Next.  7. On the Configure Analysis Service for OLAP cubes page, in the Database server box, type the computer name of the server that will host the SQL Server Analysis Services (SSAS) database, and then press the Tab key. When Default appears in the SQL Server instance box, click Next.  Important  If you are installing SSAS on a computer other than the computer that hosts the data warehouse management server and there is a firewall in your environment, you must make sure that the proper firewall ports are opened. For more information, see “Port Assignments for System Center 2012 - Service Manager” in the [Planning Guide for System Center 2012 - Service Manager](http://go.microsoft.com/fwlink/p/?LinkId=209672).  8. On the Configure Analysis Services credential page, specify the user name, password, and domain for the account, and then click Test Credentials. After you receive a message saying “The credentials were accepted,” click Next.  9. On the Help improve System Center page, indicate your preference for participation in the Customer Experience Improvement Program and in Error Reporting. As an option, click Tell me more about the program, and then click Next.  10. On the Use Microsoft Update to help keep your computer secure and up-to-date page, indicate your preference for using Microsoft Update to check for Service Manager updates, and then click Next.  11. On the Configuration Summary page, read the information that is provided, and, if it is accurate, click Install.  12. On The upgrade was completed successfully page, if you have already backed up the encryption key, clear the Open the Encryption Backup or Restore Wizard check box, and then click Close. |

Service Manager Management Server

Use the following procedure to upgrade the Service Manager management server.

To upgrade the Service Manager management server

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| 1. Log on to the computer that will host the Service Manager management server by using an account that is a member of the Administrators group.  2. On the Service Manager installation media, double-click the Setup.exe to start the Service Manager Setup Wizard.  3. On the Microsoft System Center 2012 page, click Upgrade Service Manager management server.  4. On the Prepare for upgrade page, select the two items indicating that you have read the appropriate sections in the Upgrade Guide for System Center 2012 – Service Manager, and then click Next.  5. On the Product registration page, type the appropriate information in the boxes. Read the Microsoft Software License Terms, and, if applicable, click I have read, understood, and agree with the terms of the license agreement, and then click Next.  6. On the System check results page, ensure that the prerequisite check passed or at least passed with warnings, and then click Next.  7. On the Configuration Summary page, read the information that is provided, and, if it is accurate, click Install.  8. On the The upgrade was completed successfully page, if you have already backed up the encryption key, clear the Open the Encryption Backup or Restore Wizard check box, and then click Close. |

Service Manager Console

Use the following procedure to upgrade the Service Manager console.

To upgrade the Service Manager Console

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| 1. Log on to the computer that will host the Service Manager console by using an account that is a member of the Administrators group.  2. On the Service Manager installation media, double-click the Setup.exe to start the Service Manager Setup Wizard.  3. On the Microsoft System Center 2012 page, click Upgrade Service Manager console.  4. On the Prepare for upgrade page, select the two items indicating that you have read the appropriate sections in the Upgrade Guide for System Center 2012 – Service Manager, and then click Next.  5. On the Product registration page, read the Microsoft Software License Terms, and, if applicable, click I have read, understood, and agree with the terms of the license agreement, and then click Next.  6. On the System check results page, ensure that the prerequisite check passed or at least passed with warnings, and then click Next.  7. On the Configuration Summary page, read the information that is provided, and, if it is accurate, click Install.  8. On The upgrade was completed successfully page, click Close. |

After Upgrading to System Center 2012 SP1 - Service Manager

This topic describes how to restart the Data Access service if it fails to start after an upgrade to System Center 2012 – Service Manager SP1. After the upgrade, you will also have to start the Service Manager workflows and restart the data warehouse jobs. This topic also describes how to stop and then start SQL Server Reporting Services (SSRS) after an upgrade.

Restart the Data Access Service and Workflows on the Data Warehouse Management Server

If necessary, use the following procedures to restart the service and workflows.

To restart the Data Access service

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| 1. On the computer that hosts the data warehouse management server, on the Windows desktop, click Start, and then click Run.  2. In the Run dialog box, in Open, type services.msc, and then click OK.  3. In the Services window, in the Services (Local) pane, right-click System Center Data Access Service, and then click Start. |

To start Service Manager workflows

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| 1. On the computer that hosts the Service Manager management server, on the Windows desktop, click Start, and then click Run.  2. In the Run dialog box, in Open, type services.msc, and then click OK.  3. In the Services window, in the Services (Local) pane, right-click System Center Management, and then click Start. |

Restart Data Warehouse Jobs

After you upgrade the data warehouse management server, you might need to restart the data warehouse (extraction, transformation, and load (ETL)) jobs. You can use the following procedure to restart the data warehouse jobs. In this procedure, you enable data warehouse job schedules by using Windows PowerShell cmdlets.

To restart data warehouse jobs

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| 1. On the computer that hosts the data warehouse management server, click Start, point to Programs, point to Accessories, click Windows PowerShell, right-click Windows PowerShell, and then click Run as administrator.  2. Type the following commands and then press Enter after each command.  Note  It is assumed in the following command examples that Service Manager was installed in its default location on the C: drive. If necessary, change directories to the location where you installed Service Manager.  cd 'C:\Program Files\Microsoft System Center 2012\Service Manager'  import-module $PWD/Microsoft.EnterpriseManagement.Warehouse.Cmdlets.psd1  Get-SCDWJob  Enable-SCDWJobSchedule –JobName Extract\_<data warehouse management group name>  Enable-SCDWJobSchedule –JobName Extract\_<Service Manager management group name>  Enable-SCDWJobSchedule –JobName Transform.Common  Enable-SCDWJobSchedule –JobName Load.Common  Enable-SCDWJobSchedule –JobName DWMaintenance  Enable-SCDWJobSchedule –JobName MPSyncJob  Start-SCDWJob –JobName MPSyncJob  The last command, Start-SCDWJob – JobName MPSyncJob, will enable the ETL jobs to run. |

Stop and Then Start SSRS

After you perform an upgrade to System Center 2012 – Service Manager SP1, use the following procedure to stop and then start SSRS.

To stop and then start SSRS

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| 1. On the computer that hosts SSRS, on the Windows desktop, click Start, and then click Run.  2. In the Run dialog box, type services.msc, and then click OK.  3. In the Services window, in the Services (Local) pane, right-click SQL Server Reporting Services, and then click Stop.  4. In the Services window, in the Services (Local) pane, right-click SQL Server Reporting Services, and then click Start. |

Failed Upgrade in System Center 2012 SP1 - Service Manager

An upgrade to System Center 2012 – Service Manager SP1 might not complete successfully. There are five phases of the upgrade where a failure might occur. The steps that you take to recover from a failed upgrade depend on the phase in which the failure occurs:

 Failure occurs during the prerequisite check.

 Failure occurs during predicted checks.

 Failure occurs in an unpredictable manner before permanent changes are made to a management server.

 Failure occurs in an unpredictable manner after permanent changes are made to a management server.

 Failure occurs in an unpredictable manner after permanent changes are made to the database.

The upgrade might also fail as a result of Configuration service Startup timing out.

Failure Occurs During a Prerequisite Check

Before the installation of System Center 2012 – Service Manager SP1 begins, a prerequisite check is made for certain requirements. If a condition is found in which Service Manager SP1 will continue to function, you receive a warning. Warnings are identified with an explanation point (!) in a yellow triangle. Conditions that have been identified as a Warning will not prevent you from installing.

If a condition is found that is an absolute requirement, a failure indication appears. Failure indications are identified with an X in a red circle.

If either a warning or a failure indication appears, you can either cancel the installation and make the necessary changes, or make the appropriate changes and then click Check prerequisites again and continue with the installation. All failure conditions must be corrected before the installation or upgrade can proceed.

Failure Occurs During Predicted Checks

After any failures that were identified during the prerequisite check are corrected, pressing Next on the Prerequisites page of the wizard starts the upgrade or installation of System Center 2012 – Service Manager. The system checks for the following conditions during the installation or upgrade process:

 The data warehouse database that you specified exists.

 The computer running SQL Server that you specified is not running SQL Server 2008 Service Pack 1 (SP1), SQL Server 2008 Service Pack 2 (SP2). SQL Server 2008 R2.

 The hard disk drive that you specified for a database has at least 1 GB of free space.

 The System Center Data Access service can log on with the set of credentials that you supplied.

 The System Center Management Configuration service can log on with the set of credentials you supplied.

 There is enough free disk space to install the upgraded files.

 Setup can access the file location for the Service Manager installation.

If failures occur during these types of checks, you can make the appropriate changes. For example, specify a hard disk location with sufficient space, and then on the Warning page, click Retry to continue the installation.

Failure Occurs in an Unpredictable Manner Before Permanent Changes Are Made to the Management Server

During an installation or upgrade of System Center 2012 – Service Manager SP1, an error may occur. If the error occurs before any permanent changes are made to the Service Manager management server or data warehouse management server—for example, before changes are made to the Structured Query Language (SQL) database or before management packs are imported—the error message that appears includes a Retry button. In these situations, you can correct the issue and then retry the installation or upgrade.

Failure Occurs in an Unpredictable Manner After Permanent Changes Are Made to the Management Server

If an error occurs after permanent changes are made to the Service Manager management server or data warehouse management server—for example, after changes are made to the SQL database or after management packs are imported—the error message that appears does not include a Retry button. In this situation, you must reinstall the original version of the affected management server.

In any case, you need the backup of the encryption key. For the Service Manager management server, the encryption key is available only if you made a backup before you started the upgrade. For more information, see "Back Up the Encryption Key in Service Manager" in the [Disaster Recovery Guide for System Center 2012 – Service Manager](http://go.microsoft.com/fwlink/p/?LinkID=209671).

Failure Occurs in an Unpredictable Manner After Permanent Changes Are Made to a Database

If an error occurs after permanent changes have been made—for example, after management packs are imported or any other time data is written into a database—the error message that appears does not include a Retry button.

At this point your only option is to click Close and begin a disaster recovery process to restore your databases. This recovery is possible only if you backed up your databases before you started the upgrade process. For more information, see "Backing Up Service Manager Databases" in the [Disaster Recovery Guide for System Center 2012 – Service Manager](http://go.microsoft.com/fwlink/p/?LinkID=209671).

The Upgrade Fails as a Result of Configuration Service Startup Timing Out

On some computers, Service Manager Setup fails and rolls back if it cannot start the System Center Management Configuration service in a timely fashion. If this problem occurs, you might see the following entries in the install log:

CAStartServices: Attempting to start service. OMCFG

CAStartServices: StartService failed. Error Code: 0x8007041D.

ConfigureSDKConfigService: CAStartServices failed. Error Code: 0x8007041D. OMCFG

Error 0x8007041D indicates that the service did not respond to the start or control request in a timely fashion. In addition, the following event may be logged in the System Event log:

Log Name: System

Source: Service Control Manager

Event ID: 7009

Task Category: None

Level: Error

Keywords: Classic

User: N/A

Description:

A timeout was reached (30000 milliseconds) while waiting for the System Center Management Configuration service to connect.

This problem occurs because a .NET Framework 2.0 managed assembly that has an Authenticode signature takes longer than usual to load. The signature is always verified when the .NET Framework 2.0 managed assembly that has an Authenticode signature is loaded. In addition, the .NET Framework 2.0 managed assembly may take longer than usual to load because of various other settings. For example, the .NET Framework 2.0 managed assembly may take longer than usual to load because of the network configuration.

For additional information about the cause of this problem, see [Knowledgebase Article 936707](http://go.microsoft.com/fwlink/p/?LinkId=207190) in the Microsoft Knowledge Base.

For information about possible workaround procedures, see How to Workaround Configuration Service Startup Issues

How to Work Around Configuration Service Startup Issues

There are two workaround procedures that you can use to try to resolve the issue in which an upgrade to System Center 2012 – Service Manager SP1 fails as a result of Configuration service Startup timing out. You can:

 Disable signature verification on the computer that is running Setup.

 Increase the service time-out setting on the computer that is running Setup.

To disable signature verification

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| 1. On the computer that is running Setup, edit the Microsoft.Mom.ConfigServiceHost.exe.config file, which is located in the Program Files\Microsoft System Center 2012\Service Manager folder.  2. In the <runtime></runtime> section, add <generatePublisherEvidence enabled="false"/>.  3. Save the changes to the file.  4. Attempt the upgrade again. |

To increase the service time-out setting

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| 1. On the computer that is running Setup, create the following registry value to increase the service time-out period:  HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control  ServicesPipeTimeout  DWORD  200000  Caution  Incorrectly editing the registry may severely damage your system. Before making changes to the registry, you should back up any valued data on the computer.  Note  You may have to increase this value further if the service still fails to start. The value in this example is in milliseconds. For additional details about the registry key, see [article 922918](http://go.microsoft.com/fwlink/p/?LinkId=207191) in the Microsoft Knowledge Base.  2. Start the computer again.  3. Attempt the upgrade again. |