Microsoft System Center 2012 R2

Upgrading System Center 2012 SP1 Orchestrator to System Center 2012 R2 Orchestrator

Microsoft Corporation

Published: November 1, 2013

Applies To

System Center 2012 R2

Feedback

Send suggestions and comments about this document to sc2012docs@microsoft.com

Copyright Information

Revision History

Release Date	Changes
October 17, 2013	Original release of this guide.
November 1, 2013	Minor updates for this guide.

Contents

Upgrading System Center 2012 SP1 Orchestrator to System Center 2012 R2

This guide will show you how to upgrade from System Center 2012 Service Pack 1 (SP1) Orchestrator to System Center 2012 R2 Orchestrator.

⚠ **Warning**

If you are planning to upgrade two or more System Center components, it is important to start by reading the Upgrade Sequencing for System Center 2012 R2 topic.

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

💡 **Tip**

Because your data center must keep running while you upgrade System Center 2012 components one at a time, after you have upgraded the Orchestrator servers to System Center 2012 SP1, you can run:

- A System Center 2012 integration pack on a System Center 2012 component.
- A System Center 2012 SP1 integration pack on a System Center 2012 SP1 component.
- A System Center 2012 SP1 integration pack on a System Center 2012 R2 component (except for Virtual Machine Manager).
- A System Center 2012 R2 integration pack on a System Center 2012 R2 component (Virtual Machine Manager).

No other configurations are supported.

See Also

Tasks to Perform Before You Begin the Upgrade

How to Upgrade System Center 2012 SP1 Orchestrator to System Center 2012 R2

Troubleshoot your Orchestrator Installation

Tasks to Perform Before You Begin the Upgrade

Before you can upgrade Orchestrator to System Center 2012 R2, you must prepare the environment by performing the following tasks:

1. Complete all runbooks running in the current Orchestrator installation. For information about stopping runbooks, see the **Running Runbooks** topic in the Orchestrator library on TechNet.
2. Close any open programs and ensure that there are no pending restarts on the computer. For example, if you have installed a server role by using Server Manager or have applied a security update, you might have to restart the computer, and then log on to the computer with the same user account to finish the installation of the server role or the security update.
3. Perform a full backup of the Orchestrator database. For information about backing up the Orchestrator database, see the **How to Back up Orchestrator** topic in the Orchestrator library on TechNet. You can also use tools provided by SQL Server to back up the VMM database. For more information, see Back Up and Restore of SQL Server Databases.
4. Upgrade the hardware, operating system, and other software if necessary to meet the requirements of Orchestrator in System Center 2012 R2.

See Also

Upgrading System Center 2012 SP1 Orchestrator to System Center 2012 R2

How to Upgrade System Center 2012 SP1 Orchestrator to System Center 2012 R2

When you upgrade a server that runs System Center 2012 R2 Orchestrator, all features that are installed on the server are upgraded. Before you begin the upgrade process, make sure that your server meets the minimum supported configurations. For more information, see the **System Requirements** topic in the Orchestrator library on TechNet.

▶**To upgrade Orchestrator to System Center 2012 R2**

1. Stop all Orchestrator runbooks.
2. Uninstall the Orchestrator management server, any runbook servers, the Web Service, and the Runbook Designer.
3. Install the Orchestrator management server in System Center 2012 R2, as described in the Deployment Guide (http://go.microsoft.com/fwlink/?LinkID=232709).
4. Install any Orchestrator runbook servers in System Center 2012 R2.

5. Install the Orchestrator Runbook Designer in System Center 2012 R2.

6. If needed, install the Orchestrator Web Service in System Center 2012 R2.

7. Take the Orchestrator servers out of maintenance mode.

Upgrading the integration pack for another System Center 2012 R2 component

The only System Center 2012 R2 component for which an updated integration pack is being released for System Center 2012 R2 is Virtual Machine Manager.

For more detailed instructions for upgrading System Center 2012 R2 components, see the guide "Upgrade Sequencing for System Center 2012 R2" that is included in the SC2012R2Upgrade.zip file that you downloaded from the Microsoft Connect website. For each component you will perform the following steps.

1. Uninstall and unregister the integration pack for the component according to the How to Uninstall and Unregister an Integration Pack.

    When you install an upgrade of an integration pack, you must first uninstall any earlier version of the integration pack from all runbook servers and Runbook Designers. You then register and deploy the upgrade of the integration pack. If you do not uninstall the previous version of the integration pack prior to registering and deploying the upgrade version, the upgrade version will fail.

2. Upgrade the component.

3. Install and register the System Center 2012 R2 integration pack for the component.

4. Verify that Orchestrator is receiving data from the component.

Troubleshoot Your Orchestrator Installation

The latest troubleshooting information for System Center 2012 - Orchestrator is available in the release notes under the **Release Notes for Orchestrator** topic in the Orchestrator library on TechNet. The following information provides additional instructions and caveats that you can use during installation to resolve problems you might experience.

Orchestrator log files

If you experience problems during installation, installation log files are located in the folder **C:\Users\%USERNAME%\AppData\Local\SCO\LOGS**.

If you experience problems when you are running Orchestrator, the product log files are located in the folder **C:\ProgramData\Microsoft System Center 2012\Orchestrator**.

Windows Firewall

When you deploy additional Runbook Designer applications to your environment, you might see a failed installation message. To correctly install the Runbook Designer, enable the following firewall rules as they apply to your operating system and deployment configuration.

Windows Firewall with Advanced Security for Windows Server 2012 R2

By default, **Windows Firewall with Advanced Security** is enabled on all Windows Server 2012 R2 computers, and blocks all incoming traffic unless it is a response to a request by the host, or it is specifically allowed. You can explicitly allow traffic by specifying a port number, application name, service name, or other criteria by configuring Windows Firewall with Advanced Security settings.

If you are running Windows Server 2012 R2, enable the following rules to allow all Monitor Event activities to function correctly:

- Windows Management Instrumentation (Async-In)
- Windows Management Instrumentation (DCOM-In)
- Windows Management Instrumentation (WMI-In)

Automated deployment

When a runbook server or Runbook Designer is installed behind a firewall, specific firewall rules are required between the remote computers that are used to deploy the runbook server and Runbook Designer. An additional rule is required for the remote connection between the Runbook Designer and the runbook server to allow the Orchestrator management service to accept remote connections. If you are using the **Monitor WMI** task, the runbook server requires a special firewall rule on the computer that uses PolicyModule.exe.

Enable the following firewall rules on your computer:

Firewall rule between the Runbook Designer and the Orchestrator management server

Operating system	Firewall rule
64-bit	%ProgramFiles (x86)%\Microsoft System Center 2012 R2\Orchestrator\Management Server\OrchestratorManagementService.exe
32-bit	%ProgramFiles%Microsoft System Center 2012 R2\Orchestrator\Management Server\OrchestratorManagementService.exe

Firewall rules between remote computers

Operating system	Firewall rules

Windows Server 2012 R2	• File and Printer Sharing
	• Windows Management Instrumentation (WMI)
	• Program rule for OrchestratorRemotingService to accept remote connections. This rule must be enabled through the Advanced Firewall mode:
	   • %SystemRoot%\SysWOW64\OrchestratorRemotingService.exe (for a 64-bit operating system)
	   • %SystemRoot%\System32\OrchestratorRemotingService.exe (for a 32-bit operating system)

Firewall rules between the runbook server and the computer that uses PolicyModule.exe

Operating system	Firewall rule
64-bit	%ProgramFiles (x86)%\Microsoft System Center 2012 R2\Orchestrator\Runbook Server\PolicyModule.exe
32-bit	%ProgramFiles\Microsoft System Center 2012 R2\Orchestrator\Runbook Server\PolicyModule.exe

For more information about adding firewall rules, see Add or Edit a Firewall Rule.

RunbookService fails to start after computer reboot

When you reboot your runbook server, the RunbookService attempts to connect to the orchestration database. If the database is not available, the RunbookService fails. The event log message is **This computer was unable to communicate with the computer providing the server.**. Typically, this can occur when the SQL server and the runbook server are installed on the same computer.

To solve this problem. you can manually start the RunbookService, or configure the RunbookService to make multiple attempts during startup to connect to database before failing.

Cannot restart runbook service if you uninstall with an account without administrator permissions

If you attempt to uninstall Orchestrator while logged in with an account that is a member of OrchestratorSystemGroup but is not an administrator, uninstall removes all accounts from OrchestratorSystemGroup. If you stop the runbook service and attempt to restart the service, the service fails because the user account does not have the correct permissions to retrieve the orchestration database connection. An account that is an administrator or a member of the OrchestratorSystemGroup is required to retrieve the orchestration database connection.

To solve this problem, an administrator can add the user back to OrchestratorSystemGroup.

Other resources for this product

- TechNet Library main page for Orchestrator
- **System Center Orchestrator 2012 Deployment Guide** in the Orchestrator library on TechNet.

How to Uninstall and Unregister an Integration Pack

For instructions on how to install an integration pack, see the **How To Install an Integration Pack** topic in the Orchestrator library on TechNet.

💧 **Important**

When you install an upgrade of an integration pack, you must first uninstall any earlier version of the integration pack from all runbook servers and Runbook Designers. You then register and deploy the upgrade of the integration pack. If you do not uninstall the previous version of the integration pack prior to registering and deploying the upgrade version, the upgrade version will fail.

▶ **To uninstall an integration pack**

1. Open **Programs and Features** in Windows Control Panel.
2. Right-click the integration pack and click **Uninstall**.

▶ **To unregister an integration pack**

1. Start the **Deployment Manager**.
2. In the navigation pane of the Deployment Manager, click **Integration Packs**.
3. Right-click the integration pack and click **Unregister Integration Pack or Hotfix from**

the Orchestrator Management Server.

See Also

[Upgrading System Center 2012 SP1 Orchestrator to System Center 2012 R2](#)