

Create private cloud with Hyper-V (Part 5)

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TipsMake.com - The series of articles has focused primarily on creating executable image files that can be used to create new virtual machines on it. However, these executable files won't work unless we have a private cloud infrastructure that allows legitimate users to create new virtual machines on demand. Today's lesson will guide users to build this infrastructure. Our private cloud will build around Hyper-V, Microsoft's System Center Virtual Machine Manager and Self Service Portal.

Deploy System Center Virtual Machine Manager

The next thing to do is to deploy System Center Virtual Machine Manager (SCVMM). For the purposes of the article, we will use System Center Virtual Machine Manager 2008 R2 SP1 version. In addition, we also use Microsoft System Center Virtual Machine Manager Self-Service Portal 2.0 SP1. Users can download it here.

You can directly deploy this software to Hyper-V Server, but if you have another available server it is better to use that server instead because you really do not want to consume the Hyper-V Server resources. may be used to host virtual machines. Any virtual machine used must be in the created domain.

From there, the user can start the installation process by looking into the SCVMM installation media. When the installation screen appears, click on the **VMMServer Setup link** to start the installation.

At this point, the installer will extract some files and then display the required terms agreement. Select the option to accept the agreement terms and click **Next** .

The next screen will ask if the user wants to use the Microsoft update check feature. Select **Use Microsoft Update** to maintain the update and click **Next** .

The next screen will ask if the user wants to join Microsoft's customer experience improvement program. If you accept to join the program, System Center Virtual Machine Manager will send configuration and usage data to Microsoft. This entirely depends on whether the user wants to join this program or not. After selecting, click **Next** .

Next, enter the username and company name on the registration screen. Then click **Next** .

The installer will now conduct hardware and software testing as a prerequisite. Software conditions are:

1. A supported Windows Server operating system (List of supported operating systems see here).
2. Windows PowerShell (Windows Server 2008 R2 requires PowerShell 2.0).

3. Windows Remote Management (WinRM). This component is available in Windows Server 2008 and Windows 2008 R2.
4. Microsoft .NET Framework from version 3.0 and above.
5. Windows Automated installer from 1.1 or higher.
6. Supported version of SQL Server.
7. Windows Server Internet Information Services (IIS) version 7.0 or later. The following components in IIS are required:

IIS 6 Metabase Compatibility

IIS 6 WMI Compatibility

Static Content

Default Document

Directory Browsing

HTTP Errors

ASP.NET

.NET Extensibility

ISAPI Extensions

ISAPI Filters

Request Filtering

Although there are many conditions, there is nothing to worry about. If you are installing SCVMM on Windows Server 2008 R2, it doesn't seem like you have to install any additional components under these conditions. Most of the required conditions are the components in the operating system and the installation program will install them automatically if they do not already exist. Although SQL Server is not a part of the operating system, the installer will give you an option to install the Express version of SQL. Therefore, you do not have to worry about installing SQL.

Just click the mouse without considering the above conditions. The installation program will check the conditions and set the correct order to install the components.

After completing the condition check, click **Next** . Enter the location you want to install SCVMM.

Click **Next** then configure for SQL Server. We can choose to associate with an existing SQL Server or the SQL Server 2005 Express Edition SP3 installer.

The next screen is very important. It will ask you to save the virtual machine management library folder. The virtual machine management library is a catalog of resources that can be used to create virtual machines.

By default, the installation program will try to create a new public library, but since we already have a public folder, let the installation program use the public folder we created earlier.

Common items used must be placed on the server. Therefore, if you are installing Virtual Machine Manager on another server where you have installed the Deployment Workbench, you will have to use the default public folder and then manually copy the content to the library.

Once you have specified a common use for the virtual machine library, click **Next** , accept the default settings for the media port and service account and click **Next** again.

Now, we will see the screen that summarizes the specified settings. Please confirm the settings are correct. Then click the **Install** button. After installation is complete, click **Close** .

The installation process creates a Microsoft System Center folder at the Start menu on the server, but we only see the Virtual Machine Manager help. This is because the administrative control tool is not installed by default.

To install the administrative control tool, look into the means to install SCVMM and select the **VMM Administrator Console option** from the installation screen. An installation window appears. After accepting the terms of the agreement, we only need to use the default options to install the administrative control tool.

When using the tool for the first time, we have to enter the server name and port name to use to connect to the VMM server, but we just need to leave the default.

Conclude

Now, SCVMM has been installed. Now it's time to activate the Self Service Portal. The following article will show you how to do this.

You finished reading the article "**Create private cloud with Hyper-V (Part 5)**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.