

SharePoint Server 2016



Quick Start Guide for Single Server Farms





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Overview

This quick start guide provides an overview of SharePoint Server 2016 requirements and installation to support Single Server Farm installations for evaluation purposes.

Table of contents

Hardware and software requirements.....	3
Prerequisites.....	5
Installation.....	7
SharePoint Products and Configuration Wizard.....	9
Farm Configuration Wizard.....	10
Upgrade.....	11

Hardware and software requirements

The values in the following table are minimum values for installations on a single server and for web, application, and cache servers that are running SharePoint Server 2016 in a multiple server farm installation.

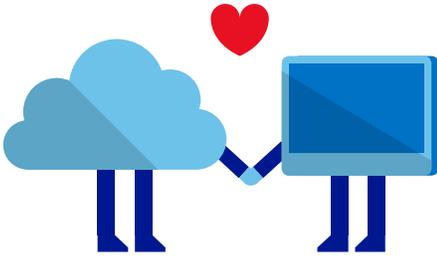
For all installation scenarios, you must have sufficient hard disk space for the base installation and sufficient space for diagnostics such as logging, debugging, creating memory dumps, and so on. For production use, you must also have additional free disk space for day-to-day operations. In addition, maintain two times as much free space as you have RAM for production environments.

NOTE

Hard disk space and number of drives depends on the amount of content and the way you choose to distribute data for a SharePoint environment.

Scenario	Deployment type and scale	Processor	RAM	Hard disk
Database server running a single SQL instance	Development or evaluation installation with the minimum recommended services	64-bit, 4 cores	12-16 GB	80 GB for system drive 100 GB for second drive
Database server running a single SQL instance	Pilot, user acceptance test running all available services	64-bit, 4 cores	16-24 GB	80 GB for system drive 100 GB for second drive and additional drives

Hardware and software requirements



Operating system requirements

SharePoint Server 2016 is supported on Windows Server 2012 R2 and the Windows Server Technical Preview "Threshold". You can download evaluation copies of both operating systems from the TechNet Evaluation Center.

Windows Server 2012 R2

<http://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-2012-r2>

Windows Server Technical Preview

<http://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-technical-preview>

SharePoint database server Requirements

SharePoint Server 2016 is supported SQL Server 2014 and SQL Server 2016. You can download evaluation copies of both database servers from the TechNet Evaluation Center.

SQL Server from the TechNet Evaluation Center at <http://www.microsoft.com/en-us/evalcenter/evaluate-sql-server-2014>.

.NET Framework requirement

The required version of .NET Framework is different for Windows Server 2012 R2 and Windows Server Technical Preview "Threshold".

Windows Server 2012 R2: SharePoint 16 requires .NET Framework 4.5.2

Windows Server Technical Preview "Threshold": SharePoint 16 requires .NET Framework 4.6 Preview, which comes with Windows Server Technical Preview "Threshold".

NOTE

Starting January 13, 2016, .NET Framework 4.5.2 will be the minimum version of .NET Framework 4.x supported by Microsoft. See the Microsoft .NET Framework Support Lifecycle Policy FAQ at http://support.microsoft.com/gp/Framework_FAQ for more information.

Prerequisites



SharePoint Server 2016 prerequisites are similar to those required to install SharePoint Server 2013 and can be installed manually or with the Prerequisite Installer:

All the required prerequisites are installed by the SharePoint Prerequisite installer.

The SharePoint Server 2016 Prerequisite Installer (prerequisiteinstaller.exe) installs the following software, if it has not already been installed on the target server:

Application Server Role, Web Server (IIS) Role. You can enable the Web Server (IIS) role and the Application Server role in Server Manager. However, if the server is not connected to the Internet, the <http://support.microsoft.com/en-us/kb/2765260> article has an Offline method that explains how to use several Windows PowerShell cmdlets to add and enable these roles.

Microsoft SQL Server 2012 Native Client. Installs with the Microsoft SQL Server 2012 Feature Pack [\[http://www.microsoft.com/en-us/download/details.aspx?id=29065\]](http://www.microsoft.com/en-us/download/details.aspx?id=29065)

The Microsoft SQL Server 2012 Feature Pack is a collection of stand-alone packages which provide additional value for Microsoft SQL Server 2012. It includes the latest versions of:

[Tool and components for Microsoft SQL Server 2012](#)

[Add-on providers for Microsoft SQL Server 2012](#)

Microsoft ODBC Driver 11 for SQL Server [\[http://www.microsoft.com/en-us/download/details.aspx?id=36434\]](http://www.microsoft.com/en-us/download/details.aspx?id=36434)

Microsoft ODBC Driver 11 for SQL Server is a single dynamic-link library (DLL) containing run-time support for applications using native-code APIs to connect to Microsoft SQL Server 2005, 2008, 2008 R2, SQL Server 2012, SQL Server 2014, and Windows Azure SQL Database. This redistributable installer for Microsoft ODBC Driver 11 for SQL Server installs the client components needed during run time to take advantage of new SQL Server 2012 features, and optionally installs the header files needed to develop an application that uses the ODBC API.

Microsoft Sync Framework Runtime v1.0 SP1 (x64) [\[http://www.microsoft.com/en-us/download/details.aspx?id=17616\]](http://www.microsoft.com/en-us/download/details.aspx?id=17616)

Microsoft Sync Framework is a comprehensive synchronization platform that enables collaboration and offline scenarios for applications, services, and devices. Developers can build synchronization ecosystems that integrate any application and any type of data, using any protocol over any network. This service pack is intended to fix a handful of bugs as well as to transition to a public-facing change tracking API that is new in SQL Compact 3.5 SP2.

Windows Server AppFabric 1.1 [\[http://www.microsoft.com/en-us/download/details.aspx?id=27115\]](http://www.microsoft.com/en-us/download/details.aspx?id=27115)

AppFabric is a set of integrated technologies that make it easier to build, scale, and manage web and composite applications that run on IIS. AppFabric targets applications built using ASP.NET, Windows Communication Foundation (WCF), and Windows Workflow Foundation (WF).

It provides out-of-the-box capabilities for you to easily build and manage composite applications, including:

[Enhanced design and development tools in Visual Studio to build rich composite applications](#)

[Management and monitoring of services and workflows via integration with IIS Manager and Windows PowerShell](#)

[Distributed in-memory application cache to improve application performance](#)

Cumulative Update Package 1 for Microsoft AppFabric 1.1 for Windows Server (KB2671763) [\[http://support.microsoft.com/en-us/kb/2671763\]](http://support.microsoft.com/en-us/kb/2671763)

This hotfix package resolves several issues and adds several features that are described at <https://support.microsoft.com/en-us/kb/2671763>.

Prerequisites



Microsoft Identity Extensions [<http://www.microsoft.com/en-us/download/details.aspx?id=15373>]

Microsoft Federation Extensions for SharePoint 3.0 enables interoperable federated access to SharePoint 3.0 sites using the WS-Federation standard. It is built using the Windows Identity Foundation and supports use of ADFS 2.0 as an identity provider.

Microsoft Information Protection and Control Client [<http://go.microsoft.com/fwlink/?LinkID=528177>]

The Active Directory Rights Management Services (AD RMS) Client 2.x is software designed for your computers to help protect access to and usage of information flowing through applications that use AD RMS.

Microsoft WCF Data Services 5.0 [<http://www.microsoft.com/en-us/download/details.aspx?id=29306>]

WCF Data Services 5.0 enables creation and consumption of data services for the Web according to version 3 of the Open Data Protocol (OData), which facilitates data access and change via standard HTTP verbs. WCF Data Services 5.0 includes .NET Framework server and client libraries as well as Silverlight client libraries.

Microsoft WCF Data Services 5.6 [<http://www.microsoft.com/en-us/download/details.aspx?id=45308>]

This installer will update the NuGet packages referenced by the WCF Data Services item templates to version 5.6.3. This installer also makes the code generation (the "Add Service Reference") for consuming OData V3 endpoints available for all current and future .Net 4.5.X versions.

Microsoft .NET Framework 4.5.2 [<http://support.microsoft.com/en-us/kb/2934520>]

The Microsoft .NET Framework 4.5.2 is a highly compatible, in-place update to the .NET Framework 4.5.1, the .NET Framework 4.5, and the .NET Framework 4. However, it can run side by side with the .NET Framework 3.5 Service Pack 1 (SP1) and earlier versions of the .NET Framework.

The .NET Framework 4.5.2 for Windows 8.1, Windows RT 8.1, and Windows Server 2012 R2 is available on Windows Update and on Windows Server Update Service (WSUS).

Update for Microsoft .NET Framework to disable RC4 in Transport Layer Security (KB2898850) [<http://www.microsoft.com/en-us/download/details.aspx?id=42883>]

Resolved a security issue that has been identified that could allow an unauthenticated remote attacker to compromise a system and gain access to information.

Visual C++ Redistributable Package for Visual Studio 2013 [<http://www.microsoft.com/en-us/download/details.aspx?id=40784>]

The Visual C++ Redistributable Packages install run-time components that are required to run applications that are developed by using Visual Studio 2013, on computers that don't have Visual Studio 2013 installed. These packages install run-time components of these libraries: C Runtime (CRT), Standard C++, ATL, MFC, C++ AMP, and OpenMP.

The prerequisite installer creates log files at %TEMP%\prerequisiteinstaller.<date>.<time>.log. You can check these log files for specific details about all changes the installer makes to the target computer.

In scenarios where installing prerequisites directly from the Internet is not possible, you can download the prerequisites and then install them from a network share. For more information, see [Install prerequisites for SharePoint 2013 from a network share](#).

Installation

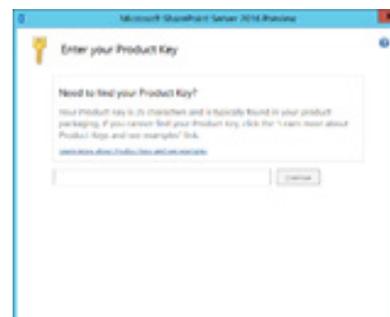
1. Verify that the user account that is performing this procedure is the Setup user account. For information about the Setup user account, see [Initial deployment administrative and service accounts in SharePoint 2013](#).
2. On the **SharePoint 2016 Start** page, click **Install SharePoint Server**.
3. On the **Enter Your Product Key** page, enter the evaluation product key [RTNGH-MQRV6-M3BWQ-DB748-VH7DM], and then click **Continue**.

NOTE

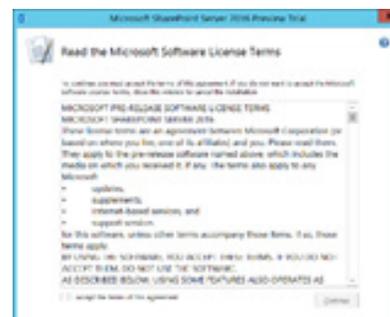
The evaluation product key is valid for 180 days.

4. On the **Read the Microsoft Software License Terms** page, review the terms, select the **I accept the terms of this agreement** check box, and then click **Continue**.
5. On the **Server Type** tab, click **Complete**.
6. When Setup finishes, a dialog box prompts you to complete the configuration of your server. Ensure that the **Run the SharePoint Products Configuration Wizard now** check box is selected.
7. Click **Close** to start the configuration wizard.

3.



4.



5-6.



SharePoint Products and Configuration Wizard

To complete the configuration of the SharePoint Server 2016, run the SharePoint Products and Technologies Configuration Wizard.

1. Verify that the user account that is performing this procedure is the Setup user account. For information about the Setup user account, see [Initial deployment administrative and service accounts in SharePoint 2013](#).
2. If you have closed the SharePoint Products Configuration Wizard, click **Start**, point to **All Programs**, click **SharePoint 2016 Products**, and then click **SharePoint 2016 Products Configuration Wizard**. If the **User Account Control** dialog box appears, click **Continue**.
3. On the **Welcome to SharePoint Products** page, click **Next**.
4. In the dialog box that notifies you that some services might have to be restarted during configuration, click **Yes**.
5. On the **Connect to a server farm** page, click **Create a new server farm**, and then click **Next**.
6. On the **Specify Configuration Database Settings** page, do the following:
 - a) In the **Database server** box, type the name of the computer that is running SQL Server.
 - b) In the **Database name** box, type a name for your configuration database or use the default database name. The default name is SharePoint_Config.
 - c) In the **Username** box, type the user name of the server farm account. Ensure that you type the user name in the format DOMAIN\user name.
 - d) In the **Password** box, type the user password.

7. Click **Next**.
8. On the **Specify Farm Security Settings** page, type a passphrase, and then click **Next**.

Although a passphrase resembles a password, it is usually longer to improve security. It is used to encrypt credentials of accounts that are registered in SharePoint Server 2016. For example, the SharePoint Server 2016 system account that you provide when you run the SharePoint Products Configuration Wizard.

Ensure that you remember the passphrase because you must use it every time that you add a server to the farm.

- Ensure that the passphrase meets the following criteria:
- Contains at least eight characters
- Contains at least three of the following four character groups:
 - English uppercase characters (from A through Z)
 - English lowercase characters (from a through z)
 - Numerals (from 0 through 9)
 - Nonalphabetic characters (such as !, \$, #, %)

9. On the **Specify Server Role** page, do the following:
 - a) Select **Single Server Farm** from the list of available options. This role is suitable for evaluation environments and installs all service applications, services, and components required for a single-machine farm.

Server roles are a new installation feature of SharePoint Server 2016 that provides a set of optimized roles for provisioning a SharePoint environment.
10. On the **Configure SharePoint Central Administration Web Application** page, do the following:
 - a) Either select the **Specify port number** check box and type the port number that you want the SharePoint Central Administration web application to use, or leave the **Specify port number** check box cleared if you want to use the default port number.
 - b) Click either **NTLM** or **Negotiate (Kerberos)**.
11. Click **Next**.
12. After you complete the **SharePoint Products Configuration Wizard** page, review your configuration settings to verify that they are correct, and then click **Next**.
13. On the **Configuration Successful** page, click **Finish**. When the wizard closes, setup opens the web browser and connects to Central Administration.

SharePoint Products and Configuration Wizard

14. If the SharePoint Products Configuration Wizard fails, check the PSCDiagnostics log files, which are located on the drive on which SharePoint Server 2016 is installed, in the %COMMONPROGRAMFILES%\Microsoft Shared\Web Server Extensions\16\LOGS folder.

If you are prompted for your user name and password, you might have to add the SharePoint Central Administration website to the list of trusted sites and configure user authentication settings in Internet Explorer. You might also want to disable the Internet Explorer Enhanced Security settings. If you see a proxy server error message, you might have to configure proxy server settings so that local addresses bypass the proxy server. Instructions for configuring proxy server settings are provided in the following section. For more information about how to configure browser and proxy settings, see [Configure browser settings](#).



Farm Configuration Wizard

You have now completed setup and the initial configuration of SharePoint Server 2016. You have created the SharePoint Central Administration website. You can now create your farm and sites, and you can select services by using the Farm Configuration Wizard.

1. Verify that the user account that is performing this procedure is the Setup user account. For information about the Setup user account, see [Initial deployment administrative and service accounts in SharePoint 2013](#).
2. On the SharePoint Central Administration home page, on the **Quick Launch**, click **Configuration Wizards**, and then click **Launch the Farm Configuration Wizard**.
3. On the **Help Make SharePoint Better** page, click one of the following options, and then click **OK**:
 - **Yes, I am willing to participate (Recommended.)**
 - **No, I don't want to participate.**
4. On the **Configure your SharePoint farm** page, next to **Yes, walk me through the configuration of my farm using this wizard**, click **Start the Wizard**.
5. On the **Configure your SharePoint farm** page, in the **Service Account** section, click the service account option that you want to use to configure your services.
6. In the **Services** section, review the services that you want to use in the farm, and then click **Next**.
7. On the **Create Site Collection** page, do the following:
 - a) In the **Title and Description** section, in the **Title** box, type the name of your new site.
 - b) Optional: In the **Description** box, type a description of what the site contains.
- c) In the **Web Site Address** section, select a URL path for the site.
- d) In the **Template Selection** section, in the **Select a template** list, select the template that you want to use for the top-level site in the site collection.
8. Click **OK**.
9. On the **Configure your SharePoint farm** page, review the summary of the farm configuration, and then click **Finish**.

Upgrade

SharePoint Server 2016 supports upgrade from SharePoint Server 2013. When you upgrade from SharePoint 2013 Products to SharePoint Server 2016, you must use a database attach upgrade, which means that you upgrade only the content for your environment and not the configuration settings. After you have configured a new SharePoint Server 2016 environment, you can copy the content and service application databases from the SharePoint 2013 Products environment to the SharePoint Server 2016 environment. You use a backup and restore process to copy the database, and you can also choose to set the databases to read-only in the SharePoint 2013 Products environment so that users can continue to access their information, but not change it. This article contains the steps that you take to copy the databases.

NOTE

Site collections provisioned in backward compatible SharePoint 2010 (14) mode must be upgraded to 2013 prior to upgrading to SharePoint Server 2016. For additional information on upgrading site collections to SharePoint 2013, see also <https://technet.microsoft.com/en-us/library/jj219650.aspx>.





Thank you

