

# [Deployment for Office SharePoint Server 2007](http://technet2.microsoft.com/Office/en-us/library/601874ea-86c9-4611-bdaf-abe17bbb68161033.mspx)

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### Abstract

This book is designed to lead a team through the steps of deploying a new solution based on Microsoft Office SharePoint Server 2007. The audiences for this guide are business application specialists, line-of-business specialists, IT generalists, program managers, and infrastructure specialists who are deploying a solution based on Office SharePoint Server 2007.



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# Deployment worksheets for Office SharePoint Server 2007

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Deployment worksheets by task](#DSDOC_section16ca1dd92_32a8_4de3_a6f2_17)

 [Deployment worksheets by title](#DSDOC_section26ca1dd92_32a8_4de3_a6f2_17)

This article provides links to worksheets that you can use to record information that you gather and decisions that you make as you perform your deployment of Microsoft Office SharePoint Server 2007. Use these worksheets in conjunction with — not as a substitute for — Deployment for Office SharePoint Server 2007.

## Deployment worksheets by task

|  |  |  |
| --- | --- | --- |
| For this task | Use this worksheet | To do this |
| [Chapter overview: Create and configure Shared Services Providers](#DSDOC_80a650f6_c4e9_48f2_86ff_96121fcdae) |  |  |
| Deploy and configure SharePoint sites |  |  |
| Upgrading to Office SharePoint Server 2007 | [Custom templates and mapping files worksheet](http://go.microsoft.com/fwlink/?LinkId=73751&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73751&clcid=0x409) | Record which custom site definitions and page templates need mapping files, and record file names and paths for mapping files. |
|  | [Estimate database space and time for upgrade worksheet](http://go.microsoft.com/fwlink/?LinkId=73752&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73752&clcid=0x409) | Record current database sizes and estimate how much space you need for upgrade. |
|  | [Supported topologies for upgrade worksheet](http://go.microsoft.com/fwlink/?LinkId=73753&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73753&clcid=0x409) | Record current topologies and any changes needed before upgrade. |
|  | [Upgrade server requirements worksheet](http://go.microsoft.com/fwlink/?LinkId=73754&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73754&clcid=0x409) | List servers in the farm, hardware capacities, and identify requirements before upgrading. |

## Deployment worksheets by title

|  |  |  |
| --- | --- | --- |
| Use this worksheet | For this task | To do this |
| [Custom templates and mapping files worksheet](http://go.microsoft.com/fwlink/?LinkId=73751&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73751&clcid=0x409) | Upgrading to Office SharePoint Server 2007 | Record which custom site definitions and page templates need mapping files, and record file names and paths for mapping files. |
| [Estimate database space and time for upgrade worksheet](http://go.microsoft.com/fwlink/?LinkId=73752&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73752&clcid=0x409) | Upgrading to Office SharePoint Server 2007 | Record current database sizes and estimate how much space you need for upgrade. |
| [Supported topologies for upgrade worksheet](http://go.microsoft.com/fwlink/?LinkId=73753&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73753&clcid=0x409) | Upgrading to Office SharePoint Server 2007 | Record current topologies and any changes needed before upgrade. |
| [Upgrade server requirements worksheet](http://go.microsoft.com/fwlink/?LinkId=73754&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73754&clcid=0x409) | Upgrading to Office SharePoint Server 2007 | List servers in the farm, hardware capacities, and identify requirements before upgrading. |

# Install Office SharePoint Server 2007 on a stand-alone computer

In this article:

 [Hardware and software requirements](#DSDOC_section1bd99c3a9_0333_4c1c_9793_a1)

 [Configure the server as a Web server](#DSDOC_section2bd99c3a9_0333_4c1c_9793_a1)

 [Install and configure Office SharePoint Server 2007 with Microsoft SQL Server 2005 Express Edition](#DSDOC_section3bd99c3a9_0333_4c1c_9793_a1)

 [Post-installation steps](#DSDOC_section4bd99c3a9_0333_4c1c_9793_a1)

 Important   This article discusses how to install Microsoft Office SharePoint Server 2007 on a single computer as a stand-alone installation. It does not cover installing Office SharePoint Server 2007 in a farm environment, upgrading from previous releases of Office SharePoint Server 2007, or how to upgrade from SharePoint Portal Server 2003. For information about how to do this, see the following articles:

[Simple farm deployment (Office SharePoint Server)](#DSDOC_356d3a0b_fc26_455c_9afb_6d2ffdceef)

Upgrading to Office SharePoint Server 2007

You can quickly publish a SharePoint site by deploying Office SharePoint Server 2007 on a single server computer. A stand-alone configuration is useful if you want to evaluate Office SharePoint Server 2007 features and capabilities, such as collaboration, document management, and search. A stand-alone configuration is also useful if you are deploying a small number of Web sites and you want to minimize administrative overhead. When you deploy Office SharePoint Server 2007 on a single server using the default settings, the Setup program automatically installs Microsoft SQL Server 2005 Express Edition and uses it to create the configuration database and content database for your SharePoint sites. In addition, the Setup program creates a Shared Services Provider (SSP), installs the SharePoint Central Administration Web site and creates your first SharePoint site collection and site.

note_ddNote:

There is no direct upgrade from a stand-alone installation to a farm installation.

## Hardware and software requirements

Before you install and configure Office SharePoint Server 2007, be sure that your servers have the required hardware and software. For more information about these requirements, see Determine hardware and software requirements (Office SharePoint Server).

## Configure the server as a Web server

Before you install and configure Office SharePoint Server 2007, you must install and configure the required software. This includes installing and configuring Internet Information Services (IIS) so your computer acts as a Web server, installing the Microsoft .NET Framework version 3.0, and enabling ASP.NET 2.0.

### Install and configure IIS

Internet Information Services (IIS) is not installed or enabled by default in the Microsoft Windows Server 2003 operating system. To make your server a Web server, you must install and enable IIS, and you must ensure that IIS is running in IIS 6.0 worker process isolation mode.

procedure_ddInstall and configure IIS

|  |
| --- |
| 1. Click Start, point to All Programs, point to Administrative Tools, and then click Configure Your Server Wizard.  2. On the Welcome to the Configure Your Server Wizard page, click Next.  3. On the Preliminary Steps page, click Next.  4. On the Server Role page, click Application server (IIS, ASP.NET), and then click Next.  5. On the Application Server Options page, click Next.  6. On the Summary of Selections page, click Next.  7. Click Finish.  8. Click Start, point to All Programs, point to Administrative Tools, and then click Internet Information Services (IIS) Manager.  9. In the IIS Manager tree, click the plus sign (+) next to the server name, right-click the Web Sites folder, and then click Properties.  10. In the Web Sites Properties dialog box, click the Service tab.  11. In the Isolation mode section, clear the Run WWW service in IIS 5.0 isolation mode check box, and then click OK.  note_ddNote:  The Run WWW in IIS 5.0 isolation mode check box is only selected if you have upgraded to IIS 6.0 on Windows Server 2003 from IIS 5.0 on Microsoft Windows 2000. New installations of IIS 6.0 use IIS 6.0 worker process isolation mode by default. |

### Install the Microsoft .NET Framework version 3.0

Go to the [Microsoft Download Center Web site](http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409), and on the Microsoft .NET Framework 3.0 Redistributable Package page, follow the instructions for downloading and installing the .NET Framework version 3.0. There are separate downloads for x86-based computers and x64-based computers. Be sure to download and install the appropriate version for your computer. The .NET Framework version 3.0 download contains the Windows Workflow Foundation technology, which is required by workflow features.

### Enable ASP.NET 2.0

ASP.NET 2.0 is required for proper functioning of Web content, the Central Administration Web Site, and many other features and functions of Office SharePoint Server 2007.

procedure_ddEnable ASP.NET 2.0

|  |
| --- |
| 1. Click Start, point to All Programs, point to Administrative Tools, and then click Internet Information Services (IIS) Manager.  2. In the Internet Information Services tree, click the plus sign (+) next to the server name, and then click the Web Service Extensions folder.  3. In the details pane, right-click ASP.NET v2.0.50727, and then click Allow. |

## Install and configure Office SharePoint Server 2007 with Microsoft SQL Server 2005 Express Edition

When you install Office SharePoint Server 2007 on a single server, run the Setup program using the Basic option. This option uses the Setup program's default parameters to install Office SharePoint Server 2007 and SQL Server 2005 Express Edition.

note_ddNote

 If you uninstall Office SharePoint Server 2007 and then later install Office SharePoint Server 2007 on the same computer, the Setup program could fail when creating the configuration database causing the entire installation process to fail. You can prevent this failure by either deleting all the existing Office SharePoint Server 2007 databases on the computer or by creating a new configuration database. You can create a new configuration database by running the following command:

 psconfig -cmd configdb -create -database <uniquename>

procedure_ddRun Setup

|  |
| --- |
| 1. From the product disc, run Setup.exe, or from the product download, run Officeserver.exe.  2. On the Enter your Product Key page, enter your product key, and then click Continue.  note_ddNote:  Setup automatically verifies the product key, places a green check mark next to the text box, and enables the Continue button after it validates the key. If the key is not valid, Setup places a red circle next to the text box and displays a message that the key is incorrect.  1. 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.  2. On the Choose the installation you want page, click Basic to install to the default location. To install to a different location, click Advanced, and then on the File Location tab, specify the location you want to install to and finish the installation.  3. When Setup finishes, a dialog box prompts you to complete the configuration of your server. Be sure that the Run the SharePoint Products and Technologies Configuration Wizard now check box is selected.  4. Click Close to start the configuration wizard. |

procedure_ddRun the SharePoint Products and Technologies Configuration Wizard

|  |
| --- |
| 1. On the Welcome to SharePoint Products and Technologies page, click Next.  2. In the dialog box that notifies you that some services might need to be restarted or reset during configuration, click Yes.  3. On the Configuration Successful page, click Finish. Your new SharePoint site opens.  note_ddNote:  If you are prompted for your user name and password, you might need to add the SharePoint site to the list of trusted sites and configure user authentication settings in Internet Explorer. Instructions for configuring these settings are provided in the following procedure.  note_ddNote:  If you see a proxy server error message, you might need to configure your proxy server settings so that local addresses bypass the proxy server. Instructions for configuring proxy server settings are provided later in this section. |

procedure_ddAdd the SharePoint site to the list of trusted sites

|  |
| --- |
| 1. In Internet Explorer, on the Tools menu, click Internet Options.  2. On the Security tab, in the Select a Web content zone to specify its security settings box, click Trusted Sites, and then click Sites.  3. Clear the Require server verification (https:) for all sites in this zone check box.  4. In the Add this Web site to the zone box, type the URL to your site, and then click Add.  5. Click Close to close the Trusted Sites dialog box.  6. Click OK to close the Internet Options dialog box. |

If you are using a proxy server in your organization, use the following steps to configure Internet Explorer to bypass the proxy server for local addresses.

procedure_ddConfigure proxy server settings to bypass the proxy server for local addresses

|  |
| --- |
| 1. In Internet Explorer, on the Tools menu, click Internet Options.  2. On the Connections tab, in the Local Area Network (LAN) settings area, click LAN Settings.  3. In the Automatic configuration section, clear the Automatically detect settings check box.  4. In the Proxy Server section, select the Use a proxy server for your LAN check box.  5. Type the address of the proxy server in the Address box.  6. Type the port number of the proxy server in the Port box.  7. Select the Bypass proxy server for local addresses check box.  8. Click OK to close the Local Area Network (LAN) Settings dialog box.  9. Click OK to close the Internet Options dialog box. |

## Post-installation steps

After Setup finishes, your browser window opens to the home page of your new SharePoint site. Although you can start adding content to the site or you can start customizing the site, we recommend that you perform the following administrative tasks by using the SharePoint Central Administration Web site.

 Configure incoming e-mail settings   You can configure incoming e-mail settings so that SharePoint sites accept and archive incoming e-mail. You can also configure incoming e-mail settings so that SharePoint sites can archive e-mail discussions as they happen, save e-mailed documents, and show e-mailed meetings on site calendars. In addition, you can configure the SharePoint Directory Management Service to provide support for e-mail distribution list creation and management. For more information, see [Configure incoming e-mail settings](#DSDOC_88317397_e0cb_47c7_9093_7872bc6852) .

 Configure outgoing e-mail settings   You can configure outgoing e-mail settings so that your Simple Mail Transfer Protocol (SMTP) server sends e-mail alerts to site users and notifications to site administrators. You can configure both the "From" e-mail address and the "Reply" e-mail address that appear in outgoing alerts. For more information, see [Configure outgoing e-mail settings](#DSDOC_f3ccc8bd_922e_49f6_9929_b5b8a6982d) .

 Create SharePoint sites   When Setup finishes, you have a single Web application that contains a single SharePoint site collection that hosts a SharePoint site. You can create more SharePoint sites collections, sites, and Web applications if your site design requires multiple sites or multiple Web applications. For more information, see Deploy and configure SharePoint sites (Office SharePoint Server).

 Configure Workflow settings   Specify whether users can assemble new workflows and if participants without site access should be sent documents in email attachments so they can participate in document workflows. For more information, see [Configure workflow settings](#DSDOC_c06095b0_7dcd_4d72_b71f_ab108e7dc3).

 Configure diagnostic logging settings   You can configure several diagnostic logging settings to help with troubleshooting. This includes enabling and configuring trace logs, event messages, user-mode error messages, and Customer Experience Improvement Program events. For more information, see [Configure diagnostic logging settings](#DSDOC_633dd35c_c6e7_4d12_be91_a237c16b27) .

 Configure antivirus protection settings   You can configure several antivirus settings if you have an antivirus program that is designed for Office SharePoint Server 2007. Antivirus settings enable you to control whether documents are scanned on upload or download and whether users can download infected documents. You can also specify how long you want the antivirus program to run before it times out, and you can specify how many execution threads the antivirus program can use on the server. For more information, see [Configure antivirus protection](#DSDOC_1289e6e2_03e0_4f10_8921_e516187891) .

 Configure search   You can configure several search and index settings to customize how Office SharePoint Server 2007 crawls your site content or external content. For more information, see [Configure the Office SharePoint Server Search service (Office SharePoint Server)](#DSDOC_61b7ae94_dff5_4b01_88b5_0a016a9c36).

 Configure Excell Services   Before you can use Excell Services, you must start the service and add at least one trusted location. For more information about doing this, see Configure Excel Services .

procedure_ddPerform administrator tasks by using the Central Administration site

|  |
| --- |
| 1. Click Start, point to All Programs, point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.  2. On the Central Administration home page, under Administrator Tasks, click the task you want to perform.  3. On the Administrator Tasks page, next to Action, click the task. |

# I Deploy Office SharePoint Server 2007 in a server farm environment

## I Deploy Office SharePoint Server 2007 in a server farm environment



# Simple farm deployment (Office SharePoint Server)

## Deployment overview

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

important_ddImportant:

 This article discusses how to do a clean installation of Microsoft Office SharePoint Server 2007 in a server farm environment. It does not cover upgrading from previous releases of Office SharePoint Server 2007 or how to upgrade from Microsoft SharePoint Portal Server 2003. For more information about upgrading from, see Upgrading to Office SharePoint Server 2007.

 This article does not cover installing Office SharePoint Server 2007 on a single computer as a stand-alone installation. For more information, see [Install Office SharePoint Server 2007 on a stand-alone computer](#DSDOC_bd99c3a9_0333_4c1c_9793_a145769e48).

You can deploy Office SharePoint Server 2007 in a server farm environment if you are hosting a large number of sites, if you want the best possible performance, or if you want the scalability of a multi-tier topology. A server farm consists of one or more servers dedicated to running the Office SharePoint Server 2007 application.

note_ddNote:

There is no direct upgrade from a stand-alone installation to a farm installation.

Because a server farm deployment of Office SharePoint Server 2007 is more complex than a stand-alone deployment, we recommend that you plan your deployment. Planning your deployment can help you to gather the information you need and to make important decisions before beginning to deploy. For information about planning, see Planning and architecture for Office SharePoint Server 2007. For information about deployment planning, see Plan for deployment rollout.

### Suggested topologies

Server farm environments can encompass a wide range of topologies and can include as few as two servers or can include many servers.

A small server farm typically consists of a database server running either Microsoft SQL Server 2005 or Microsoft SQL Server 2000 with SP3a or later, and one or more servers running Internet Information Services (IIS) and Office SharePoint Server 2007. In this configuration, the front-end servers are configured as Web servers and application servers. The Web server role provides Web content to clients. The application server role provides Office SharePoint Server 2007 services such as servicing search queries, and crawling and indexing content.

A medium server farm typically consists of a database server, an application server running Office SharePoint Server 2007, and one or two front-end Web servers running Office SharePoint Server 2007 and IIS. In this configuration, the application server provides indexing services and Excel Calculation Services, and the front-end Web servers service search queries and provide Web content.

A large server farm typically consists of two or more clustered database servers, several load-balanced front-end Web servers running IIS and Office SharePoint Server 2007, and two or more application servers running Office SharePoint Server 2007. In this configuration, each of the application servers provides specific Office SharePoint Server 2007 services such as indexing or Excel Calculation Services, and the front-end servers provide Web content.

note_ddNote:

All of the Web servers in your server farm must have the same SharePoint Products and Technologies installed. For example, if all of the servers in your server farm are running Office SharePoint Server 2007, you cannot add to your farm a server that is running only Microsoft Office Project Server 2007. To run Office Project Server 2007 and Office SharePoint Server 2007 in your server farm, you must install Office Project Server 2007 and Office SharePoint Server 2007 on each of your Web servers. To enhance the security of your farm and reduce the surface area that is exposed to a potential attack, you can turn off services on particular servers after you install SharePoint Products and Technologies.

### Before you begin deployment

This section provides information about actions that you must perform before you begin deployment.

important_ddImportant:

 The account that you select for installing Office SharePoint Server 2007 needs to be a member of the Administrators group on every server on which you install Office SharePoint Server 2007, and this account is automatically assigned as the SSP administrator. Therefore, the SSP administrator is also the local administrator on all of the farm servers, by default. You can, however, remove this account from the Administrators group on the servers after installation.

 For information about assigning users to be SSP administrators, see "Shared Services Providers" in Plan for security roles [Office SharePoint Server].

 To deploy Office SharePoint Server 2007 in a server farm environment, you must provide credentials for several different accounts. For information about these accounts, see Plan for administrative and service accounts in the Planning and architecture for Office SharePoint Server 2007 guide.

 You must install Office SharePoint Server 2007 on the same drive on all load-balanced front-end Web server computers.

 You must install Office SharePoint Server 2007 on a clean installation of the Microsoft Windows Server 2003 operating system with Service Pack 1 (SP1) or later. If you uninstall a previous version of Office SharePoint Server 2007, and then install Office SharePoint Server 2007, Setup might fail to create the configuration database and the installation will fail.

note_ddNote:

We recommend that you read the Known Issues/Readme documentation before you install Office SharePoint Server 2007 on a domain controller. Installing Office SharePoint Server 2007 on a domain controller requires additional configuration steps that are not discussed in this document.

 You must install the same language packs on all servers. For more information about installing language packs, see [Deploy language packs (Office SharePoint Server)](#DSDOC_26c07867_0150_463d_b21a_a6d42aecf0) .

 All the instances of Office SharePoint Server 2007 in the farm must be in the same language. For example, you cannot have both an English version of Office SharePoint Server 2007 and a Japanese version of Office SharePoint Server 2007 in the same farm.

 You must use the Complete installation option on all computers you want to be index servers, query servers, or servers that run Excel Calculation Services.

 If you place a query server beyond a firewall from its index server, you must open the NetBIOS ports (TCP/User Datagram Protocol (UDP) ports 137,138, and 139) on all firewalls that separate these servers. If your environment does not use NetBIOS, you must use direct-hosted server message block (SMB). This requires that you open the TCP/UDP 445 port.

 If you want to have more than one index server in a farm, you must use a different Shared Services Provider (SSP) for each index server.

### Overview of the deployment process

The deployment process consists of three phases: deploying and configuring the server infrastructure, creating and configuring one or more Shared Services Providers (SSPs), and deploying and configuring SharePoint sites.

#### Phase 1: Deploy and configure the server infrastructure

Deploying and configuring the server infrastructure consists of the following steps:

 Preparing the database server.

 Preinstalling databases [Optional].

 Verifying that the servers meet hardware and software requirements.

 Running Setup on each server you want to be in the farm, including running the SharePoint Products and Technologies Configuration Wizard.

 If you want to search over the Help content for Office SharePoint Server 2007, starting the Windows SharePoint Services Search service.

#### Phase 2: Create and configure a Shared Services Provider

Creating and configuring a Shared Services Provider consists of the following steps:

 Creating a Web application to host the SSP.

 Creating the SSP.

 Configuring the Web application and the SSP.

 Configuring services on servers.

#### Phase 3: Create site collections and SharePoint sites

Creating SharePoint site collections and SharePoint sites consists of the following steps:

 Creating a Web Application to host the site collections and SharePoint sites.

 Creating site collections.

 Creating SharePoint sites.

## Deploy and configure the server infrastructure

### Security account requirements

To deploy Office SharePoint Server 2007 in a server farm environment, you must provide credentials for several different accounts. For information about these accounts, see Plan for administrative and service accounts in the Planning and Architecture for Office SharePoint Server 2007 guide.

### Prepare the database server

The database server computer must be running Microsoft SQL Server 2005 or Microsoft SQL Server 2000 with Service Pack 3a (SP3a) or later.

The Office SharePoint Server 2007 Setup program automatically creates the necessary databases when you install and configure Office SharePoint Server 2007. Optionally, you can preinstall the required databases if your IT environment or policies require this.

For more information about prerequisites, see Determine hardware and software requirements [Office SharePoint Server].

If you are using SQL Server 2005, you must also change the surface area settings.

procedure_ddConfigure surface area settings in SQL Server 2005

|  |
| --- |
| 1. Click Start, point to All Programs, point to Microsoft SQL Server 2005, point to Configuration Tools, and then click SQL Server Surface Area Configuration.  2. In the SQL Server 2005 Surface Area Configuration dialog box, click Surface Area Configuration for Services and Connections.  3. In the tree view, expand the node for your instance of SQL Server, expand the Database Engine node, and then click Remote Connections.  4. Select Local and Remote Connections, select Using both TCP/IP and named pipes, and then click OK. |

#### SQL Server and database collation

The SQL Server collation must be configured for case-insensitive. The SQL Server database collation must be configured for case-insensitive, accent-sensitive, Kana-sensitive, and width-sensitive. This is used to ensure file name uniqueness consistent with the Windows operating system. For more information about collations, see "Selecting a SQL Collation" or "Collation Settings in Setup" in SQL Server Books Online.

#### Required accounts

The following table describes the accounts that are used to configure Microsoft SQL Server and to install Office SharePoint Server 2007. For more information about the required accounts, including specific privileges required for these accounts, see Plan for administrative and service accounts [Office SharePoint Server] .

|  |  |
| --- | --- |
| Account | Purpose |
| SQL Server service account | SQL Server prompts for this account during SQL Server Setup. This account is used as the service account for the following SQL Server services:   MSSQLSERVER   SQLSERVERAGENT  If you are not using the default instance, these services will be shown as:   MSSQL$InstanceName   SQLAgent$InstanceName |
| Setup user account | The user account that is used to run Setup on each server |
| Server farm account | This account is also referred to as:   Database access account  This account is:   The application pool account for the Central Administration site   The process account for the Windows SharePoint Services Timer (SPAdmin) service |

### Preinstall databases [Optional]

In many IT environments, database creation and management is handled by the Database Administrator (DBA). Security and other policies might require that the DBA create the databases required by Office SharePoint Server 2007. This topic provides details about how the DBA can create these databases before beginning the Office SharePoint Server 2007 installation or creation of a Shared Services Provider (SSP). For more information about preinstalling databases, including detailed procedures, see [Pre-install databases (Office SharePoint Server)](#DSDOC_798aa915_7025_4adc_a210_4f6ff14c43) .

If you are not preinstalling databases, you can proceed to the next section, "Verify that servers meet hardware and software requirements".

### Verify that servers meet hardware and software requirements

Before you install and configure Office SharePoint Server 2007, be sure that your servers have the recommended hardware and software. To deploy a server farm, you need at least one server computer acting as a Web server and an application server, and one server computer acting as a database server.

For more information about these requirements, see Determine hardware and software requirements [Office SharePoint Server].

#### Install the Microsoft .NET Framework version 3.0

Go to the [Microsoft Download Center Web site](http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409), and on the Microsoft .NET Framework 3.0 Redistributable Package page, follow the instructions for downloading and installing the Microsoft .NET Framework version 3.0. There are separate downloads for x86-based computers and x64-based computers. Be sure to download and install the appropriate version for your computer. The Microsoft .NET Framework version 3.0 download contains the Windows Workflow Foundation technology, which is required by workflow features.

#### Enable ASP.NET 2.0

You must enable ASP.NET 2.0 on all Office SharePoint Server 2007 servers.

procedure_ddEnable ASP.NET 2.0

|  |
| --- |
| 1. Click Start, point to All Programs, point to Administrative Tools, and then click Internet Information Services (IIS) Manager.  2. In the IIS Manager tree, click the plus sign (+) next to the server name, and then click the Web Service Extensions folder.  3. In the details pane, click ASP.NET v2.0.50727, and then click Allow. |

### Run Setup and build the farm

Run Setup and then the SharePoint Products and Technologies Configuration Wizard on all your farm servers. You should do this on all farm servers before going on to create a Shared Services Provider (SSP).

note_ddNote:

We recommend that you run Setup on all the servers that will be in the farm before configuring the farm.

You can add servers to the farm at this point, or after you have created and configured an SSP. You can add servers after you have created and configured an SSP to add redundancy, such as additional load-balanced Web servers or additional query servers. You should run Setup and the configuration wizard on all your application servers before you create and configure the SSP.

#### Recommended order of configuration

We recommend that you configure Office SharePoint Server 2007 in the order listed below. This order makes configuration easier and ensures that services and applications are in place before they are required by server types.

Recommended Order of installation

1. We recommend that the Central Administration Web application be installed on an application server, such as a query server or a server that runs Excel Calculation Services, but not an index server (for performance reasons). If your farm will have an application server, install Office SharePoint Server 2007 on that server first. This also installs the Central Administration site.

2. All your front-end Web servers.

3. The index server (if using a separate server for search queries and indexing).

4. The query servers, if separate from the index server.

note_ddNote:

To configure more than one query server in your farm, you cannot configure your index server as a query server.

5. Other application servers (optional).

Because the SSP configuration requires an index server, you must start the Office SharePoint Server Search service on the computer that you want to be the index server, and configure it as an index server before you can create an SSP. Because of this, you must deploy and configure an index server before other servers. You can choose any server to be the first server on which you install Office SharePoint Server 2007. However, the Central Administration Web site is automatically installed on the first server on which you install Office SharePoint Server 2007.

You can configure different features on different servers. The following table shows which installation type you should use for each feature set.

|  |  |
| --- | --- |
| Server type | Installation type |
| Central Administration Web application | Complete |
| Application server (such as Excel Calculation Services) | Complete |
| Search index server | Complete |
| Search query server | Complete |
| Web server | Web Front End (subsequent servers must join an existing farm) or Complete  note_ddNote:  If you choose the Web Front End installation option you will not be able to run additional services, such as search, on the server. |

When you install Office SharePoint Server 2007 on the first server, you establish the farm. Any servers that you add you will join to this farm.

Setting up the first server involves two steps: installing the Office SharePoint Server 2007 components on the server, and configuring the farm. After Setup finishes, you can use the SharePoint Products and Technologies Configuration Wizard to configure Office SharePoint Server 2007. The SharePoint Products and Technologies Configuration Wizard automates several configuration tasks, including: installing and configuring the configuration database, installing Office SharePoint Server 2007 services, and creating the Central Administration Web site.

#### Add servers to the farm

We recommend that you install and configure Office SharePoint Server 2007 on all of the farm servers before you configure Office SharePoint Server 2007 services and create sites.

Regardless of how many Web servers you have in your server farm, you must have SQL Server running on at least one database server before you install Office SharePoint Server 2007 on your Web servers. When you add servers to the farm and run the SharePoint Products and Technologies Configuration Wizard, the wizard does not create additional Central Administration sites on the servers that you add, nor does it create any databases on your database server.

### Run Setup on the first server

important_ddImportant:

If you uninstall Office SharePoint Server 2007 from the first server on which you installed it, your farm might experience problems. It is not recommended that you install Office SharePoint Server 2007 on an index server first.

note_ddNote:

Setup installs the Central Administration Web site on the first server on which you run Setup. Therefore, we recommend that the first server on which you install Office SharePoint Server 2007 is a server from which you want to run the Central Administration Web site.

procedure_ddRun Setup on the first server

|  |
| --- |
| 1. From the product disc, run Setup.exe, or from the product download, run Officeserver.exe, on one of your Web server computers.  2. On the Enter your Product Key page, enter your product key, and then click Continue.  note_ddNote:  Setup automatically verifies the product key, places a green check mark next to the text box, and enables the Continue button after it validates the key. If the key is not valid, Setup displays a red circle next to the text box and prompts you that the key is incorrect.  1. 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.  2. On the Choose the installation you want page, click Advanced. The Basic option is for stand-alone installations.  3. On the Server Type tab, select Complete.  4. Optionally, to install Office SharePoint Server 2007 at a custom location, select the File Location tab, and then type the location or Browse to the location.  5. Optionally, to participate in the Customer Experience Improvement Program, select the Feedback tab and select the option you want. To learn more about the program, click the link. You must have an Internet connection to view the program information.  6. When you have chosen the correct options, click Install Now.  7. When Setup finishes, a dialog box appears that prompts you to complete the configuration of your server. Be sure that the Run the SharePoint Products and Technologies Configuration Wizard now check box is selected.  8. Click Close to start the configuration wizard. Instructions for completing the wizard are provided in the next set of steps. |

### Run the SharePoint Products and Technologies Configuration Wizard

After Setup finishes, you can use the SharePoint Products and Technologies Configuration Wizard to configure Office SharePoint Server 2007. The configuration wizard automates several configuration tasks, including: installing and configuring the configuration database, installing Office SharePoint Server 2007 services, and creating the Central Administration Web site. Use the following instructions to run the SharePoint Products and Technologies Configuration Wizard.

procedure_ddRun the SharePoint Products and Technologies Configuration Wizard

|  |
| --- |
| 1. On the Welcome to SharePoint Products and Technologies page, click Next.  2. Click Yes in the dialog box that notifies you that some services might need to be restarted during configuration.  3. On the Connect to a server farm page, click No, I want to create a new server farm, and then click Next.  4. In the Specify Configuration Database Settings dialog box, in the Database server box, type the name of the computer that is running SQL Server.  5. Type a name for your configuration database in the Database name box, or use the default database name. The default name is SharePoint\_Config.  6. In the User name box, type the user name of the Server farm account. (Be sure to type the user name in the format DOMAIN\username).  important_ddImportant:  The server farm account is used to access your SharePoint configuration database. It also acts as the application pool identity for the SharePoint Central Administration application pool and it is the account under which the Windows SharePoint Services Timer service runs. The SharePoint Products and Technologies Configuration Wizard adds this account to the SQL Server Logins, the SQL Server Database Creator server role, and the SQL Server Security Administrators server role. The user account that you specify as the service account must be a domain user account, but it does not need to be a member of any specific security group on your Web servers or your back-end database servers. We recommend that you follow the principle of least privilege and specify a user account that is not a member of the Administrators group on your Web servers or your back-end servers.  7. In the Password box, type the user's password, and then click Next.  8. On the Configure SharePoint Central Administration Web Application page, select the Specify port number check box and type a port number if you want the SharePoint Central Administration Web application to use a specific port, or leave the Specify port number check box cleared if you do not care which port number the SharePoint Central Administration Web application uses.  9. In the Configure SharePoint Central Administration Web Application dialog box, do one of the following:   If you want to use NTLM authentication (the default), click Next.   If you want to use Kerberos authentication, click Negotiate (Kerberos), and then click Next.  note_ddNote:  In most cases, you should use the default setting (NTLM). Use Negotiate (Kerberos) only if Kerberos authentication is supported in your environment. Using the Negotiate (Kerberos) option requires you to configure a Service Principal Name (SPN) for the domain user account. To do this, you must be a member of the Domain Admins group. For more information, see [How to configure a Windows SharePoint Services virtual server to use Kerberos authentication and how to switch from Kerberos authentication back to NTLM authentication](http://go.microsoft.com/fwlink/?LinkID=76570&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=76570&clcid=0x409).  10. On the Completing the SharePoint Products and Technologies Configuration Wizard page, click Next.  11. On the Configuration Successful page, click Finish.  The SharePoint Central Administration Web site home page opens.  note_ddNote  If you are prompted for your user name and password, you might need to add the SharePoint Central Administration site to the list of trusted sites and configure user authentication settings in Internet Explorer. Instructions for configuring these settings are provided in the next set of steps.  If a proxy server error message appears, you might need to configure your proxy server settings so that local addresses bypass the proxy server. Instructions for configuring this setting are provided later in this section. |

### Add the SharePoint Central Administration Web site to the list of trusted sites

procedure_ddAdd the SharePoint Central Administration Web site to the list of trusted sites

|  |
| --- |
| 1. In Internet Explorer, on the Tools menu, click Internet Options.  2. On the Security tab, in the Select a Web content zone to specify its security settings box, click Trusted sites, and then click Sites.  3. Clear the Require server verification (https:) for all sites in this zone check box.  4. In the Add this Web site to the zone box, type the URL for the SharePoint Central Administration Web site, and then click Add.  5. Click Close to close the Trusted sites dialog box.  6. Click OK to close the Internet Options dialog box. |

### Configure proxy server settings to bypass the proxy server for local addresses

procedure_ddConfigure proxy server settings to bypass the proxy server for local addresses

|  |
| --- |
| 1. In Internet Explorer, on the Tools menu, click Internet Options.  2. On the Connections tab, in the Local Area Network (LAN) settings area, click LAN Settings.  3. In the Automatic configuration section, clear the Automatically detect settings check box.  4. In the Proxy Server section, select the Use a proxy server for your LAN check box.  5. Type the address of the proxy server in the Address box.  6. Type the port number of the proxy server in the Port box.  7. Select the Bypass proxy server for local addresses check box.  8. Click OK to close the Local Area Network (LAN) Settings dialog box.  9. Click OK to close the Internet Options dialog box. |

### Add servers to the farm

We recommend that you install and configure Office SharePoint Server 2007 on all of your Web servers and the index server before you configure Office SharePoint Server 2007 services and create sites. If you want to build a minimal server farm configuration, and incrementally add Web servers to expand the farm, you can install and configure Office SharePoint Server 2007 on a single Web server and configure the Web server as both a Web server and an application server. Regardless how many Web servers you have in your server farm, you must have SQL Server running on at least one back-end database server before you install Office SharePoint Server 2007 on your Web servers.

important_ddImportant:

If you uninstall Office SharePoint Server 2007 from the first server on which you installed it, your farm might experience problems. It is not recommended that you install Office SharePoint Server 2007 on an index server first.

procedure_ddRun Setup on additional servers — front-end Web servers

|  |
| --- |
| 1. From the product disc, run Setup.exe, or from the product download, run Officeserver.exe, on one of your Web server computers.  2. On the Enter your Product Key page, enter your product key, and then click Continue.  note_ddNote:  Setup automatically verifies the product key, places a green check mark next to the text box, and enables the Continue button after it validates the key. If the key is not valid, Setup displays a red circle next to the text box and prompts you that the key is incorrect.  1. 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.  2. On the Choose the installation you want page, click Advanced.  3. On the Server Type tab, click Web Front End.  4. Optionally, to install Office SharePoint Server 2007 at a custom location, select the File Location tab, and then type the location or Browse to the location.  5. Optionally, to participate in the Customer Experience Improvement Program, select the Feedback tab and select the option you want. To learn more about the program, click the link. You must have an Internet connection to view the program information.  6. When you have chosen the correct options, click Install Now.  7. When Setup finishes, a dialog box appears that prompts you to complete the configuration of your server. Be sure that the Run the SharePoint Products and Technologies Configuration Wizard now check box is selected.  8. Click Close to start the configuration wizard. Instructions for completing the wizard are provided in the following section. |

procedure_ddRun Setup on additional servers — index or query server

|  |
| --- |
| 1. From the product disc, run Setup.exe, or from the product download, run Officeserver.exe, on one of your Web server computers.  2. On the Enter your Product Key page, enter your product key, and then click Continue.  note_ddNote:  Setup automatically verifies the product key, places a green check mark next to the text box, and enables the Continue button after it validates the key. If the key is not valid, Setup displays a red circle next to the text box and prompts you that the key is incorrect.  1. 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.  2. On the Choose the installation you want page, click Advanced.  3. On the Server Type tab, click Complete.  4. Optionally, to install Office SharePoint Server 2007 at a custom location, select the File Location tab, and then type the location or Browse to the location.  5. Optionally, to participate in the Customer Experience Improvement Program, select the Feedback tab and select the option you want. To learn more about the program, click the link. You must have an Internet connection to view the program information.  6. When you have chosen the correct options, click Install Now.  7. When Setup finishes, a dialog box appears that prompts you to complete the configuration of your server. Be sure that the Run the SharePoint Products and Technologies Configuration Wizard now check box is selected.  8. Click Close to start the configuration wizard. Instructions for completing the wizard are provided in the next set of steps. |

### Run the SharePoint Products and Technologies Configuration Wizard on additional servers

After Setup finishes, you can use the SharePoint Products and Technologies Configuration Wizard to configure Office SharePoint Server 2007. The configuration wizard automates several configuration tasks, including installing Office SharePoint Server 2007 services. Use the following instructions to run the SharePoint Products and Technologies Configuration Wizard.

procedure_ddRun the SharePoint Products and Technologies Configuration Wizard on additional servers

|  |
| --- |
| 1. On the Welcome to SharePoint Products and Technologies page, click Next.  2. Click Yes in the dialog box that notifies you that some services might need to be restarted during configuration.  3. On the Connect to a server farm page, click Yes, I want to connect to an existing server farm, and then click Next.  4. In the Specify Configuration Database Settings dialog box, in the Database server box, type the name of the computer that is running SQL Server.  5. Click Retrieve Database Names, and then from the Database name list, select the database name that you created when you configured the first server in your server farm.  6. In the User name box, type the user name of the account used to connect to the computer running SQL Server. (Be sure to type the user name in the format DOMAIN\username.) This must be the same user account you used when configuring the first server.  7. In the Password box, type the user's password, and then click Next.  8. On the Completing the SharePoint Products and Technologies Configuration Wizard page, click Next.  9. On the Configuration Successful page, click Finish. |

### Start the Windows SharePoint Services Help Search service (optional)

You must start the Windows SharePoint Services Search service on every computer that you want to search over Help content. If you do not want users to be able to search over Help content, you do not need to start this service.

procedure_ddStart the Windows SharePoint Services Search service (optional)

|  |
| --- |
| 1. On the SharePoint Central Administration home page, click the Operations tab on the top link bar.  2. On the Operations page, in the Topology and Services section, click Services on server.  3. On the Services on Server page, next to Window SharePoint Services Search, click Start.  4. On the Configure Windows SharePoint Services Search Service Settings page, in the Service Account section, type the user name and password for the user account under which the Windows SharePoint Services Search service account will run.  5. In the Content Access Account section, type the user name and password for the user account that the search service will use to search over content. This account must have read access to all the content you want it to search over. If you do not specify credentials, the same account used for the search service will be used.  6. In the Indexing Schedule section, either accept the default settings, or specify the schedule that you want the search service to use when searching over content.  7. After you have configured all the settings, click Start. |

### Disable the Windows SharePoint Services Administration service on all servers that do not host the Central Administration Web site

You should disable the Windows SharePoint Service Administration service on all servers that do not host the Central Administration Web site, especially index servers. This service is used for the Central Administration site and is not required on other servers. Disabling this service can help avoid URL resolution problems with indexing. On the other hand, you must be sure that this service is enabled on the server that hosts the Central Administration Web site.

procedure_ddDisable the Windows SharePoint Services Administration service on a server

|  |
| --- |
| 1. In Computer Management, expand the Services and Applications node.  2. Click Services.  3. In the results pane, right-click Windows SharePoint Service Administration, and then click Properties.  4. On the General tab, on the Startup type drop-down list, select Disabled.  5. Click Apply.  6. Click Stop to stop the service.  7. Click OK. |

### Disable the Windows SharePoint Services Web Application service on all servers not serving content

You should disable the Windows SharePoint Service Web Application service on all servers that are not serving content, especially index servers. On the other hand, you must be sure that this service is enabled on the servers that are serving content.

procedure_ddDisable the Windows SharePoint Services Web Application service on a server

|  |
| --- |
| 1. On the SharePoint Central Administration home page, click the Operations tab on the top link bar.  2. On the Operations page, in the Topology and Services section, click Services on server.  3. On the Services on Server page, next to Window SharePoint Services Web Application, click Stop. |

## Create and configure a Shared Services Provider

This section covers how to create and configure a single Shared Services Provider (SSP). An SSP is a logical grouping of shared services and their supporting resources. In Office SharePoint Server 2007, the SSP enables sharing services across multiple server farms, Web applications, and site collections. For more information about configuring and using SSPs, see [Chapter overview: Create and configure Shared Services Providers](#DSDOC_80a650f6_c4e9_48f2_86ff_96121fcdae).

You create one or more SSPs in this phase and configure it to meet the needs of your farm. Each server farm can host one or more SSPs, or consume services provided by an SSP on another server farm. Each SSP runs in its own Web application which contains one or more site collections. Other Web applications on a server farm can be associated with any of the SSPs on the farm. Shared services cannot be enabled or disabled separately from other shared services. Web applications on a farm consume all of the services of an SSP, or none of them. For more information about SSPs, see Plan Shared Services Providers.

### Start the Office SharePoint Server Search service

You must start the Office SharePoint Server Search service on at least one computer that was set up by using the Complete option during Setup. This service must be started on the computer that you want to use as your index server and optionally as a query server before you can create an SSP.

procedure_ddStart the Office SharePoint Server Search service on the index server

|  |
| --- |
| 1. On the SharePoint Central Administration home page, click the Operations tab on the top link bar.  2. On the Operations page, in the Topology and Services section, click Services on server.  3. In the Server list, select the server that you want to configure as an index server and optionally a query server.  4. On the Services on Server page, next to Office SharePoint Server Search, click Start.  5. Select the Use this server for indexing content check box. This expands the page and adds the Index Server Default File Location, Indexer Performance, and Web Front End and Crawling sections.  6. If you want to use this server to service search queries, select the Use this server for servicing search queries check box. This expands the page and adds the Query Server Index File Location section. If not, skip to the next step.  7. In the Contact E-mail Address section, type the e-mail address you want external site administrators to use to contact your organization if problems arise when their sites are being crawled by your index server.  8. In the Farm Search Service Account section, specify the User name and Password of the account under which the search service will run. This account must be a member of the Administrators group on the server and be a member of the Farm Administrators group in the Central Administration Web site (the WSS\_ADMIN\_WPG Windows security group).  9. Optionally, you can also configure other settings or accept the default settings.  10. When you have configured all the settings, click Start. |

You can optionally use the following steps to start the Office SharePoint Server Search service on computers that were set up by using the Complete option during Setup to deploy query servers.

important_ddImportant:

If you selected the Use this server for serving search queries option in step 6 of the previous procedure, you cannot deploy additional query servers unless you first remove the query server role from the index server.

procedure_ddStart the Office SharePoint Server Search service on query servers

|  |
| --- |
| 1. On the SharePoint Central Administration home page, click the Operations tab on the top link bar.  2. On the Operations page, in the Topology and Services section, click Services on server.  3. In the Server list, select the server that you want to configure as a query server.  4. On the Services on Server page, next to Office SharePoint Server Search, click Start.  5. Select the Use this server for servicing search queries check box. This expands the page and adds the Query Server Index File Location section.  6. In the Farm Search Service Account section, specify the User name and Password of the account under which the search service will run. This account must be a member of the Administrators group on the server and be a member of the Farm Administrators group in the Central Administration Web site (the WSS\_ADMIN\_WPG Windows security group).  7. In the Query Server Index File Location section, in the Query server index file location box, either type the location on the local drive of the query server on which you want to store the propagated index or accept the default path.  8. In the Query Server Index File Location section, select one the following:   Configure share automatically   Select this option to automatically configure the share on which you want to store the propagated index and type the user name and password of the account that you want to use to propagate the index. (Recommended)  important_ddImportant:  This account must a member of the Administrators group and a member of the WSS\_ADM\_WPG group on the query server before you proceed to the next step or propagation of the index will fail.   I will configure the share with STSAdm   Select this option if you want to use the Stsadm.exe command-line utility to create this share at a later time.   Do nothing. The share is already configured   Select this option if the share already exists and the permissions to the share are configured as described above.  9. When you have configured all the settings, click Start. |

### Create a Web application to host the SSP and create the SSP

procedure_ddCreate a Web application to host the SSP and create the SSP

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| --- |
| 1. On the SharePoint Central Administration home page, click the Application Management tab on the top link bar.  2. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm's shared services.  3. On the Manage this Farm's Shared Services page, click New SSP.  4. On the New Shared Services Provider page, in the SSP Name section, click Create a new Web application.  note_ddNote:  If you see any items in the Web application drop-down list, a Web application has already been created. You can either use this Web application or create another.  1. .On the Create New Web Application page, in the Application Pool section, specify the User name and Password for the user account that the Web application pool will run under.  2. You can also configure other settings on this page or click OK to create the new Web application.  note_ddNote:  By default, the Web application uses the default Web site in IIS and port 80. This port might be used by other Web applications. Ensure that this port is open for use, or choose another port before you click OK.  note_ddNote:  By default, Restart IIS Manually is selected. If you use this setting, you must restart the default Web site in IIS, or restart the w3c service by using the command line.  1. On the New Shared Services Provider page, in the SSP Service Credentials section, type the user name and password for the user account that the SSP service will run under.  2. Optionally, you can also configure other settings.  3. When you have configured all the settings, click OK.  4. If you used the same Web application for the SSP administration site and the My Sites site collection, you will be prompted to use separate Web applications for these site collections. If you want to use the same Web application, click OK. For more information about site planning, see Plan site structure and navigation (Office SharePoint Server) .  5. After the SSP has been created, click OK on the confirmation page that appears. |

## Create a site collection and a SharePoint site

This section guides you through the process of creating a single site collection containing a single SharePoint site. You can create many site collections and many sites under each site collection. For more information, see Deploy and configure SharePoint sites (Office SharePoint Server).

You can create new portal sites or migrate pre-existing sites or content from a previous version of . For information about planning SharePoint sites and site collections, see Plan site structure and navigation (Office SharePoint Server). For information about migrating content, see Deploy new server farm and migrate content.

You can also migrate content from a pre-existing Microsoft Content Management Server 2002 source. For information, see Migrating from Microsoft Content Management Server 2002 to Microsoft Office SharePoint Server 2007 .

procedure_ddCreate a site collection

|  |
| --- |
| 1. On the SharePoint Central Administration home page, click the Application Management tab on the top link bar.  2. On the Application Management page, in the SharePoint Site Management section, click Create site collection.  3. On the Create Site Collection page, in the Web Application section, either select a Web application to host the site collection from the Web Application drop-down list or create a new Web application to host the site collection.  4. In the Title and Description section, type a title and description for the site collection.  5. In the Web Site Address section, select a URL type, and specify a URL for the site collection.  6. In the Template Selection section, select a template from the tabbed template control.  7. In the Primary Site Collection Administrator section, type the user account name for the user that you want to be the primary administrator for the site collection. You can also browse for the user account by clicking the book icon to the right of the text box. You can verify the user account by clicking the Check Names icon to the right of the text box.  8. Optionally, in the Secondary Site Collection Administrator section, type the user account for the user you want to be the secondary administrator for the site collection. You can also browse for the user account by clicking the book icon to the right of the text box. You can verify the user account by clicking the Check Names icon to the right of the text box.  9. Click Create to create the site collection. |

procedure_ddCreate a SharePoint site

|  |
| --- |
| 1. On the SharePoint Central Administration home page, click the Application Management tab on the top link bar.  2. On the Application Management page, in the SharePoint Site Management section, click Site collection list.  3. On the Site Collection List page, click the URL for the site collection to which you want to add a site.  4. On the Site Actions menu, click Create.  5. On the Create page, in the Web Pages section, click Sites and Workplaces.  6. On the New SharePoint Site page, in the Title and Description section, type a title and description for the site.  7. In the Web Site Address section, specify a URL for the site.  8. In the Template Selection section, select a template from the tabbed template control.  9. Either change other settings, or click Create to create the site.  10. The new site opens. |

## Post-installation steps

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

After Setup finishes, your browser window opens to the home page of your new SharePoint site. Although you can start adding content to the site or you can start customizing the site, we recommend that you perform the following administrative tasks by using the SharePoint Central Administration Web site.

 Configure incoming e-mail settings   You can configure incoming e-mail settings so that SharePoint sites accept and archive incoming e-mail. You can also configure incoming e-mail settings so that SharePoint sites can archive e-mail discussions as they happen, save e-mailed documents, and show e-mailed meetings on site calendars. In addition, you can configure the SharePoint Directory Management Service to provide support for e-mail distribution list creation and management. For more information, see [Configure incoming e-mail settings](#DSDOC_88317397_e0cb_47c7_9093_7872bc6852) .

 Configure outgoing e-mail settings   You can configure outgoing e-mail settings so that your Simple Mail Transfer Protocol (SMTP) server sends e-mail alerts to site users and notifications to site administrators. You can configure both the "From" e-mail address and the "Reply" e-mail address that appear in outgoing alerts. For more information, see [Configure outgoing e-mail settings](#DSDOC_f3ccc8bd_922e_49f6_9929_b5b8a6982d) .

 Configure workflow settings   Specify whether users can assemble new workflows and if participants without site access should be sent documents in e-mail attachments so they can participate in document workflows. For more information, see [Configure workflow settings](#DSDOC_c06095b0_7dcd_4d72_b71f_ab108e7dc3).

 Configure diagnostic logging settings   You can configure several diagnostic logging settings to help with troubleshooting. This includes enabling and configuring trace logs, event messages, user-mode error messages, and Customer Experience Improvement Program events. For more information, see [Configure diagnostic logging settings](#DSDOC_633dd35c_c6e7_4d12_be91_a237c16b27) .

 Configure antivirus protection settings   You can configure several antivirus settings if you have an antivirus program that is designed for Office SharePoint Server 2007. Antivirus settings enable you to control whether documents are scanned on upload or download and whether users can download infected documents. You can also specify how long you want the antivirus program to run before it times out, and you can specify how many execution threads the antivirus program can use on the server. For more information, see [Configure antivirus protection](#DSDOC_1289e6e2_03e0_4f10_8921_e516187891) .

 Configure search   Before search queries can be serviced, content must first be crawled. You can configure several search and index settings to customize how Office SharePoint Server 2007 crawls your site content or external content. For more information, see [Configure the Office SharePoint Server Search service (Office SharePoint Server)](#DSDOC_61b7ae94_dff5_4b01_88b5_0a016a9c36).

 Configure Excel Calculation Services Before you can use Excel Services, you must start the service and add at least one trusted location. For more information about doing this, see Configure Excel Services .

procedure_ddPerform administrator tasks by using the Central Administration site

|  |
| --- |
| 1. Click Start, point to All Programs, point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.  2. On the Central Administration home page, in the Administrator Tasks section, click the task you want to perform.  3. On the Administrator Tasks page, next to Action, click the task. |

## Configure the trace log

The trace log can be very useful for analyzing problems that may occur. Events that are written to the trace log are especially helpful because you can use them to determine what configuration changes where made in Office SharePoint Server 2007 before the problem occurred.

By default, Office SharePoint Server 2007 saves two days of events in the trace log files. This means that trace log files that contain events that are older than two days are deleted. When using either the Office SharePoint Server Search or Windows SharePoint Services Search service, we recommend that you configure the trace log to save seven days of events.

You can use the Diagnostic Logging page in Central Administration to configure the maximum number of trace log files to maintain and how long (in minutes) to capture events to each log file. By default, 96 log files are kept, each one containing 30 minutes of events.

96 log files \* 30 minutes of events per file = 2880 minutes or two days of events.

You can also specify the location where the log files are written or accept the default path.

procedure_ddConfigure the trace log to save seven days of events

|  |
| --- |
| 1. In Central Administration, on the Operations tab, in the Logging and Reporting section, click Diagnostic logging.  2. On the Diagnostic Logging page, in the Trace Log section, do the following:   In the Number of log files box, type 336.   In the Number of minutes to use a log file box, type 30.  tip_ddTip:  You can use any combination of number of log files and minutes to store in each log file you want to achieve 10,080 minutes (seven days) of events.  3. Ensure that the path specified in the Path box has enough room to store the extra log files or change the path to another location.  tip_ddTip:  We recommend that you store log files on a hard drive partition that is used to store log files only.  4. Click OK. |

Trace log files are invaluable for troubleshooting issues related to configuration changes of either the Office SharePoint Server Search or Windows SharePoint Services Search service. Because problems related to configuration changes are not always discovered right away, we recommend that you save all trace log files that the system creates on any day that you make any configuration changes related to either search service. You should store these log files for an extended period of time in a safe location that will not be overwritten. See step 3 in the procedure above to determine the location that the system stores trace log files for your system.

# Pre-install databases (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In many IT environments, database creation and management is handled by the Database Administrator (the DBA). Security and other policies might require that the DBA create the databases required by Microsoft Office SharePoint Server 2007. This topic provides details about how the DBA can create these databases before beginning the Office SharePoint Server 2007 installation or creation of a Shared Services Provider (SSP).

## Database requirements

Before you install and configure the databases, be sure that your database servers have the recommended hardware and software. For more information about these requirements, see Determine hardware and software requirements (Office SharePoint Server) .

There are also requirements specific to the database server, and, if you are using SQL Server 2005, you need to configure surface area settings.

procedure_ddConfigure surface area settings in SQL Server 2005

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| --- |
| 1. Click Start, point to All Programs, point to Microsoft SQL Server 2005, point to Configuration Tools, and then click SQL Server Surface Area Configuration.  2. In the SQL Server 2005 Surface Area Configuration dialog box, click Surface Area Configuration for Services and Connections.  3. In the tree view, expand the node for your instance of SQL Server, expand the Database Engine node, and then click Remote Connections.  4. Select Local and Remote Connections, select Using both TCP/IP and named pipes, and then click OK. |

All of the databases required by Office SharePoint Server 2007 use the Latin\_General\_CI\_AS\_KS\_WS collation. To use least-privilege guidelines, some databases might require individual domain user accounts assigned to them as the database owner (dbo, or db\_owner).

For more information about the security requirements for these databases, see Plan for administrative and service accounts (Office SharePoint Server).

To create the database with this collation and the correct database owner, perform the following procedure.

procedure_ddCreate the database with the correct collation and owner

|  |
| --- |
| 1. In Microsoft SQL Server Management Studio, navigate to the database server.  2. Right-click the Databases node, and then select New Database.  3. In the New Database dialog box, on the General page, enter the name for the database in the Database name text box.  4. Click the ellipsis by the Owner text box.  5. In the Select Database Owner dialog box, choose the correct user account, and then click OK.  6. On the Options page, select the Latin\_General\_CI\_AS\_KS\_WS collation from the Collation drop-down box.  7. Click OK to create the database. |

#### Create the required SQL Server Logins

You must create several SQL Server logins. These logins will be used by Office SharePoint Server 2007 to access the databases. The following table lists the required logins.

|  |  |
| --- | --- |
| Login | Notes |
| Setup user account | The account that is used to run Setup on each server computer. |
| SSP service account | Use the SSP App Pool account. |
| Farm search service account | The service account for the Windows SharePoint Services Search service. There is only one instance of this service in the server farm. |
| Windows SharePoint Services Search service account | Used by the Windows SharePoint Services Help Search application server role to crawl help content across sites |
| Default content access account | The default account used within a specific SSP to crawl content. If a specific account is not specified for a content source, the default content access account is used. |
| App Pool process account | Used to access content databases associated with the Web application. |

For more information about these accounts, see Plan for administrative and service accounts (Office SharePoint Server).

#### Create and configure the databases

This gives the Search service account and the content access account membership in the following database security groups or roles:

 db\_owner role for the search database

 Users group in the DBA-created configuration database

 Users group in the DBA-created admin content database

procedure_ddCreate and configure the configuration database and administration content database

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| --- |
| 1. Create a configuration database and an administration content database by using the "Create the database with the correct collation and owner" procedure given earlier.  2. Change the database owner for each database to be the Setup user account.  3. Run Setup on all the computers as the Setup user account. You must run Setup on at least one of these computers by using the Complete installation option.  4. On the computer on which you used the Complete installation option, do not run the Configuration Wizard after setup. Instead open the command line as the Setup user account, and then run the following command to configure the databases:  Psconfig –cmd configdb –create –server <SQL\_servername> –database <name\_of\_precreated\_configdb> –user <domain\dbaccessaccount> –password <dbaccesspw> –admincontentdatabase <name\_of\_precreated\_admincontentdb>  5. After the command has completed, the SharePoint Products and Technologies Configuration Wizard will open and you can complete the remainder of the configuration for your server.  6. After the SharePoint Products and Technologies Configuration Wizard has completed, by using Microsoft SQL Server Management Studio, add the following accounts to the Users groups and to the WSS\_Content\_Application\_Pools roles in both databases:   Farm search service account   Default content access account   Server SSP service account  note_ddNote:  To ensure that the accounts have been added to the correct groups and roles, verify that the home page of the Central Administration Web site can be opened. |

procedure_ddCreate and configure the Windows SharePoint Services search database

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| --- |
| 1. Create a database for the Windows SharePoint Services Search database by using the "Create the database with the correct collation and owner" procedure earlier in this article.  2. Change the database owner to be the Setup user account.  3. Open the command line as the Setup user account, and then run the following command to start the Windows SharePoint Services service:  stsadm -o spsearch -action start -farmserviceaccount <domain\username> -farmservicepassword <farmservice\_pwd> -farmcontentaccessaccount <domain\username> -farmcontentaccesspassword <farmcontentaccess\_pwd> -databaseserver <SQL\_hostname> -databasename <dba\_created\_wsssearchdb\_name> |

procedure_ddCreate and configure the SSP Admin Web application content database

|  |
| --- |
| 1. Create the SSP Admin Web application content database by using the "Create the database with the correct collation and owner" procedure given earlier.  2. Change the database owner to be the Setup user account.  3. Using Microsoft SQL Server Management Studio, add the Server SSP service account to the Users group and the db\_owner role for the SSP Admin Web application content database.  4. Open the command line as the Setup user account, and then run the following command to create the SSP Admin Web application:  stsadm.exe -o extendvs -url <http://hostname:portnumber> -donotcreatesite -exclusivelyusentlm -databaseserver <SQL\_hostname> -databasename <SSP\_content\_dbname> -apidtype configurableid -description <SSPAdminWebSiteName> -apidname <SSPAdminSiteAppPoolName> -apidlogin <domain\AppPoolID> -apidpwd <AppPoolIDPwd><dbaccesspw> –admincontentdatabase <name\_of\_precreated\_admincontentdb> |

procedure_ddCreate and configure the portal site Web application content database

|  |
| --- |
| 1. Create the portal site Web application content database by using the "Create the database with the correct collation and owner" procedure given earlier.  2. Change the database owner to be the Setup user account.  3. Using Microsoft SQL Server Management Studio, add the SSP Service account to the Users group and the db\_owner role for the portal site Web application content database.  4. Open the command line as the Setup user account, and then run the following command to configure the portal site Web application content database:  stsadm.exe -o extendvs -url http://hostname:portnumber -donotcreatesite -exclusivelyusentlm -databaseserver <SQL\_hostname> -databasename <PortalSite\_content\_dbname> -apidtype configurableid -description <PortalSiteWebSiteName> -apidname <PortalSiteAppPoolName> -apidlogin <domain\AppPoolID> -apidpwd <AppPoolIDPwd> |

procedure_ddCreate and configure the SSP database and SSP Search database

|  |
| --- |
| 1. Create the SSP database and the SSP Search database by using the "Create the database with the correct collation and owner" procedure given earlier.  2. Change the database owner to be the Setup user account for both databases.  3. Using Microsoft SQL Server Management Studio, add the following accounts to the Users group and the db\_owner role in each database:   Database access account   SSP Service account   Windows SharePoint Services 3.0 Search Service account   Office SharePoint Server 2007 Search Service account   Application pool identities for all Web applications  4. Open the command line as the Setup user account, and then run the following command to create the SSP using the DBA-created SSP database and the SSP Search database:  stsadm -o createssp -title SSPUsingDBACreatedDBs -url <http://hostname:port\_number/ssp/admin>-mysiteurl <http://hostname:port\_number>-ssplogin <domain\username> -ssppassword <ssp\_pwd>-indexserver <indexservername>-indexlocation <indexlocation>-sspdatabaseserver <SQL\_hostname>-sspdatabasename <dba\_created\_sspdb\_name>-searchdatabaseserver <SQL\_hostname>-searchdatabasename <dba\_created\_ssp\_searchdb\_name>  note_ddNote:  For more information about properly sizing these databases, see Plan for data capacity and Plan for search capacity and content isolation. |

# Configure single sign-on (Office SharePoint Server)

Single sign-on (SSO) is a Microsoft Office SharePoint Server feature that provides storage and mapping of credentials such as account names and passwords. Using SSO, portal site–based applications can retrieve information from third-party applications and back-end systems such as Enterprise Resource Planning (ERP) and Customer Relations Management (CRM) systems.

The use of single sign-on functionality enables users to authenticate only once when accessing portal site–based applications that need to obtain information from other business applications and systems.

Configuring single sign-on consists of five tasks:

 [Configuring the Microsoft Single Sign-On Service service](#DSDOC_Section1841080ca_3e3b_4dbc_a081_43)

 [Managing server settings for single sign-on](#DSDOC_Section2841080ca_3e3b_4dbc_a081_43)

 [Managing the encryption key](#DSDOC_Section3841080ca_3e3b_4dbc_a081_43)

 [Managing enterprise application definitions](#DSDOC_Section4841080ca_3e3b_4dbc_a081_43)

 [Managing account settings for enterprise application definitions](#DSDOC_Section5841080ca_3e3b_4dbc_a081_43)

Note that you must be logged into the SharePoint Central Administration Web site on a farm server to configure single sign-on (SSO) for Microsoft Office SharePoint Server 2007. If you attempt to configure SSO on a workstation or any computer that is not a farm server, you will see an error message that reads "Single sign-on cannot be configured from this server. To configure single sign-on, go to the computer running the single sign-on service and specify these settings locally."

Follow the procedures in the sections that follow to configure SSO for your Office SharePoint Server 2007 environment.

## Configure and start the Microsoft Single Sign-On service

To use single sign-on, the Microsoft Single Sign-On service (SSOSrv) must be installed on all Microsoft Windows front-end Web servers in the farm. SSOSrv must also be installed on all servers running Excel Services. If the Business Data Catalog search is used, SSOSrv must also be installed on the index server.

SSOSrv is configured by using the Services console. When configuring the service, a logon account is required. The logon account must meet all of the following criteria:

 Must be a domain user account. It cannot be a group account.

 Must be an Office SharePoint Server farm account.

 Must be a member of the local Administrators group on the encryption-key server. (The encryption-key server is the first server on which you start SSOSrv.)

 Must be a member of the Security Administrators role and db\_creator role on the computer running Microsoft SQL Server.

 Must be either the same as the single sign-on administrator account, or a member of the group account that is the single sign-on administrator account.

procedure_ddConfigure and start the Microsoft Single Sign-On service

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| --- |
| 1. On the server, click Start, Control Panel, Administrative Tools, and then click Computer Management.  2. In the Computer Management console, expand Services and Applications, and then click Services.  3. Right-click Microsoft Single Sign-On Service, and then choose Properties.  4. On the General tab, change the Startup type to Automatic.  5. On the General tab, under Service Status, click Start.  6. Click OK to save your changes and close the Properties window.  7. Repeat steps 1 through 6 for each applicable server in the farm. |

## Configure Single Sign-On for Office SharePoint Server 2007

Managing server settings for single sign-on includes specifying the appropriate administrator accounts, the single sign-on database server and server name, and time-out and audit log settings.

note_ddNote:

You must open Central Administration on the computer that runs Office SharePoint Server 2007 to manage server settings for single sign-on.

procedure_ddConfigure SSO for Office SharePoint Server 2007

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| --- |
| 1. On Central Administration, on the top navigation bar, click Operations.  2. On the Operations page, in the Security Configuration section, click Manage settings for single sign-on.  3. On the Manage Settings for Single Sign-On page, in the Server Settings section, click Manage server settings.  4. On the Manage Settings for Single Sign-On page, in the Account name box in the Single Sign-On Administrator Account section, type the single sign-on administrator account name by using the form domain/group or domain/username.  note_ddNote:  The single sign-on administrator account specifies the set of people who can create, delete, or modify application definitions. The administrator account can also back up the encryption key.  The user or group that you specify as the single sign-on administrator must be all of the following:   Either a Windows global group or an individual user account. This account cannot be a domain local group account or a distribution list.   The same account as the single sign-on service account, if a user is specified. If a group is specified, the single sign-on service account must be a member of that group.   The same as the configuration account for single sign-on, if a user is specified. If a group is specified, the configuration account for single sign-on must be a member of that group.   A member of the Farm Administrators group on Central Administration.  If a group is specified, all users who are added to the group for the purpose of administering single sign-on must be members of the local Administrators group on the encryption-key server. Do not make this account a member of the local Administrators group on the encryption-key server.  5. In the Enterprise Application Definition Administrator Account section, in the Account name box, type the account name of the group or user who can set up and manage enterprise application definitions. Type the name by using the form domain/group or domain/username.  The enterprise application definition administrator account can manage credentials of an enterprise application definition, including changing the password of a group enterprise application definition and changing or deleting credentials for an individual enterprise application definition.  The user or group that you specify must be the following:   Either a Windows global group or an individual user account. This account cannot be a domain local group account or a distribution list.   A member of the Reader SharePoint group on Central Administration.  6. In the Database Settings section, in the Server name box, type the NetBIOS name of the single sign-on database server (for example, computer\_name or computer\_name\SQL\_Server\_instance). Do not type the fully qualified domain name.  7. In the Database name box, enter the name of the single sign-on database server.  note_ddNote:  Unless you are pre-creating databases, we recommend that you use the default database server and single sign-on database server.  8. In the Time Out Settings section, in the Ticket time out (in minutes) box, type a value for how many minutes passes before a single sign-on ticket expires. The time-out should be long enough to last between the time that the ticket is issued and the time that the enterprise application redeems the ticket. Two minutes is the recommended value.  9. In the Delete audit log records older than (in days) box, type a value for how many days the audit log holds records before deleting them.  10. Click OK. |

## Manage the encryption key

The first server that SSOSrv is enabled on becomes the encryption-key server. The encryption-key server generates and stores the encryption key. The encryption key is used to encrypt and decrypt the credentials that are stored in the SSO database.

Because the encryption key protects security credentials, we recommend that you create a new encryption key on a regular schedule (for example, every 90 days). We also recommend that you create a new encryption key immediately if you suspect that account credentials have been compromised.

The encryption key must be backed up each time a new key is created. You do not need to back up the encryption key at any other time (except when you are moving the encryption-key server role from one server to another). You must back up the encryption key from the encryption-key server locally; the key cannot be backed up remotely.

You can also use encryption key backup and restore to move the encryption-key server role from one server to another. (Other tasks must also be completed to move the encryption-key server role.)

note_ddNote:

You must open Central Administration on the computer that runs Office SharePoint Server 2007 to manage the encryption key.

procedure_ddManage the encryption key

|  |
| --- |
| 1. On Central Administration, on the top navigation bar, click Operations.  2. On the Operations page, in the Security Configuration section, click Manage settings for single sign-on.  3. On the Manage Settings for Single Sign-On page, in the Server Settings section, click Manage encryption key. |

From the Manage Encryption Key page, you can perform three management tasks:

 [Create a new encryption key](#DSDOC_Section31841080ca_3e3b_4dbc_a081_4)

 [Back up an encryption key](#DSDOC_Section32841080ca_3e3b_4dbc_a081_4)

 [Restore an encryption key](#DSDOC_Section33841080ca_3e3b_4dbc_a081_4)

### Create a new encryption key

procedure_ddCreate a new encryption key

|  |
| --- |
| 1. On the Manage Encryption Key page, in the Encryption Key section, click Create Encryption Key.  2. On the Create Encryption Key page, select the Re-encrypt all credentials by using the new encryption key check box.  important_ddImportant:  If you do not re-encrypt the existing credentials with the new encryption key, users must retype their credentials for individual application definitions, and administrators must retype group credentials for group application definitions.  3. Click OK. |

### Back up an encryption key

procedure_ddBack up an encryption key

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| --- |
| 1. On the Manage Encryption Key page, in the Drive list in the Encryption Key Backup section, click the removable media drive on which you want to store the encryption-key backup.  2. Click Back Up. |

### Restore an encryption key

You should always back up the encryption key when you back up the single sign-on database, because the database is useless without the encryption key. Also, before you replace an encryption-key server, make sure to back up the encryption key so that it can be restored on the new encryption-key server.

procedure_ddRestore an encryption key

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| --- |
| 1. On the Manage Encryption Key page, in the Drive list in the Encryption Key Restore section, click the removable media drive from which you want to restore the encryption-key backup.  2. Click Restore. |

## Manage enterprise application definitions

In the single sign-on environment, the back-end external data sources and systems are referred to as enterprise applications. For each enterprise application that Office SharePoint Server 2007 connects to, a corresponding enterprise application definition needs to be configured.

procedure_ddManage enterprise application definitions

|  |
| --- |
| 1. On Central Administration, on the top navigation bar, click Operations.  2. On the Operations page, in the Security Configuration section, click Manage settings for single sign-on.  3. On the Manage Settings for Single Sign-On page, click Manage settings for enterprise application definitions. |

## Manage account information for an enterprise application definition

If you are using a group to connect to the enterprise application, you need to provide account credentials for the group to use. If individual users are connecting directly to the enterprise application, you can preset or reset user passwords, or you can delete users from the enterprise application definition.

procedure_ddManage account information for an enterprise application definition

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. On Central Administration, on the top navigation bar, click Operations.  2. On the Operations page, in the Security Configuration section, click Manage settings for single sign-on.  3. On the Manage Settings for Single Sign-On page, in the Enterprise Application Definition Settings section, click Manage account information for enterprise application definitions.  4. On the Manage Account Information for an Enterprise Application Definition page, in the Enterprise application definition list in the Account Information section, click the application definition for which you want to manage account information.  5. In the Group account name box, type the name of the group that is allowed access to the enterprise application.  6. In the Enterprise Application Definition section, select one of the following:   |  |  | | --- | --- | | Option | Purpose | | Update account information | Enter credentials for the first time or update the credentials used to connect to the enterprise application. | | Delete stored credentials for this account from this enterprise application definition | Delete the credentials currently used to connect to the enterprise application. | | Delete stored credentials for this account from all enterprise application definitions | Delete the credentials currently used to connect the selected enterprise application from all enterprise application definitions. Deleting stored credentials deletes credentials only for individual accounts; it does not delete credentials for group accounts. |   If you select Update account information, complete the following steps:  a. Click Set.  b. On the Provide Account Information page, in the Logon Information section, type the user name and password of the account that will be used to connect to the enterprise application.  c. Click OK.  7. Click Done. |

# A. Create and configure Shared Services Providers

## A. Create and configure Shared Services Providers



# Chapter overview: Create and configure Shared Services Providers

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

 [Configure the default/primary Shared Services Provider](#DSDOC_5ca59325_7cc3_4703_ab88_4055a219d3)

 Perform additional administrative tasks

 Configure personalization

 Configure business intelligence features

 Configure Excel Services

 Configure Office Project Server

 Configure InfoPath Forms Services

 [Configure portal usage reporting](#DSDOC_5233cf43_6a8f_40cb_9014_0724600e7e)

# Configure the default/primary Shared Services Provider

## Create the Shared Services Provider

1. On the SharePoint Central Administration home page, click the Application Management tab on the top navigation bar.

2. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm's shared services.

3. On the Manage this Farm's Shared Services page, click New SSP.

important_ddImportant:

If you have not created a Web application for the SSP administration site, you need to create one before you create the SSP. If you have already created a Web application for the SSP administration site, skip to step 14.

4. On the New Shared Services Provider page, click Create a new Web application.

5. On the Create New Web Application page, in the IIS Web Site section, click Create a new IIS web site , and do not modify the default settings in this section.

6. In the Security Configuration section, under Authentication provider, select the appropriate option for your environment, and do not modify the default settings in the remainder of this section.

note_ddNote:

By default, the authentication provider is set to NTLM. Use the Negotiate (Kerberos) setting only if Kerberos is supported in your environment. This option will require configuring a Service Principal Name for the domain user account, for which you must have Domain Administrator credentials. For more information about configuring Kerberos, see [Configure Windows SharePoint Services to Use Kerberos Authentication](http://go.microsoft.com/fwlink/?LinkID=76570&clcid=0x409) in the Microsoft Knowledge Base (http://go.microsoft.com/fwlink/?LinkID=76570&clcid=0x409).

7. In the Load Balanced URL section, do not modify the default settings.

8. In the Application Pool section, click Create new application pool.

9. In Application pool name, enter the name of your application pool or use the default name.

10. Click Configurable, and in User name and Password, type the user name and password for the user account that you want to act as the application pool identity for your SSP Web application.

The user account must be a domain user account, but the user account does not have to be a member of any particular security group. It is recommended that you use the principle of least privilege and select a unique user account that does not have administrative rights on your front-end servers or on your back-end database servers. You can use the user account that you specified as the Microsoft Office SharePoint Server 2007 service account; however, if that user account is a member of a security group that has administrative rights on your front-end servers or your back-end database servers, you will not be following the principle of least privilege. The user name must be in the format DOMAIN\username.

11. In the Database Name and Authentication section, verify the database information and make sure that Windows Authentication (recommended) is selected.

12. In the Search Server section, do not modify the default settings.

13. Click OK.

Upon successful creation of the Web application, the New Shared Services Provider page appears.

14. In the SSP Name section, in Web Application , select the Web application that you created for the SSP, and do not modify any of the default settings in this section.

15. In the My Site Location section, do not modify any of the default settings.

16. In the SSP Service Credentials section, in User name and Password, type the user name and password for the user account under which you want the SSP to run.

The user account must be a domain user account, but the user account does not have to be a member of any particular security group. It is recommended that you use the principle of least privilege and select a unique user account that does not have administrative rights on your front-end servers or on your back-end database servers. You can use the user account that you specified as the Office SharePoint Server 2007 service account; however, if that user account is a member of a security group that has administrative rights on your front-end servers or your back-end database servers, you will not be following the principle of least privilege. The user name must be in the format DOMAIN\username.

17. In the SSP Database section, you can either accept the default settings (recommended), or specify your own settings for the database server, the database name, or the SQL authentication credentials.

18. In the Search Database section, you can either accept the default settings (recommended), or specify your own settings for the search database server, the database name, or the SQL Server authentication credentials.

19. In the Index Server section, in Index Server , click the server on which you configured the Search service.

If there is no index server listed in the Index Server section, then no server in your farm has been assigned the index server role. To assign the index server role to a server in your farm, follow the instructions in the "Configure the Search service" section earlier in this topic.

20. In the SSL for Web Services section, click No.

21. Click OK .

Upon successful creation of the SSP, the Success page appears.

22. On the Success page, click OK to return to the Manage this Farm's Core Services page.

## Create a new SSP

important_ddImportant:

To configure an SSP, you must have already configured an index server for the farm. Without an index server, creation of a new SSP will fail. For more information about configuring an index server, see the topic Chapter overview: Configure the primary Shared Services Provider.

procedure_ddTo create and configure a new SSP:

|  |
| --- |
| 1. In a Web browser, open the Central Administration page for your farm.  2. On the top navigation bar, click Application Management.  3. On the Application Management page, under Office SharePoint Server Shared Services, click Create or configure this farm's shared services.  4. On the Manage this Farm's Shared Services page, on the top navigation bar, click New SSP.  5. In the SSP Name section, specify a unique, descriptive name for this SSP. This name will be used to identify the SSP in administration pages.  6. In the My Site location section, select the Web application for this SSP.  7. In the SSP Service Credentials section, specify the credentials which will be used by SSP Web services for inter-server communication and for the SSP timer service to run jobs.  8. In the SSP Database section, specify the database server and database name for storing session data. Use of the default database server and database name is recommended for most cases.  9. In the Index Server section, select the index server which will crawl content in all Web applications associated with this SSP. You may also specify the path on the index server where the indexes will be located if you do not want to use the default path.  10. In the SSL for Web Services section, choose whether or not to use SSL to protect communications to and from Web services.  note_ddNote:  If you choose to enable SSL for Web services, you must add the certificate on each server in the farm by using the IIS administration tool. Until this is done, the Web services will not be available.  11. Click OK to create the SSP. |

## Associate an SSP with a Web application

A Web application may be associated with only one SSP, but each SSP may be associated with multiple Web applications.

procedure_ddTo associate an SSP with a Web application:

|  |
| --- |
| 1. On the taskbar, click Start, point to Administrative Tools, and then click SharePoint 3.0 Central Administration.  2. In the Quick Launch, click Shared Services Administration.  3. On the Manage this Farm's Shared Services page, on the top navigation bar, click Change Associations.  note_ddNote:  In the SSP Name column in the SSP list, you will see all the Web applications with which each SSP is currently associated.  4. On the Change Association between Web Applications and SSPs page, under Shared Services Provider, select the SSP you want to configure.  5. In the Web applications section, select the Web applications you want to associate with the SSP.  6. Click OK to associate the SSP with the selected Web applications. |

# 1. Perform additional administrative tasks

## 1. Perform additional administrative tasks



# Chapter overview: Additional administrative tasks

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

## Configure additional administrative settings

To take full advantage of the administrative features and capabilities of Microsoft Office SharePoint Server 2007, you should perform the following optional administrative tasks using SharePoint Central Administration:

 Configure incoming e-mail settings   You can configure incoming e-mail settings so that SharePoint sites accept and archive incoming e-mail. You can also configure incoming e-mail settings so that SharePoint sites can archive e-mail discussions as they happen, save e-mailed documents, and show e-mailed meetings on site calendars. In addition, you can configure the SharePoint Directory Management Service to provide support for e-mail distribution list creation and management. For more information, see [Configure incoming e-mail settings](#DSDOC_88317397_e0cb_47c7_9093_7872bc6852) .

 Configure outgoing e-mail settings   You can configure outgoing e-mail settings so that your Simple Mail Transfer Protocol (SMTP) server sends e-mail alerts to site users and notifications to site administrators. You can configure both the "From" e-mail address and the "Reply" e-mail address that appears in outgoing alerts. For more information, see [Configure outgoing e-mail settings](#DSDOC_f3ccc8bd_922e_49f6_9929_b5b8a6982d) .

 Configure diagnostic logging settings   You can configure several diagnostic logging settings to help with troubleshooting. This includes enabling and configuring trace logs, event messages, user-mode error messages, and Customer Experience Improvement Program events. For more information, see [Configure diagnostic logging settings](#DSDOC_633dd35c_c6e7_4d12_be91_a237c16b27) .

 Configure antivirus protection settings   You can configure several antivirus settings if you have an antivirus program that is designed for Office SharePoint Server 2007. Antivirus settings allow you to control whether documents are scanned on upload or download and whether users can download infected documents. You can also specify how long you want the antivirus program to run before it times out and you can specify how many execution threads the antivirus program can use on the server. For more information, see [Configure antivirus protection](#DSDOC_1289e6e2_03e0_4f10_8921_e516187891) .

 Create SharePoint sites   When Setup finishes you have a single Web application that hosts a single SharePoint site. You can create more SharePoint sites and Web applications if your site design requires multiple sites or multiple Web applications. For more information, see Deploy and configure SharePoint sites (Office SharePoint Server).

 Configure Office SharePoint Server Search   You can configure several search and index settings to customize how Office SharePoint Server 2007 crawls through your site contents. For more information about configuring search, see [Configure the Office SharePoint Server Search service (Office SharePoint Server)](#DSDOC_61b7ae94_dff5_4b01_88b5_0a016a9c36).

You can use the following procedure to configure optional administrative settings using SharePoint Central Administration.

#### Configure administrative settings using SharePoint Central Administration

1. Click Start, point to All Programs, point to Administrative Tools, and then click SharePoint 3.0 Central Administration.

2. On the SharePoint Central Administration home page, under Administrative Tasks , click the administrative task you want to perform.

3. On the Administrative Tasks page, next to Action, click the task.

# Configure incoming e-mail settings

You can configure incoming e-mail settings so that SharePoint sites accept and archive incoming e-mail. You can also configure incoming e-mail settings so that SharePoint sites can archive e-mail discussions as they happen, save e-mailed documents, and show e-mailed meetings on site calendars. In addition, you can configure the SharePoint Directory Management Service to provide support for e-mail distribution list creation and management.

# 2. Configure personalization

## 2. Configure personalization



# Chapter overview: Configure personalization

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Configure personalization permissions](#DSDOC_section1fb1eab8c_f9d7_49a2_8cfa_f1)

 [Configure connections to personalization services](#DSDOC_section2fb1eab8c_f9d7_49a2_8cfa_f1)

 [Configure targeted content](#DSDOC_section3fb1eab8c_f9d7_49a2_8cfa_f1)

 [Configure personalization sites](#DSDOC_section4fb1eab8c_f9d7_49a2_8cfa_f1)

 [Configure policies for Profile Services](#DSDOC_section5fb1eab8c_f9d7_49a2_8cfa_f1)

The personalization service in Microsoft Office SharePoint Server 2007 uses information about users in your organization that is stored in directory services. That information can be supplemented with information about users from line-of-business applications. Personalization information can then be displayed in user profiles, and the properties in user profiles can be used to target content.

Consult the plan for personalization in your initial deployment, and then configure the options that you have selected.

## Configure personalization permissions

Before you can use personalization properties in your deployment, you must configure access to the service. You must enable access for administrators of the Shared Services Provider (SSP) to the service and to the associated Web application on which the SSP is hosted. You must also configure user permissions to view and share personalization information from My Sites.

For more information about configuring personalization permissions, see [Configure personalization permissions](#DSDOC_a138dedb_99e6_4a86_af0d_6063995257).

## Configure connections to personalization services

The administrator of personalization services for the SSP configures connections to directory services to include properties for the accounts of all users who view and share information across the organization. If some groups of users work entirely separately, those accounts connect to separate SSPs. Directory services can include Active Directory directory services and Lightweight Directory Access Protocol (LDAP) directory services.

After configuring connections to personalization services, you must also configure the settings to regularly import properties from each directory services connection. Each property is mapped to a property in the user profile.

For more information about configuring connections to personalization services, see [Configure connections to Profile Services](#DSDOC_d8a7d8b8_5d1c_4893_b5c5_94e00cabee).

## Configure targeted content

After the SSP administrator has configured access to directory services and has configured user profiles, it is time to configure targeted content.

Content is primarily targeted by using audiences. Audiences are defined by using rules based on properties from directory services. Lists, sites, and other content are then targeted to those audiences so that only members of targeted audiences can see the content.

Some kinds of content are not targeted to users until their locations are selected by administrators as trusted. The SSP administrator configures trusted My Site locations, published links to Office client applications, and personalization site links so that the correct content is available for the right users.

For more information about targeting content, see [Configure targeted content](#DSDOC_3e01f993_d38f_4bbc_a14c_ff6392555d).

## Configure personalization sites

Personalization sites use targeted Web Parts and the Current User Filter Web Part to target information to users based on their account name or display name, so that each person sees personalized information on the site. This differs from other targeted Web Parts in that the information is targeted by user and not by audience.

For more information about configuring personalization sites, see [Configure personalization sites](#DSDOC_635715ed_1407_4251_8999_8e75c03f8e).

## Configure policies for Profile Services

After configuring user profiles, targeted content, and personalization sites, SSP administrators for the personalization service can configure privacy policies that determine how that information is viewed and how it can be shared.

For more information about configuring policies, see [Configure policies for Profile Services](#DSDOC_a34a6928_c30e_441d_a820_48e0b10a35).

# Configure personalization permissions

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Configure SSP administrator permissions for Profile Services](#DSDOC_section1a138dedb_99e6_4a86_af0d_60)

 [Configure access to SSP pages](#DSDOC_section2a138dedb_99e6_4a86_af0d_60)

 [Configure user permissions for personalization](#DSDOC_section3a138dedb_99e6_4a86_af0d_60)

 [Configure access to trusted My Site host locations](#DSDOC_section4a138dedb_99e6_4a86_af0d_60)

Before enabling personalization features in your deployment, you must first configure permissions to personalization features. Although some permissions are configured by default for deployments using Active Directory directory services, other configuration options vary according to the specific plan for deployment.

Administrators of the Shared Services Provider (SSP) have limited ability to configure personalization services. The administration options for personalization services are associated with a set of permissions for different personalization features. Administrators can have access to some or all of these administration options.

The users of the SSP have access to personal features associated with My Sites. Administrators of personalization permissions are responsible for configuring any changes to the default permissions for users.

## Configure SSP administrator permissions for Profile Services

SSP administrators can view the SSP Home page and some configuration options, but many of the personalization management tasks are only available to administrators that have additional permissions. These additional configuration tasks include:

 Managing permissions.

 Managing user profiles.

 Managing audiences.

 Managing portal usage for personalization.

By default, the account that was used to install Microsoft Office SharePoint Server 2007 on the server has all of these permissions. This account can be used to delegate permissions to other users.

In some organizations, one SSP administrator will have all permissions, and access to every management task. In other organizations, the permissions will be distributed among more than one administrator. Refer to your deployment plan when adding permissions for administrators.

Use the following procedure to configure administrator permissions to the SSP for personalization services.

procedure_ddConfigure administrator permissions to the SSP for personalization sites

|  |
| --- |
| 1. Open the administration page for the SSP.To open the administration page for the SSP, perform the following:  a. On the top navigation bar, click Application Management.  b. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm’s shared services.  c. On the Manage this Farm’s Shared Services page, there is a link to each SSP and links to the Web applications for each SSP. Click the link for the SSP that you want to open.  You can also access the SSP by clicking the link to the SSP Home page in the Quick Launch.  2. On the SSP Home page, in the User Profiles and My Sites section, click Personalization services permissions.  3. On the Manage Permissions page, click Add Users/Groups.  4. On the Add Users/Groups page, in the Choose Users section, type the name of the users and groups that you want to add. If a user or group is already on the list, select the check box for that user or group, and then click Modify Permissions of Selected Users.  5. In the Choose Permissions section, select the permissions that you want for the added users and groups:   To enable administration of user profiles, select Manage user profiles. Users who have this permission can access the User profiles and properties page and the Profile services policies page.   To enable administration of permissions to personalization services, select Manage permissions.   To enable administration of audiences, select Manage Audiences.   To enable administration of the portal usage reporting service, select Manage usage analytics.  6. Click Save. |

## Configure access to the SSP pages

SSP administrators managing Profile Services must have access to the SSP pages for Profile Services. This access is in addition to the separate permissions to the service. To access the SSP Home page, an account must be a member of the Site Collection Administrators group.

By default, the account that set up the SSP is a member of the Site Collection Administrators group. For the first SSP in the initial deployment, that is the account that was used to install Office SharePoint Server 2007. If that same account is used to administer the SSP, no additional steps are necessary. In most organizations, SSP administration will be delegated to one or more additional users. The account used to set up the SSP can be used to add other accounts to the Site Collection Administrators group.

Use the following procedure to configure access to SSP pages.

procedure_ddConfigure access to SSP pages

|  |
| --- |
| 1. Open the administration page for the SSP.To open the administration page for the SSP, perform the following:  a. On the top navigation bar, click Application Management.  b. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm’s shared services.  c. On the Manage this Farm’s Shared Services page, there is a link to each SSP and links to the Web applications for each SSP. Click the link for the SSP that you want to open.  You can also access the SSP by clicking the link to the SSP Home page in the Quick Launch.  2. On the SSP Home page, click the Site Actions menu.  3. In the Site Action menu, click Site Settings.  4. On the Site Settings page, in the Users and Permissions section, click Site collection administrators.  5. On the Site Collection Administrators page, in the Site Collection Administrators section, perform the following:  a. Type the name or account that you want to add to the Site Collection Administrators group.  b. Click the Check Names icon. If the name or account is found in directory services, it will appear as a link in the text box.  c. If the name or account was not found, or if you want to search for more users, click the Browse icon.  d. On the Select People dialog box, in the Find box, type part or all of the user's name or account name, and then press Enter. All accounts that match appear in the text box.  e. Select one or more accounts that you want to add, and then click Add.  f. When you are done adding SSP administrators, click OK.  6. On the Site Collection Administrators page, click OK. |

## Configure user permissions for personalization

After configuring permissions for administrators, it is time to configure permissions for other users. By default, all users have both of the following permissions:

 Use personal features

 Create personal site

Users who have the Use personal features permission can see personalized information in sites, including user profiles for other users. Users who have both the Use personal features permission and the Create personal site permission can create a My Site by clicking the My Site link in the top navigation bar.

In some organizations, personalization features may not be enabled. In these scenarios, the administrator with permission to manage permissions would remove these permissions for all authenticated users.

In other organizations, only some users will have access to personalization features. In these scenarios, the personalization permissions would be removed for the All Authenticated Users group, and another group would be created containing users who have both permissions.

In some organizations, My Sites will be created on a case-by-case basis, or created by managers during deployment. In these scenarios, users would have the Use personal features permission, but not the Create personal site permission.

Because these permissions are managed in the same place as administrator permissions, it is possible to create several groups with different combinations of permissions. It is recommended that you carefully plan group permissions during the initial deployment so that you can minimize administration tasks during regular operations.

Use the following procedure to configure user permissions for personalization.

procedure_ddConfigure user permissions for personalization

|  |
| --- |
| 1. On the SSP home page, in the User Profiles and My Sites section, click Personalization services permissions.  2. On the Manage Permissions page, click Add Users/Groups.  3. On the Add Users/Groups page, in the Choose Users section, type the name of the users and groups that you want to add. If a user or group is already on the list, select the check box for that user or group, and then click Modify Permissions of Selected Users.  4. In the Choose Permissions section, select the permissions that you want for the added users and groups:   To enable creation of My Sites, select Create personal site.   To enable access to personalization features, select Use personal features.  5. Click Save. |

Access to personalized information can also be modified by configuring profile services policies for users. For more information about configuring profile services policies, see [Configure policies for Profile Services](#DSDOC_a34a6928_c30e_441d_a820_48e0b10a35).

## Configure access to trusted My Site host locations

Users of personalization services have the permissions given to them by administrators, but these permissions are limited to the services consumed from a single SSP.

While good planning can avoid many situations where users need access to multiple My Sites, some scenarios may require that a user have access to more than one My Site host location. The typical scenario that requires multiple My Site host locations is a geographically distributed deployment with multiple sets of shared services in different locations. In these scenarios, it is common for each region to have its own set of My Sites and personalization features based on the needs of each region.

Use the following procedure to add trusted My Site host locations.

procedure_ddAdd trusted My Site host locations

|  |
| --- |
| 1. On the SSP home page, in the User Profiles and My Sites section, click Trusted My Site host locations.  2. On the Trusted My Site Host Locations page, click New to add another Trusted My Site host location.  3. On the Trusted My Site Host Locations: New Item page, in the URL section, type the URL of the trusted My Site host location, and type a description for the location.  4. In the Target Audiences section, select one or more audiences to use. For trusted My Site locations, the relevant audiences typically represent the set of users that belong to each My Site host location.  5. Click OK. |

During regular operations, in response to changes in directory services, one or more users often end up with My Sites in different locations. Trusted My Site host locations can be used to provide access to personalization features targeted for only these users, without enabling access to all users.

## See Also

[Configure policies for Profile Services](#DSDOC_a34a6928_c30e_441d_a820_48e0b10a35)

[Configure targeted content](#DSDOC_3e01f993_d38f_4bbc_a14c_ff6392555d)

# Configure connections to Profile Services

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Add import connections](#DSDOC_section1d8a7d8b8_5d1c_4893_b5c5_94)

 [Configure import connections](#DSDOC_section2d8a7d8b8_5d1c_4893_b5c5_94)

 [Configure user profiles](#DSDOC_section3d8a7d8b8_5d1c_4893_b5c5_94)

Personal information about the users in your organization is stored in directory services and line-of-business applications and imported to the user profile store so that it can be used to present personalized or targeted content in sites, and to search for people in your organization.

When the administrator of the Shared Services Provider (SSP) configures user profile imports, the import connections necessary for those settings are configured automatically except for custom connections. Custom import connections must be configured separately.

## Configure import settings

Import settings are used to regularly import properties from each directory services connection. Each property is mapped to a property in the user profile.

Use the following procedure to configure import settings.

procedure_ddConfigure import settings

|  |
| --- |
| 1. Open the administration page for the SSP.To open the administration page for the SSP, do the following:  a. On the top navigation bar, click Application Management.  b. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm’s shared services.  c. On the Manage this Farm’s Shared Services page, there is a link to each SSP and links to the Web applications for each SSP. Click the link for the SSP that you want to open.  You can also access the SSP by clicking the link to the SSP home page in the Quick Launch.  2. On the SSP home page, in the User Profiles and My Sites section, click User profiles and properties.  3. On the User Profiles and Properties page, in the Profiles and Import Settings section, click Configure profile import.  4. On the Configure Profile Import page, in the Source section, select the source for the import. This is usually the current domain, or the entire forest.  note_ddNote:  Changing this setting will delete any manually configured connections for the current source.  5. In the Default Access Account section, select Specify Account and type a name and password for the access account.  note_ddNote:  It is recommended that you specify an account, rather than relying on the default content access account. To use the default content access account, select Use Default Content Access Account.  6. Depending on your plan for scheduling user profile imports, select Schedule full import in the Full Import Schedule section, or select Schedule incremental import in the Incremental Import Schedule section, and then select the day and time to schedule the import.  7. Click OK. |

Before continuing with configuration of personalization features, ensure that you have imported all user profiles at least once. To run a full import of user profiles:

 On the User Profiles and Properties page, in the Profile and Import Settings section, click Start full import.

## Add import connections

The administrator of personalization services for the SSP configures import connections, adding accounts for all users who are sharing personalized information by using the SSP. In deployments that have groups of isolated users, personalized information is isolated by using multiple SSPs. In deployments that have multiple SSPs, the SSP administrator must add connections between SSPs.

Connections to directory services can include Active Directory directory services and Lightweight Directory Access Protocol (LDAP) directory services. You can add a connection to the Business Data Catalog, but it is recommended that you first add import connections for directory services.

Most of these connections are configured automatically when import settings are configured. You can change the default configuration options or add custom import connections.

Use the following procedure to add an import connection.

procedure_ddAdd an import connection

|  |
| --- |
| 1. Open the administration page for the SSP.To open the administration page for the SSP, perform the following:  a. On the top navigation bar, click Application Management.  b. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm's shared services.  c. On the Manage this Farm's Shared Services page, there is a link to each SSP and links to the Web applications for each SSP. Click the link for the SSP that you want to open.  You can also access the SSP by clicking the link to the SSP home page in the Quick Launch.  2. On the SSP home page, in the User Profiles and My Sites section, click User profiles and properties.  3. On the User Profiles and Properties page, in the Profile and Import Settings section, click View import connections.  4. On the View Import Connections page, click Create New Connection.  5. To add a connection to Active Directory directory services:  a. On the Add Connection page, in the Connection Settings section, on the Type menu, click Active Directory.  b. In the Domain name text box, type the domain name for the domain that contains the information that you want to import.  c. Select Auto discover domain controller if the specific domain controller is not important. To select a specific domain controller, select Specify a domain controller, and then in the Domain controller name menu, click the name of a specific domain controller.  d. In the Port text box, type the number of the port to use to connect to the domain. To use SSL to help secure the connection, select the Use SSL-secured connection check box, and type a port number that is configured to use SSL in the Port text box.  e. To minimize the performance impact on the domain controller, type a number of seconds in the Time out text box, and select Enable Server Side Incremental.  note_ddNote:  The Enable Server Side Incremental option must be selected if you are planning to perform incremental imports.  6. To add a connection to an Active Directory resource:  a. In the Connection Settings section, on the Type menu, click Active Directory Resource.  b. In the Domain name text box, type the domain name for the domain that contains the information that you want to import.  c. Select Auto discover domain controller if the specific domain controller is not important. To select a specific domain controller, select Specify a domain controller, and then in the Domain controller name menu, click the name of a specific domain controller.  d. In the Port text box, type the number of the port to use to connect to the domain. To use SSL to help secure the connection, select the Use SSL-secured connection check box, and type a port number that is configured to use SSL in the Port text box.  e. To minimize the performance impact on the domain controller, type a number of seconds in the Time out text box, and select Enable Server Side Incremental.  f. In the Master Forest Connection Settings section, in the Domain name text box, type the domain name for the master forest associated with the Active Directory resource that you want to import.  g. Select Auto discover domain controller if the specific domain controller for the master forest is not important. To select a specific domain controller, select Specify a domain controller, and then in the Domain controller name menu, click the name of a specific domain controller.  h. In the Port text box, type the number of the port to use to connect to the domain. To use SSL to help secure the connection, select the Use SSL-secured connection check box, and type a port number that is configured to use SSL in the Port text box.Select Specify Account and type the account name and password that you want to use to import user profiles from this connection.  note_ddNote:  It is recommended that you specify an account, rather than relying on the default content access account. To use the default content access account, select Use Default Account.  7. To add a connection to LDAP directory services:  a. On the Add Connection page, in the Connection Settings section, in the Type menu, click LDAP Directory.  b. In the Connection name text box, type the name of the connection.  c. In the Directory service server name text box, type the name of the server for the directory service.  d. In the Port text box, type the number of the port to use to connect to the domain. To use SSL to help secure the connection, select the Use SSL-secured connection check box, and type a port number that is configured to use SSL in the Port text box.  e. To minimize the performance impact on the domain controller, type a number of seconds in the Time out text box, and select Enable Server Side Incremental.  f. In the Providername text box, type the name of the provider for this connection.  g. In the Username attribute text box, type the name of the attribute to import.  note_ddNote:  This attribute is the identification attribute for each entry in LDAP directory services, associated with a single user or account. By default, this is the uid attribute.  8. In the Search Settings section, in the Search base text box, type the distinguished name of the directory node from which to import the users. If you do not know the distinguished name, click the Auto Fill Root Search Base button.  9. In the User filter text box, you can add new query clauses to the default query to filter which user profiles are imported.  10. Under Scope, select One level to import one level of user profiles, or Subtree to import all user profiles under the search base.  11. To improve performance, you can type a maximum number of user profiles to import in the Page Size text box, and type a maximum number of seconds for the import in the Page time out text box.  12. In the Authentication Information section, select Specify Account and type the account name and password that you want to use to import user profiles from this connection.  note_ddNote:  It is recommended that you specify an account, rather than relying on the default content access account. To use the default content access account, select Use Default Account.  13. Click OK. |

For most connections, unless you have a specific need to narrow the scope of the import or limit the impact on the servers for directory services, you can accept the default values that appear on the Add Connection page. If you have non-user accounts in Active Directory, such as accounts used for testing, you might want to filter out those accounts. Configuration settings for connections can be modified to improve performance as part of regular operations.

For more information about the exact settings to use when importing user profiles, see the technical reference documentation for Microsoft SharePoint Office Server 2007. For more information about Active Directory, see the documentation for Active Directory.

After you have configured import connections to directory services, you can add a connection for additional properties imported from the Business Data Catalog. Unlike directory services, it is not possible to create user profiles from the Business Data Catalog. You can only add Business Data Catalog data to existing user profiles imported from directory services, although you can add as much or as little data as you want.

Use the following procedure to add an import connection to the Business Data Catalog.

procedure_ddAdd an import connection to the Business Data Catalog

|  |
| --- |
| 1. On the View Import Connections page, click Create New Connection.  2. On the Add Connection page, in the Connection Settings section, in the Type menu, click Business Data Catalog.  3. In the Connection name text box, type the name of the connection.  4. In the Domain name text box, type the domain name for the domain that contains the information that you want to import.  5. In the Business Data Catalog Entity menu, select the name of the business data type that contains the data field to import as a user profile property.  6. Under Connection, select Connect User Profile Store to Business Data Catalog Entity as a 1:1 mapping, and then select a profile property that maps to the business data type in the Return items identified by this profile property menu.  7. To import multiple items for the business data type, select Connect User Profile Store to Business Data Catalog Entity as a 1:many mapping, select a property to filter by in the Filter items by menu, and then type a property for the filter value in the Use this profile property as the filter value menu.  8. Select Auto discover domain controller if the specific domain controller is not important. To select a specific domain controller, select Specify a domain controller, and then in the Domain controller name menu, click the name of a specific domain controller.  9. In the Port text box, type the number of the port to use to connect to the domain. To use SSL to help secure the connection, select the Use SSL-secured connection check box, and type a port number that is configured to use SSL in the Port text box.  10. To minimize the performance impact on the domain controller, type a number of seconds in the Time out text box, and select Enable Server Side Incremental.  11. In the Providername text box, type the name of the provider for this connection.  12. In the Username attribute text box, type the name of the attribute to import.  note_ddNote:  This attribute is the identification attribute for each entry in the Business Data Catalog for this business data type. |

## Configure user profiles

You can add properties to user profiles other than those that are imported from directory services and the business data catalog. These properties can be mapped to existing properties so that their values can be automatically updated during profile imports.

During initial deployment, add the additional properties that you identified during user profile planning.

Use the following procedure to add properties to user profiles.

procedure_ddAdd properties to user profiles

|  |
| --- |
| 1. On the User Profiles and Properties page, in the User Profile Properties section, click Add profile property.  2. On the Add User Profile Property page, in the Property Settings section, type a name and display name for the property.  note_ddNote:  If your deployment uses multiple languages, you can provide alternative display names for each language by clicking the Edit Languages button, clicking Add Language, selecting a language from the menu, and then typing the display name in the new language. You can add display names for any of the available languages. The display name that appears depends on the language used by the user viewing the property.  3. On the Type menu, select the data type for the property.  4. On the Length menu, type the maximum number of characters allowed for values for this property.  5. To allow multiple values for this property, select the Allow multiple values check box, and then select an option from the Multivalue Separator menu.  note_ddNote:  If you select the Allow multiple values check box, the property will be permanently set as a multi-valued property. You cannot change this setting after you have selected it.  6. To allow users to select values from a list of choices, select the Allow choice list check box  7. In the User Description section, type a description that provides instructions for users who are adding values for this property.  note_ddNote:  If your deployment uses multiple languages, you can provide alternative descriptions for each language by clicking the Edit Languages button, clicking Add Language, selecting a language from the menu, and then typing the display name in the new language. You can add descriptions for any of the available languages. The description that appears depends on the language used by the user viewing the property.  8. In the Policy Settings, Edit Settings, and Display Settings sections, select a policy setting and default privacy setting for this property, select whether users can edit values for this property, and configure display options. For more information about privacy policies, see [Configure policies for Profile Services](#DSDOC_a34a6928_c30e_441d_a820_48e0b10a35).  9. In the Choice List Settings section, choose whether the property uses a defined choice list, add the choices, and select whether users can add to the choice list.  note_ddNote:  This section is only available if you selected the Allow choice list check box in the Property Settings section. For more information about choice lists, see Plan for people and user profiles.  10. In the Search Settings section, select the Alias check box if the property is equivalent to the user's name for purposes of search. Select Indexed if this property is part of the search schema for users, so that it can be used to find users or is displayed in users search results.  11. In the Property Import Mapping section, select the data source and data type field to use when mapping this property.  12. Click OK. |

## See Also

[Configure policies for Profile Services](#DSDOC_a34a6928_c30e_441d_a820_48e0b10a35)

[Configure targeted content](#DSDOC_3e01f993_d38f_4bbc_a14c_ff6392555d)

[Configure personalization sites](#DSDOC_635715ed_1407_4251_8999_8e75c03f8e)

# Configure targeted content

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Create and configure audiences](#DSDOC_section13e01f993_d38f_4bbc_a14c_ff)

 [Configure published links to Office client applications](#DSDOC_section23e01f993_d38f_4bbc_a14c_ff)

 [Configure personalization site links](#DSDOC_section33e01f993_d38f_4bbc_a14c_ff)

 [Configure access to trusted My Site host locations](#DSDOC_section43e01f993_d38f_4bbc_a14c_ff)

In Microsoft Office SharePoint Server 2007, content in a site can be targeted to individuals and groups of users so that a site can provide a personalized experience for all users. This encourages collaboration across an organization.

Content is primarily targeted by using audiences. Audiences are defined by using audience rules based on properties in user profiles or membership in distribution lists and SharePoint groups. Properties and distribution list membership information are imported from directory services or from line-of-business applications that are registered in the Business Data Catalog. SharePoint groups are configured within each site or site collection.

SharePoint lists and Web Parts can be targeted by using audiences, so that only members of the targeted audience can view content.

Links to certain sites can be targeted by audience. Examples of targeted links include published links to Office client applications and personalization site links. Targeted links appear in Office client applications and My Sites only for users who are members of the target audiences.

Administrators of the Shared Services Provider (SSP) create and configure audiences, and then configure the compilation schedules for audiences. After audiences are created by SSP administrators, any other user with the correct permissions can use audiences to target content.

SSP administrators also configure the settings for published links to the Office client applications and personalization site links. In configurations that have more than one My Site location, the SSP administrator for personalization services configures trusted My Site locations so that some groups of users can view personalized content across all My Site locations.

## Create and configure audiences

Audiences use the information from directory services and user profiles to target information in links, lists, Web Parts, document libraries, and sites. Before you can create, configure, and compile audiences, you must import user profiles from directory services.

After creating audiences, you can target content by configuring the audience targeting properties of the content.

Use the following procedures to create and configure audiences

procedure_ddCreate and configure audiences

|  |
| --- |
| 1. On the SSP home page, in the Audiences section, click Audiences.  2. On the Manage Audiences page, click Create audience.  3. On the Create Audience page, type a name and description.  4. In the Owner text box, type or select a person to own this audience.  5. Select Satisfy all of the rules or Satisfy any of the rules depending on the rules you have planned for each audience.  Note   Complex rules containing AND and OR can be created by developers using the SharePoint object model.  6. Click OK.  7. On the Add Audience Rule page, to add a rule based on a user:  a. In the Operand section, select User.  b. In the Operator section, select Reports Under to create a rule based on organizational hierarchy or select Member Of to target by group or distribution list.  c. Type or select the user that you want to use to test this rule. For a Reports Under rule, select the person who is the manager of the users that you want to include in the audience. For a Member Of audience, select the group or distribution list to include for the audience rule.  8. To add a rule based on a property of user profiles:  a. In the Operand section, select Property, and then select a property from the menu.  b. In the Operator menu, select an operator for the property. The operators vary by property, but common operators include =, Contains, and <>. Full descriptions of the operators are available in the planning and operations documentation for Office SharePoint Server 2007.  c. Type a value to use when evaluating the property against this rule.  9. Click OK. |

Use the following procedure to configure audience compilation and compile audiences.

procedure_ddConfigure audience compilation and compile audiences

|  |
| --- |
| 1. On the Manage Audiences page, click Specify compilation schedule.  2. On the Specify Compilation Schedule page, select Enable scheduling.  3. Select a start time in the Start at menu.   To compile audiences at the same time each day, select Every day.   To compile audiences at the same time once per week, select Every week on, and then select a day of the week   To compile audiences once a month, select Every month on this date, and then select a day of the month.  4. Click OK. |

On the Manage Audiences page, click Start compilation at any time to compile audiences. All audiences will be compiled.

note_ddNote:

You can compile audiences individually from the View Audiences page by clicking the audience, and then clicking Compile.

Actual targeting of content based on audiences is performed by site administrators or contributors. As part of planning for your initial deployment, your planning team will identify the key content to target. Audience administrators should work with site administrators during deployment to ensure that content is targeted according to plan.

## Configure published links to Office client applications

Users of Office 2007 client applications can see links to SharePoint sites from those applications. This allows users to quickly and easily access sites and save documents to sites or document libraries.

SSP administrators configure published links to Office applications during initial deployment, and can add or change links as part of regular operations. Links can be visible for all users or only specific groups of users by using audiences.

Administrators configure published links to Office client applications and target them to audiences.

Use the following procedure to configure published links to Office client applications.

procedure_ddConfigure published links to Office client applications

|  |
| --- |
| 1. On the SSP Home page, in the User Profiles and My Sites section, click Published links to Office client applications.  2. On the Published links to Office client applications page, click New to add a link to Office client applications.  3. On the Published links to Office client applications: New Item page, in the URL section, type the URL of the link that you want to appear in Office applications, and type a description for the link.  4. In the Type section, select the kind of site for the URL. This will affect how client applications display the link.  5. In the Target Audiences section, select one or more audiences to use. Only members of these audiences will have access to the link in Office client applications.  6. Click OK. |

## Configure personalization site links

Personalization sites are sites that present information that is personalized based on the current user of a site by using a filter Web Part to display only the information relevant for the current user. Creating a personalization site link adds the link to the My Site navigation bar.

Every user who is a member of a targeted audience can see the personalization link when viewing their personal site, along with other relevant personalization sites. This enables each user to have a single access point for personalized content.

The configuration page for personalization sites does not check the template of linked sites, so SSP administrators can theoretically create a link to any kind of sites. However, to focus the purpose of My Sites, it is recommended that only personalization site links or links to sites that use a similar template be added to the list on the Personalization site links page.

SSP administrators select an owner for each personalization site link. This provides a contact for the personalization link, but does not configure any permissions for audiences. The visibility of each link can be modified by the relevant site administrator of each site during regular operations, by changing the targeted audiences. Audience creation and membership can only be configured by the audiences administrator from the SSP administration pages.

Configure the personalization site links for the key personalization sites identified during site hierarchy and personalization planning. Additional links can be added as necessary as part of regular operations.

Use the following procedure to configure personalization site links.

procedure_ddConfigure personalization site links

|  |
| --- |
| 1. On the SSP Home page, in the User Profiles and My Sites section, click Personalization site links.  2. On the Personalization site links page, click New to add a link to a personalization site.  3. On the Personalization site links: New Item page, in the URL section, type the URL of the link that you want to appear in the My Site navigation bar, and type a description for the link.  4. In the Owner section, type the account name of an owner for the site link. This user is typically the site administrator for the personalization site.  5. In the Target Audiences section, select one or more audiences to use. Only members of these audiences will see the link in the My Site navigation bar.  6. Click OK. |

## Configure access to trusted My Site host locations

Users of personalization services have the permissions given to them by administrators, but these permissions are limited to a single SSP. While good planning can avoid many situations where users need access to multiple My Sites, some scenarios require that a user have access to more than one My Site host location. These scenarios typically involve geographically distributed server farms, each with its own set of shared services.

Consult your planning for SSPs and trusted My Site host locations to determine which trusted My Site host locations you need to add and the audiences you need to use when targeting those locations.

Use the following procedure to add trusted My Site host locations.

procedure_ddAdd trusted My Site host locations

|  |
| --- |
| 1. On the SSP Home page, in the User Profiles and My Sites section, click Trusted My Site host locations.  2. On the Trusted My Site Host Locations page, click New to add another Trusted My Site host location.  3. On the Trusted My Site Host Locations: New Item page, in the URL section, type the URL of the trusted My Site host location, and type a description for the location.  4. In the Target Audiences section, select one or more audiences to use. For trusted My Site locations, the relevant audiences typically represent the set of users that belong to each My Site host location.  5. Click OK. |

During regular operations, in response to changes in directory services, one or more users can end up with My Sites in different locations. This can happen when an account is migrated from one SSP to another, such as when an employee changes geographic divisions in an organization that uses different SSPs for geographically distributed locations. Trusted My Site host locations can be used to provide access to personalization features targeted for only these users, without enabling access to all users.

## See Also

[Configure personalization sites](#DSDOC_635715ed_1407_4251_8999_8e75c03f8e)

# Configure personalization sites

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Create personalization sites](#DSDOC_section1635715ed_1407_4251_8999_8e)

 [Design personalization sites](#DSDOC_section2635715ed_1407_4251_8999_8e)

 [Target personalization site links](#DSDOC_section3635715ed_1407_4251_8999_8e)

Microsoft Office SharePoint Server 2007 provides a template for creating personalization sites. Personalization sites use a Current User Filter Web Part that can be connected to other Web Parts on the page to display content that is personalized for each user who visits the site.

Unlike personal sites, which combine Web Parts that display information configured by Shared Services Provider (SSP) administrators by configuring user profiles and personalization policies with content customized by each user, personalization sites are designed to be customized by site owners for a larger audience.

Site owners are selected during initial deployment by SSP administrators when they configure personalization links. The site owner of each site is typically the site administrator for the site, and decides which audiences to use when targeting the display of the personalization link on the My Site navigation bar.

Site administrators, possibly working with site designers, create and customize personalization sites based on recognized business needs.

## Create personalization sites

Creation of personalization sites is straightforward. A personalization site can be created by any user who has the create sites permission. Use the following procedure to create a personalization site.

procedure_ddCreate a personalization site

|  |
| --- |
| 1. On the Site Actions menu, click Create Site.  2. On the New SharePoint Site page, in the Title and Description section, type a title and description for the personalization site.  3. In the Web Site Address section, type a directory name to complete the URL in the URL name text box.  4. In the Permissions section, select the desired permissions.  5. In the Template Selection section, click the Enterprise tab, and then click Personalization Site.  6. Configure navigation options and site categories depending on the purpose of the site and your site hierarchy and site navigation plans.  7. Click Create. |

## Design personalization sites

Design of personalization sites can be simple or complex depending on the need of the site. The key personalization sites for the initial deployment are identified during site hierarchy planning based on the needs of your organization. Consult site hierarchy planning, and then design each personalization site to meet your identified needs.

The list of Web Parts that can be used in designing personalization sites is provided in part in the planning documentation, developer documentation, and technical reference documentation for Office SharePoint Server 2007. For more information about the full capabilities of Web Parts, see this documentation. The key concept to understand regardless of the exact Web Parts used is how to connect the Current User Filter Web Part to other Web Parts.

Use the following procedure to connect the Current User Filter Web Part to other Web Parts.

procedure_ddConnect the Current User Filter Web Part to other Web Parts

|  |
| --- |
| 1. On the Site Actions menu, click Edit Page.  2. Add the Web Parts that you want to connect to the filter Web Parts, based on your plan for the design of this site.  3. On the Current User Filter Web Part, click the Edit menu, point to Connections, point to Send Values To, and then click the name of the Web Part that you want to connect to the filter Web Part.  note_ddNote:  Some connected Web Parts can accept a default value from the Current User Web Part. The procedure to connect these Web Parts uses the Send Default Value To connection option, but is otherwise the same.  4. On the Configure Connection Webpage dialog, in the Consumer Field Name menu, select the property to filter by.For example, to filter the contents of a Documents Web Part, select Modified By to filter the list in the Documents Web Part to display only the documents modified by the current user.  5. Click Finish.  6. Click Exit Edit Mode when you are done connecting Web Parts. |

## Target personalization site links

Personalization site links determine how personalization site links appear in the My Site navigation bar. Links to personalization sites are targeted by using audiences. The SSP administrator creates audiences and assigns an owner and set of audiences for each personalization site link. The owner is responsible for maintaining the targeting of the link over time by selecting new audiences, but typically cannot create audiences.

Personalization sites do not have to appear in the My Site navigation bar. However, users are much more likely to view a personalization site and work on the information they see on a personalization site if it is one of the sites that appears in the My Site navigation bar.

Because the personalization sites created during initial deployment represent key business processes identified during planning, it is usually a good idea to include links to the sites in the My Site navigation bar and carefully consider how those links are targeted.

Use the following procedure to configure personalization site links.

procedure_ddConfigure personalization site links

|  |
| --- |
| 1. On the SSP home page, in the User Profiles and My Sites section, click Personalization site links.  2. On the Personalization Site Links page, click New to add a link to a personalization site.  3. On the Personalization Site Links: New Item page, in the URL section, type the URL of the link that you want to appear in the My Site navigation bar, and type a description for the link.  4. In the Owner section, type the account name of an owner for the site link. This user is typically the site administrator for the personalization site.  5. In the Target Audiences section, select one or more audiences to use. Only members of these audiences will see the link in the My Site navigation bar.  6. Click OK. |

For more information about configuring personalization site links, see [Configure targeted content](#DSDOC_3e01f993_d38f_4bbc_a14c_ff6392555d).

# Configure policies for Profile Services

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Configure policies for personalization features](#DSDOC_section1a34a6928_c30e_441d_a820_48)

In Microsoft Office SharePoint Server 2007, Shared Services Provider (SSP) administrators for personalization services configure the policies that determine who can view personalized information and how that information can be shared. Every kind of personalized information is affected by these policies, including:

 Memberships in SharePoint sites and distribution lists.

 Social networking features, such as My Colleagues.

 Links on personal sites.

 Personalization site link pinning.

 User profile properties.

Consult your planning for personalization policies, and then configure settings for each of these personalization features.

## Configure policies for personalization features

Policies for profile services are used to configure the access and privacy settings for My Site personalization features and user profile properties. Although all users with the "use personal features" permission can view personalized information, SSP administrators can configure policies for each specific feature or user profile to achieve greater precision in preserving privacy and sharing information according to the needs of each organization.

Use the following procedure to configure policies for personalization features.

procedure_ddConfigure policies for personalization features

|  |
| --- |
| 1. On the SSP home page, in the User Profiles and My Sites section, click Profile services policies.  2. On the Manage Policy page, click the policy that you want to set, and then click Edit Policy.  3. On the Edit Policy page, in the Policy Settings section, in the Policy Setting menu, select the policy setting for the feature or property.   Click Enabled to enable the information to be shared by users other than the SSP administrator. The visibility of enabled features is configured in the Default Privacy Settings menu. This option is only available for policies for features and not policies for user profile properties.   Select Disabled to prevent anyone but the SSP administrator from viewing the property or feature.   Select Required if the property must contain information. The visibility of the property is configured in the Default Privacy Settings menu.   Select Optional if the property is not required. Each user decides whether optional properties contain information based on the user's preference.  4. In the Default Privacy Setting menu, select the people who can view information for the feature or property.   Click Only Me to limit visibility to the user.   Click My Manager to limit visibility to the user and the user's manager.   Click My Workgroup to limit visibility to the user and all users who report to the same manager.   Click My Colleagues to limit visibility to the user and all colleagues for that user.   Click Everyone to share the information with all users who have the "use personal features" permission.  5. To enable users to change the default privacy setting, select the User can override check box.  6. To enable a property to be available in user information lists for SharePoint sites other than My Site, select the Replicable check box. This property and its values from the user profile will be replicated to other sites.  note_ddNote:  If you clear a check box that has already been selected, any information that was replicated before the change will remain on other SharePoint sites until it is changed on each site. This can occur during deployment if you clear a check box for a property that is replicable by default if the property has already been imported from directory services or the Business Data Catalog.  7. Click OK. |

# 3. Configure business intelligence features

## 3. Configure business intelligence features



# Chapter overview: Configure business intelligence features

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Configure access to business data](#DSDOC_section16e1add1c_81f8_4068_9bb0_8d)

 [Register line-of-business applications in the Business Data Catalog](#DSDOC_section26e1add1c_81f8_4068_9bb0_8d)

 [Customize business data lists, Web Parts, and sites](#DSDOC_section36e1add1c_81f8_4068_9bb0_8d)

 [Configure business data search](#DSDOC_section46e1add1c_81f8_4068_9bb0_8d)

Microsoft Office SharePoint Server 2007 enables the integration of data from line-of-business applications with features that enable that data to be found, displayed, and analyzed along with other content by users who use SharePoint sites.

After you have planned the line-of-business applications, SharePoint lists, and sites for your organization, you must configure the connection between data in applications and the features in your deployment that use data.

## Configure access to business data

The first step to enabling business data within your deployment involves configuring access to business data. You must configure access to the Business Data Catalog for a Shared Services Provider (SSP) administrator. For each line-of-business application, you configure access to the underlying database, or to a database that contains a copy of the data that has been isolated from the data. Finally, you configure access to the business data that is made available by the Business Data Catalog, so that business data features are available for the users who use that data and unavailable to other users.

For more information about configuring access to business data, see [Configure access to business data](#DSDOC_a0d973ae_038d_491b_b76d_25dbf745d8).

## Register line-of-business applications in the Business Data Catalog

When you register line-of-business applications in the Business Data Catalog, you select the business data types and properties for each business data type to import. You select fields in the line-of-business application and then map them to business data properties that appear in SharePoint lists, Web Parts, business dashboards, and the Report Center site.

For more information about registering line-of-business applications in the Business Data Catalog, see [Register business applications in the Business Data Catalog](#DSDOC_97d1a614_84e7_45c2_9327_5749d5fc50).

## Customize business data lists, Web Parts, and sites

After you configure access to business data and imported business data types and properties, you can include the data in SharePoint lists and Web Parts. These lists and Web Parts are used in sites across your organization, particularly business dashboards and the Report Center site. Business data displayed in dashboard sites enables complex data analysis and action through business intelligence features, such as Excel Web Access Web Parts and key performance indicators (KPIs).

These features are implemented by site administrators and end users, but business planners and SSP administrators should work closely with these users during initial deployment to implement the decisions made during planning.

For more information about customizing business data in lists, Web Parts, and sites, see [Customize business data lists, Web Parts, and sites](#DSDOC_bd39559f_9db8_4ca8_af01_26b4bf90c0).

## Configure business data search

A key step to making business data easily available is to integrate business data into your initial search deployment. For more information about finding business data, see [Configure business data search](#DSDOC_5d91de86_b87d_4613_9fde_3d6158ea97).

# Customize business data lists, Web Parts, and sites

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Create business data lists](#DSDOC_section1bd39559f_9db8_4ca8_af01_26)

 [Create KPIs and KPI lists](#DSDOC_section2bd39559f_9db8_4ca8_af01_26)

 [Create and configure reports in the Report Center site](#DSDOC_section3bd39559f_9db8_4ca8_af01_26)

 [Create and configure dashboard sites](#DSDOC_section4bd39559f_9db8_4ca8_af01_26)

 [Create other business data sites](#DSDOC_section5bd39559f_9db8_4ca8_af01_26)

After configuring access to business data and registering applications in the Business Data Catalog, business data is available for use in lists, Web Parts, and sites in your deployment. The initial creation and customization of lists, Web Parts, and sites is performed by site administrators, designers, and contributors. While these tasks are daily operations for different users, and not the responsibility of IT professionals, it is important to set up key lists, Web Parts, and sites as part of an initial deployment of Microsoft Office SharePoint Server 2007.

The relevant customization tasks during deployment include:

 Creating SharePoint lists that use business data that can be used by business data Web Parts and sites that use business data.

 Creating key performance indicators (KPIs) based on business data lists, other SharePoint lists, Excel workbooks, or data sources made available in data connection libraries.

 Creating reports and adding KPI lists and business data lists to the Reports Library of the Report Center site or any site that uses the Report Center template.

 Creating and configuring dashboard sites in the Report Center site.

 Creating additional Report Center sites and other sites that use business data.

## Create business data lists

Business data lists are any SharePoint lists that include business data. The data is imported from properties of line-of-business applications registered in the Business Data Catalog. Business data lists are typically stored in document libraries for sites related to the applications that are the source of data, and can also be used to configure business data Web Parts that are used in sites, such as personalization sites and the Report Center site.

Use the following procedure to create a business data list.

procedure_ddCreate a business data list

|  |
| --- |
| 1. In the Quick Launch, click Lists.  2. On the All Site Content page in the list view, click Create to create a custom list, or click the link to an existing list.  3. On the list page, on the Settings menu, click Create Column.  4. On the Create Column page, in the Name and Type section, type a name and then select the Business data check box.  5. In the Additional Column Settings section, select the business data type and field that contains the data you want to add to the list.  6. To display the action menu for the selected business data type, click Display the actions menu.  7. To link the column to the business data profile for the type, click Link this column to the profile page.  8. Click OK. |

You can add as many business data columns as you want. For more information about business data lists, see the User's Guide.

## Create KPIs and KPI lists

KPIs provide a quick graphical indication of the state of a key business process. KPIs calculate a single value based on a range of data from one of several sources, and then test that value against a value that represents progress toward a business goal.

For each KPI planned in your initial configuration, you create a KPI list. Then, you add one or more KPIs to the list, grouping KPIs for related business processes. For organizational purposes, each KPI list is typically created and stored in the site that will be displaying KPIs, such as the Reports Library of a Report Center site.

Use the following procedure to create KPIs and KPI lists.

procedure_ddCreate KPIs and KPI lists

|  |
| --- |
| 1. On the Quick Launch, click Lists.  2. On the All Site Content page, click Create.  3. On the Create page in the Custom Lists section, click KPI list.  4. On the New page, in the Name and Description page, type a name and description.  5. In the Navigation section, click Yes if you want the KPI to be visible on the Quick Launch.  6. Click Create.  7. On the KPI list page, click the New menu, and then click the type of indicator that you want to add. You can use data from a SharePoint list, an Excel workbook, a SQL Server 2005 Analysis Services cube from a data connection library, of from a manual list of values.  8. On the New Item page, enter values for the relevant properties. |

For more information on creating and configuring KPIs, see the User's Guide.

## Create and configure reports in the Report Center site

For business data lists and KPI lists that are based on data from the Business Data Catalog that you plan to use in the Report Center site, you can create the lists the Reports Library of the Report Center site. These lists can then be used in dashboards for the Report Center site.

In the Report Center site, you can also create reports based on Excel data Use the following procedure to create a report.

procedure_ddCreate a report in the Report Center site

|  |
| --- |
| 1. In the Reports Library, click the New menu, and then click Report.  2. On the Reports Library: Report page, enter properties for the report, and then click OK.  3. In the Reports Library, click the menu for the report, and then click Edit in Microsoft Office Excel to add data to the report. |

During deployment, you will only add the key reports that you identified during planning. The other reports can be added by users during normal operations.

For more information about using reports to display Excel data, see Configure Excel Services.

## Create and configure dashboard sites

Dashboard sites are configured by adding and configuring the relevant Web Parts.

Dashboard sites use filter Web Parts to provide both automatic and user-selected filtering of data displayed in KPI List Web Parts and Excel workbooks. In some cases, they may also include business data Web Parts. Each filter is connected to the Web Parts it filters by the site administrator. Dashboard sites can be created from the Report Center site, or from any site that is created by using the Report Center template.

KPI List Web Parts are used to display either a list of several KPIs for your organization, or the details of a single KPI from a KPI list. Excel Web Access Web Parts are used to display information from Excel workbooks. Business data Web Parts can be used to display data from line-of-business applications, by using a business data list that includes data from the relevant applications.

Use the following procedure to create and configure a dashboard site.

procedure_ddCreate and configure a dashboard site

|  |
| --- |
| 1. On the home page of the site, in the Quick Launch, click Reports to open the Report Center site.  note_ddNote:  If your site template does not include a Report Center site, you must first create a site by using the Report Center template, and then open that site.  2. On the home page of the Report Center site, in the Quick Launch, click Dashboards to open a list of dashboards in the Reports Library page of the Report Center site.  3. On the Reports Library page, click the New menu, and then click Dashboard Page.  4. On the New Dashboard page, in the Page Name section, provide a name, title, and description for the dashboard site.  5. In the Key Performance Indicator section, select Allow me to select an existing KPI later.  note_ddNote:  Alternatively, you can select Create a KPI list for me automatically, and then configure the KPI list later.  6. Click OK.  7. On the Dashboard page, in the Site Actions menu, click Edit Page.  8. For the Web Part Page zone in which you want to add a Web Part, click Add a Web Part.  9. On the Add Web Parts Web page, in the Suggested Web Parts section, select the check box for the type of Web Part you want to add, and then click Add.  10. To configure the Web Part, click the Edit menu, and then click Modify Shared Web Part. |

For more information about the configuration options for Business Data Web Parts, see Plan business data Web Parts.

Use the following procedure to configure filter Web Parts.

procedure_ddConfigure filter Web Parts

|  |
| --- |
| 1. On the Add Web Parts Web page, select the checkbox for the filter Web Part that you want to add, and then click Add.  2. On the filter Web Part, click Edit, point to Connections, and then select the Web Part to connect to the filter. |

For more information about the configuration options for filter Web Parts, see Plan dashboards and filters.

For more information about configuring Excel Web Access Web Parts, see Configure Excel Services.

## Create other business data sites

Business data Web Parts and KPI List Web Parts can be used in any site. Site administrators can add business data to personalization sites so that each person views a personalized view of the data in each Web Part. KPIs for key business processes are often available on portal home pages, or pages in the Search Center site organized around business data. Refer to your site hierarchy plan for your initial deployment, and add business data and KPI Web Parts for each relevant site.

## See Also

[Chapter overview: Configure business intelligence features](#DSDOC_6e1add1c_81f8_4068_9bb0_8d39966ba3)

# Configure business data search

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Ensure availability of business data](#DSDOC_section15d91de86_b87d_4613_9fde_3d)

 [Configure and crawl business data content sources](#DSDOC_section25d91de86_b87d_4613_9fde_3d)

 [Configure and customize query options for business data](#DSDOC_section35d91de86_b87d_4613_9fde_3d)

Administrators of the search service and administrators of individual site collections must configure several options before business data is available in search results. To make business data available for search, you should:

 Ensure that the data you want users to find is available in the Business Data Catalog, and ensure that users have the intended permissions.

 Configure and crawl business data content sources.

 Configure and customize query options for business data.

Most of these tasks are performed by the administrator of the search shared service or by the administrator of the Business Data Catalog. Some tasks are performed by site collection administrators. Both shared services administrators and site collection administrators will help plan search for business data.

## Ensure availability of business data

Users can only search for business data for line-of-business applications if it is available in the Business Data Catalog, and only if users have the intended permissions. The Shared Services Provider (SSP) administrator for the Business Data Catalog must configure access to business data and register business data types and properties for all line-of-business applications that use the SSP.

For more information on configuring access to business data, see [Configure access to business data](#DSDOC_a0d973ae_038d_491b_b76d_25dbf745d8). For more information about registering line-of-business applications in the Business Data Catalog, see [Register business applications in the Business Data Catalog](#DSDOC_97d1a614_84e7_45c2_9327_5749d5fc50).

## Configure and crawl business data content sources

Business data, as any other content, can only be found during search queries if a content source has been created that includes a start address for the data. SSP administrators for the search service must create and configure all content sources for business data, based on the data identified during planning.

When you add start addresses for business data, you must use a location that respects the security settings configured in the Business Data Catalog. For example, if the Business Data Catalog connects to a server containing a copy of data instead of the server that is running the line-of-business application, you must use the location of the copied data in the start address for the business data content source.

Use the following procedure to configure business data content sources.

procedure_ddConfigure business data content sources

|  |
| --- |
| 1. Create one or more content sources for the data in line-of-business applications, using one start address per application. Use a start address that respects your security configuration.  2. To use a crawling account other than the default content access account to crawl a particular business data start address, create a crawl rule for that start address. All content sources that include that start address will use that account.  3. To change how a particular start address is crawled, configure a crawl rule for that start address.  4. Crawl all business data content sources.  5. Some properties for business data might appear as crawled properties in the search schema. Based on search schema planning, select relevant properties in the Configure Search section of the Business Data Catalog and map them to managed properties for search. These properties will be available for use during search queries.  6. Crawl the content sources again to complete the mapping of managed properties. |

## Configure and customize query options for business data

After crawling business data content sources, the SSP administrator for the search service creates and configures shared search scopes for business data. Then site administrators create site search scopes and keywords, and configure relevance settings for queries performed on the sites that they manage.

Both SSP administrators and site administrators configure query options based on decisions made during planning for the initial deployment. Many of these settings will be changed as part of regular operations, but it is helpful to configure the initial query options for your deployment of Office SharePoint Server 2007.

Use the following procedure to configure the initial query options.

procedure_ddConfigure initial query options

|  |
| --- |
| 1. Create shared search scopes for business data (SSP administrator).  2. Create site-specific search scopes for business data (site administrators).  3. Configure keywords for business data (site administrators).  4. Configure relevance settings (site administrators).  5. Customize the Search Center tabs for business data. |

## See Also

[Configure access to business data](#DSDOC_a0d973ae_038d_491b_b76d_25dbf745d8)

[Register business applications in the Business Data Catalog](#DSDOC_97d1a614_84e7_45c2_9327_5749d5fc50)

# 4. Configure Excel Services

## 4. Configure Excel Services



# Chapter overview: Configure Excel Services

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

Configure Excel Services to centrally manage user access to system resources and external databases. From the Central Administration Web application in Microsoft Office SharePoint Server 2007, you can configure the SharePoint document libraries, UNC paths, and HTTP Web sites from which Excel Calculation Services can open workbooks.

You can also configure which external databases workbook authors are allowed to access. You can configure restrictions on the use of data connections, single sign-on (SS0) authentication, and the use of user-defined functions.

## About Excel Services configuration

 Trusted file locations   These are SharePoint document libraries, UNC paths, or HTTP Web sites that have to be explicitly trusted before Excel Calculation Services is allowed to access them. For more information, see [Add a trusted file location](#DSDOC_00fc7447_6c0c_435c_840f_b1033710fe).

 Single sign-on   SSO enables authentication against external data sources without having to provide authentication credentials more than once. SSO authentication is required in a trusted subsystem environment. For more information, see [Start the Single Sign-On service](#DSDOC_34d6aeca_2a18_4416_8824_85d709d1b0) and [Manage settings for single sign-on](#DSDOC_cd4f4a25_e393_4e1b_9c26_a0bed175d3).

 Trusted data providers   These are databases that reside outside of the Excel Services farm and that Excel Calculation Services is explicitly configured to trust when processing data connections in workbooks. Excel Calculation Services attempts to process a data connection only if the connection is to a database that has been added to the Excel Services trusted data providers list. For more information, see [Add a trusted data provider](#DSDOC_66250265_870d_4703_bbda_998dacc0e4).

 Trusted data connection libraries   These are SharePoint document libraries that contain Office data connection (.odc) files that are used to manage workbook connections to trusted data providers. In the trusted subsystem model, front-end Web servers and application servers running Excel Calculation Services trust the accounts of the associated Office SharePoint Server 2007 applications. For more information, see [Add a trusted data connection library](#DSDOC_63e9cc2b_3cb7_4c92_a549_d823d5844f).

 User-defined functions   These are functions that enable users to extend the functionality of Excel Web Services. For more information, see [Enable user-defined functions](#DSDOC_8756faee_7fa9_4c31_ab72_f84f8b0e51).

# Add a trusted file location

In this article:

 [About trusted file locations](#DSDOC_section100fc7447_6c0c_435c_840f_b1)

 [Add a trusted file location](#DSDOC_section200fc7447_6c0c_435c_840f_b1)

## About trusted file locations

In Microsoft Office SharePoint Server 2007, a trusted file location is a SharePoint document library, a UNC path, or an HTTP Web site that is configured as a trusted repository for workbooks that Excel Calculation Services can access. Excel Calculation Services opens workbooks that are stored in trusted file locations only.

If you are planning to use a new SharePoint document library as a trusted file location for Excel Services, create the new document library on a SharePoint site. To create the new document library, click the Site Actions menu, select Create, and then click Document Library. On the New page, type a name for the new document library and click Create.

## Add a trusted file location

Use the following procedure to add a trusted file location.

procedure_ddAdd a trusted file location

|  |
| --- |
| 1. From Administrative Tools, open the SharePoint Central Administration Web application.  2. On the Central Administration home page, click Application Management.  3. On the Application Management page, in the Office SharePoint Server 2007 Shared Services section, click Create or Configure this Farm's Shared Services.  4. On the Manage this Farm's Shared Services page, click SharedServices1 (Default). This is the Shared Services Provider (SSP) that you will configure.  5. On the Shared Services home page, in the Excel Services Settings section, click Trusted file locations.  6. On the Excel Services Trusted File Locations page, click Add Trusted File Location.  7. In the Address section, type the location and name of the SharePoint Office SharePoint Server 2007 document library that you want to add as a trusted file location in Excel Services. If the document library is stored in the Microsoft Windows SharePoint Services 3.0 content database, ensure that Windows SharePoint Services 3.0 is selected as the Location Type.  8. In the External Data section, select the type of data connections that you will allow workbooks in this trusted file location to contain and click OK. |

In the External Data section, you can determine whether workbooks stored in trusted file locations and opened in Excel Calculation Services sessions can access an external data source. You can designate whether Allow External Data is set to None, Trusted data connection libraries only, or Trusted data connection libraries and embedded.

If you select either Trusted data connection libraries only or Trusted data connection libraries and embedded, the workbooks stored in the trusted file locations are allowed to access external data sources. External data connections can be accessed only when they are embedded in or linked from a workbook. Excel Calculation Services checks the list of trusted file locations before opening a workbook. If you select None, Excel Calculation Services will block any attempt to access an external data source. If you manage data connections for a large number of workbook authors, you might want to select Trusted data connection libraries only.

## See Also

[Add a trusted data connection library](#DSDOC_63e9cc2b_3cb7_4c92_a549_d823d5844f)

# Start the Single Sign-On service

In this article:

 [About single sign-on authentication](#DSDOC_section134d6aeca_2a18_4416_8824_85)

 [Start the Single Sign-On service](#DSDOC_section234d6aeca_2a18_4416_8824_85)

## About single sign-on authentication

In Microsoft Office SharePoint Server 2007, single sign-on (SSO) authentication enables users to access multiple system resources without having to provide authentication credentials more than once. Office SharePoint Server 2007 implements SSO authentication by including a Windows service and a secure credentials database.

To authenticate a data connection in a workbook against an external data source, you can configure Excel Calculation Services to retrieve authentication credentials from an SSO store. To enable SSO functionality for Office SharePoint Server 2007, you need to start the Microsoft Single Sign-On service and then manage SSO settings in the SharePoint Central Administration Web application.

## Start the Single Sign-On service

Use the following procedure to start the Single Sign-On service.

procedure_ddStart the Single Sign-On service

|  |
| --- |
| 1. From Administrative Tools, click Services.  2. Double-click Microsoft Single Sign-On Service.  3. On the Log On tab of the Single Sign-On Service Properties page, click This account, and then type the domain, user name, and password that you have used to install and manage your server.  4. Click Apply.  5. On the General tab of the Single Sign-On Service Properties page, change the startup type to Automatic, click Start, and then click OK.  note_ddNote:  Start the Single Sign-On service on all front-end Web servers and all application servers in your farm that run Excel Calculation Services. |

## [[1]](#footnote-2)#See Also

[Manage settings for single sign-on](#DSDOC_cd4f4a25_e393_4e1b_9c26_a0bed175d3)

# Manage settings for single sign-on

In this article:

 [About single sign-on settings](#DSDOC_section1cd4f4a25_e393_4e1b_9c26_a0)

 [Manage single sign-on settings](#DSDOC_section2cd4f4a25_e393_4e1b_9c26_a0)

## About single sign-on settings

Excel Services supports three data authentication methods: Integrated Windows authentication, single sign-on (SSO) authentication, and None.

Imagine a data connection in a workbook opened in an Excel Calculation Services application server that uses stored credentials for authentication against an external data source. In this scenario, Excel Calculation Services has to retrieve valid credentials from an SSO authentication database, and then use the credentials to authenticate against a data source before the data connection can be established.

To enable SSO functionality for Microsoft Office SharePoint Server 2007, you need to start the Microsoft Single Sign-On service, and then manage SSO settings in the SharePoint Central Administration Web application.

## Manage single sign-on settings

Use the following procedure to manage SSO settings.

procedure_ddManage SSO settings

|  |
| --- |
| 1. From Administrative Tools, open the SharePoint Central Administration Web application.  2. On the Central Administration home page, click Operations.  3. In the Security Configuration section, click Manage settings for single sign-on.  4. On the Manage Settings for Single Sign-On page, click Manage server settings.  5. In the Account Name box for the SSO Administrator account, type the same domain and user name that you used to configure the Single Sign-On service. If the user name you used to configure the Single Sign-On service is a member of a Windows security group, you can type the name of the Windows security group instead of a user name.  6. In the Enterprise Application Definition Administrator Account box, type the same domain and user name that you used to configure the Single Sign-On service. |

## See Also

[Start the Single Sign-On service](#DSDOC_34d6aeca_2a18_4416_8824_85d709d1b0)

# Add a trusted data provider

In this article:

 [About trusted data providers](#DSDOC_section166250265_870d_4703_bbda_99)

 [Add a trusted data provider](#DSDOC_section266250265_870d_4703_bbda_99)

## About trusted data providers

Trusted data providers are external databases that Excel Calculation Services is explicitly configured to trust when processing data connections in workbooks. Excel Calculation Services attempts to process a data connection only if the connection is to a trusted data provider.

You can control access to external data by explicitly defining the data providers that are trusted and recording them in the list of trusted data providers. The list of trusted data providers designates specific external data providers to which workbooks opened in Excel Calculation Services are permitted to connect.

Before instantiating a data provider to enable a workbook to connect to an external data source, Excel Calculation Services checks the connection information to determine whether the provider appears on the list of trusted data providers. If the provider is on the list, a connection is attempted; otherwise, the connection request is ignored.

## Add a trusted data provider

Use the following procedure to add a trusted data provider.

procedure_ddAdd a trusted data provider

|  |
| --- |
| 1. From Administrative Tools, open the SharePoint Central Administration Web application.  2. On the Central Administration home page, click Application Management.  3. On the Application Management page, in the Office SharePoint Server 2007 Shared Services section, click Create or Configure this Farm’s Shared Services.  4. On the Manage this Farm’s Shared Services page, click SharedServices1 (Default). This is the Shared Services Provider (SSP) that you will configure.  5. On the Shared Services home page, in the Excel Services Settings section, click Trusted data providers.  6. On the Excel Services Trusted Data Providers page, click Add Trusted Data Provider.  7. In the Provider ID section, type the identifier of the external database you want to add as a trusted data provider in Excel Services. Click OK. |

## See Also

[Add a trusted data connection library](#DSDOC_63e9cc2b_3cb7_4c92_a549_d823d5844f)

# Add a trusted data connection library

In this article:

 [About trusted data connection libraries](#DSDOC_section163e9cc2b_3cb7_4c92_a549_d8)

 [Add a trusted data connection library](#DSDOC_section263e9cc2b_3cb7_4c92_a549_d8)

## About trusted data connection libraries

In Microsoft Office SharePoint Server 2007, a trusted data connection library is a data connection library from which you have determined that it is safe to access Office data connection (.odc) files. The .odc files are used to centrally manage connections to external data sources.

Instead of allowing embedded connections to external data sources, Excel Calculation Services can be configured to require the use of .odc files for all data connections. The .odc files are stored in data connection libraries, and the data connection libraries have to be explicitly trusted before Excel Calculation Services will allow workbooks to access them.

If a data connection is linked from a workbook that is accessed by a server running Excel Calculation Services, the server checks the connection information and the list of trusted data connection libraries. If the data connection library is on the list, a connection is attempted by using the .odc file from the data connection library; otherwise, the connection request is ignored.

Before you can configure a data connection library as a trusted data connection for Excel Services, you must create a data connection library on a SharePoint site. To create a data connection library, click the Site Actions menu, select Create, and then click Data Connection Library. On the New page, type a name for the new data connection library and click Create.

## Add a trusted data connection library

Use the following procedure to add a trusted data connection library.

procedure_ddAdd a trusted data connection library

|  |
| --- |
| 1. From Administrative Tools, open the SharePoint Central Administration Web application.  2. On the Central Administration home page, click Application Management.  3. On the Application Management page, in the Office SharePoint Server 2007 Shared Services section, click Create or Configure this Farm’s Shared Services.  4. On the Manage this Farm’s Shared Services page, click SharedServices1 (Default). This is the Shared Services Provider (SSP) that you will configure.  5. On the Shared Services home page, in the Excel Services Settings section, click Trusted data connection libraries.  6. On the Excel Services Trusted Data Connection Libraries page, click Add Trusted Data Connection Library.  7. Type the address of the data connection library that you want to configure as a trusted data connection library and click OK. |

## See Also

[Add a trusted file location](#DSDOC_00fc7447_6c0c_435c_840f_b1033710fe)

# Enable user-defined functions

In this article:

 [About user-defined functions](#DSDOC_section18756faee_7fa9_4c31_ab72_f8)

 [Enable user-defined functions](#DSDOC_section28756faee_7fa9_4c31_ab72_f8)

 [Enable user-defined functions for workbooks in a trusted file location](#DSDOC_section38756faee_7fa9_4c31_ab72_f8)

## About user-defined functions

User-defined functions extend the capabilities of Excel Services by enabling you to define and create custom functions. To enable this functionality, you need to configure Excel Services to support user-defined functions.

To configure this support, you must enable user-defined functions on trusted file locations containing workbooks that require access to this functionality. In addition, you must register user-defined function assemblies on the Excel Services user-defined function assembly list.

## Enable user-defined functions

Use the following procedure to enable user-defined functions.

procedure_ddEnable user-defined functions

|  |
| --- |
| 1. From Administrative Tools, open the SharePoint Central Administration Web application.  2. On the Central Administration home page, click Application Management.  3. On the Application Management page, in the Office SharePoint Server 2007 Shared Services section, click Create or Configure this Farm's Shared Services.  4. On the Manage this Farm's Shared Services page, click SharedServices1 (Default). This is the Shared Services Provider (SSP) that you will configure.  5. On the Shared Services home page, in the Excel Services Settings section, click User-defined function assemblies.  6. On the Excel Services User-Defined Functions page, click Add User-Defined Function Assembly.  7. In the Assembly box, type the assembly strong name or the file path of the user-defined function assembly that you want to register.  8. In Assembly Location, perform the following actions:  a. Select the global assembly cache (GAC) if you are deploying a user-defined function assembly to the GAC on each Excel Calculation Services application server in your farm.  b. Select Local file if you want to save a user-defined function to a directory on an Excel Calculation Services application server (a local path), or to a network share (a UNC path).  c. Ensure that the Enable Assembly check box is selected, and then click OK. |

## Enable user-defined functions for workbooks in a trusted file location

Use the following procedure to enable user-defined functions for workbooks in a trusted file location.

procedure_ddEnable user-defined functions for workbooks in a trusted file location

|  |
| --- |
| 1. In the Excel Services section of the Shared Services Administration home page, click Trusted file locations.  2. On the Excel Services Trusted File Locations page, click the URL of the trusted file location whose properties you want to edit.  3. In the User-Defined Functions section of the Excel Services Edit Trusted File Location page, select User-defined functions allowed, and then click OK. |

# 5. Configure Office Project Server

## 5. Configure Office Project Server



# Chapter overview: Configure Office Project Server

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

Office Project Server 2007 is the core of Microsoft Office Enterprise Project Management (EPM) Solutions. The Microsoft Office Enterprise Project Management (EPM) Solution allows you to effectively manage and prioritize projects and resources across your organization. With it your teams can share knowledge, collaborate smoothly to complete tasks and deliverables, and adjust activities quickly to accommodate project changes and updates. And you can accurately assess your needs and effectively deploy resources across the organization.

For more information about Office Project Server 2007 and EPM Solutions, see What's new in Office Project 2007.

note_ddNote:

Additional information can be found in [The Microsoft Office Enterprise Project Management (EPM) Solution on Office Online](http://go.microsoft.com/fwlink/?LinkId=79759&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=79759&clcid=0x409) and the [Microsoft Office Enterprise Project Management Solution product guide](http://go.microsoft.com/fwlink/?LinkId=79760&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=79760&clcid=0x409).

You can easily install and configure Office Project Server 2007 on an existing Office SharePoint Server 2007 farm. This chapter describes the required steps in order to do this.

## Configuring Office Project Server

important_ddImportant:

Before installing Office Project Server 2007, it is very important to thoroughly plan for the deployment. For information on planning for Office Project Server 2007, see Planning and Architecture for Office Project Server 2007.

When installing Office Project Server 2007 to an existing Office SharePoint Server 2007 farm, you must do the following general steps:

1. Office Project Server 2007 must be installed to all Web Front-End servers in the farm

2. Office Project Server 2007 must be installed to all Application servers in the farm

note_ddNote:

The Project Application service can then be enabled on any Application servers on which you intend to run Office Project Server 2007.

1. Office Project Server 2007 must be provisioned to the farm.

These steps will be covered in more detail in the sections in this chapter.

note_ddNote:

When installing to servers on an existing farm, you should plan for an appropriate time to quiesce the farm. The farm needs to be shut down when install binary files ("bits") to multiple servers on the farm. This enables the farm to be in a consistent state after the binary files are installed to servers in the farm and restarting the farm. You can run post-setup configuration (running the SharePoint Products and Technologies Configuration Wizard) on each server after restarting the farm.

# Install Project Server 2007 to all Office SharePoint Server 2007 Web servers

On all of the Office SharePoint Server 2007 Web Front-End servers, you will need to install the Office Project Server 2007 binary files (or "bits") required for the Office Project Server 2007 Web Front-End server and run the SharePoint Products and Technologies Configuration Wizard.

## Install the Office Project Server 2007 binary files

From the Office Project Server 2007 installation media, do the following:

1. Navigate to the installation location for Office Project Server 2007, and then double-click the Setup.exe file to begin Setup.

2. On the Enter Product Key page, type the 25-character product key, and then click Continue.

3. On the End User License Agreement page, view the terms of the agreement. Select I accept the terms of the agreement, and then click Continue.

4. On the Choose the Installation you Want page, click Advanced.

5. On the next screen, on the Server Type tab, select Web Front-End,

On the File Location tab, you can specify the location to which you want the bits to be installed. The default location is C:\Program Files\Microsoft Office Servers.

On the Feedback tab, you can elect to participate in the Customer Experience Improvement Program. If you elect to participate, with your permission anonymous information will be gathered from your experience with the product for the sole purpose of improving it. The default selection is I'll choose later. This option can be configured later by using SharePoint Central Administration.

Click Install Now. The Office Project Server 2007 Web tier components will install onto the computer.

6. When installation of the binary files is completed, the Setup Complete page is displayed and prompts you to complete the configuration of your server. Verify that Run the SharePoint Products and Technologies Configuration Wizard now is selected, and then click Close.

note_ddNote:

If you choose to run the SharePoint Products and Technologies Configuration Wizard at a later time, click to clear the check box, and then click Close. To start the SharePoint Products and Technologies Configuration Wizard later, click Start, click All Programs, click Microsoft Office Server, and then click SharePoint Products and Technologies Configuration Wizard.

## Run the SharePoint Products and Technologies Configuration Wizard

After Setup finishes, you can run the SharePoint Products and Technologies Configuration Wizard to configure Windows SharePoint Services 3.0. The SharePoint Products and Technologies Configuration Wizard automates several configuration tasks, including: installing and configuring the configuration database, installing and enabling Windows SharePoint Services 3.0 services, and installing the SharePoint Central Administration Web application. Use the following instructions to run the SharePoint Products and Technologies Configuration Wizard.

1. The Welcome to SharePoint Products and Technologies page lists information that is required from you during configuration. For a single computer installation, you will need the following:

 Name of the database server and database where the server farm configuration data will be stored.

 User name and password for the database access account that will administer the server farm.

2. A message alerts you that specified services might need to be restarted or reset during the installation. Click Yes.

3. On the Connect to a Server Farm page, select No, I want to create a new server farm. Click Next.

4. On the Specify Configuration Database Settings page, use the information you gathered earlier to specify the name of the computer running SQL Server and the name of the configuration database, and to specify a Windows account that the computer will use to connect to the configuration database.

a. In the Database server box, type the name of the computer running SQL Server on which the database will be created.

b. In the Database name box, type the name that you want to give the configuration database. The default entry is SharePoint\_Config.

c. In the Specify Database Access Account section, in the Username box, type the name of the Windows account you want to use to access the SharePoint configuration database. This account must have access to the computer running SQL Server to create the configuration database and must be a member of the Power Users group on that computer. Be sure to type the username in the format DOMAIN\username.

d. In the Password box, type the password for this account.

e. Click Next.

5. On the Configure SharePoint Central Administration Web Application page, configure the following options:

a. On the Configure SharePoint Central Administration Web Application page, select the Specify port number check box and type a port number if you want the SharePoint Central Administration Web application to use a specific port, or leave the Specify port number check box unchecked if you do not care which port number the SharePoint Central Administration Web application uses. If you do not specify an available port number, one will be automatically selected.

b. In the Configure Security Settings section, select NTLM authentication (the default) if you would like to use NTLM authentication. Select Negotiate (Kerberos) if you want to use Kerberos authentication. If you are unsure, contact your network administrator. Then click Next.

note_ddNote:

In most cases, you should use the default setting (NTLM). Use Negotiate (Kerberos) only if Kerberos is supported in your environment. Using the Negotiate (Kerberos) option requires you to configure a Service Principal Name for the domain user account. To do this, you must be a member of the Domain Admins group. For more information about configuring Kerberos, see [Configure Windows SharePoint Services to Use Kerberos Authentication](http://go.microsoft.com/fwlink/?LinkID=76570&clcid=0x409) in the Microsoft Knowledge Base (http://go.microsoft.com/fwlink/?LinkID=76570&clcid=0x409).

6. On the Completing the SharePoint Products and Technologies Configuration Wizard page, verify that your configuration settings are correct. If any settings are not correct, use the Back button to change the setting. If all the settings are correct, click Next.

7. When configuration is finished, the Configuration Successful page displays the configuration settings. Click Finish. This will automatically start up the SharePoint Central Administration page.

note_ddNote:

If you are prompted for your username and password, you might need to add the SharePoint Central Administration site to the list of trusted sites in Internet Explorer. Instructions for configuring this setting are provided below.

note_ddNote:

If you see a proxy server error message, you might need to configure your proxy server settings so that local addresses bypass the proxy server. Instructions for configuring this setting are provided below.

# Install Project Server 2007 to all Office SharePoint Server 2007 application servers

All Application servers on the Office SharePoint Server 2007 farm must have the Office Project Server 2007 Application server installed on them. However, the Project Application service will not automatically start on the server after running post setup-configuration. Therefore, you will only need to turn on this service on the Application Servers you want to run 2nd\_ProjServ\_12.

On all Application servers in the farm, you will need to do the following:

1. Install the binary files.

 Install the Office Project Server 2007 binary files ("bits") to the computer.

2. Run the SharePoint Products and Technologies Configuration Wizard

 Allows you to connect to the existing farm.

3. Configure the Farm Services

 Start the Project Application service.

 Stop the Windows SharePoint Services Web Application service.

## Install the Office Project Server 2007 binary files

On the computer designated to host the Project Server 2007 Application tier, you will need to install the Office Project Server 2007 binary files (or "bits") required for the Project Server 2007 Application server. From the Office Project Server 2007 installation media, do the following:

1. Navigate to the installation location for Office Project Server 2007, and then double-click the Setup.exe file to begin Setup.

2. On the Enter Product Key page, type the 25-character product key, and then click Continue.

3. On the End User License Agreement page, view the terms of the agreement. Select I accept the terms of the agreement, and then click Continue.

4. On the Choose the Installation you Want page, click Advanced. Selecting this option allows you to install a Office Project Server 2007 farm installation.

5. On the next screen, on the Server Type tab, select Complete to install the Web front-end and Application server.

note_ddNote:

Although a complete installation installs both Web Front-End and Application server, you can stop the Windows SharePoint Services Web Application service on this computer later.

On the File Location tab, you can specify the location to which you want the bits to be installed. The default location is C:\Program Files\Microsoft Office Servers.

On the Feedback tab, you can elect to participate in the Customer Experience Improvement Program. If you elect to participate, with your permission anonymous information will be gathered from your experience with the product for the sole purpose of improving it. The default selection is I'll choose later. This option can be configured later by using SharePoint Central Administration.

Click Install Now.

6. When installation of the binary files is completed, the Setup Complete page is displayed and prompts you to complete the configuration of your server. Verify that Run the SharePoint Products and Technologies Configuration Wizard now is selected, and then click Close.

note_ddNote:

If you choose to run the SharePoint Products and Technologies Configuration Wizard at a later time, click to clear the check box, and then click Close. To start the SharePoint Products and Technologies Configuration Wizard later, click Start, click All Programs, click Microsoft Office Server, and then click SharePoint Products and Technologies Configuration Wizard.

## Run the SharePoint Products and Technologies Configuration Wizard

1. The Welcome to SharePoint Products and Technologies page lists information that is required from you during configuration. You will need the following:

 Name of the database server and database where the Office SharePoint Server 2007 server farm configuration data (the configuration database) is stored.

 User name and password for the database access account that will administer the server farm.

2. A message alerts you that specified services might need to be restarted or reset during the installation. Click Yes.

3. On the Connect to a Server Farm page, select Yes, I want to connect to an existing server farm. Click Next.

4. On the Specify Configuration Database Settings page, use the information you gathered earlier to specify the name of the computer running SQL Server and the name of the configuration database, and to specify a Windows account that the computer will use to connect to the configuration database.

a. In the Database server box, type the name of the computer running SQL Server on which the Configuration database is hosted.

b. After entering the name, click the Retrieve Database Names button. This will search for the configuration database on the SQL Server you specified. The configuration database names on the server then display in the Database name drop down list. Select the configuration database.

c. In the Specify Database Access Account section, in the Username box, type the name of the Windows account you want to use to access the configuration database. This account must have access to the computer running SQL Server to create the configuration database and must be a member of the Power Users group on that computer.

d. In the Password box, type the password for this account.

e. Click Next.

5. On the Completing the SharePoint Products and Technologies Configuration Wizard page, you are asked to verify the configuration settings that you entered.

To continue, click Next.

6. When configuration is finished, the Configuration Successful page displays the configuration settings. Click Finish. This will automatically start up the SharePoint Central Administration page.

## Configure the Farm Services

The following procedures use the Central Administration page to start the Project Application service. You can also stop the Windows SharePoint Services Web Application if you do not want this server to also serve as a Web Front End Server as well.

1. On the Central Administration page top navigation, click Operations.

2. On the Operations page, in the Topology and Services section, select Services on server.

3. On the Services on Server page for this computer, from the Service list find Project Application Service. In the same row under the Action column, click Start.

4. If you want to disable Web Front End server functionality of this server, you must stop the Windows SharePoint Services Web Application service. To do this, from the Service list find Windows SharePoint Services Web Application. Ensure that the service is stopped. If the status is listed as Started, in the same row under the Action column, click Stop.

5. To see whether the status has changed to Stopped, you might need to refresh the page.

# Install Project Server to the farm

This procedure is the last step needed in adding Project Server 2007 to an existing Microsoft Office SharePoint Server 2007 farm.

note_ddNote:

This procedure assumes that you are using an existing Shared Service Provider for the Microsoft Office SharePoint Server 2007 farm.

## Provision Office Project Server 2007 to the farm

This final procedure allows you to create the Office Project Server 2007 instance on the farm. During this process, you are able to specify the Project Server Administrator account, point to the database server that will be used to host the Office Project Server 2007 databases, and name the Office Project Server 2007 databases.

1. On the Manage this Farm's Shared Services page, in the SSP Name list, select the Shared Service Provider in which you would like to provision Project Web Access.

note_ddNote:

You can provision Project Web Access to an existing Shared Service Provider created in Office SharePoint Server 2007, or you can create one after running Post Setup Configuration.

2. On the home page for this core service, in the Project Server section, click Project Web Access Sites.

3. On the Manage Project Web Access page, click Create Project Web Access Site.

4. On the Create a New Project Web Access page, do the following:

a. In the Project Web Access Site Location section, from the SharePoint Web Application to host Project Web Access list, select the name of the extended Web site you created to host the SharePoint team site. Do not select the unextended Web site being used for the Shared Service Provider.

b. In the Project Web Access path box, enter the name you will use to specify the URL to the Project Web Access home page (for example, if you enter PWA, the URL to the home page will be http://servername/PWA).

c. In the Administrator Account section, type the Windows user account that will be given administrative credentials to the Project Server instance.

d. In the Primary Database section, type the name of the computer running SQL Server on which the Published, Draft, and Archive databases will be located. In the three Database Name fields, type unique names for each of the three Office Project Server 2007 databases.

note_ddNote:

You can use the default database names. However, make sure they do not already exist on the SQL Server.

e. In the Reporting Database section, select Use the primary database server if you want the reporting database to be created on the Primary database server you specified in the previous section. If you want the Reporting database to be created on another computer hosting SQL Server, deselect this option and enter the name of the SQL Server on which you want it to be created. In the Reporting database name field, type a unique name you want to use for the Reporting database.

note_ddNote:

You can use the default database name. However, make sure they do not already exist on the SQL Server.

5. Click OK. The provisioning process starts.

6. You will return to the Manage Project Web Access page. Click the Refresh Status button to update the status of the provisioning process. When provisioning is complete, an entry in the Status column will display Provisioned. When completed, you can click the URL to go to the Project Web Access site.

note_ddNote:

Provisioning is an asynchronous process, so it might take a few minutes before the job is complete.

# 6. Configure InfoPath Forms Services

## 6. Configure InfoPath Forms Services



# Configure InfoPath Forms Services

InfoPath Forms Services provides you with the ability to deploy your organization's forms to Microsoft Office SharePoint Server and enable users to fill out these forms using a Web browser. There are many ways you can configure InfoPath Forms Services depending on the needs of your organization. For example, by default, form templates deployed by non-administrators ("user form templates") can be opened in a browser, but you can disable this feature so that only administrator-approved templates are browser-enabled.

You should configure InfoPath Forms Services before you begin to deploy form templates in order to avoid unexpected behavior.

Before you begin to configure InfoPath Forms Services, you should read the planning articles in Chapter overview: Plan Forms Services to ensure your configuration choices are aligned with the needs of your organization.

## Configure InfoPath Forms Services using Central Administration

To configure InfoPath Forms Services, you will need to navigate to the Configure InfoPath Forms Services page in the SharePoint Central Administration Web site.

procedure_ddConfigure InfoPath Forms Services

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. On the taskbar, click Start, point to Administrative Tools, and then click SharePoint 3.0 Central Administration.  2. In the navigation bar, click the Application Management tab.  3. On the Application Management page, in the InfoPath Forms Services section, click Configure InfoPath Form Services.  4. On the Configure InfoPath Forms Services page, in the User Browser-enabled Form Templates section, you can choose settings that determine how user form templates are processed by InfoPath Forms Services.  a. Select the Allow users to browser-enable form templates check box to allow users to deploy browser-enabled form templates.  b. Select the Render form templates that are browser-enabled by users check box to allow browser-enabled form templates deployed by users to be rendered in a Web browser. If this option is not selected, users can still deploy browser-compatible form templates, but these form templates are not accessible through a Web browser.  5. In the Data Connection Timeouts section, specify default and maximum timeouts for data connections from a browser-enabled form. The connection timeout can be changed by code in the form template, but it will never exceed the maximum timeout specified.  a. In the Default data connection timeout box, enter the time in milliseconds that will elapse before a data connection times out. The default timeout is 10000 milliseconds. You can override this setting with code within a form template that specifies the data connection timeout value.  b. In the Maximum data connection timeout box, enter the maximum time in milliseconds that will elapse before a data connection times out. The default timeout is 20000 milliseconds. This is an absolute setting, and it overrides any data connection timeout values specified within form template code.  6. In the Data Connection Response Size section, type a value in kilobytes in the box to specify the maximum size of responses data connections are allowed to process. Data connection responses that exceed this value will generate an error message.  7. In the HTTP data connections section, select the Require SSL for HTTP authentication to data sources box to require an SSL-encrypted connection for data connections that use Basic authentication or Digest authentication. You must have configured Secure Sockets Layer (SSL) properly in order for this setting to function.  8. In the Embedded SQL Authentication section, select the Allow embedded SQL authentication box to allow forms to use embedded SQL credentials. Forms that connect to databases may embed SQL user name and password data in the connection string. The connection string can be read in plaintext in the universal data connection file associated with the solution, or in the solution manifest.  9. In the Authentication to data sources (user form templates) section, select the Allow user form templates to use authentication information contained in data connection files box to allow user form templates to use embedded authentication information such as an explicit user name and password or a Microsoft Single Sign-On application ID.  10. In the Cross-Domain Access for User Form Templates section, select the Allow cross-domain data access for user form templates that use connection settings in a data connection file box to allow user form templates to access data from another domain.  11. In the Thresholds section, specify the thresholds at which to end user sessions and log error messages. Form operations that exceed these thresholds will terminate the user session, resulting in the loss of all form data entered during the session, and generate an error message.  a. In the Number of postbacks per form session state box, type the maximum number of postbacks you want to allow. The default value is 75.  b. In the Number of actions per postback box, type the maximum number of actions per postback you want to allow. The default value is 200.  12. Before you configure form session state, you should read [Configure session state for InfoPath Forms Services](#DSDOC_3c4e8fb1_c3ce_4d27_8c65_6c4ab140f7). Correct configuration of form session state requires that you understand how session state is configured for Office SharePoint Server, and it can dramatically affect the behavior of InfoPath Forms Services operations and system performance.  Form session state stores data necessary to maintain a user session. File attachment data in the form will receive an additional 50 percent of session state space.  note_ddNote:  The default parameters should work for most scenarios. If you change the default settings, verify that form-filling sessions are working properly.  13. In the Form Session State section, configure the following parameters:  a. In the Active sessions should be terminated after text box, type the maximum session duration in minutes. Form-filling sessions that exceed this value will terminate, an error message will be generated, and all form data entered during the session will be lost. The default value is 1440 minutes.  b. In the Maximum size of form session state text box, type the maximum session state size in kilobytes. Form-filling sessions that exceed this value will terminate, an error message will be generated, and all form data entered during the session will be lost. The default value is 4096 kilobytes.  c. In the Select the location to use for storing form session state section, choose from the following options:   |  |  | | --- | --- | | Choose this option | To do this | | Session State Service (best for low-bandwidth users) | Store session state data on the computer running Microsoft SQL Server | | Form view (reduces database load on server) | Store session state data on the client computer. If form session state is larger than the value specified in the associated text box, the Session State Service will be used instead. |   d. In the associated text box, type the session state size in kilobytes at which form view will be automatically transitioned to the Session State Service. Once this threshold is reached, session state data will be saved to the SQL Server database, and the session will continue to use the Session State Service. The default value is 40 kilobytes.  14. Click OK to save your settings. |

## See Also

[Configure session state for InfoPath Forms Services](#DSDOC_3c4e8fb1_c3ce_4d27_8c65_6c4ab140f7)

# Configure session state for InfoPath Forms Services

In this article:

 [Configure session state for Forms Services](#DSDOC_section13c4e8fb1_c3ce_4d27_8c65_6c)

 [Session state vs. Form view](#DSDOC_section23c4e8fb1_c3ce_4d27_8c65_6c)

InfoPath Forms Services uses session state to store the large amount of transient data generated while filling out a form. As a result, front-end Web servers can remain stateless between round trips, and each postback is not burdened with carrying large amounts of session state information over narrow bandwidth pipes. Other methods of state management, such as in process, are not supported for farms with multiple front-end Web servers. Session state can only be used with Web applications that are associated with a Shared Services Provider (SSP). For more information about SSPs, see Plan Shared Services Providers.

note_ddNote:

In order for the session state database to be properly maintained, the SQL Agent must be turned on for the instance of Microsoft SQL Server where session data is stored. If the SQL Agent is not turned on, expired sessions are not automatically expunged from the session table and may eventually pose a storage problem.

note_ddNote:

If you are deploying Microsoft Office SharePoint Server 2007 with Microsoft SQL Server 2005 Express Edition, such as in a single-server deployment, expired sessions must be expunged manually. SQL Server 2005 Express Edition does not include the SQL Agent, and it cannot run automated stored procedures.

## Configure session state for Forms Services

You can configure session state settings such as state type and session thresholds for InfoPath Forms Services across the entire farm. If any of the thresholds are exceeded, the user's session is terminated, resulting in the loss of all form data, and an error is entered in the event log for the server. The error message shown to the user is "session has exceeded the amount of allowable resources."

To configure form session state, see step 12 in [Configure InfoPath Forms Services](#DSDOC_3728d1fa_c1db_4445_8d00_e26f9015dd).

## Session state versus Form view

You can configure InfoPath Forms Services to use the Session State service (the default option) or Form view (ASP.NET view state) to control how user sessions are managed. When you configure InfoPath Forms Services to use the Session State service, all browser sessions are maintained on the SQL Server database, which uses little network bandwidth, but has a cumulative performance impact on the computer running SQL Server. When you are using Form view, sessions are maintained on the client browser, and all session data is included in each postback to the server, up to 40 KB of session data. This approach uses more bandwidth than using session state does, but it does not affect the performance of the computer running SQL Server. Once session data reaches 40 KB in size, the session automatically transitions to session-state management.

We recommend the use of Form view in environments with smaller groups of users, because it reduces the impact on the computer running SQL Server. If your InfoPath Forms Services deployment will have many users, particularly if session data is below 40 KB for many high-usage form templates, session state is likely a better choice. If Form view is used, the bandwidth used by browser sessions of 40 KB or fewer can be monitored if there is a concern that network performance might be adversely affected.

## See Also

[Configure InfoPath Forms Services](#DSDOC_3728d1fa_c1db_4445_8d00_e26f9015dd)

# Configure portal usage reporting

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [About portal usage reporting](#DSDOC_section15233cf43_6a8f_40cb_9014_07)

 [Configure Windows SharePoint Services usage logging](#DSDOC_section25233cf43_6a8f_40cb_9014_07)

 [Enable portal usage reporting](#DSDOC_section35233cf43_6a8f_40cb_9014_07)

 [Activate portal usage reporting](#DSDOC_section45233cf43_6a8f_40cb_9014_07)

 [Monitor portal usage reporting](#DSDOC_section55233cf43_6a8f_40cb_9014_07)

## About portal usage reporting

Portal usage reporting is a service that enables site administrators, site collection administrators, and Shared Services Provider (SSP) administrators to monitor statistics about the use of their sites. Portal usage reporting also includes usage reporting for search queries that can be viewed by SSP administrators for search and site collection administrators.

To configure portal usage reporting, a farm administrator must first enable Windows SharePoint Services usage logging for the farm that hosts the Web application containing the SSP. The SSP administrator enables and configures the portal usage reporting service. Then, site collection administrators can activate the reporting feature to enable portal usage reports on the site collection.

After portal usage reporting is enabled, site administrators and site collection administrators can view site usage summary pages that have the following information for their sites and site collections:

 Requests and queries in the last day and the last 30 days.

 Average number of requests per day over the last 30 days.

 A chart of requests per day over the last 30 days.

 A list of the top page requests over the last 30 days.

 A list of top users over the last 30 days.

 A chart of top referring hosts over the last 30 days.

 A chart of top referring pages over the last 30 days.

 A list of top destination pages over the last 30 days.

 Top queries for the last 30 days (if search usage reporting is enabled).

 Search results top destination pages (if search usage reporting is enabled).

SSP administrators for the search service can view a search usage reports page that tracks the following information.

 Number of queries per day over the previous 30 days.

 Number of queries per month over the previous 12 months.

 Top queries over the previous 30 days.

 Top site collections originating queries over the previous 30 days.

 Queries per search scope over the previous 30 days.

Site collection administrators for the SSP site can view a usage summary page that tracks the following information:

 Total amount of storage used by the site collection.

 Percent of storage space used by Web Discussions.

 Maximum storage space allowed.

 Number of users for all sites in the hierarchy.

 Total hits and recent bandwidth usage across all sites.

Site collection administrators can also view a site usage report that includes monthly and daily page hit totals filtered by the following criteria:

 Page

 User

 Operating system

 Browser

 Referrer URL

Portal usage reporting is very useful for managing complex site hierarchies with many sites, a large number of page hits, and a large number of search queries, and it is recommended that the service be enabled for deployments of complex site hierarchies. For less complex deployments, portal usage reporting might not be necessary. It is also possible to disable the service temporarily to conserve resources when other those resources are needed for other processes.

## Enable Windows SharePoint Services usage logging

Before you can enable portal usage reporting in a SSP, you must first enable Windows SharePoint Services usage logging for the farm hosting the Web application containing the SSP.

Use the following procedure to enable usage logging for the farm.

procedure_ddEnable usage logging for the farm

|  |
| --- |
| 1. On the Central Administration home page, click Operations.  2. On the Operations page, in the Logging and Reporting section, click Usage analysis processing.  3. On the Usage Analysis Processing page, in the Logging Settings section, select Enable logging.  4. Type a log file location and number of log files to create.  5. In the Processing Settings section, select Enable usage analysis processing, and then select a time to run usage processing.  6. Click OK. |

## Enable portal usage reporting

After Windows SharePoint Services usage logging is enabled in the server farm, SSP administrators must enable the portal usage reporting service. SSP administrators can control the complexity of usage analysis processing, and select whether or not reporting is enabled for search queries.

Use the following procedure to enable portal usage reporting.

procedure_ddEnable portal usage reporting

|  |
| --- |
| 1. On the SSP home page, in the Portal Usage Reporting section, click Usage reporting.  2. On the Configure Advanced Usage Analysis Processing page, in the Processing Settings section, click Enable advanced usage analysis processing.  3. In the Search Query Logging section, select Enable search query logging.  4. Click OK. |

If advanced usage analysis processing is not selected, usage reporting statistics will be minimal.

## Activate portal usage reporting

After portal usage reporting is enabled for the SSP, site collection administrators must activate the reporting feature. Until the reporting feature is activated on a site collection, usage reports are not available.

Use the following procedure to activate the reporting feature.

procedure_ddActivate the reporting feature

|  |
| --- |
| 1. On the Site Actions menu, click Site Settings.  2. On the Site Settings page, in the Site Collection Administration section, click Site collection features.  3. On the Site Collection Features page, click the Activate button for the Reporting feature. |

## Monitor portal usage reporting

Portal usage reporting can be viewed in several places:

 Site administrators, including administrators of the SSP administration site, can view usage reporting for their site by clicking Site usage reports in the Site Administration section of the Site Settings page.

 Site collection administrators can view usage reporting by clicking Site collection usage reports in the Site Collection Administration section of the Site Settings page.

 Site collection administrators for the SSP administration site can view a usage summary by clicking Usage summary in the Site Collection Administration section of the Site Settings page.

 SSP administrators for search can view search usage reports by clicking Search usage reports in the Search section of the SSP home page.

# B. Deploy and configure SharePoint sites

## B. Deploy and configure SharePoint sites



# Deploy language packs (Office SharePoint Server)

In this article:

 [About language IDs and language packs](#DSDOC_section126c07867_0150_463d_b21a_a6)

 [Preparing your front-end Web servers for language packs](#DSDOC_section226c07867_0150_463d_b21a_a6)

 [Installing language packs on your front-end Web servers](#DSDOC_section326c07867_0150_463d_b21a_a6)

Language packs enable site owners and site collection administrators to create SharePoint sites and site collections in multiple languages without requiring separate installations of Microsoft Office SharePoint Server 2007. You install language packs, which contain language-specific site templates, on your front-end Web servers. When an administrator creates a site or a site collection based on a language-specific site template, the text that appears on the site or the site collection is displayed in the site template's language. Language packs are typically used in multinational deployments where a single server farm supports people in different locations or in situations where sites and Web pages must be duplicated in one or more languages. For more information about language packs, see Plan for multilingual sites.

note_ddNote:

You cannot change an existing site, site collection, or Web page from one language to another by applying different language-specific site templates; once you choose a language-specific site template for a site or a site collection, the site or site collection will always display content in the language of the original site template.

Word breakers and stemmers enable you to efficiently and effectively search across content on SharePoint sites and site collections in multiple languages without requiring separate installations of Office SharePoint Server 2007. Word breakers and stemmers are automatically installed on your front-end Web servers by Setup. For more information about word breakers and stemmers, see the "Plan word breakers and stemmers" section in Plan to crawl content (Office SharePoint Server) .

## About language IDs and language packs

When site owners or site collection administrators create sites or site collections, they can choose a language for the each site or site collection

. The language they choose represents the language identifier (ID), and the language ID determines the language that is used to display text and interpret text that is put on the site or site collection. For example, when a site administrator chooses to create a site in French, the site's toolbars, navigation bars, lists, and column headings appear in French. Likewise, if a site administrator chooses to create a site in Arabic, the site's toolbars, navigation bars, lists, and column headings appear in Arabic, and the default left-to-right orientation of the site changes to a right-to-left orientation to properly display Arabic text.

The list of available languages that a site administrator can use to create a site or site collection is generated by the language packs that are installed on your front-end Web servers. By default, sites and site collections are created in the language in which Office SharePoint Server 2007 was installed. For example, if you install the Spanish version of Office SharePoint Server 2007, the default language for sites, site collections, and Web pages is Spanish. If a site administrator needs to create sites, site collections or Web pages in a language other than the default Office SharePoint Server 2007 language, you must install the language pack for that language on your front-end Web servers. For example, if you are running the French version of Office SharePoint Server 2007, and a site administrator wants to create sites in French, English, and Spanish, you must install the English and Spanish language packs on your front-end Web servers.

note_ddNote:

By default, when a site administrator creates a new Web page within a site, the Web page uses the site's language ID to display text.

Language packs for Office SharePoint Server 2007 are not bundled into multilingual installation packages. You must install a specific language pack for each language that you want to support. Also, language packs must be installed on each of your front-end Web servers to ensure that each Web server can render content in the specified language.

The following table lists the language packs that are available for Office SharePoint Server 2007.

|  |  |  |
| --- | --- | --- |
| Language | Country/region | Language ID |
| German | Germany | 1031 |
| English | United States | 1033 |
| Japanese | Japan | 1041 |

Although a site administrator specifies a language ID for a site, some user interface elements such as error messages, notifications, and dialog boxes do not display in the language that was specified. This is because Office SharePoint Server 2007 relies on several supporting technologies — for example, the Microsoft .NET Framework, Microsoft Windows Workflow Foundation, Microsoft ASP.NET, and Microsoft SQL Server 2005 — some of which are localized into only a limited number of languages. If a user interface element is generated by any of the supporting technologies that is not localized into the language that the site administrator specified for the site, the user interface element appears in English. For example, if a site administrator creates a site in Hebrew, and the.NET Framework component displays a notification message, the notification message will not display in Hebrew because the .NET Framework is not localized into Hebrew. This situation can occur when sites are created in any language except the following: Chinese, French, German, Italian, Japanese, Korean, and Spanish.

In some cases, some text might originate from the original installation language, which can create a mixed-language experience. This type of mixed-language experience is typically seen only by content creators or site administrators and is not seen by site users.

## Preparing your front-end Web servers for language packs

Before you install language packs on your front-end Web servers, you must do the following:

 Install the necessary language files on your front-end Web servers.

 Install Office SharePoint Server 2007 on each of your front-end Web servers.

 Run the SharePoint Products and Technologies Configuration Wizard on each of your front-end Web servers.

Language files are used by the operating system and provide support for displaying and entering text in multiple languages. Language files include:

 Keyboard files

 Input Method Editors (IMEs)

 TrueType font files

 Bitmap font files

 Code page conversion tables

 National Language Support (.nls) files

 Script engines for rendering complex scripts

Most language files are installed by default on the Microsoft Windows Server 2003 operating system. However, you must install supplemental language files for East Asian languages and languages that use complex script or require right-to-left orientations. The East Asian languages include Chinese, Japanese, and Korean; the complex script and right-to-left oriented languages include Arabic, Armenian, Georgian, Hebrew, the Indic languages, Thai, and Vietnamese. Instructions for installing these supplemental language files are provided in the following procedure.

We recommend that you install these language files only if you need them. The East Asian files require about 230 megabytes of hard disk space. The complex script and right-to-left languages do not use much disk space, but installing either set of files might reduce performance when entering text.

note_ddNote:

You must be a member of the Administrators group on the computer to install these language files. After the language files are installed, the languages are available to all users of the computer.

note_ddNote:

You will need your Windows Server 2003 product disc to perform this procedure, or you will need to know the location of a shared folder that contains your operating system installation files.

note_ddNote:

You must restart your computer after you install supplemental language files.

procedure_ddInstall additional language files

|  |
| --- |
| 1. On your front-end Web server, click Start, point to Settings and then Control Panel, and then click Regional and Language Options.  2. In the Regional and Language Options dialog box, on the Languages tab, in the Supplemental Language Support section, select one or both of the following checkboxes:   Install files for complex script and right-to-left languages   Install files for East Asian languages  3. Click OK in the dialog box that alerts you that additional disk space is required for the files.  4. Click OK to install the additional language files.  5. When prompted, insert your Windows Server 2003 product disc or provide the location of your Windows Server 2003 installation files.  6. When prompted to restart your computer, click Yes. |

After you install the necessary language files on your front-end servers, you need to install Office SharePoint Server 2007 and run the SharePoint Products and Technologies Configuration Wizard. The wizard creates and configures the configuration database and performs other configuration tasks that must be done before you install language packs. For more information about installing Office SharePoint Server 2007 and running the SharePoint Products and Technologies Configuration Wizard, see [Simple farm deployment (Office SharePoint Server)](#DSDOC_356d3a0b_fc26_455c_9afb_6d2ffdceef) and [Install Office SharePoint Server 2007 on a stand-alone computer](#DSDOC_bd99c3a9_0333_4c1c_9793_a145769e48).

## Installing language packs on your front-end Web servers

After you install the necessary language files on your front-end servers, you can install your language packs. Language packs are available as individual downloads (one download for each supported language). If you have a server farm environment, and you are installing language packs to support multiple languages, you must install the language packs on each of your front-end Web servers.

important_ddImportant:

The language pack installs in its native language, for example the Russian language pack executable file is localized into Russian. The procedure provided below is for the English language pack.

procedure_ddInstall a language pack

|  |
| --- |
| 1. Run setup.exe.  2. 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.  3. On the Installation Types page, click Basic.  4. The setup wizard runs and installs the language pack.  5. Rerun the SharePoint Products and Technologies Configuration Wizard, using the default settings. If you do not run the SharePoint Products and Technologies Configuration Wizard after you install a language pack, the language pack will not be installed properly. |

procedure_ddRerun the SharePoint Products and Technologies Configuration Wizard

|  |
| --- |
| 1. Click Start, point to All Programs, point to Administrative Tools, and then click SharePoint Products and Technologies Configuration Wizard.  2. On the Welcome to SharePoint Products and Technologies page, click Next.  3. Click Yes in the dialog box that alerts you that some services might need to be restarted during configuration.  4. On the Modify server farm settings page, click Do not disconnect from this server farm, and then click Next.  5. If the Modify SharePoint Central Administration Web Administration Settings page appears, do not modify any of the default settings, and then click Next.  6. On the Completing the SharePoint Products and Technologies Configuration Wizard page, click Next.  7. On the Configuration Successful page, click Finish. |

When you install language packs, the language-specific site templates are installed in the \Program Files\Common Files\Microsoft Shared\web server extensions\12\template\number directory, where number is the Language ID for the language that you are installing. For example, the US English language pack installs to the \Program Files\Common Files\Microsoft Shared\web server extensions\12\template\1033 directory. After you install a language pack, site owners and site collection administrators can create sites and site collections based on the language-specific site templates by specifying a language when they are creating a new SharePoint site or site collection.

#### Uninstalling language packs

If you no longer need to support a language for which you have installed a language pack, you can remove the language pack by using Add/Remove Programs in Control Panel. Removing a language pack removes the language-specific site templates from your computer. All sites that were created with those language-specific site templates will no longer work (the URL will produce a HTTP 500 - Internal server error page). Reinstalling the language pack will make the site functional.

note_ddNote:

You cannot remove the language pack for the version of Office SharePoint Server 2007 that you have installed on your server. For example, if you are running the Japanese version of Office SharePoint Server 2007, you cannot uninstall the Japanese language support for Office SharePoint Server 2007.

# 1. Migration scenarios: Prepare for content migration [Office SharePoint Server]

## 1. Migration scenarios: Prepare for content migration



# Chapter overview: Prepare for content migration

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

If you plan to migrate an entire Web site from another farm (or from Microsoft® Content Management Server 2002) into your new environment, you must create a destination for that content before you can migrate the content. The destination will consist of a site collection based on the Blank Site template. This chapter will help you prepare for content migration by creating that blank site collection.

In this chapter:

 [Create a blank site to migrate content into](#DSDOC_1fa29f9a_62a6_4110_b620_37b555bf48)

After you have finished configuring your environment, you can then migrate the content into this blank site. For more information, see Add site content.

## See Also

# Create a blank site to migrate content into

You must create the site collection that is assigned as the destination for content migration by using the Blank Site template.

## Create a site collection

procedure_ddCreate a site collection by using the Blank Site template

|  |
| --- |
| 1. In Central Administration, on the top link bar, click Application Management.  2. On the Application Management page, in the SharePoint Site Management section, click Create site collection.  3. On the Create Site Collection page, in the Web Application section, if the Web application in which you want to create the site collection is not selected, on the Web Application menu, click Change Web Application.  4. On the Select Web Application page, click the Web application in which you want to create the site collection.  5. In the Title and Description section, type the title and description for the site collection.  6. In the Web Site Address section, under URL, select either the root directory ("/") or an included path (for example, "/sites/") to use for your URL.  If you select a wildcard included path such as /sites/, type the site name to use in your site's URL.  note_ddNote:  The paths available for the URL option are taken from the list of managed paths that have been defined as wildcard inclusions. For more information about managed paths, see the topic Define managed paths in the Central Administration Help system.  7. In the Template Selection section, in the Select a template list, on the Collaboration tab, click Blank Site.  8. In the Primary Site Collection Administrator section, specify the user name for the user who will be the site collection administrator.  You can type the user name in the User name box or use the Browse button to search for a user.  9. If you want to designate a user as the secondary administrator of the new top-level Web site (recommended), in the Secondary Site Collection Administrator section, specify the user name for the secondary administrator of the site collection.  10. If you want to use a quota to limit resource use for site collections, in the Quota Template section, select a template in the Select a quota template list.  11. Click OK. |

# Create or extend a Web application

Before you can create a site or a site collection, you must first create a Web application. A Web application is comprised of an Internet Information Services (IIS) site with a unique application pool and can be assigned to an SSP (Shared Services Provider) to enable features such as InfoPath Forms Services, Excel Calculation Services, and Workflows.

In this article:

 [Create a new Web application](#DSDOC_Section15ed10d1c_ffdf_4651_b7b6_ca)

 [Extend an existing Web application](#DSDOC_Section25ed10d1c_ffdf_4651_b7b6_ca)

## Create a new Web application

procedure_ddCreate a new Web application

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Click the Start button, point to All Programs, then point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.  2. On the Central Administration home page, click Application Management.  3. On the Application Management page, in the SharePoint Web Application Management section, click Create or extend Web application.  4. On the Create or Extend Web Application page, in the Adding a SharePoint Web Application section, click Create a new Web application.  5. On the Create New Web Application page, in the IIS Web Site section, you can configure the settings for your new Web application.  a. To choose to use an existing Web site, select Use an existing Web site, and specify the Web site on which to install your new Web application by selecting it from the drop-down menu.  b. To choose to create a new Web site, select Create a new IIS Web site, and type the name of the Web site in the Description box.  c. In the Port box, type the port number you want to use to access the Web application. If you are creating a new Web site, this field is populated with a suggested port number. If you are using an existing Web site, this field is populated with the current port number.  d. In the Host Header box, type the URL you wish to use to access the Web application. This is an optional field.  e. In the Path box, type the path to the site directory on the server. If you are creating a new Web site, this field is populated with a suggested path. If you are using an existing Web site, this field is populated with the current path.  6. In the Security Configuration section, configure authentication and encryption for your Web application.  a. In the Authentication Provider section, choose either Negotiate (Kerberos) or NTLM.  b. In the Allow Anonymous section, choose Yes or No. If you choose to allow anonymous access, this enables anonymous access to the Web site using the computer-specific anonymous access account (that is, IUSR\_<computername>).  c. In the Use Secure Sockets Layer (SSL) section, select Yes or No. If you choose to enable SSL for the Web site, you must configure SSL by requesting and installing an SSL certificate.  7. In the Load Balanced URL section, type the URL for the domain name for all sites that users will access in this Web application. This URL domain will be used in all links shown on pages within the Web application. By default, the box is populated with the current server name and port.  The Zone box is automatically set to Default for a new Web application, and cannot be changed from this page. To change the zone for a Web application, see [Extend an existing Web application](#DSDOC_Section25ed10d1c_ffdf_4651_b7b6_ca) later in this article.  8. In the Application Pool section, choose whether to use an existing application pool or create a new application pool for this Web application. To use an existing application pool, select Use existing application pool. Then select the application pool you wish to use from the drop-down menu.  a. To create a new application pool, select Create a new application pool.  b. In the Application pool name box, type the name of the new application pool, or keep the default name.  c. In the Select a security account for this application pool section, select Predefined to use an existing application pool security account, and then select the security account from the drop-down menu.  d. Select Configurable to use an account that is not currently being used as a security account for an existing application pool. In the User name box, type the user name of the account you wish to use, and type the password for the account into the Password box.  9. In the Reset Internet Information Services section, choose whether to allow Microsoft Windows SharePoint Services to restart IIS on other farm servers. The local server must be restarted manually for the process to finish. If this option is not selected and you have more than one server in the farm, you must wait until the IIS Web site is created on all servers and then run iisreset /noforce on each Web server. The new IIS site is not usable until that action is completed. The choices are unavailable if your farm only contains a single server.  10. Under Database Name and Authentication, choose the database server, database name, and authentication method for your new Web application.   |  |  | | --- | --- | | Item | Action | | Database Server | Type the name of the database server and SQL Server instance you want to use in the format <SERVERNAME\instance>.You may also use the default entry. | | Database Name | Type the name of the database, or use the default entry. | | Database Authentication | Choose whether to use Windows authentication (recommended) or SQL authentication.   If you want to use Windows authentication, leave this option selected.   If you want to use SQL authentication, select SQL authentication. In the Account box, type the name of the account you want the Web application to use to authenticate to the SQL Server database, and then type the password in the Password box. |   11. Click OK to create the new Web application, or click Cancel to cancel the process and return to the Application Management page. |

## Extend an existing Web application

You can extend an existing Web application if you need to have separate IIS Web sites that expose the same content to users. This is typically used for extranet deployments where different users access content using different domains. This option reuses the content database from an existing Web application.

procedure_ddExtend an existing Web application

|  |
| --- |
| 1. Click the Start button, point to All Programs, then point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.  2. On the Central Administration home page, click Application Management.  3. On the Application Management page, in the SharePoint Web Application Management section, click Create or extend Web application.  4. On the Create or extend Web application page, in the Adding a SharePoint Web Application section, click Extend an existing Web application.  5. On the Extend Web Application to Another IIS Web Site page, in the Web Application section, click the Web application link and then click Change Web application.  6. On the Select Web Application page, click the Web application you want to extend.  7. On the Extend Web Application to Another IIS Web Site page, in the IIS Web Site section, you can select Use an existing IIS Web site to use a Web site that has already been created, or you can choose to leave Create a new IIS Web site selected. The Description, Port, and Path boxes are populated for either choice. You can choose to use the default entries or type the information you want into the boxes.  8. In the Security Configuration section, configure authentication and encryption for the extended Web application.  a. In the Authentication Provider section, choose either Negotiate (Kerberos) or NTLM.  b. In the Allow Anonymous section, choose Yes or No. If you choose to allow anonymous access, this enables anonymous access to the Web site using the computer-specific anonymous access account (that is, IUSR\_<computername>).  c. In the Use Secure Sockets Layer (SSL) section, select Yes or No. If you choose to enable SSL for the Web site, you must configure SSL by requesting and installing an SSL certificate.  9. Under Load Balanced URL, type the URL for the domain name for all sites that users will access in this Web application. This URL domain will be used in all links shown on pages within the Web application. By default, the text box is populated with the current server name and port.  10. In the Load Balanced URL section, under Zone, select the zone for the extended Web application from the drop-down menu. You can choose Intranet, Internet, Custom, or Extranet.  11. Click OK to extend the Web application, or click Cancel to cancel the process and return to the Application Management page. |

# Create a site collection

When you create a site collection, you also create the top-level site within that site collection. Select the appropriate template for your scenario, such as: Publishing Portal for an Internet presence Web site, or Collaboration Portal for an Intranet portal Web site.

## Create a site collection

procedure_ddCreate a site collection

|  |
| --- |
| 1. On the top navigation bar, click Application Management.  2. On the Application Management page, in the SharePoint Site Management section, click Create site collection.  3. On the Create Site Collection page, in the Web Application section, if the Web application in which you want to create the site collection is not selected, click Change Web Application on the Web Application menu, and then on the Select Web Application page, click the Web application in which you want to create the site collection.  4. In the Title and Description section, type the title and description for the site collection.  5. In the Web Site Address section, under URL, select the path to use for your URL (such as an included path like /sites/ or the root directory, /).  If you select a wildcard inclusion path, such as /sites/, you must also type the site name to use in your site's URL.  note_ddNote:  The paths available for the URL option are taken from the list of managed paths that have been defined as wildcard inclusions. For more information about managed paths, see Define managed paths in the Central Administration Help system.  6. 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.  7. In the Primary Site Collection Administrator section, enter the user name (in the form DOMAIN\username) for the user who will be the site collection administrator.  8. If you want to identify a user as the secondary owner of the new top-level Web site (recommended), in the Secondary Site Collection Administrator section, enter the user name for the secondary administrator of the site collection.  9. If you are using quotas to limit resource use for site collections, in the Quota Template section, click a template in the Select a quota template list.  10. Click OK. |

# Create a quota template (Office SharePoint Server)

In this article:

 [Create a new quota template](#DSDOC_Section1c2eda191_1814_423b_882f_1f)

 [Edit an existing quota template](#DSDOC_Section2c2eda191_1814_423b_882f_1f)

 [Delete a quota template](#DSDOC_Section3c2eda191_1814_423b_882f_1f)

A quota template consists of storage limit values that specify how much data can be stored in a site and the storage size that triggers an e-mail alert to the administrator when that size is reached. You can create a quota template that can be applied to any site collection in the farm.

note_ddNote:

When you apply a quota template to a site collection, the storage limits apply to each site within the site collection, not to the site collection as a whole.

You can also modify existing quota templates. When a quota template is modified, the new storage limits you defined in the template will apply to any site collection that uses that quota template. This allows you to modify storage limits for multiple site collections without having to change settings for each site collection individually.

## Create a new quota template

1. Click the Start button, point to All Programs, then point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.

2. On the Central Administration home page, click Application Management.

3. On the Application Management page, in the SharePoint Site Management section, click Quota templates.

4. On the Quota Templates page, in the Template Name section, select Create a new quota template.

5. Type the name of the new template in the New template name box.

 If you want to base your new template on an existing quota template, click the Template to start from down arrow and select the desired template from the drop-down menu.

6. In the Storage Limit Values section, set the values you want to apply to the template.

a. If you want to restrict the amount of data that can be stored, click the Limit site storage to a maximum of check box and type the storage limit in megabytes into the text box.

b. If you want an e-mail to be sent to the site collection administrator when a certain storage threshold is reached, click the Send warning E-mail when site storage reaches check box and type the threshold in megabytes into the text box.

7. Click OK to create the new quota template, or click Cancel to cancel the operation and return to the Application Management page.

## Edit an existing quota template

1. Click the Start button, point to All Programs, then point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.

2. On the Central Administration home page, click Application Management.

3. On the Application Management page, in the SharePoint Site Management section, click Quota templates.

4. In the Template Name section, click the Template to modify down arrow and select the template you want to edit from the drop-down menu.

5. In the Storage Limit Values section, set the values you want to apply to the template.

a. If you want to restrict the amount of data that can be stored, click the Limit site storage to a maximum of check box and type the storage limit in megabytes into the text box.

b. If you want an e-mail to be sent to the site collection administrator when a certain storage threshold is reached, click the Send warning E-mail when site storage reaches check box and type the threshold in megabytes into the text box.

6. Click OK to modify the quota template, or click Cancel to cancel the operation and return to the Application Management page.

## Delete a quota template

1. Click the Start button, point to All Programs, then point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.

2. On the Central Administration home page, click Application Management.

3. On the Application Management page, in the SharePoint Site Management section, click Quota templates.

4. In the Template Name section, click the Template to modify down arrow and select the template you want to delete from the drop-down menu.

5. Click the Delete button.

6. Click OK on the dialog box that appears to delete the quota template.

# Create zones for Web applications

If your solution architecture includes Web applications with more than one zone, use the guidance in this article to create additional zones.

## Create a new zone

You can create a new zone by extending an existing Web application. Follow the "Extend an existing Web application" procedure in [Create or extend a Web application](#DSDOC_5ed10d1c_ffdf_4651_b7b6_cac1de6f9e) to create a new zone. The new zone is created when you select a zone in step 10 of the procedure.

Refer to your planning architecture documents and worksheets to determine which zones you need to create and what authentication method should be associated with each zone.

You can change the authentication provider for a zone on the Authentication Providers page. For more information, see Plan authentication methods [Office SharePoint Server].

## View existing zones

On the Alternate Access Mappings page, you can view the zones that have been created for your farm.

1. Click the Start button, point to All Programs, then point to Microsoft Office Server, and then click SharePoint 3.0 Central Administration.

2. On the Central Administration home page, click Operations.

3. On the Operations page, in the Global Configuration section, click Alternate access mappings.

On the Alternate Access Mappings page, each Web application is displayed with its associated zone.

## See Also

[Create or extend a Web application](#DSDOC_5ed10d1c_ffdf_4651_b7b6_cac1de6f9e)

[Configure alternate access mapping (AAM)](#DSDOC_be9d31d2_b9cb_4442_bfc6_2adcdbff8f)

# Configure alternate access mapping (AAM)

Each Web application can be associated with a collection of mappings between internal and public URLs. Both internal and public URLs consist of the protocol and domain portion of the full URL (for example, https://www.fabrikam.com). A public URL is what users type to get to the SharePoint site, and that URL is what appears in the links on the pages. Internal URLs are in the URL requests that are sent to the SharePoint site. Many internal URLs can be associated with a single public URL in multi-server farms (for example, when a load balancer routes requests to specific IP addresses to various servers in the load-balancing cluster).

Each Web application supports five collections of mappings per URL; the five collections correspond to five zones (default, intranet, extranet, Internet, and custom). When the Web application receives a request for an internal URL in a particular zone, links on the pages returned to the user have the public URL for that zone.

## Manage alternate access mappings

1. On the top navigation bar, click Operations.

2. On the Operations page, in the Global Configuration section, click Alternate access mappings.

## Add an internal URL

1. On the Alternate Access Mappings page, click Add Internal URLs.

2. If the mapping collection that you want to modify is not specified, then choose one. In the Alternate Access Mapping Collection section, click Change alternate access mapping collection on the Alternate Access Mapping Collection menu.

3. On the Select an Alternate Access Mapping Collection page, click a mapping collection.

4. In the Add internal URL section, in the URL protocol, host and port box, type the new internal URL (for example, https://www.fabrikam.com).

5. In the Zone list, click the zone for the internal URL.

6. Click Save.

## Edit or delete an internal URL

note_ddNote:

You cannot delete the last internal URL for the default zone.

1. On the Alternate Access Mappings page, click the internal URL that you want to edit or delete.

2. In the Edit internal URL section, modify the URL in the URL protocol, host and port box.

3. In the Zone list, click the zone for the internal URL.

4. Do one of the following:

 Click Save to save your changes.

 Click Cancel to discard your changes and return to the Alternate Access Mappings page.

5. Click Delete to delete the internal URL.

## Edit public URLs

note_ddNote:

There must always be a public URL for the default zone.

1. On the Alternate Access Mappings page, click Edit Public URLs.

2. If the mapping collection that you want to modify is not specified, then choose one. In the Alternate Access Mapping Collection section, click Change alternate access mapping collection on the Alternate Access Mapping Collection menu.

3. On the Select an Alternate Access Mapping Collection page, click a mapping collection.

4. In the Public URLs section, you may add new URLs or edit existing URLs in any of the following text boxes:

 Default

 Intranet

 Extranet

 Internet

 Custom

5. Click Save.

## Map to an external resource

You can also define mappings for resources outside internal Web applications. To do so, you must supply a unique name, initial URL, and a zone for that URL. (The URL must be unique to the farm.)

1. On the Alternate Access Mappings page, click Map to External Resource.

2. On the Create External Resource Mapping page, in the Resource Name box, type a unique name.

3. In the URL protocol, host and port box, type the initial URL.

4. Click Save.

# Configure the Office SharePoint Server Search service (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Server-level configuration](#DSDOC_section161b7ae94_dff5_4b01_88b5_0a)

 [Farm-level configuration](#DSDOC_section261b7ae94_dff5_4b01_88b5_0a)

 [SSP-level configuration](#DSDOC_section361b7ae94_dff5_4b01_88b5_0a)

 [Site collection-level configuration](#DSDOC_section461b7ae94_dff5_4b01_88b5_0a)

This article describes the process of deploying the search features for Microsoft Office SharePoint Server 2007 that are related to crawling content. If you have not already done so, we highly recommend that you first read the topics described in Plan search and fill out the companion [Plan to crawl content worksheet](http://go.microsoft.com/fwlink/?LinkID=73748&clcid=0x409) (<http://go.microsoft.com/fwlink/?LinkID=73748&clcid=0x409>). As you proceed through this article, refer to this worksheet so that you have the information you need to configure these search features.

## Server-level configuration

The procedures in this section are performed at the server level. To perform these procedures, you must be a member of the administrator group for each server on which you want to perform them.

### Install protocol handlers

The following protocols are supported by the default protocol handlers:

 bdc

 bdc2

 file

 http

 https

 rb

 rbs

 sps

 sps3

 sps3s

 spsimport

 spss

 sts

 sts2

 sts2s

 sts3

 sts3s

Refer to the Protocol handlers section of the Plan to crawl content worksheet to review your decisions for installing additional protocol handlers. Follow the installing instructions provided by the manufacturer of the protocol handler when installing them on your index server.

note_ddNote:

You must be a member of the Administrators group on each server on which you want to install an additional protocol handler.

### Install and register IFilters

The procedures used to install and register IFilters vary between different IFilters. Refer to the File type inclusions section of the Plan to crawl content worksheet for the IFilters you decided to add.

This section includes instructions for installing and registering the following IFilters. If an IFilter that you need is not listed here, contact the manufacturer for instructions for installing third party IFilters. If you do not need to install additional IFilters, skip to the next section.

note_ddNote:

You must be a member of the Administrators group on each server on which you want to install an IFilter.

#### Install and register the OneNote IFilter

Before Microsoft Office OneNote files can be crawled and indexed, you must first do the following:

 Install Microsoft Office OneNote on the index server. This installs the OneNote IFilter.

note_ddNote:

The Office OneNote 2007 IFilter can crawl both OneNote 2003 and OneNote 2007 files. The Office OneNote 2003 IFilter can crawl OneNote 2003 files only.

 Add the OneNote file extension to the File Types list.

 Register the OneNote IFilter.

note_ddNote:

You must be a member of the local Administrators group on the index server to perform the following procedures.

procedure_ddAdd the OneNote file extension to the File Types list

|  |
| --- |
| 1. Open the administration page for the Shared Services Provider (SSP).  To open the administration page for the SSP, do the following:  a. In Central Administration, on the top link bar, click Application Management.  b. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm's shared services.  c. On the Manage this Farm's Shared Services page, click the SSP for which you want to open the administration page.  2. On the Shared Services Administration page, in the Search section, click Search settings.  3. On the Configure Search Settings page, in the Crawl Settings section, click File Types.  4. On the Manage File Types page, click New File Type.  5. On the Add File Type page, in the File extension box, type one, and then click OK.  note_ddNote:  Do not type the period character "." before the file extension. |

procedure_ddRegister the OneNote IFilter

|  |
| --- |
| 1. On the index server, click Start, and then click Run.  2. In the Open box, type notepad, and then click OK.  3. Type or copy the following text into Notepad.  Windows Registry Editor Version 5.00  [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Office Server\12.0\Search\Setup\Filters\.one]  "Extension"="one"  "FileTypeBucket"=dword:00000001  "MimeTypes"="application/msonenote"  [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Office Server\12.0\Search\Setup\ContentIndexCommon\Filters\Extension\.one]  @="{B8D12492-CE0F-40AD-83EA-099A03D493F1}"  4. In Notepad, on the File menu, click Save As.  5. In the Save As dialog box, in the File name box, type onenote.reg, and then click Save.  6. On the index server, double-click the onenote.reg file that you just created.  note_ddNote:  This step starts the process of setting the necessary registry keys for registering the OneNote IFilter.  7. If the Open File - Security Warning dialog box appears, click Run.  8. In the Registry Editor dialog box, click Yes.  9. Click OK to close the Registry Editor box.  10. Restart the index server.  note_ddNote:  The index server must be restarted for the IFilter registration to take effect. |

After you restart the index server, you must start a full crawl of the locations that contain Office OneNote files before they can appear in search queries. If your document libraries require check-out to edit the files, Office OneNote files will often be in checked-out state. Any updates to the checked-out files that are saved to the library will not be searched until the file is checked in. In general, we recommend that administrators do not require that files be checked out before they can be edited for document libraries that are intended for storing OneNote files.

## Farm-level configuration

The procedures in this section are performed at the farm level. To perform these procedures, you must be a farm administrator.

### Create crawler impact rules

Use the following procedure along with the decisions you recorded in the Crawler impact rules section of the Plan to crawl content worksheet to create crawler impact rules.

procedure_ddCreate crawler impact rules

|  |
| --- |
| 1. In Central Administration, on the Application Management tab, in the Search section, click Manage search service.  2. On the Manage Search Service page, in the Farm-Level Search Settings section, click Crawler impact rules.  3. On the Crawler Impact Rules page, click Add Rule.  4. On the Add Crawler Impact Rule page, in the Site section, in the Site box, type the URL that will be associated with this crawler impact rule.  note_ddNote:  When typing the URL, you must exclude the protocol. For example, do not include http:// or file://.  5. In the Request Frequency section, select one of the following options:   Request up to the specified number of documents at a time and do not wait between requests. If you choose this option, Use the Simultaneous requests list to select how many documents you want the crawler to request at a time when crawling this URL. You can specify the maximum number of requests that the Office SharePoint Services Search service can make at one time when crawling this URL.   Request one document at a time and wait the specified time between requests. You can specify a delay (in seconds) between requests, when crawling this URL. When this option is selected, the Office SharePoint Services Search service makes one request per site at one time and then it waits for the specified amount of time before making the next request. In the Time to wait (in seconds) box, type the time to wait between requests. The minimum time to wait between requests is one second, and the maximum time is 1000 seconds.  6. Click OK. |

### Configure Farm-level search settings

Use the following procedures along with the decisions you recorded in the Farm-level search settings section of the Plan to crawl content worksheet to configure your farm-level search settings.

procedure_ddConfigure farm-level search settings

|  |
| --- |
| 1. In Central Administration, on the Application Management tab, in the Search section, click Manage search service.  2. On the Manage Search Service page, in the Farm-Level Search Settings section, click Farm-level search settings.  3. On the Manage Farm-Level Search Settings page, in the Contact E-mail Addresses section, the e-mail address of the person in your organization whom external site administrators can contact if problems arise when their site is being crawled.  4. In the Proxy Server Settings section, if you want to use a proxy server when crawling, select Use the proxy server specified and then do the following:   In the Address box, enter either the NetBIOS name or IP address of the proxy server.   In the Port box, type the port to use for this proxy server.   To bypass this proxy server when crawling local addresses, select the Bypass proxy server for local (intranet) addresses check box.   To specify addresses for which to bypass the proxy server when crawling, enter those addresses in the Do not use proxy server for addresses beginning with box.  5. In the Timeout Settings section, do the following:   In the Connection time (in seconds) box, enter the number of seconds you want the server to wait while connecting to other services.   In the Request acknowledgement time (in seconds) box, enter the number of seconds you want the server to wait for another service to acknowledge a request to connect that service.  6. In the SSL Certificate Warning Configuration section, select the Ignore SSL certificate name warnings check box if you want to trust that sites are legitimate even if their certificate names are not exact matches. |

### Configure the trace log

The trace log can be very useful for analyzing problems that may occur. Events that are written to the trace log are especially helpful because you can use them to determine what configuration changes where made in Office SharePoint Server 2007 before the problem occurred.

By default, Office SharePoint Server 2007 saves two days of events in the trace log files. This means that trace log files that contain events that are older than two days are deleted. When using either the Office SharePoint Server Search or Windows SharePoint Services Search service, we recommend that you configure the trace log to save seven days of events.

You can use the Diagnostic Logging page in Central Administration to configure the maximum number of trace log files to maintain and how long (in minutes) to capture events to each log file. By default, 96 log files are kept, each one containing 30 minutes of events.

96 log files \* 30 minutes of events per file = 2880 minutes or two days of events.

You can also specify the location where the log files are written or accept the default path.

procedure_ddConfigure the trace log to save seven days of events

|  |
| --- |
| 1. In Central Administration, on the Operations tab, in the Logging and Reporting section, click Diagnostic logging.  2. On the Diagnostic Logging page, in the Trace Log section, do the following:   In the Number of log files box, type 336.   In the Number of minutes to use a log file box, type 30.  tip_ddTip:  You can use any combination of number of log files and minutes to store in each log file you want to achieve 10,080 minutes (seven days) of events.  3. Ensure that the path specified in the Path box has enough room to store the extra log files or change the path to another location.  tip_ddTip:  We recommend that you store log files on a hard drive partition that is used to store log files only.  4. Click OK. |

Trace log files are invaluable for troubleshooting issues related to configuration changes of either the Office SharePoint Server Search or Windows SharePoint Services Search service. Because problems related to configuration changes are not always discovered right away, we recommend that you save all trace log files that the system creates on any day that you make any configuration changes related to either search service. You should store these log files for an extended period of time in a safe location that will not be overwritten. See step 3 in the procedure above to determine the location that the system stores trace log files for your system.

## SSP-level configuration

The procedures in this section are performed at the Shared Services Provider (SSP) level. To perform these procedures, you must be an SSP administrator for Search.

### Open the administration page for the SSP

Use the following procedure to go to the administration page for the SSP that you want to configure.

procedure_ddOpen the administration page for the SSP

|  |
| --- |
| 1. In Central Administration, on the top link bar, click Application Management.  2. On the Application Management page, in the Office SharePoint Server Shared Services section, click Create or configure this farm's shared services.  3. On the Manage this Farm's Shared Services page, click the SSP for which you want to open the administration page. |

### Specify the default content access account

Use the following procedure along with the decision you recorded in the Default content access account section of the Plan to crawl content worksheet to specify the content access account that the crawler will use, by default, when crawling content.

procedure_ddSpecify the default content access account

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl settings section, click Default content access account.  3. On the Default Content Access Account page, in the Account box, type the domain and user name for the account (in the form domain\username).  4. In the Password and Confirm Password boxes, type the password for the account.  5. Click OK. |

### Create content sources

Use the following steps along with the decisions you recorded in the Content sources section of the Plan to crawl content worksheet to create your content sources.

Use the following procedure to create a content source of any of the following content source types:

 SharePoint sites

 Web sites

 File shares

 Exchange public folders

procedure_ddCreate content sources

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Content sources and crawl schedules.  3. On the Manage Content Sources page, click New Content Source.  4. On the Add Content Source page, in the Name section, in the Name box, type a name for the content source.  note_ddNote:  Each content source name must be unique within the SSP in which it is created.  5. In the Content Source Type section, select the type of content you want to crawl using this content source.  6. In the Start Addresses section, in the Type start addresses below (one per line) box, type the URLs from which the search system should start crawling.  note_ddNote:  For performance reasons, you cannot add the same start addresses to multiple content sources.  7. In the Crawl Settings section, select the behavior for the type of content you selected.  8. In the Crawl Schedules section, you can specify when to start full and incremental crawls.   You can create a full crawl schedule by clicking the Create Schedule link below the Full Crawl list.   You can create an incremental crawl schedule by clicking the Create Schedule link below the Incremental Crawl list.  9. Click OK.  10. Repeat steps 4 through 10 for any additional content sources you want to create. |

Use the following procedure to create a content source of the business data content source type.

procedure_ddCreate content source for business data

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Content sources and crawl schedules.  3. On the Manage Content Sources page, click New Content Source.  4. On the Add Content Source page, in the Name section, in the Name box, type a name for the content source.  note_ddNote:  Each content source name must be unique within the SSP in which it is created.  5. In the Content Source Type section, select Business Data.  6. In the Applications section, select Crawl entire Business Data Catalog to crawl all applications registered in the business data catalog or select Crawl selected applications and select the specific applications you want to crawl.  7. In the Crawl Schedules section, you can specify when to start full and incremental crawls.   You can create a full crawl schedule by clicking the Create Schedule link below the Full Crawl list.   You can create an incremental crawl schedule by clicking the Create Schedule link below the Incremental Crawl list.  8. Click OK.  9. Repeat steps 4 through 9 for any additional content sources you want to create. |

### Create crawl rules

Use the following procedure and the decisions you recorded in the Crawl rules section of the Plan to crawl content worksheet to create crawl rules.

procedure_ddCreate crawl rules

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Crawl rules.  3. On the Manage Crawl Rules page, click New Crawl Rule.  4. On the Add Crawl Rule page, in the Path section, in the Path box, type the path affected by this rule. You can use standard wildcard characters in the path. For example:   http://server1/folder\* contains all Web resources with a URL that starts with http://server1/folder.   \*://\*.txt includes every document with the txt file extension.  5. In the Crawl Configuration section, select one of the following:   Exclude all items in this path. Select this option if you want all items in the specified path to be excluded from the crawl.   Include all items in this path. Select this option if you want all items in the path to be crawled.  6. If you chose to exclude all items in this path, skip to step 8. Otherwise, you can further refine the inclusion by selecting any combination of the following:   Follow links on the URL without crawling the URL itself. Select this option if you want to crawl links contained within the URL, but not the URL itself.   Crawl complex URLs (URLs that contain a question mark (?)). Select this option if you want to crawl URLs that contain parameters that use the question mark (?) notation.   Crawl SharePoint content as HTTP pages. Normally, SharePoint content is crawled by using a special protocol. Select this option if you want SharePoint content to be crawled as HTTP pages instead. When the content is crawled by using the HTTP protocol, item permissions are not stored.  7. In the Specify Authentication section, do one of the following:   To use the default content access account when crawling URLs affected by this crawl rule, select Use the default content access account.   If you want to use a different content access account, select Specify a different content access account and then do the following:  In the Account box, type the account name that can access the paths defined by this crawl rule. Examples are user\_name and DOMAIN\user\_name.  In the Password and Confirm Password boxes, type the password for this account.  If you want to prevent Basic authentication from being used, select the Do not allow Basic Authentication check box.   To use a client certificate for authentication, select Specify client certificate, and then click a certificate on the Certificate menu.  8. Click OK.  9. Repeat steps 4 through 8 for each new crawl rule you want to create. |

### Reorder your crawl rules

After you create all your crawl rules, we recommend that you specify the order in which you want the rules applied while content is being crawled. Crawl rules are applied in the order in which they are listed. Therefore, if two rules cover the same or overlapping content, the first rule that is listed is applied. Use the following procedure to specify reorder your crawl rules.

procedure_ddReorder crawl rules

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Crawl rules.  3. On the Manage Crawl Rules page, in the Order column in the list of crawl rules, select a value in the drop-down list that specifies the position you want the rule to occupy. Other values are shifted accordingly. |

### Configure the File type inclusions list

Use the following procedure along with the decisions that you recorded in the File-type inclusions section of the Plan to crawl content worksheet to add file types from the file type inclusions list.

procedure_ddAdd file types

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click File types.  3. On the Manage File Types page, click New File Type.  4. On the Add File Type page, in the File extension box, type the file name extension for the file type that you want to add (for example, type doc).  note_ddNote:  Do not proceed the file type with the period "." character.  5. Click OK.  6. Repeat steps 4 through 7 for any other file types you want to add. |

You can also delete file types from this list for the file types you don't want the crawler to include in the content index. Use the following procedure and the decisions you recorded in the File-type inclusions section of the Plan to crawl content worksheet to delete file types from the file type inclusions list.

procedure_ddDelete file types

|  |
| --- |
| 1. On the Manage File Types page, position the cursor over the file name extension that you want to delete, and then click Delete on the menu that appears.  2. In the message box, click OK to confirm that you want to delete the file type. |

### Crawl the content

Before the content can be indexed, you must first crawl the content. You can either crawl the content defined in a particular content source individually or crawl all content defined by all content sources at one time.

#### Crawl content specified by all content sources

Use the following procedure to crawl content specified by all content sources.

procedure_ddCrawl content specified by all content sources

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Content sources and crawl schedules.  3. On the Manage Content Sources page, in the Quick Launch, click Start all crawls. |

#### Crawl content specified by a particular content source

Use the following procedure to Crawl content specified by a particular content source.

procedure_ddCrawl content specified by a particular content source

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Content sources and crawl schedules.  3. On the Manage Content Sources page, position the cursor over the content source you want to crawl, and then click Start full crawl on the menu that appears. |

### Create managed properties

Use the following procedure along with the decisions you recorded in the Plan managed properties section of the Plan the end-user search experience worksheet to create managed properties.

procedure_ddCreate managed properties

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Metadata property mappings.  3. On the Metadata Property Mappings page, click New Managed Property.  4. On the New Managed Property page, in the Name and type section, in the Property name box, type the name of the managed property you want to create.  5. In the Description box, type a description for this managed property.  6. Under The type of information in this property, select a property type.  7. In the Mappings to crawled properties section, select one of the following:   Include values from all crawled properties mapped. Select this option if you want values from all crawled properties to be mapped. A query for a property in a document in which all crawled properties are mapped returns a result if any of the crawled properties that are mapped match the query.   Include values from a single crawled property based on the order specified. Select this option if you want only a single value mapped. When multiple crawled properties are mapped to a managed property, the one that’s chosen will be the first in the list that has a value for a given document. You can reorder the list by using the Move up and Move down buttons.  8. If you selected Include values from all crawled properties mapped, skip to step 13.  9. Click Add Mapping to add a mapping to the list.  10. The Crawled property selection dialog box appears. Configure the settings as follows:  a. On the Select a category menu, click either All categories or a specific type of document category (for example, Office or SharePoint).  b. In Select a crawled property, select a crawled property to map to the managed property that you are adding.  Because the list of crawled properties is likely to be long, you can type the name (or the first part of the name) of the property that you are looking for in the Crawled property name box and then click Find.  c. Click OK.  11. Repeat steps 10 through 11 for each additional crawled property that you want to map to this managed property.  12. On the New Managed Property page, in the Use in scopes section, select the Allow this property to be used in scopes check box if you want this managed property to be available for defining search scopes.  13. Click OK.  note_ddNote:  Changes to the property mappings take effect on a document-by-document basis as soon as a document is crawled, regardless of the type of the crawl. A full crawl ensures that the changes are consistently applied to the entire index. |

### Create shared scopes

Use the following procedure along with the decisions you recorded in the Plan scopes section of the Plan the end-user search experience worksheet to create shared scopes.

procedure_ddCreate shared scopes

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Scopes section, click View scopes.  3. On the View Scopes page, click New Scope.  4. On the Create Scope page, in the Title and Description section, in the Title box, type a title for the scope.  5. In the Description box, type a description for the search scope that informs administrators what the purpose of the scope is.  note_ddNote:  Descriptions are not visible to users.  6. Your credentials are automatically entered in the read-only Last modified by box.  note_ddNote:  Last modified by settings are not visible to users.  7. In the Target Results Page section, select one of the following:   Use the default Search Results Page. Select this option if you want search results from this search scope to be presented by using the standard Search Results page.   Specify a different page for searching this scope. Select this option if you want search results from this search scope to be presented on a custom page. If you select this option, type the URL for the custom search results page in the Target results page box.  8. Click OK. |

### Create search scope rules

Use the following procedure along with the decisions you recorded in the Plan scopes section of the Plan the end-user search experience worksheet to create scope rules.

The following table describes the four scope rule types that you can choose from when creating a search scope rule. For simplicity, a separate procedure is provided for each scope rule type.

|  |  |
| --- | --- |
| Scope rule type | Purpose |
| Web address | Select this option if you want the scope to include or exclude content from any resource in the search index that can be identified either by a URL (such as Web sites, file shares, and Exchange public folders) or by a host name, domain name, or sub-domain name.   Folder. Select this option if you want to include or exclude items in the folder and subfolders of the indicated URL (for example, http://site/subsite/folder).   Hostname. Select this option if you want to specify a host name. All items in the host name will be included or excluded from the scope (according to the behavior rules).   Domain or subdomain. Select this option if you want to specify a domain or subdomain (for example, widgets.contoso.com). All items in the domain or subdomain will be included in or excluded from the scope. |
| Property query | Select this option if you want the scope to include or exclude content that has a managed property with a particular value. For example: Author="John Doe". |
| Content source | Select this option if you want the scope to include or exclude content that was crawled using a particular content source. |
| All content | Select this option if the rule should not restrict the search scope (the search scope will include or exclude all content in the search index). |

Use the following procedure to open the Add Scope Rule page.

procedure_ddOpen the Add Scope Rule page

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Scopes section, click View scopes.  3. On the View Scopes page, position the cursor over the scope that you want to edit, click the arrow that appears, and then click Edit Properties and Rules on the menu that appears.  4. On the Scope Properties and Rules page, in the Rules section, click New rule. |

Use the following procedure to create a scope rule using the Web address scope rule type.

procedure_ddCreate scope rules using the Web address scope rule type

|  |
| --- |
| 1. On the Add Scope Rule page, in the Scope Rule Type section, select Web Address.  2. In the Web Address section, select one of the following options and provide the address you want to associate with this rule:   Folder. Select this option if you want to include or exclude items in the folder and subfolders of the indicated URL (for example, http://site/subsite/folder).   Hostname. Select this option if you want to specify a host name. All items in the host name will be included or excluded from the scope (according to the behavior rules).   Domain or subdomain. Select this option if you want to specify a domain or subdomain (for example, widgets.contoso.com). All items in the domain or subdomain will be included in or excluded from the scope.  3. In the Behavior section, select one of the following options:   Include. Select this option if you want the rule to be applied (if another rule precludes its inclusion, it won't be included). The Include option is analogous to the logical operator AND.   Require. Select this option if you want the rule to be applied regardless of other rules. The Require option is analogous to the logical operator OR.   Exclude. Select this option if you want items that match this rule to be excluded from the search scope. The Exclude option is analogous to the logical operator AND NOT.  4. Click OK. |

Use the following procedure to create a scope rule using the Property query scope rule type.

procedure_ddCreate scope rules using the Property query scope rule type

|  |
| --- |
| 1. On the Add Scope Rule page, in the Scope Rule Type section, select Property Query.  2. In the Property Query section, select the managed property that you want to use to limit the search scope from the Add property restrictions menu.  3. In the = box, type the string (value) that the managed property needs to match.  4. In the Behavior section, select one of the following options:   Include. Select this option if you want the rule to be applied (if another rule precludes its inclusion, it won't be included). The Include option is analogous to the logical operator AND.   Require. Select this option if you want the rule to be applied regardless of other rules. The Require option is analogous to the logical operator OR.   Exclude. Select this option if you want items that match this rule to be excluded from the search scope. The Exclude option is analogous to the logical operator AND NOT.  5. Click OK. |

Use the following procedure to create a scope rule using the Content source scope rule type.

procedure_ddCreate scope rules using the Content source scope rule type

|  |
| --- |
| 1. On the Add Scope Rule page, in the Scope Rule Type section, select Content source.  2. In the Content Source section, in the corresponding menu, select the content source from the list that you want to associate with this rule.  3. In the Behavior section, select one of the following options:   Include. Select this option if you want the rule to be applied (if another rule precludes its inclusion, it won't be included). The Include option is analogous to the logical operator AND.   Require. Select this option if you want the rule to be applied regardless of other rules. The Require option is analogous to the logical operator OR.   Exclude. Select this option if you want items that match this rule to be excluded from the search scope. The Exclude option is analogous to the logical operator AND NOT.  4. Click OK. |

Use the following procedure to create a scope rule using the All content scope rule type.

procedure_ddCreate scope rules using the All content scope rule type

|  |
| --- |
| 1. On the Add Scope Rule page, in the Scope Rule Type section, select All Content.  2. Click OK. |

### Specify authoritative pages

Use the following procedure along with the decisions you recorded in the Authoritative pages section of the Plan the end-user search experience worksheet to specify authoritative pages.

procedure_ddSpecify authoritative pages

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Authoritative Pages section, click Specify authoritative pages.  3. On the Specify Authoritative Pages page, in the Authoritative Web Pages section, in the Most authoritative pages box, list the URLs that are central or authoritative.  note_ddNote:  Separate the URLs by returns so that you list one full URL per line.  4. In the Second-level authoritative pages box, list the URLs that are secondary.  5. In the Third-level authoritative pages box, list the URLs that are tertiary.  6. In the Non-authoritative Sites section, in the Sites to demote box, list the URLs that you want to mark as unimportant when search results are returned (for example, URLs of sites that contain outdated information but are kept for record-keeping).  note_ddNote:  Any URL or item whose prefix matches the provided URLs in the Sites to demote box is demoted.  7. If you want the ranking calculations to begin after you click OK, in the Refresh Now section, select the Refresh now check box. If the check box is cleared, ranking calculations occur according to a predetermined schedule.  8. Click OK. |

### Create server name mappings

Use the following procedure along with the decisions you recorded in the Server name mappings section of the Plan the end-user search experience worksheet to specify server name mappings.

procedure_ddSpecify server name mappings

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Server name mappings.  3. On the Server Name Mappings page, click New Mapping.  4. On the Add Server Name Mapping page, in the Address in index box, type the address for the crawled content.  5. In the Address in search results box, type the address that you want users to see on the search results page when they receive query results for the address you typed in the Address in index box.  6. Click OK. |

### Manage search-based alerts

Search-based alerts are active, by default. However, you can deactivate them. Refer to the decision you recorded in the Search-based alerts section of the Plan the end-user search experience worksheet and do the following steps if you want to deactivate search-based alerts.

procedure_ddDeactivate search-based alerts

|  |
| --- |
| 1. On the Shared Services Administration page, in the Search section, click Search settings.  2. On the Configure Search Settings page, in the Crawl Settings section, click Search-based alerts.  3. On the Configure Search-based Alerts page, click Deactivate. |

## Site collection-level configuration

The procedures in this section are performed at the site collection-level. To perform these procedures, you must be a site collection administrator for the site collection on which you want to perform them.

### Create scopes at the site-collection level

Site collection administrators can choose to use scopes that were created at the SSP level, copy scopes that were created at the SSP level and modify them, or create new site collection level scopes.

Use the following procedure along with the decisions you recorded in the Search scopes (site-collection level) section of the Plan the end-user search experience worksheet to copy shared scopes at the site collection level.

procedure_ddCopy a shared scope

|  |
| --- |
| 1. On the top-level site of the site collection on which you want to create a scope, click Site actions, point to Site Settings, and then click Modify All Site Settings.  2. On the Site Settings page, in the Site Collection Administration section, click Search scopes.  3. On the View Scopes page, position the cursor over the name of the shared scope you want to copy, and then click Make Copy on the menu that appears.  note_ddNote:  The copy of the shared scope appears in the Unused Scopes section of the View Scopes page. |

Use the following procedure along with the decisions you recorded in the Search scopes (site-collection level) section of the Plan the end-user search experience worksheet to create scopes at the site-collection level.

procedure_ddCreate scopes at the site-collection level

|  |
| --- |
| 1. On the top-level site of the site collection on which you want to create a scope, click Site actions, point to Site Settings, and then click Modify All Site Settings.  2. On the Site Settings page, in the Site Collection Administration section, click Search scopes.  3. On the View Scopes page, click New Scope.  4. On the Create Scope page, in the Title and Description section, type a brief title for the search scope that will best explain it to your users. You can also type a fuller description for reference by site administrators.  5. Ignore the Display Groups section for now. We will assign display groups to scopes later in this article.  6. In the Target Results Page section, select one of the following:   Use the default Search Results Page. Select this option if you want search results from this search scope to be presented by using the standard Search Results page.   Specify a different page for searching this scope. Select this option if you want search results from this search scope to be presented on a custom page. If you select this option, type the URL for the custom search results page in the Target results page box.  7. Click OK. |

### Create Search scope rules at the site-collection level

Use the following procedure along with the decisions you recorded in the Search scopes (site-collection level) section of the Plan the end-user search experience worksheet to create scope rules.

The following table describes the scope rule types that you can choose from when creating a search scope rule. For simplicity, a separate procedure is provided for each scope rule type.

|  |  |
| --- | --- |
| Scope rule type | Purpose |
| Web address | Select this option if you want the scope to include or exclude content from any resource in the search index that can be identified either by a URL (such as Web sites, file shares, and Exchange public folders) or by a host name, domain name, or subdomain name.   Folder. Select this option if you want to include or exclude items in the folder and subfolders of the indicated URL (for example, http://site/subsite/folder).   Hostname. Select this option if you want to specify a host name. All items in the host name will be included or excluded from the scope (according to the behavior rules).   Domain or subdomain. Select this option if you want to specify a domain or subdomain (for example, widgets.contoso.com). All items in the domain or subdomain will be included in or excluded from the scope. |
| Property query | Select this option if you want the scope to include or exclude content that has a managed property with a particular value. For example: Author="John Doe". |
| All content | Select this option if the rule should not restrict the search scope (the search scope will include or exclude all content in the search index). |

Use the following procedure to Open the Add Scope Rule page.

procedure_ddOpen the Add Scope Rule page

|  |
| --- |
| 1. On the top-level site of the site collection on which you want to create a scope rule, click Site actions, point to Site Settings, and then click Modify All Site Settings.  2. On the Site Settings page, in the Site Collection Administration section, click Search scopes.  3. On the View Scopes page, position the cursor over the scope that you want to edit, click the arrow that appears, and then click Edit Properties and Rules on the menu that appears.  note_ddNote:  You cannot add search scope rules to shared scopes at the site collection level.  4. On the Scope Properties and Rules page, in the Rules section, click New rule.  5. |

Use the following procedure to create a scope rule using the Web address scope rule type.

procedure_ddCreate scope rules using the Web address scope rule type

|  |
| --- |
| 1. On the Add Scope Rule page, in the Scope Rule Type section, select Web Address.  2. In the Web Address section, select one of the following options and provide the address you want to associate with this rule:   Folder. Select this option if you want to include or exclude items in the folder and subfolders of the indicated URL (for example, http://site/subsite/folder).   Hostname. Select this option if you want to specify a host name. All items in the host name will be included or excluded from the scope (according to the behavior rules).   Domain or subdomain. Select this option if you want to specify a domain or subdomain (for example, widgets.contoso.com). All items in the domain or subdomain will be included in or excluded from the scope.  3. In the Behavior section, select one of the following options:   Include. Select this option if you want the rule to be applied (if another rule precludes its inclusion, it won't be included). The Include option is analogous to the logical operator AND.   Require. Select this option if you want the rule to be applied regardless of other rules. The Require option is analogous to the logical operator OR.   Exclude. Select this option if you want items that match this rule to be excluded from the search scope. The Exclude option is analogous to the logical operator AND NOT.  4. Click OK. |

Use the following procedure to create a scope rule using the Property query scope rule type.

procedure_ddCreate scope rule using the Property query scope rule type

|  |
| --- |
| 1. On the Add Scope Rule page, in the Scope Rule Type section, select Property Query.  2. In the Property Query section, select the managed property that you want to use to limit the search scope from the Add property restrictions list.  3. In the = box, type the string (value) that the managed property needs to match.  4. In the Behavior section, select one of the following options:   Include. Select this option if you want the rule to be applied (if another rule precludes its inclusion, it won't be included). The Include option is analogous to the logical operator AND.   Require. Select this option if you want the rule to be applied regardless of other rules. The Require option is analogous to the logical operator OR.   Exclude. Select this option if you want items that match this rule to be excluded from the search scope. The Exclude option is analogous to the logical operator AND NOT.  5. Click OK. |

Use the following procedure to create a scope rule using the All content scope rule type.

procedure_ddCreate scope rules using the All content scope rule type

|  |
| --- |
| 1. On the Add Scope Rule page, in the Scope Rule Type section, select All Content.  2. Click OK. |

### Manage display groups

To support a customized search experience, you can set up new display groups for which to associate your search scopes and you can assign scopes to the default display groups. Site administrators can also control the order that search scopes appear within a particular display group. After you create a display group, designers can modify the Search Box Web Part to display it.

#### Create a new display group

Use the following procedure along with the decisions you recorded in the Display groups section of the Plan the end-user search experience worksheet to create display groups at the site collection level and assign the scopes you want to them.

procedure_ddCreate display groups

|  |
| --- |
| 1. On the top-level site of the site collection on which you want to create a display group, click Site actions, point to Site Settings, and then click Modify All Site Settings.  2. On the Site Settings page, in the Site Collection Administration section, click Search scopes.  3. On the View Scopes page, click New Display Group.  4. On the Create Scope Display Group page, type a title and description that easily identifies the purpose of the group.  5. In the Scopes section, select the check box next to each scope that you want to include in this display group. You can manage the ordering of the scopes in the group by using the Position from Top lists.  6. In the Default Scope section, in the Default Scope list, select the scope that you want to be applied if users do not make a choice on their own.  7. Click OK. |

#### Assign scopes to default display groups

Use the following procedure along with the decisions you recorded in the Display groups section of the Plan the end-user search experience worksheet to assign scopes to the default Search Drop-down and Advanced Search display groups.

procedure_ddAssign scopes to default display groups

|  |
| --- |
| 1. On the top-level site of the site collection on which you want to assign scopes, click Site actions, point to Site Settings, and then click Modify All Site Settings.  2. On the Site Settings page, in the Site Collection Administration section, click Search scopes.  3. On the View Scopes page, in the Title column, click Search Dropdown.  4. On the Edit Scope Display Group page, in the Scopes section, select the check boxes for the scopes you want to be included in this display group and clear the check boxes for the scopes you want to remove from this display group.  5. Optionally use the Position from Top lists to specify what order the scopes will appear to the user for this display group.  6. Click OK.  7. On the View Scopes page, in the Title column, click Advanced Search.  8. On the Edit Scope Display Group page, in the Scopes section, select the check boxes for the scopes you want to be included in this display group and clear the check boxes for the scopes you want to remove from this display group.  9. Optionally use the Position from Top lists to specify what order the scopes will appear to the user for this display group.  10. Click OK. |

#### Modify the Search box Web Part for a new display group

Use the following procedure to modify the Search box Web Part for a new display group.

procedure_ddModify the Search box Web Part for a new display group

|  |
| --- |
| 1. Go to the Search Center page on the site collection on which you want to modify the Search box Web part.  2. Click Site actions, and then click Edit Page.  3. In the Search Box, click Edit, and then click Modify Shared Web Part.  4. In the Search Box tool pane, click the plus sign (+) next to Miscellaneous.  5. In the Scope Display Group text box, type the name of the display group that you want to use, and then click Apply.  6. Click OK to close the tool pane.  7. On the Search Center page, click either Publish or Check In to Share Draft, depending on your site permissions and workflow. |

### Create keywords and Best Bets

Search keywords and Best Bets enable you to provide two important features to help your users get the search results they need:

 Search keywords enable you to create a glossary of important terms within your organization. When a user types the keyword in a search query, the definition that has been created for the keyword is displayed at the top of the search results page.

 Best Bets enable you to prominently present editorially selected search results. Best Bets are URLs to pages, documents, or external Web sites that you associate with particular search keywords. When a user types a keyword in a search query that has one or more Best Bets, the search results page prominently displays the Best Bet URLs, including the title and description of each one.

Best Bets are most helpful in situations in which a site administrator wants to promote specific pages. Because the Best Bet URLs are displayed prominently on the search results page, end users may be more inclined to view them.

Use the following procedure along with the decisions you recorded in the Keywords and Best Bets section of the Plan the end-user search experience worksheet to create keywords and Best Bets.

procedure_ddCreate keywords and Best Bets

|  |
| --- |
| 1. On the top-level site of the site collection on which you want to create keywords and best bets, click Site actions, point to Site Settings, and then click Modify All Site Settings.  2. On the Site Settings page, in the Site Collection Administration section, click Search keywords.  3. On the Manage Keywords page, click Add Keyword.  4. On the Add Keyword page, in the Keyword Information section, in the Keyword Phrase box, type the keyword phrase you want to create.  5. In the Synonyms box, type the synonyms you want to associate with this keyword phrase. You can type more than one synonym by separating them with semicolons.  6. If you want to associate a Best Bet with this keyword, in the Best Bets section, click Add Best Bet. Otherwise, skip to step 11.  7. If this is the first Best Bet you will create on this site collection, skip to step 8. Otherwise, in the Add Best Bet dialog box, do one of the following:   To create a new best bet, select Add new best bet.   To select an existing Best Bet, select Select existing best bet, click the Best Bet you want from the Select best bets from the list below box, and then click OK. Skip to step 11.  8. In the URL box, type the URL you want to associate with this Best Bet.  9. In the Title box, type the title you want to associate with this Best Bet. This title appears in the Select best bets from the list below box, when selecting an existing Best Bet.  10. In the Description box, type a description for this Best Bet. This description appears with the Best Bet on the Search Results page.  11. If you want to create a definition for this keyword, in the Keyword Definition section, type the definition that you want to appear next to Best Bets for this keyword on the Search Results page.  12. In the Contact section, type the user name of the person to inform when the keyword is past its review date. (Optional)  13. In the Publishing section, you can optionally choose end and review dates for this keyword.  14. Click OK. |

# II Upgrading to Office SharePoint Server 2007

## II Upgrading to Office SharePoint Server 2007



# A. Plan and prepare for upgrade [Office SharePoint Server]

## A. Plan and prepare for upgrade



# Chapter overview: Plan and prepare for upgrade [Office SharePoint Server]

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

The upgrade process is not as simple as inserting a CD and running Setup. You need to carefully plan your approach, anticipate issues that might come up during or after the process, and consider your specific environment. This chapter includes information and recommendations that can help you plan and prepare for the upgrade process.

In this chapter:

 [Determine upgrade approach [Office SharePoint Server]](#DSDOC_f11e6c4f_dc2a_4d17_a2c8_9455792b4b)

 [How the upgrade process works (Office SharePoint Server)](#DSDOC_4d7a8038_4b27_4bd8_a855_585db4e924)

 [Review upgrade best practices](#DSDOC_1c3b661f_7d88_4b2c_bc3a_3337253f3f)

 [Review supported topologies](#DSDOC_79b3d76f_1e48_4608_b97c_ac744f5a1c)

 [Review system requirements for upgrade (Office SharePoint Server)](#DSDOC_d94ce4e7_7318_4452_a06d_1ca275b4bc)

 [Estimate how long the upgrade process will take and the amount of space needed (Office SharePoint Server)](#DSDOC_7d9c454c_9300_42e5_a79f_1064266a23)

 [Create communication plan](#DSDOC_dcf8e99b_fd8e_4a91_b281_bd673afee3)

 [Use a trial upgrade to find potential issues (Office SharePoint Server)](#DSDOC_2b5d3825_adba_4185_84f2_ef59e8110f)

 [Determine how to handle customizations (Office SharePoint Server)](#DSDOC_be1de0da_addb_4e6a_852c_0e68072d7f)

 [Develop new custom site definitions and create upgrade definition files (Office SharePoint Server)](#DSDOC_e9ce38b0_e047_4519_a12c_3ded2231e8)

In addition to these upgrade-specific planning steps, you should also follow the steps and recommendations for planning for security, capacity, and performance found in Planning and architecture for Office SharePoint Server 2007.

## [[2]](#footnote-3)#See Also

# Determine upgrade approach [Office SharePoint Server]

In this article:

 [Choose an upgrade approach](#DSDOC_section1f11e6c4f_dc2a_4d17_a2c8_94)

 [Special cases](#DSDOC_section2f11e6c4f_dc2a_4d17_a2c8_94)

Before you run any upgrade process, you need to determine which upgrade approach to take. Use the information in this article to help compare the pros and cons for each approach, and review information about special cases that might influence your approach.

## Choose an upgrade approach

The following table lists and compares different upgrade approaches.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Approach | Description | Pros | Cons | Best for |
| In-place upgrade | Upgrades the content and configuration data in-place, at one time. | Easiest approach. Sites retain original URLs. Updates existing databases and servers using existing hardware. | Environment is offline while it runs. No ability to revert to original site. | Single server or small server farm. |
| Gradual upgrade | Installs the new version side-by-side with the previous version. The server administrator determines which site collections to upgrade and when to upgrade them. | Enables a more granular approach: You can upgrade at the site collection level. Reduces time any single user is affected. Sites retain original URLs. Can revert to original site. Uses existing hardware. | More complex and resource-intensive. Must redirect URLs during upgrade process, which causes issues for some client applications such as Microsoft Office. Requires extra storage in SQL Server. Microsoft Windows SharePoint Services 2.0 scalable hosting mode is not supported. | Medium or large server farms (without shared services) with many sites for which you must limit downtime. Good for when your environment has many customizations. |
| Gradual upgrade for shared services | The same as gradual upgrade but with separate upgrade passes to upgrade parent and child portal sites. | Same as gradual upgrade, but allows you to upgrade parent and child portal sites individually. | Same as gradual upgrade, plus: Two search crawls are active at the same time for the Microsoft Office SharePoint Portal Server 2003 and Office SharePoint Server 2007 environments. | Server farm of any size with shared services. |
| (Advanced) Database migration | Requires the server administrator to install the new version on a separate farm or separate hardware, and then manually migrate the databases into the new environment. | Enables moving to new farm or new hardware. SharePoint Portal Server 2003 environment is available and is untouched by upgrade. | Complex process that requires many manual steps and a higher risk of error. Requires additional manual steps to retain original URLs for sites. Search scopes must be re-created and search settings must be reapplied. Requires new server farm, and twice the amount of SQL Server storage space. | Those who are moving to new hardware or a new architecture. Those who need to maximize upgrade throughput. This approach is required for Windows SharePoint Services 2.0 environments that are using scalable hosting mode or Active Directory directory service account creation mode. |

For more information about how in-place and gradual upgrades work, see [How the upgrade process works (Office SharePoint Server)](#DSDOC_4d7a8038_4b27_4bd8_a855_585db4e924).

## Special cases

You might have other requirements or additional goals that you want to accomplish when you perform your upgrade. The following table lists special cases and describes which upgrade approach is appropriate for each case.

|  |  |
| --- | --- |
| Case | Upgrade approach to take |
| Changing languages? | You have two choices, depending on whether a single site or your entire environment is changing languages:   To change the language for a specific site, upgrade in the same language, and then install the new language pack and change to that language.  caution_ddCaution:  You must have the appropriate language packs installed to upgrade any sites based on a localized site definition. If you do not have the new language pack, the sites will not be accessible. Wait for the new language packs to be released before attempting to upgrade those sites.   To change the installation language for your servers, use the database migration approach to migrate your data from the old version and language to the new version and language. |
| Moving to Microsoft Windows Server Code Name "Longhorn"? | First upgrade to Office SharePoint Server 2007 by using either in-place or gradual upgrade, and then upgrade to Windows Server Code Name "Longhorn". |
| Upgrading from SharePoint Portal Server 2001? | Upgrade to SharePoint Portal Server 2003, and then upgrade to Office SharePoint Server 2007. For more information about migrating from SharePoint Portal Server 2001 to SharePoint Portal Server 2003, see [SharePoint Portal Server 2003 Migration Resources](http://go.microsoft.com/fwlink/?LinkId=71516) (http://go.microsoft.com/fwlink/?LinkId=71516). Upgrading directly from SharePoint Portal Server 2001 is not supported. |
| Upgrading from SharePoint Team Services? | Upgrade to Windows SharePoint Services 2.0, and then to Windows SharePoint Services 3.0. Then you can either install Office SharePoint Server 2007 or migrate the content to Office SharePoint Server 2007. To migrate the content, use a tool (supplied, created by yourself, or licensed from a Microsoft partner) to use the PRIME object model to import the content into your Office SharePoint Server 2007 site. Upgrading directly from SharePoint Team Services is not supported. |
| Upgrading from Windows SharePoint Services 2.0? | Upgrade to Windows SharePoint Services 3.0, and then install Office SharePoint Server 2007. Upgrading directly from Windows SharePoint Services 2.0 to Office SharePoint Server 2007 is not supported. |
| Upgrading from Microsoft Content Management Server 2002? | See the Upgrade and Migration Guide for Microsoft Content Management Server 2002. |
| Upgrading from SharePoint Portal Server 2003 using the SPARK connector for Microsoft Content Management Server 2002? | See the Upgrade and Migration Guide for Microsoft Content Management Server 2002. Recommended approach: Upgrade the SharePoint Portal Server 2003 portal sites, and then use the MCMS migration tools to migrate content from MCMS 2002 into the upgraded portal sites. |
| Upgrading from an environment that included the [Microsoft Office Web Components](http://go.microsoft.com/fwlink/?LinkId=71517) (http://go.microsoft.com/fwlink/?LinkId=71517)? | These components will continue to work in the new version if you upgrade using in-place or gradual upgrade. However, the database migration approach does not work for these components, because they can only be installed in a Windows SharePoint Services 2.0 or SharePoint Portal Server 2003 environment. If you are upgrading to the Office SharePoint Server 2007 Enterprise Client Access License (CAL), consider using the Excel Services capabilities in your new environment instead of the Office Web Components. |

# How the upgrade process works (Office SharePoint Server)

In this article:

 [In-place upgrade](#DSDOC_section14d7a8038_4b27_4bd8_a855_58)

 [Gradual upgrade](#DSDOC_section24d7a8038_4b27_4bd8_a855_58)

 [How URL redirects are handled during gradual upgrade](#DSDOC_section34d7a8038_4b27_4bd8_a855_58)

 [How shared services change the gradual upgrade process](#DSDOC_section44d7a8038_4b27_4bd8_a855_58)

You can choose among three upgrade approaches: in-place, gradual, and database migration. An in-place upgrade is used to upgrade all Microsoft® SharePoint® sites at one time, which is best suited for single server or small deployments. A gradual upgrade allows finer control of the upgrade process by allowing one or more site collections to be upgraded at a time. Both in-place and gradual upgrades take place on the same hardware on which your previous version is installed. A database migration allows you to move your content to a new farm or new hardware.

tip_ddTip:

For larger deployments, a gradual upgrade is a better option than an in-place upgrade because it enables the administrator performing the upgrade to control how many site collections to upgrade at one time. In this way, large deployments can be upgraded gradually over several weekends while continuing to host the previous version sites. This is possible because you can continue to host the sites that have not yet been upgraded on the same server as the upgraded sites.

In an in-place upgrade:

 The previous version is overwritten with the new version, and the content databases are changed. Because of this, an in-place upgrade is not a reversible process — that is, you cannot roll back to the previous version.

 The original sites are upgraded in place, and you cannot view the previous versions of the sites after upgrade.

 All sites are unavailable to site visitors during upgrade. The period during which the sites are unavailable is the full time it takes to upgrade the entire server or server farm.

 Site visitors continue to use the same URLs after upgrade.

In a gradual upgrade:

 As each group of site collections is upgraded, the upgrade process copies the data in them from the original database to a new database before upgrading the data. The original data is maintained in the original database until explicitly deleted by the server administrator. Because of this, upgraded sites can be easily rolled back to the previous version if necessary.

 Most sites are available to site visitors during the upgrade; only those site collections that are currently being upgraded are offline. (Note that the previous version sites are marked as updates only after they have been copied in preparation for upgrade.)

 The upgrade impact is limited to only those users who need the site or sites being upgraded.

 After upgrade, the original URLs point to the upgraded version of the sites. This way, users can continue to use the same URLs they used before the upgrade.

A database migration is essentially an in-place upgrade that you perform on a copy of the content. In a database migration:

 You copy all databases except for the configuration and search databases, and then add the databases to a new stand-alone or server farm installation.

 When you attach the databases to the new server farm, the upgrade process runs and upgrades the data in place.

important_ddImportant:

Because of the downtime, and the risk that upgrade may take longer than expected or that some sites may need some rework after upgrade, it is critical that the server administrator communicate with site owners and users about what to expect during the process. For more information, see [Create communication plan](#DSDOC_dcf8e99b_fd8e_4a91_b281_bd673afee3).

## In-place upgrade

An in-place upgrade takes place on the same hardware as your previous version installation. When you run an in-place upgrade, the process upgrades your entire installation in a pre-set sequence. The following steps explain what happens as the in-place upgrade process runs:

1. After performing all pre-upgrade steps, the server administrator installs Microsoft Office SharePoint Server 2007 to the server running Microsoft Office SharePoint Portal Server 2003 and chooses In-place Upgrade.

2. The upgrade process runs and upgrades the configuration database and the Central Administration site.

3. The upgrade process runs and upgrades any data specific to the server (for example, search settings).

4. The upgrade process runs on each virtual server and upgrades each site collection in that virtual server.

5. After all sites have been upgraded, the upgrade process ends.

6. Repeat the upgrade action on each server in a server farm environment.

7. The administrator confirms that upgrade is complete and then uninstalls SharePoint Portal Server 2003.

## Gradual upgrade

Similar to an in-place upgrade, a gradual upgrade takes place on the same hardware that is used for your previous version installation. However, a gradual upgrade allows you to control when upgrade takes place for each individual site collection, and it also allows you to continue running the previous version and the new version side by side on that hardware. When you perform a gradual upgrade, the starting and ending topologies have the same configuration, similar to an in-place upgrade except for the following differences:

 During and after upgrade, the front-end Web servers run both SharePoint Portal Server 2003 and Office SharePoint Server 2007. Any upgraded site collections run under Office SharePoint Server 2007, whereas site collections that could not be upgraded or that were not selected for upgrade continue to run under SharePoint Portal Server 2003.

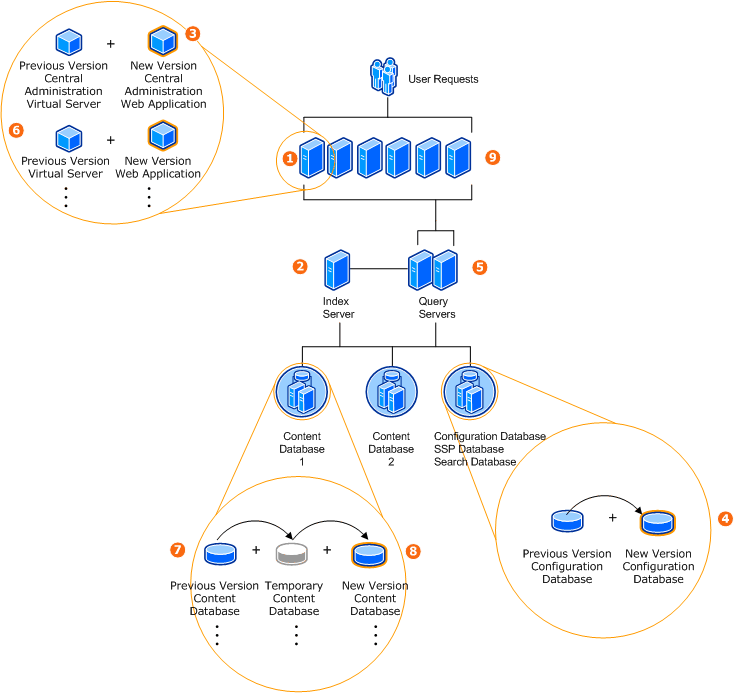
note_ddNote:

Scenarios in which you may not want to upgrade sites include: you may need to keep some sites in the previous version until a needed language pack is available for the current version, or you may need to wait for a new custom site definition to be created.

 During and after upgrade, the application servers run both SharePoint Portal Server 2003 and Office SharePoint Server 2007 services. Upgraded portal sites consume Office SharePoint Server 2007 shared services; portals that have not yet been or cannot be upgraded consume SharePoint Portal Server 2003 shared services. Additional services (such as Microsoft Excel® services) can be added after upgrade.

 During and after upgrade, both the SharePoint Portal Server 2003 and the Office SharePoint Server 2007 databases are available. Content for upgraded sites is stored in the Office SharePoint Server 2007 databases; content for sites that could not be upgraded or that need to remain as they were continue to be stored in the SharePoint Portal Server 2003 databases. Configuration databases exist for both Office SharePoint Server 2007 and SharePoint Portal Server 2003.

The following figure illustrates the gradual upgrade process:



The following steps correspond to the callout numbers in the preceding figure and explain what happens as the gradual upgrade process runs.

1. After performing all pre-upgrade steps, the server administrator installs Office SharePoint Server 2007 to the first front-end Web server in the farm and then chooses Gradual Upgrade.

note_ddNote:

It is recommended that you back up your environment before running the upgrade. For more information, see [Run and test a full backup in SQL Server [Office SharePoint Server]](#DSDOC_380db6c1_df37_4a44_8c65_9b13555152).

2. The upgrade process runs and upgrades any data specific to each server (for example, search settings stored on the file system on SharePoint Portal Server 2003 servers).

3. The upgrade process creates a Office SharePoint Server 2007 Web application to host SharePoint Central Administration, and the Central Administration site is created.

4. The upgrade process creates a new configuration database to store configuration data for Office SharePoint Server 2007. Configuration data from the SharePoint Portal Server 2003 configuration database is copied into the new database. Single sign-on (SSO) is upgraded (it registers a new Office SharePoint Server 2007 service that talks to the previous version SSO database).

5. After Office SharePoint Server 2007 has been installed to the first front-end Web server, the administrator installs it to all other servers in the server farm. If the environment uses shared services, the upgrade process upgrades user profiles and search data (this data is specific to the portal site that was selected).

6. The administrator selects a virtual server to upgrade and specifies the target Web application. The upgrade process creates the target Web application and adds any Web Parts deployed to the SharePoint Portal Server 2003 virtual server to the new Web application.

7. The upgrade process creates a temporary content database for each content database that exists in the previous version. The upgrade process copies the site list from SharePoint Portal Server 2003 into the new environment. The administrator selects the site collections to upgrade. The upgrade process copies the data for those sites into the temporary content database, and then upgrades those sites in that temporary content database. Each site is temporarily unavailable while being copied into the temporary content database.

8. After the content has been upgraded, the upgrade process moves the data to the Office SharePoint Server 2007 content database and then deletes the temporary content database.

9. At the end of the upgrade process, SharePoint Portal Server 2003 and Office SharePoint Server 2007 are both running and available. After all sites have been upgraded, the administrator confirms that upgrade is complete. If SharePoint Portal Server 2003 is no longer needed, the administrator uninstalls SharePoint Portal Server 2003.

## How URL redirects are handled during gradual upgrade

Two sites cannot share the same URL. Therefore, during a gradual upgrade, when you have both the old version and the new version of each site, you need two different domain URLs for each site (for example, http://company\_name/sites/SiteA and http://company\_name\_old/sites/SiteA). During upgrade, a temporary domain URL is needed to host the original previous version sites. The new version takes over the domain URL that points to the content prior to upgrade, and user requests will be routed to their content whether or not it has been upgraded. The following process occurs during upgrade to make this redirection possible:

1. Before you begin the upgrade, create a temporary URL domain for your previous version sites.

2. When you run the upgrade, the upgrade process will ask you for the domain you specified above. The process moves the previous version site to the temporary URL domain, and the new version site takes over the original URL domain.

3. A redirect is created automatically for each site collection to send requests for the original URL to the previous version site until the site is upgraded.

4. After each site has been upgraded, the redirect for that site is dropped.

5. After all sites have been upgraded, and after you have deleted all of the previous version sites and completed the upgrade process, you can manually remove the temporary URL domain from the Domain Name System (DNS).

During this process, browse access to the original URL always works. However, certain client applications (such as Microsoft Office client applications) cannot use these types of redirects. For more information, see [Comparison of key features](#DSDOC_bacce8ce_02cb_439e_83a7_275200c920). Before a site is upgraded, the original URL points to the previous version; after a site has been upgraded, the original URL points to the new version.

The following table illustrates how the URLs work during gradual upgrade.

|  |  |  |  |
| --- | --- | --- | --- |
| Stage | Original site URL | Upgraded site URL | Notes |
| Before upgrade | http://company\_name/sites/SiteA | n/a | The server administrator creates http://company\_name\_old for use during gradual upgrade. |
| During upgrade | http://company\_name\_old/sites/SiteA | http://company\_name/sites/SiteA | Requests for http://company\_name/sites/SiteA are redirected to http://company\_name\_old/sites/SiteA until it is upgraded. |
| After upgrade | http://company\_name\_old/sites/SiteA (until deleted) | http://company\_name/sites/SiteA | The redirect is removed after upgrade is complete and the results are validated. |

Be aware that this URL redirection can cause hard-coded links within sites or documents to break. For example, Microsoft Office InfoPath® forms sometimes contain hard-coded links to a data location (such as a specific SharePoint list, Web service, or XML file). Because the link is hard-coded, it cannot be automatically updated to point to the temporary URL used for sites that have not yet been upgraded during a gradual upgrade. Use a trial upgrade to identify such issues before you begin your official upgrade process. That way, you can identify any sites that need to be upgraded quickly so that they can use the original URL again, and you can avoid the support calls that result from loss of functionality in forms or other items containing hard-coded links.

## How shared services change the gradual upgrade process

If you use shared services in SharePoint Portal Server 2003, the gradual upgrade process is more complicated. It follows the same rough outline, but you must repeat the steps for the parent portal site and all child portal sites.

During a gradual upgrade with shared services:

 The SharePoint Portal Server 2003 parent portal site continues to provide services to sites that are configured to consume shared services.

 The SharePoint Portal Server 2003 sites that consume shared services retain the same user experience.

 Two search crawls are performed: by default, Office SharePoint Server 2007 crawls everything that was crawled by SharePoint Portal Server 2003, and the SharePoint Portal Server 2003 search service continues to crawl the SharePoint Portal Server 2003 environment. (Note that Office SharePoint Server 2007 can crawl the SharePoint Portal Server 2003 sites, but SharePoint Portal Server 2003 cannot crawl the Office SharePoint Server 2007 sites.) This means that you may be using up to twice the amount of network bandwidth for search crawling during a gradual upgrade with shared services. To minimize the impact, you can reduce the scope of either the previous version or the Office SharePoint Server 2007 crawls and, as SharePoint Portal Server 2003 sites are upgraded, you can delete their start addresses from the SharePoint Portal Server 2003 search settings.

 User profile and audience data is modified in one location — Office SharePoint Server 2007  — and is pushed from Office SharePoint Server 2007 to the SharePoint Portal Server 2003 environment by way of a scheduled job run by the SharePoint timer service.

When you upgrade with shared services, upgrade the parent portal site first, and then any child portal sites. However, if you need to upgrade a child portal site first (for example, if you only want to upgrade a single child portal site, and not any other child portal sites or the parent portal site), you can instead:

1. Create a temporary Shared Services Provider (SSP) in a new Office SharePoint Server 2007 environment.

2. Upgrade the child portal site and point it to the temporary SSP for services.

# How search features are affected by upgrade

In Microsoft Office SharePoint Portal Server 2003, all search settings were stored in the registry, except for scopes and best bets which were stored in the content database. During an in-place or gradual upgrade to Microsoft Office SharePoint Server 2007, most search settings are upgraded, with the following exceptions:

 Index files are not upgraded. They will be recreated when the server or farm is crawled for the first time. After upgrading to Office SharePoint Server 2007, you must perform a full crawl of any content you want to index.

 Scopes are not upgraded. You must recreate search scopes after upgrading to Office SharePoint Server 2007. For more information, see the topic Manage Search Scopes in the Office SharePoint Server 2007 Central Administration Help system.

 Search alerts are not upgraded. You must recreate search alerts after upgrading to Office SharePoint Server 2007. For more information, see the topic Configure search-based alerts in the Office SharePoint Server 2007 Central Administration Help system.

 Any filters, word breakers, and thesaurus files that you have installed are not upgraded. These files are version-dependent, and you must install new versions of these files, as available.

For more information about how search works in Office SharePoint Server 2007 and what to plan for when moving to Office SharePoint Server 2007, see Plan search.

note_ddNote:

If you have shared services, when you upgrade the parent portal, the settings from the parent portal's servers are added to the upgraded Search database.

Because the search settings are stored in the registry and not in database, if you choose a database migration approach to upgrade, none of the search settings are upgraded; you must manually reconfigure search in the new environment.

The following table lists the settings for search in SharePoint Portal Server 2003 and what happens to these settings during and after the upgrade process.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SharePoint Portal Server 2003 search setting | SharePoint Portal Server 2003 Scope | What happens during upgrade | Office SharePoint Server 2007 setting | Office SharePoint Server 2007 scope |
| Default Content Access Account and Default Content Access Account Password | Central Admin | The account and password are copied over to the shared service provider (SSP) database. These were farm-wide settings in SharePoint Portal Server 2003 and were stored in the registry for all indexer servers in the farm. In Office SharePoint Server 2007 , these settings are stored in the SSP database instead. | Default Content Access Account and Default Content Access Account Password | Shared Service Provider Administration |
| "This Portal"/"Non-Portal" Content sources | Portal Admin | All settings are upgraded. | Default content source | Shared Service Provider |
| Custom content sources | Portal Admin | Settings are migrated from the SharePoint Portal Server 2003 registry to the Office SharePoint Server 2007 registry. | Content sources | Shared Service Provider |
| Rules | Portal Admin | Rules are upgraded in the following order: first, portal rules, then non-portal rules, then other rules. After upgrade, the administrator must resolve any conflicts by using the Shared Services Provider interface. | Rules | Shared Service Provider |
| Best bets | Portal Admin | The best bets are copied from the Site\_Serv database into the SSP database. | Best bets | Site |
| Schema | Portal Admin | The schema is upgraded and changes from JET to SQL Server database format. | Schema | Shared Service Provider |
| Site hit frequency rules | Central Admin | Site hit frequency rules are upgraded. | Site hit frequency rules | Central Administration |
| Custom search pages with custom search Web Parts | Any | These continue to work without any changes after upgrade. The query object model is still functional. | Custom search pages with custom search Web Parts | Any |
| Schedules | Portal Admin | Schedule information is copied into the content sources. | Content sources | Schedules |

Additional notes about upgrading and search:

 In gradual upgrade, where the SharePoint Portal Server 2003 and Office SharePoint Server 2007 portals run side-by-side, and the configuration is inter-farm shared services, both the SharePoint Portal Server 2003 and Office SharePoint Server 2007 crawlers will be running side-by-side as long as child portals are not yet upgraded to Office SharePoint Server 2007. After all portals are upgraded to Office SharePoint Server 2007, you must manually turn off the SharePoint Portal Server 2003 crawler. For more information, see Perform a gradual upgrade with Shared Services.

 In Office SharePoint Server 2007, there is only one index per farm, rather than multiple indexes with aggregated results as in SharePoint Portal Server 2003. When you upgrade, the indexes are stored on the job server, and the configuration settings from other indexes in the farm are pulled into the Shared Services Provider (SSP) database, however the other index machines are no longer used.

 The SharePoint Portal Server 2003 administrative object model has been deprecated in Office SharePoint Server 2007. This means that any custom applications that rely on the Customers SharePoint Portal Server 2003 administrative object model will have to be rewritten to use the new object model in Office SharePoint Server 2007.

 The Query object model and the Web service are backward-compatible in Office SharePoint Server 2007. This means that any custom applications built using those should continue to work without any modifications.

 SQL syntax is supported for search in Office SharePoint Server 2007.

 SharePoint Portal Server 2003 required the Windows Task Scheduler service and used this service to manage crawl schedules. Office SharePoint Server 2007 uses the SharePoint Timer Service to perform this function instead and no longer requires the Task Scheduler service. If you are not using the Task Scheduler service for other scheduled tasks, you can stop this service after you have completed the upgrade process.

# Review upgrade best practices

To ensure a smooth upgrade process, follow these best practices:

1. Perform a trial upgrade on a test farm first.

Back up the live farm, restore to test servers, and then perform the upgrade. Examine the results to set expectations for what the live upgraded sites will look like, to determine how much post-upgrade customization will have to be done, and to estimate how long the upgrade will take. Try a full search indexing crawl. For more information about performing a test upgrade and a list of common issues, see [Use a trial upgrade to find potential issues (Office SharePoint Server)](#DSDOC_2b5d3825_adba_4185_84f2_ef59e8110f).

2. Plan for capacity.

Ensure that you have disk, processor, and memory capacity sufficient to handle gradual upgrade requirements. For more information about system requirements, see [Review system requirements for upgrade (Office SharePoint Server)](#DSDOC_d94ce4e7_7318_4452_a06d_1ca275b4bc). For more information about planning disk space required for upgrade, see [Estimate how long the upgrade process will take and the amount of space needed (Office SharePoint Server)](#DSDOC_7d9c454c_9300_42e5_a79f_1064266a23).

3. Back up your data.

Perform a full backup before upgrading, and then perform backups again after each set of upgraded site collections goes live. There are two reasons to perform the additional backups after upgrading sets of site collections:

 If anything happens to your servers, you won't have to start from the old version and perform the upgrade again.

 In a gradual upgrade, at some point, you will want to reduce the amount of space consumed by upgraded sites, old sites, and the backups themselves, and you will need to delete the old versions. You will want to have backups of the upgraded sites in case something goes awry after you have deleted the old sites.

We recommend that you use the following methods in the different environments:

 For the Microsoft® Office SharePoint® Portal Server 2003 environment, use the SharePoint Portal Server Data Backup and Restore utility or the SQL Server™ backup tools. For more information about performing a backup of your SharePoint Portal Server 2003 environment, see [Disaster Recovery in SharePoint Products and Technologies](http://go.microsoft.com/fwlink/?LinkId=75165&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=75165&clcid=0x409) and [Run and test a full backup in SQL Server [Office SharePoint Server]](#DSDOC_380db6c1_df37_4a44_8c65_9b13555152).

 For the Microsoft Office SharePoint Server 2007 environment, use the new backup capabilities in Office SharePoint Server 2007 or the SQL Server backup tools. For more information about performing a backup of your Office SharePoint Server 2007 environment, see Office SharePoint Server 2007 Backup and Restore.

4. Do not change previous version sites or configuration data during or after the upgrade.

We recommend that you lock the sites to updates while you perform the upgrade. The upgrade process itself can lock the site content and the configuration data from Microsoft Windows® SharePoint Services 2.0, but not the configuration data that is specific to SharePoint Portal Server 2003. Be sure that you do not make configuration changes (such as adding a site to the site directory) to the previous version site while you are upgrading it or afterwards, because those changes cannot be synchronized with the new version; you might either lose those changes or need to revert to the previous version and perform the upgrade again. There are two methods you can use to lock the sites:

 You can use the Adding content prevented lock on the Manage site collection quotas and locks page in SharePoint Central Administration to lock site collections. For more information about locking sites by using quotas, see Configuring Site Collection Quotas and Locks (Windows SharePoint Services 2.0).

 You can set the content database to read-only in Microsoft SQL Server. For more information about setting a database to read-only, see the "Setting Database Options" topic in the SQL Server Books Online for SQL Server 2000.

5. Do not add any servers to your server farm after you begin the upgrade process.

Running the SharePoint Products and Technologies Configuration wizard upgrades the configuration database. The configuration database contains the list of servers in the farm. Servers added to the farm after the Configuration wizard has been run are not included in the database. Therefore, servers added after the wizard runs do not appear in the upgraded version topology. If you need to add servers to your farm, do so either before starting the upgrade or after you have completed the upgrade process by following the steps in [Add servers to an upgraded farm (Office SharePoint Server)](#DSDOC_b4279ff9_2842_475a_8d7f_cc90711c47).

6. If you have shared services, upgrade the parent portal site first.

However, if it is not feasible to upgrade the parent portal site first, you can create a temporary Shared Services Provider (SSP) to host the new version services and upgrade a child portal site first. If you intend to take this approach, keep the following things in mind:

 After the upgrade, you need to create a temporary parent Shared Services Provider (SSP) and populate it with data (search, profiles, and so on). Associate the temporary SSP with your upgraded child portal site or portal sites and test the new functionality.

 Consider a trial deployment with a small department's child portal site to start with. Then, when you're ready to begin the full migration, upgrade the parent portal site first and point the upgraded child portal site at the upgraded parent's SSP. The child portal site's content will be available immediately after you upgrade the child portal site, but the shared services content associated with the parent portal site will be unavailable until the parent portal site is upgraded.

For more information about upgrading with shared services, see Perform a gradual upgrade with Shared Services.

# Review supported topologies

In this article:

 [Supported topologies](#DSDOC_section179b3d76f_1e48_4608_b97c_ac)

 [Moving from a single server to a server farm](#DSDOC_section279b3d76f_1e48_4608_b97c_ac)

 [Additional configurations](#DSDOC_section379b3d76f_1e48_4608_b97c_ac)

 [Related worksheet](#DSDOC_section479b3d76f_1e48_4608_b97c_ac)

## Supported topologies

The following table lists the supported starting topologies in , and which ending topologies are supported and not supported when you upgrade to Microsoft Office SharePoint Server 2007.

|  |  |  |
| --- | --- | --- |
| Starting topology () | Supported ending topology (Office SharePoint Server 2007) | Not supported ending topology (Office SharePoint Server 2007) |
| Single server with MSDE | Single Server with SQL Server 2005 Express Edition | Any farm |
| Single server with SQL Server | Single server with SQL Server | Single Server with SQL Server 2005 Express Edition, any farm |
| Small farm | Any farm | Single server with SQL Server 2005 Express Edition, single server with SQL Server |
| Medium farm | Any farm | Single server with SQL Server 2005 Express Edition, single server with SQL Server |
| Large farm | Any farm | Single server with SQL Server 2005 Express Edition, single server with SQL Server |

note_ddNote:

SQL Server 2005 Express Edition is the SQL Server 2005 replacement for MSDE.

## Moving from a single server to a server farm

If you want to move from a single server to a server farm configuration, you must first migrate from MSDE or SQL Server 2005 Express Edition to SQL Server, and then add additional servers to create a server farm. You can do this by performing either of the following actions:

 Migrate from MSDE to SQL Server 2000, and then perform your upgrade. For more information about moving from MSDE to SQL Server 2000 for , see [Migrating from MSDE to SQL Server](http://go.microsoft.com/fwlink/?LinkId=78008&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=78008&clcid=0x409).

 Upgrade (upgrading also upgrades the database from MSDE to SQL Server 2005 Express Edition), and then migrate from SQL Express to SQL Server 2005.

For more information about adding servers to a server farm, see Deployment for Office SharePoint Server 2007.

## Additional configurations

There are additional constraints if you are running in any of the following configurations:

 SharePoint Portal Server 2003 with the backward-compatible document library features   Not supported in Office SharePoint Server 2007. Office SharePoint Server 2007 includes new document management features that you can use instead. For more information about these features, see Planning and architecture for Office SharePoint Server 2007.

 32- vs. 64-bit versions   You cannot switch between 32-bit and 64-bit versions. If you start in 32-bit, you must upgrade to 32-bit. If you need to switch from 32-bit hardware to 64-bit hardware, you should perform a database migration instead of an upgrade. For more information, see [Determine upgrade approach [Office SharePoint Server]](#DSDOC_f11e6c4f_dc2a_4d17_a2c8_9455792b4b).

## Related worksheet

Use the [Supported topologies for upgrade worksheet](http://officebeta.iponet.net/search/redir.aspx?AssetID=AM101599191033) (http://officebeta.iponet.net/search/redir.aspx?AssetID=AM101599191033) to determine if you need to make any changes to your topology before upgrading.

# Review system requirements for upgrade (Office SharePoint Server)

In this article:

 [Stand-alone installation](#DSDOC_section1d94ce4e7_7318_4452_a06d_1c)

 [Server farm installation](#DSDOC_section2d94ce4e7_7318_4452_a06d_1c)

 [Worksheet](#DSDOC_section3d94ce4e7_7318_4452_a06d_1c)

Not only do you need to meet the system requirements to run the new version, but your system must have the appropriate processor power and memory to run the upgrade process. Before you begin the upgrade process, make sure your system meets the recommendations below for your servers.

caution_ddCaution:

 It is important that your hardware meets these recommendations, otherwise you may run into issues during the upgrade process. For example, if your database server does not have enough memory or processor power, it may not be able to keep up with the number of transactions that occur during the upgrade process, and the upgrade may fail with an error and a comment in the upgrade log. The Upgrade.log file is located at %windir%\Program Files\Common Files\Microsoft Shared\web server extensions\12\LOGS. If you experience problems with your hardware capacity, you can increase the capacity, and then try running the upgrade again by using the following command on the command line:

 stsadm -o upgrade

 For more information about running upgrade from the command line, see [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

For more information about system requirements, see Determine hardware and software requirements (Office SharePoint Server) in the Planning Guide.

## Stand-alone installation

You can install Microsoft Office SharePoint Server 2007 on a single computer by either choosing Basic, or choosing Advanced and then selecting Stand-alone in Office SharePoint Server 2007 Setup.

### Hardware requirements

The following table lists the minimum and recommended hardware requirements for deploying Office SharePoint Server 2007, including the deployment of Microsoft SQL Server 2005 Express Edition, for a stand-alone installation.

|  |  |  |
| --- | --- | --- |
| Component | Minimum | Recommended |
| Processor | 2.5 Gigahertz (GHz) | Dual processors that are each 3 GHz or faster |
| RAM | 1 gigabyte (GB) | 2 GB |
| Disk | NTFS file system–formatted partition with a minimum of 3 GB of free space | NTFS file system–formatted partition with 3 GB of free space plus adequate free space for your Web sites |
| Drive | DVD drive | DVD drive or the source copied to a local or network-accessible drive |
| Display | 1024x768 | 1024x768 or higher resolution monitor |
| Network | 56 kilobits per second (Kbps) connection between client computers and server | 56 Kbps or faster connection between client computers and server |

## Server farm installation

The primary difference between a single server and a server farm topology is that you can use one or more computers to host the following server roles:

 Application server

 Front-end Web server

 Database server

This section details the minimum and recommended system requirements for each server role. If you install more than one role onto a single computer, ensure that the computer meets the minimum requirements for both roles.

### Application server

The following table lists the minimum and recommended hardware requirements for deploying an Office SharePoint Server 2007 application server.

|  |  |  |
| --- | --- | --- |
| Component | Minimum | Recommended |
| Processor | 2.5 GHz | Dual processors that are each faster than 2.5 GHz |
| RAM | 2 GB | 4 GB |
| Disk | NTFS file system–formatted partition with a minimum of 3 GB of free space | NTFS file system–formatted partition with 3 GB of free space plus adequate free space for your data storage requirements |
| Drive | DVD drive | DVD drive or the source copied to a local or network-accessible drive |
| Display | 1024x768 | 1024x768 or higher resolution monitor |
| Network |  56 Kbps connection between client computers and server   For connections between computers in your server farm, 100 megabits per second (Mbps) connection |  56 Kbps or faster connection between client computers and server   For connections between computers in your server farm, 1 gigabit per second (Gbps) connection |

### Front-end Web server

The following table lists the minimum and recommended hardware requirements for deploying an Office SharePoint Server 2007 front-end Web server.

|  |  |  |
| --- | --- | --- |
| Component | Minimum | Recommended |
| Processor | 2.5 GHz | Dual processors that are each 3 GHz or faster |
| RAM | 2 GB | More than 2 GB |
| Disk | NTFS file system–formatted partition with a minimum of 3 GB of free space | NTFS file system–formatted partition with 3 GB of free space plus adequate free space for your data storage requirements |
| Drive | DVD drive | DVD drive or the source copied to a local or network-accessible drive |
| Display | 1024x768 | 1024x768 or higher resolution monitor |
| Network |  56 Kbps connection between client computers and server   For connections between computers in your server farm, 100 megabits per second (Mbps) connection |  56 Kbps or faster connection between client computers and server   For connections between computers in your server farm, 1 gigabit per second (Gbps) connection |

## Worksheet

Use the [Upgrade server requirements worksheet](http://go.microsoft.com/fwlink/?LinkID=73754&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=73754&clcid=0x409) to determine if you need to increase your server capacity before upgrade.

# Estimate how long the upgrade process will take and the amount of space needed (Office SharePoint Server)

In this article:

 [Estimate the amount of space needed for the upgrade](#DSDOC_section17d9c454c_9300_42e5_a79f_10)

 [Estimate how long the upgrade will take](#DSDOC_section27d9c454c_9300_42e5_a79f_10)

 [Related worksheet](#DSDOC_section37d9c454c_9300_42e5_a79f_10)

Every environment is unique and includes different hardware capabilities and different site characteristics. The amount of space and the length of time needed to run an upgrade will vary greatly depending on your environment. For example, sites based on Microsoft® Windows® SharePoint® Services 2.0 can be upgraded much faster than personal or portal sites based on Microsoft Office SharePoint Portal Server 2003; this is because the upgrade process for Windows SharePoint Services 2.0 sites has fewer steps than the upgrade process for SharePoint Portal Server 2003 personal or portal sites. The best way to estimate how much space will be needed and how long the upgrade process will take is to perform a trial upgrade pass, and then review the sizes and times. For more information about performing a trial upgrade, see [Use a trial upgrade to find potential issues (Office SharePoint Server)](#DSDOC_2b5d3825_adba_4185_84f2_ef59e8110f).

## Estimate the amount of space needed for the upgrade

Depending on the upgrade approach you choose, you will need different amounts of available disk space to perform your upgrade. With the in-place upgrade and database migration approaches, you need to plan for very little expansion in the databases; however, there are a lot of transactions taking place while the upgrade process runs, and so the log files will need to expand to accommodate the changes that are occurring.

With a gradual upgrade, you must have space for three sets of databases: the original databases, the temporary databases where the upgrade process takes place, and the upgraded databases. In addition, you need space for the log files and additional search indexes (if needed).

### Estimate space for an in-place upgrade or a database migration

For an in-place upgrade or a database migration, you do not need to plan for a lot of extra database space. For a content database migration, you simply need to plan on having as much space available on the new hardware as is required for your current databases, plus room to expand over time. To find out how large your databases currently are, use Enterprise Manager in Microsoft SQL Server. In addition to database space, you also need to have room for the following items:

 The upgrade log files.

 The transaction log files for the databases. These log files must grow quickly to accommodate the number of changes taking place in the databases; be sure that you have enough disk space for these log files.

note_ddNote:

In very large environments, there is a possibility that the default growth rate for the transaction log files (10%) is not enough to keep up with the upgrade process; this can cause a timeout. Again, a trial upgrade is the best way to determine if the transaction log files can keep up with the upgrade process. If your environment is very large, or if the process timed out during a trial upgrade, consider pre-growing the SQL Server transaction log files to be sure you have room for the number of transactions that need to be processed. For more information about pre-growing the SQL Server transaction logs, see the "Expanding a Database" topic in the SQL Server 2000 or 2005 documentation.

### Estimate space for a gradual upgrade

If you are following a gradual upgrade path, you need to have enough database space to accommodate an amount of data approximately three times the size of your largest site collection. For example, one internal portal site here at Microsoft included a root portal site in SharePoint Portal Server 2003 that had 400 gigabytes (GB) of data in its database. The IT group estimated that 1.2 terabytes (TB) of database space was needed to run the gradual upgrade process. To find out how large your databases currently are, use Enterprise Manager in SQL Server.

If you cannot afford to allocate this much disk space, you can reduce this overhead by upgrading sites in batches. After you have upgraded a few batches and confirmed with the sites' owners that the old versions are no longer needed, you can start cleaning up and deleting the previous version sites (after taking a backup). If you continue in this way, upgrading new batches and deleting sites from the old version, you can regulate the amount of space needed.

If you are using shared services, you also need to have space for approximately two times your indexes. This is because, during a gradual upgrade with shared services, you will be indexing twice — from both the previous version and the new version.

In addition to database space, you also need to have room for the following items:

 The upgrade log files.

 The transaction log files for the databases. These log files must grow quickly to accommodate the number of changes taking place in the databases; be sure that you have enough disk space for these log files.

note_ddNote:

In very large environments, there is a possibility that the default growth rate for the transaction log files (10%) is not enough to keep up with the upgrade process; this can cause a timeout. Again, a trial upgrade is the best way to determine if the transaction log files can keep up with the upgrade process. If your environment is very large, or if the process timed out during a trial upgrade, consider pre-growing the SQL Server transaction log files to be sure you have room for the number of transactions that need to be processed. For more information about pre-growing the SQL Server transaction logs, see the "Expanding a Database" topic in the SQL Server 2000 or 2005 documentation.

 The search indexes. In a gradual upgrade, you may have two search crawls running at the same time.

For more information about how disk space is used during a gradual upgrade, see [How the upgrade process works (Office SharePoint Server)](#DSDOC_4d7a8038_4b27_4bd8_a855_585db4e924).

## Estimate how long the upgrade will take

With your disk space estimates in hand, you can now calculate a rough estimate of how long the actual upgrade process will take. Upgrade times vary widely among environments. The performance for an upgrade depends greatly on the hardware being used, the complexity of the sites, and the particular characteristics of your implementation. For example, if you have a lot of large document libraries or a lot of personalized sites, these may take longer to upgrade than a simpler site.

The upgrade approach you've chosen will also make a big difference in how long the process will take. Upgrading by way of a database migration is the quickest method (keep in mind, however, that the pre- and post-upgrade steps for this approach take much longer than other approaches). A gradual upgrade is the slowest method because of the extra data copying steps involved. An in-place upgrade falls somewhere in between.

The best way to estimate overall time is to do a trial upgrade of a small portion of the data, and then review the upgrade log files. You can also use the log files to check your progress during the upgrade process. The upgrade.log file located at %windir%\Program Files\Common Files\Microsoft Shared\web server extensions\12\LOGS contains the duration.

However, the estimate you arrive at based on your data set is for the actual upgrade process for the data; it does not include all of the steps you have to perform before and after this step, which can take more time than the upgrade of the data itself. When estimating how long the upgrade will take, in addition to the data processing, you must also estimate how long the activities during the pre- and post-upgrade phases will take.

Pre-upgrade steps:

 Creating custom elements   Creating a site definition or new page layouts, or upgrading Web Parts, will take some time. The process of creating custom elements should begin early, during the evaluation phase of your project.

 Backing up the databases   You must perform a full backup — not a differential backup — to be sure you can recover in the remote possibility that the upgrade fails and you need to rebuild your server farm. For large environments, this step can take a significant amount of time. In particular, if you are backing up to a network location, network latency issues can slow this process down.

 Creating new Domain Name System (DNS) names for a gradual upgrade   The Domain Name System will take time to propagate changes across the network. For more information about pre-creating the DNS names for a gradual upgrade, see [Create new domain names (gradual upgrade only)](#DSDOC_985fdf95_479f_472e_9f92_bbeb23ed2e).

Post-upgrade steps:

 Verifying sites and making changes or reverting to template   Allow enough time for users to validate their sites after the upgrade. This may take several days. For more information, see [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

 Creating the Shared Services Provider (SSP)   This step only applies during a database migration (in either an in-place or a gradual upgrade, the SSP is created as part of the upgrade process). Creating an SSP can take from 10 to 20 minutes; however, if you need to contact a database administrator to pre-create the databases for you, you might need a day or two of lead time.

 Importing profiles after upgrade   This step can take several hours to a day for large organizations (for example, more than 1,000 profiles).

 Running a people crawl   For large organizations, this step can take more than 24 hours.

 Running a search crawl on all content   For large sites, this step can take more than 24 hours.

Additional factors in your environment can also contribute to longer upgrade times, including:

 Very large document libraries   A document library with more than 250,000 documents all in the root of the document library (rather than in folders) will take a long time to upgrade, and the upgrade might not be successful. Following the 2003 and 2.0 guidelines for using folders to break up large document libraries can help you manage the library size. For example, if you rearrange the same document library so that the 250,000 documents are divided into 125 folders, it should upgrade more easily.

 Very large databases   Databases larger than 100 GB can take a long time to upgrade. However, content databases containing portal sites are often much larger than that (for example, 200 GB). If you have a portal site with many large areas, it cannot be split up in SharePoint Portal Server 2003 and you must upgrade it all at the same time.

note_ddNote:

If you have content databases that are larger than 100 GB but comprise team sites or MySites rather than portal sites, it is recommended that you divide them up into smaller databases before running the upgrade. Larger databases not only take longer to upgrade, but they can make it harder to recover if the upgrade does not complete successfully. There are community-supported tools available to move site collections between databases. One such tool is the SharePoint Utility Suite, available from the [SharePoint Products and Technologies Web Component Directory](http://go.microsoft.com/fwlink/?LinkId=79736&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=79736&clcid=0x409).

If you have a very large database (more than 100 GB), you may want to reconsider your upgrade approach. A gradual upgrade approach can handle larger databases because, with a gradual approach, you can upgrade site collections individually. A database migration approach is more difficult with very large databases, simply because backing up and restoring such large databases is problematic. Of course, a gradual approach requires more space, so you need to consider your options carefully.

caution_ddCaution:

Be sure you are following the capacity planning guidelines from the old and new versions before you attempt the upgrade. If you have exceeded the guidelines for best performance, the upgrade process might take longer, or it might not succeed (for example, the process might time out repeatedly on the same large document library). If your deployment does not meet the recommended capacity guidelines, consider whether you need to do some work to meet those guidelines before attempting the upgrade. Again, a trial upgrade can help you with that decision.

## Worksheet

Use the [Estimate database space and time for upgrade worksheet](http://go.microsoft.com/fwlink/?LinkID=73752&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=73752&clcid=0x409) to determine how much disk space you need to perform the upgrade and how long the upgrade process might take.

# Create communication plan

In this article:

 [When and what to communicate to the upgrade team](#DSDOC_section1dcf8e99b_fd8e_4a91_b281_bd)

 [When and what to communicate with site users](#DSDOC_section2dcf8e99b_fd8e_4a91_b281_bd)

For small deployments in which sites have not been customized to any great degree, the upgrade team might consist of only one person. For larger deployments, on the other hand, several people with different roles can be required, as shown in the following list.

 Server administrators   The server administrator performs most of the upgrade tasks. There must be at least one server administrator on the upgrade team because running the Setup wizard requires someone who is a member of the local Administrators group on each front-end Web server.

note_ddNote:

Farm administrators might or might not be local administrators for the server.

 Shared services administrators   For Microsoft Office SharePoint Portal Server 2003, you must communicate with the administrators for shared services, such as search, to be sure that they are ready for the upgrade, and so that they can configure the appropriate settings in the new version.

 Site collection owners   You need to be able to notify site collection owners that the upgrade process is about to happen, and alert them to any issues you find when you upgrade their sites. If you are performing a gradual upgrade, you must also communicate with site collection owners to determine whether their sites have been completely upgraded and any customizations re-applied before you delete or deactivate the old sites.

 Site designers and developers   If you have custom templates, Web Parts, Web services, or other custom elements associated with your sites, you need to work with the people responsible for developing or customizing those elements to ensure that you can create new versions of these custom elements, or to verify that these elements have upgraded correctly. For more information about potential issues with custom elements, see Use a trial upgrade to find potential issues.

 Site users   Although site users won't need to be included in making decisions about the upgrade process, you need to tell site users when it will take place and what they should expect.

 Sponsors and other stakeholders   You might have other people in your organization involved in the upgrade planning process. Be sure to include them in your communication plan appropriately.

note_ddNote:

An upgrade team can include one or more members in each role depending upon your organization.

## When and what to communicate to the upgrade team

In general, the server administrators and shared services administrators set the timeline for upgrade, and site owners are notified only when the process is about to begin. However, because team members have their own tasks to perform at particular points in the overall upgrade process, it is critical that you have a solid plan to communicate the progress of the upgrade to all team members so that everyone knows when it is time to perform their particular tasks.

The entire upgrade team needs to work together to determine:

 The upgrade approach to use   The Determine upgrade approach (2) topic provides information to help you decide which type of upgrade to perform. The report generated by the pre-upgrade scan tool is also important to take into consideration when making this decision.

 Dates and times to perform the upgrade   We recommend (particularly for an in-place upgrade) that you upgrade when site usage is low. For small single-server deployments, upgrade may complete in less than a day. For larger deployments, such as server farms with large amounts of data, the gradual upgrade option can be used to distribute the upgrade process over several outage windows. There is no way to determine the exact amount of time required to upgrade any particular site collection. Because of this, it is very important to communicate with other team members involved in the upgrade process as well as end users. The day or days that you choose for upgrading should be far enough in the future to enable the upgrade team time to complete all of the preliminary steps. When planning the timeline, be sure to schedule time to validate the upgraded sites and time to implement any changes or do any work to re-brand sites.

It is important to communicate with site owners, designers, and developers at the following points during the upgrade process:

 Before the process begins, so that they know the general timeline and what their roles in the process will be.

 After the pre-upgrade scan tool has been run, so that they can address any issues identified by the tool. For more information about the pre-upgrade scan tool, see [Run the pre-upgrade scan tool (Office SharePoint Server)](#DSDOC_3479e99e_0734_4237_a412_9fc42bf8bd). For example, issues such as customized site templates or custom Web Parts should be reported to the appropriate site owner, designer, or developer before scheduling the upgrade to give them time to investigate the issues and take preliminary steps. For example, a developer might decide that it is prudent to rebuild a Web Part before the upgrade occurs. And site owners might want to make note of any customizations that have been done to their sites, including site templates and changes to core Active Server Page Extension (ASPX) files.

 After their sites have been upgraded, so that they can review the sites and make any changes necessary. Site owners need to know how long the old versions of the sites will be maintained so that they can be sure to retrieve anything they need from the old site.

## When and what to communicate with site users

It is equally important to communicate with the users of the sites to tell them about the following issues:

 When their sites will be upgraded   In the case of an in-place upgrade, they must also be informed that their sites will be unavailable during the upgrade.

 When to expect their upgraded sites to be ready   This means that the upgrade team has not only upgraded but also verified the functionality of the upgraded sites.

 How the upgrade might impact them and what they should know about the new environment   For example, the site might look different or function slightly differently. Or they may need to reapply customizations from the old site after upgrade. You can also point them to available content, such as What's New articles or training materials, to learn about the new version.

# Use a trial upgrade to find potential issues (Office SharePoint Server)

Before you begin the upgrade process, you'll want to know approximately how long it will take, how many customizations will have to be done again or reapplied, and which sites may not upgrade as expected. The following method will help you determine what issues you may run into during the upgrade process, so you can address them before or after upgrade as appropriate.

1. Run the pre-upgrade scan tool to find any custom sites or unghosted pages (required).

note_ddNote:

You must run the pre-upgrade scan tool before starting the upgrade process. This tool steps through each site collection and generates a report about the state of each site. It also saves list definition information for each list. You can review the reports to find issues and address them before you start the upgrade process. This scan must be run before you can upgrade; the SharePoint Products and Technologies Configuration Wizard will not run if this scan has not been performed. For more information about this tool and steps for running the scan, see [Run the pre-upgrade scan tool (Office SharePoint Server)](#DSDOC_3479e99e_0734_4237_a412_9fc42bf8bd).

2. [Review common issues](#DSDOC_section12b5d3825_adba_4185_84f2_ef) to see which issues may apply to your environment.

This list gives you a quick look at some common issues you may run across, and how to address them either before or after performing the upgrade.

3. [Perform a trial upgrade](#DSDOC_section22b5d3825_adba_4185_84f2_ef) by using a backup or mirrored (read-only) site (recommended, but optional).

This is the best method for discovering issues. You can preview the entire upgrade process and find any issues and address them before you start (or at least know what to expect). This method does require extra time and hardware; however, if you do invest in a trial run, you'll have a much easier time during the real upgrade process.

## Review common issues

When you run the pre-upgrade scan tool or a test upgrade pass, you may notice one or more of the following common issues in your sites. If you have several sites with these issues, it is recommended that you perform a gradual upgrade. With a gradual upgrade, you have both the old version and the new version of any affected sites available, and you can revert to the old sites or make updates to the new sites before making the new versions live. If you must run upgrade in place, be sure to take a backup of your sites before running the upgrade.

|  |  |
| --- | --- |
| Issue | Explanation and what to do |
| The local server and server farm administrators cannot browse to the sites. | In the new release, local server and server farm administrators are not automatically granted access to site content. If you want these users to have access to all site content, you can use the Web application policy to grant these users access to all sites. For more information about policy, see "Policy for Web applications" in the Logical architecture elements article. |
| My branding customizations are lost during upgrade. | The methods to use for branding your site have changed in the new version. For example, you can now use Master Pages to control the layout and structure of your pages. Reapply branding by using the new methods. For more information, see Plan Web pages. |
| My themes are lost during upgrade. | Themes have been reworked and redesigned for the new version. Apply a new theme. |
| Customizations done in Microsoft® Office FrontPage® 2003, are retained (my pages are still unghosted), but new functionality does not appear in the site. | Revert the pages to template to get the latest functionality, then reapply customizations in Microsoft Office SharePoint Designer 2007. For more information about reverting to a template, see [Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007](#DSDOC_da3e6cbb_a478_4c7a_ae5a_4560c62206). |
| Hard-coded URLs in Web Parts and pages that pointed to specific places in my sites no longer work. | The URLs for certain pages may have changed during upgrade (for example, if you had some areas with the /C2/ or /C16/ paths, then those paths may have been updated to /sites/ instead). Navigate to the appropriate location, and then recreate the URLs to point to the new location. |
| My sites are based on a heavily customized site definition. | Before upgrading your sites, create a new site definition, and then create an upgrade definition file so the upgrade process can map your old site definition elements to the new site definition. |
| I had extended form libraries and they no longer work. | Support for forms has been changed from form libraries to document libraries. Redeploy and reapply the forms to new document libraries. |
| We started the gradual upgrade process, and now my forms do not work. | Some InfoPath forms contain hard-coded links to a data location (such as a specific SharePoint list, Web service, or XML file). Because the link is hard-coded, it cannot be fixed automatically to point to the temporary URL that is used for sites that have not yet been upgraded during gradual upgrade. To fix the forms, you can immediately upgrade the sites that contain forms with broken links (thus restoring the original URL). If you cannot upgrade the sites immediately (for example, if there are other issues with the site that you need to investigate before upgrading), you can republish the forms and point to the temporary URL domain. Note that, if you choose to republish the forms, you'll have to republish the forms again after you upgrade the sites to point to the original URL, so use this option sparingly. For more information about the temporary URLs used during gradual upgrade, see [How the upgrade process works (Office SharePoint Server)](#DSDOC_4d7a8038_4b27_4bd8_a855_585db4e924). |
| I had custom message text for Alerts and it is no longer displayed. | The custom messages are preserved, but you must manually transfer the message file to the new path. |
| I had custom event handlers configured for my environment. | You may need to reapply the event handlers, or use new features to perform the tasks instead. |
| Some controls that I rely on have been deprecated. | Remove the references to the controls from your new site definition. For more information about deprecated controls and which controls or features to use instead, see the Microsoft Office SharePoint Server 2007 Software Development Kit (SDK). |
| My Web Parts were obfuscated in the old version, and now they do not work in the new version. | You may need to rebuild the Web Parts with ASP.NET 2.0. |
| My custom Web services relied on hard-coded URLs or functionality that has changed. | You may need to rework the Web services to use the new URL schemes and new functionality. For more information, see the Office SharePoint Server 2007 Software Development Kit (SDK) and [Comparison of key features](#DSDOC_bacce8ce_02cb_439e_83a7_275200c920). |
| My contributing users can edit and change landing pages after upgrade. | Because areas are now sites and the pages in the areas are stored in the Area Pages document library, members of your old contributor group can now edit them. If you need to control who can edit these pages, change the permissions for the document library to be more restrictive. |
| Some files (with extensions .asmx, .rem, .resx, .soap, or .ashx) are no longer visible or cannot be opened after upgrade. | These file extensions have been added to the list of blocked file extensions for the new version. If you need to allow users to upload or download files with these extensions, you can remove the entries for these extensions from the list. For more information about managing blocked file extensions, see the topic Manage blocked file types in the 2nd OSS 12 Central Administration Help system. |
| I don't see a Link to Outlook button on View pages anymore. | You must revert the page to the template version to get the new user interface controls on the View pages, such as this control. |
| I can't revert a custom page to template. | If you added a completely custom page to your site (for example, if you replaced default.aspx with a completely different file rather than making changes to the existing default.aspx file), that page has no association with the site definition and so cannot revert to template. If you want your custom page to have the same look and feel as the other pages in your site, consider creating a new page based on the site definition and transferring your customizations to that new page. |

In addition to the above issues, some changes in functionality between the previous version and the new version result in issues that you'll have to resolve either before or after upgrade. These issues include:

|  |  |
| --- | --- |
| Issue | Explanation and what to do |
| Search scopes do not upgrade. | Because of the changes in the scope infrastructure, search scopes from SharePoint Portal Server 2003 do not upgrade directly to Office SharePoint Server 2007. After upgrade, you must recreate your search scopes in the new infrastructure. For more information, see the search topics in the Planning Guide. |
| The site directory has been redesigned. | Many changes have been made to how the site directory works, including the following:  **** The site directory search box is removed from the site directory page after upgrade. This is because the default search box now can search the site directory and its subsites. To search just the Site directory list, use the contextual scope to search only This List.  **** Creating a site from the Site directory now creates subsites under the Site directory, not site collections. Existing sites under the Site directory remain site collections after upgrade, and there is no navigation hierarchy for them (except for the data that was already populated in the Site Directory list); however, any new sites are created as subsites and do appear in the navigation hierarchy as well as in the sites list in the Site Directory. |
| E-mail–enabled document libraries have been replaced with the incoming e-mail feature. | In the previous version, you could set up a public folder, and have documents sent to the public folder automatically added to a specific document library. This functionality has been replaced with the incoming e-mail feature in the new version and will no longer work after you perform the upgrade. After upgrade, you can configure incoming e-mail to restore the ability to archive documents from e-mail messages. For more information, see Plan incoming e-mail. |

## Perform a trial upgrade

If you have the resources available, it is recommended that you perform a trial upgrade to discover any issues before you perform the actual upgrade. You can perform this trial upgrade on either a backup or a mirrored version of your site.

To perform a trial upgrade on a backup version of your environment:

1. Take a full backup of your server or server farm.

2. Restore the backup on separate hardware, and configure that environment so it is identical to your product environment (for example, install any custom Web Parts, custom binaries, site definitions, and so on).

3. Perform the pre-upgrade, upgrade, and post-upgrade steps for the upgrade path you will use in your live environment.

4. Review the results and look for issues that you can address before performing the upgrade in your live environment.

To perform a trial upgrade on a mirrored (read-only) version of your environment:

1. In the mirrored environment, perform the pre-upgrade, upgrade, and post-upgrade steps for the upgrade path you will use in your live environment.

2. Review the results and look for issues that you can address before performing the upgrade in your live environment.

# Determine how to handle customizations (Office SharePoint Server)

If you have extensively customized your Microsoft® SharePoint® Portal Server 2003 sites (by using Microsoft Office FrontPage® 2003), you need to determine how you want to handle your customized sites when you upgrade. Your approach will vary based on the extent of the customizations, the complexity of your site, and your goals for upgrading. You can choose to:

1. Keep the customizations   While this approach allows you to keep the same look and feel, you won't be able to take advantage of the new capabilities available in the new version. If you really want to keep your pages looking just as they did, there are three ways to keep the customizations:

 Do an in-place upgrade.

By default, an in-place upgrade preserves customizations and does not reset to the site definition. Some controls, such as the Site Actions menu, may not be available in your upgraded site.

 Do a gradual upgrade, and keep the site in the previous version environment (do not upgrade the site).

This maintains the site exactly as it is, with the previous version functionality only. This is usually a short-term solution, as most organizations do not want to support both versions over the long term.

 Do a gradual upgrade and upgrade the site, but don't reset any pages to the site definition.

This approach might result in an uneven look if you didn't customize every page. Customized pages retain the previous version's look and functionality, while uncustomized pages have the new version's look and functionality. Some controls, such as the Site Actions menu, may not be available in your customized pages.

note_ddNote:

By default, custom pages are kept as is after upgrade (except for themes).

2. Throw out the customizations   If you are planning a complete site redesign, or if you are significantly changing the information architecture, then the upgrade is your chance to start over with a new look or a new organization. There are two ways to throw out your customizations and start with a fresh site:

 Go ahead and upgrade (either in-place or gradual), and reset all pages to use the default pages from the site definition. For an in-place upgrade, after upgrading, use Microsoft Office SharePoint Designer 2007 to reattach the default page layouts. For a gradual upgrade, use the upgrade option to reset the entire Web site to use the site definition pages.

With this approach, you can start with the new look and functionality, and then decide whether or not to customize the site again. Site owners can reapply customizations when they review the upgraded sites.

note_ddNote:

If you have added a completely custom page to your site (for example, if you replaced default.aspx with a completely different file rather than making changes to the existing default.aspx file), that page has no association with the site definition and therefore it cannot be reattached to the page layout. If you want your custom page to have the same look and feel as the other pages in your site, consider creating a new page based on the site definition and transferring your content to that new page.

 Start fresh with a new site in the new environment.

This approach works when you're dramatically redesigning your site and do not need to have either the structure or most of the content in the new site. Create a brand-new site, create a new site design, and transfer your content into the new site. This is not an upgrade path, but rather an opportunity to design your new site from scratch.

3. Redo the customizations   This approach allows you to take advantage of the new capabilities, modify your design slightly if desired, and move to a more manageable design. You can take advantage of the new Master Pages model to apply your design, rather than customizing each individual page. Converting the customized landing pages to use page layouts instead also cuts down on future maintenance costs, because you can simply change the page layouts rather than each individual page. There are three ways to redo the customizations:

 Do an in-place or gradual upgrade and do not reset the pages to the site definition version. After upgrade, modify the appropriate master pages and page layouts in the upgraded site to take on the previous version's look and feel, and then reattach the page layouts to all customized pages. This gives all formerly customized landing pages the same look as the un-upgraded site. You can incorporate the new controls, such as the Site Actions menu, into your new page layouts as part of this work.

 Do an in-place upgrade and do not reset the pages to the site definition. After upgrade, open the site and copy the customizations, then reattach the page layouts and reapply your customizations to the master pages and page layouts as appropriate.

By default, an in-place upgrade preserves customizations and does not reset the pages to the site definition version. When you open the site by using a Web page editor compatible with Microsoft Office SharePoint Server 2007, such as Office SharePoint Designer 2007, you can copy the customizations and then reset the original pages to get the new functionality. Then you can reapply any customizations to the master pages and page layouts that still make sense. Doing this process with an in-place upgrade is somewhat complicated because you need to copy the customized pages before resetting them. Consider using the gradual upgrade method below instead.

note_ddNote:

When you perform an in-place upgrade, it does not preserve the previous version of the site. If you want to be able to have the previous version and the new version of the site side by side so you can transfer customizations from the previous version site to the new version site, use a gradual upgrade — or, if you are performing an in-place upgrade, be sure you have a mirrored server or server farm that is running the previous version.

 Do a gradual upgrade and, in the upgraded site, reattach the page layouts. Then transfer the customizations from your original site to the master pages and page layouts in the upgraded site by using Office SharePoint Designer 2007.

This option provides you with the most flexibility. Because you can refer to the original site, you can see exactly how you did the previous customizations. And because you reattached the page layouts, you can see the new functionality and decide which customizations to reapply to the master pages and page layouts and which to ignore.

note_ddNote:

Again, not all custom pages have an equivalent page in the site definition, so reattaching the page layouts will not work for truly custom pages. If you want your custom pages to have the same look and feel as the other pages in your site, consider creating a new page based on the site definition and transferring your content to that new page.

For more information about reapplying customizations after upgrade, see [Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007](#DSDOC_da3e6cbb_a478_4c7a_ae5a_4560c62206).

## Worksheet

Record any customized site definitions or page templates you are using in the [Custom templates and mapping files worksheet](http://go.microsoft.com/fwlink/?LinkId=73751&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=73751&clcid=0x409).

# Develop new custom site definitions and create upgrade definition files (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [Develop new site definitions and custom elements](#DSDOC_section1e9ce38b0_e047_4519_a12c_3d)

 [About upgrade definition files](#DSDOC_section2e9ce38b0_e047_4519_a12c_3d)

 [Create upgrade definition files](#DSDOC_section3e9ce38b0_e047_4519_a12c_3d)

 [Worksheet](#DSDOC_section6e9ce38b0_e047_4519_a12c_3d)

If your sites are based on custom site definitions, you must take the following steps to ensure that they upgrade correctly.

note_ddNote:

If you are not yet ready to upgrade the sites based on a custom site definition (for example, if you obtained the site definition from a solution provider and a new version of that site definition is not yet available), you can use gradual upgrade to upgrade other sites, and leave the sites based on the custom site definition running in the previous-version environment. Later, when you have a new custom site definition, you can create the upgrade definition files and upgrade only the sites based on the custom site definitions.

1. Obtain or develop new site definitions and custom elements   If you want to retain the functionality of sites that are based on a custom site definition, you need a new site definition that includes all of the functionality you need, plus any of the new capabilities you want to use. If you had obtained a custom site definition or custom elements from a solution provider, check to see if they have a new version. If your solution provider does not provide a new version, you might need to develop your own.

2. Create a site upgrade definition file   You also need to create a file that maps the custom elements from your old custom site definition to the new site definition, so that each element in your site (for example, a custom page) can upgrade to the appropriate new element.

3. Create page template upgrade definition files   For Microsoft Office SharePoint Portal Server 2003, you also need to create upgrade definition files for translating the page templates, such as the Home page, into new page layouts. Page layouts replace page templates in the new site architecture and you need to specify which page layout to use for each page type. For more information about page layouts, see Plan Web pages.

note_ddNote:

You might want to continue running sites based on a custom site definition in the previous-version environment (for example, if you have purchased a solution based on a custom site definition for the previous version that is not yet available for the current version). In this case, you do not need to create upgrade definition files for the custom site definitions. Instead, you can perform a gradual upgrade, upgrading only the sites that do not depend on that site definition, and keep the other sites in the previous-version environment indefinitely, or until a current version site definition is available. If you later acquire a current-version site definition, you can then create upgrade definition files and upgrade the sites.

During the pre-upgrade process, you deploy the new custom site definition and any upgrade definition files to the installation directory so that they are available when you upgrade the site collections.

## Develop new site definitions and custom elements

Use the following process to create site definitions and page templates in a development environment. For more information, see the Software Development Kit (SDK).

1. Create custom site definitions and page templates by starting from a site definition or page template that comes with the new version.

 Site definitions are stored in the following folder:

%WinDir%\Program Files\Common Files\Microsoft Shared\web server extensions\12\TEMPLATE\SiteTemplates\NAME

where NAME matches the site definition name (for example, ACTION). Create a folder for your new site definition and name the new folder by using all capital letters.

 The XML files that register the site templates are stored in the following location:

%WinDir%\Program Files\Common Files\Microsoft Shared\Web server extensions\12\TEMPLATE\LCID\XML\webtempname.xml

Where name matches the site definition name, except that it is in lowercase, (for example action), and where LCID is the locale identifier for the language that the template is in, (for example, 1033 for United States English).

2. Page templates are stored in the master page gallery folder at the root of a site collection. For more information, see Plan Web pages.

3. Test your site definitions and page templates in the development environment by creating a new site based on the site definition and new pages based on the page templates.

After you have created and tested your new site definitions and page templates, you can create the upgrade definition files that map your previous-version site definitions and page layouts to the new-version site definitions and page templates.

## About upgrade definition files

A site upgrade definition file describes how to map a customized previous-version site definition to a new-version site definition. The goal of a site upgrade definition file is to give developers a tool to transform their previous-version sites into new-version equivalents that take advantage of all the improvements the new version has to offer.

For Microsoft Office SharePoint Server 2007, there are additional page template upgrade definition files for specific page templates (also known as page layouts). A page template is an Active Server Page Extension (ASPX) file that defines the structure of a page. The benefit of page templates is that you can create new pages based on the page template, rather than editing the pages in a Web page editor that is compatible with Office SharePoint Server 2007. Page templates are stored at the root of the site collection and are shared across the site collection.

In Office SharePoint Server 2007, page templates are used for most pages in the portal site. In other words, all new-version site definitions for Office SharePoint Server 2007 include page templates, and many portal pages that were based on the standard portal site definition in the previous version are based on different page layouts in the new version. The upgrade process moves portal pages from the previous version to pages that use page templates in the new version. Page templates from the previous version are moved to the default set of page templates that comes with the new version. If the default set of page templates does not suit your needs, you can create a custom set and provide an upgrade definition file to map the old portal pages to the new page templates.

An upgrade definition file for a site definition has the following sections:

 WebTemplate   Specifies upgrade information for the Web template as a whole. You need one WebTemplate tag per upgrade definition file.

 Lists   Specifies upgrade information for each list or library in the template. In the Lists section, you need one List tag per list or library.

 Files   Specifies upgrade information for the individual pages in the template. In the Files section, you need one File tag for each ghosted (uncustomized) page in the template.

 Applied SiteFeature and Applied WebFeature   Specifies upgrade information for any site collection-level or subsite-level features included in the template. In the Applied SiteFeature and Applied WebFeature sections, you need one Feature tag for each feature at that level in the template.

For more information about creating upgrade definition files, including a sample upgrade definition file, see the Upgrade Definition Files and Upgrade Definition Schema topics in the Microsoft Windows SharePoint Services 3.0 Software Development Kit (SDK).

The following example, taken from one of the files installed in Microsoft Office SharePoint Server 2007, outlines the format for a page template upgrade definition file.

<SPSSiteUpgraderConfig>

<PublishingPageLayoutMappings>

<PublishingPageLayoutMapping WebTemplateId="20" PublishingPageLayout="/\_catalogs/masterpage/defaultlayout.aspx"/>

<PublishingPageLayoutMapping WebTemplateId="22" PublishingPageLayout="/\_catalogs/masterpage/welcomelayout2.aspx"/>

</PublishingPageLayoutMappings>

</SPSSiteUpgraderConfig>

You can see from this example that a Web site template maps to a page template — in other words, the Web site template with ID=20 maps to the page layout=defaultlayout.aspx. This means that every site that uses the template ID of 20 will have a home page (usually default.aspx) that uses a page layout defined by defaultlayout.aspx.

## Create upgrade definition files

Give the upgrade definition file a unique name that begins with the name of the site definition. For example, for a site definition named "STS1", name the upgrade definition file "STS1\_upgrade.xml".

Upgrade definition files must be installed to the following folder:

%WinDir%\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\Config\Upgrade

For more information, see [Deploy upgrade definition files and new site definitions [Office SharePoint Server]](#DSDOC_c32cbc26_b1cd_4c3a_8285_6223d458e8). For more information about creating upgrade definition files, such as what to include in the files and the schema to follow, see the Software Development Kit (SDK) <Link to come>.

## Worksheet

Record the file names and paths for each upgrade definition file that you need to create in the [Custom templates and mapping files](http://officebeta.iponet.net/search/redir.aspx?AssetID=AM101599211033) worksheet (http://officebeta.iponet.net/search/redir.aspx?AssetID=AM101599211033).

# B. Perform pre-upgrade steps [Office SharePoint Server]

## B. Perform pre-upgrade steps



# Chapter overview: Perform pre-upgrade steps [Office SharePoint Server]

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

There are specific steps you must take before you start the upgrade process. If you don't perform these steps before you start the upgrade process, the upgrade process might fail. This chapter describes the pre-upgrade steps you must perform to have a successful upgrade experience, regardless of which upgrade path you are pursuing.

In this chapter:

 [Install Service Pack 2 for Windows SharePoint Services 2.0 and SharePoint Portal Server 2003](#DSDOC_394070c1_a32f_4992_82b4_5048b4ba56)

 [Install all pre-requisites (Office SharePoint Server)](#DSDOC_b6d6298f_61da_4d5c_ae0c_de79128a9b)

 [Communicate downtime to site owners and users](#DSDOC_c3029380_efab_45a5_b72d_89c684740f)

 [Run and test a full backup in SQL Server [Office SharePoint Server]](#DSDOC_380db6c1_df37_4a44_8c65_9b13555152)

 [Create new domain names (gradual upgrade only)](#DSDOC_985fdf95_479f_472e_9f92_bbeb23ed2e)

 [Run the pre-upgrade scan tool (Office SharePoint Server)](#DSDOC_3479e99e_0734_4237_a412_9fc42bf8bd)

 [Deploy upgrade definition files and new site definitions [Office SharePoint Server]](#DSDOC_c32cbc26_b1cd_4c3a_8285_6223d458e8)

 [Upgrade custom Web Part packages](#DSDOC_7b8993be_8afc_4eba_9c5e_960083758d)

After you have completed the pre-upgrade steps, you can perform your in-place or gradual upgrade, or database migration.

# Install Service Pack 2 for Windows SharePoint Services 2.0 and SharePoint Portal Server 2003

If you have not already applied Service Pack 2 (SP2) to your environment, you must do so before upgrading. You must install both SP2 for Microsoft Windows SharePoint Services and Microsoft Office SharePoint Portal Server 2003.

note_ddNote:

It is advised that you perform a full backup of your SharePoint Portal Server 2003 environment prior to applying a service pack.

To install Windows SharePoint Services SP2, do one of the following:

 Use [Microsoft Windows Update](http://go.microsoft.com/fwlink/?LinkID=15270&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=15270&clcid=0x409) to update your Web server computer (recommended). Windows Update scans your computer and provides you with a tailored selection of updates that apply only to the items on your computer.

 Download Windows SharePoint Services SP2 from the [Microsoft Download Center Web site](http://go.microsoft.com/fwlink/?LinkId=71862) (http://go.microsoft.com/fwlink/?LinkId=71862), and then run the service pack executable on a server computer that is running the original version of Windows SharePoint Services.

note_ddNote:

If you are running a server farm configuration, you must install the service pack to each front-end Web server computer. For more information, see the Microsoft Knowledge Base article [KB 875358: You must update all the Web servers in a Web farm that is running Windows SharePoint Services](http://go.microsoft.com/fwlink/?LinkID=39585&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=39585&clcid=0x409).

After you have installed Windows SharePoint Services SP2, you can install SharePoint Portal Server 2003 SP2. To install SharePoint Portal Server 2003 SP2:

1. Download SharePoint Portal Server 2003 SP2 from the [Microsoft Download Center](http://go.microsoft.com/fwlink/?LinkId=71863) (http://go.microsoft.com/fwlink/?LinkId=71863).

2. Follow the instructions at the bottom of the Download details page to install the service pack.

3. After you install the service pack, restart your server computer for the upgrade to complete successfully.

For more information about installing SP2 for SharePoint Portal Server 2003, see [Installing Office SharePoint Portal Server 2003 SP2](http://go.microsoft.com/fwlink/?LinkId=72211&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=72211&clcid=0x409).

# Install all pre-requisites (Office SharePoint Server)

In this article:

 [Install Microsoft .NET Framework 3.0](#DSDOC_section1b6d6298f_61da_4d5c_ae0c_de)

 [Enable Microsoft ASP.NET 2.0](#DSDOC_section2b6d6298f_61da_4d5c_ae0c_de)

Before you can upgrade, you must have the following pre-requisite software installed:

 The Web server and application server computers must be running Microsoft® Windows® Server 2003 (Standard, Enterprise, Datacenter, or Web Edition) with Service Pack 1 (SP1), and must have Microsoft .NET Framework 3.0 and Microsoft ASP.NET 2.0. Instructions for installing Microsoft .NET Framework 3.0 and enabling Microsoft ASP.NET 2.0 are provided later in this article.

For more information about Microsoft .NET Framework, see the [Microsoft .NET Framework Developer Center](http://msdn.microsoft.com/netframework/) (http://msdn.microsoft.com/netframework/).

 For server farm installations, the back-end database server computer must be running Microsoft SQL Server™ 2005 or Microsoft SQL Server 2000 with Service Pack 3 (SP3) or later.

## Install Microsoft .NET Framework 3.0

Go to the [Microsoft Download Center Web site](http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409). On the Microsoft .NET Framework 3.0 page, follow the instructions for downloading and installing Microsoft .NET Framework 3.0. There are separate downloads for x86-based computers and x64-based computers; be sure to download and install the appropriate version for your computer. The Microsoft .NET Framework version 3.0 download contains the Windows Workflow Foundation technology, which is required by Microsoft Office SharePoint Server 2007 workflow features.

important_ddImportant:

If you have a previous version of the Windows Workflow Foundation, such as Windows Workflow Foundation Beta 2.2 (build 3807.7), you must uninstall that version before installing this version of Microsoft .NET Framework 3.0.

## Enable Microsoft ASP.NET 2.0

1. Click Start, point to All Programs, point to Administrative Tools, and then click Internet Information Services (IIS) Manager.

2. In the IIS Manager tree, click the plus sign (+) next to the server name, and then click the Web Service Extensions folder.

3. In the details pane, click ASP.NET v2.0.50727, and then click Allow.

# Communicate downtime to site owners and users

Before you run the upgrade, you need to tell the owners and users of your sites that their sites are about to be upgraded. You should include the following information:

 Whether site owners and users will be able to use their sites during the upgrade process. All sites are unavailable during an in-place upgrade.

 How long you expect the upgrade process to take and when their sites will be ready to use again.

 Whether the site owners or users will have to redo any customizations after upgrade. (This is necessary so that they can record information about the customizations before you run the upgrade.)

# Run and test a full backup in SQL Server [Office SharePoint Server]

In this article:

[Back up a database](#DSDOC_section1380db6c1_df37_4a44_8c65_9b)

[Test the backups](#DSDOC_section2380db6c1_df37_4a44_8c65_9b)

To ensure that you can recover your existing environment in case something goes wrong during the upgrade process, you must back up all of the databases that are used by Microsoft Office SharePoint Portal Server 2003 before you run the upgrade process. SharePoint Portal Server 2003 uses several databases, as listed in the following table.

|  |  |  |
| --- | --- | --- |
| Database type | Database name | Notes |
| Configuration database | ID\_Config\_db | Required — one per farm |
| Site database | ID\_SITE | Required — one per portal site. |
| Profile database | ID\_PROF | Required — one per portal site. |
| Component settings database | ID\_SERV | Required — one per portal site. |
| Single sign-on database | ID\_SSO | Optional — one per farm |
| Content databases | STS\_database\_server\_name\_ID | Optional — there can be several if you have many team sites in your environment. |

note_ddNote:

The database names above are examples of the default naming structure. The naming structure for your databases may vary.

## Back up a database

Follow the appropriate steps to back up your databases in either SQL Server 2000 or SQL Server 2005.

procedure_ddBack up a database in SQL Server 2000

|  |
| --- |
| 1. On your database server, click Start, point to All Programs, point to Microsoft SQL Server, and then click Enterprise Manager.  2. In SQL Server Enterprise Manager, click the plus sign next to Microsoft SQL Servers.  3. Click the plus sign next to SQL Server Group.  4. Click the plus sign next to (local) (Windows NT).  5. Click the plus sign next to Databases.  6. Right-click the database you want to back up, point to All Tasks, and then click Backup Database.  7. In the SQL Server Backup dialog box, in the Name box, specify a name for the backup, and then in the Backup area, select Database - complete.  8. In the Destination area, either select an existing destination, or:  a. Click Add.  b. In the Select Backup Destination box, select File Name, and then next to the File Name box, click the browse button.  c. In the Backup Device Location - (local) dialog box, in the File name box, type a file name, and then click OK.  d. Click OK again to close the Select Backup Destination dialog box.  9. Click OK to start the backup process.  10. Click OK to acknowledge that the backup process has completed.  Repeat these steps to back up the configuration database plus all of the other databases that are used by Windows SharePoint Services in your environment.  important_ddImportant:  You should also back up any customizations (such as site definitions, Web Parts, and so on) and other files you would need in case you need to re-create your previous-version environment. |

procedure_ddBack up a database in SQL Server 2005

|  |
| --- |
| 1. On your database server, click Start, point to All Programs, point to Microsoft SQL Server 2005, and then click SQL Server Management Studio.  2. In the Connect to Server box, fill in the connection information, and then click Connect.  3. 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.  4. Expand Databases and select the database to back up.  5. Right-click the database, point to Tasks, and then click Back Up.  The Back Up Database dialog box appears.  6. In the Source section, in the Database box, verify the database name.  7. In the Backup type box, select Full.  8. Under Backup component, click Database.  9. In the Name text box, either accept the default backup set name suggested or enter a different name for the backup set.  10. In the Destination section, choose the type of backup destination by clicking Disk or Tape, and then select a destination. To create a different destination, click Add.  11. Click OK to start the backup.  Repeat these steps to back up the configuration database plus all of the other databases that are used by Windows SharePoint Services in your environment.  important_ddImportant:  You should also back up any customizations (such as site definitions, Web Parts, and so on) and other files you would need in case you need to re-create your previous-version environment. |

## Test the backups

You need to be sure that these backups are valid so that you can recover if there is a hardware failure or data corruption during the upgrade process. To test your backups, set up a non-production front-end Web server computer and a computer running SQL Server, restore the backups and install any customizations (such as site definitions, Web Parts, and so on), and then verify that the restored backup is functional.

# Create new domain names (gradual upgrade only)

If you are performing a gradual upgrade, you must have two separate domain names for your existing sites and your upgraded sites. The new, upgraded sites take over your existing domain names so that users can continue with their work on the upgraded sites without having to update their Favorites or bookmarks. The existing sites move to temporary domain names, where you can access them as needed.

For example, if you have sites at http://company\_intranet or http://portal\_name, create a temporary domain name such as http://company\_intranet\_old or http://portal\_name\_old to host the old version's sites, leaving the original URL for the new version.

note_ddNote:

You can also use a port number instead of a full domain name as the temporary URL. For more information about specifying the domain name or port number during upgrade, see [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

For more information about how URLs change during a gradual upgrade, see [How the upgrade process works (Office SharePoint Server)](#DSDOC_4d7a8038_4b27_4bd8_a855_585db4e924).

You must create the new domain names before you install the new version and upgrade any sites. For more information, see Creating DNS Domain Names and Computer Names.

# Run the pre-upgrade scan tool (Office SharePoint Server)

In this article:

 [Issues that are reported by the pre-upgrade scan tool](#DSDOC_section13479e99e_0734_4237_a412_9f)

 [Install and run the pre-upgrade scan tool](#DSDOC_section23479e99e_0734_4237_a412_9f)

You must use the pre-upgrade scan tool to scan your sites, and then fix any errors before you perform an upgrade. If you have not successfully run this tool and you attempt to upgrade your environment, when you attempt to run the SharePoint Products and Technologies Configuration wizard, the wizard will exit and prompt you to run the tool. We highly recommend that the server administrator run the pre-upgrade scan tool before the upgrade, and resolve any problems that can be resolved before scheduling the upgrade.

note_ddNote:

You might need to run the pre-upgrade scan tool more than once. For example, if you run the tool to evaluate your server farm but you are not going to be performing the upgrade for a few weeks, you will need to run the tool again just before you perform the upgrade to scan any new sites and to ensure that no additional issues have appeared in the meantime. Also, after you resolve any issues from your first scan, you will need to run the tool again; otherwise, when you try to run the SharePoint Products and Technologies Configuration wizard, you might see an error message that pre-scan has not been run.

## Issues that are reported by the pre-upgrade scan tool

For each SharePoint site, issues reported by this tool include the existence of the following objects:

 Customized site templates   You need to know which site templates have been customized for a particular site so you can verify the customizations again after the upgrade.

 Orphaned objects   Objects such as list items, lists, documents, Web sites, and site collections can be orphaned — that is, the objects exist but are not associated with a particular site. Because orphaned objects do not work in the previous version, they won’t work after the upgrade. If you perform an in-place upgrade, the orphaned items will still exist but will not work. If you perform a gradual upgrade, orphaned items will not be copied to the new site. We recommend that you clean up any orphaned objects before upgrading.

tip_ddTip:

Members of the Administrators group on the front-end Web servers can recover orphaned items before the upgrade by following the steps in Knowledge Base article 918744, [Description of a new command-line operation that you can use to repair content databases in Windows SharePoint Services](http://go.microsoft.com/fwlink/?linkid=69958&clcid=0x409) (http://go.microsoft.com/fwlink/?linkid=69958&clcid=0x409).

 Custom Web Parts   Report the existence of custom Web Parts to the appropriate site administrator or developer before upgrading, to give the administrator or developer time to investigate.

note_ddNote:

Heavily obfuscated custom Web Parts may need to be rebuilt and redeployed after the upgrade.

 Sites that are based on languages or that use controls that are not installed   If the database contains a Web site based on a language template pack that is not currently installed on the front-end Web servers, or a Web site that uses controls (such as the Microsoft Office Web Components) that are not currently installed on the front-end Web servers, install the missing language packs or controls before upgrading.

Use the information gathered from the pre-upgrade scan tool to determine:

 Whether to perform an in-place or a gradual upgrade.

[Determine upgrade approach [Office SharePoint Server]](#DSDOC_f11e6c4f_dc2a_4d17_a2c8_9455792b4b) provides information to help you decide which type of upgrade to perform. It is important to consider the report generated by the pre-upgrade scan tool when making this decision. Generally, if you find significant issues, use a gradual upgrade rather than an in-place upgrade so you can resolve the issues.

 Whether to upgrade some or all site collections that contain customized sites.

 Which sites need to have customizations reapplied or redone after upgrade and therefore might take longer than others in the review stage.

important_ddImportant:

When you run the pre-upgrade scan tool, the metadata on all lists and libraries in your sites is updated. This means that lists and libraries in the environment will show that they have been updated after the pre-upgrade scan tool is run. The dates for individual list items and documents are not changed by this process.

## Install and run the pre-upgrade scan tool

To install the prescan.exe tool, you must install Microsoft Office SharePoint Server 2007 to a test server. After you install, search for the two files prescan.exe and preupgradescanconfig.xml, and then copy the files to the computer that runs the existing version.

note_ddNote:

You must be a member of the Administrators group on the local computer to run this tool.

1. On the command line, change to the folder that contains the two files, and then run the following command to scan all servers in your server farm:

prescan.exe /c preupgradescanconfig.xml /all

You can use the pre-upgrade scan tool to scan all Web sites in your environment (by using the /all parameter) or to scan a specific URL (by using the /vURL parameter). If you do not supply a scoping parameter, all Web sites will be scanned.

note_ddNote:

Templates used by SharePoint Portal Server 2003 can be incorrectly identified during the pre-upgrade scan as custom templates unless you use the preupgradescanconfig.xml file when you perform the scan. This file contains additional logic to identify the portal site templates as standard templates used by SharePoint Portal Server 2003 rather than as custom templates based on Windows SharePoint Services 2.0.

If you have already installed the new version but have not yet run the SharePoint Products and Technologies Configuration wizard, you can run the pre-upgrade scan tool from the following folder: %PROGRAMFILES% \Common Files\Microsoft Shared\web server extensions\12\BIN.

Running the scan can take several minutes or a few hours, depending on the amount of content in your environment.

2. After the scan has completed, a summary report is displayed in the command-line window.

If there were any errors or if any upgrade issues were found for your sites, you can review the full report to see the details. The report is named PreupgradeReport\_uniqueID\_Log.txt (where uniqueID is a number string) and it is located in the temp directory on the computer of the user who ran the tool (for example, %SYSTEMDRIVE%:\Documents and Settings\User1\Local Settings\Temp). There is also a prescan.log file in the same directory; this prescan.log file notes the time or times when the pre-upgrade scan tool was run.

After you run the pre-upgrade scan tool, you can review the reports to find and troubleshoot issues (search for "error" in the report to find the issues). You can also share the relevant pre-upgrade scan test results with other members of the upgrade team. For example, you can report issues such as customized site templates or custom Web Parts to the appropriate site owner, Web designer, or developer before scheduling the upgrade to give them time to investigate the issues and take preliminary steps. For example, a designer or developer might decide that it would be prudent to rebuild a heavily obfuscated Web Part before the upgrade occurs. Site owners can then verify any customizations that have been done to their sites, including site templates and changes to core Active Server Pages Extension (ASPX) files, and can note any potential issues.

# Deploy upgrade definition files and new site definitions [Office SharePoint Server]

In this article:

 [Before you deploy upgrade definition files and site definitions](#DSDOC_section1c32cbc26_b1cd_4c3a_8285_62)

 [Deploy upgrade definition files and site definitions](#DSDOC_section2c32cbc26_b1cd_4c3a_8285_62)

You can create the upgrade definition files and custom site definitions on a separate development environment. Then, you can use the following process to deploy the upgrade definition files and custom site definitions to your server.

important_ddImportant:

This step must be performed after installation, but before running the SharePoint Products and Technologies Configuration Wizard.

## Before you deploy upgrade definition files and site definitions

Before you perform this procedure, you must create the upgrade definition files and custom site definitions. For more information, see [Develop new custom site definitions and create upgrade definition files (Office SharePoint Server)](#DSDOC_e9ce38b0_e047_4519_a12c_3ded2231e8) and the [Office SharePoint Server 2007: Software Development Kit](http://go.microsoft.com/fwlink/?LinkId=72208) (http://go.microsoft.com/fwlink/?LinkId=72208).

## Deploy upgrade definition files and site definitions

1. Save the upgrade definition files to the %WinDir%/Program Files/Common Files/Microsoft Shared/Web server extensions/12/CONFIG/UPGRADE folder.

2. Save the custom site definitions to the %WinDir%/Program Files/Common Files/Microsoft Shared/Web server extensions/12/TEMPLATE/LCID/NAME folder, where LCID is the locale identifier for the language that the template is in (for example, 1033 for United States English), and NAME matches the site definition name (for example, ACTION). Name the new folder by using all capital letters.

3. Save the Webtemp.xml files for your custom site definitions to the %WinDir%/Program Files/Common Files/Microsoft Shared/Web server extensions/12/TEMPLATE/LCID/XML folder. Name the files WEBTEMPNAME.XML, where NAME matches the site definition name (for example, WEBTEMPACTION.XML).

4. You might need to reset Internet Information Services (IIS) to recognize the new site definitions. To reset IIS, run the following command on the command line:

iisreset /noforce

5. If you have a server farm, repeat these steps for all servers in your farm.

# Upgrade custom Web Part packages

## Upgrade custom Web Part packages

Most custom Web Parts will continue working after upgrade. However, you should test your Web Parts in ASP.NET 2.0 to verify that they will work in the new environment. In particular, you must rebuild or redeploy custom Web Parts if you:

 Used the ASP.NET 1.1 obfuscation tools. If you used these tools, you must rebuild your Web Parts by using ASP.NET 2.0.

 Are moving to a new server farm by using the database migration path for upgrade. If you choose this upgrade path, you must redeploy your Web Parts to the new farm.

 Have stored your custom Web Parts in the \BIN folder and are not upgrading in-place. Gradual upgrade does not upgrade items to the new \BIN folder, so you must redeploy your Web Parts.

To upgrade your Web Parts, test them in ASP.NET 2.0, and then either rebuild or redeploy any Web Parts that meet the criteria above.

# C. Perform an in-place upgrade [Office SharePoint Server]

## C. Perform an in-place upgrade



# Chapter overview: Perform an in-place upgrade (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

The in-place upgrade approach is the simplest. After you perform the pre-upgrade steps, run Setup for the new version, install any necessary language packs, start the SharePoint Products and Technologies Configuration wizard, wait while the upgrade runs, and then verify the results.

In this chapter:

 [Install and configure Office SharePoint Server for an in-place upgrade](#DSDOC_bff35d1d_af83_45ae_a4d0_30f7cee863)

 [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164)

After you have completed these steps, you can go on to the Perform post-upgrade steps (Office SharePoint Server) chapter and perform the following steps:

 [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08)

 [Troubleshoot and resume upgrade (Office SharePoint Server)](#DSDOC_8c676788_f2bc_412b_b14e_6e13bee3e1)

 [Perform post-upgrade steps for an in-place upgrade (Office SharePoint Server)](#DSDOC_7d4d75f0_fe37_4ade_809e_d68c730a07)

# Install and configure Office SharePoint Server for an in-place upgrade

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

When you run an in-place upgrade, all content and configuration data is upgraded in-place, at one time. After you start the in-place upgrade process, your environment will remain offline until the upgrade completes. You cannot pause or roll back to the previous version with an in-place upgrade.

note_ddNote:

An in-place upgrade is best used for a standalone server. If you have a more complex server farm, you might want to perform a gradual upgrade instead. For more information about performing a gradual upgrade, see [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). For more information about choosing an upgrade approach, see [Determine upgrade approach [Office SharePoint Server]](#DSDOC_f11e6c4f_dc2a_4d17_a2c8_9455792b4b).

When upgrading a server farm, be sure to upgrade all of the servers in the server farm in the following order:

1. Run setup to install the new version on all servers in the server farm.

2. Run the SharePoint Products and Technologies Configuration Wizard on the front-end Web server that contains SharePoint Central Administration.

3. Run the SharePoint Products and Technologies Configuration Wizard on the Index job server.

4. Run the SharePoint Products and Technologies Configuration Wizard on all other front-end Web servers or search servers in the farm in any order.

Before you begin, be sure you have installed all pre-requisite software before installing Office SharePoint Server 2007. For more information, see [Install all pre-requisites (Office SharePoint Server)](#DSDOC_b6d6298f_61da_4d5c_ae0c_de79128a9b).

In this article:

 [Install Office SharePoint Server 2007](#DSDOC_section1bff35d1d_af83_45ae_a4d0_30)

 [Run the SharePoint Products and Technologies Configuration wizard](#DSDOC_section3bff35d1d_af83_45ae_a4d0_30)

 [Install and configure Office SharePoint Server 2007 using the command line](#DSDOC_section4bff35d1d_af83_45ae_a4d0_30)

 [Review the log files and resolve any issues](#DSDOC_section6bff35d1d_af83_45ae_a4d0_30)

Note   If your medium or large server farm contains one or more servers that are not front-end Web servers, and you have used the Default Web Site in Internet Information Services to host a SharePoint site, upgrade may fail with a message that the Default Web Site cannot be upgraded. To work around this issue, before running upgrade, on all non-front-end Web servers, rename the Default Web Site in IIS to something else, then run upgrade, and then restore the name to Default Web Site. You do not need to rename the Web site on any front-end Web servers in the server farm.

## Install Office SharePoint Server 2007

1. Run setup.exe.

2. On the Enter your Product Key page, type your product key, and then click Continue.

3. 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.

4. On the Upgrade earlier versions page, click Yes, perform an automated in-place upgrade.

5. On the Server Type tab, select your server type:

 Choose Complete if this is the first server that you are upgrading in a server farm.

 Choose Web Front End if you are running upgrade on an additional front-end Web server in a server farm.

 Choose Stand-alone if this is a standalone server (not part of a server farm), and you want to use SQL Express for your database.

6. Click Install Now.

7. The setup wizard runs and installs Office SharePoint Server 2007.

8. On the completion page, clear the Run the SharePoint Products and Technologies Configuration Wizard now check box, and then click Close.

Before you run the SharePoint Products and Technologies Configuration Wizard, you should perform the following steps:

 Run the pre-upgrade scan tool to be sure that you have identified and addressed any issues. For more information, see [Run the pre-upgrade scan tool (Office SharePoint Server)](#DSDOC_3479e99e_0734_4237_a412_9fc42bf8bd).

 Deploy any upgrade definition files. For more information, see [Deploy upgrade definition files and new site definitions [Office SharePoint Server]](#DSDOC_c32cbc26_b1cd_4c3a_8285_6223d458e8).

 Install any language template packs for Office SharePoint Server 2007. Alternatively, you can install them after you complete the upgrade process, and then use the command-line to upgrade any sites that depend on the language template packs. For more information, see [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164).

## Run the SharePoint Products and Technologies Configuration wizard

1. Click Start, point to All Programs, point to Administrative Tools, and then click SharePoint Products and Technologies Configuration Wizard.

2. In the SharePoint Products and Technologies Configuration Wizard, on the Welcome to SharePoint Products and Technologies page, click Next.

A message appears, notifying you that Internet Information Services (IIS), the SharePoint Administration Service, and the SharePoint Timer Service may need to be restarted or reset during configuration.

3. Click Yes to continue with the wizard.

A message appears, notifying you that you should download and install new language template packs for the new version.

4. Click OK to confirm the message and continue with the wizard. Do not install the language template packs until you have completed running the configuration wizard.

5. On the Configure SharePoint Central Administration Web Application page, if you want to use a specific port number for SharePoint Central Administration, select the Specify port number check box, and then type the port number to use.

6. In the Configure Security Settings section, select either Negotiate (Kerberos) or NTLM, depending on your environment, and then click Next.

note_ddNote:

To enable Kerberos authentication, you must perform additional configuration. For more information about authentication methods, see Plan authentication methods (Office SharePoint Server).

7. In the Completing the SharePoint Products and Technologies Configuration Wizard page, verify the settings, and then click Next.

The configuration wizard runs and configures the configuration database and Central Administration Web application for Office SharePoint Server 2007.

8. A message appears, notifying you that if you have a server farm with multiple servers, you must run setup on each server to install new binary files before running the configuration wizard and starting the upgrade process. Depending on your server farm configuration, and where you are in the process of installing and configuring Office SharePoint Server 2007, you have three choices:

 If this is the only server in your farm, no other actions are necessary. Click OK to continue with the wizard.

 If you have other servers in your farm, and you have not yet run setup and the configuration wizard on the other servers, leave this message open on this server, and then run setup on the other servers in the farm. When all of the other servers are at this same stage, you can return to the front-end Web server and click OK to continue with the SharePoint Products and Technologies Configuration Wizard.

 If you have already run setup on all servers in your server farm and they are all at this stage, on a front-end Web server, click OK to continue with the configuration wizard.

9. On the Configuration Successful page, review the settings that have been configured, and then click Finish.

The SharePoint Products and Technologies Configuration wizard closes and the Upgrade Running page opens. You may be prompted to enter your username and password before the Upgrade Running page will open. The upgrade process might take a while to complete. The Upgrade Running page refreshes every minute.

10. After the process has completed, click Continue.

The Central Administration home page opens.

## Install and configure Office SharePoint Server 2007 using the command line

If you prefer, you can use the command line to install and configure Office SharePoint Server 2007 instead. For more information, see Setup.exe command-line reference (Office SharePoint Server) and Command-line reference for the SharePoint Products and Technologies Configuration Wizard (Office SharePoint Server).

## Review the log files and resolve any issues

If upgrade fails or reports issues, you can refer to the log files for more information. The Upgrade.log file is located at %windir%\Program Files\Common Files\Microsoft Shared\web server extensions\12\LOGS.

For information about troubleshooting common issues, see [Troubleshoot and resume upgrade (Office SharePoint Server)](#DSDOC_8c676788_f2bc_412b_b14e_6e13bee3e1).

# Install available language template packs (Office SharePoint Server)

Before you can upgrade any sites based on a previous version's language template pack, you need to install the new version's language template pack.

In this article:

 [About installing language template packs and upgrading sites](#DSDOC_section15a2be738_df29_43cd_b361_84)

 [About changing languages](#DSDOC_section25a2be738_df29_43cd_b361_84)

 [Install language template packs](#DSDOC_section35a2be738_df29_43cd_b361_84)

For more information about language template packs, see [Deploy language packs (Office SharePoint Server)](#DSDOC_26c07867_0150_463d_b21a_a6d42aecf0) in the Deployment Guide.

## About installing language template packs and upgrading sites

If you want to install a language template pack for Microsoft Office SharePoint Server 2007, do so after running Setup and before running the SharePoint Products and Technologies Configuration wizard. This way, you can upgrade any sites based on a  language template pack along with your other sites during the upgrade process (either in-place or gradual).

You can also install a language template pack after you have run the SharePoint Products and Technologies Configuration wizard, and after you have upgraded the sites in your environment that are not based on a language template pack. If you choose this path, you must then use the command line to upgrade the sites based on the newly installed language template pack.

For more information about using the command line to upgrade sites based on a language template pack, see [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

## About changing languages

Generally, cross-language upgrade is not supported; you must upgrade from and to the same language. For example, if you are running U.S. English in the previous version, you need to upgrade to U.S. English in the new version. If you want to change languages, you must first perform the upgrade and then change the language for the site.

However, this process is complicated in some cases — such as when the previous version had a fully localized product for a particular language but the new version only has a language template pack, or when the new version has a language template pack for a new language that was not available in the previous version.

### Moving from a fully localized product to a language template pack

Use the following procedure to upgrade from a language that was supported with a fully localized product in the previous version, but that is only supported by a language template pack in the new version:

1. Choose a language to install for the new version (for example, English), and select the appropriate upgrade option (in-place or gradual) during Setup. This is the language that the SharePoint Central Administration Web site and Shared Services Provider (SSP) Web sites will use.

2. In the SharePoint Products and Technologies Configuration wizard, when you are prompted to install language template packs, stop the wizard and install the appropriate language's language template pack.

If you had additional Windows SharePoint Services language template packs installed, install the Windows SharePoint Services 3.0 language template packs now by canceling the wizard and running the appropriate Setup programs to install the language template packs. Then start the wizard again.

3. Run the Configuration wizard again to start the upgrade process.

### Changing languages to a new language template pack

Use the following process to upgrade from one language in the previous version to a different language in the new version (for example, if the language you want was not available in the previous version, but is now available as a language template pack in the new version):

1. Upgrade to the new version in the same language that you used for the previous version.

2. After upgrade is complete, install the new language template pack.

3. Create new sites based on the new language template pack.

4. Use the import/export operations to migrate your content to the new sites.

For more information, see [Migrate content or sites after upgrade (Office SharePoint Server)](#DSDOC_16a7e571_3531_4a4e_baa7_f348a9f9d1).

## Install language template packs

After you install the new version, you can install the language template packs you need.

note_ddNote:

Before you begin, be sure you have configured supplemental support for the languages you want to install in your server operating system. You can install language support files by opening the Regional and Language Options control panel, and then on the Language tab, in the Supplemental language support area, selecting the check boxes for the language types you need to support.

procedure_ddTo install a language template pack

|  |
| --- |
| 1. For the language template pack, run setup.exe.  2. Follow the instructions in Setup to install the language template pack.  3. On the completion page, clear the Run the SharePoint Products and Technologies Configuration Wizard now check box, and then click Close. |

After installing all of the language templates packs you need, you can continue configuring your installation. For more information, see [Install and configure Office SharePoint Server for an in-place upgrade](#DSDOC_bff35d1d_af83_45ae_a4d0_30f7cee863) or [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f).

# D. Perform a gradual upgrade [Office SharePoint Server]

## D. Perform a gradual upgrade



# Chapter overview: Perform a gradual upgrade (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

A gradual upgrade enables you to run both the previous and new versions, so that you can move sites gradually to the new environment, and have both versions of the sites available for transferring customizations or comparison.

In this chapter:

 [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f)

 [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164)

 [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed)

After you have completed these steps, you can go on to the Perform post-upgrade steps (Office SharePoint Server) chapter and perform the following steps:

 [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08)

 [Revert to a previous version site (Office SharePoint Server)](#DSDOC_76ae633f_671b_4300_bf73_903f6de364)

 [Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007](#DSDOC_da3e6cbb_a478_4c7a_ae5a_4560c62206)

 [Troubleshoot and resume upgrade (Office SharePoint Server)](#DSDOC_8c676788_f2bc_412b_b14e_6e13bee3e1)

 [Perform post-upgrade steps for a gradual upgrade (Office SharePoint Server)](#DSDOC_63f1755d_6d6d_4554_adce_c259fe346a)

 [Finalize upgrade (Office SharePoint Server)](#DSDOC_9c09631b_0553_4b03_b803_0a3d718921)

# Install and configure Office SharePoint Server for a gradual upgrade

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

A gradual upgrade installs the new version side-by-side with the previous version. After you install and configure Microsoft Office SharePoint Server 2007, you can then determine which site collections to upgrade and when to upgrade them. If you are running SharePoint Portal Server 2003 with shared services, see [Chapter overview: Perform a gradual upgrade in a shared services environment](#DSDOC_21dd7a46_8433_4115_8004_850a6c8a1a).

note_ddNote:

You must use an in-place upgrade (or database migration) for a standalone server. For more information about performing an in-place upgrade, see [Install and configure Office SharePoint Server for an in-place upgrade](#DSDOC_bff35d1d_af83_45ae_a4d0_30f7cee863). For more information about choosing an upgrade approach, see [Determine upgrade approach [Office SharePoint Server]](#DSDOC_f11e6c4f_dc2a_4d17_a2c8_9455792b4b).

When upgrading a server farm, be sure to upgrade all of the servers in the server farm in the following order:

1. Run setup to install the new version on all servers in the server farm.

2. Run the SharePoint Products and Technologies Configuration Wizard on the front-end Web server that contains SharePoint Central Administration.

3. Run the SharePoint Products and Technologies Configuration Wizard on the Index job server.

4. Run the SharePoint Products and Technologies Configuration Wizard on all other front-end Web servers or search servers in the farm in any order.

Before you begin, be sure you have installed all pre-requisite software before installing Office SharePoint Server 2007. For more information, see [Install all pre-requisites (Office SharePoint Server)](#DSDOC_b6d6298f_61da_4d5c_ae0c_de79128a9b).

In this article:

 [Install Office SharePoint Server 2007](#DSDOC_section12473bbec_87fd_4c01_bfdb_b1)

 [Install Office SharePoint Server 2007 on other servers in the farm](#DSDOC_section22473bbec_87fd_4c01_bfdb_b1)

 [Run the SharePoint Products and Technologies Configuration wizard](#DSDOC_section52473bbec_87fd_4c01_bfdb_b1)

 [Install and configure Office SharePoint Server 2007 using the command line](#DSDOC_section62473bbec_87fd_4c01_bfdb_b1)

 [Review the log files and resolve any issues](#DSDOC_section82473bbec_87fd_4c01_bfdb_b1)

Note   If your medium or large server farm contains one or more servers that are not front-end Web servers, and you have used the Default Web Site in Internet Information Services to host a SharePoint site, upgrade may fail with a message that the Default Web Site cannot be upgraded. To work around this issue, before running upgrade, on all non-front-end Web servers, rename the Default Web Site in IIS to something else, then run upgrade, and then restore the name to Default Web Site. You do not need to rename the Web site on any front-end Web servers in the server farm.

## Install Office SharePoint Server 2007

1. Run setup.exe.

2. On the Enter your Product Key page, type the product key, and then click Continue.

3. 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.

4. On the Upgrade earlier versions page, click Yes, perform a Gradual upgrade.

5. On the Server Type tab, select your server type:

 Choose Complete if this is the first server that you are upgrading in a server farm.

 Choose Web Front End if you are running upgrade on an additional front-end Web server in a server farm.

6. Click Install Now.

7. The setup wizard runs and installs Office SharePoint Server 2007.

8. On the completion page, clear the Run the SharePoint Products and Technologies Configuration Wizard now check box, and then click Close.

Before you run the SharePoint Products and Technologies Configuration Wizard, you should perform the following steps:

 Run the pre-upgrade scan tool to be sure that you have identified and addressed any issues. For more information, see [Run the pre-upgrade scan tool (Office SharePoint Server)](#DSDOC_3479e99e_0734_4237_a412_9fc42bf8bd).

 Deploy any upgrade definition files. For more information, see [Deploy upgrade definition files and new site definitions [Office SharePoint Server]](#DSDOC_c32cbc26_b1cd_4c3a_8285_6223d458e8).

 Install any language template packs for Office SharePoint Server 2007. Alternatively, you can install them after you complete the upgrade process, and then use the command-line to upgrade any sites that depend on the language template packs. For more information, see [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164).

## Install Office SharePoint Server 2007 on other servers in the farm

If you have a server farm, follow the instructions above to install Office SharePoint Server 2007 on each Index server and front-end Web server in your server farm. After you have run setup on all servers, you can run the SharePoint Products and Technologies Configuration wizard following the instructions below.

caution_ddCaution:

Do not add any servers to your server farm after this point in the process. Running the SharePoint Products and Technologies Configuration wizard upgrades the configuration database. This database contains the list of servers in the farm, and any servers added to the farm after the Configuration wizard has been run will not be included in the database, and therefore, will not appear in the v3 topology. If you need to add servers to your farm, do so either before starting upgrade or after you have completed the upgrade process, following the steps in [Add servers to an upgraded farm (Office SharePoint Server)](#DSDOC_b4279ff9_2842_475a_8d7f_cc90711c47).

## Run the SharePoint Products and Technologies Configuration wizard

1. Click Start, point to All Programs, point to Administrative Tools, and then click SharePoint Products and Technologies Configuration Wizard.

2. In the SharePoint Products and Technologies Configuration Wizard, on the Welcome to SharePoint Products and Technologies page, click Next . A message appears, notifying you that Internet Information Services (IIS), the SharePoint Administration Service, and the SharePoint Timer Service may need to be restarted or reset during configuration.

3. Click Yes to continue with the wizard.

4. On the Connect to a server farm page, select No, I want to create a new server farm, and then click Next.

5. On the Specify Configuration Database Settings page, in the Database server box, type the name of the server running Microsoft SQL Server 2000 or Microsoft SQL Server 2005.

6. In the Database name box, leave the default (SharePoint\_config) or type a database name to use instead.

7. In the Specify Database Access Account section, type the user name and password to use to connect to SQL Server, and then click Next .

note_ddNote:

This account must have rights to create databases. If SQL Server is running on a separate server from your Web Front end server, then this account must also be a domain account. This user account must be a member of the following SQL Server security roles: Database Creator and Security Administrator.

8. On the Configure SharePoint Central Administration Web Application page, if you want to use a specific port number for SharePoint Central Administration, select the Specify port number check box, and then type the port number to use.

9. In the Configure Security Settings section, select either Negotiate (Kerberos) or NTLM, depending on your environment, and then click Next.

note_ddNote:

To enable Kerberos authentication, you must perform additional configuration. For more information about authentication methods, see Plan authentication methods (Office SharePoint Server).

10. In the Completing the SharePoint Products and Technologies Configuration Wizard page, verify the settings, and then click Next.

The configuration wizard runs and configures the configuration database and Central Administration Web application for Office SharePoint Server 2007.

11. A message appears, notifying you that if you have a server farm with multiple servers, you must run setup on each server to install new binary files before running the configuration wizard and starting the upgrade process. Depending on your server farm configuration, and where you are in the process of installing and configuring Office SharePoint Server 2007, you have three choices:

 If this is the only server in your farm, no other actions are necessary. Click OK to continue with the wizard.

 If you have other servers in your farm, and you have not yet run setup and the configuration wizard on the other servers, leave this message open on this server, and then run setup on the other servers in the farm. When all of the other servers are at this same stage, you can return to the front-end Web server and click OK to continue with the SharePoint Products and Technologies Configuration Wizard.

 If you have already run setup on all servers in your server farm and they are all at this stage, on a front-end Web server, click OK to continue with the configuration wizard.

12. On the Configuration Successful page, review the settings that have been configured, and then click Finish.

The SharePoint Products and Technologies Configuration wizard closes and Central Administration opens. You may be prompted to enter your user name and password before the Central Administration site will open. If you have not already done so, you can install any language template packs you need for the new version. For more information, see [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164). After installing the language packs (if any), you are ready to start upgrading specific Web applications and site collections. Continue with the process by following the steps in the [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed) topic.

## Install and configure Office SharePoint Server 2007 using the command line

If you prefer, you can use the command line to install and configure Office SharePoint Server 2007 instead. For more information, see Setup.exe command-line reference (Office SharePoint Server) and Command-line reference for the SharePoint Products and Technologies Configuration Wizard (Office SharePoint Server).

## Review the log files and resolve any issues

If upgrade fails or reports issues, you can refer to the log files for more information. The Upgrade.log file is located at %windir%\Program Files\Common Files\Microsoft Shared\web server extensions\12\LOGS.

For information about troubleshooting common issues, see [Troubleshoot and resume upgrade (Office SharePoint Server)](#DSDOC_8c676788_f2bc_412b_b14e_6e13bee3e1).

# Upgrade sites (Office SharePoint Server)

In this article:

 [Upgrade sites by using Central Administration pages](#DSDOC_section194c49b6d_527e_4387_9557_8c)

 [Upgrade sites by using the command line](#DSDOC_section294c49b6d_527e_4387_9557_8c)

 [Upgrade sites after installing a language template pack](#DSDOC_section394c49b6d_527e_4387_9557_8c)

When you perform a gradual upgrade, you can determine which sites to upgrade and when. Before you can upgrade any sites to Microsoft Office SharePoint Server 2007, you must run Setup and the SharePoint Products and Technologies Configuration wizard on all servers in your server farm. After you have completed that step and installed any language template packs you need, you can begin to upgrade sites. For more information about upgrading your servers, see one of the following topics:

 [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f)

 [Chapter overview: Perform a gradual upgrade in a shared services environment](#DSDOC_21dd7a46_8433_4115_8004_850a6c8a1a)

When you are ready to upgrade your sites, you can use either the upgrade pages in the SharePoint® Central Administration Web site or the upgrade operation on the command line. Use the command line if you want to run upgrade for large batches of sites at different times, or if you have installed a language template pack after upgrading other sites in your environment.

## Upgrade sites by using Central Administration pages

There are two phases in the process for upgrading sites from the Central Administration pages. First, you create a new Web application to host the upgraded versions of the sites. Then, you upgrade one or more site collections.

important_ddImportant:

You must upgrade the root site collection before you can upgrade any other site collections in the Web application.

### Create a new Web application to host upgraded sites

1. In Central Administration, on the Operations tab, under Upgrade and Migration, click Site content upgrade status.

2. On the Site Content Upgrade Status page, next to the URL you want to upgrade, click Begin upgrade.

3. On the Set Target Web Application page, in the Web Application to Upgrade section, verify that the Web application you want to upgrade appears.

4. In the New URL for Original Content section, in the Port box, type a port number, and then in the Host Header box, type the host header to use (if needed).

5. In the Application Pool for New Web Application section, select Create new application pool, then in the Application pool name box, type a name, and then select either Predefined or Configurable.

 If you selected Predefined, select the account to use.

 If you selected Configurable, type the account name to use, and then type the password for that account.

note_ddNote:

You cannot use the same application pool that you used for the previous version. You can use the same user account, but you must create a new application pool, or use an application pool that you already created for your upgraded sites.

6. In the Reset Internet Information Services section, select either Restart IIS Automatically or Restart IIS Manually.

If you choose Restart IIS Manually, you will need to restart IIS after the Web application is created in the final step in this procedure.

7. In the Security Configuration section, under Authentication Provider, select either Negotiate (Kerberos) or NTLM depending on your environment.

8. In the Content Databases section, select either Automatic database name selection or Manually set database names.

If you choose to manually set the database names, then on the Database Names page, you must supply names for the temporary content databases and the new version content databases.

9. In the SSP Database Settings section, in the SSP Database Name box, type the name for the Shared Services Provider database.

10. In the Search Database Name box, type the name for the Search database.

11. In the Index Server section, in the Index Server box, select the Index Server to use.

12. Click OK.

 If you chose to manually set the database names, the Database Names page opens. Type the names to use for the temporary content databases and the new version content databases for this Web application, and then click Save.

An Operation in Progress page appears while the new Web application is created.

note_ddNote:

If you chose to restart IIS manually, you must now run iisreset /noforce on each front-end Web server in your server farm.

### Upgrade site collections

1. On the Site Collection Upgrade page, select the check boxes next to the sites you want to upgrade, and then click Upgrade Sites.

important_ddImportant:

You must upgrade the root site collection before you can upgrade any other site collections in the Web application. If you are upgrading multiple site collections at one time, the root site collection must be included in the first set of sites that you upgrade.

1. On the Sites Selected for Upgrade page, verify the number of site collections, the storage used, the originating database, and the target database, and then click Continue.

The Upgrade Running page opens, and upgrade runs for the selected site collections. This may take a few minutes or a few hours, depending on how many site collections you have selected and how large the site collections are. The Status page refreshes automatically every minute to provide you with an updated status. If the upgrade fails or reports issues, you can refer to the log files for more information. The Upgrade.log file and the trace log file are located at %windir%\Program Files\Common Files\Microsoft Shared\web server extensions\12\LOGS. The trace log is named in the following format: Machine\_name-YYYYMMDD-HHMM.log, where YYMMDD is the date and HHMM is the time (for example, Server1-20061105-1241.log).

2. After the upgrade process has completed, click Home to return to the Central Administration home page.

## Upgrade sites by using the command line

To upgrade sites by using the command line, you must follow the same two-step process: create a target Web application, and then upgrade the sites.

To create the target Web applications, use the following command, including any options that apply to your environment (skip this step if you have already performed the steps under "Create a new Web application to host upgraded sites" above):

Stsadm.exe. -o upgradetargetwebapplication -url <URL to upgrade> -relocationurl <new URL for non-upgraded content> -apidname <new application pool name> [-apidtype <configurableid/NetworkService>] [-apidlogin <DOMAIN\name>] [-apidpwd <application pool password>] [-exclusivelyusentlm]

Then, after you have created the Web application, you can upgrade individual site collections by using the following command, including any options that apply to your environment:

stsadm.exe -o upgrade [-inplace | -sidebyside] [-url <url>] [-forceupgrade] [-quiet] [-farmuser <farm user> -farmpassword <farm password>] [-sitelistpath <sites xml file>]

For example, to upgrade sites at a particular URL in a side-by-side (gradual) upgrade process, you would use the following command:

stsadm.exe -o upgrade -sidebyside -url <url> -sitelistpath <path to XML file>

note_ddNote:

When you use the command line to perform a gradual upgrade, you cannot upgrade sites from different content databases. If your Web application contains a large number of sites spread across multiple content databases, break the list into smaller groups of sites contained within the same content database.

To get a list of sites that need to be upgraded, you can use the enumsites operation to list all redirected sites on a Web application. Use the following syntax to generate the list:

stsadm -o enumsites -url http://server\_name -redirectedsites

You can use the list of sites generated by this operation to generate your sitelist XML file for the upgrade operation.

The following table describes the parameters used for the upgrade operation:

|  |  |  |
| --- | --- | --- |
| Parameter | Optional/Required | Description |
| Inplace or Sidebyside | Required, you must specify one of these options | Inplace specifies an in-place upgrade, where the version 2.0 sites are upgraded immediately, and the version 2.0 environment is not available after the upgrade process is complete.  Sidebyside specifies a gradual upgrade, where the version 2.0 sites are preserved in the version 2.0 environment. |
| URL | Optional | The version 2.0 URL to the site collection. |
| ForceUpgrade | Optional | Specifies whether or not to force the upgrade. |
| Quiet | Optional | Specifies that the upgrade process is run in quiet mode. |
| FarmUser | Optional | Specifies the user account to use in performing the upgrade. |
| FarmPassword | Optional (but required if using FarmUser) | Specifies the password for the FarmUser account. |
| Reghost | Optional | Specifies whether to reghost pages (reset pages to site definition) during upgrade. |
| SiteListPath | Optional | Allows you to specify an XML file with a list of specific site collections to upgrade. The format of the XML file is:  <RedirectedSites Count="2”>  <Site Url="http://server\_name" TargetDatabase="DB1" />     <Site Url="http://server\_name/sites/site1"  TargetDatabase="DB1" /> </RedirectedSites>  The “Count” and “TargetDatabase” attributes are optional. Specify just the set of sites you want to upgrade from a single content database.  Alternatively, use the command “stsadm –o enumsites –url <V3url> -redirectedsites” to produce this same XML for site collections that require upgrade. |

## Upgrade sites after installing a language template pack

If you performed an in-place upgrade and then installed a language template pack, you must now upgrade any sites that depend on the language in that language template pack. To perform the upgrade, perform the upgrade operation on the command line by using any options that apply to your environment.

# E. Perform a gradual upgrade with shared services

## E. Perform a gradual upgrade with shared services



# Chapter overview: Perform a gradual upgrade in a shared services environment

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

If you are upgrading in a shared services environment, you can choose between two options. You can either:

 Upgrade the parent portal site first (recommended approach).

 Upgrade the child portal sites first, using a new shared services provider (more complicated, but necessary if you want to upgrade in stages).

This chapter provides steps to perform either of these options, plus steps that must be taken after you upgrade the site content.

In this chapter:

 [Perform a gradual upgrade with shared services (upgrading the parent portal first)](#DSDOC_13c54c47_f931_4cd2_ad7f_1bdea4d628)

 [Perform a gradual upgrade with shared services (upgrading a child portal first)](#DSDOC_4361b71b_7a69_4ea5_b064_f266705e4f)

After you have completed these steps, you can go on to the Perform post-upgrade steps (Office SharePoint Server) chapter and perform the following steps:

 [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08)

 [Revert to a previous version site (Office SharePoint Server)](#DSDOC_76ae633f_671b_4300_bf73_903f6de364)

 [Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007](#DSDOC_da3e6cbb_a478_4c7a_ae5a_4560c62206)

 [Troubleshoot and resume upgrade (Office SharePoint Server)](#DSDOC_8c676788_f2bc_412b_b14e_6e13bee3e1)

 [Perform post-upgrade steps for a gradual upgrade (Office SharePoint Server)](#DSDOC_63f1755d_6d6d_4554_adce_c259fe346a)

 [Finalize upgrade (Office SharePoint Server)](#DSDOC_9c09631b_0553_4b03_b803_0a3d718921)

# Perform a gradual upgrade with shared services (upgrading the parent portal first)

When you perform a gradual upgrade on a  environment that contains shared services, you must perform the upgrade actions in a specific order. This article walks you through the process for upgrading the parent portal first, and then the additional sites and other portals in the environment. If you want to upgrade a child portal first, follow the steps in [Perform a gradual upgrade with shared services (upgrading a child portal first)](#DSDOC_4361b71b_7a69_4ea5_b064_f266705e4f).

Before you begin, be sure that you have completed the steps in Perform pre-upgrade steps.

In this article:

1. [Upgrade the parent portal](#DSDOC_section113c54c47_f931_4cd2_ad7f_1b)

2. [Upgrade the personal site host](#DSDOC_section213c54c47_f931_4cd2_ad7f_1b)

3. [Upgrade MySites (repeat at necessary)](#DSDOC_section313c54c47_f931_4cd2_ad7f_1b)

4. [Upgrade team sites (repeat as necessary)](#DSDOC_section413c54c47_f931_4cd2_ad7f_1b)

5. [Upgrade child portals (repeat at necessary)](#DSDOC_section513c54c47_f931_4cd2_ad7f_1b)

You can upgrade the MySites, team sites, and child portals in any order, but it is best to upgrade all MySites at one time, for a consistent user experience. After you have completed these steps, you can [Perform post-upgrade steps for a gradual upgrade (Office SharePoint Server)](#DSDOC_63f1755d_6d6d_4554_adce_c259fe346a).

## Upgrade the parent portal

important_ddImportant:

When you perform a gradual upgrade in an environment that includes shared services, the upgrade process creates a SQL Server backup file for the Profile (PROF) and Component settings (SERV) databases. This backup is stored in the default data directory for SQL Server, often: %PROGRAMFILES%\mssql\data. Before installing Microsoft Office SharePoint Server 2007 and starting the upgrade process, make sure that there is enough room at this default backup location to store a backup of your PROF and SERV databases, or, in SQL Server properties, change the default data directory to a location that has enough disk space.

1. [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). Be sure to run setup on all servers in the server farm.

2. [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164), if needed.

3. Review the log files to check for any issues.

4. Prepare the Web applications, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

5. Copy any Web Parts from the bin to the Office SharePoint Server 2007 Web application. Copy all Web Parts marked as safe controls in web.config. Install upgraded Web Parts from installation package.

6. Prepare to upgrade the site collections:

a. Run pre-upgrade scan tool again, review the reports, and troubleshoot issues.

b. Refresh the site list to see the current set of sites.

c. You can use the command line tool instead of Central Administration if you want to schedule the upgrade process or to upgrade large numbers (more than 100 or so) of site collections.

7. Upgrade the site collections, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed). You must upgrade the root Web site for the Web application first. Note that all areas and shared services are upgraded when you upgrade the portal.

8. [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

9. Review shared services settings. You must:

a. Recreate any search scopes.

b. Review upgraded content source definitions, crawl rules, and so on.

c. Configure profiles and audiences to be synchronized between  and Office SharePoint Server 2007.

d. Review the Managed Properties of user profiles in Office SharePoint Server 2007.

e. Run a full crawl on the new portal site.

## Upgrade the personal site host

For most environments, the personal site host is the same as the parent portal. You only need to perform these steps if you had configured the personal site host to be on its own farm in SharePoint Central Administration for .

1. [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). Be sure to run setup on all servers in the server farm.

2. [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164), if needed.

3. Review the log files to check for any issues.

## Upgrade MySites (repeat as necessary)

1. Prepare the Web applications, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

2. Upgrade the site collections, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed). You must upgrade the root Web site for the Web application first.

3. [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

## Upgrade team sites (repeat as necessary)

Perform steps 1 through 3 only if the team sites are hosted on their own server farm.

1. [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). Be sure to run setup on all servers in the server farm.

2. [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164), if needed.

3. Review the log files to check for any issues.

4. Prepare the Web applications, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

5. Upgrade the site collections, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed). You must upgrade the root Web site for the Web application first.

6. [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

## Upgrade child portals (repeat as necessary)

1. [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). Be sure to run setup on all servers in the server farm.

2. [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164), if needed.

3. Review the log files to check for any issues.

4. Prepare the Web applications, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

5. Upgrade the site collections, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed). You must upgrade the root Web site for the Web application first. Note that all areas and shared services are upgraded when you upgrade the portal.

6. [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

7. Upgrade any MySites for the child portal ([Upgrade MySites (repeat as necessary)](#DSDOC_section313c54c47_f931_4cd2_ad7f_1b)).

8. Upgrade any team sites for the child portal ([Upgrade team sites (repeat as necessary)](#DSDOC_section413c54c47_f931_4cd2_ad7f_1b)).

9. Modify the start addresses in the parent portal to prevent double-crawling of the content.

# Perform a gradual upgrade with shared services (upgrading a child portal first)

When you perform a gradual upgrade on a environment that contains shared services, you must perform the upgrade actions in a specific order. This article walks you through the process for upgrading a child portal before the parent portal. If you want to upgrade the parent portal first, follow the steps in [Perform a gradual upgrade with shared services (upgrading the parent portal first)](#DSDOC_13c54c47_f931_4cd2_ad7f_1bdea4d628).

Before you begin, be sure that you have completed the steps in Perform pre-upgrade steps.

In this article:

1. [Create a new Microsoft Office SharePoint Server 2007 environment](#DSDOC_section14361b71b_7a69_4ea5_b064_f2).

2. [Upgrade the personal site host and personal sites in Microsoft Office SharePoint Portal Server 2003 (repeat as necessary)](#DSDOC_section24361b71b_7a69_4ea5_b064_f2) and attach them to the new Shared Services Provider.

3. [Upgrade team site host and team sites (repeat as necessary)](#DSDOC_section34361b71b_7a69_4ea5_b064_f2) and attach them to the new Shared Services Provider.

4. [Upgrade child portals (repeat as necessary)](#DSDOC_section44361b71b_7a69_4ea5_b064_f2) and attach them to the new Shared Services Provider.

You can upgrade the MySites, team sites, and child portals in any order, but it is best to upgrade all MySites at one time, for a consistent user experience. After you have completed these steps, you can [Perform post-upgrade steps for a gradual upgrade (Office SharePoint Server)](#DSDOC_63f1755d_6d6d_4554_adce_c259fe346a).

## Create a new Microsoft Office SharePoint Server 2007 environment

Deploy Microsoft Office SharePoint Server 2007 to a new server farm and create and configure a shared services provider (SSP) to host services for your upgraded sites. For more information about deploying Office SharePoint Server 2007, see [Simple farm deployment (Office SharePoint Server)](#DSDOC_356d3a0b_fc26_455c_9afb_6d2ffdceef).

## Upgrade the personal site host and personal sites in Microsoft Office SharePoint Portal Server 2003 (repeat as necessary)

For most environments, the personal site host is the same as the parent portal. You only need to perform steps 1 through 3 if you had configured the personal site host to be on its own farm in SharePoint Central Administration for .

1. [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). Be sure to run setup on all servers in the server farm.

2. [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164), if needed.

3. Review the log files to check for any issues.

4. Prepare the Web applications, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

5. Upgrade the site collections, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed). Be sure to upgrade the root Web site for the Web application first.

6. [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

## Upgrade team site host and team sites (repeat as necessary)

Perform steps 1 through 3 only if the team sites are hosted on their own server farm.

1. [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). Be sure to run setup on all servers in the server farm.

2. [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164), if needed.

3. Review the log files to check for any issues.

4. Prepare the Web applications, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

5. Upgrade the site collections, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed). You must upgrade the root Web site for the Web application first.

6. [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

## Upgrade child portals (repeat as necessary)

important_ddImportant:

When you perform a gradual upgrade in an environment that includes shared services, the upgrade process creates a SQL Server backup file for the Profile (PROF) and Component settings (SERV) databases. This backup is stored in the default data directory for SQL Server, often: %PROGRAMFILES%\mssql\data. Before installing Office SharePoint Server and starting the upgrade process, make sure that there is enough room at this default backup location to store a backup of your PROF and SERV databases, or, in SQL Server properties, change the default data directory to a location that has enough disk space.

1. [Install and configure Office SharePoint Server for a gradual upgrade](#DSDOC_2473bbec_87fd_4c01_bfdb_b1a38de63f). Be sure to run setup on all servers in the server farm.

2. [Install available language template packs (Office SharePoint Server)](#DSDOC_5a2be738_df29_43cd_b361_84b7822164), if needed.

3. Review the log files to check for any issues.

4. Prepare the Web applications, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

5. Upgrade the site collections, following the steps in [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed). You must upgrade the root Web site for the Web application first. Note that all areas and shared services are upgraded when you upgrade the portal.

6. [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

7. Upgrade any MySites for the child portal ([Upgrade personal sites in Microsoft Office SharePoint Portal Server 2003 (repeat as necessary)](#DSDOC_section24361b71b_7a69_4ea5_b064_f2)).

8. Upgrade any team sites for the child portal ([Upgrade team sites (repeat as necessary)](#DSDOC_section34361b71b_7a69_4ea5_b064_f2)).

9. Modify the start addresses in  parent portal to prevent double-crawling of the content.

# F. Deploy new server farm and migrate content [Office SharePoint Server]

## F. Deploy new server farm and migrate content



# Chapter overview: Deploy a new farm, then migrate databases (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

If you are moving to new hardware, or redesigning and restructuring your deployment, you can choose to migrate your databases from the old version to the new version rather than directly upgrading them. When you perform a database migration, you perform an in-place upgrade on the databases, but you do not upgrade your server farm configuration data. Although this upgrade path has more manual steps than either an in-place or a gradual upgrade, it can be the best option if you have highly customized sites or custom Web services or applications.

important_ddImportant:

Before you begin the process, be sure you have performed the planning and pre-upgrade steps. For more information, see [Chapter overview: Plan and prepare for upgrade [Office SharePoint Server]](#DSDOC_53b8a28b_43c4_43aa_8854_d72d9b7b59) and [Chapter overview: Perform pre-upgrade steps [Office SharePoint Server]](#DSDOC_7db0484f_a19e_4398_a40a_21d79d3ab0).

Perform a database migration by using the following steps:

1. Create the environment for the new version. See [Prepare the new Microsoft Office SharePoint Server 2007 environment](#DSDOC_99684f0b_f617_4c10_8420_d4d0adea36).

2. Back up or copy the databases, and then migrate the data. See [Migrate databases](#DSDOC_d0a50e40_5322_4f7a_a3a4_c4660c8796).

After you have completed these steps, you can go on to the Perform post-upgrade steps (Office SharePoint Server) chapter and perform the following steps:

1. Review the sites to be sure they upgraded properly. See [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08).

2. [Troubleshoot and resume upgrade (Office SharePoint Server)](#DSDOC_8c676788_f2bc_412b_b14e_6e13bee3e1)

3. Perform post-upgrade steps. See [Perform post-upgrade steps for an in-place upgrade (Office SharePoint Server)](#DSDOC_7d4d75f0_fe37_4ade_809e_d68c730a07). Because database migration is essentially an in-place upgrade for your content, you can use the same post-upgrade steps.

# Prepare the new Microsoft Office SharePoint Server 2007 environment

Before you can migrate your content into a new environment, you must create that new environment. Follow the steps in Deployment for Office SharePoint Server 2007 to deploy and configure your new server farm.

Part of creating the new environment is recreating the Web applications, re-applying configuration settings, and copying other customizations over from the old environment. After you deploy Microsoft Office SharePoint Server 2007, you must:

1. Create a Web application for each virtual server that was in the old environment. For more information, see Deployment for Office SharePoint Server 2007.

2. Manually re-apply farm configuration settings, including:

 Outgoing e-mail server

 Any server farm–level security and permission settings

 Included paths (such as /sites or /mysites)

 Alternate access settings

 Quota templates

 Shared services settings, including Search settings

note_ddNote:

Because Search settings from SharePoint® Portal Server 2003 were stored both in the registry on the server and in a database, you must recreate your search database and reconfigure your search settings when you perform a database migration.

For more information about configuring these settings, see Deployment for Office SharePoint Server 2007.

3. Manually copy all customizations into your new farm. Be sure to install any of the following components that your sites may depend on to work properly, including:

 Language packs

 Custom site definitions

 Custom style sheets (cascading style sheets files)

 Custom Web Parts

 Custom Web services

 Any other components or files on which your sites may depend

After you finish preparing the new environment, you can migrate the databases. Follow the steps in [Migrate databases](#DSDOC_d0a50e40_5322_4f7a_a3a4_c4660c8796) to migrate your databases from your SharePoint Portal Server 2003 server farm to your Office SharePoint Server 2007 server farm.

# Migrate databases

When you upgrade by way of a database migration, you essentially perform a backup and restore of your databases (that is, you back them up in the old farm, and then restore them in the new farm). When you restore a database and add it to the farm, the upgrade process runs and upgrades the entire database. The database migration process is similar to the in-place upgrade process; the difference is that the database migration process is performed manually and gradually.

Before you begin, you must create your new server farm environment. For information about creating the new environment, see [Prepare the new Microsoft Office SharePoint Server 2007 environment](#DSDOC_99684f0b_f617_4c10_8420_d4d0adea36).

After you have set up the new environment, you can follow the steps below to detach and then reconnect the databases to perform the upgrade.

In this article:

 [Set the previous version databases to be read-only](#DSDOC_section1d0a50e40_5322_4f7a_a3a4_c4)

 [Back up the previous version databases using SQL Server](#DSDOC_section2d0a50e40_5322_4f7a_a3a4_c4)

 [Restore the backup copy to the new farm](#DSDOC_section3d0a50e40_5322_4f7a_a3a4_c4)

 [Add the databases to the Web applications](#DSDOC_section4d0a50e40_5322_4f7a_a3a4_c4)

 [Review the upgrade log files for any issues](#DSDOC_section5d0a50e40_5322_4f7a_a3a4_c4)

 [Repeat the restore and add database procedures for remaining databases](#DSDOC_section6d0a50e40_5322_4f7a_a3a4_c4)

## Set the previous version databases to be read-only

You want to be sure you capture all of the data in your backup, so that you are restoring and upgrading the current state of your environment. So, you need to set the previous version databases to read-only, so that users cannot add or change information in the sites. With the databases set to read-only, users should be able to continue to view content, but they will not be able to add or change content.

note_ddNote:

Before you set the databases to read-only, be sure that you have run the pre-upgrade scan tool on the site content stored in the databases. For more information, see [Run the pre-upgrade scan tool (Office SharePoint Server)](#DSDOC_3479e99e_0734_4237_a412_9fc42bf8bd).

#### Set a database to read-only in SQL Server 2000

1. In Microsoft® SQL Server™ Enterprise Manager, right-click the name of the database that you want to set to read-only, and then click Properties.

2. In the Properties dialog box, click the Options tab.

3. Under Access, select the Read-only check box, and then click OK.

#### Set a database to read-only in SQL Server 2005

1. In Microsoft SQL Server Management Studio, right-click the name of the database that you want to set to read-only, and then click Properties.

2. In the left pane, click Options.

3. In the right pane, under Other options, under State, next to Database Read-Only, click the down arrow, and then select True.

## Back up the previous version databases using SQL Server

Follow the appropriate steps to back up your databases in either SQL Server 2000 or SQL Server 2005. Repeat these steps for each of the following database types in your server farm: site, content, user profile, and single sign-on databases. You do not need to back up the configuration or component settings (search) databases, because you will recreate these databases in the new server farm. For more information about the types of databases you may have in your SharePoint® Portal Server 2003 server farm, see [Run and test a full backup in SQL Server [Office SharePoint Server]](#DSDOC_380db6c1_df37_4a44_8c65_9b13555152).

#### Back up a database in SQL Server 2000

1. On your database server, click Start, point to All Programs, point to Microsoft SQL Server, and then click Enterprise Manager.

2. In SQL Server Enterprise Manager, click the plus sign next to Microsoft SQL Servers.

3. Click the plus sign next to SQL Server Group.

4. Click the plus sign next to (local) (Windows NT).

5. Click the plus sign next to Databases.

6. Right-click the database you want to back up, point to All Tasks, and then click Backup Database.

7. In the SQL Server Backup dialog box, in the Name box, specify a name for the backup, and then in the Backup area, select Database - complete.

8. In the Destination area, either select an existing destination, or:

a. Click Add.

b. In the Select Backup Destination box, select File Name, and then next to the File Name box, click the Browse button.

c. In the Backup Device Location - (local) dialog box, in the File name box, type a file name, and then click OK.

d. Click OK again to close the Select Backup Destination dialog box.

9. Click OK to start the backup process.

10. Click OK to acknowledge that the backup process has completed.

Repeat these steps to back up the databases that are used by SharePoint Portal Server 2003 in your environment, except for the configuration and component settings (search) databases.

#### Back up a database in SQL Server 2005

1. On your database server, click Start, point to All Programs, point to Microsoft SQL Server 2005, and then click SQL Server Management Studio.

2. In the Connect to Server box, fill in the connection information, and then click Connect.

3. After connecting to the appropriate instance of the SQL Server 2005 Database Engine, in Object Explorer, click the server name to expand the server tree.

4. Expand Databases, right-click the database you want to back up, point to Tasks, and then click Back Up. The Back Up Database dialog box appears.

5. In the Source section, in the Database box, verify the database name.

6. In the Backup type box, select Full.

7. Under Backup component, click Database.

8. In the Name text box, either accept the default backup set name that is suggested or type a different name for the backup set.

9. In the Destination section, choose the type of backup destination by clicking Disk or Tape, and then select a destination. To create a different destination, click Add.

10. Click OK to start the backup process.

Repeat these steps to back up the databases that are used by SharePoint Portal Server 2003 in your environment, except for the configuration and component settings (search) databases.

## Restore the backup copy to the new farm

After you have configured the new environment, you can restore the backup copies of the databases. Start with one database, and then verify that the restoration has worked before you restore the other databases.

#### Restore a backup copy of a database in SQL Server 2005

1. After connecting to the appropriate instance of the SQL Server 2005 Database Engine, in Object Explorer, click the server name to expand the server tree.

2. Expand Databases, right-click the database you want to restore, point to Tasks, point to Restore, and then click Database. The Restore Database dialog box appears.

3. On the General page, the name of the restoring database appears in the To database list box.

4. In the To a point in time text box (if using SQL Server 2005 Enterprise Edition), retain the default (Most recent possible).

5. To specify the source and location of the backup sets to restore, click From database, and then specify the database name in the list box.

6. In the Select the backup sets to restore grid, select the most recent full backup to restore.

7. Click OK to start the restore process.

## Add the databases to the Web applications

When you add the content databases, be sure that the root site for the Web application is included in the first content database you add. After you have added the database that contains the root site, you can add the other content databases for the Web application in any order. Be sure that you do not add any new site collections until you have restored all of the content databases.

note_ddNote:

If you are using MySites, be sure to upgrade the site content database first. Then, when restoring the Shared Services Provider (SSP), select the check box to configure the My Site Web application, choose the Web application for the portal, and then type /MySite as the relative path.

You must use the command-line tool to add a content database to a Web application.

note_ddNote:

You cannot add the same content database more than once to a farm, even on different Web applications. Each site collection in a content database (including each portal site) has a globally unique identifier (GUID) associated with it, registered in the configuration database. Therefore, it is not possible to add the same site collection (or portal) twice to the farm, even in separate Web applications. Although you can successfully attach the database in this situation, the site collection cannot be started. If you need a duplicate copy of a site collection (or portal) in the same farm, first attach the database that contains the site collection to a separate farm, and then use the Stsadm.exe backup and restore operations to copy the site collection over to the other farm. The backup and restore process creates a new GUID for the site collection.

#### Add a content database to a Web application by using the command-line tool

 On the command line, run the following command:

stsadm -o addcontentdb -url URL [-databaseserver servername] –databasename databasename [-DatabaseUser username -DatabasePassword password] [-SiteWarning number] [-SiteMaximum number] [-SearchServer servername]

The following table explains the parameters for the operation.

|  |  |  |
| --- | --- | --- |
| Name | Required/Optional | Description |
| URL | Required | The URL for the Web application to which this database is being added. |
| DatabaseServer | Optional | The database server where the new database will be stored. The short version of this parameter is DS. If omitted, this parameter defaults to the name of the server from which you are running the command. |
| DatabaseName | Required | The name of the database you are creating. The short version of this parameter is DN. |
| DatabaseUser | Optional | The user account for SQL Server database creation. If you use this parameter, you must also specify the DatabasePassword parameter. |
| DatabasePassword | Optional (however, required if using DatabaseUser) | The password for the specified DatabaseUser account. |
| SiteWarning | Optional | The integer number of site collections to allow in this content database prior to generating a warning event in the Windows Event log. |
| SiteMaximum | Optional | The maximum number of site collections to allow in this content database. |
| SearchServer | Optional | The Search server to use for indexing content in this content database. |

## Review the upgrade log files for any issues

After you have attached the database and the upgrade process has completed, you can review the upgrade log file to see if there were any issues during upgrade. The upgrade log file and the trace log file are located at %ProgramFiles%\Common Files\Microsoft Shared\web server extensions\12\LOGS. The trace log is named in the following format: Machine\_name-YYYYMMDD-HHMM.log, where YYYYMMDD is the date and HHMM is the time (for example, Server1-20061105-1241.log).

## Repeat the restore and add database procedures for remaining databases

After you have restored the first site content database and verified the upgrade by reviewing the upgrade log file, you can continue by restoring and upgrading the next database. After you have successfully restored and upgraded all of the site, content, user profile, and single sign-on databases, you can review the sites to be sure that they upgraded properly (for more information, see [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08)), and then follow the steps in the [Perform post-upgrade steps for an in-place upgrade (Office SharePoint Server)](#DSDOC_7d4d75f0_fe37_4ade_809e_d68c730a07) topic. Because database migration is essentially an in-place upgrade for your content, you can use the same post-upgrade steps. For more post-upgrade steps, see [Chapter overview: Perform post-upgrade steps (Office SharePoint Server)](#DSDOC_6ae2d2aa_a70a_44d9_a8c4_d04228c977).

# G. Perform post-upgrade steps [Office SharePoint Server]

## G. Perform post-upgrade steps



# Chapter overview: Perform post-upgrade steps (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

After you have reviewed your upgraded sites and made any changes that you needed to, and after you have also determined that you are done running the upgrade process, then you can finish the upgrade, import or migrate any additional content you need to include, and remove the old version of the product.

In this chapter:

 [Review upgraded sites (Office SharePoint Server)](#DSDOC_e1ec87a4_d8ee_4037_b4c2_1694a2fd08)

 [Revert to a previous version site (Office SharePoint Server)](#DSDOC_76ae633f_671b_4300_bf73_903f6de364) — for gradual upgrades only

 [Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007](#DSDOC_da3e6cbb_a478_4c7a_ae5a_4560c62206)

 [Troubleshoot and resume upgrade (Office SharePoint Server)](#DSDOC_8c676788_f2bc_412b_b14e_6e13bee3e1)

 [Perform post-upgrade steps for an in-place upgrade (Office SharePoint Server)](#DSDOC_7d4d75f0_fe37_4ade_809e_d68c730a07)

 [Perform post-upgrade steps for a gradual upgrade (Office SharePoint Server)](#DSDOC_63f1755d_6d6d_4554_adce_c259fe346a)

 [Finalize upgrade (Office SharePoint Server)](#DSDOC_9c09631b_0553_4b03_b803_0a3d718921)

 [Migrate content or sites after upgrade (Office SharePoint Server)](#DSDOC_16a7e571_3531_4a4e_baa7_f348a9f9d1)

 [Remove SharePoint Portal Server 2003 after upgrade is complete](#DSDOC_f057d1e5_f8b7_4c92_bb98_3f983df2a2)

 [Add servers to an upgraded farm (Office SharePoint Server)](#DSDOC_b4279ff9_2842_475a_8d7f_cc90711c47)

# Review upgraded sites (Office SharePoint Server)

After upgrading a site collection by using the gradual upgrade option, keep the original sites online for a period of time so that the upgraded sites can be reviewed and verified against the original sites. During this time, IT administrators, site owners, designers, and developers can review the sites and have a chance to do the following:

note_ddNote:

Because the URLs of the old sites are changed during a gradual upgrade, be sure to include the URL when you notify site owners that their sites are ready for review. The Site Content Upgrade Status page lists the URLs for the previous and new version sites.

 Compare the old site to the new site and look for any discrepancies or errors. For example, check all hyperlinks. In particular, hard-coded URLs may not work.

 Copy missing components, if any, from the old site to the new site by using a SharePoint-compatible Web page editor, such as Office SharePoint Designer.

 Update or re-deploy any Web Parts that no longer function correctly.

 Determine whether any pages need to be reset to the site definition version. If you have pages that have been customized, and do not show the new version's functionality, you should consider resetting the pages to the site definition to apply the new version's look and functionality, and then reapplying your customizations. You can perform this step from the Site Settings page in your site, and you can reset either individual pages or the entire site.

 If necessary, revert to the version 2 site. For more information, see [Revert to a previous version site (Office SharePoint Server)](#DSDOC_76ae633f_671b_4300_bf73_903f6de364).

For more information about reviewing your upgraded site and re-applying customizations, see [Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007](#DSDOC_da3e6cbb_a478_4c7a_ae5a_4560c62206).

# Revert to a previous version site (Office SharePoint Server)

If you want to discard the results of a gradual upgrade for a particular site and revert to the previous version site, you can do so by using the procedure below. Note that reverting to the previous version site deletes the upgraded site, so be sure to copy any elements you might need from the upgraded site (by using a Web Page editor that is compatible with Microsoft Office SharePoint Server 2007 such as Microsoft Office SharePoint Designer 2007) before you perform this action. After you have made any necessary changes in the previous version site, you can try upgrading the site again.

1. In Central Administration, on the Operations tab, under Upgrade and Migration, click Site content upgrade status.

2. On the Site Content Upgrade Status page, next to the URL that contains the site you want to revert, click Continue upgrade.

3. On the Site Collection Upgrade page, on the Actions menu, click Revert site.

4. On the Revert to Non-Upgraded Site page, in the Select Upgrade Site Collection section, in the Site Collection box, click the down arrow and click Change Site Collection.

5. On the Select Site Collection page, click the URL for the site collection you want to revert, and then click OK.

6. On the Revert to Non-Upgraded Site page, then click Continue.

# Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007

After a gradual upgrade or database migration, before you direct users to your upgraded site, you have the ability to spend time comparing the original version of your site with the upgraded version, fixing any issues you notice, and reapplying any customizations.

## Checklists for reviewing your upgraded site

The following checklists will help you walk through your site and identify any issues you need to address.

### Web Parts

Even if you have tested your Web Parts in Microsoft® ASP.NET 2.0, you may still find some issues with your Web Parts after the upgrade. For more information about testing your Web Parts, see [Upgrade custom Web Part packages](#DSDOC_7b8993be_8afc_4eba_9c5e_960083758d).

|  |  |
| --- | --- |
| What to check | What to do if there's a problem |
| Do all of the Web Parts from your original site show up in your upgraded site? | If a Web Part zone exists in a customized (unghosted) page but not in the site definition, the Web Parts from that Web Part zone may have been moved into the bottom zone on the page during the upgrade.  In either Edit Mode for the page in the browser or in Microsoft Office SharePoint Designer 2007, look for missing Web Parts in the bottom zone or other zones, or check to see if the Web Parts have been closed.  For more information about working with Web Parts and Web Part zones in Office SharePoint Designer 2007, see [Insert or delete a Web Part](http://go.microsoft.com/fwlink/?LinkId=76020&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76020&clcid=0x409) in the Office SharePoint Designer 2007 Help system. |
| Are the Web Parts displayed correctly (for example, are they showing up in the correct Web Part zone, in the correct location, and as the correct size)? | In either Edit Mode for the page in the browser or in Office SharePoint Designer 2007, drag the Web Part into the correct zone, or modify the Web Part properties to correct any sizing or positioning problems.  For more information about working with Web Parts and Web Part zones in Office SharePoint Designer 2007, see [Insert or delete a Web Part](http://go.microsoft.com/fwlink/?LinkId=76020&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76020&clcid=0x409) in the Office SharePoint Designer 2007 Help system. |
| Are there any extra or missing Web Parts? | Open the page in either Edit Mode for the page in the browser or in Office SharePoint Designer 2007. If you see extra Web Parts on your page, look for closed or inactive Web Parts on the original version of the page. Were the closed or inactive Web Parts activated by the upgrade process? If so, you can modify the Web Part properties to close these Web Parts.  If Web Parts are missing, look for errors in Office SharePoint Designer 2007 such as "Error Rendering Control" or "Missing Assembly." These errors indicate that the Web Part is not installed or configured correctly for the new environment and needs to be reinstalled or reconfigured.  For more information about working with Web Parts and Web Part zones in Office SharePoint Designer 2007, see [Insert or delete a Web Part](http://go.microsoft.com/fwlink/?LinkId=76020&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76020&clcid=0x409) in the Office SharePoint Designer 2007 Help system. |
| Do your pages use the Listings Web Part? | The Listings Web Part was available in Microsoft SharePoint® Portal Server 2003. If you had a Listings Web Part on your original page, it has been upgraded in Microsoft Office SharePoint Server 2007 to either a Summary Link Web Part or a Content Query Web Part. You may have to reconfigure the Web Part to display the data you want in the way that you want.  For more information about configuring these Web Parts in Office SharePoint Server 2007, see:   [Use and configure a Summary Link Web Part or a Summary Link field control](http://go.microsoft.com/fwlink/?LinkId=76021&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76021&clcid=0x409)   [Add a group to a Summary Link Web Part or a Summary Link](http://go.microsoft.com/fwlink/?LinkId=76022&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76022&clcid=0x409)   [Display data from multiple lists with the Content Query Web Part](http://go.microsoft.com/fwlink/?LinkId=76024&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76024&clcid=0x409) |
| Do the Web Parts work? | Open the page in either Edit Mode for the page in the browser or in Office SharePoint Designer 2007, and look for errors indicating that a component or service is missing. Be sure that any components or services that the Web Parts rely on exist in the upgraded site. Particularly for the database migration approach, you must make sure that you have installed all of the components or services you need for your Web Parts, and that you have configured them correctly (for example, updating the web.config Safe Controls list). |

### Styles and appearance

Styles from a cascading style sheets file should still be applied after upgrade. However, you still need to verify that your pages look the way they should.

|  |  |
| --- | --- |
| What to check | What to do if there's a problem |
| Do all of the images used on your pages display correctly? | Verify that the links to the images are correct. When you upgrade to Office SharePoint Server 2007, all of the images used on your landing pages (such as default.aspx) are moved into the PublishingImages library by the upgrade process. All links should have been fixed, but page-relative links might not have been updated. |
| Are the appropriate cascading style sheet colors and styles used in the appropriate places? | Verify that the links to the cascading style sheets file are correct. When you upgrade to Office SharePoint Server 2007, all of your landing pages (such as default.aspx) are moved into the Pages library by the upgrade process. All links should have been fixed, but page-relative links might not have been updated.  Note that, if your site uses master pages, you can update the link on the master page rather than changing each individual page. |
| Does the theme you applied to your site still look the same? | Your site's home page, or other pages in your site, may look different after the site is upgraded. For example, in Windows SharePoint Services 2.0, themes were collections of industry-standard cascading style sheets that controlled the fonts and formatting for a site. With Microsoft Windows SharePoint Services 3.0 and Office SharePoint Designer 2007, each updated theme has been consolidated into one cascading style sheet, which also includes more styles and updated styles. After an upgrade, the site's style sheets from the Windows SharePoint Services 2.0 themes are brought over with the upgraded site, but the default theme is changed to the Windows SharePoint Services 3.0 default theme. Because Windows SharePoint Services 2.0 themes do not have updated styles or classes for new styles, they must be updated in order to be successfully applied to Windows SharePoint Services 3.0 sites. Alternatively, if you don't want to update a theme, you can apply a Windows SharePoint Services 3.0 theme that has the appearance you want. |
| Do you have any JavaScript controls that are not working? | Verify that the links to the controls are correct. When you upgrade to Office SharePoint Server 2007, all of your landing pages are moved into the Pages library by the upgrade process. All links should have been fixed, but page-relative links might not have been updated. |

### Areas (now subsites)

Areas and subareas undergo many conversions during upgrade; ultimately, they are converted into subsites within the portal site collection. The home pages for your areas and subareas have been moved into the Pages library for each subsite, and URLs for sites and subsites in Office SharePoint Server 2007 now follow the logical navigation structure. So, rather than seeing http://portal\_name/c2/, you'll see http://portal\_name/ or http://portal\_name/sites/. For more information about how your upgraded portal sites work, see Welcome to Office SharePoint Server 2007.

|  |  |
| --- | --- |
| What to check | What to do if there's a problem |
| Do all of your previous areas and subareas now show up as subsites in the upgraded site collection and appear in the correct order in navigation? Are there any extra subsites? | Look at the navigation in your site to confirm that the subsites appear as expected. To view your complete site hierarchy, use the Site Content and Structure page. On the Site Actions menu, click Manage Content and Structure; the subsites are shown at the top of the list on this page. From this page, you can move, create, or delete subsites in your site collection. |
| If an area in your original site was hidden from navigation, is the subsite still hidden in the upgraded site?  Also, there are new standard subsites that are included in the site definition by default, such as the Documents, Reports, or Search subsites; do these now show up in your site navigation? | To hide subsites in your site's navigation, use the Navigation Settings page. On the Site Actions menu, click Site Settings, and then on the Site Settings page, under Look and Feel, click Navigation Settings. Under Navigation Editing and Sorting, click the subsite you want to hide, and then click Hide.  If a previously hidden area is now showing up in the navigation, go to the Site Navigation Settings page and hide the subsite again. |
| Are the names of the subsites showing up correctly in navigation? | If you have manually changed how a subarea's name is displayed in navigation (either through a SharePoint-compatible Web Page editor, such as Microsoft Office FrontPage® 2003, or through the browser interface), but you have not changed the actual name of the subarea, then the subsite in the upgraded site might be displaying with the original name instead of with the updated name, and you may need to reapply the change. |

### Customized (unghosted) pages

A page that has been customized by using a SharePoint-compatible Web Page editor, such as Office FrontPage 2003, is called an unghosted page because it is no longer simply a view of the default version of that page.

|  |  |
| --- | --- |
| What to check | What to do if there's a problem |
| Are your customizations still in place? | Is it just one issue (perhaps something on the checklist above), or is there a larger problem with the entire page? In Office SharePoint Designer 2007, compare your original page to your upgraded page to determine which issue may be causing any differences.  For example, if you added a completely new page to your original site (for example, if you replaced default.aspx with a different file rather than making changes to the existing default.aspx file), the new page has no association with the site definition, and therefore it might not look like the other pages in the upgraded site, nor can it be reset to look like them. If you want your customized page to have the same look and feel as the other pages in your site, consider creating a brand-new page that is based on the site definition and then transferring your customizations to that new page. |
| Can you still get to the editing controls on the pages? | If you customized the editing controls (for example, the Site Settings link or the Edit Page link), check to see whether they still appear. If they don't appear, you can either:   Copy and paste the controls from your original site. Use this option only if you need to stay with the old version's functionality. Open the original page in Office SharePoint Designer 2007 and, in Code view, search for the control. Copy the control and then, in the upgraded site, open the upgraded page (or the master page) and paste the control into the appropriate place.   Replace them with the new version's editing controls by resetting the page to the default version. This option is recommended for most cases because it gives you the updated functionality. Use the Reattach to Page Layout command in Office SharePoint Designer 2007 to reset the page to the default version (also known as reghosting). After you have restored the default page, you can then reapply your customizations in the browser by applying a different master page or page layout, or by reapplying the customizations in Office SharePoint Designer 2007.   For more information about resetting to the site definition, see [Reset a customized page to the site definition](http://go.microsoft.com/fwlink/?LinkId=76026&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76026&clcid=0x409). |
| Are your customizations still appropriate in the new environment, or do you want to update to the new functionality or look? | When you perform a gradual upgrade, a customized (unghosted) page does not take on the new site definition (that is, the new functionality) by default. (However, there is an option to perform this action during a gradual upgrade; for more information, see [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).)  If you want the new functionality and features, you must reset any customized pages to use the site definition. Resetting the page essentially discards the customizations and attaches your pages to the master page and page layout. Any customizations you want can then be transferred to the master pages and page layouts instead of being stored in individual pages.  If you want to be able to use the new functionality with a customized page, consider using the Reattach to Page Layout command in Office SharePoint Designer 2007 to reset the page to the default version (reghosting). After you have restored the default page, you can then reapply your customizations in the browser by applying a different master page or page layout, or by reapplying the customizations in Office SharePoint Designer 2007.  For more information about resetting to the site definition, see [Reset a customized page to the site definition](http://go.microsoft.com/fwlink/?LinkId=76026&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76026&clcid=0x409). |

## See Also

[Use a trial upgrade to find potential issues (Office SharePoint Server)](#DSDOC_2b5d3825_adba_4185_84f2_ef59e8110f)

# Troubleshoot and resume upgrade (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this article:

 [General information about troubleshooting and restarting upgrade](#DSDOC_section18c676788_f2bc_412b_b14e_6e)

 [Known issues for pre-upgrade scanning](#DSDOC_section28c676788_f2bc_412b_b14e_6e)

 [Known issues for in-place upgrade](#DSDOC_section38c676788_f2bc_412b_b14e_6e)

 [Known issues for gradual upgrade](#DSDOC_section48c676788_f2bc_412b_b14e_6e)

 [Known issues for database migration](#DSDOC_section58c676788_f2bc_412b_b14e_6e)

 [Known issues for customized sites](#DSDOC_section68c676788_f2bc_412b_b14e_6e)

## General information about troubleshooting and restarting upgrade

If upgrade stops, you can use the following methods to troubleshoot the issues:

 Review the upgrade log files and look for “error”. The upgrade log files are located at %windir%\Program Files\Common Files\Microsoft Shared\web server extensions\12\LOGS.

tip_ddTip:

Use the Search Files and Folders feature of Windows to find iterations of “error” quickly in these log files.

 Review the readme for known issues and workarounds. Errors are often issues that can be worked around.

 If you are running Gradual Upgrade, check to see if the site collections you were running have appeared in the new version. If so, you can perform the workaround there, or revert the new version site to the previous version, and try to upgrade the site again. For more information about reverting sites, see [Revert to a previous version site (Office SharePoint Server)](#DSDOC_76ae633f_671b_4300_bf73_903f6de364).

 In-place upgrade can be restarted using the command stsadm –o upgrade. Upgrade will skip those tasks that were already complete, and continue from where it left off. For more information about the upgrade operation, see [Upgrade sites (Office SharePoint Server)](#DSDOC_94c49b6d_527e_4387_9557_8cfe8b55ed).

## Known issues for pre-upgrade scanning

#### Upgrade is blocked if you use Localhost as your server name

Using "localhost" as your server name can cause many issues in your environment and is not recommended. If you are using "localhost" as your server name, when you run the pre-upgrade scan tool, this issue is logged and the upgrade cannot proceed. You must rename the server computer and then run an operation in prescan before you can continue with the upgrade. Follow the steps below to rename your server and fix the issue for the pre-upgrade scan tool.

1. Back up the configuration database.

2. From the command line, change to the following path: %WINDIR%\Program Files\Common Files\Microsoft Shared\web server extensions\60\bin, and then run the following command to change the server name in the configuration database:

Stsadm.exe -o setconfigdb -databaseserver <server name> -connect

note_ddNote:

If you are using the database migration path to upgrade, this operation will not resolve the issue, because you are upgrading to a different configuration database. Instead, you must use a script to fix this issue in the content databases directly.

1. From the command line, change to the following path: %WINDIR%\Program Files\Common Files\Microsoft Shared\web server extensions\12\bin, and then run the following command to clear the issue for the pre-upgrade scan tool:

Prescan /fixlocalhost

2. On the command line, run the following command to re-run the pre-upgrade scan process:

Prescan /all

 If it is successful, proceed with upgrade.

 If it still fails, then there is still a service using the localhost servername. At this point, upgrade is not blocked, but some services may not upgrade successfully.

## Known issues for in-place upgrade

#### You must use a domain account, not Network Service, for server farm upgrades

For either in-place or gradual upgrade in a server farm environment, you should use the same credentials that you used in the previous version environment in your new version environment. However, if you were using the Network Service account for your previous version environment, you must instead use a domain account in the new version. Your previous version environment can continue using Network Service, but when you install the new version and create the new farm, you must supply a domain account instead. Be sure that you grant the domain account that you use the appropriate rights to the databases in SQL Server (must be a member of the database creators, process administrators, and database owners group for all previous version databases).

#### In-place upgrade may fail for medium or large farms with non-front end Web servers when using the Default Web Site in IIS

If your medium or large server farm contains one or more servers that are not front-end Web servers, and you have used the Default Web Site in Internet Information Services to host a SharePoint site, upgrade may fail with a message that the Default Web Site cannot be upgraded. To work around this issue, before running upgrade, on all non-front end Web servers (such as the Index server), rename the Default Web Site in IIS to something else, then run upgrade, and then restore the name to Default Web Site. You do not need to rename the Web site on any front-end Web servers in the server farm.

If you don't rename the Default Web Site in IIS before running upgrade, upgrade will fail. If this happens, you can rename the Default Web Site on the non-front-end Web servers, and then resume upgrade. You can use the following command-line operation to resume upgrade:

psconfig -cmd upgrade -inplace previous versionv -wait -force

#### In-place upgrade may fail if there are multiple portal sites with the same URL in your environment

If your environment contains multiple portal sites at the same URL, the SharePoint Products and Technologies Configuration Wizard will fail with the following error in the log file: An item with the same key has already been added. This error results if you have any orphaned portal sites - sites that exist in IIS or on the file system, but not in the configuration database. Your environment may have gotten into this state by any of the following ways:

 You had accidentally deleted and then recreated the IIS Web site that hosts a portal site

 You had unextended an existing virtual server, then reextended the same virtual server to host a new portal site.

 You have more than one IIS Web site for the same port number.

To determine whether you have any sites with duplicate URLs, in your SharePoint Portal Server 2003 environment, go to the List and Manage Portal Sites page in SharePoint Central Administration and look for any portal sites with the same URL. Determine which site is in use and which is the orphaned site, and then delete the orphaned site before running upgrade.

#### In-place upgrade might display the wrong URLs for sites in Central Administration if you create the Central Administration site on a non front-end Web server

If you are performing an in-place upgrade on a large farm and you ran upgrade on an index server before running it on a front-end Web server, then Central Administration is created on the index server instead of the front-end Web server. This can make Central Administration display incorrect host names for the URLs to the Web sites being upgraded on the Site Content Upgrade Status page. To work around this issue, you can add an alternate access mapping for the Central Administration site to point to the correct URL for the front-end Web server.

1. In Internet Information Services Manager on the front-end Web server, verify the hostname and port number for Central Administration.

2. Open Central Administration on the Index server, and on the Operations tab, under Global Configuration, click Alternate access mappings.

3. On the Alternate Access Mappings page, click Edit Public URLs.

4. On the Edit Public Zone URLs page, click the Alternate Access Mapping Collection down arrow, and select Change Alternate Access Mapping Collection.

5. In the Select an Alternate Access Mapping Collection box, click Central Administration.

6. In the Public URLs section, in the Intranet box, type the correct URL for Central Administration on the front-end Web server, and then click Save.

7. On the front-end Web server, open Central Administration, and on the Operations tab, under Upgrade and Migration, click Site content upgrade status.

The URLs should display correctly.

#### Search start address and file types upgrade might fail if an unusual start address is configured in 1st\_SPS\_11

If you have an unusual start address, such as http://server\_name/server\_name.com, as a start address for indexing, the search upgrade might fail to upgrade the start addresses and file types, and you must enter these configuration settings manually in your Office SharePoint Server 2007 environment.

## Known issues for gradual upgrade

#### You must use a domain account, not Network Service, for server farm upgrades

For either in-place or gradual upgrade in a server farm environment, you should use the same credentials that you used in the previous version environment in your new version environment. However, if you were using the Network Service account for your previous version environment, you must instead use a domain account in the new version. Your previous version environment can continue using Network Service, but when you install the new version and create the new farm, you must supply a domain account instead. Be sure that you grant the domain account that you use the appropriate rights to the databases in SQL Server (must be a member of the database creators, process administrators, and database owners group for all previous version databases).

#### Running search from a child portal may not find new documents after performing a gradual upgrade with shared services

If you have upgraded a child portal that consumed shared services from a parent farm, you must update the alternate portal site URL mappings to point to the upgraded URL. Otherwise, when users search from the child portal, they may not see content added to the child portal.

important_ddImportant:

These steps must be performed in the SharePoint Portal Server 2003 environment.

procedure_ddUpdate the alternate portal site URL mappings

|  |
| --- |
| 1. Click Start, point to All Programs, point to SharePoint Portal Server, and then click SharePoint Central Administration.  2. Under Portal Site and Virtual Server Configuration, click Configure alternate portal site URLs for intranet, extranet, and custom access.  3. On the dropdown menu for the upgraded site on the child portal, click Edit.  4. On the Change Alternate Access Setting page, in the Intranet URL box, enter the original site's URL, and then click OK.  You should now have a Default URL pointing to the upgraded site and an Intranet URL pointing to the original site.  5. Perform a crawl for the SharePoint Portal Server 2003 environment.  For more information about performing a crawl, see [Managing Updates of Content Indexes](http://office.microsoft.com/en-us/sharepointserver/CH011715081033.aspx) (http://office.microsoft.com/en-us/sharepointserver/CH011715081033.aspx) in the SharePoint Portal Server 2003 Administrator's Guide. |

#### Search start address and file types upgrade might fail if an unusual start address is configured in 1st\_SPS\_11

If you have an unusual start address, such as http://server\_name/server\_name.com, as a start address for indexing, the search upgrade might fail to upgrade the start addresses and file types, and you must enter these configuration settings manually in your Office SharePoint Server 2007 environment.

#### My parent portal site wasn't crawled after upgrade

No crawl is performed on a parent portal if the following conditions are met:

 You are using shared services

 You have a large server farm with more than one index server

 There is an exclusion rule for the parent portal on one of those index servers.

 To generate the indexes, you can either delete the rule, or change the rule from exclude to include, and then perform the crawl again.

#### My query failed on the parent portal after upgrade with separate query servers

If you are using query index propagation between farms, it takes a while to initialize the query servers. On each of you query servers, run the following operation on the command line to be sure that they are initialized:

stsadm.exe -o osearch -propagationlocation <applications directory>

Where <applications directory> is the location above the index data for all SSPs, such as:

applications

   SSP1 (as a GUID)

   SSP2 (as a GUID)

   SSP3 (as a GUID)

#### My upgraded parent portal doesn't have the converted start addresses, only the original start addresses, for content still in 2nd\_SPS\_11 sites

After a gradual upgrade, the parent portal site might not have the correct temporary URLs listed for start addresses, only the original start addresses. To work around this issue, use the following process:

1. In , in the Search administration pages, add an exclusion rule to delete any content now stored in the Office SharePoint Server 2007 environment.

2. Add a new content source to crawl the new URL for sites still in the environment.

3. Perform a crawl in the environment.

## Known issues for database migration

#### You cannot add the same content database more than once to a farm, even on different Web applications

Each site collection in a content database (including each portal site) has a globally-unique identifier (GUID) associated with it, registered in the configuration database. So, adding the same site collection (or portal) twice to the farm, even in separate Web applications, is not possible. Although the database attach succeeds in this situation, the site collection cannot be started. If you need a duplicate copy of a site collection (or portal) in the same farm, first attach the database that contains the site collection to a separate farm, and then use the Stsadm.exe backup and restore operations to copy the site collection over to the other farm. The backup and restore process creates a new GUID for the site collection.

#### Do not attach the component settings (\_SERV) database during a database migration

When you perform a database migration, you do not need to migrate and attach the SharePoint Portal Server 2003 component settings database (the search database, usually named "ID\_SERV" where ID is an ID such as the server name). Rather, you must recreate the search database and reconfigure your search settings when you perform a database migration. This is because Search settings from SharePoint Portal Server 2003 were stored both in the registry on the server and in the database, and a database migration does not contain all of the settings.

If you attach the component settings (search) database during database migration, the upgrade process will fail when upgrading the shared services and you maysee the following message: Could not find stored procedure 'dbo.proc\_MSS\_PropagationGetQueryServers'.

Perform the database migration again, and do not attach the component settings (\_SERV) database.

## Known issues for customized sites

#### An application error can result when disallowed customizations are made to web.config files

Certain customizations are not allowed in web.config files for subfolders within a virtual server. For example, the AUTHENTICATION and SESSIONSTATE nodes are not allowed within the web.config file at this level. Modifying the web.config file in ways that are not recommended can result in unexpected upgrade results. Be sure to follow the recommended practices for customizations, including customizations to the web.config file. For more information, see [Best Practices for Ensuring Application Reusability and Upgrade in Windows SharePoint Services](http://msdn.microsoft.com/library/default.asp?url=/library/en-us/odc_SP2003_ta/html/WSSSharePointCodeReuse.asp) on the MSDN Web site (http://msdn.microsoft.com/library/default.asp?url=/library/en-us/odc\_SP2003\_ta/html/WSSSharePointCodeReuse.asp).

# Perform post-upgrade steps for an in-place upgrade (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

After you have upgraded your sites, there may still be a few things that you need to do before you are ready to finish the upgrade. Depending on your environment, you may need to:

 [Search: install or upgrade additional files needed by search](#DSDOC_section17d4d75f0_fe37_4ade_809e_d6)

 [Search: reconfigure performance level settings and site hit rules](#DSDOC_section27d4d75f0_fe37_4ade_809e_d6)

 [Migrate data from SharePoint Portal Server 2003 backward-compatible Web Storage System document libraries](#DSDOC_section37d4d75f0_fe37_4ade_809e_d6), if you have any in your environment.

 [Remove Windows SharePoint Services version 2 language packs](#DSDOC_section47d4d75f0_fe37_4ade_809e_d6).

After you have completed these steps, you can go on to [Finalize upgrade (Office SharePoint Server)](#DSDOC_9c09631b_0553_4b03_b803_0a3d718921).

## Search: install or upgrade additional files needed by search

 Install new wordbreaker and filter binaries.

 Resolve any crawl rule conflicts from indexes and upgrade noise words and thesaurus files.

note_ddNote:

Language files for different languages will be made available at different times; check back periodically if you need a language that is not yet available.

## Search: reconfigure performance level settings and site hit rules

The performance level settings and site hit rules are not upgraded from your environment. You must configure the performance level settings and site hit rules again in your Office SharePoint Server 2007 environment. For more information about configuring the indexer performance level and creating sit hit rules, see Configure the Office SharePoint Server Search service and Manage crawler impact rules in the Office SharePoint Server 2007 Central Administration Help system.

## Migrate data from SharePoint Portal Server 2003 backward-compatible Web Storage System document libraries

If you have any data in a backward-compatible Web Storage System document library, you can migrate the data into new document libraries. Document libraries in Office SharePoint Server 2007 have workflow capabilities, plus the ability to use multiple content types within one library, making it much easier to maintain the same library structure that you may have used in Microsoft SharePoint Portal Server 2001.

To migrate you content from your backward-compatible Web Storage System document libraries to Office SharePoint Server 2007 document libraries, you can manually copy the documents to a file share, and then use Explorer view or the multiple file upload feature to import the documents to the new document libraries. Note that any metadata associated with the documents, including versioning, workflow state, and so on, will not be imported.

There are also community-supported tools that can help you migrate documents from a backward-compatible Web Storage System document library to an Office SharePoint Server 2007 document library. Microsoft does not provide support for community-developed or third-party migration tools.

## Remove Windows SharePoint Services previous version language packs

You must install the Windows SharePoint Services 3.0 language packs before you can upgrade sites in the corresponding previous version language. After you have upgraded the sites to use the new language packs, you can remove the old version of the language pack.

note_ddNote:

Language packs for different languages will be made available at different times; check back periodically if you need a language that is not yet available.

# Perform post-upgrade steps for a gradual upgrade (Office SharePoint Server)

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

After you have upgraded your sites, there may still be a few things that you need to do before you are ready to finish the upgrade.

If you want to continue running Microsoft Office SharePoint Server 2007 and  side-by-side, you must:

 [Delete any upgraded and confirmed previous version sites](#DSDOC_section163f1755d_6d6d_4554_adce_c2)

 [Search: install or upgrade additional files needed by search](#DSDOC_section263f1755d_6d6d_4554_adce_c2)

 [Search: reconfigure performance level settings and site hit rules](#DSDOC_section363f1755d_6d6d_4554_adce_c2)

 [Profiles: set the previous version profile store to synchronize with the new version profile store](#DSDOC_section463f1755d_6d6d_4554_adce_c2). This step is only necessary if you plan to continue running Office SharePoint Server 2007 and side-by-side.

 [Migrate data from SharePoint Portal Server 2003 backward-compatible Web Storage System document libraries](#DSDOC_section563f1755d_6d6d_4554_adce_c2), if you have any in your environment.

 [Remove Windows SharePoint Services previous version language packs](#DSDOC_section663f1755d_6d6d_4554_adce_c2). Perform this step only when all sites using these language packs have been upgraded to the new version and are using Microsoft Windows SharePoint Services 3.0 language packs.

If you are completely finished with upgrade and are ready to remove your  environment, you must:

 [Delete any upgraded and confirmed previous version sites](#DSDOC_section163f1755d_6d6d_4554_adce_c2)

 [Search: install or upgrade additional files needed by search](#DSDOC_section263f1755d_6d6d_4554_adce_c2)

 [Search: reconfigure performance level settings and site hit rules](#DSDOC_section363f1755d_6d6d_4554_adce_c2)

 [Migrate data from SharePoint Portal Server 2003 backward-compatible Web Storage System document libraries](#DSDOC_section563f1755d_6d6d_4554_adce_c2), if you have any in your environment.

 [Remove Windows SharePoint Services previous version language packs](#DSDOC_section663f1755d_6d6d_4554_adce_c2). Perform this step only when all sites using these language packs have been upgraded to the new version and are using Windows SharePoint Services 3.0 language packs.

If you have upgraded all sites and you no longer need the  environment, then after you complete the steps below you can go on to [Finalize upgrade (Office SharePoint Server)](#DSDOC_9c09631b_0553_4b03_b803_0a3d718921).

## Delete any upgraded and confirmed previous version sites

After you have upgraded the previous sites and confirmed that the upgraded instances of the sites are ready to use, you can start to clean up the previous version sites. You can delete the previous version sites in batches, as they are upgraded, and then continue to clean up upgraded sites over time. When all sites have been upgraded and are no longer needed, you can delete any remaining previous version sites, and then continue on to remove the language packs and [Finalize upgrade (Office SharePoint Server)](#DSDOC_9c09631b_0553_4b03_b803_0a3d718921). If some sites cannot be upgraded successfully, continue to run both versions side-by-side until the sites are no longer needed, or until you can migrate the content into a new site.

You can use autodelete to automatically delete upgraded sites. For more information about deleting unused Web sites, see Managing Unused Web Sites (Windows SharePoint Services 2.0).

## Search: install or upgrade additional files needed by search

 Install new wordbreaker and filter binaries.

 Resolve any crawl rule conflicts from indexes and upgrade noise words and thesaurus files.

note_ddNote:

Language files for different languages will be made available at different times; check back periodically if you need a language that is not yet available.

## Search: reconfigure performance level settings and site hit rules

The performance level settings and site hit rules are not upgraded from your environment. You must configure the performance level settings and site hit rules again in your Office SharePoint Server 2007 environment. For more information about configuring the indexer performance level and creating sit hit rules, see Configure the Office SharePoint Server Search service and Manage crawler impact rules in the Office SharePoint Server 2007 Central Administration Help system.

## Profiles: set the previous version profile store to synchronize with the new version profile store

If you plan to continue running Office SharePoint Server 2007 and side-by-side, you can set the previous version profile store to be synchronized with the new version profile store.

## Migrate data from SharePoint Portal Server 2003 backward-compatible Web Storage System document libraries

If you have any data in a backward-compatible Web Storage System document library, you can migrate the data into new document libraries. Document libraries in Office SharePoint Server 2007 have workflow capabilities, plus the ability to use multiple content types within one library, making it much easier to maintain the same library structure that you may have used in Microsoft SharePoint Portal Server 2001.

To migrate you content from your  backward-compatible Web Storage System document libraries to Office SharePoint Server 2007 document libraries, you can manually copy the documents to a file share, and then use Explorer view or the multiple file upload feature to import the documents to the new document libraries. Note that any metadata associated with the documents, including versioning, workflow state, and so on, will not be imported.

There are also community-supported tools that can help you migrate documents from a  backward-compatible Web Storage System document library to an Office SharePoint Server 2007 document library. Microsoft does not provide support for community-developed or third-party migration tools.

## Remove Windows SharePoint Services previous version language packs

You must install the Windows SharePoint Services 3.0 language packs before you can upgrade sites in the corresponding previous version language. After you have upgraded the sites to use the new language packs, you can remove the old version of the language pack.

note_ddNote:

Language packs for different languages will be made available at different times; check back periodically if you need a language that is not yet available.

# Finalize upgrade (Office SharePoint Server)

For an in-place or gradual upgrade, after all sites have been upgraded you can finalize the upgrade. Finalizing upgrade removes the connection to the previous version and cleans up any temporary data.

After you finalize upgrade, you cannot go back to the farm upgrade process.

note_ddNote:

This content applies only to in-place and gradual upgrade processes. There is no finalize upgrade step for database migrations.

1. In Central Administration, on the Operations tab, under Upgrade and Migration, click Finalize upgrade.

2. On the Finalize Upgrade page, read through the information; if you are ready to finalize, click Complete Upgrade.

3. Click OK to finalize upgrade.

# Migrate content or sites after upgrade (Office SharePoint Server)

In this article:

 [Migrate content by using import/export](#DSDOC_section116a7e571_3531_4a4e_baa7_f3)

 [Migrate a site collection by using backup/restore](#DSDOC_section216a7e571_3531_4a4e_baa7_f3)

 [Migrate or publish content by using the content deployment capability in Office SharePoint Server 2007](#DSDOC_section316a7e571_3531_4a4e_baa7_f3)

After you have completed the upgrade process, you can redistribute content or sites as needed to fit your new environment. It is easiest to move content or sites before you open the sites to users again, so that they do not have to experience more than one outage window.

Some of the reasons that would prompt you to redistribute content after upgrade include:

 Changing a portal site structure to fit current organizational needs   For example, you might need to realign your portal sites and subsites to respond to a reorganization within your company.

 Consolidating Shared Services Providers (SSPs)   For Microsoft Office SharePoint Server 2007, we recommend that you have one SSP per region. However, by default, after upgrade you have one SSP per portal site.

 Moving MySites into a dedicated Web application   For Office SharePoint Server 2007, it is recommended that you host all MySites on a dedicated Web application, rather than in the same Web application as your portal site.

If you want to redistribute sites among your content databases, you can use any of the following methods to perform this action:

 Import/Export   Use this method to move a subsite into a different site collection, or to move an entire site collection to a different database or Web application. With import/export, you can choose whether or not to include security settings when you import. To migrate content by using this method, use the import and export operations with the Stsadm.exe command-line tool.

 Backup/Restore   Use this method to move an entire site collection to a different database or Web application. To migrate content by using this method, use the backup and restore operations with the Stsadm.exe command-line tool.

 Content Migration application programming interfaces (APIs)   Use this method to move smaller sets of data (down to the list or item level) between sites. For more information about using the Content Migration APIs, see [Windows SharePoint Services 3.0 Software Development Kit](http://go.microsoft.com/fwlink/?LinkId=76000&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76000&clcid=0x409).

 Content Deployment   If you want to migrate or publish content to a new site, you can use the content deployment capability in Office SharePoint Server 2007. For more information, see (This link is not yet available. It will be available in later versions of this content.).

## Migrate content by using import/export

The import/export feature is based on the new Content Migration APIs. With import/export, you can migrate either subsites or entire site collections, and you can import a subsite into an existing site collection. Like the Smigrate.exe utility in the previous version, import/export requires that the site you import to already exists. Note that import/export does not include some site settings, such as Recycle Bin state and alerts.

To use import/export to migrate a site or site collection, use the following process:

1. Export the subsite or site collection by using the following command:

Stsadm.exe -o export -url <URL> -includeusersecurity

2. In Central Administration, on the Manage Content Databases page, set to offline all databases except the one that currently contains the subsite or site collection.

3. Create a blank site or site collection to contain the content you are importing.

For more information about creating a blank site collection, see [Create a blank site to migrate content into](#DSDOC_1fa29f9a_62a6_4110_b620_37b555bf48).

4. Import the subsite or site collection by using the following command:

Stsadm.exe -o import -url <URL> -includeusersecurity

The includeusersecurity parameter specifies that you want to import the security settings for the subsite or site collection. If you do not need the security settings, you can omit this parameter.

For more information about using import/export, see Stsadm.exe command-line utility (Office SharePoint Server).

## Migrate a site collection by using backup/restore

If you want to migrate an entire site collection, you can do so by using the backup and restore operations with the Stsadm.exe command-line tool. First, back up the site collection you want to move, then delete it from the current database and take the database offline. Then, restore the site collection to the new URL. Be sure that there is no site collection already at the new location, or the restore operation will fail.

note_ddNote:

If there is a site collection at the destination and you want to overwrite it, you can use the overwrite parameter with the restore operation.

To use backup/restore to migrate a site collection, use the following process:

1. Back up the site collection by using the following command:

Stsadm.exe -o backup -url <URL>

2. In Central Administration, on the Manage Content Databases page, set to offline the database that currently contains the site collection.

3. Restore the site collection by using the following command:

stsadm.exe -o restore -url <URL>

4. In Central Administration, on the Manage Content Databases page, set to online the database that originally contained the site collection.

For more information about using backup/restore, see Windows SharePoint Services 3.0 Technology Backup and Restore.

## Migrate or publish content by using the content deployment capability in Office SharePoint Server 2007

With Office SharePoint Server 2007, you can migrate sites, subsites, or specific lists and libraries or items and documents by using the content deployment capability. To use this method, specify the content to deploy and the destination for the deployment, and then start the deployment process. For more information about content deployment, see Plan content deployment.

# Remove SharePoint Portal Server 2003 after upgrade is complete

In this article:

 [Remove SharePoint Portal Server 2003 all at once](#DSDOC_section1f057d1e5_f8b7_4c92_bb98_3f)

 [Remove SharePoint Portal Server 2003 gradually](#DSDOC_section2f057d1e5_f8b7_4c92_bb98_3f)

When you are finished running the upgrade process and all sites have been upgraded successfully, if you no longer need to run Microsoft® Office SharePoint® Portal Server 2003, you can remove it. Keep in mind that, if you have performed a gradual upgrade, you can continue to run SharePoint Portal Server 2003 and Microsoft Office SharePoint Server 2007 side by side for as long as you need to. Only remove SharePoint Portal Server 2003 when you are certain you no longer need it in your environment.

You have the following two options for removing SharePoint Portal Server 2003:

 If you have a single server or a small server farm and all sites have been upgraded successfully, you can remove SharePoint Portal Server 2003 all at once by uninstalling the product and then deleting all files that are no longer necessary.

 If you have a large farm or more than one server farm with shared services, remove SharePoint Portal Server 2003 gradually.

## Remove SharePoint Portal Server 2003 all at once

Use the following process to remove SharePoint Portal Server 2003 all at once. If you have performed a gradual upgrade, be certain that you no longer need any of the old sites before you uninstall.

1. Uninstall SharePoint Portal Server 2003.

2. Delete all SharePoint Portal Server 2003 databases (configuration database, content databases, profiles database, services database).

3. Delete all SharePoint Portal Server 2003 index files.

4. Uninstall Microsoft SQL Server™ 2000 Desktop Engine (MSDE), if applicable.

## Remove SharePoint Portal Server 2003 gradually

Use the following process to remove SharePoint Portal Server 2003 gradually as each set of sites, content databases, and Web applications are successfully upgraded.

1. Delete each personal and team site collection after it has been successfully upgraded.

You can do this from SharePoint Central Administration in SharePoint Portal Server 2003. Alternatively, you can do this from the command line by running the following command from the %ProgramFiles%\Common Files\Microsoft Shared\web server extensions\60\bin directory:

Stsadm.exe -o deletesite -url <URL>

2. After all sites within a content database have been deleted, delete the associated content database in SharePoint Central Administration or from the command line as part of the next step.

3. After all sites on a virtual server have been deleted, use SharePoint Central Administration to remove Windows SharePoint Services from the virtual server — or use the following command line operation:

stsadm.exe -o unextendvs -url <url> -deletecontent

4. Optionally, delete the empty virtual servers in Internet Information Services (IIS).

5. After all associated personal and team sites have been deleted, delete the portal site.

For more information about deleting a portal site in SharePoint Portal Server 2003, see [Deleting a Portal Site](http://go.microsoft.com/fwlink/?LinkId=76023&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkId=76023&clcid=0x409).

6. After the associated portal sites have been deleted, delete the profiles and services databases.

7. Delete the index files.

8. After all sites and portal sites have been deleted, uninstall SharePoint Portal Server 2003.

9. Delete the configuration database.

# Add servers to an upgraded farm (Office SharePoint Server)

In this article:

 [Add a front-end Web server to an upgraded server farm](#DSDOC_section1b4279ff9_2842_475a_8d7f_cc)

 [Add an application server to an upgraded server farm](#DSDOC_section2b4279ff9_2842_475a_8d7f_cc)

 [Add a back-end database server to an upgraded server farm](#DSDOC_section3b4279ff9_2842_475a_8d7f_cc)

When you add a front-end Web server or application server to an upgraded farm, you need to be careful to install not only the files and components needed for 1st OSS 12, but any files and components still needed from Microsoft® SharePoint® Portal Server 2003. To accomplish this, you can sometimes manage — with the help of a good checklist — to install all of the files and components you need to get your sites working correctly when provided by a new front-end Web server. However, there are some cases in which installing such components will not work. For example, the Microsoft Office Web Components cannot be installed on a server running 2nd OSS 12. However, if they are already installed when 2nd OSS 12 is installed, they should continue to run.

caution_ddCaution:

Do not add servers to your farm during the upgrade process. Either add them before beginning the upgrade, or wait until the upgrade is complete to add servers. Specifically, if you add a server to the farm while the SharePoint Products and Technologies Configuration wizard is being run on any server in the farm, the new server will not appear in the upgraded topology. This is because the configuration database — which contains the information about which servers are in a farm — is the first item upgraded by the configuration wizard, and any servers not included in the configuration wizard at that time will not be registered in the configuration after the upgrade.

Because you need both the previous and the current versions' files and components, the easiest way to add a server to a farm is to take an image of one of the existing servers in your farm (by using any of the tools available for imaging hard disks) and restore it to the new server, then run the SharePoint Products and Technologies Configuration wizard to add the new server to the farm. This way, you have a snapshot of the upgraded state of the server, complete with any of the files or components you need in order for the sites to render correctly.

## Add a front-end Web server to an upgraded server farm

Perform these steps on a server that has been prepared with an image taken from another front-end Web server in your farm. You can add a front-end Web server by using the SharePoint Products and Technologies Configuration wizard or the psconfig.exe command-line tool.

Use the following procedure to use the SharePoint Products and Technologies Configuration wizard to add a front-end Web server to your upgraded farm.

procedure_ddAdd a front-end Web server to an upgraded server farm by using the configuration wizard

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| --- |
| 1. Click Start, point to All Programs, point to Administrative Tools, and then click SharePoint Products and Technologies Configuration Wizard.  2. In the SharePoint Products and Technologies Configuration wizard, on the Welcome to SharePoint Products and Technologies page, click Next.  A message appears, notifying you that Internet Information Services (IIS), the SharePoint Administration Service, and the SharePoint Timer Service may need to be restarted or reset during configuration.  3. Click Yes to continue with the wizard.  4. On the Connect to a server farm page, select Yes, I want to connect to an existing server farm, and then click Next.  5. On the Specify Configuration Database Settings page, in the Database server box, type the name of the database server used for the farm you are connecting to, and then click Retrieve Database Names.  6. In the Specify Database Access Account section, type the user name and password to use to connect to Microsoft SQL Server™, and then click Next.  note_ddNote:  This account must have rights to create databases. If SQL Server is running on a separate server from your front-end Web server, then this account must also be a domain account. This user account must be a member of the following SQL Server security roles: Database Creator and Security Administrator.  7. In the Completing the SharePoint Products and Technologies Configuration wizard page, verify the settings, and then click Next.  The configuration wizard runs.  8. On the Configuration Successful page, review the settings that have been configured, and then click Finish. |

Use the following procedure to use the psconfig.exe command-line utility to add a front-end Web server to your upgraded farm.

procedure_ddAdd a front-end Web server to an upgraded server farm by using the command line

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| --- |
| 1. Open a command prompt window and change to the following directory:  %PROGRAMFILES%\Common Files\Microsoft Shared\web server extensions\12\bin  2. Run the following command:  psconfig –cmd configdb –connect –server <database\_server> -database <database\_name>  Note that the database\_name above should be the name of the configuration database for the upgraded farm you want to connect to. |

For more information about adding a front-end Web server to your server farm, see [Simple farm deployment (Office SharePoint Server)](#DSDOC_356d3a0b_fc26_455c_9afb_6d2ffdceef).

## Add an application server to an upgraded server farm

Perform these steps on a server that has been prepared with an image taken from another application server in your farm. You can add an application server by using the SharePoint Products and Technologies Configuration wizard or the psconfig.exe command-line tool.

Use the following procedure to use the SharePoint Products and Technologies Configuration wizard to add an application server to your upgraded farm.

procedure_ddAdd an application server to an upgraded server farm by using the configuration wizard

|  |
| --- |
| 1. Click Start, point to All Programs, point to Administrative Tools, and then click SharePoint Products and Technologies Configuration Wizard.  2. In the SharePoint Products and Technologies Configuration wizard, on the Welcome to SharePoint Products and Technologies page, click Next.  A message appears, notifying you that Internet Information Services (IIS), the SharePoint Administration Service, and the SharePoint Timer Service may need to be restarted or reset during configuration.  3. Click Yes to continue with the wizard.  4. On the Connect to a server farm page, select Yes, I want to connect to an existing server farm, and then click Next.  5. On the Specify Configuration Database Settings page, in the Database server box, type the name of the database server used for the farm you are connecting to, and then click Retrieve Database Names.  6. In the Specify Database Access Account section, type the user name and password to use to connect to SQL Server, and then click Next.  note_ddNote:  This account must have rights to create databases. If SQL Server is running on a separate server from your application server, then this account must also be a domain account. This user account must be a member of the following SQL Server security roles: Database Creator and Security Administrator.  7. In the Completing the SharePoint Products and Technologies Configuration wizard page, verify the settings, and then click Next.  The configuration wizard runs.  8. On the Configuration Successful page, review the settings that have been configured, and then click Finish.  9. In Central Administration, on the Operations page, click Services on server.  10. In the Server box, select Change Server, and then in the Select Server box, select the new server.  11. Under Select server role to display services you will need to start in the table below, select the appropriate role.  12. If needed, under Start services in the table below, click Start next to any services that are not running. |

Use the following procedure to use the psconfig.exe command-line utility to add an application server to your upgraded farm.

procedure_ddAdd an application server to an upgraded server farm by using the command line

|  |
| --- |
| 1. Open a command prompt window and change to the following directory:  %PROGRAMFILES%\Common Files\Microsoft Shared\web server extensions\12\bin  2. Run the following command:  psconfig –cmd configdb –connect –server <database\_server> -database <database\_name>  Note that the database\_name above should be the name of the configuration database for the upgraded farm you want to connect to.  3. In Central Administration, on the Operations page, click Services on server.  4. In the Server box, select Change Server, and then in the Select Server box, select the new server.  5. Under Select server role to display services you will need to start in the table below, select the appropriate role.  6. If needed, under Start services in the table below, click Start next to any services that are not running. |

For more information about adding an application server to your server farm, see [Simple farm deployment (Office SharePoint Server)](#DSDOC_356d3a0b_fc26_455c_9afb_6d2ffdceef).

## Add a back-end database server to an upgraded server farm

For a database server, you do not need to use an image from another server in your server farm. You can simply install SQL Server and then join the server to the farm. For more information about adding a database server to your server farm, see [Simple farm deployment (Office SharePoint Server)](#DSDOC_356d3a0b_fc26_455c_9afb_6d2ffdceef).

# H. Welcome to Office SharePoint Server 2007

## H. Welcome to Office SharePoint Server 2007



# Chapter overview: Welcome to Microsoft Office SharePoint Server 2007

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

The process of moving from Microsoft Office SharePoint Portal Server 2003 to Microsoft Office SharePoint Server 2007 is complete, as far as the data set goes, after you have finished upgrade. However, Office SharePoint Server 2007 has many more capabilities than SharePoint Portal Server 2003, and many things work a little differently than they did before. This chapter helps you orient yourself to the new capabilities and new ways of working in the new environment.

In this chapter:

 [Comparison of key features](#DSDOC_bacce8ce_02cb_439e_83a7_275200c920)

 [Tips and tricks for the new environment](#DSDOC_c60918f7_5076_480c_b258_cab9f26517)

# Comparison of key features

In this article:

 [New concepts and terminology](#DSDOC_section1bacce8ce_02cb_439e_83a7_27)

 [New or changed processes in the server administration experience](#DSDOC_section2bacce8ce_02cb_439e_83a7_27)

 [New or changed features for searching](#DSDOC_section3bacce8ce_02cb_439e_83a7_27)

 [New or changed features in the authoring and site management experience](#DSDOC_section4bacce8ce_02cb_439e_83a7_27)

 [Changes to areas](#DSDOC_section5bacce8ce_02cb_439e_83a7_27)

 [Other changes](#DSDOC_section6bacce8ce_02cb_439e_83a7_27)

Microsoft Office SharePoint Server 2007 has a new architecture and includes many new capabilities. These changes mean that some ways that you are used to working with your sites and pages may not work or may not be the most effective ways. The following tables help you understand some of the key changes to terminology and features that immediately affect the administration and site management process after upgrading. For more information about changes to Office SharePoint Server 2007, see What's New for IT Professionals in Office SharePoint Server 2007.

## New concepts and terminology

The following concepts and terminology have been updated or added to reflect the new architecture and design of Office SharePoint Server 2007.

|  |  |  |
| --- | --- | --- |
| SharePoint Portal Server 2003 concept or term | Office SharePoint Server 2007 concept or term | Comments |
| Virtual server | Web application | Change in terminology. |
| Shared services | Shared Service Providers | The architecture behind shared services has changed quite a bit, to allow easier and more flexible sharing of resources. For more information, see Plan shared services providers. |
| Areas | Subsites | SharePoint Portal Server 2003 areas are upgraded to subsites in the new version. To manage your site, on the Site Actions menu, click Manage Content and Structure. |
| Portal Security | Windows SharePoint Services Security | Portal security is now managed using the new Windows SharePoint Services 3.0 security model. The groups and users are upgraded to this model. For more information about the new security model, see Chapter overview: Plan site and content security (Office SharePoint Server). |
| Custom authentication | New authentication choices | You can now use ASP.NET authentication methods, such as Forms authentication, with Office SharePoint Server 2007 instead of having to create a completely custom authentication solution. For more information, see Plan authentication methods (Office SharePoint Server). |
|  | Rights management | Now available for documents stored in document libraries. |
| SharePoint Portal Server 2003 backward-compatible document libraries | Office SharePoint Server 2007 document libraries | SharePoint Portal Server 2003 backward-compatible document libraries are not supported for Office SharePoint Server 2007. You can move any content stored in these libraries into standard document libraries in Office SharePoint Server 2007. A tool for migrating this content is under development. For more information, see [Perform post-upgrade steps for a gradual upgrade (Office SharePoint Server)](#DSDOC_63f1755d_6d6d_4554_adce_c259fe346a) or [Perform post-upgrade steps for an in-place upgrade (Office SharePoint Server)](#DSDOC_7d4d75f0_fe37_4ade_809e_d68c730a07). |

## New or changed processes in the server administration experience

The server administration experience has been redesigned to make delegation and auditing easier, and to enhance the administration experience.

|  |  |
| --- | --- |
| SharePoint Portal Server 2003 process | Office SharePoint Server 2007 process |
| Create IIS Web sites using IIS tools | Create and configure IIS Web sites in Central Administration instead. |
| Difficult to know which tasks are high priority and must be performed first | New Task List in Central Administration directs you to high priority tasks that must be completed before you proceed to create or configure sites. |
| Server administrators have access to site content by default. | Server administrators must take ownership of a site collection to view site content. |

## New or changed features for searching

The search functionality has been updated and revised. The following table lists and explains many of these changes. For more information, see [How search features are affected by upgrade](#DSDOC_e96a7f61_4287_40f9_b7c0_2763e1fd93).

|  |  |  |
| --- | --- | --- |
| SharePoint Portal Server 2003 feature | Office SharePoint Server 2007 feature | Comments |
| "This Portal"/"Non-Portal" content sources | Default content source | Scope has changed from Portal Administration to Shared Service Provider. |
| Custom content sources | Content sources | Scope has changed from Portal Administration to Shared Service Provider. |
| Best bets | Best bets | Scope has changed from Portal Administration to Site. |
| Schedules | Content sources | Scope has changed from Portal Administration to Schedules. |
| Indexes | Indexes | In Office SharePoint Server 2007, there is only one index per farm, rather than multiple indexes with aggregated results as in SharePoint Portal Server 2003. |
| SharePoint Portal Server 2003 administrative object model |  | The SharePoint Portal Server 2003 administrative object model has been deprecated in Office SharePoint Server 2007. This means that any custom applications that rely on the Customers SharePoint Portal Server 2003 administrative object model will have to be rewritten to use the new object model in Office SharePoint Server 2007. |

## New or changed features in the authoring and site management experience

Much has changed in the authoring and site management experience. For example, the following changes are immediately apparent when you open and edit your site in Office SharePoint Server 2007.

 The Pages library. In Office SharePoint Server 2007, all landing pages, including default.aspx, are stored in the Pages library, and their URLs have changed to "http://site\_name/pages/default.aspx" instead of just "http://site\_name/default.aspx". This is expected, and is because of the addition of the publishing capabilities of Office SharePoint Server 2007. With this change, landing pages are simply documents that you can check out, edit, and then republish.

 Page layouts and master pages. In Office SharePoint Server 2007, all ghosted (non-customized) pages are converted to use master pages and page layouts to control the page design. If you have unghosted pages in your site (pages that were customized using FrontPage 2003), you can update these pages to use master pages and page layouts for a consistent look throughout your site. For more information, see [Reapply customizations in the browser and Microsoft Office SharePoint Designer 2007](#DSDOC_da3e6cbb_a478_4c7a_ae5a_4560c62206).

 Version control. Version control for pages in the pages library is on by default, so you must check them out before making changes.

note_ddNote:

Version control can help manage your changes, so you can recover if someone makes a mistake. However, if you want to turn it off, you can do so. Version control is highly recommended if you have multiple people making changes to your site.

For more information about the publishing capabilities in Office SharePoint Server 2007, see Plan Web pages and Plan content approval and scheduling.

You may notice the following changes when authoring or managing the site.

|  |  |  |
| --- | --- | --- |
| SharePoint Portal Server 2003 feature | Office SharePoint Server 2007 feature | Comments |
| Default.aspx | Pages/default.aspx | Pages are a new construct in Office SharePoint Server 2007. Landing pages are stored in a list called Pages. You can schedule, approve, and publish pages. For more information about site content management, see the topics under Web Content Management in the Office SharePoint Server 2007 help system or the topics under Page layouts and publishing sites in the Microsoft Office SharePoint Designer 2007 help system. |
| Listings Web Part | Content by Query Web Part or Summary Links Web Part | By default, Listings are upgraded to the Content By Query Web Part. This Web Part uses a query to display items in a Links list. The query is configured through Web Part properties. For more authoring and presentation control, consider manually moving Listings links to the Summary Links Web Part after upgrade. |
| Listings Approval Status | Approval status values have changed | The status values for SharePoint Portal Server 2003 listings items will be upgraded as follows:  Expired - changes to Rejected  Yet-to-appear - changes to Pending  Approved - no change  Pending - no change  Reject/Archived - changes to Denied |
| Targeting Areas | Targeting Pages | To target a site after upgrade, you must enable targeting on the Welcome page of a site. For more information about targeting, see Chapter overview: Plan for personalized content and sites. |
| Site Directory | Site Directory | The site directory has new pages after upgrade in order to show organizational categories. |
| News Listings | Links list items and pages | News listings are upgraded to Links lists or pages. |
| The Site Designer site group did not include the Apply Themes and Borders permission | The Design permission level can now include this permission | If you want to enable upgraded users with the Design permission level to use this permission, you must edit the Design permission level to include the right. (This permission is included for new users, but not for upgraded users.) For more information, see Manage permission levels in the Office SharePoint Server 2007 Help system. |

## Changes to areas

Areas have been redesigned to be easier to edit and manage.

|  |  |
| --- | --- |
| Change | Comments |
| Areas are now subsites | During upgrade, areas are converted to subsites of the portal. The home area becomes the top-level site in the site collection, and the next-level areas become subsites of that site, and so on. This changes the physical hierarchy for the portal to match the logical area hierarchy of the SharePoint Portal Server 2003 portal site, and also affects the URLs, as discussed below. |
| Portal URLs may have changed | URLs for sites and subsites in Office SharePoint Server 2007 are updated to match the physical hierarchy structure of the portal site. So rather than seeing http://portal\_name/c2/area\_name, you'll see http://portal\_name/area\_name or http://portal\_name/sites/site\_name. |

## Other changes

In addition to the above, you may notice the following changes to your environment.

|  |  |
| --- | --- |
| Change | Comments |
| Client applications have trouble with the redirects | The Microsoft Office client applications do not work with the 302 redirects used to redirect users from an old URL to the new URL. For example, if a user attempts to open a document directly from their Word application using the original URL, they may get an error. However, the browser does work with the 302 redirects, so if a user is having trouble with the client applications, have them use the browser to retrieve the files they need instead. |
| MySites have new look, features | During upgrade, the MySites are upgraded to include the new look and new features available in Office SharePoint Server 2007. |
| Deprecated Web Parts: Office 2003 Web Components and MSNBC Web Parts | The Office Web Components will continue to work in the new version if you upgrade using in-place or gradual upgrade. However, the database migration approach does not work for these components, because they can only be installed in a Windows SharePoint Services 2.0 or SharePoint Portal Server 2003 environment. If you are upgrading to the Office SharePoint Server 2007 Enterprise Client Access License (CAL), consider using the Excel Services capabilities in your new environment instead of the Office Web Components.  The MSNBC Web Parts have been deprecated and will no longer be available to use. Consider using the RSS Viewer Web Part to connect to an RSS feed or use an XSLT in conjunction with the XMLS Web Part to render an RSS feed from MSNBC instead. |

# I. Migrating from Microsoft Content Management Server 2002 to Office SharePoint Server 2007

## I. Migrating from Microsoft Content Management Server 2002 to Office SharePoint Server 2007



# Chapter overview: Migrating from Microsoft Content Management Server 2002 to Microsoft Office SharePoint Server 2007

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

In this chapter:

 [Plan and prepare for migration from MCMS 2002](#DSDOC_0d14c416_0750_492b_9205_7accff1338)

 [Migrate from MCMS 2002](#DSDOC_34b53a6a_0b7e_4d72_935c_4fd3bd701b)

For information about migrating from Microsoft Content Management Server 2002 to Microsoft Office SharePoint Server 2007, read the following articles:

 [Planning MCMS 2002 Application Migration to SharePoint Server 2007](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMS2002PlanningForMigration.asp) (http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMS2002PlanningForMigration.asp)

 [Assessing and Analyzing Your MCMS 2002 Application for Migration](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSAssessAnalyzing2002Application.asp) (http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSAssessAnalyzing2002Application.asp).

 [SharePoint Server 2007 for MCMS 2002 Developers](http://msdn2.microsoft.com/en-us/library/ms406043.aspx)

(http://msdn2.microsoft.com/en-us/library/ms406043.aspx)

 [Mapping MCMS 2002 APIs to SharePoint Server 2007](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp)

(http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp)

 Download the [MCMS 2002: CMS Assessment Tool](http://www.microsoft.com/downloads/details.aspx?FamilyId=360D0E83-FA70-4C24-BCD6-426CAFBCC627&displaylang=en)

(http://www.microsoft.com/downloads/details.aspx?FamilyId=360D0E83-FA70-4C24-BCD6-426CAFBCC627&displaylang=en)

More information is available at the [Office Developer Center: Migration and Upgrade Information for SharePoint Developers](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp) site (http://msdn.microsoft.com/office/server/moss/2007/migration/).

# Plan and prepare for migration from MCMS 2002

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

For information about migrating from Microsoft Content Management Server 2002 to Microsoft Office SharePoint Server 2007, read the following articles:

 [Planning MCMS 2002 Application Migration to SharePoint Server 2007](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMS2002PlanningForMigration.asp) (http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMS2002PlanningForMigration.asp)

 [Assessing and Analyzing Your MCMS 2002 Application for Migration](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSAssessAnalyzing2002Application.asp) (http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSAssessAnalyzing2002Application.asp).

 [SharePoint Server 2007 for MCMS 2002 Developers](http://msdn2.microsoft.com/en-us/library/ms406043.aspx)

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 [Mapping MCMS 2002 APIs to SharePoint Server 2007](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp)

(http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp)

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(http://www.microsoft.com/downloads/details.aspx?FamilyId=360D0E83-FA70-4C24-BCD6-426CAFBCC627&displaylang=en)

More information is available at the [Office Developer Center: Migration and Upgrade Information for SharePoint Developers](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp) site (http://msdn.microsoft.com/office/server/moss/2007/migration/).

# Migrate from MCMS 2002

note_ddNote:

This content is preliminary content. It might be incomplete and is subject to change.

For information about migrating from Microsoft Content Management Server 2002 to Microsoft Office SharePoint Server 2007, read the following articles:

 [Planning MCMS 2002 Application Migration to SharePoint Server 2007](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMS2002PlanningForMigration.asp) (http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMS2002PlanningForMigration.asp)

 [Assessing and Analyzing Your MCMS 2002 Application for Migration](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSAssessAnalyzing2002Application.asp) (http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSAssessAnalyzing2002Application.asp).

 [SharePoint Server 2007 for MCMS 2002 Developers](http://msdn2.microsoft.com/en-us/library/ms406043.aspx)

(http://msdn2.microsoft.com/en-us/library/ms406043.aspx)

 [Mapping MCMS 2002 APIs to SharePoint Server 2007](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp)

(http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp)

 Download the [MCMS 2002: CMS Assessment Tool](http://www.microsoft.com/downloads/details.aspx?FamilyId=360D0E83-FA70-4C24-BCD6-426CAFBCC627&displaylang=en)

(http://www.microsoft.com/downloads/details.aspx?FamilyId=360D0E83-FA70-4C24-BCD6-426CAFBCC627&displaylang=en)

More information is available at the [Office Developer Center: Migration and Upgrade Information for SharePoint Developers](http://msdn.microsoft.com/office/server/moss/2007/migration/default.aspx?pull=/library/en-us/dnmscms02/html/CMSVersionAPIDiffs.asp) site (http://msdn.microsoft.com/office/server/moss/2007/migration/).

# Upgrading from Office SharePoint Server 2007 Beta 2 Technical Refresh to Release Version

Follow the instructions in this article carefully when you upgrade from Office SharePoint Server 2007 Beta 2 Technical Refresh to the release version.

During upgrade, your farm will be offline for a period of time while the databases are upgraded to the release version of the product. Be sure to notify your customers in advance.

In this article:

 [Prepare for upgrade](#DSDOC_section13df597d0_bad0_4c73_9c26_a1)

 [Uninstall Office SharePoint Server 2007 Beta 2 Technical Refresh](#DSDOC_section23df597d0_bad0_4c73_9c26_a1)

 [Install the release version of Office SharePoint Server 2007](#DSDOC_section33df597d0_bad0_4c73_9c26_a1)

 [Uninstall and reinstall the Microsoft .NET Framework version 3.0](#DSDOC_section43df597d0_bad0_4c73_9c26_a1)

## Prepare for upgrade

Perform the procedures in this section on every server computer in your farm.

procedure_ddDelete failed timer jobs

|  |
| --- |
| 1. Open SharePoint Central Administration.  2. On the top navigation bar, click Operations.  3. In the Global Configuration section, click Timer job definitions.  4. On the Timer Job Definitions page, look for backup and restore or upgrade timer jobs in the list. If any exist, delete them by clicking the timer job and then clicking Delete on the page that appears. |

procedure_ddRecord current server information

|  |
| --- |
| 1. Record the name of every server computer that hosts SharePoint 3.0 Central Administration.  2. Record the following information for each server computer:   Server type   When you install the release version, you will need to specify the same server type that you have currently installed for each server computer in your farm.  note_ddNote:  The server type of a computer is located in the HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Shared Tools\Web Server Extensions\12.0\WSS\ServerRole registry subkey. The values are singleserver for Basic installations, and either WFE (commonly referred to as "Web front end") or Complete (commonly referred to as "application server") for Advanced (farm) installations.   Enterprise versus Standard SKU   When you installed Beta 2 Technical Refresh, you entered a PID key that enabled either Standard or Enterprise features of the product. When you install the release version, you must enter a PID key that corresponds to the same Standard/Enterprise choice that you made for Beta 2 Technical Refresh. To find out which license you have installed, open SharePoint Central Administration, click Operations on the top navigation bar, and then click Enable Enterprise Features in the Upgrade and Migration section.  If you installed Beta 2 Technical Refresh with a Standard PID key, you can install the release version with either a Standard or an Enterprise PID key.  If you installed Beta 2 Technical Refresh with an Enterprise PID key, you must install the release version with an Enterprise PID key.  note_ddNote:  In Beta 2, Enterprise features were referred to as "Premium" features; if you see "Enable Premium Features" on the above page, you must first upgrade to Beta 2 Technical Refresh.   Central Administration application pool account and password   You will need to use the same account and password when you install the release version. |

procedure_ddModify the registry setting for the configuration database connection

|  |
| --- |
| 1. On the Start menu, click Run. In the Open box, type  regedit  and then click OK.  2. In the Registry Editor, navigate to the following subkey:  HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Shared Tools\Web Server Extensions\12.0\Secure\ConfigDB  3. On the File menu, click Export, and in the File name box, type  SharePointRegKeyBackup  This backs up the subkey so you can restore it to your registry later, if necessary.  4. Under the registry subkey, right-click the dsn value, and then click Rename.  5. Type  dsn2  for the name, and then press ENTER to save your changes.  caution_ddCaution:  Be sure to check that you have renamed the registry key to dsn2. If you fail to perform this step, upgrade will fail and you will have to manually upgrade the content databases to a new installation. This step is required for the installation process to detect and upgrade Beta 2 Technical Refresh to the release version.  6. Close the Registry Editor. |

procedure_ddDelete existing SharePoint Products and Technologies Configuration Wizard logs

|  |
| --- |
| 1. Open a command window.  2. At the command prompt, type  cd "%programfiles%\common files\microsoft shared\web server extensions\12\logs"  and then press ENTER.  3. At the command prompt, type  del psc\*.log  and then press ENTER. |

## Uninstall Beta 2 Technical Refresh

Perform the procedure in this section on all server computers in your farm. You can perform the steps in parallel across all server computers, or complete the procedure on each computer before moving to the next.

procedure_ddUninstall Beta 2 Technical Refresh

|  |
| --- |
| 1. In Control Panel, double-click Add or Remove Programs.  2. Uninstall all Microsoft Office SharePoint Server 2007 Language Packages.  caution_ddCaution:  You must uninstall all language packs before you uninstall Office SharePoint Server 2007 Beta 2 Technical Refresh. If you do not uninstall all language packs at this point, you will be unable to install the release version of Office SharePoint Server 2007.  3. A message box appears to remind you to run the SharePoint Products and Technologies Configuration Wizard after uninstalling the language packs. You can ignore this reminder; click OK.  4. Select Microsoft Office SharePoint Server 2007, and then click Remove.  5. In the first message box that asks you to confirm that you want to uninstall, click Yes.  6. In the second message box that asks you to confirm that you want to uninstall, click OK.  7. If you are prompted to restart the computer, do so. |

## Install the release version of Office SharePoint Server 2007

The procedure in this section must first be performed on a front-end Web server that hosted the Central Administration Web application in your Beta 2 Technical Refresh installation, which you noted under "Record current server information," earlier in this article. After you successfully complete this procedure on that server computer, perform it on all the other server computers in the farm.

note_ddNote:

If upgrade fails on any server computer, do not run this procedure on any other computer in the farm until you have fixed the problem. After you have fixed the problem, run the SharePoint Products and Technologies Configuration Wizard again to resume upgrade.

procedure_ddInstall Office SharePoint Server 2007 release version

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| 1. Run Setup for the release version of Office SharePoint Server 2007.  2. Follow the steps to install the product. Be sure to select the same server type previously used for this server, and to enter a PID key corresponding to the same license type (Standard or Enterprise) that you selected when you installed Beta 2 Technical Refresh (you noted this information under "Record current server information," earlier in this article). Cancel the SharePoint Products and Technologies Configuration Wizard when it opens.  3. Install any Office SharePoint Server 2007 Language Packages.At the end of every language pack installation, cancel the SharePoint Products and Technologies Configuration Wizard when it opens.  4. Run the SharePoint Products and Technologies Configuration Wizard. Use the Central Administration account and password that you noted under "Record current server information," earlier in this article.  A message box appears to remind you that services will be started; click Yes.  A message box appears to remind you to run the wizard on each server in the farm; click OK.  note_ddNote:  Upgrade may only be run on one server computer in the farm at a time.  Ignore the warning displayed in the wizard that reads Failed to start search service SPSearchServinceInstance on this server after completing upgrade. Please start it manually. You will start this service in step 7.  5. Wait until upgrade has been completed successfully on this server computer.  6. Determine the search topology of the server computer by doing the following:  a. Open SharePoint Central Administration, click Operations on the top navigation bar, and then click Services on Server in the Topology and Services section. On every application server on which the Office SharePoint Server Search service is started, note the following:   If only the Use this server for indexing search content check box is selected, only the INDEXER role is enabled for the server.   If only the Use this server for serving search queries check box is selected, only the QUERY role is enabled for the server.   If both these check boxes are selected, both the INDEXER and QUERY roles are enabled for the server.  7. Open SharePoint Central Administration, click Operations on the top navigation bar, and then click Services on Server in the Topology and Services section. On every application server on which the Office SharePoint Server Search service is started, do the following:  a. On the Start menu, click Run.  b. In the Open box, type  cmd  and then click OK.  c. At the command prompt, type  stsadm –o osearch –action start  and then press ENTER.  8. On every application server on which the INDEXER role is enabled (regardless of whether the QUERY role is enabled), do the following:  a. On the Start menu, click Run.  b. In the Open box, type  regedit  and then click OK.  c. Find all subkeys in the registry that are of the following form: HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Office Server\12.0\Search\Applications\{Application GUID}. For each subkey that has this form, do the following:   Set the (Default) key to On.   Create a new subkey named Gathering Manager.   Create a DWORD value named UseClustering under that subkey (value 0).  a. On the Start menu, click Run.  b. In the Open box, type  cmd  and then click OK.  c. At the command prompt, type  net stop osearch  and then press ENTER.  d. At the command prompt, type  net start osearch  and then press ENTER.  9. On every Web front-end and application server computer in your farm, do the following:  a. On the Start menu, click Run.  b. In the Open box, type  cmd  and then click OK.  c. At the command prompt, type  IISRESET  and then press ENTER.  10. On every application server that you noted in step 6 as having either the INDEXER role or QUERY role (but not both) enabled, do the following:  a. Open SharePoint Central Administration, click Operations on the top navigation bar, and then click Services on Server in the Topology and Services section.  b. (b)On every application server that has the QUERY role enabled (but not the INDEXER role), and on which the Office SharePoint Server Search Service is started, click Stop. Record all server names on which you perform this step. Wait for the status of each search service to change from Stopping to Stopped.  c. On each application server that has the INDEXER role enabled (but not the QUERY role), and on which the Office SharePoint Server Search Service is started, do the following:   On the Start menu, click Run.   In the Open box, type  cmd  and then click OK.   At the command prompt, type  net stop osearch  and then press ENTER.   At the command prompt, type  net start osearch  and then press ENTER. |

After you have installed Office SharePoint Server 2007 release version, check that the Scopes drop-down list on the home page of each portal site displays all the search scopes you expect. If some scopes (for example, All Sites, People, and custom scopes) are missing, perform the following steps for each portal site.

procedure_ddDisplay search scopes on portal home pages

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| 1. Browse to the home page.  2. Click Site Actions, point to Site Settings, and then click Modify All Site Settings.  3. In the Site Collection Administration section, click Search Settings.  4. Click Use custom scopes, and enter the path to the Search Center site. You can obtain the Search Center site URL by right-clicking Search in the top navigation bar on the portal home page, and then clicking Copy Shortcut. If the Search Center site has been customized, obtain the custom URL from your administrator. |

## Uninstall and reinstall Microsoft .NET Framework 3.0

After you have successfully installed the release version and verified that the search service is functional, perform this procedure on every server computer in your farm to install the final release version of the .NET Framework version 3.0.

procedure_ddUninstall and reinstall Microsoft .NET Framework 3.0

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| 1. In Control Panel, click Add or Remove Programs, select Microsoft .NET Framework 3.0, and then remove it.  2. Install the [Microsoft .NET Framework version 3.0](http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409) (http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409). |

1. #section3 [↑](#footnote-ref-2)
2. #section1 [↑](#footnote-ref-3)