

Microsoft SharePoint Server 2010 Services Upgrade

Before you begin

Review updated services infrastructure in SharePoint Server 2010

In Microsoft® SharePoint® Server 2010, services are no longer contained within a Shared Services Provider (SSP); instead, the infrastructure for hosting services moves into Microsoft SharePoint Foundation 2010, and the configuration of service offerings is much more flexible. Individual services can be configured independently, and third-party companies can add services to the platform.

In SharePoint Server 2010, many services that stored data in the SSP database have their own databases — in some cases, several databases. When you enable new services, new databases are also created to store the data for those services.



This model covers upgrading services from Office SharePoint Server 2007 to SharePoint Server 2010. Before you begin the upgrade process, you need to understand how the services infrastructure has changed in SharePoint Server 2010. For further information about the services infrastructure, see the following models:

- **Services model 1 of 2 – Single farm** – Details and examples of the services infrastructure for single farms.
- **Services model 2 of 2 – Cross farm** – Details and examples of using services across farms.

Review other upgrade models

This model covers upgrading the services infrastructure and content from Office SharePoint Server 2007 to SharePoint Server 2010. For further information about how to upgrade to SharePoint Server 2010, see the following models:

- **Upgrade planning** – Information about upgrade requirements and steps to take before beginning the upgrade process.
- **Upgrade approaches** – Details and examples of three types of upgrade approaches: in-place, database attach, and a hybrid of the two.
- **Test your upgrade** – Why and how to test the upgrade process before you upgrade your production environment.
- **Project Server upgrade** – Details about the upgrade process for Project Server 2010.

Considerations for specific services

The following services were available in Office SharePoint Server 2007 and can be upgraded to SharePoint Server 2010. Because the services infrastructure has changed, you need to consider additional factors when planning and performing an upgrade when these services are present in the environment.

Personalization Services

Profiles

- **Services:** In SharePoint Server 2010, two services are now used for user profiles and taxonomy information: the User Profile service and the Managed Metadata service.
 - During in-place upgrade, these two services are automatically enabled and configured.
 - If you are using database attach upgrade, enable and configure the Managed Metadata service before you upgrade the User Profile service.
- **Databases:**
 - During in-place upgrade, user profile data from Office SharePoint Server 2007 is upgraded from the SSP database into a new User Profile database.
 - Any taxonomy data is upgraded, and you can copy the taxonomy data into a Taxonomy database for use by the Managed Metadata service after upgrade has been completed.
 - During a database attach upgrade, user profile and taxonomy data from the SSP database is upgraded when the SSP database is attached, but the database is not copied and renamed. You can copy the taxonomy data into a Taxonomy database for use by the Managed Metadata service after upgrade has been completed by using the `Move-SPProfileManagedMetadataProperty` Windows PowerShell cmdlet.
- Persisted properties that relate to the profiles (such as the MySite Host URL) are preserved during an in-place upgrade, but they are not upgraded when you use database attach because they are stored in the configuration database, not the SSP database.
- Any scheduled timer jobs will need to be reconfigured after upgrade. During upgrade, they are set back to the default times. Be sure to record your timer job schedules before upgrade so you can reapply the times.

My Sites

- Upgrade the My Site host at the same time that you upgrade the profile services. You do not need to upgrade the My Sites themselves at the same time.
- For best results, upgrade My Sites (or at least the My Site host) at the same time as your main intranet site.

Office SharePoint Server Search

- In SharePoint Server 2010, the Search service uses three databases:
 - Search administration database (new): contains Search administration settings that were stored in the SSP database in Office SharePoint Server 2007.
 - Search Service Crawl database (new): contains crawl history information that was stored in the SSP database in SharePoint Server 2007.
 - Search metadata database (reused Search database): contains the metadata for search.
- You cannot upgrade Search data by using the database attach approach for upgrading. If you are using database attach upgrade, you must configure Search in your new farm separately from that is, either before or after) upgrading your other content.
- If you are using the in-place upgrade approach, you should review and adjust your Search topology after upgrade to suit the new recommendations and requirements. For more information, see the [Search models](#).

InfoPath Forms Services

- When you upgrade by using the database attach upgrade approach, you must export any administrator-deployed form templates (XSN files) and data connection files (UDCX files) before migrating, then import them to the new farm after migrating by using the `Export-SPInfoPathAdministrationFiles` Windows PowerShell cmdlet. If the URL of the new server is different from the URL of the previous server, you can run the `Update-SPInfoPathAdminFileUrl` Windows PowerShell cmdlet to update links that are used in the upgraded form templates.
- If you are running Office Forms Server 2007, you can upgrade to SharePoint Server 2010, but you must use the database attach upgrade approach.

More information about upgrading forms and form templates is available in the "Plan to upgrade form templates" article on TechNet.

Excel Services

- Excel Services remains a local service for SharePoint Server 2010. This means that you must run the service in the same farm that consumes it.
- For in-place upgrade, any configuration information stored in the SSP database for Excel Services is upgraded and moved into the configuration database.
- For the database attach upgrade approach, you will have to reconfigure Excel Services in your new farm.
- After upgrade (either in-place or database attach), you will have to provision a new unattended service account by using the Secure Store Service to use with Excel Services.

Business Data Catalog

- During an in-place upgrade, data that was stored in the SSP database is moved and upgraded to a separate database. New service applications are created for the new version of the BDC service. A new service, the Application Registry Backwards-compatible service, is used to manage the old BDC connections.
- The Business Data Catalog is not upgraded when you use the database attach upgrade approach.

Single Sign-On

- The Single Sign-On (SSO) service is being replaced with the Secure Store Service in SharePoint Server 2010. To upgrade application definitions from SSO to the Secure Store Service, use the following Windows PowerShell cmdlets:
 - `Upgrade-SPSingleSignOnDatabase`
 - `Upgrade-SSOConnectionString`
 - `Upgrade-SecureStoreConnectionString`
 - `Upgrade-SecureStorePassphrase`
- Note that passwords are not upgraded. After you upgrade the application definitions, you can make the Secure Store Service the default SSO provider.

In-place upgrade with services

When you perform an in-place upgrade, all of your services infrastructure and the settings for the services themselves are upgraded as part of the process. The following sections and diagrams explain what happens to the different services components during the upgrade process.

Shared Services Providers

- Shared Services Providers (SSPs) are converted to service applications and service application proxies, one per service. They are given default names (for example, if the SSP was named "SharedServices1", the service applications will be named "SharedServices1_Service", as in SharedServices1_Search).
- All SSPs that are upgraded retain their associations with the Web applications that consumed from that SSP.
- All SSP administrators are added to Central Administration as delegated administrators.

Databases

- The SSP database is upgraded, and data is copied into new user profiles and taxonomy databases. Other services information is moved into other service databases or the configuration database.

Sites

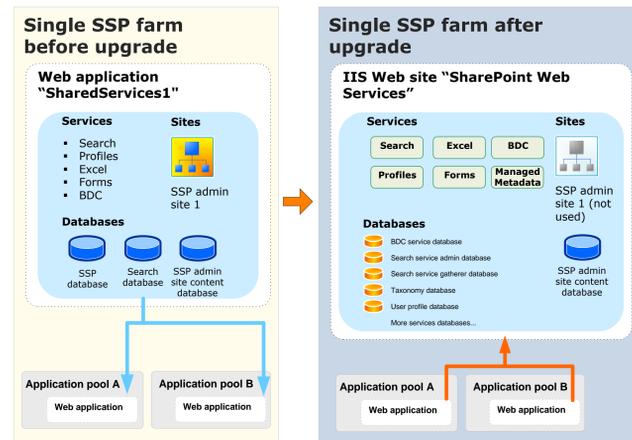
- The SSP Admin site is upgraded as a mostly blank site except for the BDC profile pages. The site can be deleted after upgrade if it is not needed for BDC pages.

Before upgrade

- Collect any settings that must be reapplied, such as scheduled timer job settings.
- Review your services architecture and determine what, if any, changes to make after upgrade.

During upgrade (single SSP)

If you have a single SSP, all proxies for service applications are added to the default proxy group. The following diagrams show the changes to your farm that are made during in-place upgrade.



After upgrade

Configure new and upgraded services

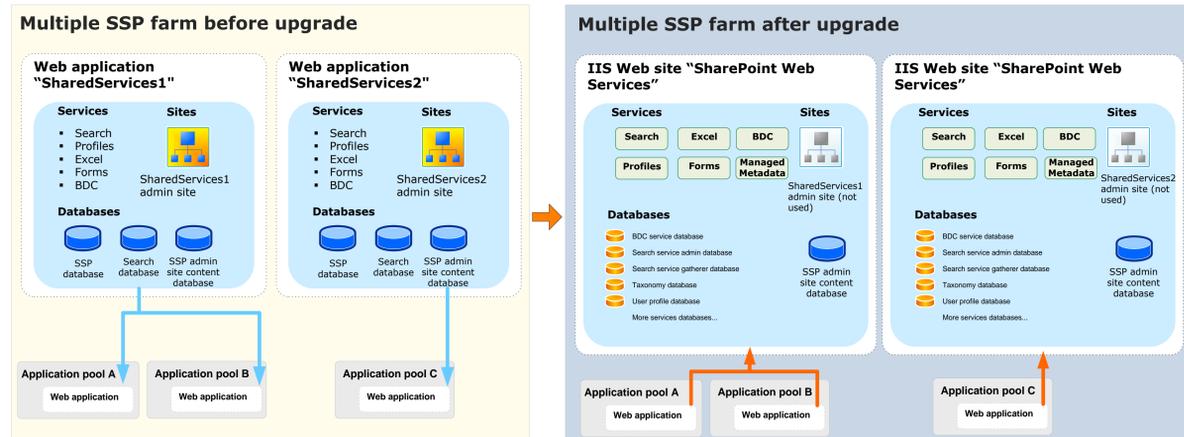
- Many new services are available in SharePoint Server 2010. You can enable these new services after you perform an in-place upgrade.
 - You must create service applications to host any new services. You can use the farm configuration wizard to quickly select and enable several new services in your farm, or you can configure the services manually.
 - You can also add proxies for any service applications that you want to use with different Web applications.
- For Profile Services, upgrade any taxonomy data manually:
- Use the `Move-SPProfileManagedMetadataProperty` Windows PowerShell cmdlet to upgrade profile taxonomy data to the Taxonomy database and reconnect the data to the Managed Metadata and User Profiles service applications.
 - The User Profiles service proxy and Managed Metadata service proxy must be in the same proxy group to upgrade and use the data.

For Excel Services, provision a new unattended service account for the Secure Store Service.

For BDC, consider migrating the BDC profile pages to a new location.

During upgrade (multiple SSPs)

If you have multiple SSPs, they are all upgraded together, and you will have multiple proxy groups after the upgrade. The following diagrams show the changes to your farm that are made during in-place upgrade.



Database attach upgrade with services

Most services settings will need to be reconfigured when you upgrade via database attach. When you move your databases to a new farm and upgrade the content, you must create your services infrastructure in the new farm and configure the services appropriately for your new farm and new version. You can attach the SSP databases from your old farm, but only the profile information in that database is upgraded – any search information or other services settings are not upgraded. You cannot upgrade Search databases by using the database attach upgrade approach.

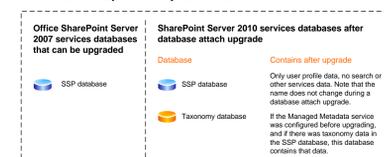
If you are using the database attach approach for upgrading to SharePoint Server 2010, there are several steps to perform before, during, and after the upgrade to successfully reconfigure the services infrastructure.

Before upgrade

- When you configure the new farm, you must also configure the new service applications and service application proxies for the farm, and configure the settings for all services that you want to use.
- If you are using Profile Services, you must also configure the Managed Metadata service to be able to upgrade any taxonomy data from the SSP database.
- For Forms Services, export any administrator-deployed form templates (XSN files) and data connection files (UDCX files) from your Office SharePoint Server 2007 farm by using the following command: `stsadm.exe -o exporttipsadminobjects -filename <path to export CAB>`.
- For Forms Services, import any administrator-deployed form templates and data connection files to your new farm before you attach the content databases. Use the `Import-SPIPAdministrationFiles` Windows PowerShell cmdlet to import the forms.

During upgrade

- When you attach and upgrade the content databases, you also attach and upgrade the SSP database, which upgrades the profile information in the database.
- Upgrade the My Site host at the same time as the User Profiles data (or else set the My Site host and all My Sites to read-only). You do not need to upgrade the My Sites themselves, just the My Site host.



After upgrade

- Reapply administrator permissions for services. By default, farm administrators have permissions to all services when you perform a database attach upgrade.
- For Excel Services, you must provision a new unattended service account by using the Secure Store Service to use with Excel Services.
- For InfoPath Forms Services, update any links that are used in the upgraded form templates by using the `Update-SPInfoPathAdminFileURL` Windows PowerShell cmdlet.
- For Profile Services, upgrade any taxonomy data. You use the `Move-SPProfileManagedMetadataProperty` Windows PowerShell cmdlet to upgrade profile taxonomy data manually to the Taxonomy database and reconnect the data to the Managed Metadata and User Profiles service applications. The User Profiles service proxy and Managed Metadata service proxy must be in the same proxy group to upgrade and use the data.
- For BDC, consider migrating the BDC profile pages to a new location.