

SharePoint Server 2010 – Upgrading Parent and Child Farms

In Microsoft® Office SharePoint® Server 2007, it was possible to set up parent and child farms to share services. In such an environment, the parent farm hosts one or more Shared Services Providers (SSPs) from which one or more child farms consume services. You can choose one of two approaches to upgrade farms that share services. The recommended approach is to upgrade a duplicate of the parent farm (the farm that hosts the shared services) first and then upgrade the child farms. If you need additional time to complete the upgrade of all farms, you can instead create a temporary parent farm to upgrade the child farms (the farms that consume shared services) until the original parent farm can be fully upgraded. Both approaches require you to create an additional parent farm: in the first case, this parent farm is a duplicate of the original farm that you immediately upgrade; in the second case, this parent farm is a new parent farm built on Microsoft SharePoint Server 2010.

Choose an upgrade approach

Depending on your business needs, you can choose one of the following upgrade approaches for parent and child farms.

Recommended: Minimal downtime

Upgrade a duplicate of the parent farm

The recommended approach to upgrading parent and child farms is to upgrade a duplicate of the parent farm, and then upgrade the child farms. After upgrade, you continue with the duplicated parent and turn off the old parent farm.

Benefits of this approach

To provide maximum uptime during the upgrade process, you need to keep the original parent farm running until all the child farms have been upgraded to SharePoint Server 2010. However, because a SharePoint 2010 farm cannot consume services from a SharePoint 2007 farm, this means that there must be another SharePoint 2010 farm that provides services to the child farms until the entire environment is upgraded.

This approach is optimized for minimal downtime during the upgrade process. Because the original parent farm is still available to host services for any child farms that are not yet upgraded, your users can continue working with sites on those farms.

Alternative: Child first

Create a temporary parent farm and upgrade individual child farms

If you need to upgrade a child farm quickly, you can do so by setting up a temporary parent farm in SharePoint Server 2010. In this approach, you create a new parent farm based on SharePoint Server 2010, and then upgrade the child farms individually and configure them to consume services from the new parent. After all child farms have been upgraded, you can upgrade or remove the original parent farm.

Benefits of this approach

This approach is optimized for allowing individual child farms to be upgraded over time. Whenever a child farm is ready to be upgraded, it can be upgraded and start consuming services from the new parent farm, without affecting the original parent farm or other child farms.

Considerations and additional steps

As you plan and perform your upgrade, keep these considerations in mind. These considerations apply to either upgrade approach.

• Don't change authentication types during upgrade

Because both parent farms need to be able to crawl the same content, you should not change authentication types until all farms are upgraded. If you plan to change the authentication type in the upgraded farm, complete the upgrade and then make the change.

• Child farms that have not been upgraded will not have access to the Web analytics available in SharePoint Server 2010

This might not matter in the short term, but — depending on how long your farms are in a mixed upgrade state — the data could be skewed because it is split between two analytics systems and will not be combined.

• You need to perform specific steps to upgrade your services

Search, User Profiles, Business Data Catalog, and other services have specific steps that must be performed before, during, and after upgrade. For more information, see the [Services Upgrade](http://go.microsoft.com/fwlink/?LinkId=167107) model (<http://go.microsoft.com/fwlink/?LinkId=167107>).

Additional resources

This model covers the process for upgrading farms that share services. For further information about how to upgrade to SharePoint 2010 Products, 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 upgrade approaches: in-place upgrade, database attach upgrade, or a hybrid of the two.
- **Test Your Upgrade Process** – Why and how to test the upgrade process before you upgrade your production environment.
- **Services Upgrade** – What steps you need to perform when upgrading shared services to SharePoint Server 2010.

For detailed information and steps for upgrading, see the following Resource Center:

- [Upgrade and Migration for SharePoint Server 2010](#)

Process for upgrading parent and child farms

The following diagrams explain the processes for each approach to upgrading parent and child farms.

How to upgrade by using a duplicate parent farm

1 Duplicate the parent farm

- Back up Parent Farm 1.
- Restore the parent farm to a new farm, Parent Farm 2.

2 Upgrade the new parent farm

- Upgrade Parent Farm 2 to SharePoint Server 2010.
- Optional: Configure synchronization for Parent Farm 1 and Parent Farm 2:
 - Configure crawling – both farms should crawl the same content.
 - Use the profile replication tool to keep user profile store in sync across farms.
 - Manually keep Business Data Catalog manifests and changes in sync.
- Publish the service applications that will be used by child farms (at a minimum, these include Search, Business Data Catalog, and User Profiles).

The synchronization steps are optional, but will ensure that the child farms have a smooth experience with minimal loss of configuration or content as they move from the Office SharePoint Server 2007 parent farm to the SharePoint Server 2010 parent farm.

3 Upgrade the first child farm

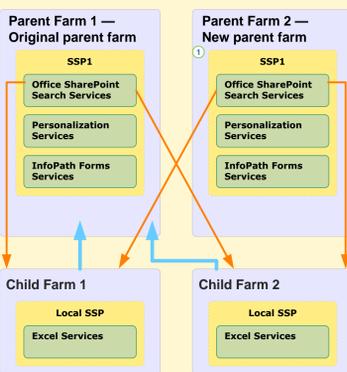
- Upgrade the first child farm, Child Farm 1, to SharePoint Server 2010.
- Ensure that local service applications (such as Excel Services) are configured and working on Child Farm 1.
- Configure Child Farm 1 to start consuming services from Parent Farm 2.

4 Upgrade remaining child farms

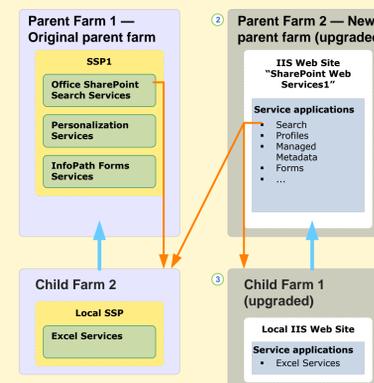
- Repeat step 3 for all remaining child farms in the environment.

5 Remove the original parent farm

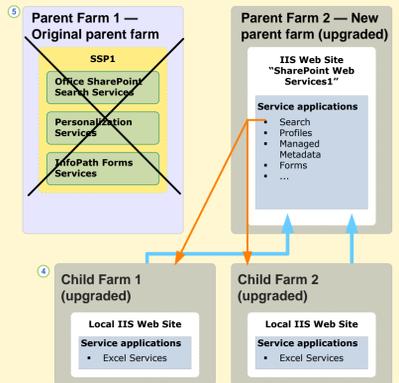
Original farms before upgrade



Farms during upgrade



Farms after upgrade



How to upgrade by using a temporary parent farm

1 Create a new parent farm

- Create and configure a new parent farm, Parent Farm 2.

2 Upgrade the first child farm

- Upgrade the first child farm, Child Farm 1, to SharePoint Server 2010.
- Ensure that local service applications (such as Excel Services) are configured and working on Child Farm 1.
- Configure Child Farm 1 to start consuming services from Parent Farm 2.

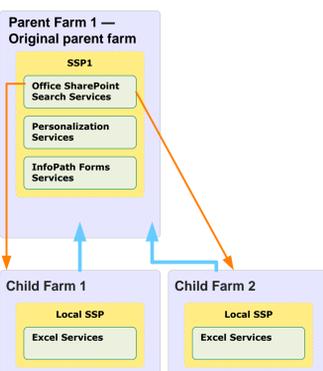
3 Upgrade remaining child farms

- Repeat step 2 for all remaining child farms in the environment.

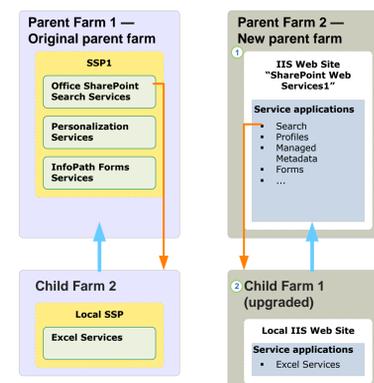
4 Upgrade the original parent farm

- You can either re-associate the child farms with the upgraded parent farm (Parent Farm 1), or continue to use the new parent farm (Parent Farm 2) to host services for the child farms.

Original farms before upgrade



Farms during upgrade



Farms after upgrade

