

Perform a search-first migration (SharePoint Server 2010)

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Perform a search-first migration (SharePoint Server 2010)

Microsoft Corporation

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**Applies to**:Microsoft® SharePoint® Server 2007, Microsoft SharePoint Server 2010

Summary: Search-first migration enables organizations that are using enterprise search in SharePoint Server 2007 to accelerate adoption of the search capability that is provided by SharePoint Server 2010. This white paper explains how to perform a search-first migration.

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# Introduction to search-first migration

Upgrading to Microsoft® SharePoint® Server 2010 from Microsoft SharePoint Server 2007 provides significant improvements in enterprise search capability. However, policy or resource constraints in an organization sometimes pose challenges that can prevent or postpone a complete upgrade. If your organization is not ready to perform a complete upgrade from SharePoint Server 2007, you can still take advantage of end-user enterprise search capabilities of SharePoint Server 2010 by deploying a solution that is known as *search-first migration*.

## What is search-first migration?

To implement a search-first migration, you migrate only the search settings from a SharePoint Server 2007 farm to a new SharePoint Server 2010 farm. You then configure the SharePoint Server 2007 farm to forward search queries to the new farm, where the queries will be processed. When the search-first migration is complete, the new farm provides search functionality of SharePoint Server 2010 for searches in the SharePoint Server 2007 farm or the SharePoint Server 2010 farm. For example, a user who types a search query in either farm can take advantage of SharePoint Server 2010 features such as prefix matching, Boolean query syntax, phonetic name matching, and query suggestions. For queries that do not use contextual scopes, the user views the search results on a site in the SharePoint Server 2010 farm and can use search features there such as results refinement, social tags integration, and relevance improvements.

After the search-first migration, the organization can complete the product upgrade at any time that is convenient. In the meantime, the SharePoint Server 2007 farm can continue to provide other SharePoint Server 2007 functionality for the organization as usual. SharePoint Server 2007 features such as sites and content databases are not migrated or upgraded as part of a search-first migration. Functionality that is not related to search does not have to be configured in the new SharePoint Server 2010 farm.

## Supported and unsupported paths for search-first migration

Search-first migration supports only the migration of search capability from a SharePoint Server 2007 farm to a SharePoint Server 2010 farm.

Examples of paths that Microsoft does not support for search-first migration include the following:

* Migration that involves a stand-alone FAST-based product, or a stand-alone FAST-based product that has a Search Center in SharePoint Server 2010. (Stand-alone FAST-based products include FAST Enterprise Search Platform, FAST Search for Internet Sites, and FAST Search for Intranet Applications.)
* Migration that involves Search Server 2008 or Search Server 2008 Express.
* Migration that involves Search Server 2010 or Search Server 2010 Express.
* Migration from a SharePoint Server 2010 search environment to FAST Search Server 2010 for SharePoint.
* Migration from FAST Enterprise Search Platform (ESP) to FAST Search Server 2010 for SharePoint.
* Migration that involves Windows SharePoint Services 3.0 or Microsoft SharePoint Foundation 2010.

## High-level steps for performing a search-first migration

The initial state of the system for performing a search-first migration is a SharePoint Server 2007 production farm that has at least one Shared Services Provider (SSP) in which search functionality is configured and operational. In addition, the User Profile service might be enabled to provide My Sites and people search. Other shared services might also be enabled in SSPs in the SharePoint Server 2007 farm, but those shared services are not relevant to search first-migration.

To complete a search-first migration, you must perform the following steps:

1. Deploy a new SharePoint Server 2010 farm.
When the search-first migration is complete, this farm provides SharePoint Server 2010 search functionality to end users when they submit search queries in the SharePoint Server 2007 farm.
2. Prepare the new farm for search by configuring the following:
* A Web application for search
* At least one Search service application
* At least one Enterprise Search Center
* Optional:
	+ To provide people search capability of SharePoint Server 2010: a User Profile service application for user profiles and My Sites
	+ To provide social-tag search: a Managed Metadata service application
1. Configure the SharePoint Server 2007 farm for search-first migration, as follows:
	1. Configure all search boxes to forward queries to the SharePoint Server 2010 farm. You can perform this process manually, or you can use the scripts in the Metalogix Search Redirection Toolkit for SharePoint Server 2007 to automate the process.
	2. Ensure that all links to Search Centers or Advanced Search pages point to appropriate pages in the SharePoint Server 2010 farm.
	3. Optional: Install the Search Box Replacement Control from Metalogix. When users type search queries in the SharePoint Server 2007 farm, this control does the following:
* Displays query suggestions that it obtains from the search query history in the SharePoint Server 2010 farm.
* Displays the custom scopes that are in the SharePoint Server 2007 farm, or in the SharePoint Server 2010 farm, or both.

For more information about using the Metalogix Software tools mentioned here, see the *Metalogix Search-First Migration User Guide*, which is available from the [Metalogix Search First Migration Accelerator download page](http://go.microsoft.com/fwlink/?LinkId=210942) (http://go.microsoft.com/fwlink/?LinkId=210942).

1. Migrate search settings from the SharePoint Server 2007 farm to the new farm. This includes farm-level, SSP-level, site-collection level, and site-level search settings.
2. Crawl content in both farms:
* Crawl all content in the SharePoint Server 2007 farm by using the search system in the SharePoint Server 2010 farm.
* Crawl content in the SharePoint Server 2007 farm by using the search system in the SharePoint Server 2007 farm.

After you perform the preceding steps and the SharePoint Server 2010 farm finishes full crawls of all content sources, the migration of search to the new farm is complete. You can then notify SharePoint Server 2007 users that they can begin to use the enhanced search functionality provided by SharePoint Server 2010. For more information, see [Train end users to use the search-first environment](#_Train_end_users). When the organization is ready to complete the upgrade, you can migrate the SharePoint Server 2010 content databases and sites and configure other features of the new farm that you want to use. For more information, see [Upgrading to SharePoint Server 2010](http://technet.microsoft.com/en-us/library/cc303420.aspx).

**Note**: The following terms are used in this white paper for brevity:

* Original farm: The SharePoint Server 2007 farm that the organization is using in a production environment, with SharePoint enterprise search deployed.
* New farm: A new SharePoint Server 2010 farm that you deploy and initially use only for the search-first migration.
* Search-first environment: An environment in which a search-first migration is complete. In this environment, end users can use SharePoint Server 2010 search-query features and search-results features when they submit search queries in the original farm or the new farm.

# Plan a new farm for search-first migration

This section discusses planning considerations for deploying and configuring a new server farm for a search-first migration. For this section, it is assumed that you are knowledgeable about deploying, configuring, and operating SharePoint Server 2007 and SharePoint Server 2010, especially with regard to search functionality.

The first main step in a search-first migration is to deploy a new SharePoint Server 2010 farm. In a search-first environment, the purpose of the new farm is to provide SharePoint Server 2010 search functionality for end users when they perform searches in the original farm. To provide search results for the content that is in the original farm, the search system in the new farm must crawl that content, create a content index, and respond to queries from users of the original farm. Therefore, the new farm must accommodate the crawl, index, and query demands that were previously handled by the original farm only. Beyond this minimum requirement, planning the new farm is similar to planning any new search deployment. Depending on how much search load is anticipated in the new farm, the organization might design the new deployment as a dedicated search farm. Or, it might be appropriate to plan the deployment so that it can later also provide other SharePoint Server 2010 services. In either case, the organization should design the new farm to keep the search infrastructure flexible, so that the farm can be scaled out later as necessary to meet evolving business and user requirements. Other planning considerations for the new farm include geographic distribution, governance, high availability, and disaster recovery.

The following articles on TechNet provide information about planning search for a SharePoint Server 2010 farm:

* [Gather information about the current search environment (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/gg398059%28d%3Dlightweight%29.aspx). Collecting information about the current search environment can help you identify requirements as you plan the new farm.
* [Planning and architecture for SharePoint Server 2010](http://technet.microsoft.com/en-us/library/cc261834.aspx). This section on TechNet provides guidance about how to design the logical and physical aspects of a SharePoint Server 2010 farm to provide a scalable, highly reliable, and consistently available system. The section includes resources such as the following:
* Technical Diagrams:
	+ [Search Environment Planning for Microsoft SharePoint Server 2010](http://go.microsoft.com/fwlink/?LinkID=166636) (http://go.microsoft.com/fwlink/?LinkID=166636)
	+ [Search Architectures for SharePoint Server 2010](http://go.microsoft.com/fwlink/?LinkID=166637) (http://go.microsoft.com/fwlink/?LinkID=166637)
	+ [Design Search Architectures for Microsoft SharePoint Server 2010](http://go.microsoft.com/fwlink/?LinkID=166638) (http://go.microsoft.com/fwlink/?LinkID=166638)
* [Services architecture planning (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc560988.aspx)
* Performance and capacity management:
	+ [Capacity management and sizing for SharePoint Server 2010](http://technet.microsoft.com/en-us/library/cc261700.aspx)
	+ [Storage and SQL Server capacity planning and configuration (SharePoint Server 2010)](http://technet.microsoft.com/library/cc298801%28office.14%29.aspx)
	+ [Software boundaries and limits](http://technet.microsoft.com/library/cc262787%28Office.14%29.aspx)
* [Plan for availability (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc748824.aspx). This article describes key decisions in choosing availability strategies for a SharePoint Server 2010 environment.

# Plan to configure search in the new farm

This section describes considerations for planning Search Centers and people search in the new farm.

## Plan Search Center deployment

To configure the new farm for search-first migration, you must deploy at least one Enterprise Search Center site. Search results for queries that are forwarded from the original farm are displayed on a search results page that is associated with a Search Center in the new farm.

In SharePoint Server 2007 and SharePoint Server 2010, search administrators can configure Search Center access for end users by using one of the following approaches:

* **Centralized Search Center**. The farm provides search functionality from a single Web application with an associated site collection and a single Search Center. All queries from the original farm, regardless of which Search Center or other site they originate from, are redirected to the same search results page in the new farm. Multiple site collections provide Search Centers.
* **Decentralized Search Center**. Multiple site collections provide Search Centers.
* **Hybrid of centralized and decentralized Search Centers**. End users access search functionality primarily from one Search Center, but for business reasons such as security, some site collections have separate Search Centers.

For the purpose of search-first migration, we recommend that you use a centralized Search Center in the new farm. A single Search Center is more likely to suffice to meet search demands in SharePoint Server 2010 than in SharePoint Server 2007 for the following reasons:

* A Search service in the SSP of a SharePoint Server 2007 farm can index approximately 50 million items. Users can query in an associated Search Center to obtain search results from that index. By comparison, a Search service application in SharePoint Server 2010 can index approximately 100 million items. Users can query in a single associated Search Center to obtain results from that much larger index.
* In SharePoint Server 2010, a Search Center can serve multiple site collections, which is not the case In SharePoint Server 2007. Therefore, in SharePoint Server 2010, a single Search Center might suffice even when many new site collections are added.

Providing a single Search Center in the new farm also has the following advantages:

* It is quicker and easier to configure the original farm to forward queries to a single Search Center in the new farm.
* It can reduce the amount of work that is required for customization and branding.

As the organization completes the upgrade from SharePoint Server 2007, you can modify the new farm to use a different Search Center approach from the one that you used for the search-first migration. For example, the original farm might use a decentralized or a hybrid Search Center approach, but you might configure the new farm to use a centralized Search Center for the search-first migration. However, as the organization completes the upgrade, you might choose to modify the new farm to use the same Search Center approach as the original farm uses.

## Plan people search

You might also want to consider options for providing people-search functionality in the search-first environment. People search enables end users to find other people in the organization by searching on attributes such as name, department, job title, expertise, or interests. SharePoint Server 2007 and SharePoint Server 2010 can provide this user-related information in profiles that users can access on My Sites.

To provide people-search capability in the search-first environment, you must configure the new farm to obtain information for the content index from user profiles. You can do this in either of the following two ways:

* Deploy and crawl user profiles in the new farm. When you use this approach, end users can take advantage of the new people-search capabilities of SharePoint Server 2010.
* Crawl user profiles that are in the original farm. When you use this approach, end users can take advantage of the people-search capabilities of SharePoint Server 2007 only. People-search capabilities that are new in SharePoint Server 2010, such as phonetic name matching and nickname matching, are not available.

In the first approach, you bring user profiles into the new farm and configure the search system in the new farm to crawl the profiles there. Therefore, in the new farm you have to provision a User Profile service application, create a My Site host location, and deploy My Sites. For more information, see [Plan for My Site Web sites (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc262500.aspx) and [Plan user profiles (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee721054.aspx). If additional user-related information is available in a separate business-application database, you can use a Business Connectivity Services connector to import that data and then use the data to augment the information that is in the user profiles in the new farm. When the search-first migration is complete and an end user performs a people search, the search results appear on a search results page in the new farm. Clicking a people-search result on that page takes the user to a site in the new farm that hosts the content for the search result.

In the second approach, you configure the search system in the new farm to crawl user profiles that are in the original farm. In this case, the only configuration requirement for the new farm is that you must create a content source there that specifies that the system will crawl the user profiles in the original farm. When the search-first migration is complete and a user performs a people search, the search results appear on a search results page in the new farm. Clicking a people-search result on that page takes the user to a site in the original farm that hosts the content for the search result.

If you plan to deploy and crawl user profiles in the new farm, you can use one of the following methods to bring user profiles into the new SharePoint Server 2010 farm:

* Import user profiles from the directory service — for example, Active Directory Domain Services (AD DS) — into the new farm. For more information, see [Plan for profile synchronization (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ff182925.aspx) (http://technet.microsoft.com/en-us/library/ff182925.aspx).Copy user profiles from the original farm to the new farm by using the User Profile Replication Engine (UPRE). The UPRE is an optional component of SharePoint Server 2010 that is part of the SharePoint Administration Toolkit. You can download the toolkit from the [Microsoft Download Center](http://go.microsoft.com/fwlink/?LinkID=196866). For more information, see [Post-installation steps for search (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee808863%28office.14%29.aspx) (http://technet.microsoft.com/en-us/library/ee808863(office.14).aspx) and [User Profile Replication Engine overview (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc663011.aspx) (http://technet.microsoft.com/en-us/library/cc663011.aspx).

In some cases, organizations face constraints in importing user profiles from the directory service. In such cases, an organization can use UPRE to bring user profiles into the new farm. Otherwise, the organization can delay bringing user profiles into the new farm (and then crawling the profiles in the new farm) until it is more convenient. In the meantime, the administrator can configure the new farm to crawl the user profiles that are in the original farm.

# Configure the new farm for search-first migration

This section describes how to configure a new farm for a search-first migration. The section assumes that you have planned and deployed the new farm to meet the needs of your organization so that you are ready to configure the farm for search. For more information, see [Plan a new farm for search-first migration](#_Plan_a_new) and [Deployment for SharePoint Server 2010](http://technet.microsoft.com/en-us/library/cc262957.aspx) (http://technet.microsoft.com/en-us/library/cc262957.aspx).

To configure the new farm for a search-first migration, you must do each of the following:

1. [Ensure that a Web application exists that you want to use for search](#_Ensure_that_a).
2. [Ensure that a Search service application exists](#_Ensure_that_a_1).
3. [Ensure that the Web application for search is connected to a Search service application](#_Ensure_that_the).
4. [Ensure that there is at least one Enterprise Search Center in the new farm](#_Ensure_that_an).

To configure the new farm for a search-first migration, you can also do each of the following:

* [Optional: Provide people-search](#_Optional:_Provide_people)
* [Optional: Provide social-tag search capability (search that crawls social tags) by using a Managed Metadata service application](#_Optional:_Provide_social)

## Ensure that a Web application exists for search

You must ensure that there is at least one Web application for search. This Web application will consume a Search service application and will host the site collections of one or more Enterprise Search Centers. For performance and governance reasons, we recommend that you configure a Web application that is dedicated to search.

### To ensure that a Web application exists for search

1. Verify that the user account that is performing this procedure is a member of the Farm Administrators group.
2. On the Home page of the Central Administration Web site, in the **Application Management** section, click **Manage web applications**. The Web Applications Management page opens and shows a list of all Web applications in the server farm.
3. Determine whether there is a Web application in the list that you want to dedicate to search.
4. Create a Web application to dedicate to search if one does not already exist.
**Note**: When you use the Farm Configuration Wizard to create a site collection, the wizard automatically creates a Web application named SharePoint – 80. You can dedicate this Web application for search, or you can create a different Web application for this purpose. For more information, see [Create a Web application (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc261875.aspx) (http://technet.microsoft.com/en-us/library/cc261875.aspx).

## Ensure that a Search service application exists

You must ensure that there is at least one Search service application in the new farm that is associated with the Web application that you want to dedicate to search.

### To ensure that a Search service application exists

1. Verify that the user account that is performing this procedure is a member of the Farm Administrators group.
2. On the Home page of the Central Administration Web site, in the **Application Management** section, click **Manage service applications**.
3. On the **Manage Service Applications** page, if there is no Search service application in the list of service applications, create a Search service application by using the following procedure.

### To create a Search service application

Create a Search service application in one of the following ways:

* Use the procedure [Create a new Search service application (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/gg502597.aspx) (http://technet.microsoft.com/en-us/library/gg502597.aspx).
* Use the Farm Configuration Wizard to create a Search service application by doing the following:
	+ 1. On the Home page of the Central Administration Web site, in the Quick Launch, click **Configuration Wizards**.
		2. On the Configuration Wizards page, click **Launch the Farm Configuration Wizard**.
		3. On the Help Make SharePoint Better page, click the option that is appropriate for your organization, and then click **OK**.
		4. On the Configure your SharePoint farm page, select **Yes, walk me through the configuration of my farm using this wizard**, and then click **Start the Wizard**.
		5. On the Configure your SharePoint farm page, in the **Services** section, ensure that the **Search service application** check box is selected.
		6. On the Configure your SharePoint farm page, ensure that other settings are configured as appropriate for your organization.
		7. On the Create Site Collection page, click **Skip**.
		8. On the Configure your SharePoint farm page, click **Finish**.

## Ensure that the Web application is connected to a Search service application

You must ensure that the Web application that you want to use is connected to a Search service application.

### To ensure that the Web application is connected to a Search service application

1. On the Central Administration home page, in the **Application Management** section, click **Manage web applications**.
2. On the Web applications management page, click the Web application that you want to use.
3. In the **Web applications** tab, click **Service Connections**.
4. In the **Configure Service Application Associations** dialog box, ensure that the Search service application that you want to associate with the Web application is selected, and then click **OK**.

## Ensure that an Enterprise Search Center exists

You must ensure that there is at least one Enterprise Search Center in the new farm. For more information, see [Plan Search Center deployment](#_Plan_Search_Center). If there is no Enterprise Search Center in the farm yet, use the following procedure to create one.

### To ensure that there is an Enterprise Search Center in the new farm

1. To determine whether there is an Enterprise Search Center site in the farm, go to the Central Administration home page, click **Application Management**, and then in the **Site Collections** section, click **View all site collections**.
2. Browse to the top-level site of each site collection. If none of the top-level sites is an Enterprise Search Center site and none of those sites has a tab named **Search**, do the following:
	1. Create an Enterprise Search Center site by doing one of the following:
* Automatically create an Enterprise Search Center by using the Create Site Collection page in the Farm Configuration Wizard. For more information, see “To run the Initial Farm Configuration Wizard” in [Install Search Server 2010 or Search Server 2010 Express](http://technet.microsoft.com/en-us/library/ee808898.aspx) (http://technet.microsoft.com/en-us/library/ee808898.aspx).
* Manually create an Enterprise Search Center by using the procedure “To create a Search Center site” in [Post-installation steps for search](http://technet.microsoft.com/en-us/library/ee808863.aspx) (http://technet.microsoft.com/en-us/library/ee808863.aspx).

b. Grant all authenticated users access to the Enterprise Search Center by doing the following:

1. Verify that the user account that is performing this procedure is a site collection administrator for the Enterprise Search Center site.
2. In a Web browser, go to the Enterprise Search Center site.
3. On the **Site Actions** menu, click **Site Settings**.
4. In the **Users and Permissions** section, click **People and groups**.
5. On the Quick Launch, click **Enterprise Search Center Visitors**.
6. In the **New** menu, click **Add Users**.
7. In the **Users/Groups** box, type **NT Authority\authenticated users**.
8. Click **OK**.

## Optional: Provide people search

To provide people search for a search-first environment, do one of the following:

• [Configure the search system in the new farm to crawl the user profiles that are in the original farm](#_Crawl_user_profiles).

• [Bring user profiles into the new farm, and configure the search system in the new farm to crawl the user profiles that are in the new farm](#_Crawl_user_profiles_1).

For more information about each of these approaches, see [Plan people search](#_Plan_people_search).

### Crawl user profiles that are in the original farm

1. Create a content source in the new farm that you will configure for crawling user profiles in the original farm.
2. In the content source, add the start address for crawling the user profiles that are in the original farm. The start address should be in the following form: **sps3://<*HostName*>** where **<*HostName*>** is the name of the server in the original farm that hosts My Sites.
3. If the default content access account does not have permission to crawl the user profiles that are in the original farm, do one of the following:
	* Change the default content access account to an account that has permission to crawl the user profiles in the original farm and that has permission to crawl SharePoint content in the new farm. For more information, see [Change the default content access account (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc261796.aspx) (http://technet.microsoft.com/en-us/library/cc261796.aspx).
	* Create a crawl rule that specifies a different content access account for crawling the user profiles that are in the original farm. For more information, see [Manage crawl rules (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee792871.aspx) (http://technet.microsoft.com/en-us/library/ee792871.aspx).

### Crawl user profiles that are in the new farm

To crawl user profiles that are in the new farm, do the following:

1. [Ensure that a User Profile service application exists](#_To_ensure_that).
2. [Bring user profiles into the new farm](#_Bring_user_profiles).
3. [Provide My Sites to host the user-profile content](#_Provide_My_Sites).
4. [Crawl the user profiles that are in the new farm](#_To_provide_people).

#### To ensure that a User Profile service application exists

1. Verify that the user account that is performing this procedure is an administrator for the Search service application.
2. On the Home page of the Central Administration Web site, in the **Application Management** section, click **Manage service applications**.
3. On the Manage Service Applications page, if there is no User Profile service application in the list of service applications, create a User Profile service application. For more information, see [Create, edit, or delete a User Profile service application (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee721052.aspx) (http://technet.microsoft.com/en-us/library/ee721052.aspx).

#### Bring user profiles into the new farm

You can use one of the following methods to bring user profiles into the new farm:

* Import user profiles from the directory service — for example, Active Directory Domain Services (AD DS) — into the new farm. For more information, see [Configure profile synchronization (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee721049.aspx) (http://technet.microsoft.com/en-us/library/ee721049.aspx).
* Copy user profiles from the original farm to the new farm by using the User Profile Replication Engine (UPRE). The UPRE is an optional component of SharePoint Server 2010 that is part of the SharePoint Administration Toolkit. You can download the toolkit from http://go.microsoft.com/fwlink/?LinkID=196866. For more information, see [Post-installation steps for search (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee808863.aspx) (http://technet.microsoft.com/en-us/library/ee808863.aspx) and [User Profile Replication Engine overview (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc663011.aspx) (http://technet.microsoft.com/en-us/library/cc663011.aspx).

#### Provide My Sites to host user-profile content

To enable users to access people-search results for content that is in user profiles, you must provide My Sites. To do this, you create a My Site host location and associate it with My Sites. For more information, see [Create and manage a My Site host location (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ff729456.aspx) (http://technet.microsoft.com/en-us/library/ff729456.aspx) and [Set up My Site Web sites (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee624362.aspx) (http://technet.microsoft.com/en-us/library/ee624362.aspx).

#### To crawl user profiles that are in the new farm

1. Create a content source in the new farm that you want to use for crawling user profiles in the new farm.
	* In the content source, add the start address for crawling the user profiles that are in the new farm. The start address should be in the following form:
	**sps3://<*HostName*>**where **<*HostName*>** is the name of the server in the new farm that hosts My Sites.
2. If the default content access account does not have permission to crawl the user profiles that are in the new farm, do one of the following:
	* Change the default content access account to an account that has permission to crawl the user profiles and SharePoint content in the new farm. For more information, see [Change the default content access account (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc261796.aspx) (http://technet.microsoft.com/en-us/library/cc261796.aspx).
	* Create a crawl rule that specifies a content access account for crawling the user profiles that are in the new farm. For more information, see [Manage crawl rules (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee792871.aspx) (SharePoint Server 2010) (http://technet.microsoft.com/en-us/library/ee792871.aspx).

## Optional: Provide social tag search

To enable users to get search results for queries that contain social tags, the Web application that is associated with the Search service application must be connected to a Managed Metadata service application. For information about how to set up this configuration, see the following articles:

* [Create, update, publish, or delete a managed metadata service application (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee530392.aspx) (http://technet.microsoft.com/en-us/library/ee530392.aspx)
* [Create, update, or delete a managed metadata service connection (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee530391.aspx) (http://technet.microsoft.com/en-us/library/ee530391.aspx)
* [Grant permission to access the managed metadata service (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ff625176.aspx) (http://technet.microsoft.com/en-us/library/ff625176.aspx)

# Configure the original farm for search-first migration

This section provides the following procedures to configure the original farm for a search-first migration:

* [Configure crawling](#_Configure_crawling)
* [Configure search boxes and related search links](#_Configure_search_boxes)
* [Optional: Enable query suggestions and custom scopes by using the Search Box Replacement Control](#_Optional:_Enable_query)

## Configure crawling

In a search-first environment, the search system in the original farm automatically serves any query in the original farm that uses a contextual scope — that is, the This Site scope or the This List scope. You configure the search system in the original farm to forward all other queries to the search system in the new farm to provide search results. For more information, see [Configure search boxes and related search links](#_Configure_search_boxes).

You must configure the search system in the original farm to crawl all of the SharePoint sites in the original farm on which contextual scopes are enabled for searches. This enables the search system in the original farm to serve queries in the original farm that use contextual scopes,

**Note**: In addition, you must configure the search system in the new farm to crawl all of the SharePoint content in the original farm. For the search-first environment, typically both search systems must crawl SharePoint content in the original farm. For more information, see [Crawl user profiles that are in the original farm](#_Crawl_user_profiles).

If contextual scopes are disabled for the search boxes on a large site or large list in the original farm, you might want to verify that the search system in the original farm is not configured to crawl that site or list. This helps to ensure that you will not use crawl resources in that farm unnecessarily. For example, if you install the Search Box Replacement Control in the original farm and set its scope mode to **2010**, this automatically disables contextual scopes for all non-custom search boxes in the original farm. In this situation, you do not have to configure the search system in the original farm to crawl content there. For more information, see [Optional: Enable query suggestions and custom scopes by using the Search Box Replacement Control](#Optional) and [Search scopes](#_Search_scopes).

You should also ensure that the search system in the original farm is not configured to crawl content other than SharePoint sites. If you want the search-first environment to provide search results for content other than the SharePoint sites in the original farm, you should configure the search system in the new farm to crawl that content. (For information about migrating content sources from the original farm, see [Migrate search settings to the new farm](#_Migrate_search_settings).) Therefore, content sources in the original farm should not contain start addresses for locations such as file shares or Microsoft® Exchange public folders. You should also ensure that no content source in the original farm contains the start address for crawling user profiles. If you want the search-first environment to provide people search, you should configure the search system in the new farm to crawl the user profiles. This is the case regardless of whether you are using user profiles in the original farm or user profiles that you bring into the new farm. For more information about crawling user profiles in the original farm or the new farm, see [Plan a new farm for search-first migration](#Plan) and [Configure the new farm for search-first migration](#_Configure_the_new).

To configure crawling in the new farm, perform the following procedure for each SSP in the original farm that uses the Office SharePoint Server Search service.

### To configure crawling in the original farm

1. Verify that the account that is performing this procedure is a member of the Farm Administrators group.
2. In Central Administration, in the Quick Launch, click the SSP — for example, **SharedServices1**.
3. On the Shared Services Administration page for the SSP, in the Search section, click **Search settings**.
4. On the Configure Search Settings page, click **Content sources and crawl schedules**.
5. On the Manage Content Sources page, for each content source in the list, do the following:
	1. Click the content source.
	2. On the Edit Content Source page, in the **Start Addresses** section, do the following:
		1. If there is a start address for crawling user profiles (this start address has the form sps3://<hostname>), do the following:
			1. Make a note of the address for later. If you plan to use the search system in the new farm to crawl user profiles in the original farm, you will have to ensure that this start address is added to a content source in the new farm.
			2. Delete the address. When you delete the address, if there are other start addresses remaining in this content source, ensure that each start address begins on a new line.
		2. For each address that remains in the list that is not a start address for one or more SharePoint sites in the original farm, do the following:
			1. Make a note of the address for later. You will have to ensure that this start address is added to a content source in the new farm.
			2. Delete the address.
		3. Optional: if you deleted all start addresses in the content source, you can deactivate or delete the content source by doing the following:
* To deactivate the content source, on the Edit Content Source page, set the full crawl schedule to **None** and set the incremental crawl schedule to **None**.
* To delete the content source, on the Manage Content Sources page, click the arrow next to the content source name, and then click **Delete**.

## Configure search boxes and related search links

You must configure search boxes and related links in the original farm so that when an end user submits a search query or clicks a related link there, the search system in the original farm forwards the query to the new farm. The new farm processes the query and displays the results on a search results page in the new farm. The search results page in the new farm provides SharePoint Server 2010 search functionality such as results refinement and relevance improvements to help the user view and interact with search results.

To configure search boxes in the original farm to forward search queries to the new farm, you must adjust settings for search boxes and Advanced Search links in the original farm. You can perform this configuration in one of the following two ways:

* Automatically, by using the Search Redirection Toolkit for SharePoint Server 2007 that is provided by Metalogix Software. The toolkit is a set of Windows PowerShell™ cmdlets that helps you automate the configuration of non-custom search boxes to forward search queries from the original farm to the new farm. For information about obtaining and using this toolkit, see the Metalogix Search-First Migration User Guide, which is available from the [Metalogix Search First Migration Accelerator](http://go.microsoft.com/fwlink/?LinkId=210942) download page (http://go.microsoft.com/fwlink/?LinkId=210942).

**Note**: To understand how to use the cmdlets in the Search Redirection Toolkit, it is helpful to understand the manual process of forwarding search queries from the original farm to the new farm. The procedures that compose the manual process are described later in this section.

* Manually, by separately configuring each search box and its associated Advanced Search link, and other related links, in the original farm. This process consists of the following procedures:
	+ Configure the delegate-control search box for each site collection
	+ Configure search boxes on Search Centers
	+ Configure other non-custom search boxes
	+ Configure custom search boxes
	+ Modify links to Search Centers or Advanced Search pages in the original farm

The following sections explain how to perform these procedures.

**Note**: The manual procedures for forwarding search queries can be time-consuming for large SharePoint Server 2007 farms that have many search boxes. After you understand how to manually perform the process and how long it will take, you might decide to automate the process by using the Search Redirection Toolkit for SharePoint Server 2007 that was mentioned previously in this section.

### Configure the delegate-control search box for each site collection

For each site collection in the original farm, perform the following procedure to configure the delegate control to forward search queries to the new farm. The delegate control is the default search box that is located near the top right of non-custom master pages for site collections.

#### To configure the delegate-control search box for a site collection

1. Verify that the account that is performing this procedure is an administrator of the site collection.
2. Go to the top-level site of the site collection.
3. On the **Site Actions** menu, click **Site Settings**, and then click **Modify All Site Settings**.
4. In the **Site Collections Administration** section, click **Search settings**.
5. On the Search Settings page, in the **Search Center and Custom Scopes** section, do the following:
6. Click the **Use custom scopes. Display richer results using the following Search Center** button.
7. In the associated text box, type the following URL: http://*<Web application>*/pages where *<Web application>* is the Web application that is associated with the Search Center and Search service application in the new farm.

This is the URL to which you want the search system in the original farm to forward queries that users submit from the delegate control of this site collection.

**Note**: This action will also automatically update the Advanced Search link on the Search Center site to point to http://*<Web application>*/pages. When you type the URL http://*<Web application>*/pages, do not type a trailing .aspx extension. The system will automatically append results.aspx or advanced.aspx, depending on the type of query that is issued.

### Configure search boxes on Search Centers

Perform the following procedure on each Search Center in the original farm that you want to configure to forward user search queries to the new farm.

#### To configure search boxes on Search Centers

1. Verify that the user account that is performing this procedure has Contribute permission for site content on the Search Center site.
2. Perform the following steps, depending on whether there are tabs on the Search Center site:
	* If there are no tabs on the Search Center site, do the following:
3. On the **Site Actions** menu, click **Edit Page**.
4. In the Search Web Part, click the edit arrow, and then click **Modify Shared Web Part**.
5. In the Web Part Properties window, click **Miscellaneous**.
6. Ensure that **Use Site Level Defaults** is selected.
7. Click **OK**.
8. Follow the steps that your organization uses to save, submit, approve, and publish the page.
* If there are tabs on the Search Center site, do the following:
1. Select the tab that you want to configure.
2. Click the **Site Actions** menu, and then click **Edit Page**.
3. In the Search Web Part, click the edit arrow, and then click **Modify Shared Web Part**.
4. In the Web Part Properties window, click **Miscellaneous**.
5. Perform the following steps in the **Miscellaneous** section, depending on the tab that you are configuring:
	* If you are configuring the **All Sites** tab, ensure that **Use Site Level Defaults** is selected.
	* If you are configuring the **People** tab, do the following:
6. Ensure that the Use Site Level Defaults check box is cleared.
7. Ensure that the Target search results page URL field contains the URL of the people-search results page in the new farm. Typically, the URL of a people-search results page has the following form: http://*<Web application>*/pages/peoplesearch.aspx, where *<Web application>* is the Web application that is associated with the Search Center and Search service application in the new farm.

This is the URL to which you want the search system in the original farm to forward queries that users submit in the people-search text box.

1. In the **Miscellaneous** section, if **Display advanced search link** is selected, ensure that the **Advanced Search page URL** text box indicates the location of the Advanced Search page in the new farm. Typically, the Advanced Search page URL text box contains only the following portion of the Advanced Search page URL: /pages/advanced.aspx.

**Note**: Do not use the Advanced Search Web Part.

* If you are configuring a custom search tab, do the following:
1. Configure the search box by doing the following:
2. Ensure that the **Use Site Level Defaults** check box is cleared.
3. Ensure that the Target search results page URL field contains the URL of the search results page in the new farm.
4. In the **Miscellaneous** section, If the **Display advanced search link** is selected, ensure that the Advanced Search page URL text box indicates the location of the Advanced Search page in the new farm.

Typically, the Advanced Search page URL text box contains only the following portion of the Advanced Search page URL: /pages/advanced.aspx.

**Note**: Do not use the Advanced Search Web Part.

1. Configure the people-search box by doing the following:
	1. Ensure that the **Use Site Level Defaults** check box is cleared.
	2. Ensure that the **Target search results page URL** field contains the URL of the people-search results page in the new farm. Typically, the URL of the people results page has the following form: http://*<Web application>*/pages/peoplesearch.aspx, where *<Web application>* is the Web application that is associated with the Search Center and Search service application in the new farm.

This is the URL to which you want the search system in the original farm to forward queries that users submit in the people-search text box that you are configuring.

* 1. If **Display advanced search link** is selected, ensure that the **Advanced Search page URL** text box indicates the location of the Advanced Search page in the new farm. Typically, the Advanced Search page URL text box contains only the following portion of the Advanced Search page URL: /pages/advanced.aspx

**Note**: Do not use the Advanced Search Web Part.

1. Click **OK**.
2. Follow the steps that your organization uses to save, submit, approve, and publish the page.

### Configure other non-custom search boxes

Developers or administrators can add non-custom search text boxes and non-custom people-search text boxes to pages on SharePoint sites. Typically, such pages are not part of a Search Center. From each page that has such a text box, perform the following procedure to configure the search box to forward users’ queries to the new farm.

#### To configure other non-custom search boxes

1. Go to a page that has one or more non-custom search text boxes and people-search text boxes.
2. Verify that the account that is performing the remainder of this procedure has Contribute permission for site content on that page.
3. Click the **Site Actions** menu, and then click **Edit Page**.
4. In the Search Web Part for the search text box or people-search text box, click the edit arrow, and then click **Modify Shared Web Part**.
5. In the Web Part Properties window, click **Miscellaneous**.
6. In the **Miscellaneous** section, do one of the following:
* If you are configuring a search text box, select the **Use site level Defaults** check box.
* If you are configuring a people-search text box, do the following:

Clear the **Use site level Defaults** check box.

In the **Target search results page URL** text box, type the URL for the people-search results page in the following form: http://*<Web application>*/pages/peoplesearch.aspx, where *<Web application>* is the Web application that is associated with the Search Center and Search service application in the new farm. This is the URL to which you want the original farm to forward queries that users submit in the people-search text box that you are configuring.

 In the **Miscellaneous** section, if **Display advanced search link** is selected, ensure that the **Advanced Search page URL** text box indicates the location of the Advanced Search page in the new farm. Typically, the **Advanced Search page URL** text box contains only the following portion of the Advanced Search page URL:/pages/advanced.aspx

**Note**: Do not use the Advanced Search Web Part.

1. Click **OK**.
2. Follow the steps that are used in your organization to save, submit, approve, and publish the page.

### Configure custom search boxes

If there are custom search text boxes in the original farm, you will probably want to configure those search boxes to forward search queries to the new farm. For site collections for which you have already configured the delegate-control search box, you can test the behavior of custom search text boxes to determine whether those text boxes use the site-level defaults. For custom search text boxes in those site collections that do not use site-level defaults, or for custom search text boxes in other site collections, we recommend that you contact the developer to determine how to configure the custom search text boxes to forward search queries to the new farm.

### Modify links to Search Centers or Advanced Search pages in the original farm

If sites in the original farm have links that refer to Search Centers or Advanced Search pages, content contributors or others who have appropriate permissions should manually update the links as appropriate to refer to Search Centers or Advanced Search pages in the new farm.

## Optional: Enable query suggestions and custom scopes by using the Search Box Replacement Control

The Search Box Replacement Control is a search Web Part from Metalogix Software that you can install and use in the original farm to take the place of all delegate controls there. Delegate controls are the non-custom search boxes in the top-right corner of SharePoint sites. The Search Box Replacement Control looks and works the same as search boxes that it replaces because it inherits its appearance and functionality from the standard Search Box Web Part. However, the Search Box Replacement Control provides two additional functions for search queries in the original farm — query suggestions and search scopes.

After you install the Search Box Replacement Control, you can also configure it to take the place of non-custom search boxes on Search Centers and SharePoint sites in the original farm.

**Note**: Replacing custom search boxes with the Search Box Replacement Control is not supported. We recommend that you contact the developer of the custom search boxes to determine how to reconfigure custom search boxes to meet the requirements of your organization.

If you do not use the Search Box Replacement Control or some other solution for the same purpose, neither custom scopes nor query suggestions will be available when the search-first migration is complete. Nonetheless, some organizations might not want to use the Search Box Replacement Control. This might be the case, for example, if the organization has custom search boxes in the original farm or if there are certain restrictions on installing software in the environment.

You should plan to notify end users that search functionality will not be available in the original farm while you install and configure the Search Box Replacement Control.

For more information about installing and using the Search Box Replacement Control, see the Metalogix Search-First Migration User Guide, available from the [Metalogix Search First Migration Accelerator](http://go.microsoft.com/fwlink/?LinkId=210942) download page (http://go.microsoft.com/fwlink/?LinkId=210942).

### Query suggestions

SharePoint Server 2010 provides query suggestions as a user types a query in a search box. SharePoint Server 2007 does not provide this functionality. However, after a search-first migration is complete, search boxes in the original farm that you replace with the Search Box Replacement Control can provide query suggestions for users who type search queries in the original farm. The replacement control obtains query suggestions from the log of search queries that have been submitted in the new farm.

**Note**: No query suggestions will be available immediately after a search-first migration is completed because no searches have been conducted in the new farm. However, query suggestions will become available as more searches are conducted in the new farm.

### Search scopes

In SharePoint Server 2007 and SharePoint Server 2010, site collection administrators can define search scopes to help end users narrow their searches. Available scopes can be displayed in a drop-down box next to the search box. An end user can select a scope in the drop-down box at query time to narrow a search.

If you install the Search Box Replacement Control, you can specify one of the scope modes that the replacement control can display. The scope mode specifies the server farm from which scopes are available when users submit search queries in the original farm. These modes are described in the following table.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |  |
| --- | --- |
| **If you select this Scope Mode** | **The Search Box Replacement Control displays these scopes** |
| 2007 | Scopes that a standard search box displays in a SharePoint Server 2007 farm |
| 2010 | Service application-level scopes that were created in the new farm. Contextual scopes (This Site scopes and This List scopes) are not displayed. |
| MIX | Scopes from both farms |

 |

**Note**:

* For all scope modes, each site-collection–level scope is usable only if you map it to a service application–level scope with the same name in the new farm and you specify the URL of the appropriate site collection in an associated scope rule. For more information, see [To add or edit a scope rule at the service application level](http://technet.microsoft.com/en-us/library/ee792872.aspx) and [To map a site collection–level scope to a service application–level scope](#Map).
* For each site-collection–level scope in the original farm that you mapped to a service application–level scope with the same name in the new farm, the Search Box Replacement Control displays the scope name only once.
* For scope modes 2010 or MIX, each Search Box Replacement Control displays each service application–level scope that was created in the new farm. This can be confusing to end users because not all service application–level scopes will necessarily pertain to all search boxes in the original farm.

# Migrate search settings to the new farm

The following table describes methods that you can use in a search-first migration to retrieve search settings from the original farm and reproduce those settings in the new farm.

|  |  |
| --- | --- |
| **To migrate this search setting to the new farm** | **You can use this method** |
| Best Bets, keywords, synonyms, SSP–level scopes and associated scope rules and display groups | [SharePoint Enterprise Search Migration Tool for SharePoint Server 2010](http://msdn.microsoft.com/en-us/library/ff828776.aspx)**Note**:* The Enterprise Search Migration Tool does not migrate any other settings from a SharePoint Server 2007 farm to a SharePoint Server 2010 farm. For example, it does not export the Search Center URL, search box drop-down mode, or search-results page URL.
* The Enterprise Search Migration Tool does not migrate site collection–level scopes if there are no corresponding site collections in the new farm. Typically in a search-first migration there are no site collections in the new farm because there is no content in that farm yet. For more information, see [Migrating SSP–level scopes](#SSP) and [Migrating site collection–level scopes](#SiteColl) later in this article.
 |
| Farm–level search settings (such as crawler impact rules, proxy settings, and time-out settings) | Database-attach upgrade. For more information, see [Perform a database attach upgrade to SharePoint Server 2010](http://technet.microsoft.com/en-us/library/cc303436.aspx). |
| Thesaurus files | Manually copy thesaurus files to the new farm. For more information, see [Manage thesaurus files (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/dd361734.aspx). |
| Stop word files | Manually copy stop word files to the new farm. For more information, see [Manage stop word files (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/dd361733.aspx). |
| Custom dictionaries | Manually copy custom dictionaries to the new farm. For more information, see [Create a custom dictionary (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/cc263242.aspx). |
| IFilters that are not installed with the product | Manually install the IFilters in the new farm. For more information, see [File types and IFilters reference (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/gg405170.aspx). |
| Protocol handlers that are not installed with the product | Manually install the protocol handlers in the new farm. In SharePoint Server 2010, protocol handlers are called connectors. For more information, see [Default connectors (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/gg153530.aspx). |
| Content sources | 1. Manually or programmatically retrieve the content sources that are associated with the Office SharePoint Search service of each SSP. For information about how to programmatically retrieve content sources from a SharePoint Server 2007 farm, see [How to: Retrieve the Content Sources for a Shared Services Provider](http://msdn.microsoft.com/en-us/library/aa637145%28v%3Doffice.12%29.aspx).
2. Manually or programmatically reproduce the content sources in the new farm. For information about how to use Windows PowerShell to create a content source in a SharePoint Server 2010 farm, see [New SPEnterpriseSearchCrawlContentSource](http://technet.microsoft.com/en-us/library/ff607867.aspx).
 |
| Crawl rules | 1. Manually or programmatically retrieve the crawl rules that are associated with the Office SharePoint Search service of each SSP. For information about how to programmatically retrieve crawl rules from a SharePoint Server 2007 farm, see [Content.CrawlRules Property](http://msdn.microsoft.com/en%20us/library/microsoft.office.server.search.administration.content.crawlrules%28v%3Doffice.12%29.aspx).
2. Manually or programmatically reproduce the crawl rules in the new farm. For information about how to use Windows PowerShell to create a crawl rule in a SharePoint Server 2010 farm, see [New SPEnterpriseSearchCrawlRule](http://technet.microsoft.com/en-us/library/ff608119.aspx).
 |
| File types | 1. Manually or programmatically retrieve file type settings that are associated with the Office SharePoint Search service of each SSP. For information about how to programmatically retrieve file type settings from a SharePoint Server 2007 farm, see [Extension Class](http://msdn.microsoft.com/en-us/library/microsoft.office.server.search.administration.extension%28v%3Doffice.12%29.aspx).
2. Manually reproduce the file type settings in the new farm.
 |
| Authoritative pages | 1. Manually or programmatically retrieve the authoritative pages that are associated with the Office SharePoint Search service of each SSP. For information about how to programmatically retrieve authoritative pages by using the AuthorityPages collection of the Ranking class, see [Ranking.AuthorityPages Property](http://msdn.microsoft.com/en-us/library/microsoft.office.server.search.administration.ranking.authoritypages.aspx).
2. Manually or programmatically reproduce the authoritative pages in the new farm. For information about how to use Windows PowerShell in a SharePoint Server 2010 farm to create an authoritative page and set its properties, see [New SPEnterpriseSearchQueryAuthority](http://technet.microsoft.com/en-us/library/ff607981.aspx) and [Set SPEnterpriseSearchQueryAuthority](http://technet.microsoft.com/en-us/library/ff607814.aspx).
 |
| Alerts | Manually reproduce alert settings. |
| Server-name mappings | Manually reproduce server-name mappings. |
| Federated locations | Export federated locations from the original farm and import them into the new farm. For configuration information for a federated location in SharePoint Server 2010, see [LocationConfiguration Class](http://msdn.microsoft.com/en-us/library/microsoft.office.server.search.administration.locationconfiguration.aspx). |
| Crawled properties | 1. Manually or programmatically retrieve the crawled properties that are associated with the Office SharePoint Search service of each SSP. For information about how to programmatically retrieve crawled properties from a SharePoint Server 2007 farm, see [How to: Retrieve the Crawled Properties for a Category in the Search Schema](http://msdn.microsoft.com/en-us/library/aa981438.aspx).
2. Manually or programmatically reproduce the crawled properties in the new farm. For information about how to use Windows PowerShell in a SharePoint Server 2010 farm to create a crawled property and set its properties, see [New SPEnterpriseSearchMetadataCrawledProperty](http://technet.microsoft.com/en-us/library/ff608064.aspx) and [Set SPEnterpriseSearchMetadataCrawledProperty](http://technet.microsoft.com/en-us/library/ff607859.aspx).
 |
| Managed properties | 1. Manually or programmatically retrieve the managed properties that are associated with the Office SharePoint Search service of each SSP. For information about how to programmatically retrieve managed properties from a SharePoint Server 2007 farm, see [How to: Retrieve the Managed Properties for a Shared Services Provider](http://msdn.microsoft.com/en-us/library/aa638271%28office.12%29.aspx).
2. Manually or programmatically reproduce the managed properties in the new farm. For information about how to use Windows PowerShell in a SharePoint Server 2010 farm to create a managed property and set its properties, see [New SPEnterpriseSearchMetadataManagedProperty](http://technet.microsoft.com/en-us/library/ff608089.aspx) and [Set SPEnterpriseSearchMetadataManagedProperty](http://technet.microsoft.com/en-us/library/ff608001.aspx).
 |

## Migrating SSP–level scopes

You can migrate SSP–level scopes in either of the following ways:

* Automatically, by using the [SharePoint Enterprise Search Migration Tool for SharePoint Server 2010](http://msdn.microsoft.com/en-us/library/ff828776.aspx). For each SSP–level scope in the original farm, the tool automatically creates in the new farm a corresponding service application–level scope with the same name.
* Manually, by creating a service application–level scope in the new farm with the same name as a corresponding SSP level–scope in the original farm. You can do this for any or all SSP-level scopes.

By using either of these methods, you create a one-to-one mapping between SSP–level scopes in the original farm and service application–level scopes in the new farm. When a user submits a query that uses a SSP–level scope that is mapped to a service application–level scope, the search system in the new farm receives the query from the original farm and uses the mapped scope to narrow the search results according to the SSP-level scope.

## Migrating site collection–level scopes

In a search-first migration, it is not possible to migrate site collection–level scopes. This is because the new farm contains no SharePoint content or site collections yet. Therefore, when a user selects a site collection–level scope in the original farm, the scope is not usable and the user will see an error message to the effect that the scope does not exist. As a workaround, you can manually map the site collection–level scope in the original farm to a new service application–level scope that you create in the new farm. You can do this for any site collection–level scopes in the original farm. (A potential disadvantage is that this will be time-consuming if there are many site collection–level scopes that you want to map.) When an end user submits a query in the original farm that uses a site collection–level scope that is mapped to a service application–level scope, the search system in the new farm receives the query and uses the scope mapping that you created to narrow the search results to the site collection level. For more information, see [To map a site collection–level scope in the original farm to a service application–level scope](#Map).

**Note**: It is not possible to have multiple service application–level scopes in the new farm that have the same name. Therefore, the results of the workaround might be unpredictable for cases in which you attempt to map multiple scopes from the original farm (site collection–level scopes or SSP–level scopes) that have the same name. For example, the results might be unpredictable if you migrate an SSP–level scope named “Sales” to a service-application–level scope named “Sales”, and you map a site-collection level scope named “Sales” to a service application–level scope named “Sales”.

### To map a site collection–level scope to a service application–level scope

1. Verify that the user account that is performing this procedure is a member of the Farm Administrators group in the new farm.
2. Refer to Manage search scopes (SharePoint Server 2010) (http://technet.microsoft.com/en-us/library/ee792872.aspx) as you perform the following tasks:
	1. Create a service application–level scope that has the same name as the site collection–level scope in the original farm.
	2. Create a scope rule for the new service application–level scope.
	3. On the Add Scope Rule page for the new scope rule, in the Scope Rule Type section, click Web address.
	4. On the same Add Scope Rule page, in the Web Address section, specify the URL of the site collection in the original farm that you want to map to this service application. This ensures that the service-application level scope in the new farm applies only to the site collection that you specify in the original farm.

**Note**: After you migrate content databases to the new farm, you can delete service application–level scopes that you no longer want.

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# Train end users to use the search-first environment

After a search-first migration, end users can continue to perform tasks in the original server farm and use familiar SharePoint Server 2007 features and functionality. When users conduct searches, they have the additional advantage of new search features and functionality in SharePoint Server 2010. It is important to educate users about what they can do with these new search capabilities, and to explain to users how to navigate when they perform searches in the new environment. The search system displays pages in the original farm or the new farm depending on a user’s actions, and this might be confusing to users at first. This sectionprovides information that you can use to help users understand how to use the search-first environment and capabilities.

## Search-related navigation

In a search-first environment, end users can submit search queries from search boxes in the original farm or in the new farm. Typically, a user initiates a query from a search box in the original farm because that is the main SharePoint working environment. If the query uses a contextual scope (that is, the This Site scope or the This List scope), the user’s Web browser displays the results on a search results page in the original farm. In that case, there is no change in the way that the user goes from site to site, because all of the navigation stays in the original farm and works in the familiar way.

On the other hand, if the search query does not use a contextual scope, the user’s Web browser displays the results on a search results page in the new farm. Similarly, when a user clicks an **Advanced Search** link in the original farm to perform an advanced search, the user’s Web browser displays an Advanced Search page in the new farm. The user types the search parameters on the Advanced Search page in the new farm and submits the query there. The search system displays the results on a search results page in the new farm.

After viewing the search results in the new farm, the user can do any of the following:

* Click the **Back** button in the browser to return to the site in the original farm or the new farm where the user typed the query.
* Click a **Did You Mean** link to try a post-query suggestion.
* Use the Refinement Panel on the search results page in the new farm to narrow the search results.
* Type a new search query in the search box on the search results page in the new farm.
* Click a search result on the search results page in the new farm.

In a search-first environment, when a user clicks a search result, the user’s Web browser displays the site that hosts the content, whether the site is in the original farm or the new farm. SharePoint content is typically located in the original farm because content has not been migrated to the new farm yet. However, if you brought user profiles into the new farm to crawl them and host them on My Sites there, the corresponding content is in the new farm. (For more information, see [Plan people search](#_Plan_people_search).) The user can continue to work as usual after the system displays the search-result content.

## SharePoint Server 2010 functionality for search queries

End users have access to SharePoint Server 2010 search features, whether they type queries in the original farm or in the new farm. The following table summarizes the new search query features that are available, depending on the way that you configured the search-first migration.

|  |  |  |
| --- | --- | --- |
| **End users can take advantage of this SharePoint Server 2010 search feature** | **If you do this when you perform a search-first migration**  | **For more information, see** |
| * Prefix matching
* Boolean query syntax
 | No special steps required | [What’s new in enterprise search (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee667266.aspx) (http://technet.microsoft.com/en-us/library/ee667266.aspx) |
| Phonetic name matching | You crawl user profiles in the new farm rather than the original farm | [Configure crawling](#_Configure_crawling) |
| Query suggestions | You install the Search Box Replacement Control | [Query suggestions](#_Query_suggestions)\* |

\*The search system will provide query suggestions in cases where there are related queries in the query history in the new farm.

## SharePoint Server 2010 functionality for viewing and interacting with search results

The following table describes the conditions under which end users have access to SharePoint Server 2010 search functionality when they view search results.

|  |  |  |
| --- | --- | --- |
| **When an end user submits a query in a non-custom search box in the original farm** | **The results are displayed on a search results page in** | **Are SharePoint Server 2010 features available when viewing search results?** |
| And the query does not use a contextual scope | The new farm | Yes: for example, results refinement and relevance improvements |
| And the query uses a contextual scope\* | The original farm | No |

\*To use a contextual scope for a search on SharePoint content that is in the original farm, the user must submit the search query from a search box in the original farm. When typing a query in a non-custom search box in the new farm, it is not possible to specify a contextual scope to search SharePoint content that is in the original farm.

## Other user interface differences

Users might be accustomed to the look and feel of Search Centers in the original farm, and to customizations that the organization applied there. Search Centers in the new farm provide refinement capability and might have other look-and-feel differences from Search Centers in the original farm. In addition, the new farm might have fewer Search Centers than the original farm. For more information, see [Plan Search Center deployment](#_Plan_Search_Center).

Many navigation paths and shortcuts that are used in the original farm will also be different or unavailable in the new farm. This is because the new farm is a different farm and because it has less SharePoint content than the original farm.

# Additional Resources

* [What’s new in enterprise search (SharePoint Server 2010)](http://technet.microsoft.com/en-us/library/ee667266.aspx) (http://technet.microsoft.com/en-us/library/ee667266.aspx)
* [Evaluation guide for SharePoint Server 2010](http://go.microsoft.com/fwlink/?LinkId=167123) (http://go.microsoft.com/fwlink/?LinkId=167123)
* [Evaluation guide for FAST Search Server 2010 for SharePoint](http://technet.microsoft.com/en-us/library/ff678241.aspx) (http://technet.microsoft.com/en-us/library/ff678241.aspx)
* *Metalogix Search-First Migration User Guide*, available from the [Metalogix Search First Migration Accelerator](http://go.microsoft.com/fwlink/?LinkId=210942) download page (http://go.microsoft.com/fwlink/?LinkId=210942)

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