

## Microsoft Office SharePoint Portal Server 2003 Document Library Migration Tools

### Introduction

The Microsoft® Office SharePoint™ Portal Server 2003 Document Library Migration Tools are a set of utility programs developed by Microsoft for migrating documents and associated descriptive information ("metadata") from SharePoint Portal Server Web Storage System–based document libraries to SharePoint Portal Server 2003 Microsoft SQL Server™ document libraries. The tools can export documents and associated descriptive information from SharePoint Portal Server 2001 document libraries as well as SharePoint Portal Server 2003 backward-compatible document libraries — both of which are based on Microsoft Web Storage System technology. The content exported by the tools can be imported into SharePoint Portal Server 2003 SQL Server document libraries that reside in a SharePoint Portal Server 2003 portal site, team site, My Site personal site, or SharePoint Portal Server 2003 portal area.

The two document library migration tools developed by Microsoft are Spout.exe and Spin.exe. Spout.exe, the Document Library Export Tool, is a Microsoft Windows® program that reads Web Storage System–based document libraries and exports (or outputs) the selected content as a collection of files in a format that is understood by the import program. Spin.exe, the Document Library Import Tool, is a Windows command-line program that reads the collection of files created by Spout.exe and adds the documents and associated descriptive information to the selected portal area, portal site, team site, or personal Web site on the server running SharePoint Portal Server 2003.

### Related Topics

- [Migration Scenarios](#)
- [Using the Document Library Migration Tools](#)
- [Installation](#)
- [Reference](#)
- [Frequently Asked Questions](#)
- [Known Issues](#)
- [Glossary](#)
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### Migration Scenarios

The SharePoint Portal Server 2003 Document Library Migration Tools are used for two common SharePoint Portal Server 2003 migration scenarios:

- [Migrating a Web Storage System–Based Document Library to a Document Library](#)
- [Migrating a Web Storage System–Based Document Library to a Collection of SharePoint Portal Server 2003 Portal Areas](#)

The scenarios are described in detail in the following sections. Both scenarios consist of an export phase followed by an import phase. The export settings to be used depend on how the content will be eventually imported into SharePoint Portal Server 2003. Selected variations of both scenarios are identified.

Step-by-step procedures and selected variations for these scenarios can be found in [Using the Document Library Migration Tools](#). Detailed information about how to use the export and import tools, Spout.exe and Spin.exe, can be found in the [Reference](#) section.

 [Migrating a Web Storage System–Based Document Library to a Document Library](#)

The more common migration scenario involves exporting all of the documents and associated descriptive information from a Web Storage System–based document library in a SharePoint Portal Server 2001 workspace or a backward-compatible document library in a SharePoint Portal Server 2003 portal site and importing the documents and descriptive information into a SharePoint Portal Server 2003 SQL Server document library.

### **Export**

During the export phase, each document from each folder in the specified workspace document library is copied to a set of file system folders that are automatically created in the same folder where the XML manifest file is created.

The descriptive information associated with each exported document is written to an XML manifest file in the specified file system folder. If the collection of documents to be exported uses more than one document profile, either the list of properties from one selected document profile is used, or a merged list of properties from all the document profiles used by the collection of documents is written out for each exported document.

### **Import**

During the import phase of this scenario, the documents are copied into a document library in the specified SharePoint site. The documents are written into a set of folders and subfolders that correspond to the organization of the original folders and subfolders in the Web Storage System–based document library.

If the selected Web Storage System–based document profile includes the Category property, this property is written to the XML manifest file during export. During import, if the SharePoint Portal Server 2003 portal site topic areas already contain a hierarchy of portal areas that exactly match the category hierarchy represented by values of the Category document profile property exported with the documents, each document will also appear in the topic area corresponding to the value of the original Category document profile property.

**Note** To insure that a compatible topic area hierarchy is available, use the SharePoint Portal Server 2003 upgrade process to perform an in-place upgrade of SharePoint Portal Server 2001 to SharePoint Portal Server 2003. When the SharePoint Portal Server 2001 workspace information is imported into the SharePoint Portal Server 2003 site, a topic hierarchy is created that corresponds one-to-one with the original SharePoint Portal Server 2001 workspace category hierarchy.

### **Variations**

Variations of this scenario include:

- Merging multiple Web Storage System–based document libraries into a single SharePoint Portal Server 2003 site
- Migrating a selected subfolder from a Web Storage System–based document library to a document library
- Migrating a selected subfolder from a Web Storage System–based document library to a My Site personal site
- Migrating a Web Storage System–based document library to a document library (cross-language scenario)
- Merging multiple Web Storage System–based document profiles used in a Web Storage System–based document library into a single list of properties in a SharePoint Portal Server 2003 SQL Server document library
- Merging Web Storage System folder–based security into SharePoint Portal Server 2003 site groups
- Migrating all versions, last public version, or last private version of the documents in a Web Storage System–based document library to a SharePoint Portal Server 2003 SQL Server document library

### **Related Topics**

- [How to Migrate a Web Storage System–Based Document Library to a Document Library](#)

 [Migrating a Web Storage System–Based Document Library to a Collection of SharePoint Portal Server 2003 Portal Areas](#)

This migration scenario involves exporting all of the documents and associated descriptive information from a Web Storage System–based document library in a SharePoint Portal Server 2001 workspace or a backward-

compatible document library in a SharePoint Portal Server 2003 portal site and importing the documents and descriptive information into a collection of SharePoint Portal Server 2003 topic areas.

#### **Export**

During the export phase, each document from each folder in the specified workspace document library is copied to a set of file system folders that are automatically created in the same folder where the XML manifest is created. Alternatively, each document from a specified subfolder and all subfolders in a workspace document library can be copied to the specified set of Windows file system folders.

The descriptive information associated with each exported document is written to an XML manifest file in the specified file system folder. If the collection of documents to be exported uses more than one document profile, either the list of properties from one selected document profile is used, or a merged list of properties from all the document profiles used by the collection of documents is written out for each exported document.

#### **Import**

During the import phase of this scenario, the documents are copied into SharePoint Portal Server 2003 portal areas. The documents are written into a set of folders and subfolders in a SQL Server document library in each portal area. The hierarchy of portal areas corresponds to the organization of the original folders and subfolders in the Web Storage System–based document library. Each portal area created during the import phase can have its own security, and each area can have its own set of document library properties.

#### **Variations**

Variations of this scenario include:

- Merging multiple Web Storage System–based document libraries into a collection of SharePoint Portal Server 2003 topic areas
- Merging multiple Web Storage System–based document profiles used in a Web Storage System–based document library into a single list of properties in a collection of SharePoint Portal Server 2003 topic areas
- Migrate all versions, last public version, or last private version of the documents in a Web Storage System–based document library into a collection of SharePoint Portal Server 2003 topic areas

#### **Related Topics**

- [How to Migrate a Web Storage System–Based Document Library to a Collection of SharePoint Portal Server 2003 Portal Areas](#)

### **Using the Document Library Migration Tools**

Step-by-step procedures are provided for both of the following SharePoint Portal Server 2003 migration scenarios:

- [How to Migrate a Web Storage System–Based Document Library to a Document Library](#)
- [How to Migrate a Web Storage System–Based Document Library to a Collection of SharePoint Portal Server 2003 Portal Areas](#)

The Spout.exe settings to be used in each scenario to export the documents and associated descriptive information depend on how the content will be eventually imported into SharePoint Portal Server 2003.

 [How to Migrate a Web Storage System–Based Document Library to a Document Library](#)

The more common migration scenario involves exporting all of the documents and associated descriptive information from a Web Storage System–based document library in a SharePoint Portal Server 2001 workspace or a backward-compatible document library in SharePoint Portal Server 2003 portal site and importing the documents and descriptive information into a SharePoint Portal Server 2003 SQL Server

document library. Spout.exe is used to export the documents and associated descriptive information, and Spin.exe is used to import the content into a document library.

### Export

1. Install the necessary prerequisite software components on the server running SharePoint Portal Server 2001 or on a computer with a network connection to the server running SharePoint Portal Server 2001.
2. Install the Document Library Migration Tools on the computer.
3. Start Spout.exe.
4. On the **General** tab, in the **Export folder URL** box, enter the export folder for the "documents" folder (or a subfolder).
5. Click **Browse** to select an export file folder where the XML manifest file and exported documents are to be written.
6. In the **Export type** section, select the export type based on how the exported content is to be imported by Spin.exe:
  - The documents from the Web Storage System–based document library folder are to be imported into a single document library, or
  - The documents from the Web Storage System–based document library folder are to be imported into a collection of SharePoint Portal Server 2003 portal areas (one source folder per portal area).
7. If you are planning to import the content into a document library, do one of the following:
  - Select the **Export security policy** check box to map the Reader, Author, and Coordinator roles to site groups that already exist on the SharePoint Portal Server 2003 site. Alternatively, these roles can be mapped to new site groups specified on the **Profiles and Security** tab. The latter is the default, and the specific result depends on the options used during the import phase.
  - Select the **Inherit security from parent site** check box to leave the existing security settings on the server running SharePoint Portal Server 2003 unchanged. All existing SharePoint site groups on the site are given default access to the document library.
8. In the **Exported content** section, choose whether documents from the export folder URL folder and all subfolders are to be exported or if only the documents in the export folder URL folder (and not the subfolders) are to be exported.
9. On the **Versions** tab, select whether you want to export multiple versions of the document or only one version per document.
10. If you choose to export multiple versions per document, do one of the following:
  - **Export only approved versions.** These correspond to the versions of the documents with a major version number and zero as the value of the minor version number (such as 1.0, 2.0, 3.0, etc.).
  - **Maximum number of most recent versions** (including drafts and approved versions).
11. If you choose to export only one version per document, you can limit the export to the:
  - Most recent version
  - Most recently approved version
12. On the **Profiles and Security** tab, select from the following document profile options:

- **Merge properties from all profiles** (referenced in the documents to be exported).
  - **Convert all documents to a single profile.** The profile can be selected from a list of available document profiles.
13. In the **Role to site group conversion** section, either use the default names for the Readers, Authors, and Coordinators site groups (based on the name of the top-level source folder):
- *sourcefoldername\_readers*
  - *sourcefoldername\_authors*
  - *sourcefoldername\_coordinators*
- or, select the **Customize site group names for roles** check box and enter the new site group names.
14. Verify that all options are set correctly.
15. Click **OK** to begin the export of the documents and descriptive information to the specified folder. Carefully review the export settings in the confirmation dialog box before proceeding, especially warnings about security settings and the possibility of overwriting previously exported content.

#### **Import**

To import the documents and descriptive information created in the previous export procedure into a document library on a SharePoint site, use the following command:

```
spin.exe siteurl filename.xml
```

*siteurl* is the URL of the SharePoint site where the imported documents are to be stored.

**Note** It is important that *siteurl* is the root URL for a SharePoint site and not, for example, the URL for a document library or another component of a site.

**Note** When exporting the document and descriptive information using Spout.exe, the exported content must be written to a shared file system folder that can be accessed from the target server running SharePoint Portal Server 2003, or the files must be copied to the target server before running Spin.exe. The shared folder must be on an NTFS-formatted file system and allow an unlimited number of connections.

**Security Note** Ensure that you specify the appropriate security settings on the folder to which you export content. The security settings on the folder will control access to the content until it is imported into the target site and the content in the export folder is deleted.

See the [Reference](#) section for more details about using Spout.exe and Spin.exe.

#### **Selected Variations**

The following notes apply to selected variations of the preceding scenario:

- Merging multiple Web Storage System–based document libraries into a single SharePoint Portal Server 2003 site
  - The document library migration tools can be used to migrate multiple Web Storage System–based document libraries to the same SharePoint Portal Server 2003 site.
- Migrating a selected subfolder from a Web Storage System–based document library to a document library
  - In addition to migrating an entire Web Storage System–based document library to a document library, selected subfolders from the Web Storage System–based document library can be migrated, one subfolder at a time.

- Migrating a selected subfolder from a Web Storage System–based document library to a My Site personal site
  - The user of Spin.exe must be a server administrator on the source server. If the user is not a member of the Administrators group on the source server, the error "Unable to retrieve folder properties for *folderurl*" is displayed. In addition, if Spin.exe is used to import content into a portal area, team site, or My Site personal site, the user must be a SharePoint site administrator for the site.
  - Do not use the */area areapath* parameter when importing content into a Microsoft Windows SharePoint Services site or My Site personal site. Instead, specify the Windows SharePoint Services site or My Site URL for the *siteurl* parameter.
- Migrating a Web Storage System–based document library to a document library (cross-language scenario)
  - The document library migration tools can be used to migrate content from any language version of a SharePoint Portal Server 2001 Web Storage System–based document library or SharePoint Portal Server 2003 backward-compatible document library to any language version of a SharePoint Portal Server 2003 SQL Server document library.
- Merging multiple Web Storage System–based document profiles used in a Web Storage System–based document library into a single list of properties in a SharePoint Portal Server 2003 SQL Server document library
  - The document library migration tools support a maximum number of properties for each type. For example, a document library can have a maximum of 50 properties for text information, 16 properties for date and time information, 16 properties for number information, and 31 properties for multiple line text information and multiple choice list information. If the merging of document profiles causes the number of properties of a given type to exceed these limits, some properties will not be migrated.
- Merging Web Storage System folder-based security into SharePoint Portal Server 2003 site groups
  - SharePoint Portal Server document libraries do not support security settings for each folder—they only support security settings for the entire document library. Only the role members of the top-level folder included in the export are added to new site groups when exporting a set of folders from a Web Storage System–based document library. If folders included in the export have different security settings than the top-level folder, they will have the same security settings as the top-level folder after migration. This may cause some users who currently have access to the content to be unable to access the content, and other users who do not currently have access to the content to gain access after the content is imported.
- Migrating all versions, last public version, or last private version of the documents in a Web Storage System–based document library to a SharePoint Portal Server 2003 SQL Server document library
  - When exporting all versions of a document collection, be aware that all versions of the documents (including interim draft versions) will be readable by users with Reader permissions.
  - When exporting the most recent version of a document, be aware that the most recent version may be an unapproved interim draft version, and it will be readable by users with Reader permissions.

See the [Reference](#) section for more details about using Spout.exe and Spin.exe.

#### [How to Migrate a Web Storage System–Based Document Library to a Collection of SharePoint Portal Server 2003 Portal Areas](#)

This migration scenario involves exporting all of the documents and associated descriptive information from a Web Storage System–based document library in a SharePoint Portal Server 2001 workspace or a backward compatible-document library in a SharePoint Portal Server 2003 portal site and importing the documents and descriptive information into a collection of SharePoint Portal Server 2003 topic areas.

## Export

1. Install the necessary prerequisite software components on the server running SharePoint Portal 2001 or a computer with a network connection to the server running SharePoint Portal Server 2001.
2. Install the Document Library Migration Tools on the computer.
3. Start Spout.exe
4. On the **General** tab, in the **Export folder URL** box, enter the export folder for the "documents" folder (or a subfolder).
5. Click **Browse** to select an export file folder where the XML manifest file and exported documents are to be written.
6. In the **Export type** section, select the export type based on how the exported content is to be imported by Spin.exe:
  - The documents from the Web Storage System–based document library folder are to be imported into a single document library, or
  - The documents from the Web Storage System–based document library folder are to be imported into a collection of SharePoint Portal Server 2003 portal areas (one source folder per portal area).
7. If you are planning to import the content into a collection of SharePoint Portal Server 2003 portal areas, you have to option to export the security policy. When the security policy is not exported, security mapping options on the **Profiles and Security** tab are disabled.
8. In the **Exported content** section, choose whether documents from the export folder URL folder and all subfolders are to be exported or if only the documents in the export folder URL folder (and not the subfolders) are to be exported.
9. On the **Versions** tab, select whether you want to export multiple versions of the document or only one version per document.
10. If you choose to export multiple versions per document, the following options are available:
  - **Export only approved versions.** These correspond to the versions of the documents with a major version number and zero as the value of the minor version number (such as 1.0, 2.0, 3.0, etc.).
  - **Maximum number of most recent versions** (including drafts and approved versions).
    - **Note** When exporting all versions of a document collection, be aware that all versions of the documents (including interim draft versions) will be readable by users with Reader permissions.
11. If you choose to export only one version per document, you can limit the export to the:
  - Most recent version
  - Most recently approved version
  - **Note** When exporting the most recent version of a document, be aware that the most recent version may be an unapproved interim draft version and it will be readable by users with Reader permissions.
12. On the **Profiles and Security** tab, select from the following document profile options:
  - **Merge properties from all profiles** (referenced in the documents to be exported).
  - **Convert all documents to a single profile.** The profile can be selected from a list of available document profiles.

13. In the **Role to site group conversion** section, either use the default names for the Readers, Authors, and Coordinators site groups (based on the name of the top-level source folder):

- *sourcefoldername\_readers*
- *sourcefoldername\_authors*
- *sourcefoldername\_coordinators*

or, select the **Customize site group names for roles** check box and enter the new site group names.

14. Verify that all options are set correctly.

15. Click **OK** to begin the export of the documents and descriptive information to the specified folder. Carefully review the export settings in the confirmation dialog box before proceeding, especially warnings about security settings and the possibility of overwriting previously exported content.

### Import

To import the documents and descriptive information created in the previous export procedure into a collection of SharePoint Portal Server 2003 portal areas, use the following command:

```
spin.exe siteurl filename.xml [/area areapath]
```

*siteurl* is the URL of the server running SharePoint Portal Server 2003 where the imported documents are to be stored.

*areapath* is the URL of the SharePoint Portal Server 2003 portal area where portal areas are to be created and the documents are to be stored.

**Note** It is important that *siteurl* is the root URL for a server running SharePoint Portal Server 2003 and not, for example, the URL for a SharePoint site, document library, portal area, or another component of a site.

**Note** When exporting the document and descriptive information using Spout.exe, the exported content must be written to a shared file system folder that can be accessed from the target server running SharePoint Portal Server 2003, or the files must be copied to the target server before running Spin.exe. The shared folder must be on an NTFS-formatted file system and allow an unlimited number of connections.

See the [Reference](#) section for more details about using Spout.exe and Spin.exe.

### Selected Variations

The following notes apply to selected variations of the preceding scenario:

- Merging multiple Web Storage System–based document libraries into a collection of SharePoint Portal Server 2003 topic areas
  - The Document Library Migration Tools can be used to migrate multiple Web Storage System–based document libraries into a single SharePoint Portal Server 2003 portal area.
- Merging multiple Web Storage System–based document profiles used in a Web Storage System–based document library into a single list of properties in a collection of SharePoint Portal Server 2003 topic areas
  - SharePoint Portal Server document libraries support a maximum number of properties for each type. For example, a document library can have a maximum of 50 properties for text information and 16 properties for date and time information. If the merging of document profiles causes the number of properties of a given type to exceed the limits of document libraries, some properties will not be migrated. For more information about the limits of document libraries, see the Microsoft Office SharePoint Portal Server 2002 Administrators Guide.



- Migrate all versions, last public version, or last private version of the documents in a Web Storage System-based document library into a collection of SharePoint Portal Server 2003 topic areas
- When exporting all versions of a document collection, be aware that all versions of the documents (including interim draft versions) will be readable by users with Reader permissions.
- When exporting the most recent version of a document, be aware that the most recent version may be an unapproved interim draft version, and it will be readable by users with Reader permissions.

See the [Reference](#) section for more details about using Spout.exe and Spin.exe.

## Installation

The Document Library Migration Tools, Spout.exe and Spin.exe, have the following prerequisites and download and setup requirements:

### Prerequisites

#### Spout.exe Prerequisites

Spout.exe can be run from any computer running Microsoft Windows 2000, Microsoft Windows XP, or Microsoft Windows Server™ 2003 that has a network connection to a server running SharePoint Portal Server 2001 from which the documents and associated descriptive information is to be exported.

**Security Note** Ensure that you specify the appropriate security settings on the folder to which you export content. The security settings on the folder will control access to the content until it is imported into the target site and the content in the export folder is deleted.

Spout.exe has the following prerequisites:

- Windows 2000, Windows XP, or Windows Server 2003 operating system with the latest service pack installed.
- Microsoft .NET Framework 1.1.
- User must be both a member of the Administrators group for the computer running SharePoint Portal Server 2001 and a workspace coordinator on the workspace that the documents and associated descriptive information is to be exported from.
- The server running SharePoint Portal Server 2001 must have SharePoint Portal Server 2001 Service Pack 2A or later installed.
- Directory browsing must be enabled on the server running SharePoint Portal Server 2001. In Internet Information Services Manager, browse to the default Web site, right-click the workspace against which Spout.exe is to be run, and then click **Properties**. On the **Virtual Directory** tab, select the **Directory browsing** check box.

#### Spin.exe Prerequisites

Spin.exe must be run on a server running SharePoint Portal Server 2003 and Windows Server 2003 where the documents and associated descriptive information are to be imported.

Spin.exe has the following prerequisites:

- The user must be a member of the Administrators Windows group on the server running SharePoint Portal Server 2003.

**Note** The language version of the server running SharePoint Portal Server 2003 can be different from the language version of the server running SharePoint Portal Server 2001 used to create the exported content.

**Note** Spin.exe temporarily raises the privilege of the current user to allow setting of audit history. In addition, Spin.exe temporarily stops the SharePoint Portal Server 2003 indexing service while the documents and descriptive information are being imported. The indexing service is restarted after the import is complete.

#### [Download and Setup](#)

The Document Library Migration Tools self-extracting setup program is available for download from the Microsoft Download Center (<http://www.microsoft.com/downloads>).

#### **Download**

- To locate the downloadable setup file in the Download Center, select **SharePoint** in the **Product/Technology** list, enter **Document Library Migration Tools** in the **Keywords** box, and then click **Go**.
- When the "Microsoft Office SharePoint Portal Server 2003 Document Library Migration Tools" entry appears on the Download Center search results page, click the entry to begin the download process.

#### **Setup**

To install the document library migration tools:

- Copy the downloaded Setup.exe file to a file folder on any computers on which the tools are to be installed.
- Start Setup.exe by double-clicking the file in Microsoft Windows Explorer.
- Read and respond the End-User License Agreement.
- Enter the fully qualified name of the folder where the document library migration tools are to be installed.

Setup.exe installs three files in the selected folder:

- Spout.exe
- Spin.exe
- spinspouthelp.mht

No DLLs or assemblies are installed by Setup.exe.

#### **Reference**

The Document Library Migration Tools include:

- [Document Library Export Tool \(Spout.exe\)](#)
- [Document Library Import Tool \(Spin.exe\)](#)

The following sections provide detailed descriptions of how both tools are started and the parameters recognized by them.

#### [Document Library Export Tool \(Spout.exe\)](#)

Spin.exe writes an XML manifest file and documents to be exported to a specified file system folder. The XML manifest file stores the descriptive information associated with each exported document. The descriptive information includes the names and values of the document profile properties, security settings, and version information associated with each document. SharePoint Portal Server 2001 routing and approval workflow settings are not exported.

The command-line syntax for Spout.exe is:

```
spout.exe
```

Spout.exe does not have any command-line parameters.

When started, Spout.exe displays a window for entering parameters to select which content is exported from the Web Storage System-based document library. The parameters are organized into groups. Each group of parameters is displayed on its own tab in the window. The parameters are as follows.

Parameter group	Parameter	Required?	Default value	Description
General	Export folder URL	Yes		URL to the "documents" folder (or a subfolder) in the SharePoint Portal Server 2001 workspace.
	Export file	Yes		File path name for XML manifest file to be created by Spout.exe.
	Create one document library	Yes	On	When the content is imported by Spin.exe into a SharePoint site, create one document library or one portal area per document library folder.
	Create one area per folder	Yes	Off (mutually exclusive with Create one document library)	
	Export security policy	No	Off	Export the SharePoint Portal Server 2001 workspace and document library security settings into the XML manifest file.
	Inherit security from parent site	No	Off	When the content is imported by Spin.exe into a SharePoint site, use the parent site's security settings.
Versions	Export multiple versions per document	Yes	On	Option to export multiple versions of each document (if available) or to export a single version of a document.
	Export only one version per document	Yes	Off (mutually exclusive with Export multiple versions per document)	
	Maximum number of most recent versions	No	Off	Specify the maximum number of most recent versions of a document to be exported.

	Export only approved versions	No	Off	Option to specify that only approved versions of a document are to be exported.
	Most recent version	Yes	On	Option to control if the most recent version or the most recently approved version of a document is to be exported.
	Most recently approved version	Yes	off (mutually exclusive with Most recent version)	
Profiles and Security	Merge properties from all profiles	Yes	On	Option to specify whether a single SharePoint Portal Server 2001 document profile is to be used when exporting the descriptive information for a document, or whether a merged list of properties from all of the SharePoint Portal Server 2003 document profiles referenced by the collection of exported documents is to be written to the XML manifest file.
	Convert all documents to a single profile	Yes	Off (mutually exclusive with Merge properties from all profiles)	
	Customize site group names for roles	No	<i>sourcefoldername_readers, sourcefoldername_authors, sourcefoldername_coordinators</i>	Override the default names used for the site groups to be used by Spin.exe when importing the exported content.

After Spout.exe successfully completes, the following directories and files are created:

- Filename.xml
- Filename\_SPOUT.log
- Filename\_SPOUT.err
- Document folders named A0, A1, A2, etc. through "An," with each folder containing a maximum of 100 documents.

**Note** The export folder URL must refer to the "documents" folder in the SharePoint Portal Server 2001 workspace or a subfolder below the documents folder. The export folder URL parameter cannot refer to the workspace "Document Library" folder (such as <http://myserver/myworkspace/Document Library>). The export folder URL parameter should not refer to SharePoint Portal Server 2001 system folders (such as <http://myserver/myworkspace/portal>). Spout.exe may complete successfully, but Spin.exe will not be able to import the exported XML manifest file and documents.

**Note** When exporting the document and descriptive information using Spout.exe, the exported content must be written to a shared file system folder that can be accessed from the target server running SharePoint Portal Server 2003, or the files must be copied to the target server before running Spin.exe. The shared folder must be on an NTFS-formatted file system and allow an unlimited number of connections.

## Document Library Import (Spin.exe)

Spin.exe reads the XML manifest file and the documents exported by a previous execution of Spout.exe and imports the documents and their associated descriptive information into a SharePoint Portal Server SQL Server document library. The descriptive information includes the names and values of the document profile properties, security settings, and version information associated with each document. SharePoint Portal Server 2001 routing and approval workflow settings are not imported.

The command-line syntax for Spin.exe is:

```
spin.exe siteurl filename.xml [/area areapath]
[/sourcesecurity] [/targetsecurity] [/renamedocs] [/silent]
[/reportonly] [/?]
```

Spin.exe takes the following parameters.

Parameter	Required?	Description
<i>siteurl</i>	Yes	URL to the SharePoint site where the documents are to be imported.
<i>filename.xml</i>	Yes	File path name to an XML manifest file that describes the content to be imported.
<i>/area areapath</i>	No	Site-relative path pointing to the target portal area where content should be imported.
<i>/sourcesecurity</i>	No	Enforce the source security settings found in the XML manifest file created by Spin.exe.
<i>/targetsecurity</i>	No	Enforce the existing security settings found in the target SharePoint site or portal area.
<i>/renamedocs</i>	No	Avoid overwriting existing files with duplicate file names.
<i>/silent</i>	No	Disable console reporting and bypass all prompting for user input.
<i>/reportonly</i>	No	Perform validation and logging without performing the import of document and associated descriptive information to the target SharePoint site or portal area.
<i>/?</i>	No	Display Help message.

The *siteurl* parameter is the URL to the SharePoint site where the documents are to be imported. The site URL can include the path to the root of either a portal site, a Windows SharePoint Services site collection, or a Windows SharePoint Services site.

The *filename.xml* parameter is the file system path to the XML manifest file that describes the content to be imported. The XML manifest file name can be an absolute local file path (C:\dir1\dir2\file.xml), a UNC file path (\\fileshare\dir1\file.xml), or just a file name (file.xml). If the XML file name has no path, it must exist in the current directory. The XML manifest file must be stored on an NTFS file system; it cannot be read from a FAT32 file system.

The */area areapath* parameter is a site-relative URL pointing to the portal area where content is to be imported. Spin.exe will report an error and terminate under the following conditions:

- *areapath* is more than 512 characters in length
- URL is not valid
- Portal area does not exist
- *siteurl* does not point to a valid SharePoint Portal site and an *areapath* is specified
- *areapath* contains special characters such as '&', '^', '<', and '>'.

Do not use the */area areapath* parameter when importing content into a Windows SharePoint Services site or My Site personal site. Instead, specify the Windows SharePoint Services site or My Site URL for the *siteurl* parameter. The name of the portal area document library is the same as the name of the portal area.

**Note** The maximum length of the portal area document library folder name is 30 characters. The document library folder name is the same as the portal area name. If the portal area name is longer than 30 characters, the document library folder name is truncated to 30 characters.

**Note** When the document library folder name is truncated to 30 characters, more than one Web Storage System–based document library folder may be saved to the same portal area. When this occurs, it is required that the properties of the imported documents be a proper subset of the properties in the existing portal area document library.

When importing content into a portal area, the *siteurl* parameter should be the URL for the server running SharePoint Portal Server, and the */area areapath* parameter should refer to the target portal area. If the *areapath* is supposed to refer to a topic area created during the SharePoint Portal Server 2003 installation (such as "Marketing"), *areapath* should refer to the topic area's relative path name (such as "Topics/Divisions/Marketing"). The example command line would be:

```
spin.exe http://myserver myfile.xml /area
Topics/Divisions/Marketing
```

The */sourcesecurity* parameter is used to enforce the source security settings found in the XML manifest created by Spin.exe. If the *sourcesecurity* parameter is specified and the following conditions exist, the following actions will be taken.

Condition	Action
The site group already exists in the XML manifest file.	Rename the site group by appending a number and continue migration.
The portal area already exists in the XML manifest file.	Merge the content with the existing area, but overwrite the security.
The document library already exists in the XML manifest file, and the schema from the source document library is a subset of the existing schema on the target document library.	Merge documents with the existing document library and overwrite with the source security.
The document library already exists in the XML manifest file, and the schema from the source document library is not a proper subset of the existing schema on the target document library.	Skip migrating documents for that document library.

The */targetsecurity* parameter is used to enforce the existing security settings found in the target SharePoint site or portal area. If the *targetsecurity* parameter is specified and the following conditions exist, the following actions will be taken.

Condition	Action
The site group already exists in the XML manifest file.	Skip creating the site group and continue to import the documents specified in the XML manifest file.
The portal area already exists in the XML manifest file.	Merge the content with the existing area

but do not overwrite security settings. Keep the existing security settings in the target SharePoint site.

---

The document library already exists in the XML manifest file, and the schema from the source document library is a subset of the existing schema on the target.

Merge documents with the existing document library and do not overwrite the security settings. Keep the existing security settings in the target SharePoint site.

---

The document library already exists in the XML manifest file, and the schema from the source document library is not a proper subset of the existing schema on the target document library.

Skip migrating documents for that document library and do not overwrite the security settings. Keep the existing security settings in the target SharePoint site.

---

If neither the `/sourcesecurity` nor the `/targetsecurity` parameters are specified and the following conditions exist, the following actions will be taken.

Condition	Action
The area or document library already exists.	Skip the import of the affected content and do not overwrite the security settings. Keep the existing security settings in the target SharePoint site.

---

The `/renamedocs` parameter is used to avoid overwriting existing files with duplicate file names. If the `/renamedocs` parameter is specified and the following conditions exist, the following actions will be taken.

Condition	Action
There are documents in a pre-existing folder with the same name as a document in the <code>.xml</code> file.	Rename the document being imported by adding a number to the end of the file name.

---

The `/silent` parameter disables console reporting and bypasses all prompting for user input.

The `/reportonly` parameter is used to perform validation and logging without performing the import of document and associated descriptive information to the target SharePoint site or portal area. This parameter enables an XML manifest file to be validated prior to performing the import of the documents and descriptive information into a SharePoint site or portal area.

**Note** When the `/reportonly` parameter is specified, `Spin.exe` does not report blocked file type errors. Blocked file type errors are reported to the console and `Spin.exe` log file when `/reportonly` is not

specified. If specific blocked file types need to be imported, they must be removed from the blocked file type list Manage Blocked File Types, available from the SharePoint Portal Server Central Administration page for the site.

**Note** SharePoint sites may have quota limits applied to help control the total amount of content stored on a site. The import tool verifies the amount of content that is about to be imported to ensure that it will not exceed the quota for the target site. If the quota for the site will be exceeded, the import tool reports the size of the current import, the size of the storage quota for the site, and exits.

When the Spin.exe tool runs, the following processing steps are performed:

- Validate the XML manifest file
- Temporarily grant the current user account full permissions on the front-end Web server for the portal site
- Stop the SharePoint Portal Server 2003 indexing service
- Verify that it can access the target SharePoint site or portal area
- Import content to the site
- Report percentage complete up to 100%
- Report success or failure
- Revoke the additional permissions for the current user on the front-end Web server
- Restart the SharePoint Portal Server 2003 indexing service
- Report statistics, including:
  - Number of site groups created
  - Number of areas created or changed
  - Number of document libraries created or changed
  - Number of folders created or changed
  - Number of documents imported (with multiple versions of one document counted as a single document)
  - Total time elapsed

**Note** When exporting the document and descriptive information using Spout.exe, the exported content must be written to a shared file system folder that can be accessed from the target server running SharePoint Portal Server 2003, or the files must be copied to the target server before running Spin.exe. The shared folder must be on an NTFS-formatted file system and allow an unlimited number of connections.

## Frequently Asked Questions

 [1. How can I upgrade to SharePoint Portal Server 2003 and continue to use the Web Storage System-compatible document store?](#)

SharePoint Portal Server 2003 includes an updated version of the Web Storage System technology known as the "backward-compatible document store."

SharePoint Portal Server 2003 Setup.exe can perform an in-place upgrade of a server running SharePoint Portal Server 2001. Setup.exe will automatically detect when it is started on a server running SharePoint Portal Server 2001 and start Upgrade.exe to begin the following upgrade process:



1. Upgrade.exe first exports the workspace categories, content sources, security roles, and Best Bet keywords to a collection of .xml files in the specified directory.
2. You must upgrade Windows 2000 Server to Windows Server 2003 and install ASP.NET.
3. You must re-run Setup.exe for SharePoint Portal Server 2003. Setup.exe will detect that the upgrade process has been started and start Upgrade.exe a second time to upgrade the Web Storage System to the backward-compatible document storage technology that is compatible with SharePoint Portal Server 2003 and Windows Server 2003.
4. You use the SharePoint Portal Server 2003 Site Settings administration pages to import the SharePoint Portal Server 2001 data exported in step 1.

**Note** To later use Spin.exe to import content containing document profiles that use the Category property, Upgrade.exe must be used to export the category information, and the SharePoint Portal Server 2003 Site Settings administration pages must be used to import and re-create the category hierarchy in a SharePoint Portal Site 2003 portal site. In the new portal site, the hierarchy of categories and subcategories is implemented as a hierarchy of portal topic areas and subareas.

#### [2. How do I migrate from the Web Storage System document store to the SharePoint Portal Server 2003 SQL Server content store?](#)

To migrate content from the Web Storage System document store to the SharePoint Portal Server 2003 SQL Server content store, use the SharePoint Portal Server 2003 Document Library Migration Tools, Spout.exe and Spin.exe, described in this document. The Document Library Migration Tools work with both the SharePoint Portal Server 2001 document libraries and the SharePoint Portal Server 2003 backward-compatible document libraries.

#### [3. What descriptive information \("metadata"\) is migrated by the SharePoint Portal Server 2003 Document Library Migration Tools?](#)

SharePoint Portal Server 2001 document libraries support the use of multiple document profiles per document folder. The document profiles are defined at the workspace level. SharePoint Portal Server 2003, in effect, supports only one document profile per list or document library. Spout.exe provides the option of exporting the properties of one workspace document profile or a merge of the properties from all available document profiles.

#### [4. What descriptive information is not migrated by the SharePoint Portal Server 2003 Document Library Migration Tools?](#)

SharePoint Portal Server 2001 routing and approval workflow settings are not migrated to the SharePoint Portal Server 2003 backward-compatible document store.

#### [5. What are the document versioning differences between SharePoint Portal Server 2001 and SharePoint Portal Server 2003?](#)

SharePoint Portal Server 2001 supports major and minor version numbers with versioning of document profile data. When a document is checked out, it is visible only to users with permission to author the document. SharePoint Portal Server 2003 does not support minor version numbers; only a linear single-number versioning scheme is supported. Checked out documents are locked to prevent multiple people from trying to modify the document at the same time. While checked out and locked, the document remains visible to all users who would normally have access to the document.

#### [6. What are the document security differences between SharePoint Portal Server 2001 and SharePoint Portal Server 2003?](#)

SharePoint Portal Server 2001 has three fixed roles with fixed sets of permissions: Reader, Author, and Coordinator. Users can be assigned roles on a folder-by-folder basis. SharePoint Portal Server 2003 has extensible site groups with customizable permissions. Site groups are defined at the SharePoint site level, and user security is managed at the document library level.

#### [7. What are the document routing and approval differences between SharePoint Portal Server 2001 and SharePoint Portal Server 2003?](#)

SharePoint Portal Server 2001 supports an Approver role assigned at the document library folder level and multiple approval models (serial routing, parallel routing with a single approver, and parallel routing

with all approvals required). SharePoint Portal Server 2003 supports moderator-based approval based on site groups and is scoped to the SharePoint site level.

 **8. What does Spin.exe do when it imports category information from the Spout.exe manifest file?**

To use Spin.exe to import content containing document profiles that use the Category property, SharePoint Portal Server 2003 Upgrade.exe must be used to export the category information, and the SharePoint Portal Server 2003 Site Settings administration pages must be used to import and re-create the category hierarchy in a SharePoint Portal Site 2003 portal site. In the new portal site, the hierarchy of categories and subcategories is implemented as a hierarchy of portal topic areas and subareas. If Upgrade.exe was not used to create the topic area hierarchy in the new portal site, the category property information will appear as a simple document property in the document library.

 **9. How are Web Storage System document profile properties mapped to document library properties?**

The Document Library Migration Tools migrate the Web Storage System document profile properties to document library properties based on the following mappings.

Source SharePoint Portal Server 2001 Document Profile Properties			Target SharePoint Portal Server 2003 Document Library Properties	
Property name	System or custom	Data type	Property name	Data type
Author	System	Text	Author	Single line of text
Categories	System	Multi-value list	Categories	Choice (check boxes, allow 'fill-in' choices)
Company	System	Text	Company	Single line of text
Description	System	Comment box	Description	Multiple lines of text
Keywords	System	Multi-value list	Keywords	Choice (check boxes, allow 'fill-in' choices)
Link	System	Text	Link	Single line of text
Manager	System	Text	Manager	Single line of text
Subject	System	Text	Subject	Single line of text
Title	System	Text	Title	Single line of text
Custom Text Property	Custom	Text	Custom Text Property	Single line of text
Custom Number Property	Custom	Number	Custom Number Property	Number
Custom List Property	Custom	List	Custom List Property	Choice (option buttons, allow 'fill-in' choices)
Custom Multi-value List Property	Custom	Multi-value list	Custom Multi-value List Property	Choice (check boxes, allow 'fill-in' choices)
Custom Comment Box Property	Custom	Comment box	Custom Comment Box Property	Multiple lines of text
Custom Date Property	Custom	Date	Custom Date Property	Date (date-only format)

## Notes

- Document profile properties marked as "Required" in SharePoint Portal Server 2001 are marked "Required" when migrated to SharePoint Portal Server 2003.
- The value of the SharePoint Portal Server 2003 "Single line of text" property is limited to a maximum of 255 characters.
- The value of the SharePoint Portal Server 2003 "Multiple lines of text" property is limited to a maximum of 20 lines of displayable text.
- The names of document profile properties are migrated without any changes.

## Known Issues

### Exporting files from SharePoint Portal Server 2001 with SP2A installed fails.

In Internet Information Server Manager, browse to the default Web site, right-click the workspace against which Spout.exe is to be run, and then click **Properties**. On the **Virtual Directory** tab, select the **Directory browsing** check box.

### Shortcuts stored in SharePoint Portal Server 2001 Link properties are not usable after migration to SQL Server–based document libraries.

The shortcuts stored in Link properties are migrated, and there is no data loss, but the shortcuts cannot be used to access the target document if the document is also stored the SQL Server–based document library.

### The current user must be a member of the Administrators group on the source server.

The user of the Spin.exe must be a server Administrator on the source server. If the user is not a member of the Administrators group on the source server, the error "Unable to retrieve folder properties for *folderurl*" is displayed. In addition, if Spin.exe is used to import content into a portal area, team site, or My Site personal site, the user must be a SharePoint site administrator for the site.

### Running Spin.exe or Spout.exe returns immediately with no action.

This behavior is a result of the executable files residing on a FAT32-formatted file system. FAT32 is not supported.

### File data and file properties are missing after an import.

This behavior may be a result of the source files and .xml file residing on a FAT32-formatted file system. FAT32 is not supported.

### "Out of memory exception" error is reported in the Spin.exe error log.

This may be the result of trying to import very large files, or trying to import a file with many large versions. It is necessary to import these files manually.

## Glossary

### backward-compatible document library

A feature of SharePoint Portal Server 2003 that enables documents from SharePoint Portal Server 2001 document libraries to be used in SharePoint Portal Server 2003 portal sites. Backward-compatible document libraries are based on an upgraded version of the Microsoft Web Storage System technology that is compatible with Windows Server 2003 and SharePoint Portal Server 2003. The Document Library Migration Tools are used to migrate content from backward-compatible document libraries to document libraries.

### document library

A component of a SharePoint site or area where documents and their associated descriptive information are stored. Document libraries are stored in SQL Server content databases.

 [SQL Server document library](#)

See [document library](#).

 [Web Storage System–based document library](#)

Either a feature of SharePoint Portal Server 2001 where documents and their associated descriptive information are stored, or a backward-compatible document library (see [backward-compatible document library](#)). The Document Library Migration Tools are used to migrate content from Web Storage System–based document libraries (including backward-compatible document libraries) to document libraries.

 [XML manifest file](#)

The XML manifest file is an .xml file created by Spout.exe that contains descriptive information about the documents exported from a Web Storage System–based document library. The descriptive information includes category and security information. The XML manifest file is read by Spin.exe and is used to control the importing of documents and descriptive information into a SharePoint site or portal area.

## Additional Resources

- [Microsoft Office SharePoint Portal Server on Office Online](#): Resources for administrators about SharePoint Portal Server
- [Microsoft SharePoint Products and Technologies Web site](#): A Web site that provides information about SharePoint Products and Technologies
- [Microsoft Product Support Services](#): Microsoft Help and Support Services for all products
- [Microsoft Windows SharePoint Services on TechNet](#): Resources for administrators about Windows SharePoint Services
- [Microsoft SharePoint Products and Technologies on MSDN](#): Resources for developers about SharePoint Portal Server on the Microsoft Developer Network
- [Microsoft SharePoint Products and Technologies Assistance Center](#): A Web site that provides a centralized collection of documentation resources for Microsoft SharePoint Products and Technologies