Tzunami Inc.
Evaluation Guide

Using K-Wise Deployer™ for Rapid Content Migration into Microsoft SharePoint Products and Technologies

Rapid migration solutions for Microsoft SharePoint Portal Server 2003 and Windows SharePoint Services

FINAL REVIEW DRAFT – NOT FOR DISTRIBUTION

Abstract

K-Wise Deployer is a Microsoft .NET application designed for the rapid content migration from multiple sources into Microsoft SharePoint Products and Technologies.

Rather than being viewed merely as a migration tool, K-Wise Deployer should be viewed as a design board for rapid SharePoint construction combined with a unified application and process that streamlines both the construction and migration processes.

K-Wise Deployer enables organizations using SharePoint to dramatically reduce deployment costs while providing better data accountability and content cleansing tools. A typical SharePoint Portal Server document migration project can be implemented within one week, while, with a traditional labor intensive migration process, it might take several months.

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Introduction

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Rather than being viewed merely as a migration tool, K-Wise Deployer should be viewed as a design board for rapid SharePoint construction combined with an application and process that streamlines the content migration process.

K-Wise Deployer enables organizations using SharePoint to dramatically reduce deployment costs. A typical SharePoint Portal Server document migration project can be implemented within one week, while, with a traditional labor intensive migration process using customer software, it can take several months.

Acknowledgements

This evaluation guide was created with the support of Parallelspace Corporation, a Tzunami business partner.

KEY FEATURES

SharePoint Portal Server 2003 Site Design and Content Migration

K-Wise Deployer ("Deployer") is the leading tool for modeling Windows SharePoint sites and document libraries on a Windows SharePoint Services or SharePoint Portal Server 2003 server (or server farm) and for migrating content from a number of different source content locations to the SharePoint environment. The list of currently supported source content locations includes:

- Local file systems
- File servers
- Exchange public folders
- SharePoint Portal Server 2001 workspaces
- Windows SharePoint Services sites
- SharePoint Portal Server 2003 sites
- Hyperwave

This document concentrates on the tasks, activities and steps required to migrate content stored on file server to a SharePoint document library in a Windows SharePoint Services or SharePoint Portal Server 2003 site.

Drag and Drop User Interface

K-Wise Deployer's drag and drop user interface makes it easy to deploy individual files, folders or entire folder hierarchies of content to a SharePoint document library.

Metadata Mapping

K-Wise Deployer's metadata mapping features distinguish Deployer from simpler tools. Deployer's GUI-based capabilities enable new custom property sets to be designed and for custom SharePoint document libraries to be created based on the custom property sets created in Deployer

HOW IT WORKS

K-Wise Deployer communicates directly with the source content location. In the case of file server content, the source content location may be a local file system or a remote file server (see Figure 1). The destination content location is a Microsoft Windows server running either Windows SharePoint Services or SharePoint Portal Server 2003.

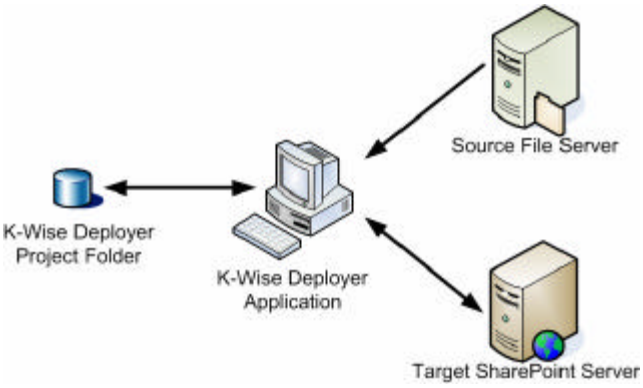


Figure 1. K-Wise Deployer Architecture

Deployer uses the concept of a *project* (and corresponding *project folder*) to store all of the information related to a particular content migration project. The project folder is a file system folder that is used to store information describing the source content location, property sets and the configuration of the destination content location.

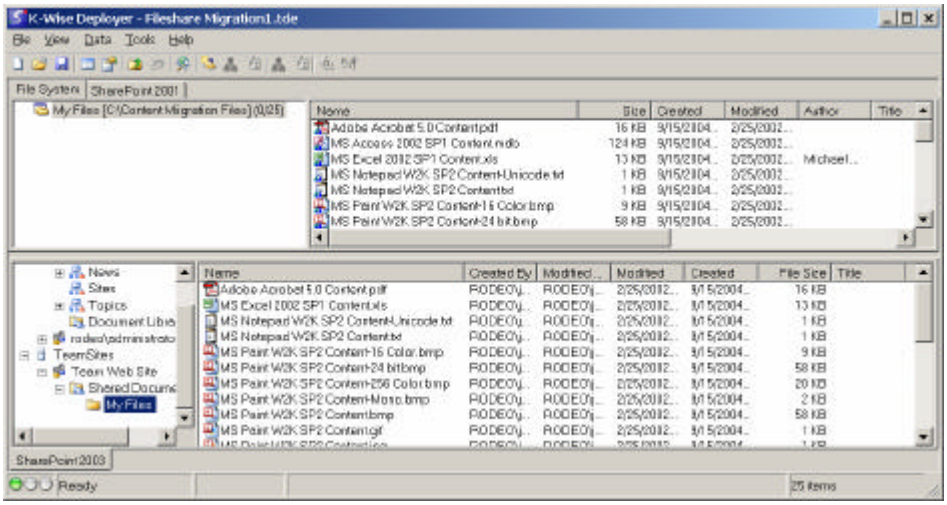


Figure 2. K-Wise Deployer Application

The Deployer user interface is depicted in Figure 2. The top half of the project window uses a Windows Explorer style folder tree and details tables to display the folder and file content that has been loaded from the source content location. The bottom half of the project window uses a similar approach to display the structure and content of the SharePoint portal sites and team sites on a given SharePoint

server (or server farm). The details tables in the top and bottom halves of the project display the columns of metadata properties and values for each document in the currently selected folder.

The Deployer content migration process is organized into a series of tasks, activities and steps. The four process tasks include:

- Load
- Model
- Deploy
- Commit

Each task in turn is broken down into a collection of activities. Each activity is described as a series of steps.

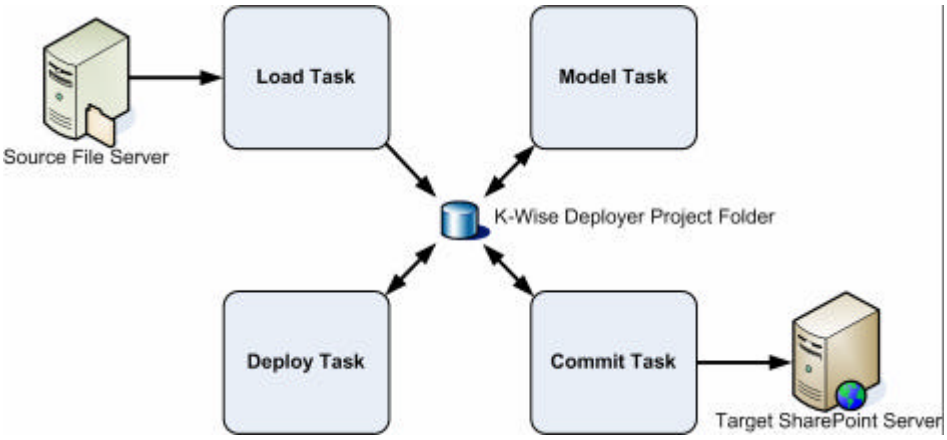


Figure 3. K-Wise Deployer Process View

The Load task involves loading information describing the source content folder hierarchy and the metadata properties associated with each document. Loading is a read-only operation that reads information from the source content location and stores the information in the current Deployer project. Loading does not make changes to the source content location.

The Model task contains the series of activities used to design or modify the structure of the destination SharePoint environment. This includes connecting to a destination SharePoint server and creating new SharePoint sites and SharePoint document libraries. The configuration of a new site is determined by selecting one of the SharePoint site templates available on the server. New SharePoint document libraries can be created in an existing or brand-new SharePoint site. In addition to sites and document libraries, the Model task can be used to create portal areas and subareas in a SharePoint portal site as well as folders and subfolders in a new or existing SharePoint document library. The Model task does not make any actual changes to the destination SharePoint server. The changes to be applied to the destination SharePoint server are not executed immediately. Rather, the changes are recorded in the current Deployer project and only applied when a Commit task is executed.

The Deploy task specifies which source folders and files are to be migrated to

specific SharePoint document libraries, folders and subfolders on the destination SharePoint server. Similar to the Model task, Deployer does not immediately migrate the source content to the SharePoint server. The Deploy task records the changes to be made to the current Deployer project. The Deploy task content migration changes are executed and applied to the destination SharePoint server when a Commit task is executed.

The Commit task causes the orderly execution of the destination content location changes to begin. First, the Commit task applies the Model task destination source location changes to the SharePoint server. This ensures that the sites, document libraries and document library folders have been created in the destination SharePoint site before the Deploy task content migration changes are applied. The Deploy task content migration changes are applied after the Model task changes. The content migration changes are those involved with the physical copying of the source content items (for example, Office documents) from the source content location to the destination folder in the destination document library in the destination SharePoint site.

More information on using Deployer for specific content migration scenarios is found in the section Content Migration Scenarios. Information on how to install Deployer is found in the next section, Installation.

INSTALLATION

Software Prerequisites

Client Workstation

K-Wise Deployer has been tested with and is supported on computers with the following Microsoft Windows configurations:

- Microsoft Windows Server 2003
- Microsoft Windows Server 2000 SP2
- Microsoft Windows XP SP1 or SP2

Deployer expects to be able to connect to a SharePoint Portal 2003 or Windows SharePoint Server 2003 server running the latest release of Windows Server 2003. Deployer works with both single server as well as server farm deployments of SharePoint Products and Technologies.

Specific Requirements

K-Wise Deployer requires and the setup program checks to make sure that Microsoft XML 4.0 is installed on the local computer. Microsoft XML 4.0 can be downloaded from the Microsoft Download Center Web site: http://www.microsoft.com/downloads/details.aspx?FamilyID=3144b72b-b4f2-46da-b4b6-c5d7485f2b42&DisplayLang=en.

SharePoint Server

K-Wise Deployer has been tested with and is supported on computers with the following configurations:

- Microsoft Windows Server 2003
- SQL Server 2000 (excluding Windows MSDE (Microsoft SQL Server Data Engine)
- Windows SharePoint Services
- Microsoft Office SharePoint Portal Serve 2003

All SharePoint single server as well as server farm configurations described in the SharePoint administrator guides are supported.

Installing K-Wise Deployer

Installing K-Wise Deployer consists of a single task: installation.

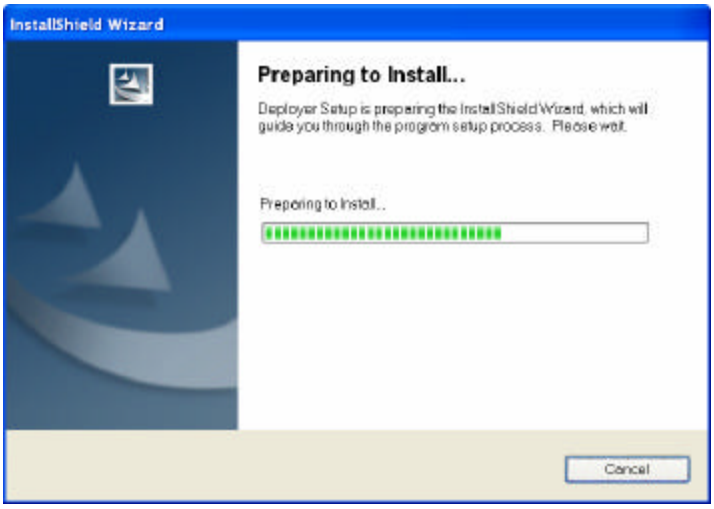
Installation Task

Installing K-Wise Deployer consists of two activities:

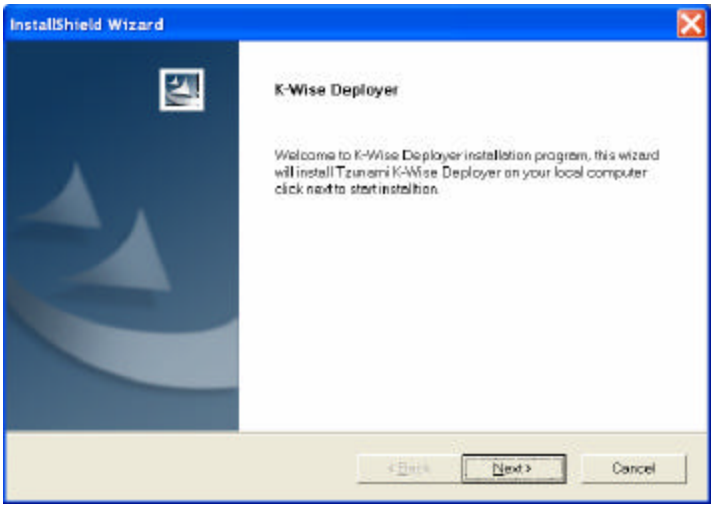
- Install
- Activate

Install activity

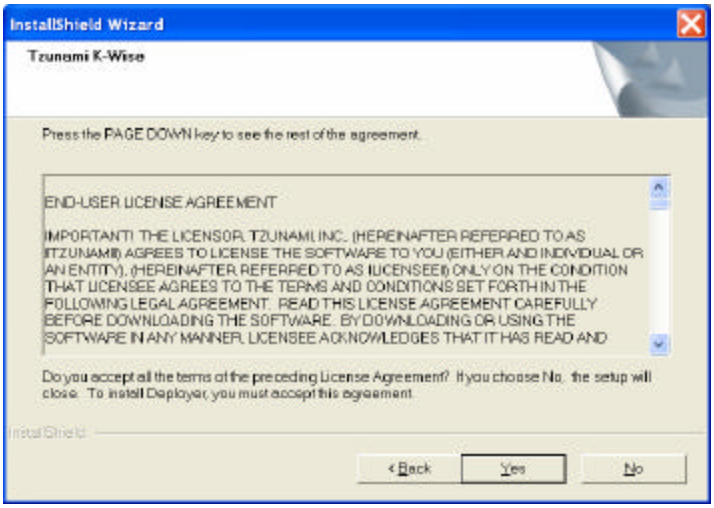
1. Download the K-Wise Deployer installation files from the Tzunami web site (http://www.tzunami.net) to a local file system folder.
2. Start the setup.exe program by double-clicking on it in Windows Explorer by typing the full pathname of the setup.exe program in the Start->Run… dialog box and click OK.
3. The setup.exe program will start and display the following dialog box.



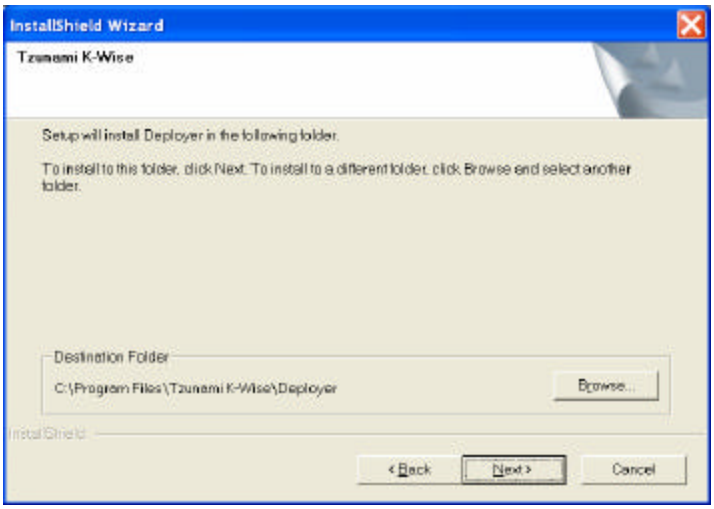
4. After the setup.exe program has completed its preparation steps, the following dialog box will be displayed. Click Next.



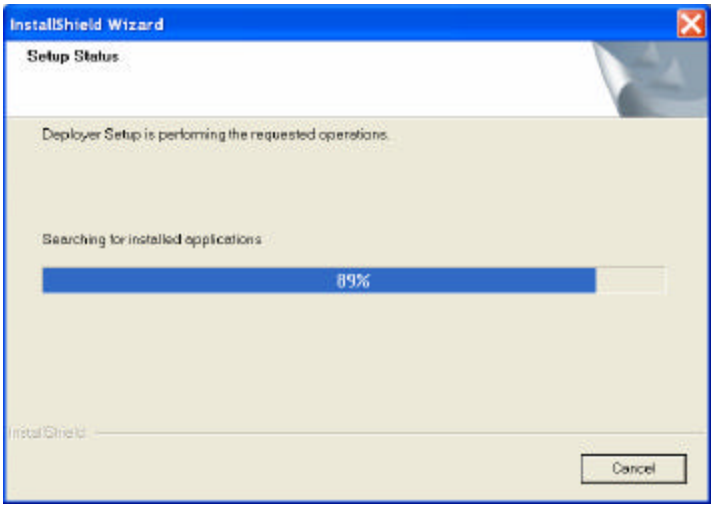
5. Read and review the End-user License Agreement (EULA) when it is displayed. Click Yes or No if you accept or don't accept all the terms of the EULA.



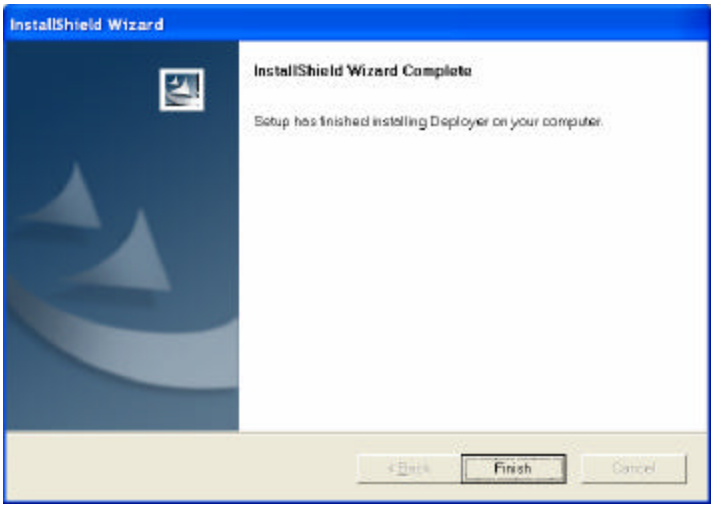
6. The following dialog will be displayed allowing you to change the default installation folder to be used by setup.exe. Click Browse to change the folder. Click Next to continue the installation process.



7. The following dialog appears while the installation process is underway.



8. When setup.exe has completed the installation process, the following dialog box is displayed. Click Finish.

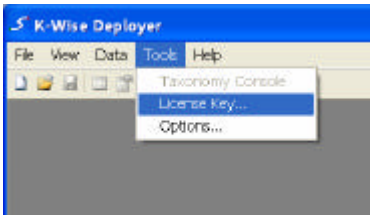


When the setup.exe program has finished, the following Deployer menu item will appear on Windows Start Programs menu.

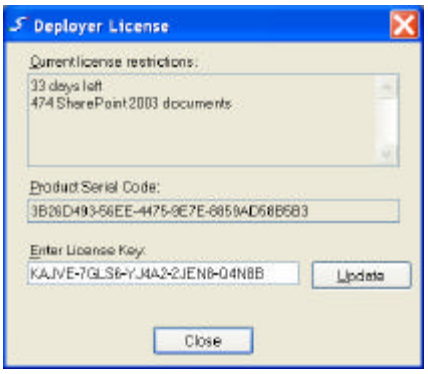
Activate activity

K-Wise Deployer installs a default license key that can be used for evaluation purposes. To install a new license key, following these steps:

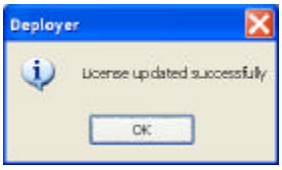
1. Start Deployer
2. Click on Tools->License Key …



3. The following Deployer License dialog box will be displayed.



4. Enter the new license key and click Update. The following dialog box should appear. If you receive an error, contact Tzunami Support by emailing mailto:support@tzunami.comsupport@tzunami.com.



5. Click Close on the Deployer License dialog box.
6. Deployer is now licensed using the new license key.

CONTENT MIGRATION SCENARIOS

Migrating Content from a File Server into SharePoint Portal Server 2003

The K-Wise content migration process is made up of four tasks, which are usually executed in the following order:

- Load
- Model
- Deploy
- Commit

The sample content migration files used in these scenarios are described in Appendix B – Content Migration Test Files on page 45.

Assumptions

1. It is assumed that the existing users already have accounts in the local Active Directory domain.
2. Most Deployer operations can be initiated through the menus, the toolbar or by right-clicking on an item to display a pop-up context menu. In the task and activity descriptions below, the right-click approach for displaying a menu as a pop-up menu is used.

User Permissions

The user account used to run the Deployer should have the permissions described in

Table 1. Deployer User Permissions

Content source	The user must have Read permissions in case of file shares and Coordinator rights in case of SharePoint Portal Server 2001.
SharePoint Web front-end server	The user must have administrator rights on the machine (mandatory to analyze the SharePoint structure).
Target SharePoint	The user must have full administrator rights for the SharePoint site collection or portal site.
SQL Server	The user must have full administrator rights on the master and SharePoint databases.
Active Directory	The user must have query rights to get lists of users in the target Active Directory domain..

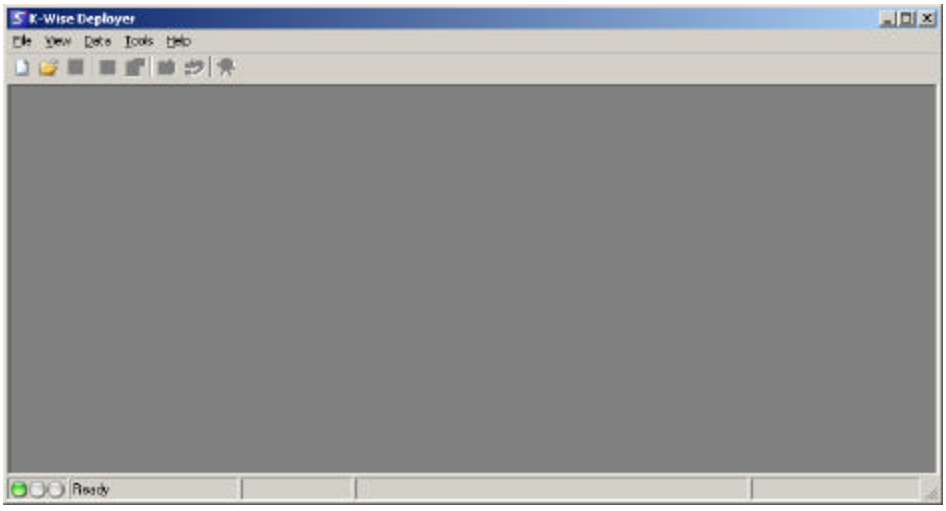
The K-Wise Content Migration Process

An overview of the content migration process can be found in the section How It Works on page 4. The following steps, organized by content migration process task, describe how Deployer is used to migrate content from a source file server to a destination SharePoint server.

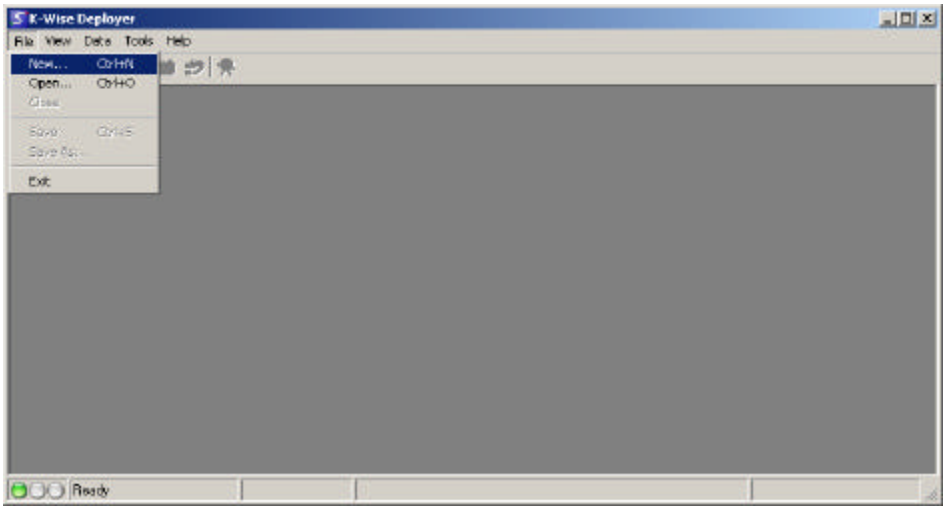
Create a New Project activity

K-Wise Deployer stores all of the information related to a content migration project in a Deployer project and project folder. The first step in using Deployer is to create a new project.

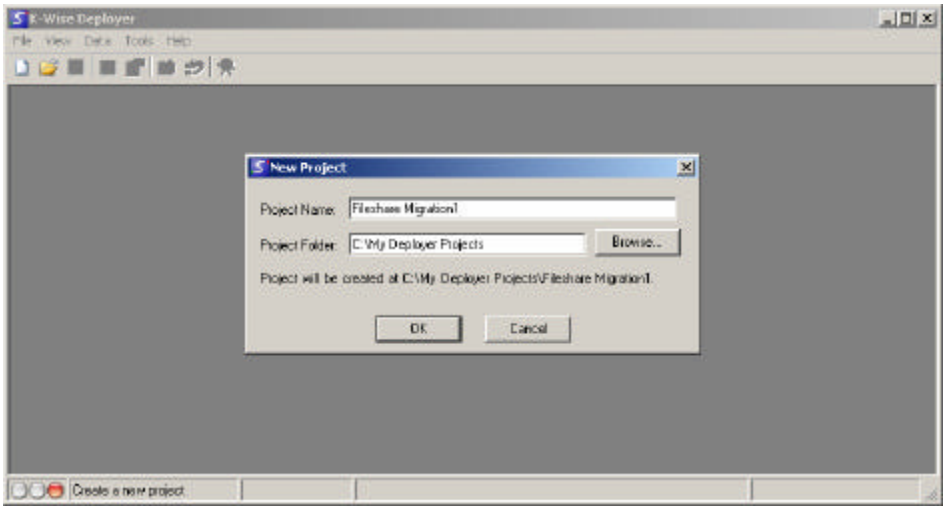
1. Start K-Wise Deployer. Before a new Deployer project is created or an existing project is opened, Deployer will display an empty window.



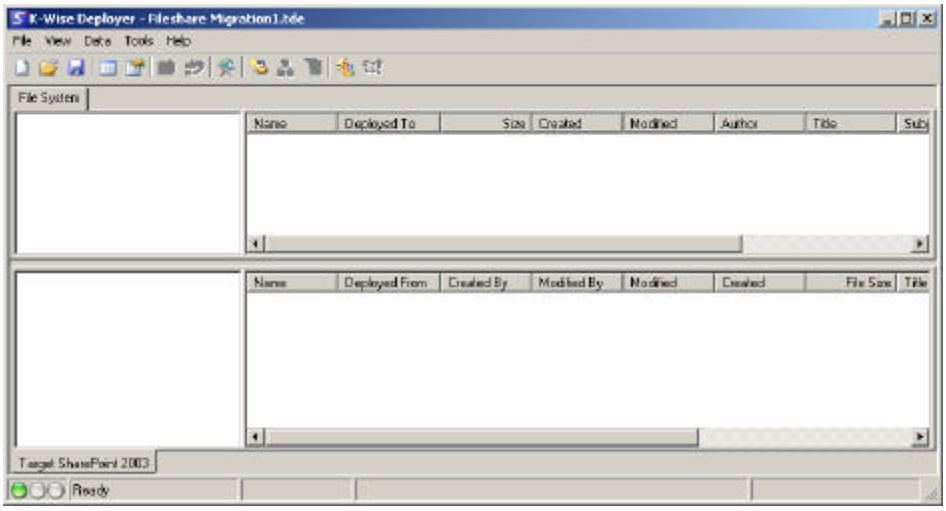
2. To create a new project, click File->New…



1. When the New Project dialog box appears, enter a project name and select a file system folder where Deployer will store the files it creates for this project. Click OK.



3. Deployer will create the new project folder and initialize its project files. Deployer will display the source content location window in the top half of the project window and the destination content location window in the bottom half of the project window. Initially both windows are empty.



Load Task

The Load task involves loading information describing the source content folder hierarchy and the metadata properties associated with each document. Loading is a read-only operation that reads information from the source content location and stores the information in the current Deployer project. Loading does not make changes to the source content location.

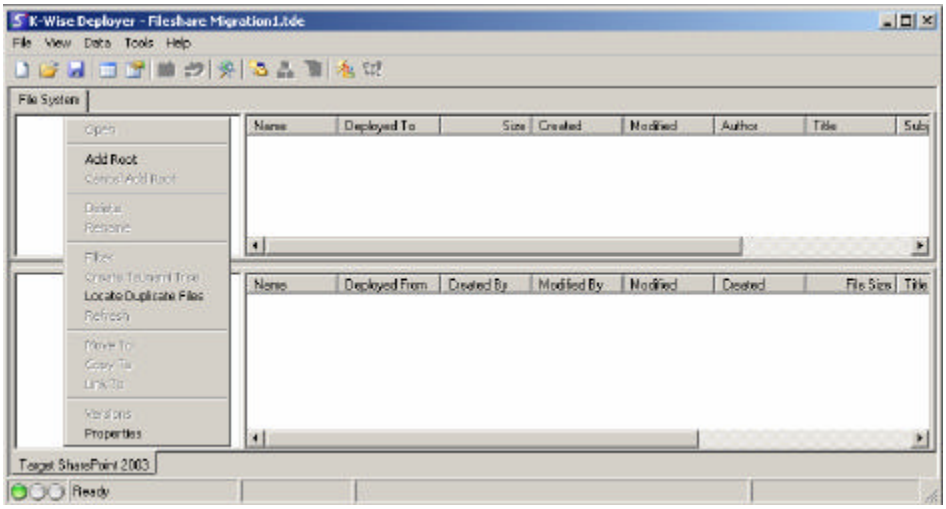
Once a new empty project has been created, the next task is to load content and metadata from the source content location.

File Server Load activity

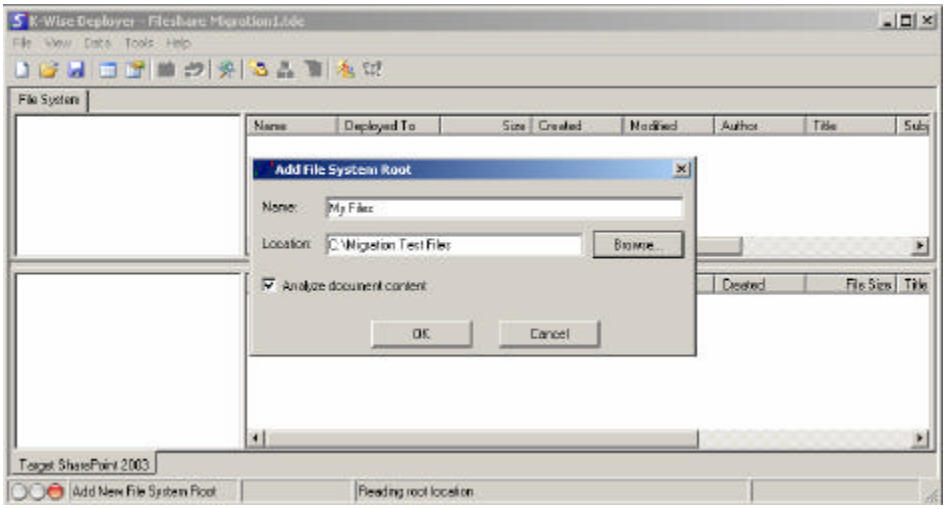
1. If more than one tab appears above the source content window in the top half of the Deployer application, click the File System tab to begin migrating content

from a local file system or remote file server.

2. Right-click in the File System window. When the file system pop-up menu appears, select *Add Root*.

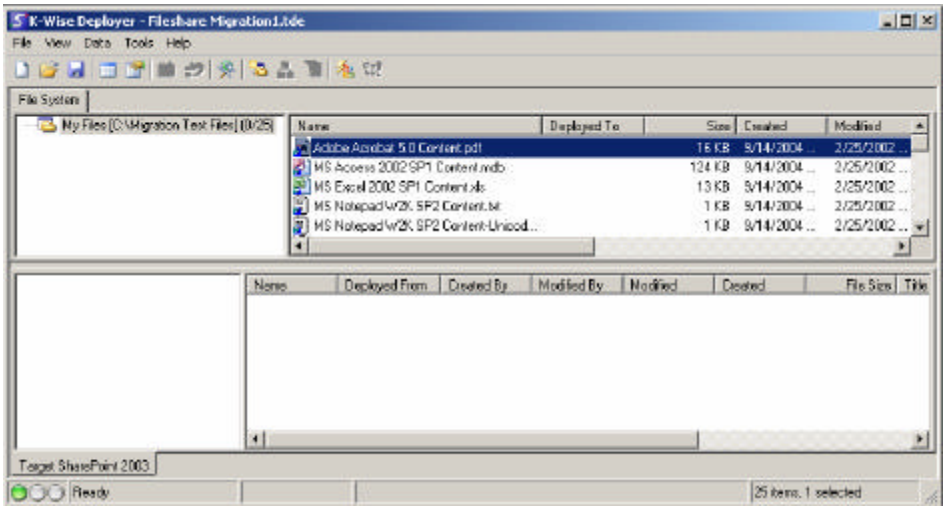


3. When the Add File System Root dialog box appears, enter name to be used for the label for the file system folder to be loaded. Click Browse… to select the source file system folder to be loaded.
   To enable Deployer to scan and load the metadata associated with each file (in addition to the file properties available in the file system directory), check *Analyze Document Content*. If the number of source documents is very large and/or each file's internal metadata does not need to be migrated, leave this option unchecked. This will enable Deployer to load the source files as fast as possible.



4. Click OK to start the source content loading process. When the process is complete, the folder and files loaded by Deployer will appear in the top window. If *Analyze Document Content* was checked, note the extra metadata fields are available for each document that was loaded into the project.

Note: Two numbers appear to the right of each folder name in the source content window. The second number is a count of the number of source documents that have been loaded from that particular folder and all subfolders. The first number is the number of documents remaining to be committed to the destination content location. This number will be described in more detail in the Deploy and Commit task descriptions.



The Load task is complete when Deployer has finished loading the folders and files from the selected source content location.

Model Task

The Model task is the series of activities used to design or modify the structure of the destination SharePoint environment. This includes connecting to a destination SharePoint server and creating new SharePoint sites and SharePoint document libraries. The configuration of a new site is determined by selecting one of the SharePoint site templates available on the server. New SharePoint document libraries can be created in an existing or brand-new SharePoint site. In addition to sites and document libraries, the Model task can be used to create portal areas and subareas in a SharePoint portal site as well as folders and subfolders in a new or existing SharePoint document library. The Model task does not make any actual changes to the destination SharePoint server. The changes to be applied to the destination SharePoint server are not executed immediately. Rather, the changes are recorded in the current Deployer project and only applied when a Commit task is executed.

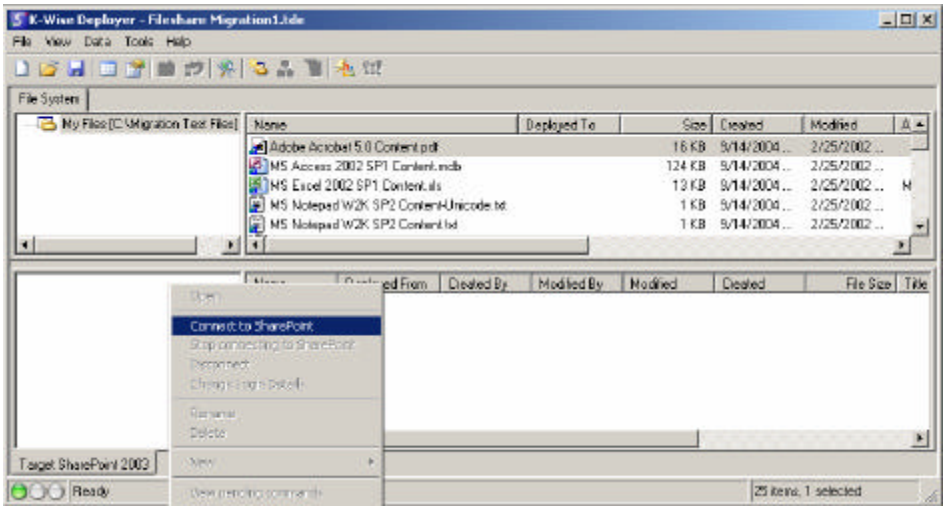
Once the source content is loaded, the next step is to design the SharePoint sites, document libraries and folders where source content is to be migrated to.

As an alternative, it is also common for the Model task to be organized as a separate process with its own Deployer project and project folder; often under the direction of another member of the content migration team (for example, by the team's information architect).

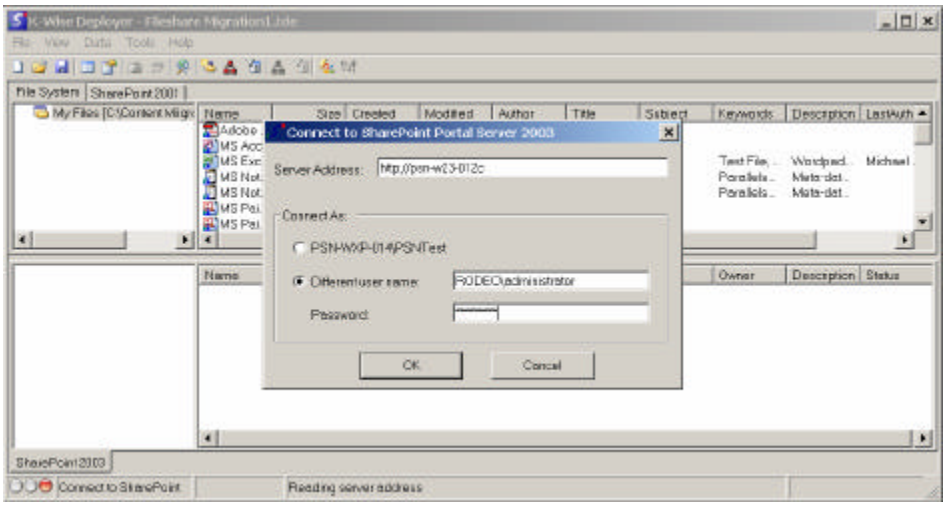
Connect to SharePoint Server activity

1. To begin the Model task, it is necessary to connect to the destination SharePoint

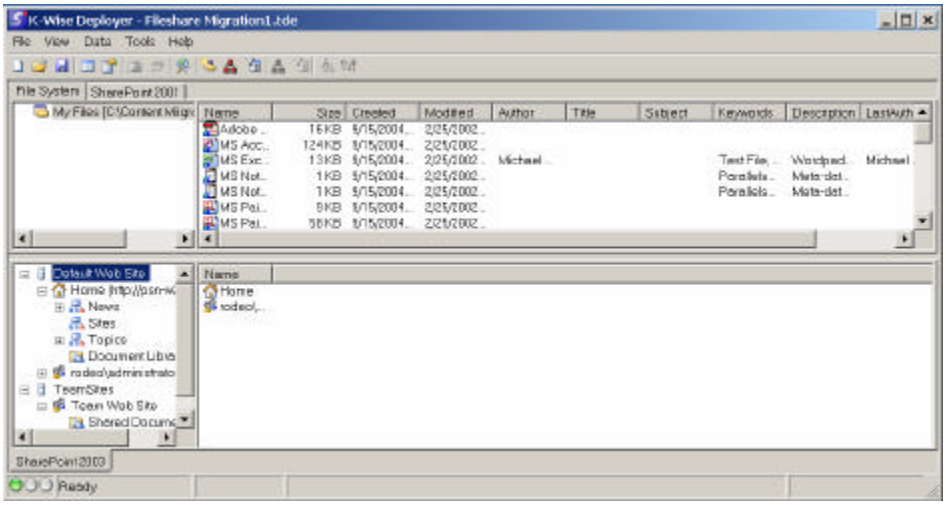
server. Right-click in the bottom destination content location window to display the destination content source pop-up menu. Select *Connect to SharePoint.*



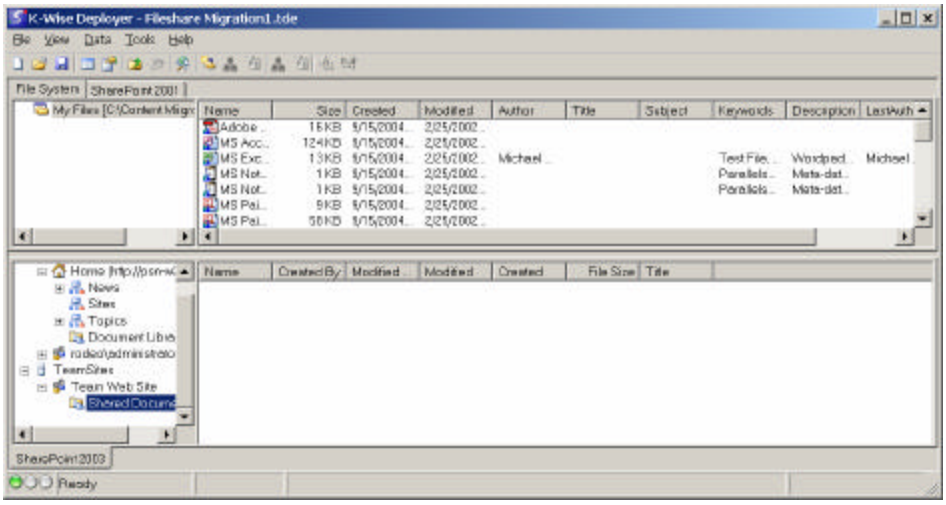
2. The Connect to SharePoint Portal Server 2003 dialog box is displayed. Enter the URL for the destination SharePoint server. The server machine name, domain name or IP address can be used. Select the user account to be used by Deployer to login and access the destination SharePoint server. The selected user account must be member of the Administrator role for the top-level SharePoint site collection on the SharePoint server. Click OK.



3. Deployer will begin to scan the destination SharePoint server and load descriptive information about each SharePoint portal site, team site, 'My Site' personal site, portal area and listing, document library, folder and file on the SharePoint server.

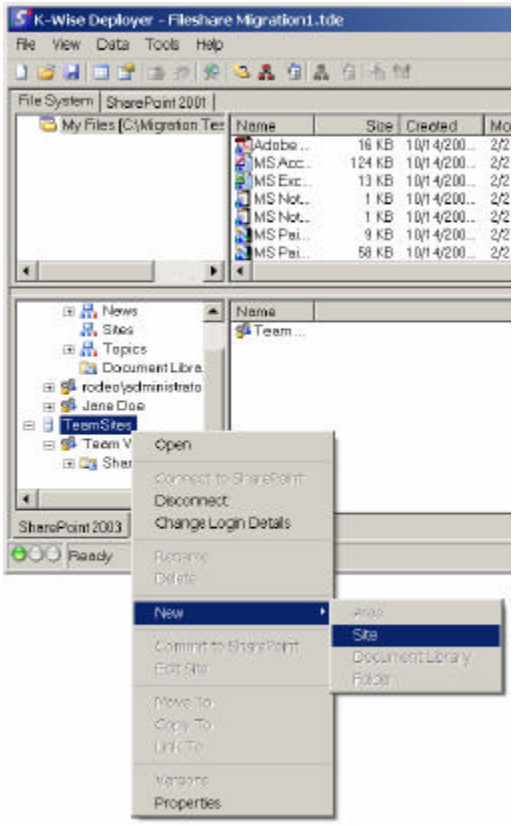


4. Clicking on a SharePoint site, document library, folder or file on the left-side of the destination content window will display the metadata for the item in the right-side of the window.

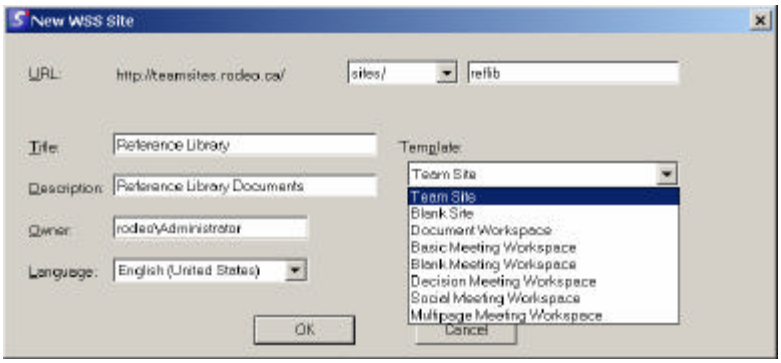


Create a New SharePoint Site activity

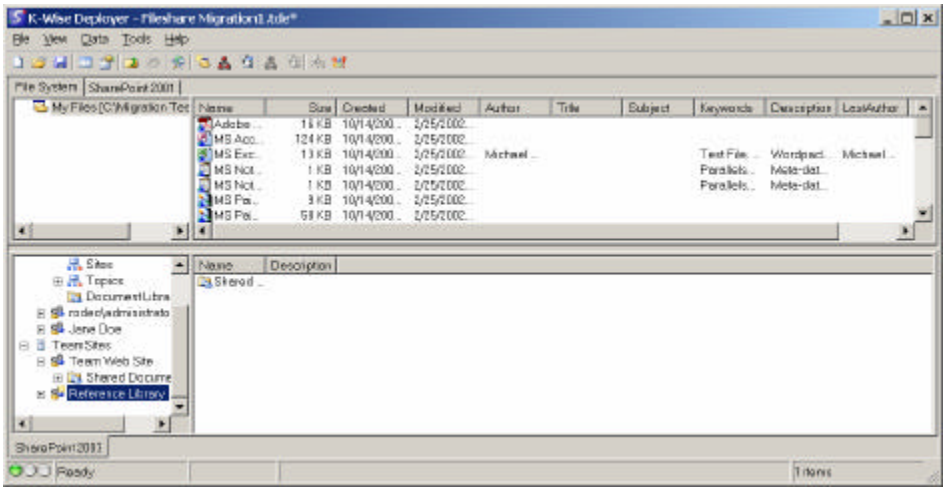
1. To create a new SharePoint site in your Deployer project, create a new Deployer project or open an existing Deployer project (see Create a New Project activity on page 13). When an existing project is opened and the project contains a previous SharePoint connection, Deployer will automatically connect to the destination SharePoint Server; otherwise, connect to the SharePoint Server (see Connect to SharePoint Server activity).
2. Right-click on a portal or team site to display the modeling pop-up menu. Scroll down the menu until *New* is highlighted. Select *Site* from the New pop-up menu.



3. The New WSS Site dialog box will be displayed. Enter the URL, title, description, owner account to be used for the new SharePoint Site. Select the language and team site template to be used.



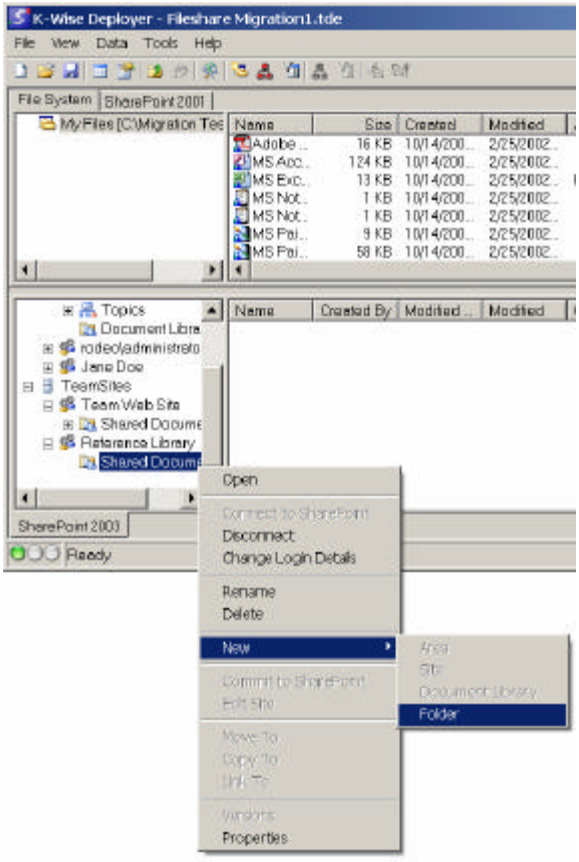
4. The new SharePoint site will appear in the bottom half of the project window.



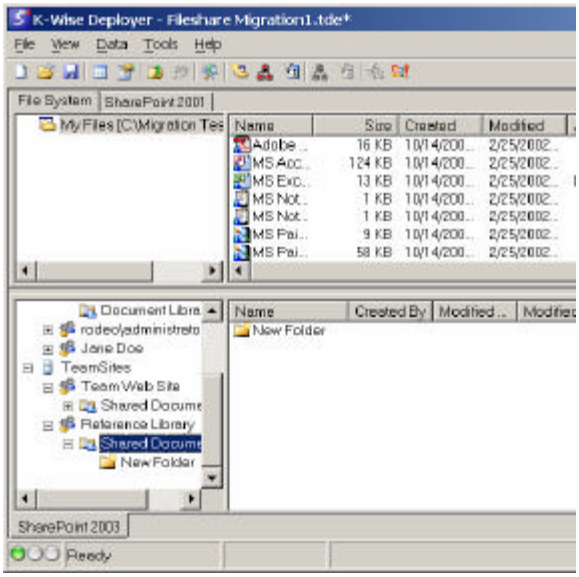
5. At this point, the new site has been added to the Deployer project but Deployer has not applied the changes to the SharePoint server. The Deployer project enables you to model a complete SharePoint server configuration before physically committing it to your SharePoint server.
   Once an initial connection has been made to a SharePoint server and the SharePoint server configuration has been saved in a Deployer project, further modeling work can be completed offline or off-site – without requiring a live connection to the SharePoint server.
   When the Model task is complete, the changes in the Deployer project need to be physically committed to the SharePoint server. This is described in the Commit the Changes to the SharePoint Server activity on page 31.

Create a New Folder in a SharePoint Document Library activity

1. To create a new folder in an existing SharePoint document library on an existing SharePoint site, open an existing Deployer project (see Create a New Project activity on page 13).
2. Right-click on the document library in the SharePoint site to display the modeling pop-up menu. Scroll down the menu until *New* is highlighted. Select *Folder* from the New pop-up menu.



3. A new folder called “New Folder” will be added to the highlighted document library.



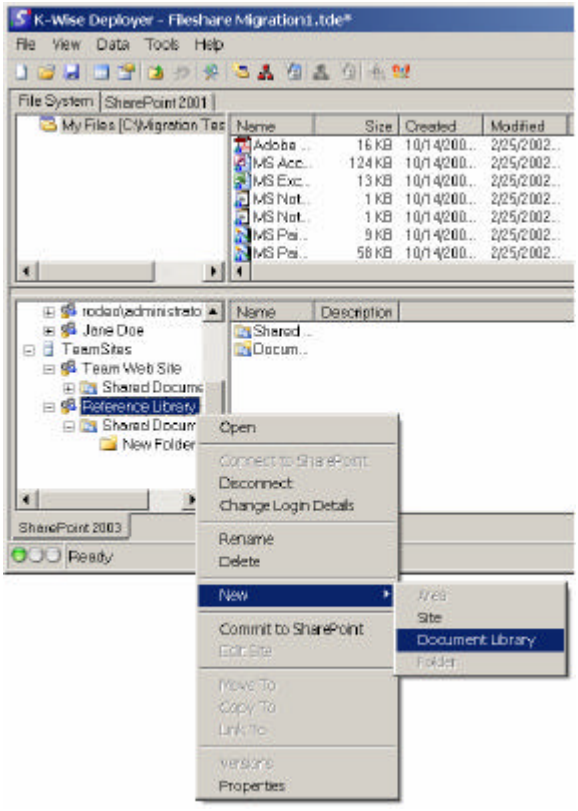
4. To rename the folder, right-click on the folder to display the modeling pop-up menu and select *Rename*. Enter the new name for the folder and click OK.
5. A subfolder can be created inside an existing folder by right-clicking on the folder

and selecting New and then selecting Folder from the New pop-up menu.

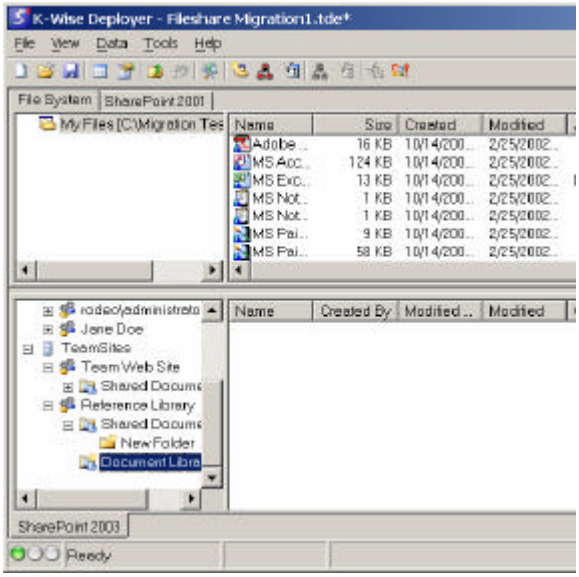
6. At this point, the new folder has been added to the Deployer project but Deployer has not applied changes to the SharePoint server. When the modeling SharePoint server configuration is complete, the changes in the Deployer project need to be physically committed to the SharePoint server. This is described in the Commit the Changes to the SharePoint Server activity on page 31.

Create a New Document Library in a SharePoint Site activity

1. To create a new document library in an existing SharePoint site, open an existing Deployer project (see Create a New Project activity on page 13).
2. Right-click on the SharePoint site to display the modeling pop-up menu. Scroll down the menu until *New* is highlighted. Select *Document Library* from the New pop-up menu.



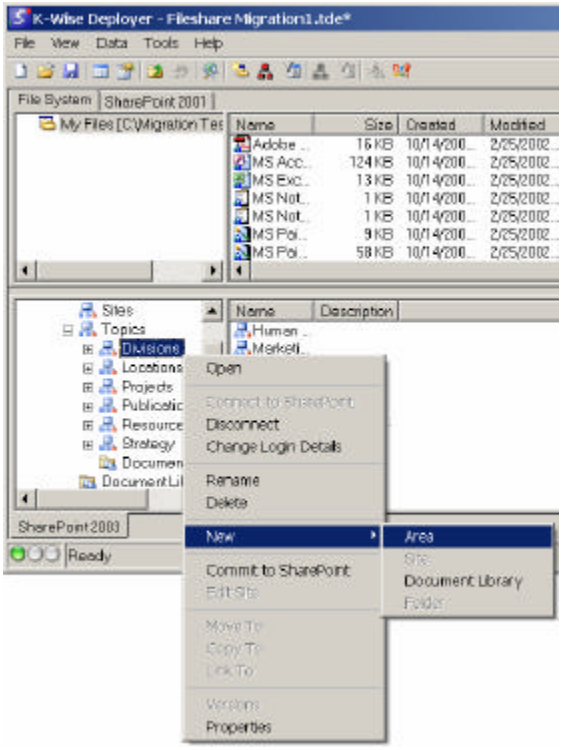
3. A new document library called *Document Library* will be added to the SharePoint site.



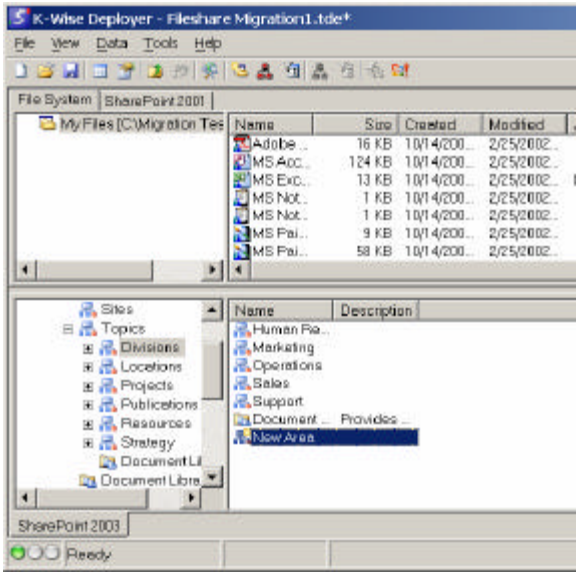
4. To rename the document library, right-click on the document library to display the modeling pop-up menu and select *Rename*. Enter the new name for the document library and click OK.
5. Folders and subfolders can be created inside a document library by right-clicking on a document library or one of its sub folders and selecting New and then selecting Folder from the New pop-up menu. See Create a New Folder in a SharePoint Document Library activity on page 20 for more details.
6. At this point, the new document library has been added to the Deployer project but Deployer has not applied changes to the SharePoint server. When the modeling SharePoint server configuration is complete, the changes in the Deployer project need to be physically committed to the SharePoint server. This is described in the Commit the Changes to the SharePoint Server activity on page 31.

Create a New Portal Area activity

1. To create a portal area in an existing SharePoint portal site, open an existing Deployer project (see Create a New Project activity on page 13).
2. Click on the portal site and then click on Home to display the list of top-level topics in the portal site. The default portal areas are called News, Sites and Topics.
3. Right-click on the Topics portal area (or a subarea) to display the modeling pop-up menu. Scroll down the menu until *New* is highlighted. Select *Area* from the New pop-up menu.



4. A new portal area called “New Area” will be added to the highlighted Topics area (or subarea).



5. To rename the portal area, right-click on the portal area to display the modeling pop-up menu and select *Rename*. Enter the new name for the portal area and click OK.
6. At this point, the new portal area has been added to the Deployer project but Deployer has not applied changes to the SharePoint server. When the modeling SharePoint server configuration is complete, the changes in the Deployer project

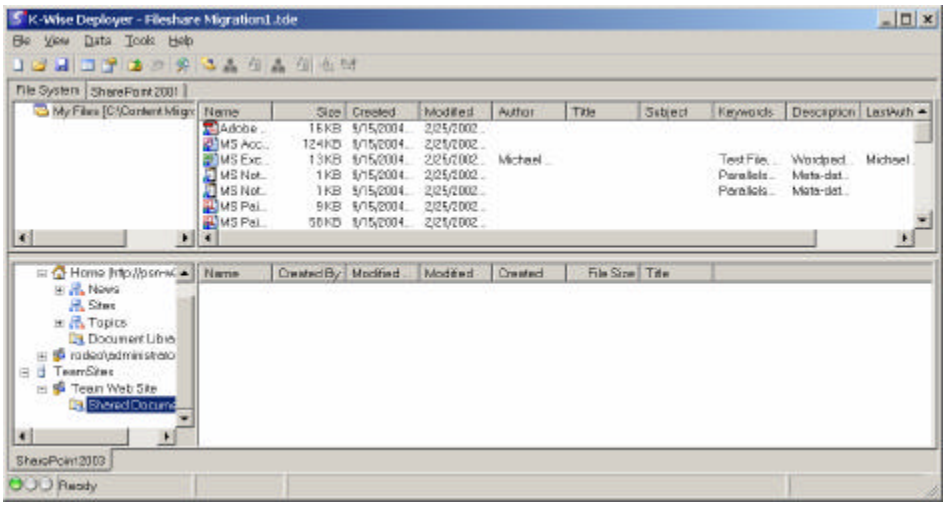
need to be physically committed to the SharePoint server. This is described in the Commit the Changes to the SharePoint Server activity on page 31.

Deploy Task

The Deploy task specifies which source folders and files are to be migrated to which specific SharePoint document libraries, folders and subfolders on the destination SharePoint server. Similar to the Model task, Deployer does not immediately migrate the source content to the SharePoint server. The Deploy task records the changes to be made to migrate the source content in the current Deployer project. The Deployer content migration changes are executed and applied to the destination SharePoint server when a Commit task is executed.

Deploy Source File Server Content activity

1. To deploy all or part of the file server content loaded into Deployer during the Load task, begin by opening the correct project in Deployer (see Create a New Project activity on page 13).
2. The top half of the project window will display the folders, subfolders and files that were added to the project during a previous Load task. If the top half of the project window is empty, the file server content will need to be loaded before proceeding. Use the File Server Load activity on page 14 to do this.
3. The bottom half of the project window should display the SharePoint sites and document libraries that were added to the project during a previous Model task. If the bottom half of the project window is empty, the configuration of the destination SharePoint server must be added to the project. Use the Connect to SharePoint Server activity on page 16 to do this. If additional SharePoint sites or document libraries need to be added to the destination SharePoint server before the source file server content is deployed, use the activities in the Model Task on page 16 to do this.

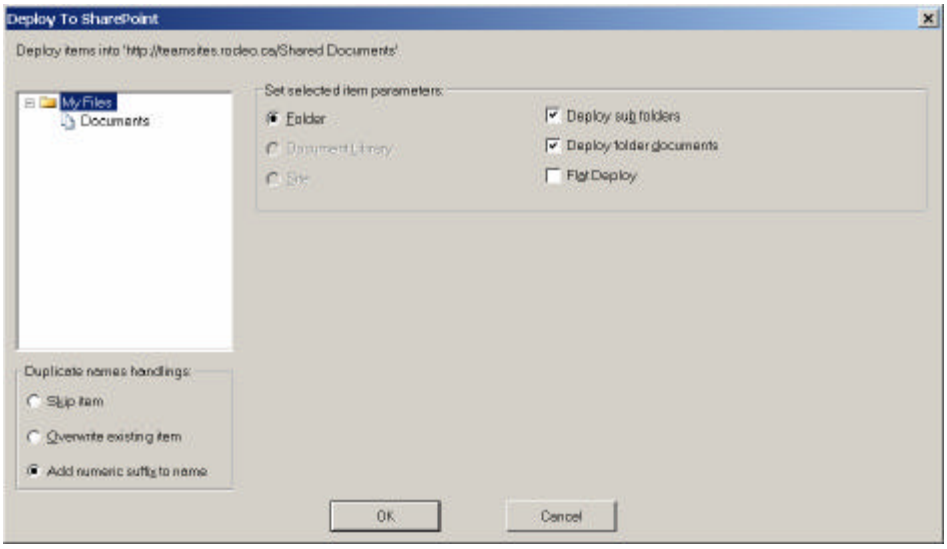


4. To begin the deployment of the source file server content to one or more SharePoint document libraries in one or more SharePoint sites, click on a file server folder (or select a group of files) in the top half of the project window and,

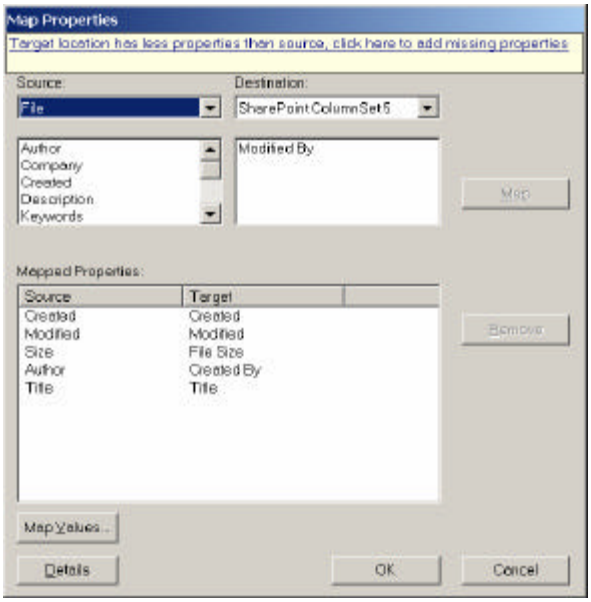
holding the left mouse button down, drag the folder or collection of files over top of a document libraries in the bottom half of the project window. Release the left mouse button. Deployer will be start the Deploy task by displaying the Deploy To SharePoint dialog box.

Note: The deploy activity (dragging and dropping content from the file server content in a project to the SharePoint site and document configuration in the project does not cause any content or other changes to be physically written to the destination SharePoint server. Changes are only written to the destination SharePoint server during a Commit task. Changes that are made during a Model or Deploy task are recorded in the Deployer project. A Commit task must be used to have these changes applied to the destination SharePoint server.

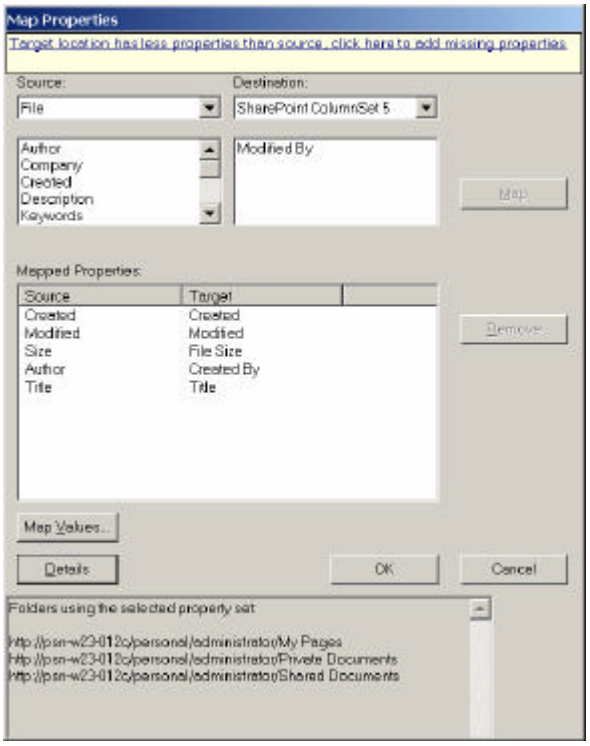
5. If a folder is dragged and dropped on a destination document library, the Deploy to SharePoint dialog box will be displayed. Several options are available to control where and how subfolders are handled:
    a. Select the destination folder or subfolder where the folders and file items are to be deployed.
    b. If the *Deploy sub folders* option is checked, all subfolders from the source file server will be deployed as subfolders in the destination SharePoint document library. If the *Deploy sub folders* option is not checked, only the folder that was dragged and dropped into the destination document library will be deployed.
    c. If the *Deploy folder documents* option is checked, the documents in each source file server folder will be deployed. If the *Deploy folder documents* option is not checked, only the subfolder hierarchy is created and the documents in each subfolder are not copied to the destination document library.
    If *Deploy sub folders* is not checked and *Deploy folder documents* is checked, only the documents in the folder that was dragged and dropped into the destination Document library will be deployed. No subfolders (and no documents in the subfolders) will be deployed.
    d. If the *Flat Deploy* option is checked, the folder structure in the source file server is ignored. All documents in the source file server folder (and potentially all subfolders) will be deployed into the destination SharePoint document library folder. Documents will not be copied to any subfolders.
    e. When the *Flat Deploy* option is checked and documents in one or more subfolders have the same name, Deployer needs to know how to handle the situation where a document with the same name as a previous document might be overwritten. The *Duplicate names handling* options tell Deployer either skip the item, overwrite the existing item or save the new item with a numeric suffix added to the name.
6. Once the appropriate Deploy To SharePoint options have been selected, click OK.



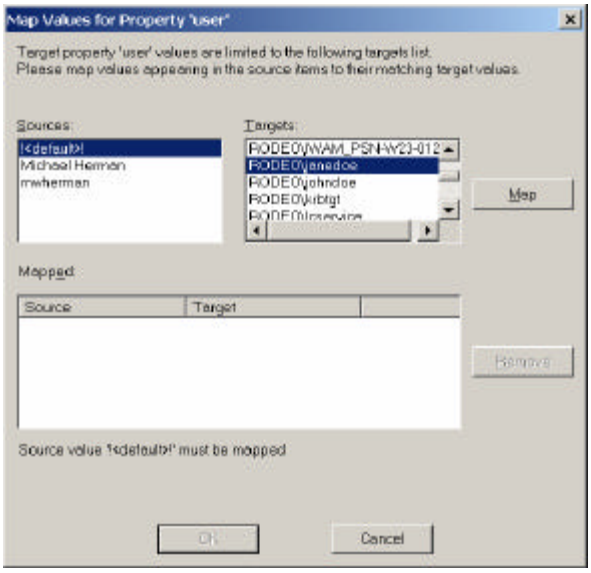
7. When the metadata property set for the source file server does not match the metadata property set for the destination SharePoint document library, the Map Properties dialog box is displayed. Properties with the same name are automatically matched and appear in the Mapped Properties list. The source and destination properties that were not mapped automatically can be mapped manually by selecting a source property and its corresponding destination property and clicking Map. This can be repeated as many times as required.



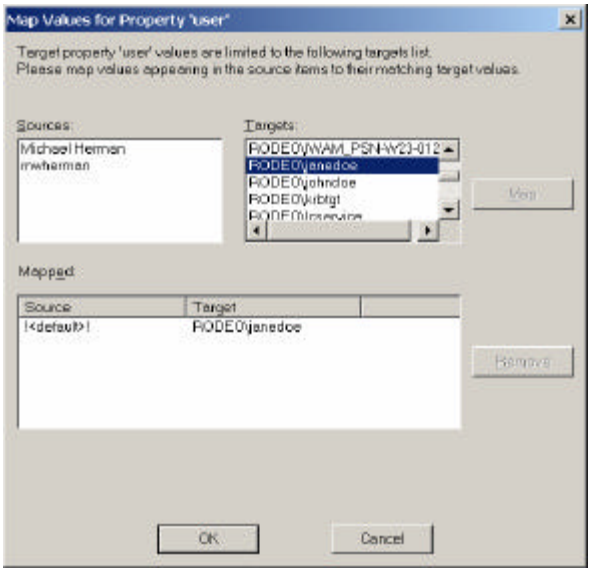
8. Clicking on Details will display a list of folders that use the selected property.



9. Clicking on Map Values… will display the Map Values dialog box for the selected property. This dialog box can be used to maps specific source values for a metadata field to specific destination (target) values. Select a source value and a target value and click Map.

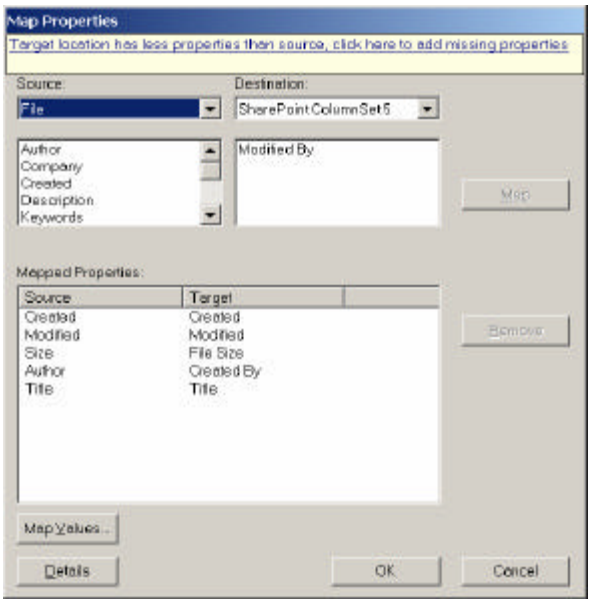


10. Repeat the previous step to map any additional source values. Click OK to close the Map Values dialog box.



11. Once the metadata properties and metadata property values have, optionally, been mapped, click OK on the Map Properties dialog box to start the deployment of the source folders and files into the selected SharePoint document library.

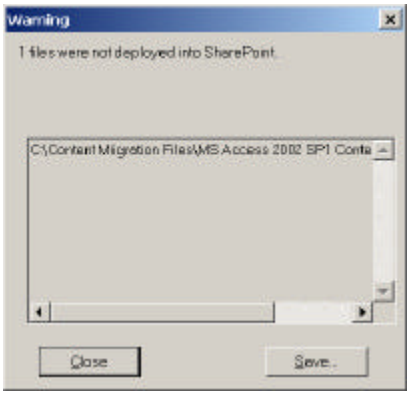
Note: Changes are only written to the destination SharePoint server during a Commit task. Changes that are made during a Deploy task are recorded in the Deployer project. A Commit task must be used to physically apply these changes to the destination SharePoint server.



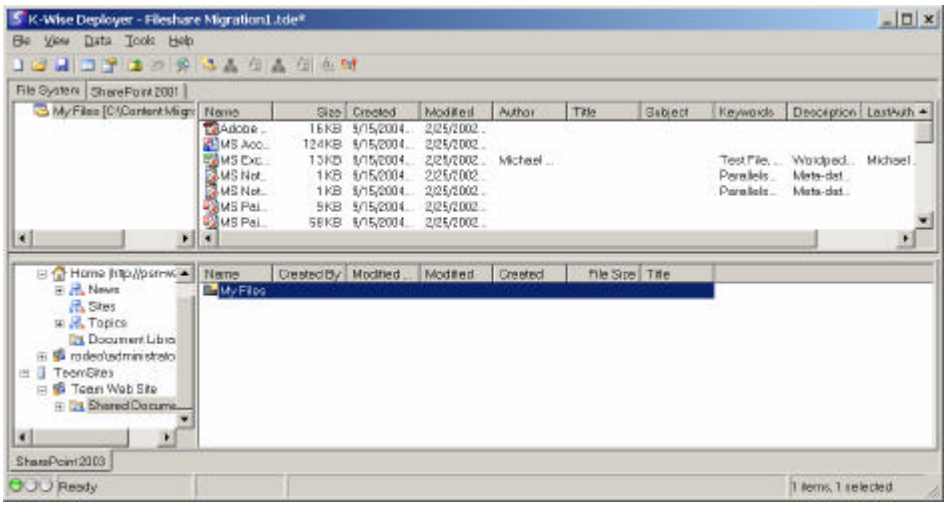
12. If Deployer is unable to deploy one or more source folders or files to the destination SharePoint document library, the following Warning dialog box will be displayed. The most frequent reasons for not being able to deploy a folder or document are:
    - The folder or file pathname is too long.

- A folder name or path name contains illegal characters.
- The file is an Internet shortcut file (.url suffix).

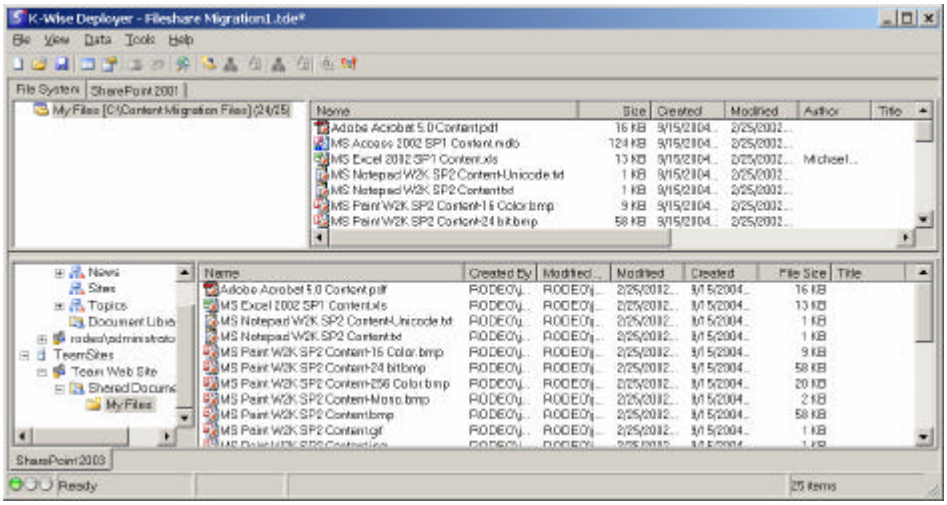
Additional folder and file naming considerations can be found in Appendix A - Folder and File Naming Considerations on page 41.



13. When Deployer has finished deploying the source files and folders to the destination document library, the new folders and files will appear in the lower-half of the project window.



14. Clicking on one of the new folders will display a table of subfolders and files contained in that folder. The name of the item will appear in the first column. The metadata property values copied to the destination document library will appear in the adjacent columns.



15. The Deploy task is complete.

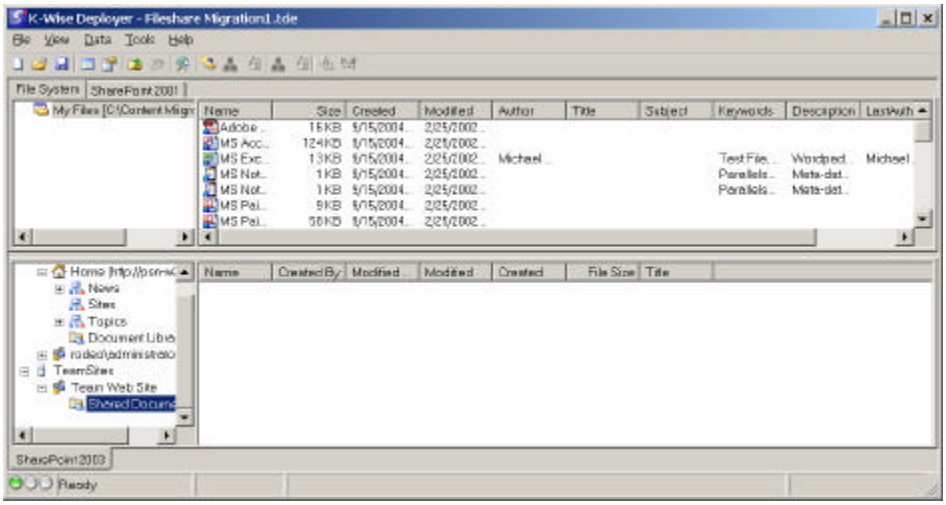
At this point, the changes have been recorded in the Deployer project but Deployer has not applied changes to the SharePoint server. When all of the content to be deployed has been dragged and dropped into the appropriate SharePoint document libraries, the changes in the Deployer project need to be physically committed to the SharePoint server. This is described in the Commit the Changes to the SharePoint Server activity on page 31.

Commit Task

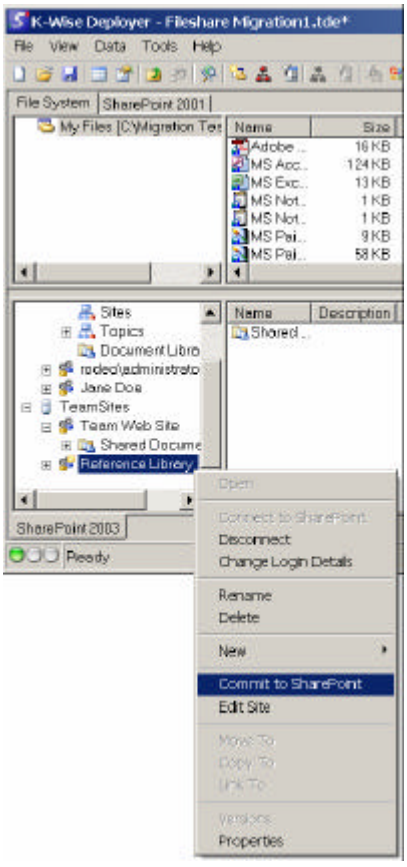
The Commit task causes the orderly execution of the destination content location changes to be begin. First, the Commit task applies the Model task destination location changes to the SharePoint server. This ensures that the sites, document libraries and document library folders have been created in the destination SharePoint site before the Deploy task content migration changes are applied. The Deploy task content migration changes are applied after the Model task changes. The content migration changes are those involved with the physical copying of the source content items (for example, Office documents) from the source content location to the destination folder in the destination document library in the destination SharePoint site.

Commit the Changes to the SharePoint Server activity

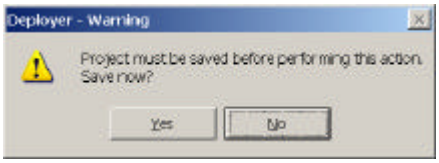
1. To physically commit any changes in a Deployer project to a SharePoint server, open the Deployer project. When an existing project is opened and the project contains a previous SharePoint connection, Deployer will automatically connect to the destination SharePoint Server.



2. To start the commit activity, right-click on a portal or team site to display the modeling pop-up menu. Select *Commit to SharePoint*.

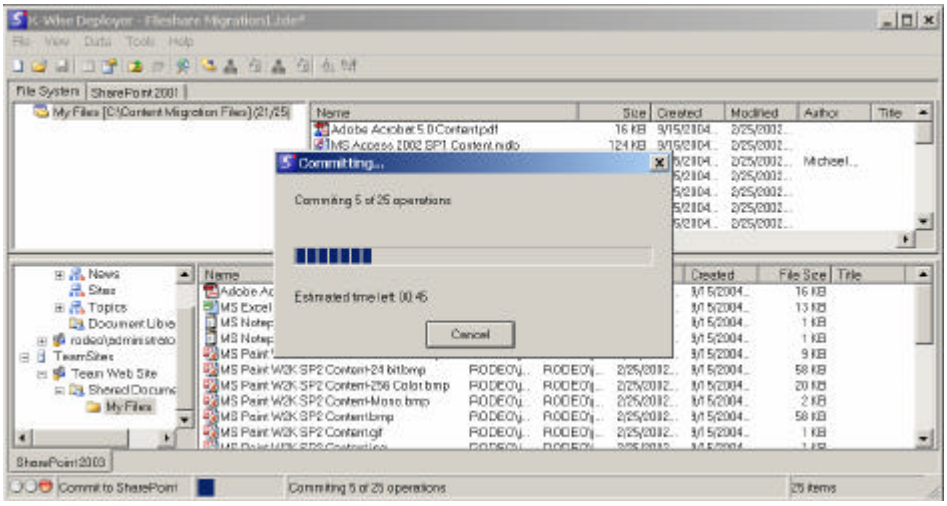


3. The following dialog box will be displayed warning you that Deployer is going to save the current project data to disk. Click Yes to continue.
   If you want to save your project data under a new name, click No and use *File Save As…* to save the project data with a new project name. Then go to the previous step to resume the commit activity.

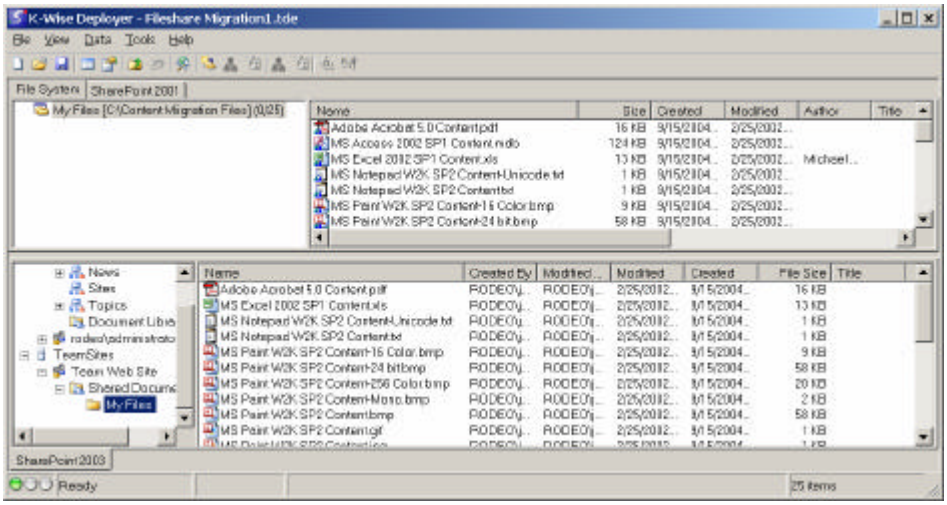


4. After the project has been saved to disk, Deployer prompts one more time before making any physical changes to the SharePoint server. If you want all changes in the project since the last commit activity or in the case of a new project, all of the changes since the project was created, click Yes.

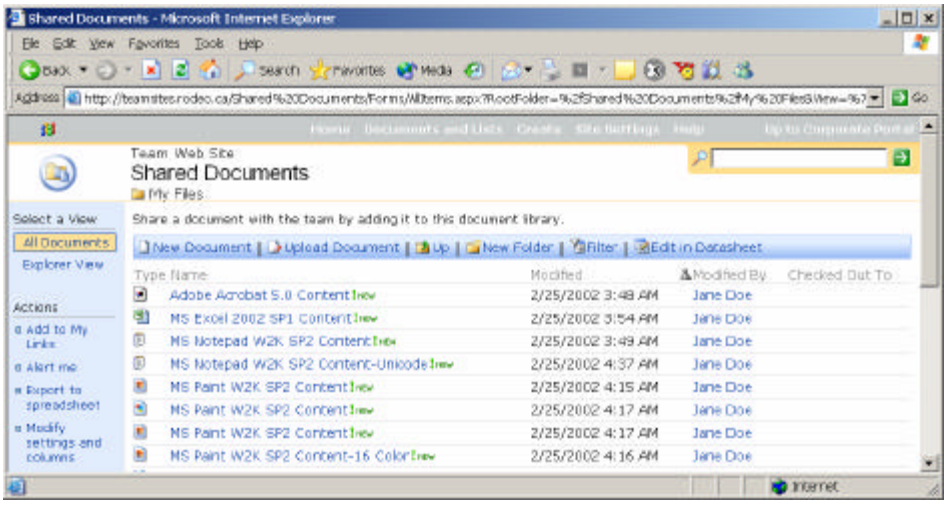
5. Deployer will display the following progress dialog box indicating the number of change operations that have been made to the SharePoint server.



6. A summary of the changes that were committed to the SharePoint server will be displayed at the end of the commit activity.



7. This ends the Commit task. Right-click on the new SharePoint site or document library and select *Open* to view the site or document library using Internet Explorer.



ADDITIONAL SCENARIOS

Deployer is a powerful end-to-end solution for migrating content, metadata and folder structures into SharePoint sites but it is also very useful for more specific SharePoint management and metadata management tasks including:

- Offline modeling of SharePoint infrastructures
- Managing metadata mappings

Offline Modeling of Your SharePoint Environment

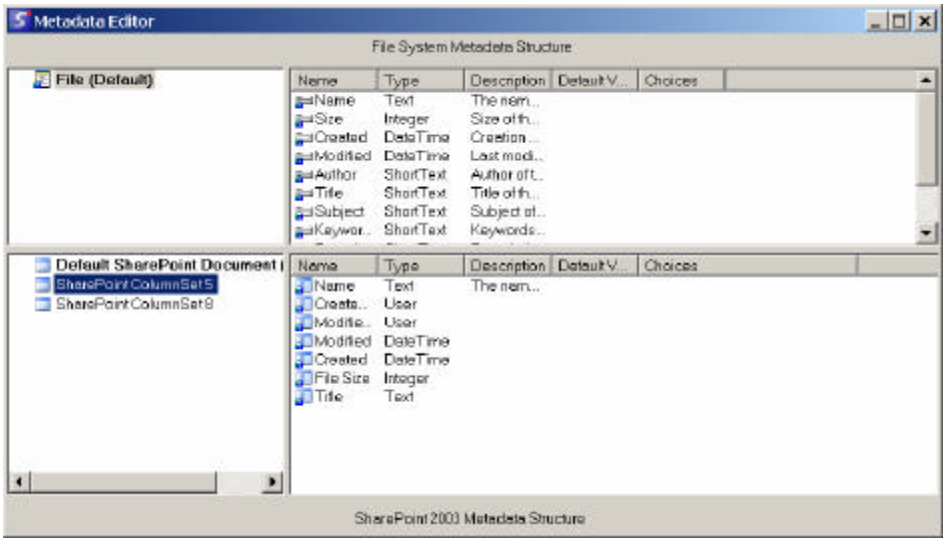
The Model task can be used independently of the other Deployer tasks to initially model a new SharePoint infrastructure or manage and update an existing SharePoint environment. Simply connect to the destination SharePoint server to collect the current configuration information in a Deployer project. A business analyst can then work offline with the Deployer project to make the necessary modifications to the SharePoint environment. All resulting changes will be captured in the project and a Commit task can be used online to apply the complete set of changes to the SharePoint server.

Managing Metadata Mappings

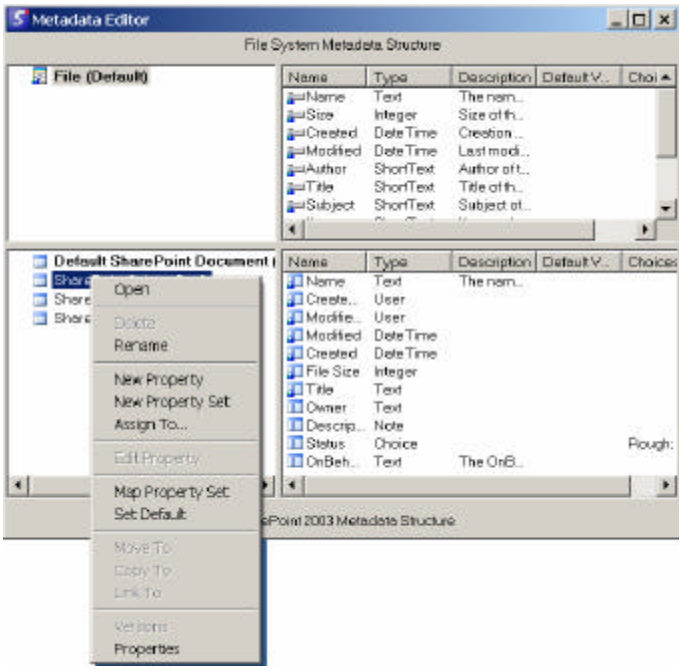
The Metadata Editor enables Deployer users to model the source-to-destination property and property value mappings in advance of using the Deploy task.

Metadata Editor Activity

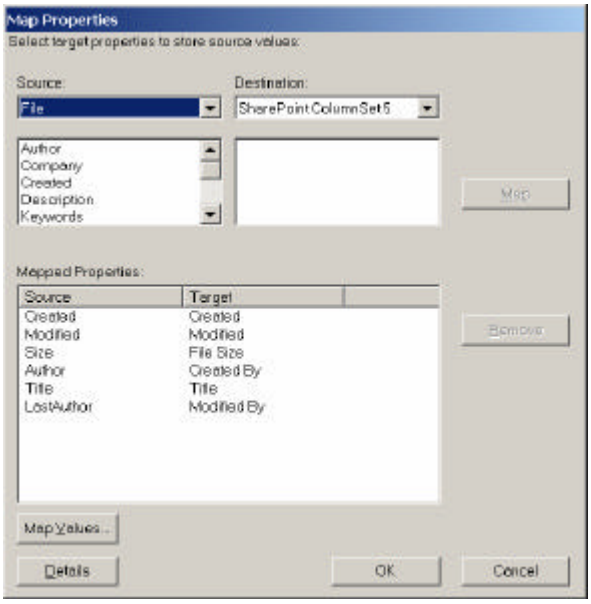
1. Selecting Metadata Editor on the View menu of an open project will display Deployer's Metadata Editor for the current source content location (for example, File System).



2. To edit a particular Deployer column set of property fields, right-click on the column set name to display the Metadata Editor pop-up menu.



3. Select *Map Property Set* to display the Map Properties dialog.



4. Follow the steps described in the Deploy Source File Server Content activity on page 25 to change the property field and property value mappings.

DEPLOYER APPLICATION OPTIONS

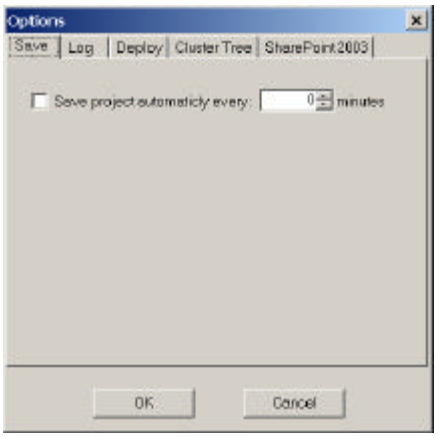
Options Dialog Box

The Options menu item on the Deployer Tools menu can be used to specify a number of options that affect overall Deployer operation. The Options dialog enables the following settings to be edited:

- Auto save
- Log file
- Deployment
- Cluster tree
- SharePoint 2003

Save Options

The Save settings on the Options dialog can be used to enable the automatic saving of a project to the hard disk.



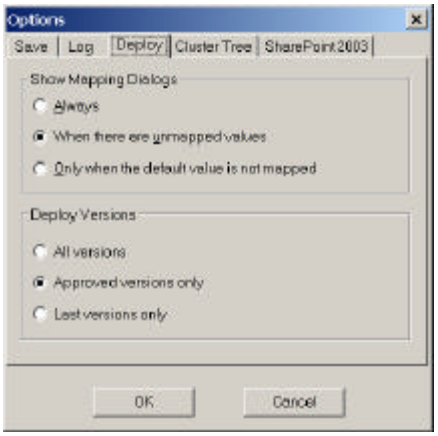
Log Options

The Log settings control the type and amount log information that is written to the project folder.

Deploy Options

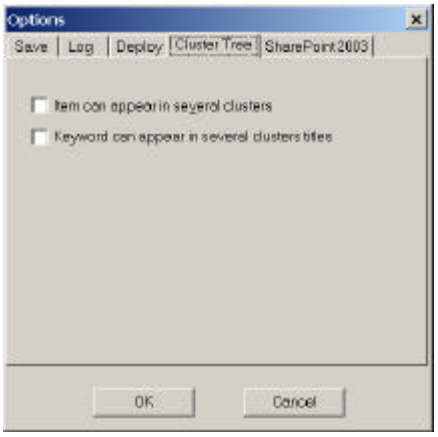
The Deploy settings control when the Map Properties and Map Values dialogs are displayed.

For source content collections that support versioning (for example, SharePoint Portal Server 2003), the Deploy settings are also used to control how multiple versions of source files are to be handled during the Deploy task.



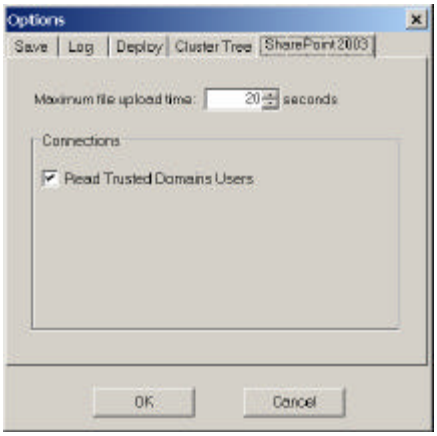
Cluster Tree Options

Cluster tree settings specify how file metadata in the source file collection is to be used during clustering.



SharePoint 2003 Options

The SharePoint 2003 settings control the file upload timeout value and whether trusted domain user accounts are to be used when setting ownership property values.


Options
Save
Log
Deploy
Cluster Tree
SharePoint 2003
Maximum file upload time:
20
seconds
Connections
Read Trusted Domains Users
OK
Cancel

MORE INFORMATION

Frequently Asked Questions

1. Where does K-Wise Deployer store a project?

   Answer: During the Create a New Project activity, the project is given a name and a project folder location. A project is stored in a project folder created in the supplied project folder location. The project folder name is the same as the name of the project.

Troubleshooting

1. When I use Deploy to load, model, deploy and commit an entire collection of files from a source content location to a SharePoint document library, some of the files appear to be missing. Where are they?

   Answer: The most common reasons for files not being migrated to the destination SharePoint document library are:
   - The folder or file pathname is too long.
   - A folder name or path name contains illegal characters.
   - The file type appears in the SharePoint blocked file type list and, hence, the file could not be uploaded to a SharePoint document library
   - The size of the file to be migrated is greater than the maximum file upload size for the SharePoint site.

For More Information

For more information on K-Wise Deployer, visit http://www.Tzunami.net.

APPENDIX A - FOLDER AND FILE NAMING CONSIDERATIONS

To ensure a smooth migration of a collection of files stored in folders and subfolders on a local file system or remote file server, one best practice is to make sure your folder, file and path names conform to the following limits and other restrictions.

Folder path and fully qualified file name lengths

Context

A fully qualified file name consists of two parts:

- File name including the file base name and file suffix
- Folder path for the fully qualified file name

The filename is the last component of a fully qualified file name. The folder path for a fully qualified file name starts with the partition's drive letter and includes everything up to the filename and the last folder character (e.g. '\' or '/').

Restrictions – Microsoft Windows

- The fully qualified file name can have a maximum length of 260 characters.
- The maximum length of a folder path portion of a fully qualified file name is 248 characters.

Restrictions – Microsoft SharePoint Portal Server 2003

- The fully qualified file name can have a maximum length of 255 characters in Windows.
- The maximum length of a folder component is 30 characters.

Discussion

- Normally, it is not possible using Windows Explorer or a Windows application to create folder paths and fully qualified file names that are too long. However, it is possible under the following scenarios:
  - A subfolder 1 or more levels below the root of the file system is shared as UNC file share. Then it is possible to create an entire new folder hierarchy under the root of the file share that can store files using fully qualified file name that are a further 260 characters long.
  - Similarly, the **`subst`** command can be used to anchor a drive letter at a subfolder 1 or more levels below the root of the file system.
  - Using Unicode fully qualified file names prefixed with the letters "**`\\?\`**". When this approach is used, fully qualified path names can be 32,000 characters in length.

Unsupported characters in folder and file names

The following characters are not supported in Windows SharePoint Services: **`/\:*?"<>|#{}%&~`** or tab characters and multiple periods.

If a file, folder, or URL name in your original site contains one of these characters, it is usually replaced with an underscore (_).

Two exceptions are:

- Character '#' (pound sign) which can be replaced with the word "No."

- Character & which can be replaced with the word “and”

Multiple periods are replaced with a single period.

Additional digits may be appended to the file or folder name if there are conflicting renaming changes.

Files or folders with trailing spaces at the very end of a filename ("filename.doc ") are not supported in Windows SharePoint Services. You must change the file name and then add the file manually to your site.

Blocked file types

Windows SharePoint Services (and in turn, SharePoint Portal Server 2003) have the ability to block certain file types from being uploaded or otherwise stored in a document library.

The following is the default list of file types (based on a file’s suffix) that are blocked from being uploaded or otherwise stored into a SharePoint document library.

Table 2. SharePoint default blocked file types

File extension	File type
.ade	Microsoft Access project extension
.adp	Microsoft Access project
.app	Application file
.bas	Microsoft Visual Basic class module
.bat	Batch file
.chm	Compiled HTML Help file
.class	Java class file
.cmd	Microsoft Windows NT Command Script
.com	Microsoft MS-DOS program
.cpl	Control Panel extension
.crt	Security certificate
.dll	Windows dynamic link library
.exe	Program
.fxp	Microsoft Visual FoxPro compiled program
.hlp	Help file
.hta	HTML program
.ins	Internet Naming Service
.isp	Internet Communication settings
.jse	JScript Encoded Script file
.lnk	Shortcut
.mda	Microsoft Access add-in program
.mdb	Microsoft Access program
.mde	Microsoft Access MDE database
.mdt	Microsoft Access data file
.mdw	Microsoft Access workgroup
.mdz	Microsoft Access wizard program
.msc	Microsoft Common Console Document
.msi	Microsoft Windows Installer package

.msp	Windows Installer patch
.mst	Visual Test source files
.ops	Microsoft Office profile settings file
.pcd	Photo CD image or Microsoft Visual Test compiled script
.pif	Shortcut to MS-DOS program
.prf	System file
.prg	Program source file
.reg	Registration entries
.scf	Windows Explorer command file
.scr	Screen saver
.sct	Windows Script Component
.shb	Windows shortcut
.shs	Shell Scrap Object
.url	Uniform Resource Locator (Internet shortcut)
.vb	Microsoft Visual Basic Scripting Edition (VBScript) file
.vbe	VBScript Encoded Script file
.vbs	VBScript file
.wsc	Windows Script Component
.wsf	Windows Script file
.wsh	Windows Script Host Settings file

The following sections contain the character limitations that apply to various user-specified parameters in Microsoft Office SharePoint Portal Server 2003.

Other Naming Considerations

Portal Site

Portal site name

The portal site name is limited to 80 Unicode characters.

The portal site name can consist of all alphanumeric characters except for the following: \ / : * ? " < > |

Portal site description

The portal site description is limited to 200 Unicode characters.

The portal site description can consist of all alphanumeric characters, as well as the following: # % * + \ | " ? $ @ [ ] { } ¦

Portal site logo

The URL for the portal site logo is limited to 256 ASCII characters.

The URL for the portal site logo can consist of all alphanumeric characters except for the following: # % * + \ | " ? > < $ @ [ ] { } ¦

The following file formats are supported for the graphics file: .gif, .bmp, .jpg, and .png. TIFF files are not supported.

Portal site URL

The URL for the portal site is limited to 255 characters for the entire URL, including virtual directories.

Account name for portal site owner

The account name is limited to 128 characters.

E-mail address for portal site owner

The e-mail address is limited to 255 characters.

Location for creating SharePoint sites

The URL for creating sites from the Site Directory is limited to 2,048 ASCII characters. In addition, no component of the URL, such as the virtual directory or virtual server, can exceed 128 characters.

The URL must end with /_layouts/language/scsignup.aspx.

Backward-Compatible Document Library (Web Storage System-Based)

Document library friendly name

The friendly (display) name cannot exceed 100 characters in length.

Alternate Portal Site Access Mappings

Mapping name

The mapping name has a maximum length of 64 Unicode characters and must not be null.

The following character limitations apply for the default, intranet, extranet, and custom URLs:

Each URL has a maximum length of 255 Unicode characters and a minimum length of 5 characters.

The user can enter the URL in any combination of uppercase and lowercase letters, but the URL is always saved in lowercase.

Each URL must be different from all other URLs.

Content Index

Content index name

The content index name must be less than 50 characters.

The content index name cannot contain the following characters: `+ ~ # ' % * ( ) = [ ] { } | \ " < > . ? / @ &` or the euro symbol or a space.

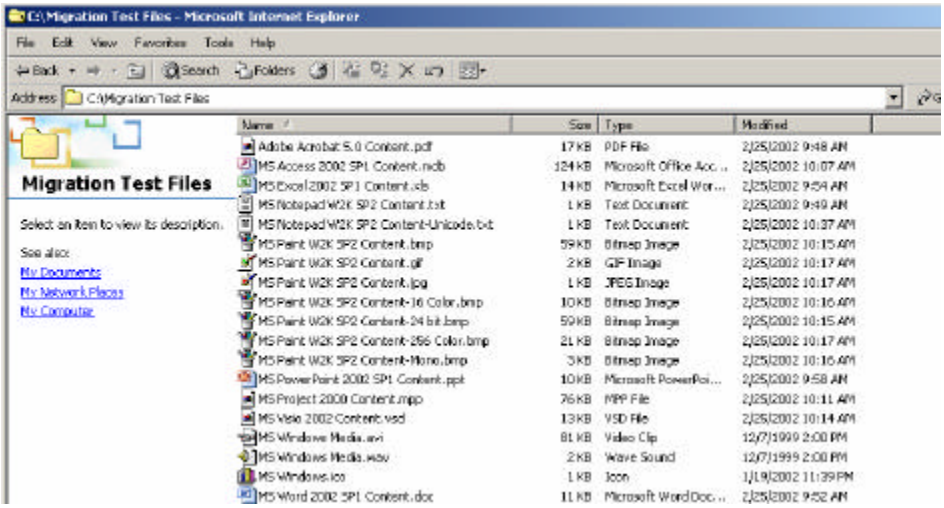
APPENDIX B – CONTENT MIGRATION TEST FILES

The sample content migration files used in these activities are a set of 19 different file types. Each sample file was created to be a small as possible example of that particular file type. This makes this set of files ideal for training and testing.

An archive file containing all 19 file can be downloaded from:

http://www.parallelspace.net/sharepoint/deployer

Registration is required.



APPENDIX C – USING DEPLOYER ACROSS A FIREWALL

In a K-Wise Deployer context, working inside a firewall means there is no firewall installed between the client workstation running the Deployer, the source content location (for example, a source file server) and the target SharePoint environment. If the client workstation, source content location and the target SharePoint environment are on different local area networks (LANs), the only requirement is for the different LANs to be inter-networked. Connection speeds of 10 Mbit are acceptable; 100 Mbit or higher connections are preferred.

Working outside a firewall means at least one (but not all) of the client workstations running the Deployer, the source content location (for example, a source file server) or the target SharePoint environment is installed behind a firewall. In this scenario, the firewall needs to be configured (temporarily) to open the specific ports necessary to connect Deployer, running on the client workstation, with the source content location, the SQL Server database server and the target SharePoint environment. These ports are described in Table 3, Table 4 and Table 5.

Table 3. SharePoint port assignments

Any ports used by a Web load balancing solution that sits in front the SharePoint Web front-end servers.
SharePoint virtual server ports. Port 80 is the default port. Additional virtual servers may use additional IP addresses and/or ports.
SharePoint Central Administration Site port. This port is configured at SharePoint installation time to a random port number. The SharePoint Central Administration Site port can be found by inspecting the URL for the SharePoint Central Administration Site web page or by using the Microsoft Internet Information Server (IIS) Manager.

Table 4. NETBIOS default port assignments

Service	Port	Description
Netbios-ns	137/tcp	nbname #NETBIOS Name Service
Netbios-ns	137/udp	nbname #NETBIOS Name Service
Netbios-dgm	138/udp	nbdatagram #NETBIOS Datagram Service
Netbios-ssn	139/tcp	nbsession #NETBIOS Session Service
Microsoft-ds	445/tcp	
Microsoft-ds	445/udp	

Table 5. SQL Server default port assignments

Service	Port	Description
Ms-sql-s	1433	#Microsoft-Sql-Server
JDL-DBKitchen	3086	#SQL