CopyMove for SharePoint 2007

Product Documentation

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Part I

Introduction

1 Introduction

CopyMove for SharePoint 2007 is a commercial add-on for Windows SharePoint Services 3.0 and Microsoft Office Server 2007. It enables users to easily copy and move files, list items and folders in SharePoint. The product is primarily designed for end-users moving or copying smaller amounts of content at a time. It can of course also be used by administrators - but should not be confused with a full blown migration tool to move large volumes of data.

Technically, CopyMove performs all the work through the official .NET API of Windows SharePoint Services 3.0. All copy and move transactions follow the procedure outlined below:

1. User selects the items to copy or move.
2. CopyMove validates the requested transaction and reports any errors and warnings before the transaction is initiated. Errors will abort the transaction while warnings must be confirmed by the user to initiate the transaction.
3. CopyMove exports all items to disk on the SharePoint Web front-end server handling the request.
4. CopyMove imports all items from disk to the selected target location.
5. If it is a move transaction and the import operation was successful, CopyMove now deletes the selected items in the source location.
6. CopyMove logs the transaction to the SharePoint audit log if enabled.

1.1 Product Features

CopyMove adds the following functionality to Windows SharePoint Services 3.0:

- **Copy and Move files in document libraries**. Enables users to copy and move files across folders, lists, sites and site collections within the same farm. However, the target list must be of the same type as the source list.
- **Copy and Move list items**. Enables users to copy and move list items across folders, lists, sites and site collections within the same farm. Again, the target list must be of the same type as the source list.
- **Copy and Move folders in document libraries**. Enables users to copy and move entire folder structures, i.e. folders including all the files and sub-folders below it. However, users are prevented from performing a move in the event that the folder contains one or more files and/or sub-folders with unique permissions preventing full access to the current user.
- **Copy and Move folders in lists**. Same story as for document libraries.
- **Copy and Move Web part pages**. Support for copying and moving Web part pages including the Web parts on them.
- **Copy and Move across site collections**. Enables users to copy and move content across any accessible site collections within the same farm.
- **Preserve version history**. CopyMove preserves the full version history for files, folders and list items unless version history has not been enabled for the target location.

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- **Preserve metadata**. CopyMove preserves all metadata for files, folders and list items when copied or moved. This includes the created date, last modified date, created by user, last modified by user, content type, other system properties as well as all custom properties.
- **Preserve item permissions**. Unique permissions on files, folders and list items are also preserved when copied or moved.
- **Warning on file overwrite**. Warns users if they are about to overwrite any files and/or folders in the target location.
- **Warning on loss of version history**. Moving files and list items from lists with version history enabled to another list without versioning, implies that the version history is lost. In this situation, CopyMove issues a warning to the user before starting the transaction.
- **Warning on loss of Content Type information**. Moving files and list items associated with Content Types that do not exist in the target list, implies that this information is lost. In this situation CopyMove issues a warning to the user before starting the transaction.
- **Access Copy and Move from list views**. In MOSS 2007 it is necessary to navigate to the "Manage Content and Structure" page to access the Copy and Move actions. With CopyMove, users can access them directly from the actions menu or the item menu in list views.
- **Administrators can configure transaction limits**. Moving and copying many large volumes of data in one transaction can be very time consuming leading users to believe that the application has entered a deadlock. Consequently, CopyMove enforces a limit on the number of files and the total MB that each user is allowed to select for one transaction. The limit is configurable from Central Administration - but only to a ceiling of 2 GB.
- **Web Service API**. For programmatic access to the Move and Copy functionality.
- **Logs transactions to the SharePoint Audit log**. CopyMove automatically logs all transactions to the SharePoint audit log if it has been enabled for the site collection in question.

1.2 Supported List Types

The product basically adds two user friendly actions (Copy and Move) to document libraries and lists. It specifically supports the following types of libraries and lists:

- Announcement list
- Calendar list
- Contacts list
- Document library
- Form library
- Generic list
- Issues list
- Links list
- Picture library
- Project tasks list
- Publishing pages list
- Tasks list
- Web page library
- Wiki page library

Libraries and lists created from other templates including custom ones are not supported by CopyMove. It is, however, possible to add support for such libraries and lists by developing and

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deploying a custom SharePoint feature that adds the CopyMove menu actions. Use the CopyMove Web application feature or site collection feature as a template. See the section "Activating the CopyMove Features" to learn where to find the CopyMove feature XML files.

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Part II

Installation and Setup

2 Installation and Setup

CopyMove is implemented as a standard SharePoint Solution, which means that it is very easy to install, configure and distribute between servers using the standard SharePoint controls and integration points.

CopyMove is delivered with a setup program that must be run locally on the SharePoint server. If you have a multi-server SharePoint farm then CopyMove will automatically be distributed to the other servers as needed via the SharePoint Solution mechanism. Thereafter, you can deploy, configure and customize CopyMove as described in this manual.

In the event of a problem installing or using CopyMove, consult the "Troubleshooting" section which provides answers to known problems. If that does not provide a solution to the problem then contact support@sharepointproducts.com for help.

2.1 System Requirements

CopyMove requires the following to install and operate as expected:

- Windows Server 2003/2008
- .NET Framework 2.0 or higher
- Windows SharePoint Services 3.0 with SP1 or higher
- 2.5 GB free disk space in the temporary files location. Default location is LOGS\SharePointProducts relative to the SharePoint 12 root folder.

The product also works with Microsoft Office SharePoint Server 2007 that builds on top of WSS 3.0.

2.2 Making CopyMove Available

Complete the following steps to make the features of CopyMove available to users:

1. **Install and activate CopyMove for the farm**.
   This makes CopyMove available at the farm level. See the sections "Guided Installation" and "Activating CopyMove at the Farm-Level" for instructions.

2. **Deploy CopyMove to all relevant Web applications.**
   This might have already been done automatically during installation, but if you add a new Web application or choose not to deploy automatically, then you may need to do so manually. See the section "Manual Deployment" for instructions.

3. **Activate CopyMove for all relevant site collections.**
   The Copy and Move menu actions only shows in document libraries and lists where CopyMove is activated for the underlying site collection or Web application. Activate CopyMove at the level of the Web application to make it available to users in all site collections hosted by the Web application. See the section "Activating CopyMove for all Site Collections" for instructions. To limit the availability of CopyMove to selected site collections only, activate it independently for each. See the section "Activating CopyMove for Selected

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Site Collections" for instructions.

IMPORTANT NOTE: Do not activate CopyMove at both levels at the same time as this will result in duplicate menu items in document libraries and lists.

2.3 Guided Installation

Follow the steps below to install CopyMove using the setup program included in the distribution:

1. Login to the SharePoint server with administrator privileges. If your SharePoint installation is a multi-server farm then you can install on just one server after which the CopyMove files are automatically propagated to the other servers in the farm.

   TIP: Login as domain administrator or login using the same account used by the IIS application pool used by the SharePoint Central Administration Web site.

2. Download the latest version of CopyMove from www.sharepointproducts.com

3. CopyMove is distributed in a ZIP archive that you must extract to a local folder on the SharePoint server.

4. Run **setup.exe** from the local folder that the CopyMove files were extracted to.

   IMPORTANT NOTE: Do not run setup.exe from a network drive as this is normally not allowed by the Microsoft .NET framework.

5. The setup program launches, showing the **Welcome** page illustrated below.

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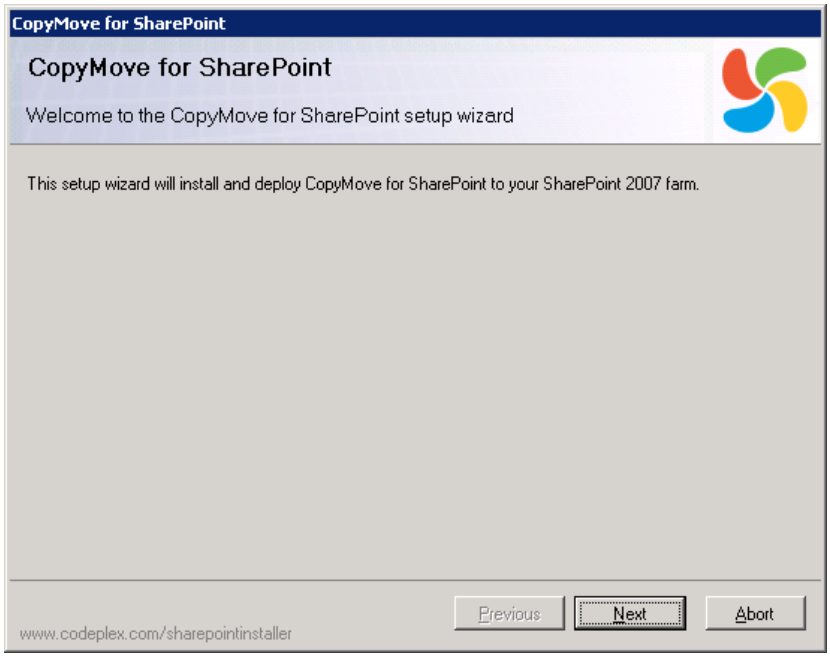
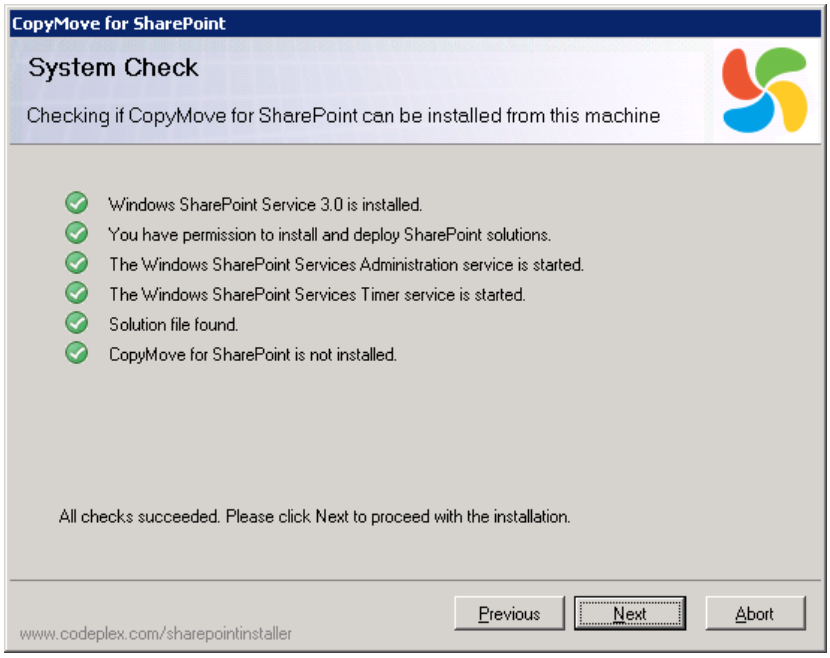


There are no settings on this page, so just click the **Next** button.

6. The **System Check** page opens.



The setup program now checks your system to make sure that the required prerequisites are available and that you have adequate permissions to install CopyMove. If one of the tests fails

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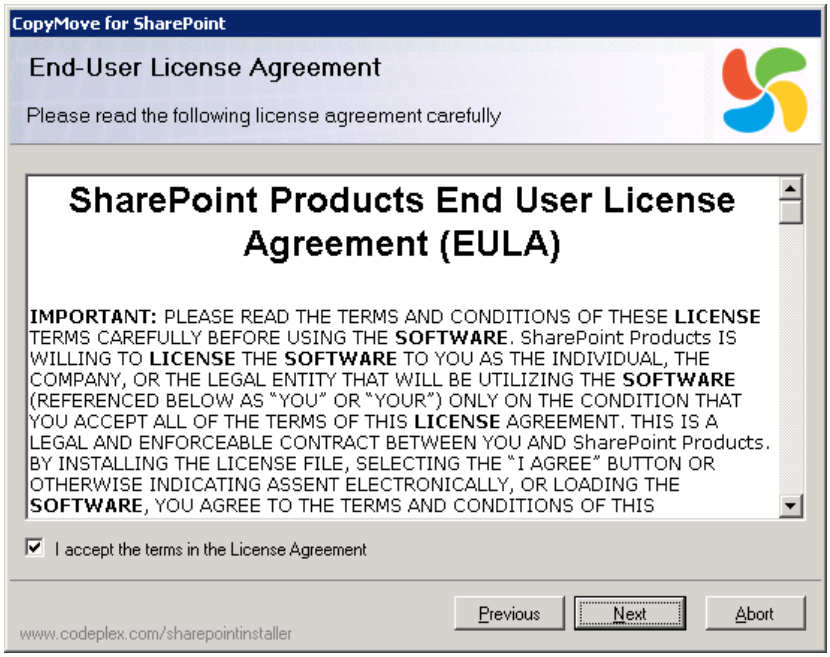
then read the message on your screen, fix the problem and run the setup program again. Once all of the tests have passed, click **Next**.

7. The **End-User License Agreement** page opens.



Read the agreement carefully. If you agree with its terms, mark the **I accept the terms in the License Agreement** check box and click **Next**.

8. Provided you chose to accept the license agreement, the **Deployment Targets** page opens.

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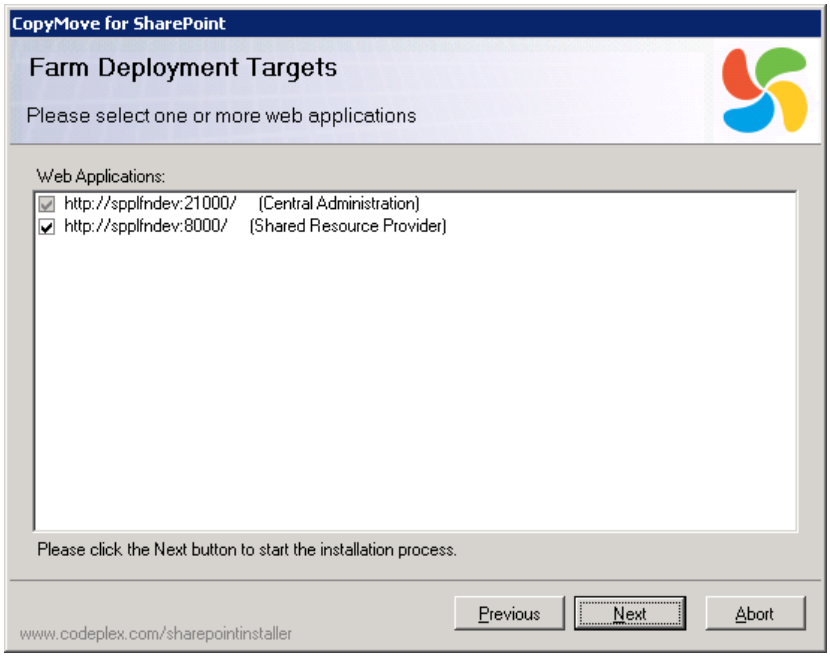
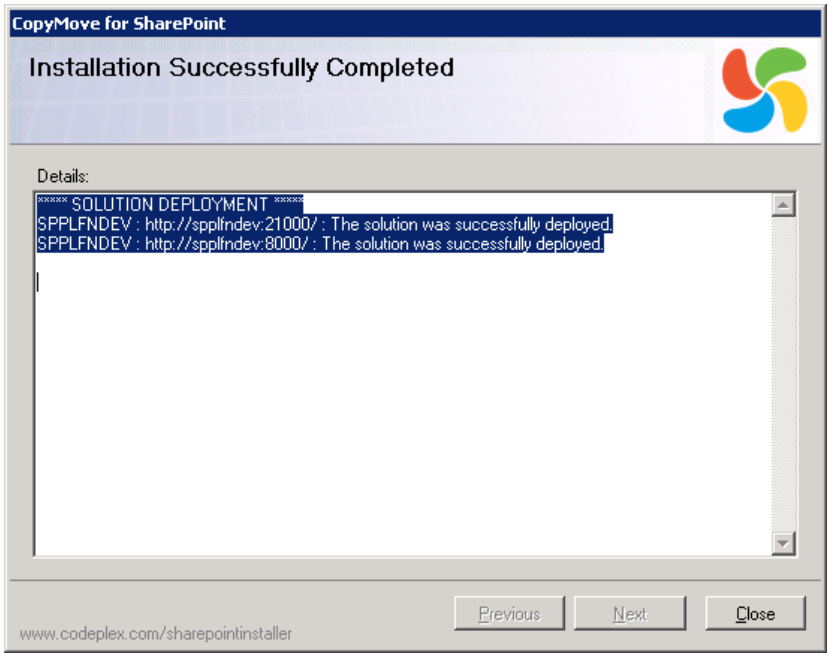


This page shows each of the Web applications currently available in the SharePoint farm. Mark the check box for each Web application to which to deploy CopyMove. Note that it is also possible to deploy CopyMove manually to new and existing Web applications at any time later. Select the appropriate target applications and click **Next**.

9. CopyMove is now installed and deployed to the selected Web applications. This process may take several seconds - a progress bar is shown. When installation and deployment is finished, the **Installation Complete** page shows.



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CopyMove is now installed. Click the **Close** button to quit the installer.

2.4 Activating the CopyMove Features

The CopyMove product is implemented as a standard SharePoint "Feature", which means it can easily be activated or deactivated by SharePoint administrators and site collection owners. The product ships with the following three features:

- **Farm Feature**. This feature adds a group of CopyMove related administration links to the **Operations** tab in Central Administration. It also kick starts a one time timer job that copies all CopyMove resource files (RESX files) from the **resources** folder to the **App_GlobalResources** folder for each Web application. This is a work-around to a known bug in the SharePoint solutions framework, which erroneously deploys application resource files to the **resources** folder.

  When deactivated at the farm level, the link group labeled **SharePoint Products** will no longer be available on the operations tab in Central Administration. It will also prevent further activations of the Web application feature and the site collection feature. However, CopyMove will continue to be available in site collections for which one of these two features are already activate.

  The feature XML files are deployed to the folder TEMPLATE\FEATURES\SPPCopyMoveFarm relative to the SharePoint 12 root folder.

- **Web Application Feature**. Activating this feature adds a Copy and Move menu action to all supported document libraries and lists in all site collections hosted by the Web application. Deactivating the feature removes all menu actions again. Document libraries and lists created from custom templates are not supported - it requires the development of a custom feature associated with the list template id.

  The feature XML files are deployed to the folder TEMPLATE\FEATURES\SPPCopyMoveWebApp relative to the SharePoint 12 root folder.

- **Site Collection Feature**. Activating this feature adds a Copy and Move menu action to all supported document libraries and lists in the site collection. Deactivating the feature removes all menu actions again. Document libraries and lists created from custom templates are not supported - it requires the development of a custom feature associated with the list template id.

  The feature XML files are deployed to the folder TEMPLATE\FEATURES\SPPCopyMoveSite relative to the SharePoint 12 root folder

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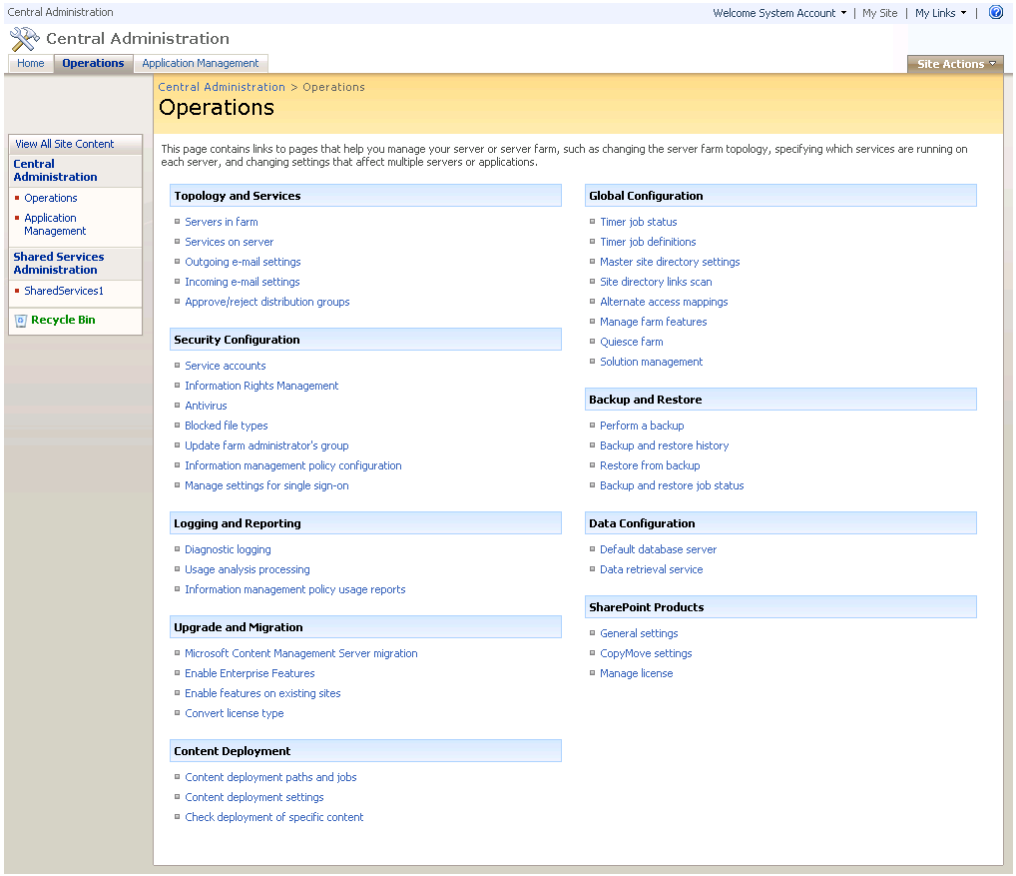
2.4.1 Activating CopyMove at the Farm-Level

To activate or deactivate the CopyMove farm feature, follow the steps listed below:

1. Open the SharePoint Central Administration site.

2. Click on the **Operations** tab.



3. On the **Operations** page, select **Manage farm features** under the **Global Configuration** heading. This brings up the **Manage Farm Features** page where the activation status of each installed farm feature is listed.

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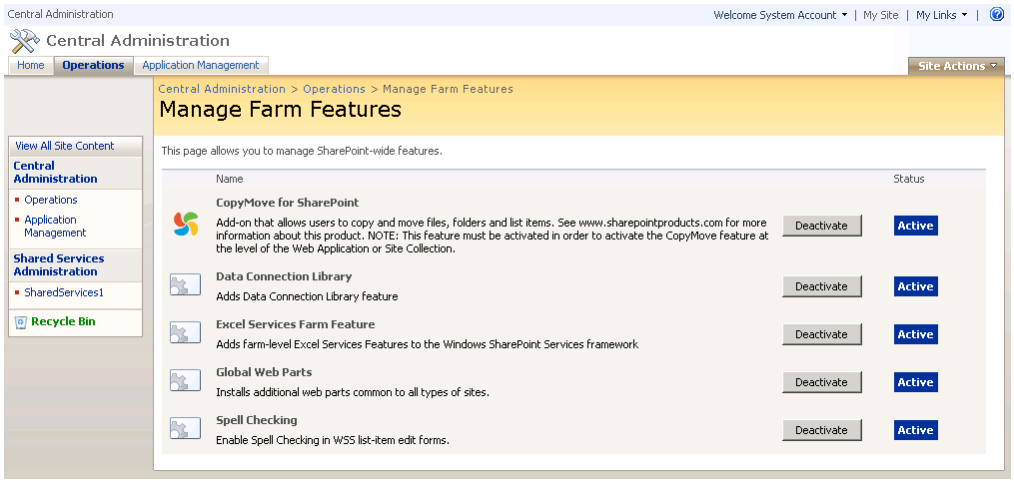

4. To toggle the activation status of CopyMove, click the **Activate**/**Deactivate** button for the feature labeled **CopyMove for SharePoint**.

Please consult the official SharePoint documentation for more information about how to open the SharePoint Central Administration site and use it to work with features and other aspects of SharePoint.

2.4.2 Activating CopyMove for all Site Collections

To activate or deactivate the CopyMove feature at the level of the Web application, follow these steps:

1. Open the SharePoint Central Administration site.

2. Click on the **Application Management** tab.

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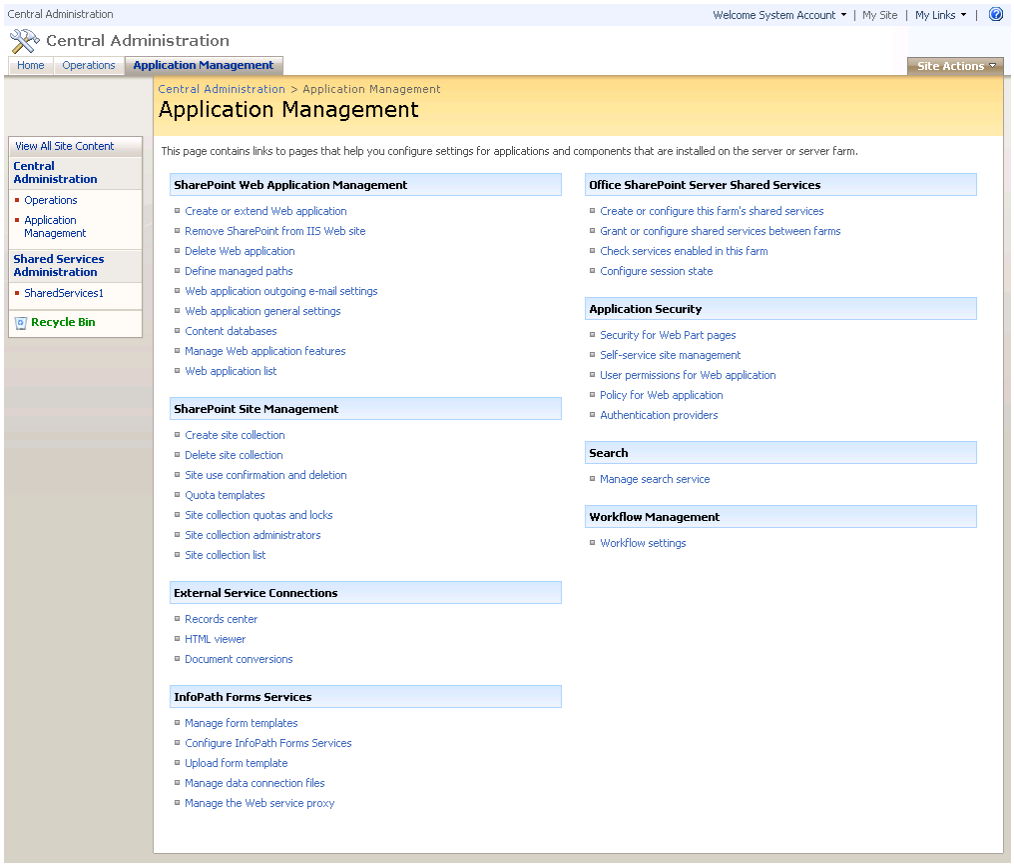

3. On the **Application Management** page, select **Manage web application features** under the **SharePoint Web Application Management** heading. This brings up the **Manage Web Application Features** page where the activation status of each installed Web application feature is listed.

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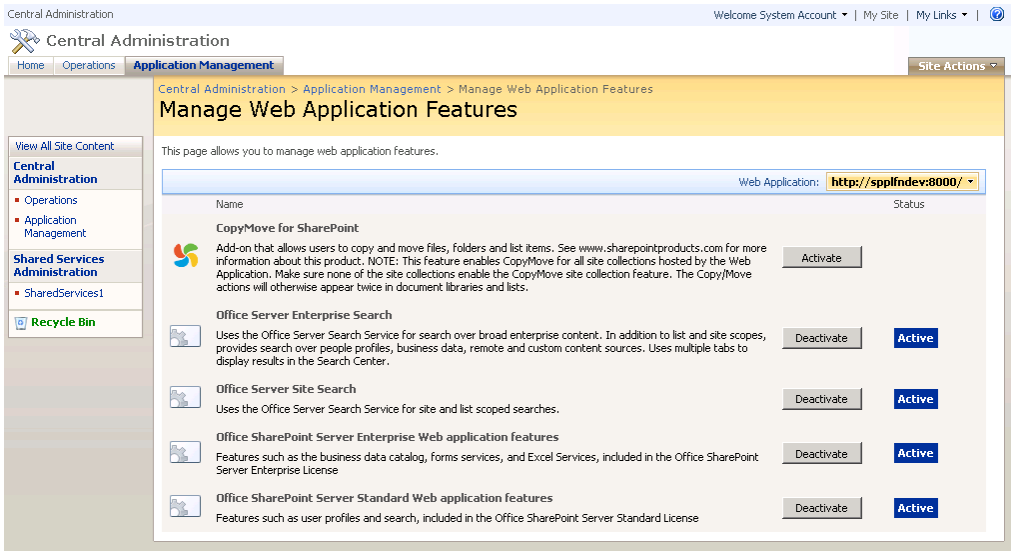

4. Select the appropriate Web application using the picker control in the blue bar above the list of features.

5. To toggle the activation status of CopyMove, click the **Activate**/**Deactivate** button for the feature labeled **CopyMove for SharePoint**.

Please consult the official SharePoint documentation for more information about how to open the SharePoint Central Administration site and use it to work with features and other aspects of SharePoint.

2.4.3 Activating CopyMove for Selected Site Collections

To activate or deactivate the CopyMove feature at the level of the site collection, follow these steps:

1. Open the root site of the site collection for which to activate or deactivate CopyMove.

2. Select **Site Actions -> Site Settings -> Modify All Site Settings** from the Site Actions menu. This brings up the **Site Settings** page.

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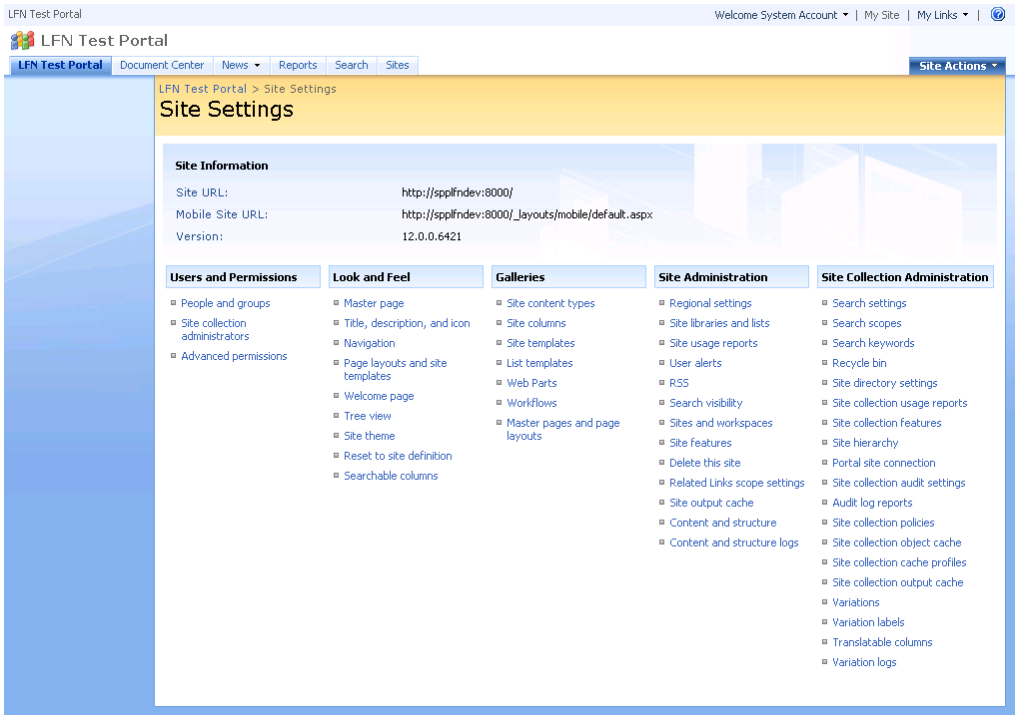
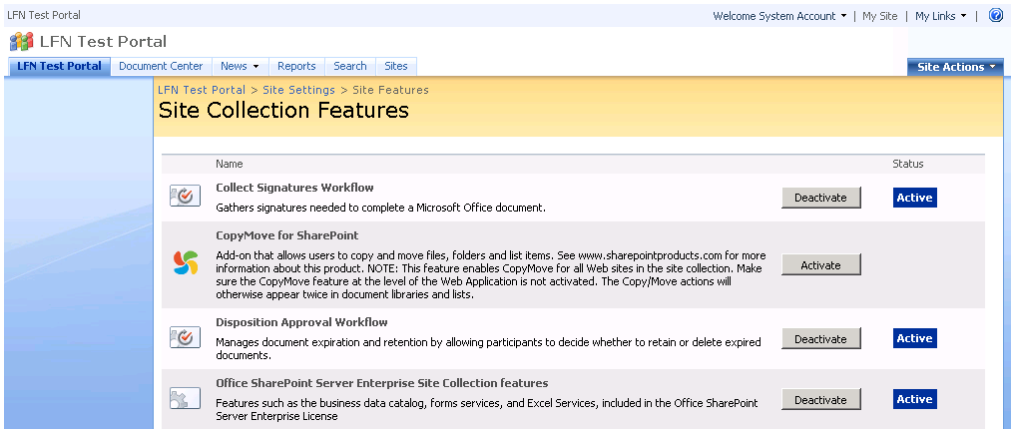


3. Click the **Site collection features** link under the **Site Collection Administration** heading. This brings up the **Site Collection Features** page where the activation status of each installed site collection feature is listed.



4. To toggle the activation status of CopyMove, click the **Activate**/**Deactivate** button for the feature labeled **CopyMove for SharePoint**.

Please consult the official SharePoint documentation for more information about how to work with sites, features and other aspects of SharePoint.

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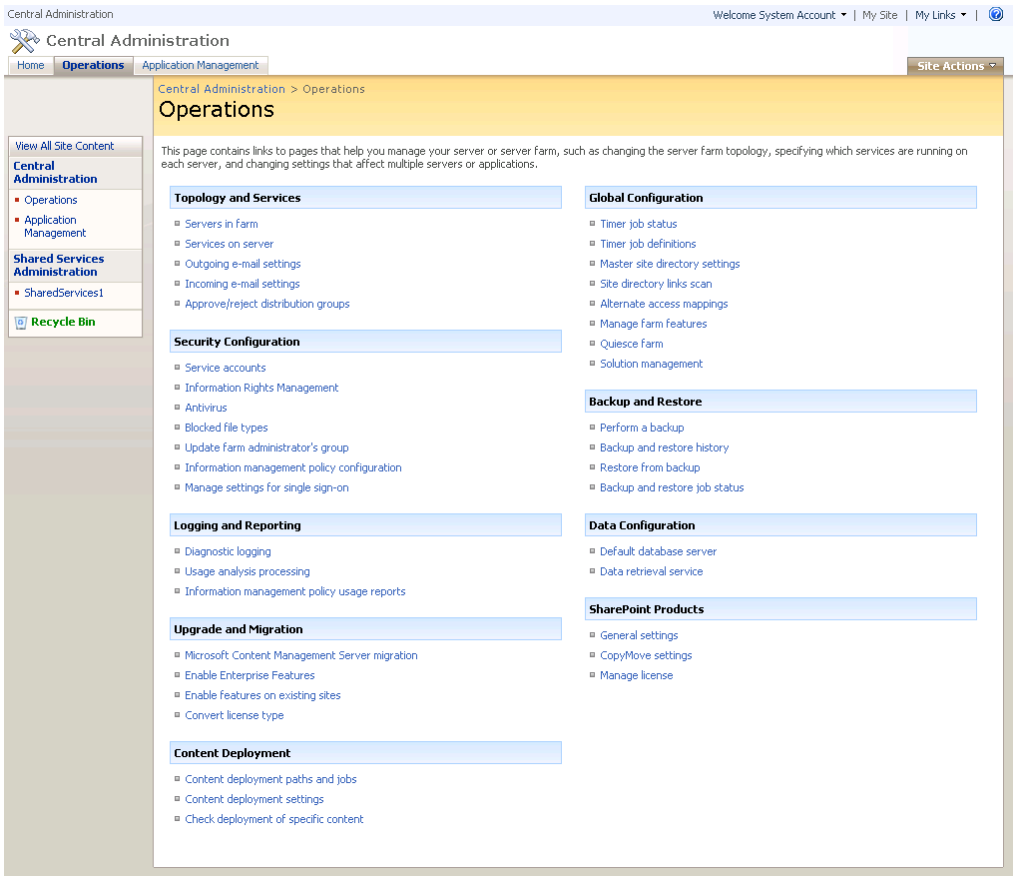
2.5 Manual Deployment

CopyMove can also be deployed manually to Web applications in a SharePoint farm using the built-in solution deployment features in SharePoint. Provided that CopyMove is needed for a particular Web application then Manual deployment is a necessary step in the following scenarios:

- The Web application was unchecked on the **Deployment Targets** page in the CopyMove installation program.
- The Web application was created after CopyMove was installed and deployed to the SharePoint farm.
- The CopyMove solution file **sharepointproducts_copymove.wsp** was added using the **STSADM** tool instead of using the CopyMove installation program.

To manually deploy CopyMove to a Web application, follow the steps below:

1. Open the SharePoint Central Administration site.
2. Click on the **Operations** tab.



3. On the **Operations** page, select **Solution management** under the **Global Configuration** heading.

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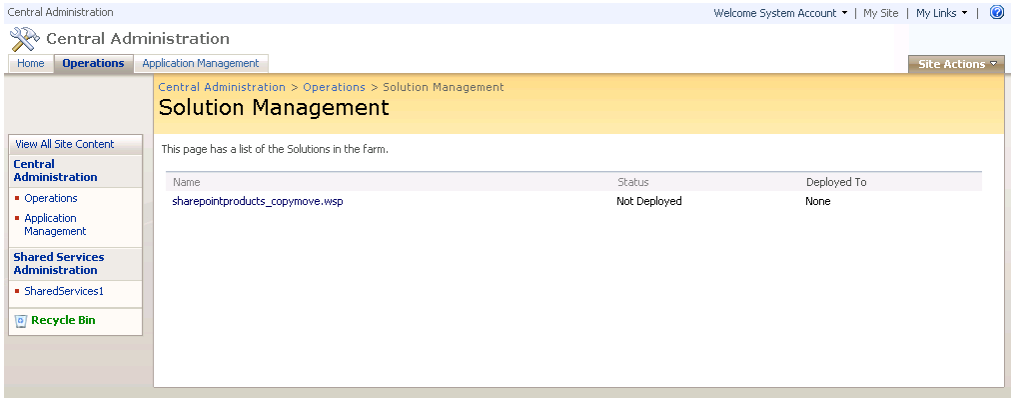
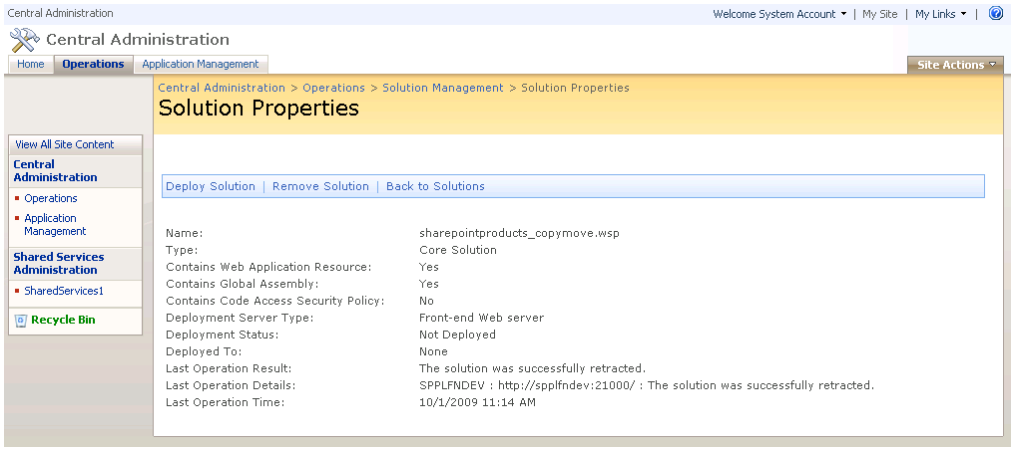
4. The **Solution Management** page is now shown. It lists all the solutions installed on the farm.



Click on the **sharepointproducts_copymove.wsp** link in the solutions list.

5. This opens the **Solution Properties** page listing the deployment status for the CopyMove solution.



Click on the **Deploy Solution** link to open a page for deploying the solution to selected Web applications.

Please consult the official SharePoint documentation for more information about how to open the SharePoint Central Administration site and use it to work with solutions and other aspects of SharePoint installations.

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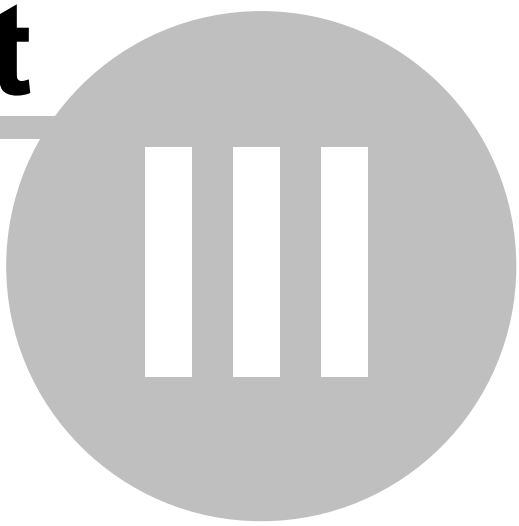
Part



Troubleshooting

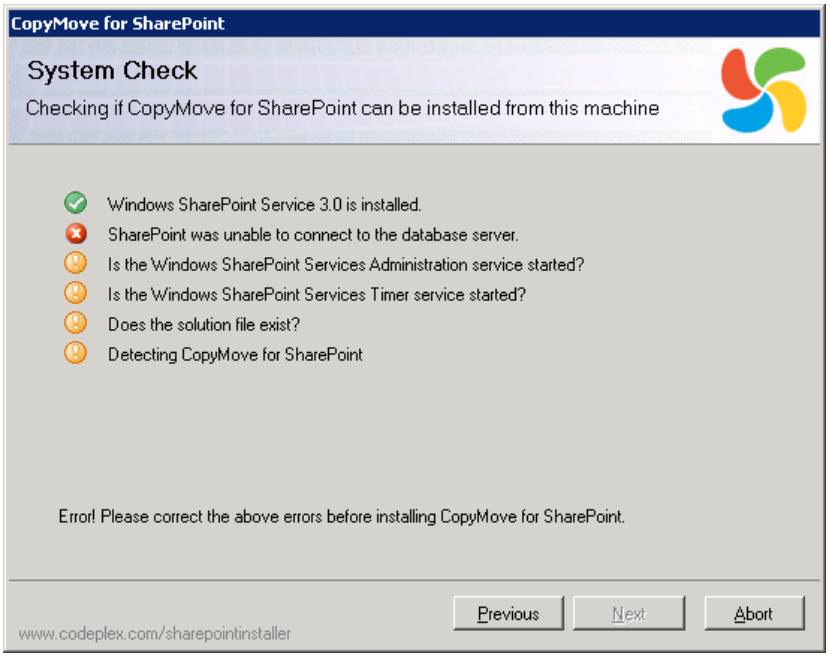
3 Troubleshooting

3.1 Installation Problems

This section provides answers to common problems that can occur when installing CopyMove.

3.1.1 SharePoint was unable to connect to the database server

The following error shows in the installation program when trying to install CopyMove to a SharePoint farm.



CAUSE
You have logged in to the SharePoint server with a Windows account that does not have full access to the SharePoint configuration database.

RESOLUTION
Log out of the SharePoint server and log in again with the credentials of a user having full access to the SharePoint configuration database. If possible, use the same account as used by the IIS application pool account for the SharePoint Central Administration Web site. Alternatively, login as domain administrator if you have the password to this account.

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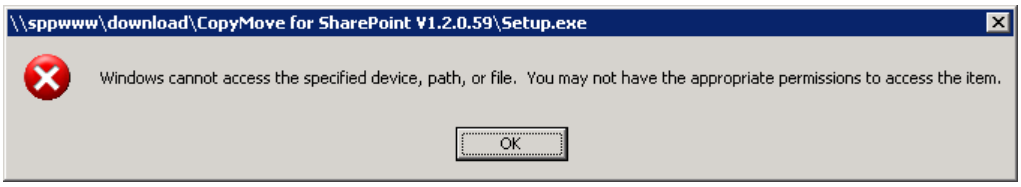
3.1.2 Windows cannot access the specified device

You see the error Windows cannot access the specified device, path, or file when trying to run setup.exe.

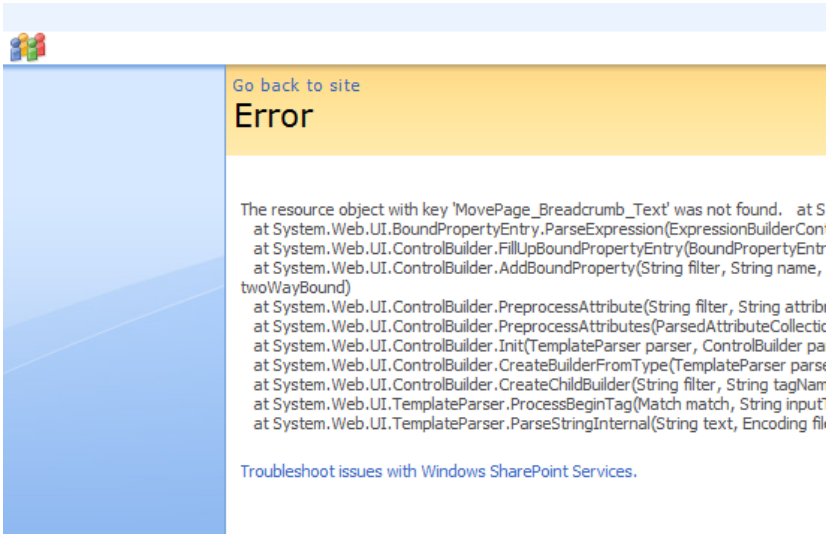


CAUSE
The file is located on a file share, which causes Microsoft .NET to refuse execution of the application.

RESOLUTION
Copy the installation files to a local folder and run setup.exe from there.

3.1.3 The resource object was not found

This following error shows when accessing any of the CopyMove pages.



CAUSE
The resource files **sppplatform.resx** and **sppcopymove.resx** are missing from the **App_GlobalResources** folder of the SharePoint Web application. CopyMove relies on a post installation timer job to copy these files from the **resources** folder to the **App_GlobalResources** folder.

RESOLUTION
Copy all resource files from the **resources** folder to the **App_GlobalResources** folder below the inetpub directory of all affected Web applications. Repeat for every Web front-end server in the farm. Alternatively, try and reactivate the farm level feature labeled CopyMove for SharePoint. This action triggers the timer job that copies the files in place on all servers.

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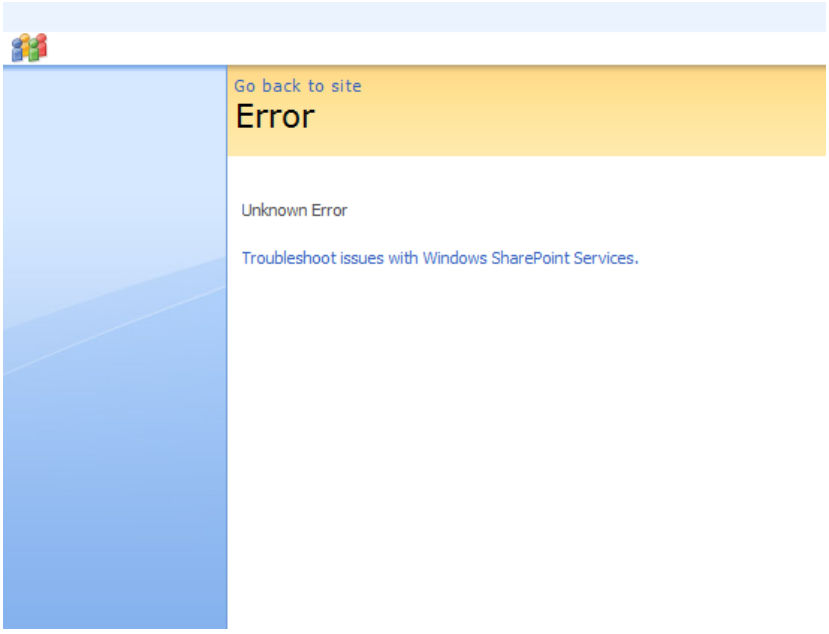
3.1.4 Unknown error

This following error shows when accessing any of the CopyMove pages.



CAUSE
An unknown error can of course be anything. But this is also just the general error message that SharePoint shows in a production environment in order to not compromise any system information to end-users.

RESOLUTION
This error usually occurs because of a missing resource file - see the section "The resource object was not found" for more information. To see the exact error message, open the **web.config** file of the SharePoint Web application and set the **CallStack** attribute to **true** on the **SafeMode** element, and the **mode** attribute to **Off** on the **customErrors** element. Then repeat your actions to reproduce the error.

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