DocAve® Migrator 2.1

Migrating from SPS 2001 to SharePoint 2010

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Introduction

This guide is intended for those who wish to migrate the contents of their environment from Microsoft SharePoint Portal Server (SPS) 2001 to Microsoft SharePoint Server 2010. This process will require two steps: a "backup" on the SharePoint 2001 environment, followed by a "restore" to the SharePoint 2010 environment.

Pre-requisite list

- If the security needs to be migrated, .NET Framework 2.0 should be installed.
- Make sure the destination SharePoint 2010 "Recycle Bin" is empty before restoring.
- The destination SharePoint 2010 Document Library setting "Require documents to be checked out before they can be edited?" must be set to "No".
- The destination SharePoint 2010 Document Library Versioning setting "Require content approval for submitted items?" must be set to "No".
- The destination SharePoint 2010 AvePoint service account must be a domain account with sufficient Admin rights to the SharePoint server and database ownership on the content database.
- On the source (SharePoint 2001) side, the "env.cfg" file under the DocAve installation directory (\Program Files\AvePoint\DocAve for SharePoint\data\env.cfg) must include the line: "IndexFileSize=512".
- The source SharePoint 2001 AvePoint service account must be a "Local System Account". Make sure the APVCTool event log is set to "Overwrite as Needed"; otherwise the migration process may hang. To set this feature-> Open the Windows Event Viewer-> right click on the APVCTool event log-> click "Properties"-> select the "Overwrite as Needed" radio button.

Installation

DocAve Migrator 2.1 must be installed on Microsoft SharePoint Portal Server 2001 and Microsoft Office SharePoint Server 2010 in order to migrate the data from SharePoint 2001 to SharePoint 2010. An additional patch is also required for the SharePoint 2010 environment.

Step	Action
1	In order to install the Migrator 2.1 package, all versions of DocAve (version 3.1 or lower) must be uninstalled on both the SharePoint 2001 and SharePoint 2010 machines. To uninstall DocAve, navigate to "Start Menu" -> "Control Panel" -> "Add or Remove Programs" and select the appropriate DocAve environment from the list.

2	From the Migrator 2.1 downloaded package, locate the "setup.exe" file and run it. On the SharePoint 2010 machine, this will install and start the AvePoint Control Service (ACS) automatically. ***Note:** The default installation destination for Migrator 2.1 is: "C:\Program Files\AvePoint\Doc_Ave_For_SharePoint". Please make a note of this file path.
3	Copy the license file that you have received from AvePoint to the directory listed in the previous step and overwrite the existing "license.txt" file. The AvePoint registry key and several COM dlls will be created while installing the software.

*Note: Installation for the SharePoint 2001 environment will only require Steps 1 to 3 above. Please follow all steps below for the SharePoint 2010 installation.

SharePoint 2010 Installation – Extra Steps

Step	Action
1	Install Package on SharePoint 2010 using x64 bit package according to the OS.
2	AvePoint Control Service (ACS) will be set to "Local System Account" during the installation by default. Please follow the steps below to change the account: 1. Navigate to "Start Menu" -> "Control Panel" (or "Administrator Tool") -> "Services." 2. Look for "AvePoint Control Service" (ACS) on the list. 3. Stop the ACS service and double click on it to bring up the property dialog. 4. Select the "Log On" tab and check the "This Account" box. 5. In the appropriate fields, type in your account information (in "Domain\user" format). ***Note:** This account should have full access to the SQL database installed on the machine. Also this account should have the permission of Local Admin and Farm Administrator. Select *OK* and start the ACS again manually.

Migrator 2.1 should now be installed on both SharePoint environments.

Backup on SharePoint Portal Server 2001

The following section will show how to perform a backup of the SharePoint 2001 environment:

Step	Action
1	From the "Start Menu," run AvePoint DocAve2.1 for SharePoint V2.
2	In order to create a "Backup Plan," you need to reload SharePoint structure from the server. To do this, select the "Reload" icon shown in the screenshot: A pop-up window should appear indicating that the data has been retrieved.
3	Select the "Location" icon indicated by the screenshot to bring up the location dialog:
4	This dialog shows the attributes related to a location. To add a new location, select the *New* button on the bottom of the window. This will open a new popup:
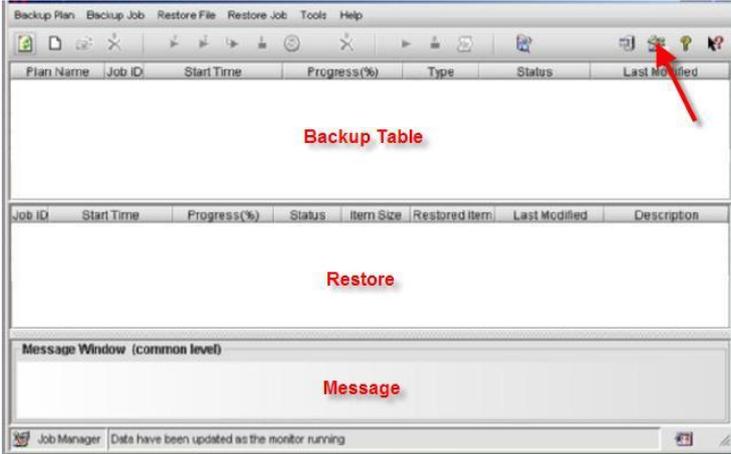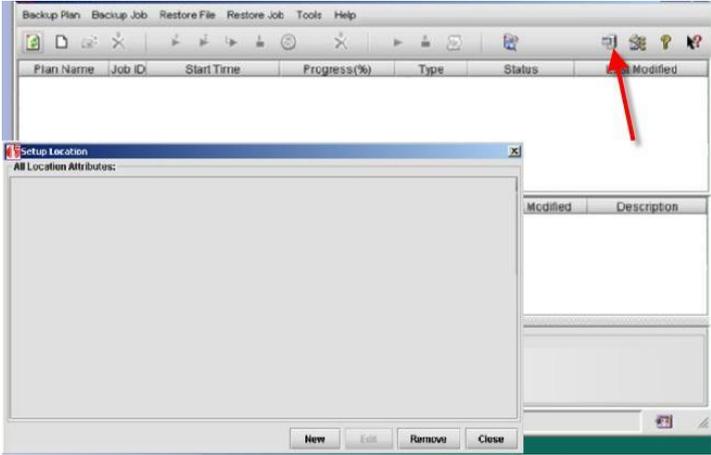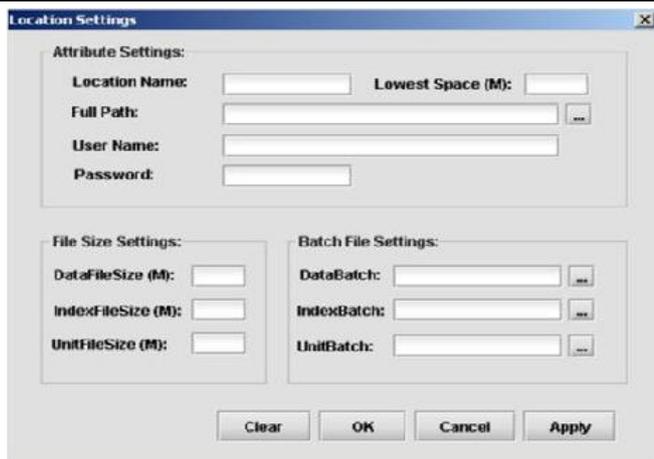
5	Enter the name for the location, and select the "…" button next to "Full Path." This will let you browse to the desired location for the backup data. Click *Select* after choosing a path.
6	Enter any additional information referring to that location. For advanced settings, please refer to the AvePoint website.
7	After reloading the SharePoint structure, select the "New" icon to bring up the "Plan Editor Window":
8	The SharePoint structure is shown by the tree in the left side. Right click on items on the tree and add workspace or folders to the plan:
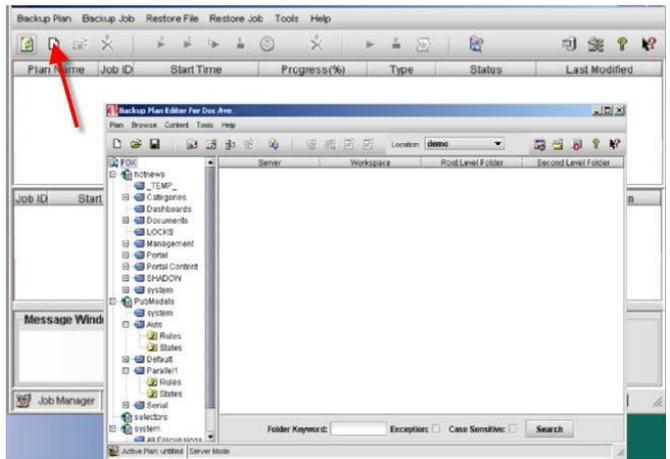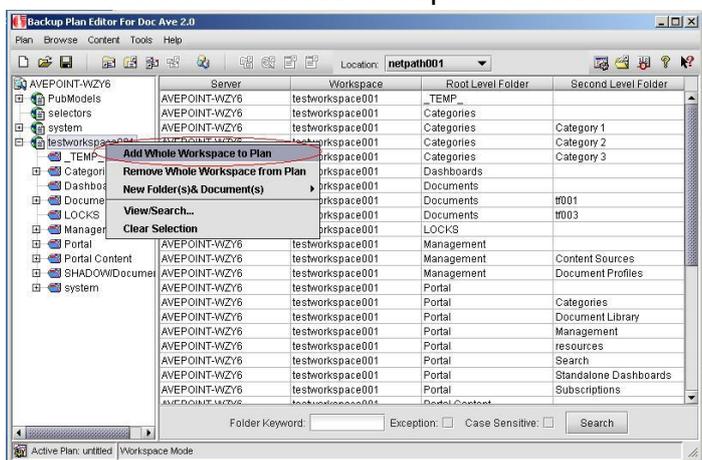
	*Note: "SHADOW" folders on SharePoint 2001 contain version histories. If these folders are not included, all version histories will be lost.
9	The area on the right should be populated with all the data you have added. You can select the "Location" from the top, which by default will be the path set in the previous steps.
10	Save the backup plan using the "🖫 " icon.
11	After returning to the Manager, click *Refresh* in the upper left corner. The new plan should be displayed in the "Backup Table."
12	Right click on the plan and select "Start Selected Backup Job As" -> "Full Backup" :
13	After completion of the backup (shown by the progress tab), the data should be saved under the earlier specified location.
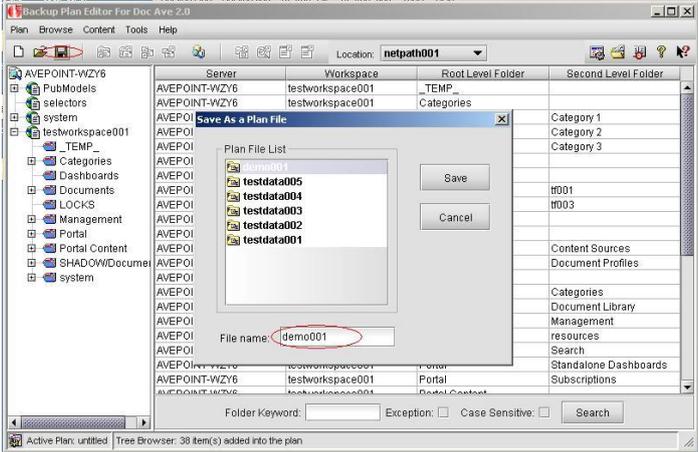
Backup of Security

To migrate the security from SharePoint 2001 to SharePoint 2010 after you backup the content, please follow the steps below. This is optional; you can choose to recreate the security on SharePoint 2010.

Step	Action
1	There is a GetFolderSecurity.exe file under the installation directory "\AvePoint\Doc_Ave_for_SharePoint\bin" on SharePoint 2001. Run this .exe file in the command prompt using the following parameter, which is the path of the plan's directory. For example, the plan's name is testdata001, the parameter should be C:\Program Files\Avepoint\Doc_Ave_for_SharePoint\data\testdata001).
2	After running the .exe file, it will generate a file named **security.dat** under the plan directory (For Example: \AvePoint\Doc_Ave_for_SharePoint\data\ testdata001).
4	Copy the secuity.dat file to the installation directory "\AvePoint\Doc_Ave_for_SharePoint\temp" on the SharePoint 2010 server where Migrator 2.1 has been installed.
5	There is a "GetProfiles.exe" file under the installation directory "\AvePoint\Doc_Ave_for_SharePoint\bin" on SharePoint 2001. Run this .exe file in the command prompt using the following parameter, which is the workspace path. For Example, http://avepoint-henry/myworkspace.
6	After running the "GetProfiles.exe" file, it will generate a **profile.xml** file under directory (\AvePoint \Doc_Ave_for_SharePoint\data). Copy this "profile.xml" file to the installation directory "\AvePoint\Doc_Ave_for_SharePoint\data" on the SharePoint 2010 server. ***Note:** If there is no "profile.xml" in SharePoint2010, no content types will be retained during migration.

Mapping content from SharePoint 2001 to SharePoint 2010

You can use the security.cfg and profile.cfg file located under the following path "…\AvePoint \Doc_Ave_for_SharePoint\data" on the SharePoint 2010 to apply domain and user mapping and property mapping respectively.

Domain Mapping

This setting allows you map the domain in SharePoint 2001 to the domain in SharePoint 2010 with the corresponding securities. You can set the following columns respectively:
<Mapping PortalDomainName="" MOSSDomainName="" />

The "PortalDomainName" attribute is the domain the SharePoint 2001 instance is located in. The "MOSSDomainName" attribute is the domain the SharePoint 2010 instance is located in.

*Note: If you do not set the mapping, DocAve will default map the domain in SharePoint 2001 to the domain installed on the SharePoint 2010.

User Mapping

This setting allows you map the user in SharePoint 2001 to the user in SharePoint 2010 and specify the corresponding permission to the user in SharePoint 2010.You can set the mapping columns respectively:
<Mapping PortalUserName= "" MOSSUserName= "" />

The "PortalUserName" attribute represents the user of the SharePoint 2001.
The "MOSSUserName" attribute represents the user of the SharePoint 2010.

Property Mapping

This setting allows you map the property from SharePoint 2001 to SharePoint 2010. If the property has already existed in SharePoint 2010, DocAve will map the value of the SharePoint 2001 property to the SharePoint 2010 property directly. If the property does not exist in SharePoint 2010, DocAve will create the property in SharePoint 2010 and map the value from SharePoint 2001 to it. You can set the mapping columns respectively:

```
<PropertyMapping>
    <Mapping PortalProperty="Author" MOSSProperty="SP2001_Author" />
    <Mapping PortalProperty="01pName" MOSSProperty="10pName" />
    <Mapping PortalProperty="" MOSSProperty="" />
    <Mapping PortalProperty="" MOSSProperty="" />
  </PropertyMapping>
```

Content type Mapping

This setting allows you map the content type from SharePoint 2001 to SharePoint 2010. If the content type has already existed in SharePoint 2010, DocAve will map the value of the SharePoint 2001 content type to the SharePoint 2010 content type directly. If the content type does not exist in SharePoint 2010, DocAve will create the content type in SharePoint 2010 and map the value from SharePoint 2001 to it. You can configure your custom content type in profile.cfg.

```
<ContentTypeMapping>
    <Mapping PortalContentType="Base Document" MOSSContentType="Document" />
    <Mapping PortalContentType="Announcement" MOSSContentType="Announcement" />
    <Mapping PortalContentType="News Item" MOSSContentType="Item" />
    <Mapping PortalContentType="Web Link" MOSSContentType="Link" />
    <Mapping PortalContentType="01ContentType" MOSSContentType="10ContentType"
/>
  </ContentTypeMapping>
```

Role Mapping

This setting allows you to transfer the permissions of the object "SP2001RoleName" to the corresponding permissions of the object "MOSSPermissionLevelName" and then restore them to SharePoint 2010. After the migration, the user with the corresponding permissions will be added to the Group named MOSSGroupName. By default, the group should be MOSSDefaultGroup. If the user already exists in SharePoint, it will not be added to the group.

```
<RoleMapping MOSSDefaultGroup="Viewers">
    <Mapping        SP2001RoleName="Read"        MOSSPermissionLevelName="Read"
MOSSGroupName="" />
    <Mapping SP2001RoleName="Full Control" MOSSPermissionLevelName="Full Control"
MOSSGroupName="" />
    <Mapping   SP2001RoleName="Contribute"   MOSSPermissionLevelName="Contribute"
MOSSGroupName="" />
    <Mapping        SP2001RoleName="Design"        MOSSPermissionLevelName="Design"
MOSSGroupName="" />
  </RoleMapping>
```

Configuration of the Security of the SharePoint 2010

Migrator 2.1 allows you migrate the profile of SharePoint 2001 as the content type in SharePoint 2010, You can use the env.cfg located "…\AvePoint\Doc_Ave_for_SharePoint\data" on SharePoint 2010 to add the attributes of the "enableSecurityFirstInheritance", "RestoreOnlyProfile", "MaxFileNameLength" and "MaxFolderPathLength".

enableSecurityFirstInheritance

This attribute determines whether inherits the security or not.

If set the value as true, the permissions' inheritance of the root folder should be broken in order to ensure that the permissions of the root folder of the destination are the same with the corresponding folder in the source,. However, the permissions of the sub folders will be the same as the source.

If set the value as false, all the permissions' inheritance will be broken.

By default, the value is false.

RestoreOnlyProfile

This attribute determines whether restore profile from SharePoint 2001 to SharePoint 2010.

If set the value as true, we will restore profile from SharePoint 2001 to SharePoint 2010.
If set the value as false, we will not restore profile from SharePoint 2001 to SharePoint 2010.

By default, the value is false.

MaxFileNameLength

This attribute should be added manually when necessary and it allows the user to set the maximum length of the uploaded file name.

For example, you can add the attribute in the following format: MaxFileNameLength=50.

The value range of this attribute is from 20 to 120 and the default value is 120.

MaxFolderPathLength

This attribute should be added manually when necessary and it allows the user to set the maximum length of the uploaded folder name.

For example, you can add the attribute in the following format: MaxFolderPathLength =50.

The value range of this attribute is from 20 to 100 and the default value is 100.

EnableSecurityMigration

The configurations in the file "security.cfg" will only be restored when the value of this attribute is "true" and there is a "security.dat" file.

The default value is "true".

LogFileSize

This attribute represents the size of the file "AveMSSPMigrator.log" generated during the restoring job or the file "AveMSSPBackup.log" generated during the backup job.

The default value is 20480(20 Megabytes).

This attribute is used to avoiding the previous logs of the user to be overwritten. If there are a great number of logs, the part of the log file which is bigger than 20480 Kilobytes will be backed up.

The attribute works together with the attribute BakLogFileNumber.

BakLogFileNumber

This attribute represents the number of the logs that we back up and the minimum number is 1. The user can adjust this number according to the number of their logs.

UseOldRestoreMethod

This attribute defines the Restore Method to be used.

By default, the value is false, which is also a recommended value.

DataConnectionWaitingTime

This attribute defines the waiting time when connecting to the database. The value should be greater than 15 seconds. If the value is set below 15 seconds, the restore job will fail.

The default value is 180 seconds.

DataCommandWaitingTime

This attribute defines the time to wait when the database is executing the commands. The time must be longer than 3600 seconds.

The default value is 3600 seconds.

*Note:
1. The time zone and the time of the SharePoint 2001 environment and the SharePoint 2010 environment must be the same.

2. The Security.dat file must be copied to the SharePoint 2010 directory. If there is no file in SharePoint 2010, the migration job will fail when the security migrates.


Restore on SharePoint 2010

If you are currently using a different username and password than the SharePoint 2001 server, you may have difficulty accessing the backup directory. Network locations require that the user has full administrative rights to the drive where the data is stored.

Step	Action

1	Log on to the SharePoint 2010 machine. In the SharePoint 2010 environment, create document libraries with the same names as the workspace on the SharePoint 2001 environment. You can also specify new names for the document libraries in the SharePoint 2010 environment, we just use the same names here as an example. For example, if there is a workspace on your SharePoint 2001 server with the URL: "http://server2001/testname," create a document library in SharePoint 2010 with the URL: "http://server2010/testname." The two servers can have the same or different names. ***Note:** The destination on SharePoint 2010 must be a document library or a folder under a document library.
2	If any profiles were created by the user on the SharePoint 2001 server, you must recreate them with the same names and attributes on SharePoint 2010.
3	Go to the location specified in the SharePoint 2001 backup and copy the entire directory to SharePoint 2010.
4	Navigate to Start > All Programs > AvePoint Doc Ave2.1 Migratior Pro > AvePoint DocAve2.1 for SharePoint V2.
5	Open the Migrator 2.1 Manager. Select the "Browse Option" icon to open the following popup:
6	Either enter the path of the SharePoint 2001 backup data, or browse for it using the "…" button. Select *Go* to retrieve all backup data and it will list in the "Time selection".
7	Select the backup file and press the " → " button to add it to the time fields.
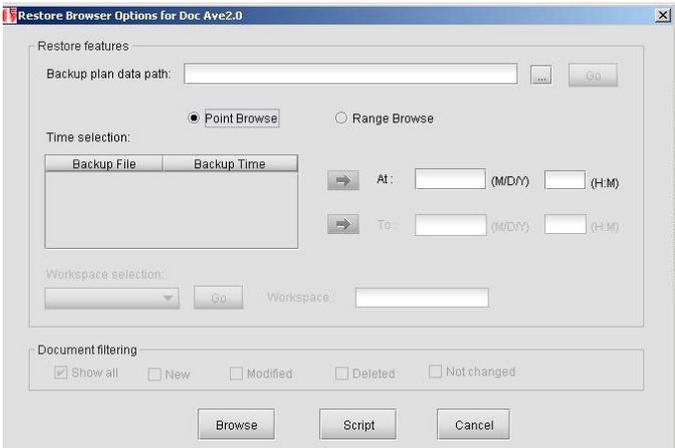
|	
8	Click *Browse*, the "Restore Browser" window will appear. It will list all folders of the workspace.
9	Using the browser, select the items for the restore by right clicking on each item or folder. After adding the data, the items should be highlighted blue, with a box around each icon in the tree. ***Note**: Select all "SHADOW" folders to ensure that version histories are restored. Please see the section below for more detail on restoring version histories. Also, if you are running a Demo version of Migrator 2.1, please do not select more than 200 items at a time for restore. Please note that the Demo version only allows you to restore as many as 200 items in total, which means if you select 40 items for restore the first time, the second time you can only select as many as 160 items for restore. Otherwise, the job will fail.
10	Select "Restore" -> "Create and Save a new restore file".
11	Select the destination path for creating a restore file. This should be the same path as created in Step 1: ***Note:** If you copy and paste the link directly from SharePoint, remember to
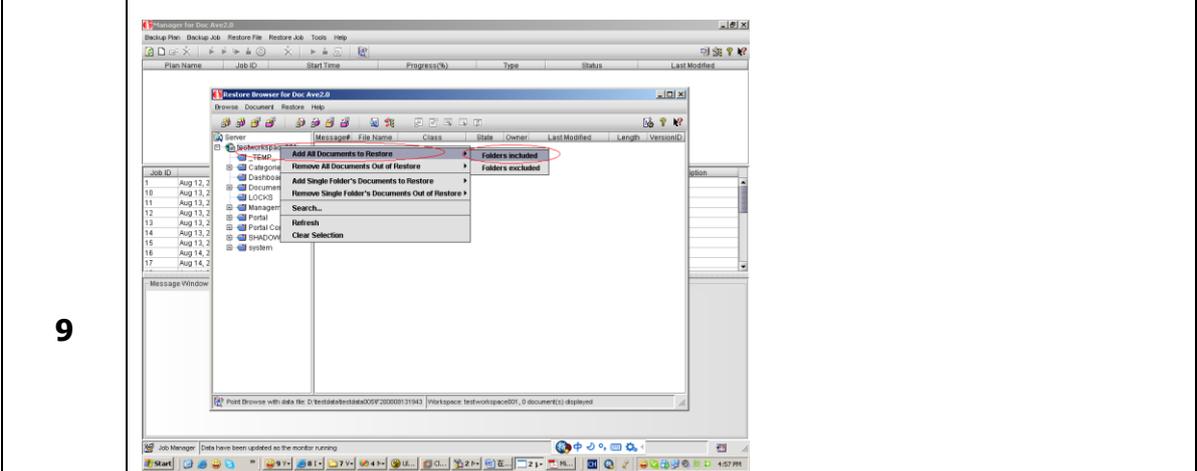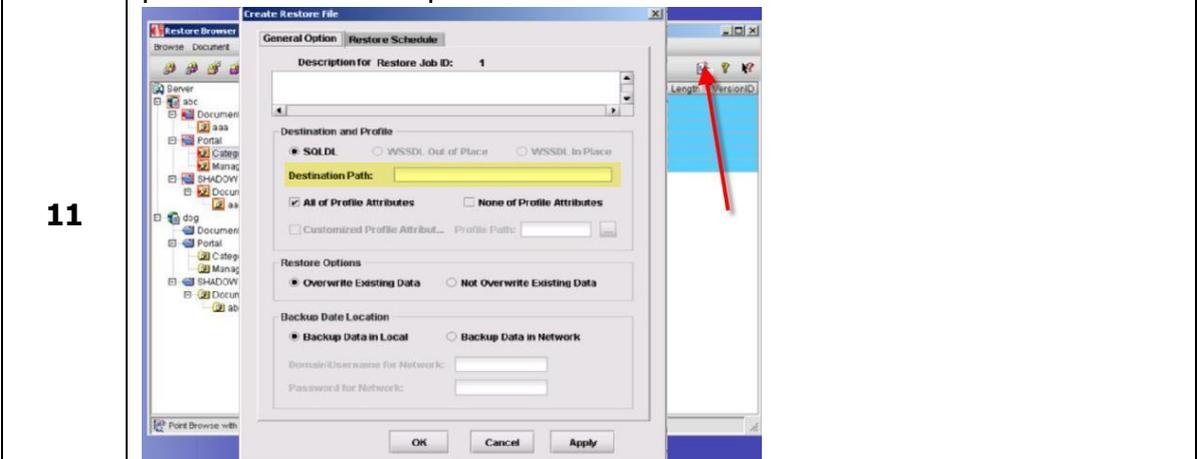
	replace all "%20" phrases with a blank space in the "Destination Path" field. Also, remove all "/Forms/AllItems.aspx" references.
12	Click *OK* and then follow the instructions or click *Apply*, the migration job will run.
13	After ".dat" file for restore has been created successfully, it will pop-up a prompt box.
14	After returning to the Manager, select *Refresh* in the upper left corner. The new plan should be displayed in the "Restore Table."
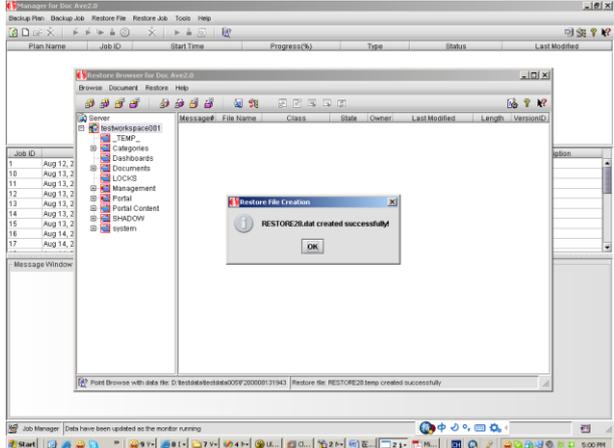
Congratulations, you have now successfully migrated your data from SharePoint 2001 to SharePoint 2010!

Restoring Version Histories

In order to make sure all version histories are migrated to SharePoint 2010, the SHADOW folders for each corresponding library must be restored simultaneously. Please follow the steps below:

Step	Action
1	Click on the "Restore File" -> "Create a New Restore File" in the Migrator 2.1 GUI.
2	Using the "…" icon next to the "Backup Plan Data Path" field, select the SharePoint 2001 backup data.
3	Click *Go* to load the backup data.
4	Select the desired backup data on the left side of the screen and use the " ➡ " button to load the data.
5	Click *Browse* to bring up the restore screen.
6	Right click on the document library desired and select "Add All Documents to Restore" (with folders included or excluded).
7	Expand the "SHADOW" directory listed in the left panel and find the associated folder for the one selected in the previous step.
8	Right click and select "Add All Documents to Restore" on the associated SHADOW folder.

The version histories should now be imported for the desired content.

Migration 2.1 common issues

SharePoint 2001 side

- If the service account is not local system account, you may get an "access denied error".

SharePoint 2010 side

- If you cannot find a site in SharePoint using the Migrator 2.1 interface, please check the Service account used to run the migration; it should have the full rights to the site.
- If you cannot browse and restore the backup data on the network share by using the mapped drive, you should use the UNC path to do it and give the username and password in the final restore dialog box.

Currently Supported and Unsupported Content for Migrator 2.1

Content	Status
Document Content	Supported
Document Metadata	Supported
Document Version Content	Supported
Document Version Metadata	Supported
Folder Structure	Supported
Security	Supported
Dashboard and other objects (except Document, folder, and document history version listed above)	Unsupported