

# Micro Focus File Dynamics 6.5 Cross-Empire Data Migration Guide

**September 10, 2019** 

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# About This Guide

This guide is written to provide administrators the conceptual and procedural information for using the Cross-Empire Data Migration subsystems of Micro Focus File Dynamics.

- Chapter 1, "Performing an eDirectory to Active Directory Cross-Empire Data Migration," on page 7
- Chapter 2, "Performing an Active Directory to Active Directory Cross-Empire Data Migration," on page 95

#### **Audience**

This guide is intended for network administrators who are tasked with migrating network user and group folders, permissions, and metadata from:

- eDirectory to Active Directory
- Active Directory to Active Directory

#### **Feedback**

We want to hear your comments and suggestions about this guide and the other documentation included with this product. Please use the User Comment feature at the bottom of each page of the online documentation, or go to www.novell.com/documentation/feedback.html and enter your comments there.

### **Documentation Updates**

For the most recent version of the *Micro Focus File Dynamics 6.5 Cross-Empire Data Migration Guide*, visit the Micro Focus File Dynamics Documentation website (https://www.novell.com/documentation/file-dynamics-60/).

### **Additional Documentation**

For additional Micro Focus File Dynamics documentation, see the following guides at the Micro Focus File Dynamics Documentation website (https://www.novell.com/documentation/file-dynamics-60/):

- Micro Focus File Dynamics 6.5 Installation Guide
- Micro Focus File Dynamics 6.5 Administration Guide
- Micro Focus File Dynamics 6.5 Data Owner Client Guide

# Performing an eDirectory to Active Directory Cross-Empire Data Migration

eDirectory to Active Directory Cross-Empire Data Migration is a for-purchase add-on subsystem for File Dynamics that allows for the movement of file system data from the Novell or Micro Focus NSS network file system and eDirectory directory service, to the Microsoft NTFS network file system and Active Directory directory service.

Many customer initiatives can precipitate the need for such a move, including a migration to a different server operating system, a merger and acquisition by the organization, or just the consolidation of environments.

- Section 1.1, "Understanding an eDirectory to Active Directory Cross-Empire Data Migration," on page 7
- Section 1.2, "Security and Ownership," on page 10
- Section 1.3, "Prerequisites," on page 11
- Section 1.4, "Creating the Migration Proxy Account," on page 13
- Section 1.5, "Creating and Modifying an Identity Map," on page 15
- Section 1.6, "Migration Options," on page 33
- Section 1.7, "Viewing the Migration Log File," on page 34
- Section 1.8, "Performing a User to User Data Migration," on page 35
- Section 1.9, "Performing a Folder to User Data Migration," on page 42
- Section 1.10, "Performing a Group to Group Data Migration," on page 50
- Section 1.11, "Performing a Folder to Group Migration," on page 58
- Section 1.12, "Performing a Folder to Folder Migration," on page 65

# 1.1 Understanding an eDirectory to Active Directory Cross-Empire Data Migration

The mission of Cross-Empire Data Migration is to quickly and easily perform automated movement of data, based on a variety of scenarios, including the movement of data for multiple users and groups directly to its intended location across multiple servers or shares in a single operation, all while preserving certain file system metadata. Further, Cross-Empire Data Migration lets you leverage the policies provided in File Dynamics to allow you to move to a managed storage environment on the target system and optionally restructure and reorganize data in the process.

A wizard in the Admin Client allows you to implement a phased approach to migration by incorporating one or more migration types offered through the interface to add work onto the File Dynamics event queue. In taking advantage of the dispatching and state machine architecture features of the event queue, the migration effort can be enhanced both in terms of performance through the Agent subsystem and in terms of reliability in overcoming outages and other factors that occur in real-world environments. Additionally, other options involving copying permissions, file ownership, filtering of the files to be copied and more, allow for greater control and flexibility during a data migration operation.

In addition to the eDirectory to Active Directory Cross-Empire Data Migration, there is a separate forpurchase Active Directory to Active Directory Cross-Empire Data Migration offering. For more information, see Chapter 2, "Performing an Active Directory to Active Directory Cross-Empire Data Migration," on page 95.

The eDirectory to Active Directory Cross-Empire Data Migration generally supports three constructs for movement:

- Section 1.1.1, "User Storage Migration," on page 8
- Section 1.1.2, "Collaborative or Group Storage Migration," on page 9
- Section 1.1.3, "Direct Folder Storage Migration," on page 9

# 1.1.1 User Storage Migration

Cross-Empire Data Migration can be used to copy User object personal file data from the source platform to the target platform. In an eDirectory to Active Directory scenario, this would likely be a migration of the data from the Novell or Micro Focus home directory to the Microsoft home folder. There are two options for migrating personal storage. The difference between the two is related to how File Dynamics determines the path to a specific user's data on the source network. These options can be used exclusively or in combination with one another during a migration project:

- "User to User" on page 8
- "Folder to User" on page 8

### **User to User**

This option allows you to instruct File Dynamics to determine the source location for user data by using the Home Directory attribute in eDirectory. As part of the migration wizard, you specify a source eDirectory container. The User objects within that container are listed for matching with the target, and you can select one or more users for migration. For each user selected, the Home Directory attribute provides the source file system path to be used. This option is very useful when the Home Directory attribute in the source tree is populated correctly and there is a need to migrate data simultaneously from multiple locations on the source network. It is also very useful if the user directory name on the source does not match the account name on the target.

For procedures on performing a user to user data migration, see Section 1.8, "Performing a User to User Data Migration," on page 35.

### Folder to User

This option allows you to specify the location of user data by providing a file system path as the source. Instead of specifying an eDirectory container, you specify a parent folder location on the file system in the source network. From this folder, all immediate subfolders are listed for matching with the target, and you can select one or more for migration. This option is useful when the Home Directory attribute in the source tree is not populated or reliable, or there is a need to migrate a set of users with folders in a single path on a single volume.

For procedures on performing a folder to user data migration, see Section 1.9, "Performing a Folder to User Data Migration," on page 42.

### 1.1.2 Collaborative or Group Storage Migration

File system data used by groups can also be copied by using the eDirectory to Active Directory Cross-Empire Data Migration subsystem. The options available to the administrator are similar to those available for user storage, but are different in whether to rely on data in directory services or specify the file system paths directly.

The underlying concept behind both options is that the collaborative storage is being moved to a managed storage environment on the target network, which means that the collaborative managed path attribute is being populated and managed in directory services in the target. If you don't want to move some of the collaborative group directories, you should consider using direct folder storage migration., which is documented at Section 1.1.3, "Direct Folder Storage Migration," on page 9.

The following options are available for moving collaborative storage:

- "Group to Group" on page 9
- "Folder to Group" on page 9

### **Group to Group**

This option allows you to instruct File Dynamics to determine the source location for user data by using the group managed path attribute in eDirectory. As part of the migration wizard, you specify a source eDirectory container. The Group objects within that container are listed for matching with the target, and you can select one or more groups for migration. For each group selected, the group managed path attribute provides the source file system path to be used. This option is very useful when File Dynamics has been used to manage collaborative storage in the source tree.

For procedures on performing a group to group data migration, see Section 1.10, "Performing a Group to Group Data Migration," on page 50.

### Folder to Group

This option allows you to specify the location of group data by providing a file system path. Instead of specifying an eDirectory container, you specify a parent folder location on the file system in the source network. From this folder, all immediate subfolders are listed for matching with the target, and you can select one or more for migration. This option is useful when File Dynamics has not been used in the source tree to manage collaborative group storage or when you are migrating only some of the group storage.

For procedures on performing a folder to group data migration, see Section 1.11, "Performing a Folder to Group Migration," on page 58.

### 1.1.3 Direct Folder Storage Migration

A major benefit in using File Dynamics is that your organization can move to a managed storage environment for its file system data. File Dynamics allows you to define and enforce policies on the data by driving management of it throughout the life cycle of the user or group associated with the data. The architecture of the Cross-Empire Data Migration subsystem allows organizations to move to this paradigm for both user and group storage.

However, you are not required to use this method during the migration process. You might not want to move to managed storage for all of the data, or you might want to move to it in phases. For this reason, the Cross-Empire Data Migration subsystem has provisions for direct movement of data outside of the policy construct by performing a folder to folder data migration.

### Folder to Folder

A folder to folder migration allows you to move a folder and its contents directly from the source network to a designated location on the target network. Selecting this method in the wizard allows you to specify distinct file system paths on both the source and the target networks. All file system contents and metadata are copied during the operation.

For your convenience, there is a **Skip Open Files** option that will migrate all unopened files located in a folder. Open files are not migrated, but the filenames and paths of all of the open files are logged in a delta file. You can then ensure that all open files are closed and do a follow-up migration of these remaining files by simply specifying the location of the delta file.

You can identify and move all files that are new or have been modified from a given date. Additionally, you can verify that all of the files you wanted to migrate from a source server have been migrated.

Following the folder to folder migration, use the CEDMScanCompare utility to scan the NetWare or Open Enterprise Server source for all new and modified folders and files. Once these new folders and files have been migrated, use CEDMScanCompare again to generate a folder and file content list for both the source server and the target server, then use the application to compare the two lists to verify that all folders and files migrated properly.

For procedures on performing a folder to folder migration, see Section 1.12, "Performing a Folder to Folder Migration," on page 65

# 1.2 Security and Ownership

Moving to a managed storage environment presents an opportunity to refine the security on the data itself. By defining the security that should be on the file system as a part of the policy, you are assured that the security of the data on the target network is in line with the security and governance requirements that your organization wants to employ. This can also contribute to present and future compliance requirements for your organization. Avoiding these types of exposure is another benefit of moving to a managed storage environment.

However, in many environments, there is a desire to migrate security and ownership assignments directly from the source environment to the target. This capability is accomplished through the creation and optional usage of an Identity Map as a part of a migration operation.

- Section 1.2.1, "Defining an Identity Map for Security and Ownership Migration," on page 10
- Section 1.2.2, "Using an Identity Map," on page 11

# 1.2.1 Defining an Identity Map for Security and Ownership Migration

For security and ownership information to be migrated between environments, the Cross-Empire Data Migration subsystem requires a series of object equivalence definitions to identify an object in the source environment as equivalent to an analogous object in the target environment. In other words, if an object in the source environment is given rights to a file or folder, and you want that

trustee assignment to be migrated along with the data, then File Dynamics must be told which object in the target environment is equivalent to it so that the appropriate rights assignment can be made. An identity map is a construct for creating and managing these equivalence definitions.

You can create and populate an identity map within the Cross-Empire Data Migration subsystem of the Admin Client interface. There are various options for automatically locating and matching objects based on a number of matching rules. There are options for creating manual assignments as well as for editing assignments.

However, some objects that are assigned rights in the source environment might not have an analogous object that already exists in the target environment. These objects need to be created before they can be defined to an identity map.

In addition, an analogous object might exist in the target environment, but might not be able to be assigned as a trustee, such as a container that is given rights in the source environment. The same container might exist in the target environment (Active Directory), but Active Directory does not support the assignment of a container as a security object. In these instances, a group representing the container is usually created for assigning permissions.

You can import data into an identity map. This can be useful when you already have a data set defining equivalences, or you can easily create one using data from an external system.

In general, it is standard practice to iteratively evolve an identity map as needed to perform a migration. Within the interface, you can run a check scan against a given source file system path to check rights and ownership assignments against an identity map. This identifies which objects still need a definition within the map in order for a migration to finish with 100 percent coverage for security and ownership.

# 1.2.2 Using an Identity Map

When you are satisfied with the coverage within the identity map for a given file system path, you can use the identity map as a part of a migration. You can optionally use the identity map in conjunction with any migration operation type supported by the Cross-Empire Data Migration subsystem:

- User storage migration
- Collaborative or group storage migration
- Direct folder storage migration

The system supports a single identity map within the framework at any one time. When the map is created or edited, the master copy is held by the Engine and is automatically distributed to Agents as necessary.

**IMPORTANT:** Certain operations during a Cross-Empire Data Migration involve building a cache on the local workstation or the Engine. If the identity map contains more than 20,000 objects, the time it takes to cache all of the objects could significantly inhibit the speed of the migration.

Once the cache has been built the first time on the workstation or Engine, it does not have to be rebuilt again.

# 1.3 Prerequisites

The server on which the Engine in Active Directory is installed must have the Client for OES installed while the migration is being performed. After the migration is complete, the client can be removed. Additionally, the Engine can delegate migration operations to Agents for improved migration

performance. If Agents are deployed as a part of a File Dynamics installation, these Agents are individually used for migration if the Client for OES is installed on them. In order for an Agent to participate in a migration, the server that has the Agent installed must also have the Client for OES installed. This determination is made automatically within File Dynamics as a part of Agent/Engine communications and no additional configuration is required in order to use this feature.

The Client for OES installed on the Engine in Active Directory should be properly configured to use SLP (Service Location Protocol) for the eDirectory tree source of a data migration. For information on SLP configuration, see "Setting Client Properties" (https://www.novell.com/documentation/windows\_client/windows\_client\_admin/data/hbqx7szx.html) in the Client for Open Enterprise Server Administration Guide.

# 1.3.1 Prerequisite Tasks

Before you proceed with an eDirectory to Active Directory Cross-Empire Data Migration, perform the following tasks:

- 1. Log in with Administrative access to the domain.
- Install the File Dynamics Engine on the target Windows server.
   See "Installing the Engine" in the Micro Focus File Dynamics 6.5 Installation Guide.
- 3. Install the Client for OES with the NMAS installation default option on the Engine server. The Client for OES can be removed after you have completed your migrations.
- 4. Extend the Active Directory schema.
  - This is required only if you are migrating to a target share managed by a collaborative storage policy.
  - See "Active Directory Schema" in the Micro Focus File Dynamics 6.5 Installation Guide.
- 5. Install the Admin Client.
  - See "Installing the Admin Client" in the Micro Focus File Dynamics 6.5 Installation Guide.
- 6. (Optional) Install and authorize the Event Monitor.
  - The Event Monitor is not needed for a Cross-Empire Data Migration, but is needed for managing storage once your data has been migrated to the Microsoft network.
  - See "Installing and Configuring the Event Monitor" and "Authorizing the Event Monitor" in the *Micro Focus File Dynamics 6.5 Installation Guide*.
- 7. Assign SMProxyRights group Full Control permission to the shares to which you will be migrating data.
  - See "Setting Rights and Privileges on Managed Storage" in the *Micro Focus File Dynamics* 6.5 *Installation Guide*.
- 8. Install and authorize Agents and configure Proxy Agents for all servers that will be target servers for Cross-Empire Data Migrations.
  - See "Installing and Configuring the File System Agents" and "Authorizing the Agents" in the *Micro Focus File Dynamics 6.5 Installation Guide*.
- 9. (Conditional) If you plan to migrate data to a NAS device, make the fdproxyrights group a member of the Local Administrators group on each NAS device.
  - See "Setting Rights and Privileges on Managed Storage" in the *Micro Focus File Dynamics* 6.5 *Installation Guide*.
- 10. Install the Client for OES and configure SLP on any Agent servers that will be involved in a Cross-Empire Data Migration.
  - The Client for OES can be removed after you have completed your migrations.

- 11. Create File Dynamics policies for the migration of storage.
  - These policies are needed if the Cross-Empire Data Migrations will be driven by File Dynamics policies, which we recommend for migrating user data.
- 12. For all objects in eDirectory that have rights assigned to the file system, create matching objects in Active Directory.
  - To migrate rights assigned to containers, you must create an equivalent Group object in Active Directory for each container object in eDirectory.

# 1.4 Creating the Migration Proxy Account

The Engine running in Active Directory uses a migration proxy account to log in to the eDirectory tree. Any time you perform a migration from the eDirectory tree to the Active Directory domain, the Admin Client uses the migration proxy account that you establish in this procedure.

**IMPORTANT:** This process creates a new User object in eDirectory with a 32-character password that is generated automatically by File Dynamics. If your Universal Password policy does not accommodate 32-character passwords, you must modify or create a new Universal Password policy before proceeding. For more information, refer to Section 3.4, "Creating Password Policies," (http://www.novell.com/documentation/password\_management33/pwm\_administration/data/an4bun5.html) in the *Novell Password Management 3.3.1 Administration Guide*, especially the information in Figure 3.3, "Advanced Password Rules Continued."

- 1 Launch the Admin Client.
- 2 From the Cross-Empire Data Migration tab, click eDirectory to Active Directory.
- 3 From the Proxy Account Management drop-down menu, select Provision Source Proxy Account.

Provision Migration Source Proxy Account X					
Default Source Server Address  Enter the IP address or DNS name of the default eDirectory server in the source tree.					
Migration Proxy Account  Enter the name of the Migration Proxy account to create in the source tree. The account may be entered as a typeful or typeless FDN such as admin.org or cn=admin.org.  This account will be created as a user object, and will be granted full Supervisor access to the root of the source eDirectory tree.					
Admin Name  Enter the name of an administrator account in the source tree. The account may be entered as a typeful or typeless FDN such as admin.org or cn=admin.o=org.  Password  Enter the password for the admin account.					
Default Server Address					
1 Enter Migration Proxy Account and Admin Name as dotted FDNs					
Migration Proxy Account					
Admin Name					
Password					
	OK Cancel				

### **4** Fill in the following fields:

**Default Server Address:** Specify the IP address or DNS name of a server in the eDirectory tree where the files you want to migrate are located. The Engine in the Active Directory environment must be able to communicate with this server when performing data migrations.

**Migration Proxy Account:** Provision a migration proxy account by specifying the typeless fully distinguished name (FDN) of the proxy account that you want to provision.

The Engine running in Active Directory uses the migration proxy account to log in to the eDirectory tree. Any time you perform a migration from the eDirectory tree to the Active Directory domain, the Engine uses the migration proxy account that you establish in this step.

**Admin Name:** Specify the typeless FDN of an account in the source eDirectory tree that has the appropriate right to provision the Migration Proxy Account (MPA).

**Password:** Specify the password for the typeless FDN provided above.

- 5 Click OK
- **6** When the confirmation dialog box appears, click **Yes**.

The information entered in the Provision Migration Source Proxy Account dialog box is now displayed in the fields of the Migration Source Information region of the page.

The Engine logs in as the Admin account provided and provisions the MPA as a User object in the source eDirectory tree. It also grants the MPA object full rights to the root of the source tree, which allows File Dynamics to pull eDirectory and file system information during the course of migration operations.

# 1.5 Creating and Modifying an Identity Map

The eDirectory to Active Directory Cross-Empire Data Migration uses an identity map to make associations between the users, groups, and containers that are the owners and trustees of the Novell or Micro Focus network data and the corresponding data owners on the Microsoft network target.

You create a single identity map for each eDirectory tree that you are migrating.

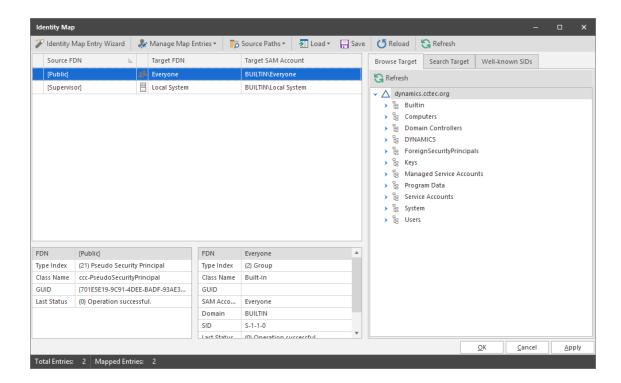
**IMPORTANT:** You must create an identity map so that file and folder rights, trustee assignments, and other metadata are maintained during the migration. If you do not want to maintain these rights, trustee assignments, and other metadata, you can skip this section and migrate through using the **Data Only** option from the **Migration Wizards** menu.

- Section 1.5.1, "Creating an Identity Map," on page 15
- Section 1.5.2, "Importing a Source Path List," on page 24
- Section 1.5.3, "Adding Source Entries to the Identity Map," on page 25
- Section 1.5.4, "Adding or Modifying Target Entries to the Identity Map," on page 26
- Section 1.5.5, "Saving a Local Instance of the Identity Map," on page 28
- Section 1.5.6, "Loading a Saved Identity Map," on page 28
- Section 1.5.7, "Generating a Migration Preview Report," on page 28
- Section 1.5.8, "Adding Entries from Preview Reports," on page 31
- Section 1.5.9, "Review Rights and Trustee Assignment Mappings," on page 32

### 1.5.1 Creating an Identity Map

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click eDirectory to Active Directory.
- 3 Click Identity Map Management > Edit Identity Map.

The following page appears:



The page displays an initial identity map with a small number of suggested entries that you can append.

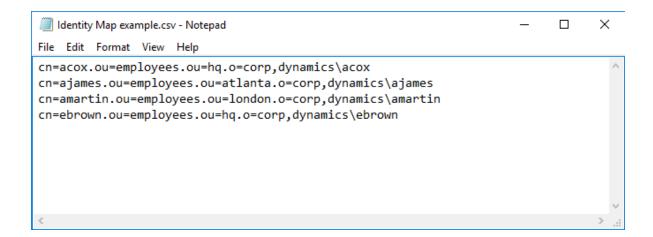
- 4 Do one of the following:
  - To import associations between users in eDirectory and Active Directory using a delimited text CSV file, go to "Importing Identity Associations through Delimited Text" on page 16.
  - To associate the users between the two directory services yourself, go to "Creating Object Associations" on page 21.

# Importing Identity Associations through Delimited Text

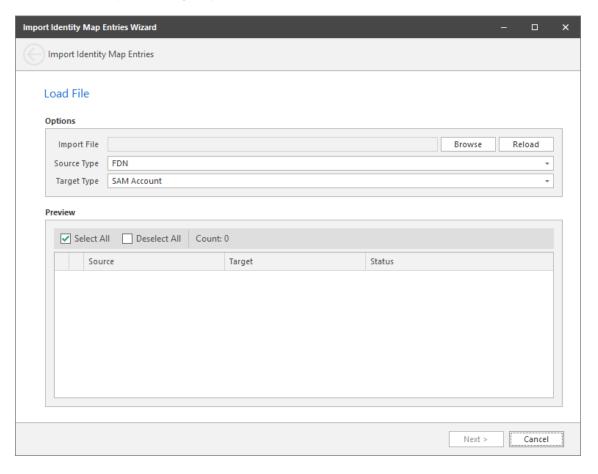
If you have a delimited text CSV file that associates eDirectory user and group objects with Active directory user and group objects, you can import it into the identity map using the Import Identity Map from Delimited Text option.

The CSV file can have entries using either typeful or typeless Fully Distinguished Names (FDNs).

16

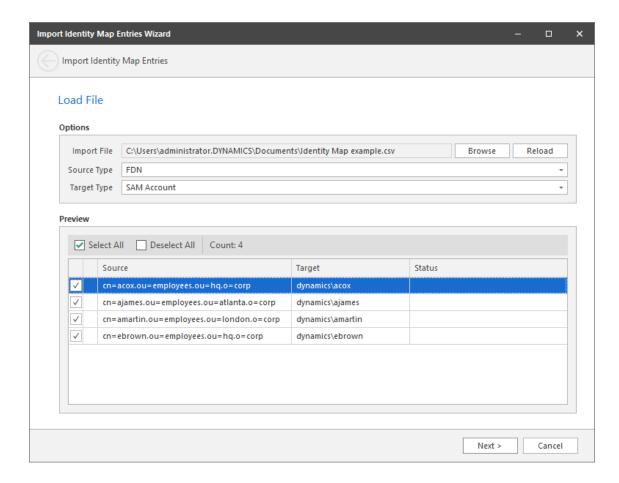


1 Select Load > Import Identity Map from Delimited Text.



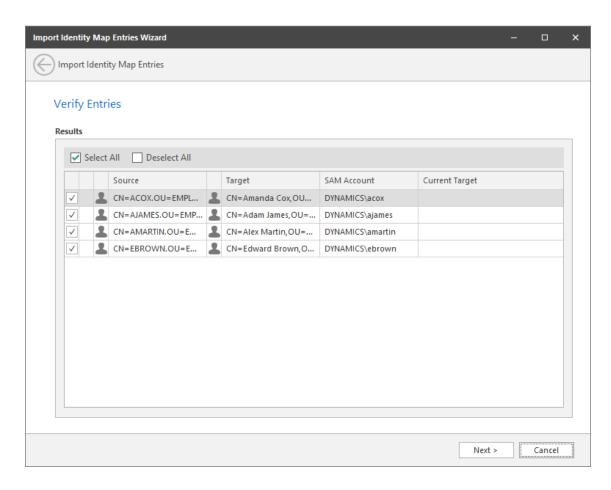
- 2 Click Browse.
- 3 Select the CSV file, then click Open.

The following page appears and specifies whether the names in the CSV file are formatted properly.

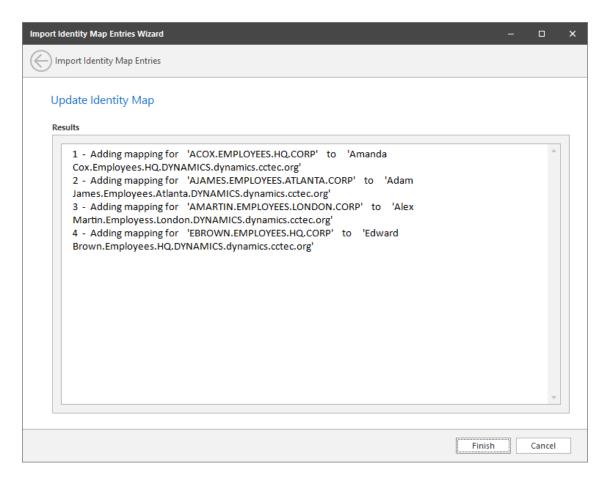


- **4** (Conditional) If incorrect options in the **Source Type** or **Target Type** fields are displayed, select the correct options.
- 5 Click Next.

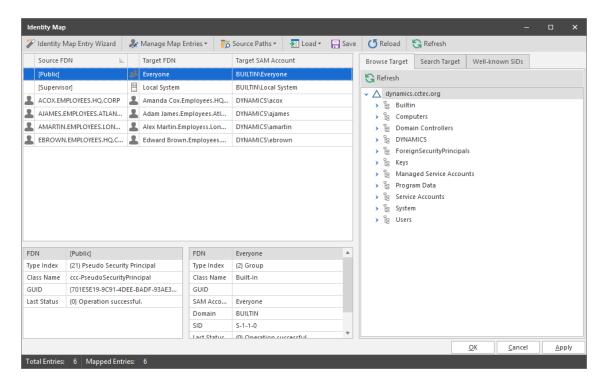
The following page appears and specifies whether the user and group objects exist in eDirectory and Active Directory.



6 Click Next.



#### 7 Click Finish.

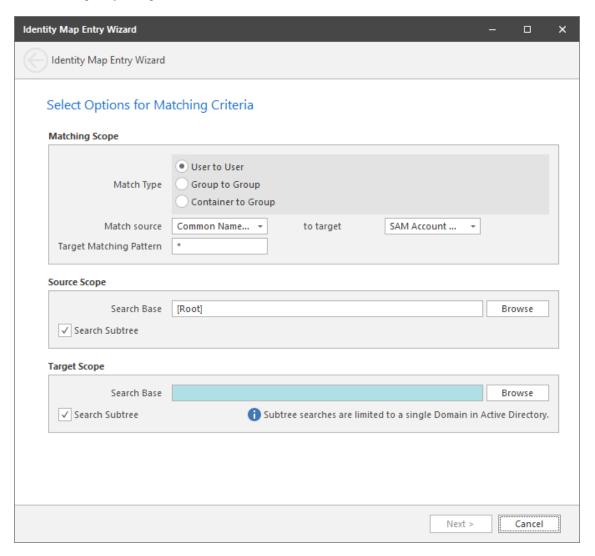


8 Click Apply to save the updated identity map.

- **9** (Conditional) If you have additional users to import from another delimited text CSV file, select the new CSV file and repeat the procedures in this section.
- **10** (Conditional) If you need to add additional users that were not listed in the CSV file, proceed to "Creating Object Associations" on page 21.

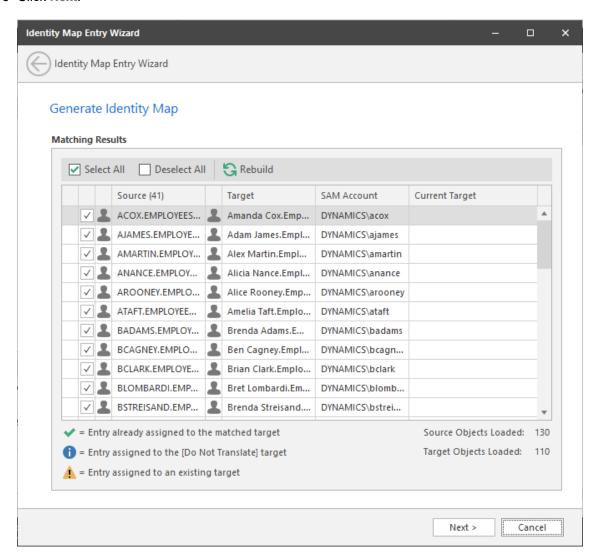
### **Creating Object Associations**

1 Click Identity Map Entry Wizard.

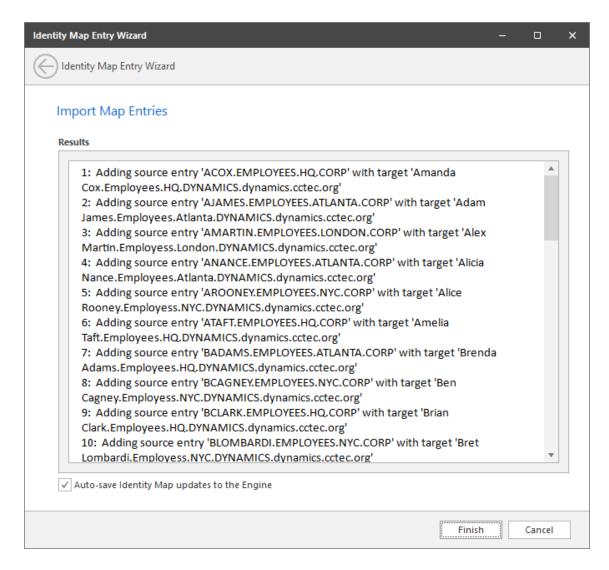


- 2 In the Matching Scope region, leave the User to User option selected and from the to target drop-down menu, specify if the target accounts to locate are SAM accounts or Common Name (CN) accounts.
  - If you need to match using both account types on your target server, you can choose one option now and then run the wizard again and choose the other option. You might need to run the wizard multiple times in order to add all of the users, groups, and containers to the identity map.
- 3 In the Source Scope region, browse to and select the source container with the users you want included in the identity map.
- 4 In the Target Scope region, browse to and select the target container with the users you want included in the identity map.

#### 5 Click Next.

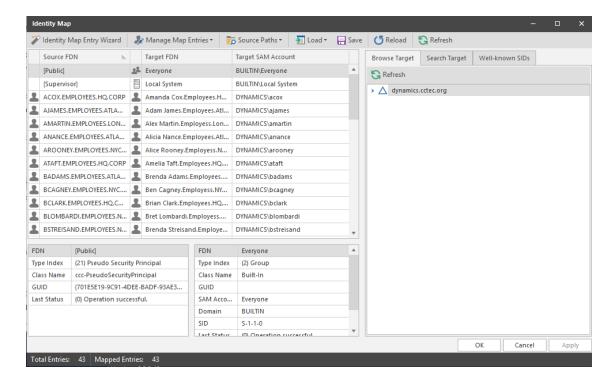


- **6** Select the names you want appended to the identity map file.
- 7 Click Next.



#### 8 Click Finish.

The identity map is appended with the new entries.

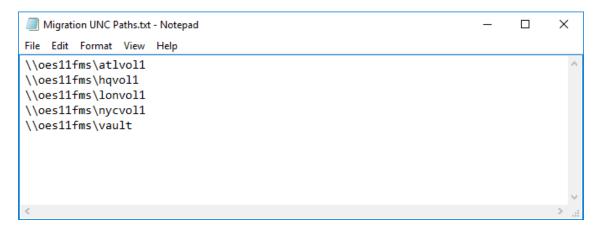


- 9 Click OK to save the updated identity map.
- 10 Repeat Step 3 and Step 4 and select the account type you did not select previously.
- 11 Repeat Step 5 through Step 9.

# 1.5.2 Importing a Source Path List

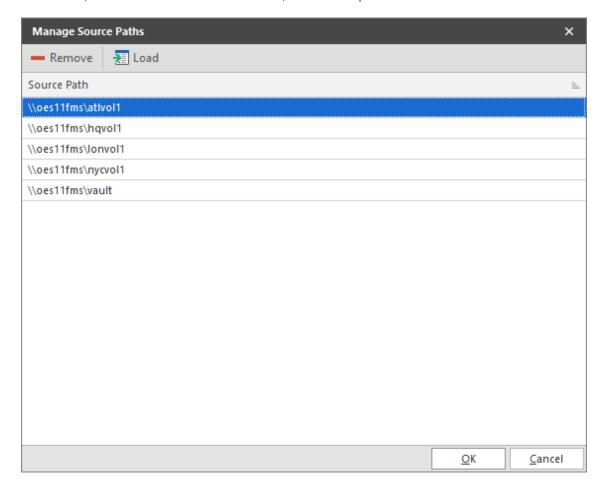
Depending on the size of your network, you might need to specify a significant number of different source paths as you build your identity map. You can easily import a list of your UNC paths from a text file so that these paths are accessible from a drop-down menu. Additionally, the search is filtered so that it can locate the specific UNC path as you type.

1 Using a text editor, create a file with UNC paths for each server and volume that you want to import, then save the file.



- 2 In the Admin Client, click the Cross-Empire Data Migration tab.
- 3 Click eDirectory to Active Directory.

- 4 Select Source Management > Source Path Cache.
- 5 Click Load, browse to and select the text file, then click Open.

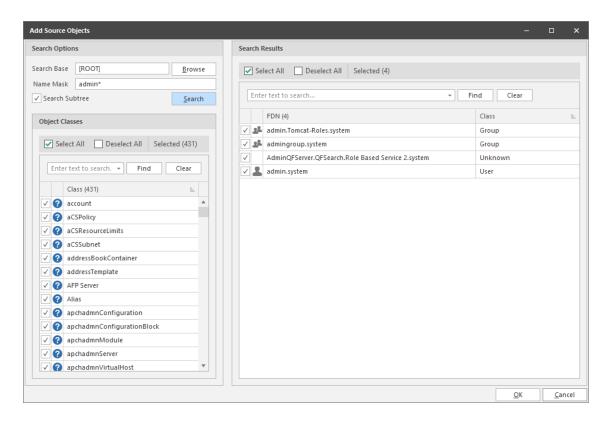


6 Click OK.

# 1.5.3 Adding Source Entries to the Identity Map

To append additional users or groups to the identity map from the eDirectory source:

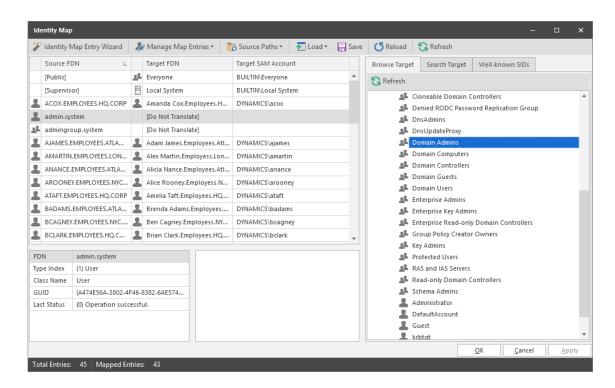
- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click eDirectory to Active Directory.
- 3 Select Identity Map Management > Edit Identity Map.
- 4 Select Manage Map Entries > Add Source Entries.
- 5 In the Add Source Objects page, use the Search Base, Browse button, Search Scope, and Name Mask fields to locate and select the container you want to use for your search.
  - If you wish to limit your search to a selected set of object types, under the **Class** heading, deselect those object types you do not want included in the search.
- 6 Click OK.
- 7 On the Add Source Object page, click Search.



- 8 In the right pane, select the objects you want to append to the identity map.
- 9 Click OK.

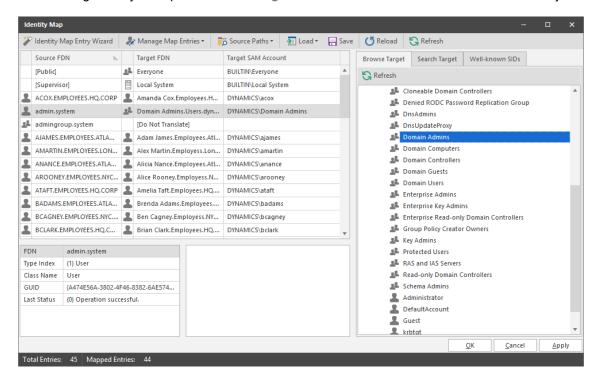
# 1.5.4 Adding or Modifying Target Entries to the Identity Map

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click eDirectory to Active Directory.
- 3 Click Identity Map Management.
- 4 In the Identity Map page, select the listing for the source entry to which you want to add a target or that you want to modify.
- **5** Use one of the tabs in the right panel of the Identity Map page to locate and select the desired target.



6 Specify the object as the new target object.

For example, if you were using the **Browse Targets** tab in the example above, you could rightclick or drag the object to place it in the **Target SAM Account** field of the selected source object.



7 Click Apply to save the modified identity map.

# 1.5.5 Saving a Local Instance of the Identity Map

When working with identity maps, you might find that you want to experiment with different associations. In such cases, you should have multiple identity maps. To save an identity map that differs from the original, you must save it locally.

- 1 Click Save.
- 2 Save the XML formatted identity map file to a location you prefer.

# 1.5.6 Loading a Saved Identity Map

This action retrieves saved versions of identity maps.

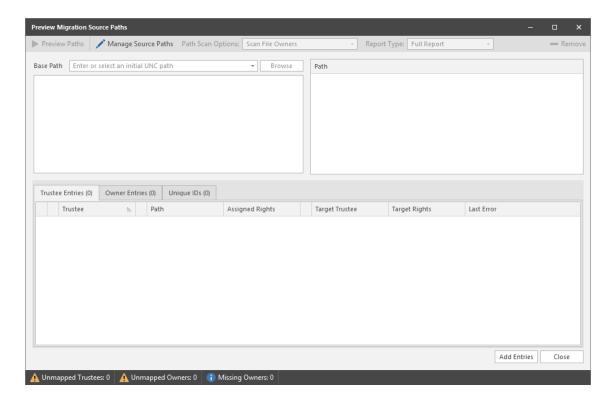
- 1 Select Load > Load Identity Map File.
- 2 Select the file, then click Open.

# 1.5.7 Generating a Migration Preview Report

Before performing a Cross-Empire Data Migration, you should generate a preview report. The report indicates any concerns that might need to be addressed such as objects which have file rights but which have not yet been mapped in the identity map.

The preview report uses your identity map, and searches file and folder rights assignments and ownership of the actual data which you will be migrating to indicate which objects actually have ownership or rights, and if an object is mapped in the identity map.

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click eDirectory to Active Directory.
- 3 Select Identity Map Management > Edit Identity Map.
- 4 Select Source Paths > Generate Preview Report.



- 5 In the Base Path field, do one of the following:
  - · Select an imported source path
  - Specify an initial UNC path for a server and volume to browse

For example,  $\scalebox{$\scriptstyle \cdot$}$ 

or

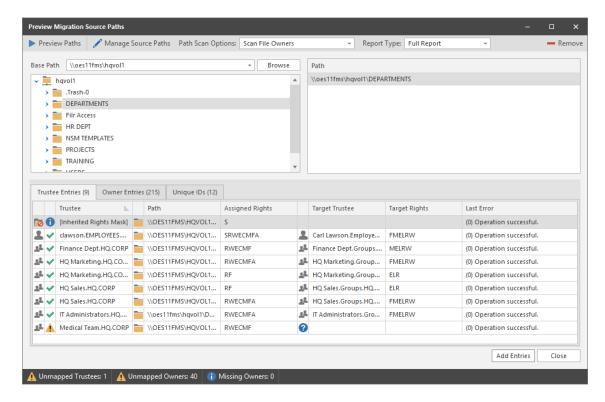
\\ip\_address\volume\_name\

After you enter a path, you can click the **Browse** button to browse to the folder you want, such as the Users folder.

- 6 Drag the selected folder to the Path pane.
- 7 From the Path Scan Options drop-down menu, choose one of the following:
  - Scan Folders Only: Select this option to view the trustee assignments and owners of folders.
  - Scan File Owners: Select this option to view the trustee assignments and owners of folders, along with the owners of files.
  - Scan File Owners and Permissions: Select this option to view the trustee assignments and owners of folders, as well as the trustee assignments and owners of files.

Depending on the number of files and folders on your Novell or Micro Focus network, the **Scan File Owners and Permissions** option can take a significant amount of time to generate. We recommend using one of the other options first.

- 8 From the Report Type drop-down menu, choose one of the following:
  - Full Report: Depending on which of the File Scan Options are selected, this generates a
    report of all of the folders and files, along with their corresponding owners and trustees, and
    indicates whether they are mapped to a target object in the identity map or not.
    - Depending on the number of files and folders on your Novell or Micro Focus network, generating a full report can take a significant amount of time. We recommend generating an Anomaly report instead.
  - Anomaly Report: Depending on which of the File Scan Options is selected, this generates
    a report of all of the folders and files that have trustees or owners that are not mapped to a
    target object in the identity map.
- 9 Click Preview Paths.



10 Use the tabbed reports to preview targets according to trustees, owners, and unique IDs.

For example, in the graphic above, the **Trustee Entries** tab displays the source IDs that have a trustee assignment to a folder but a target ID has not yet been created in the identity map.

The **Owner Entries** tab displays owners of files and folders that do not have a corresponding target in the identity map.

The Unique IDs tab displays a single entry for each ID that is mapped in the identity report.

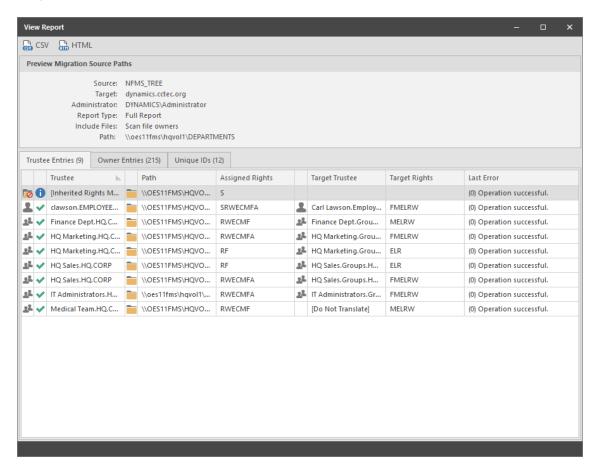
11 Click Add Entries to append the entries to the identity map.

The entries are added to the identity map and you can now add target entries by following the procedures in Section 1.5.4, "Adding or Modifying Target Entries to the Identity Map," on page 26.

### 1.5.8 Adding Entries from Preview Reports

In Step 11 on page 30, you added entries to the identity map by using the Preview Migration Source Path page's **Add Entries** button. You can also use the **Add Entries from Preview Report** option to retrieve any preview report that you have generated for the directory tree you are working with, and add those entries to the identity map.

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click eDirectory to Active Directory.
- 3 Select Identity Map Management > Edit Identity Map.
- 4 Select Source Paths > Add Entries from Preview Report.
- **5** From the Browse Migration Preview Reports dialog box, select the preview report you want to add, then click **OK**.



At this point, you can view the preview report according to the tabbed options.

6 Click Add to add the entries to the identity map.

The entries are added to the identity map and you can now add target entries to each by following the procedures under Section 1.5.4, "Adding or Modifying Target Entries to the Identity Map," on page 26.

# 1.5.9 Review Rights and Trustee Assignment Mappings

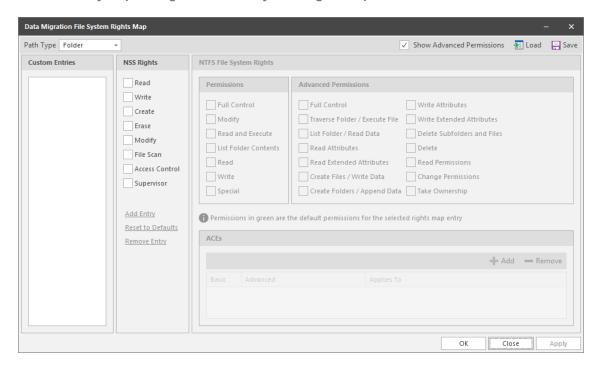
Despite the inherent differences in rights, trustee assignments, and permissions between Novell or Micro Focus networks and Microsoft networks, the Cross-Empire Data Migration subsystem of File Dynamics does its best to match the Novell or Micro Focus rights and trustee assignments with the equivalent Microsoft permissions and advanced permissions.

When you generate a Preview Report, you should pay particular attention to the actual rights in the **Assigned Rights** column and the proposed file and folder rights listed in the **Target Rights** column.

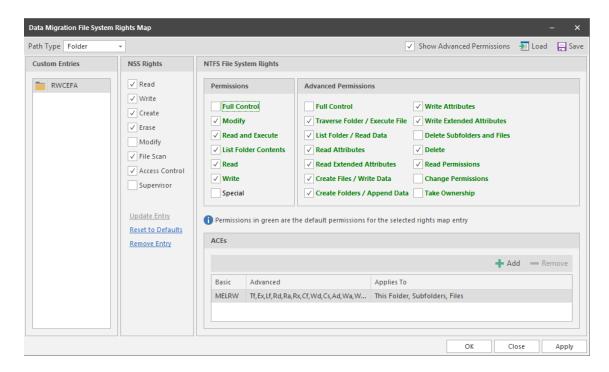
You can modify the rights mappings by using the File System Rights Map. When you do this, you specify a mapping between one particular set of rights on the Novell or Micro Focus servers to one particular set of rights on the Microsoft Windows servers. As an example, the default mapping is to map the Novell or Micro Focus NSS rights RWECMF to the Windows NTFS rights MELRW. As a further example, perhaps when files have this set of rights you do not want to grant the E (erase) right to files on the target. You could modify the mapping using the procedures below to change the mapping of Novell or Micro Focus NSS rights RWECMF to the Windows NTFS rights MLRW. When you do this, you change the mapping for every file that has that exact set of rights, but it does not change the E mapping in any other set of rights. For instance, if you had trustees that had RWCEF, that mapping would not be changed because you changed the mapping for RWCEMF.

To view or modify these rights:

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click eDirectory to Active Directory.
- 3 Select Identity Map Management > File System Rights Map.



4 In the NSS Rights column, click the rights to see the equivalent NTFS permissions and advanced permissions.



The default permissions are indicated in green.

- 5 Select or deselect permissions as needed.
- 6 Click Apply to save the settings.

# 1.6 Migration Options

The eDirectory to Active Directory Cross-Empire Data Migration subsystem of File Dynamics provides the following options for migration:

- Section 1.6.1, "Data and Security," on page 33
- Section 1.6.2, "Data Only," on page 34
- Section 1.6.3, "Security Only," on page 34

# 1.6.1 Data and Security

This option migrates the data and the associated folder and file rights and trustee assignments specified in the identity map.

**NOTE:** The initial identity map referenced in Step 3 on page 15 does not function as an identity map until you have appended entries to it.

The procedures that begin in Section 1.8, "Performing a User to User Data Migration," on page 35 use the Data and Security option.

### 1.6.2 Data Only

This option migrates only the data and not the associated rights and trustee assignments. After you have migrated the data, you can later go back and apply the file rights and trustee assignments to the data through the Security Only option.

When data is migrated by using this option, file ownership is set according to the File Dynamics policy for the migration target. If there is no policy in place, the owner is the File Dynamics proxy user in Active Directory.

In the procedures included in the remainder of this section, the Copy Options - Rights and Ownership page is not applicable for a Data Only migration.

# 1.6.3 Security Only

This option migrates the rights and trustee assignments of data that has already been migrated. If the data to which the trustee assignments are assigned has not been migrated, the associated rights and trustee assignments for those files or folders are not migrated.

If you attempt to use this option and you have not created an identity map, you cannot proceed.

This option is frequently used when migrating the rights and trustee assignments from a single Novell or Micro Focus source to a remote Windows Server that does not have an installed Client for OES.

# 1.7 Viewing the Migration Log File

The migration log file can be used to track the status of the migration. You can view the file by using a Windows tail program or an application such as <code>dbqview.exe</code>.

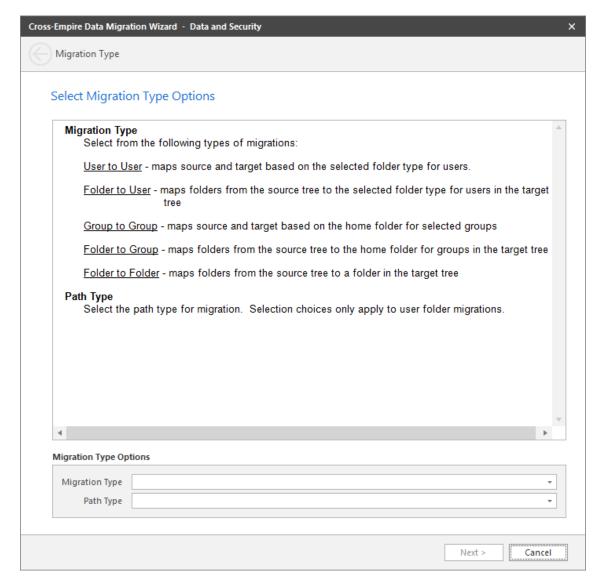
To view the log file using <code>dgbview.exe</code>, refer to the application's documentation for configuring and viewing log file data.

Procedures for viewing the log file data using a Windows tail program follow:

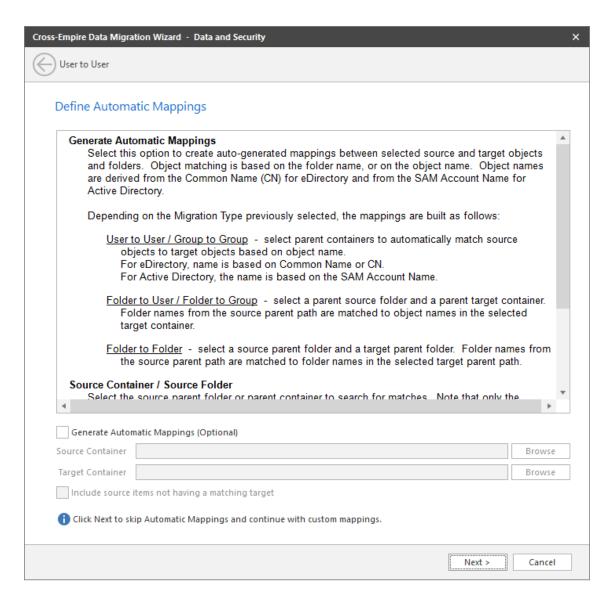
- 1 Download a Windows tail program and install it on the Engine host or the Cross-Empire Data Migration enabled File System Agent tasked with the migration.
  - To verify that the File System Agent is Cross-Empire Data Migration enabled, refer to the Agent page in the Admin Client. For more information, see Agents in the *Micro Focus File Dynamics 6.5 Administration Guide*.
- 2 Do one of the following:
  - If the server to which you are migrating data is running a Cross-Empire Data Migration capable File System Agent, or is set up to be proxied by a Cross-Empire Data Migration capable File System Agent, at the File System Agent server, use the Windows tail application to open the log file at:
    - C:\ProgramData\Micro Focus\File Dynamics\Agent\log\fsagent-xxx.log
  - If the server to which you are migrating data is not running a Cross-Empire Data Migration capable File System Agent, and is not set up to be proxied by a Cross-Empire Data Migration capable File System Agent, at the Engine server, use the Windows tail application to open the log file at:
    - C:\ProgramData\Micro Focus\File Dynamics\Engine\log\engine-xxx.log
- **3** Refer to the log file during the migration to view the status.

# 1.8 Performing a User to User Data Migration

- 1 Make sure you have completed the prerequisites and have created a migration proxy account. For more information on the prerequisites, see Section 1.3, "Prerequisites," on page 11. For more information on creating a migration proxy account, see Section 1.4, "Creating the Migration Proxy Account," on page 13.
- 2 In the Admin Client, click the Cross-Empire Data Migration tab.
- 3 Click eDirectory to Active Directory.
- 4 Select Migration Wizards > Data and Security.



- 5 From the Migration Type drop-down menu, select User to User.
- **6** From the **Path Type** drop-down menu, select the target path type for the data that you will migrate.
  - For example, if you select **Home Folder**, the data is copied to each user's home folder path as defined in directory services.
- 7 Click Next.



#### **8** Do one of the following:

• Fill in the following fields:

**Generate Automatic Mappings (Optional):** If you are migrating a large number of users, select this check box to activate the other fields.

**Source Container:** Browse to select the source container.

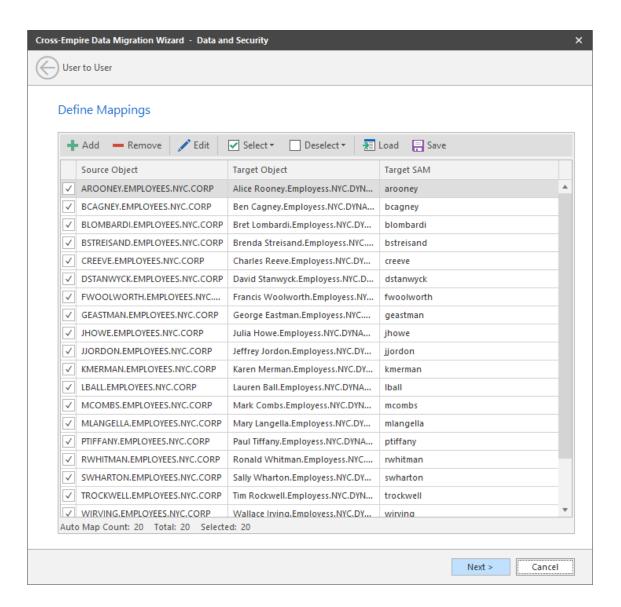
**Target Container:** Browse to select the target container.

**Include Source items not having a matching target:** Indicate if you want to identify source objects not having a matching target object.

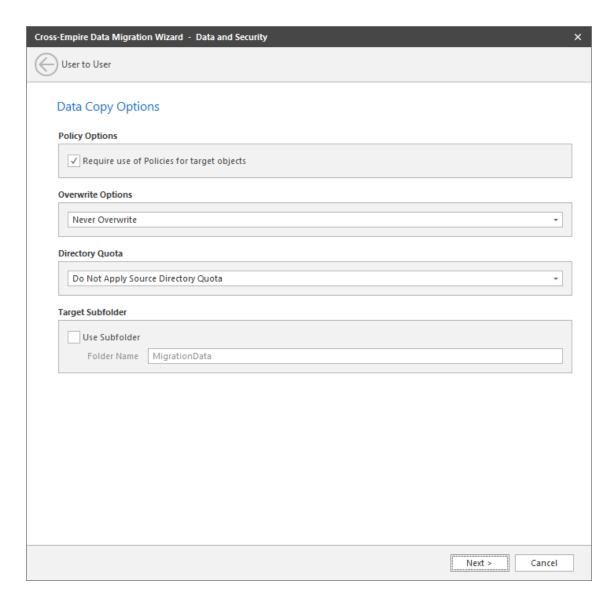
If you are migrating only a few users, use the Add button on the next wizard page to add the
users individually.

#### 9 Click Next.

The Data Migration Wizard attempts to match the Common Name (CN) of objects from the eDirectory source with the SAM (Security Accounts Manager) Account Names in the Active Directory target. If there is a match, the listed object in the **Source Object** field is selected and a corresponding match is listed in the **Target Object** column.



- **10** Specify a target object for each source object that is not automatically matched by double-clicking the name to bring up the Modify Data Map Entry dialog box.
- 11 Click Browse, specify the target object, then click OK.
  - The target object is displayed in the Target Object column.
- 12 Click the check box corresponding to the listing with the new target.
- 13 Repeat Step 10 and Step 11 to specify all target objects that are not listed.
  - To change the specified target object, use the Edit button.
  - To add an object to the Source Object column, use the Add button.
- 14 When all of the objects you want to migrate are selected and have an associated target object, click Next.



### **15** Fill in the following fields:

**Require use of Policies for target objects:** If you are migrating data for objects to an Active Directory container that has an associated File Dynamics policy, leave this check box selected.

If this check box is selected and there is no associated File Dynamics policy, the object's data is not eligible for migration.

Additionally, if you are migrating a user and the target user is not currently managed by an associated policy, but the object does have a policy that would apply to it, then File Dynamics automatically applies that policy to the target user.

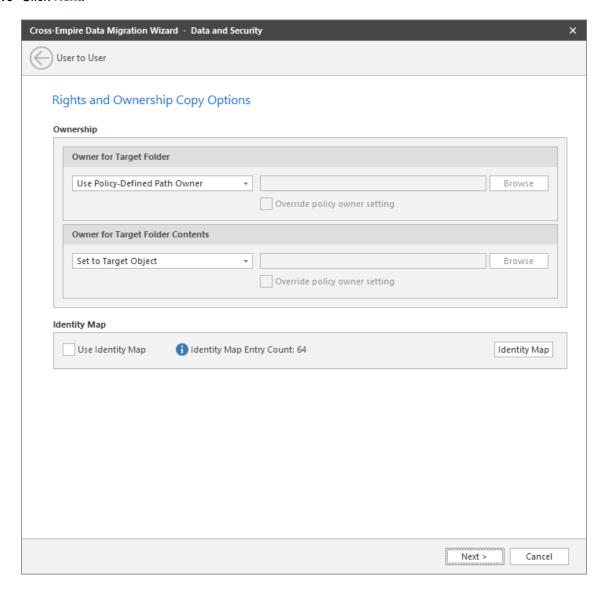
If you are migrating object data to an Active Directory container that does not have an associated File Dynamics policy, deselect this check box.

**Overwrite Options:** Indicate what you want to take place when duplicate filenames are encountered in the source and target.

**Directory Quota:** Specify how quota settings from the source Novell or Micro Focus file system should be applied after the migration.

**Target Subfolder:** If you want migrated data to be placed in a subfolder, select the **Use Subfolder** check box and specify the subfolder name in the field.

### 16 Click Next.



### 17 Fill in the following fields:

**Owner for Target Folder:** Use these settings to specify how ownership of the migrated folder is determined.

If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Use Policy-Defined Path Owner and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- Set to Target Object: Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Use Policy-Defined Path Owner: Ownership of the files is determined according to the settings in the File Dynamics policy associated with the container where the object is managed.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder, unless the policy specifies another object as the owner. To override the policy's configuration, select the Override policy owner setting check box.

**Owner for Target Folder Contents:** Use these settings to specify how ownership of the migrated folder contents is determined.

If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Set to Target Object and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- **Set to Target Object:** Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the
  migrated files, unless the policy specifies another object as the owner. To override the
  policy's configuration, select the Override policy owner setting check box.

**Use the Identity Map:** Selecting this check box indicates that you want File Dynamics to utilize the identity map you created earlier and use the corresponding IDs to copy security rights and file ownership from the Novell or Micro Focus network file system to the Windows network file system.

- Transfer Rights and Ownership: Selecting this option indicates that you want to transfer the file and folder security rights along with the ownership settings.
  - Be aware that when you transfer the ownership of a file or folder in a Windows network, you are granting the owner Full Rights, which you might not want to provide.
- Transfer Rights Only: Selecting this option indicates that you want to transfer only the file and folder security rights.
- Overwrite Trustees: Selecting this option indicates that you want any existing trustee assignments for a target file or folder, to be overridden by the established eDirectory trustee assignments for those files and folders.
- Merge Trustees: Selecting this option indicates that you want the established eDirectory trustee assignments merged with those of the target files or folders in the Windows file system.

**Identity Map:** Clicking this button opens your identity map where you can make any desired changes.

- 18 Click Next.
- 19 (Conditional) If you want to use a filter to include or exclude specific files, select the Use Copy Filter check box and click the Add button.
  - **19a** Fill in the following fields:

**Description:** Specify a description of the filter.

**Action:** From the drop-down menu, select either **Migrate** or **Ignore**, based on whether the filter specifies to migrate files or folders or to ignore them.

Files, Folders: Specify if the filter applies to files or folders.

Masks: List the file types to migrate or ignore.

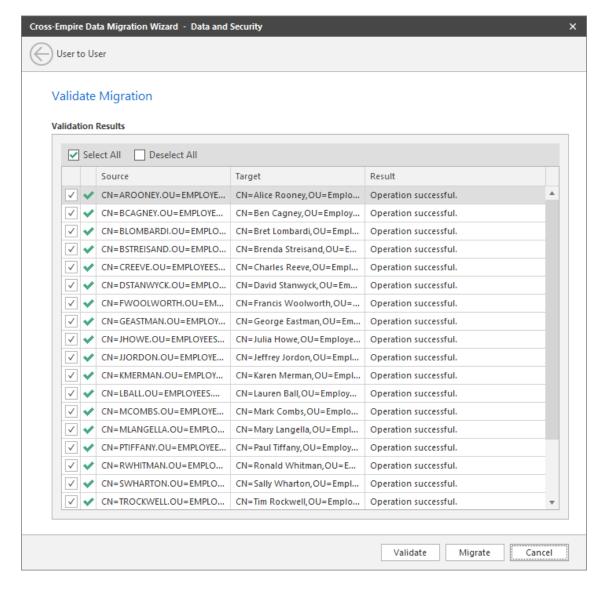
**19b** Specify any additional filter criteria in the menus and fields that remain.

For a detailed explanation of this region of the dialog box, see Setting Vault Rules in the *Micro Focus File Dynamics 6.5 Administration Guide*.

19c Click OK.

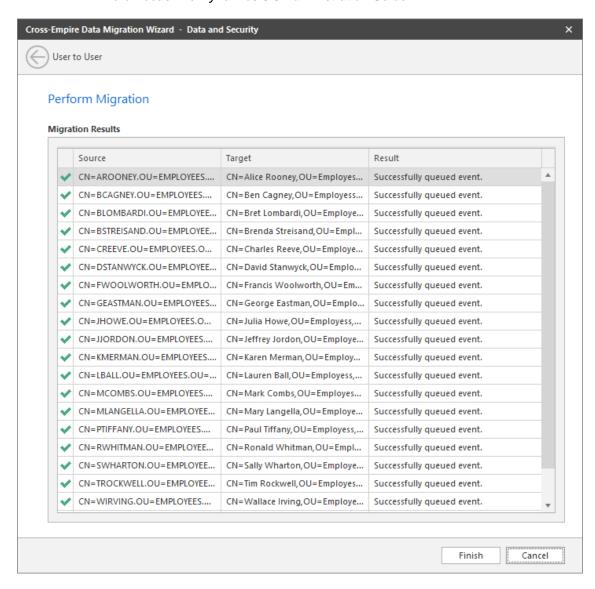
### 20 Click Validate.

**Validate** shows the result of certain checks that can be run prior to the migration. The **Result** column shows the status of the validation checks. If errors are displayed, you can choose to correct those errors prior to running the migration.



- 21 (Conditional) Take any necessary action in the Windows network file system target and then validate again.
- 22 Click Migrate.

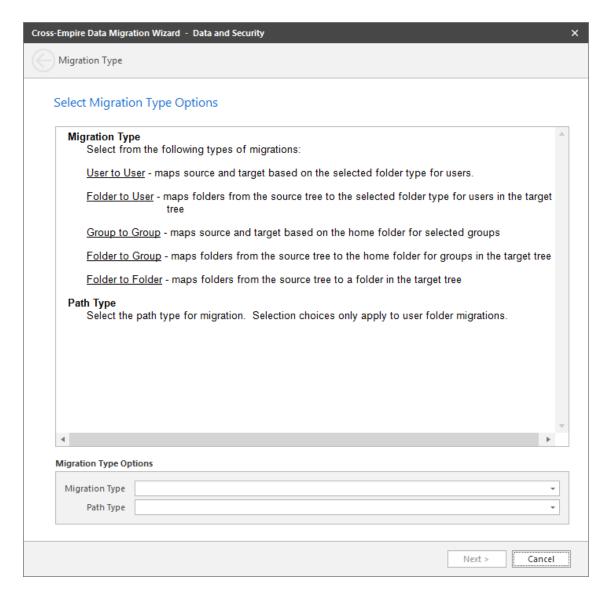
A page appears with details of the data migration events that are queued for processing. To view the status of migration events, click **Events**. For more information on Events, see Pending Events in the *Micro Focus File Dynamics 6.5 Administration Guide*.



23 Click Finish to close the Data Migration Wizard.

# 1.9 Performing a Folder to User Data Migration

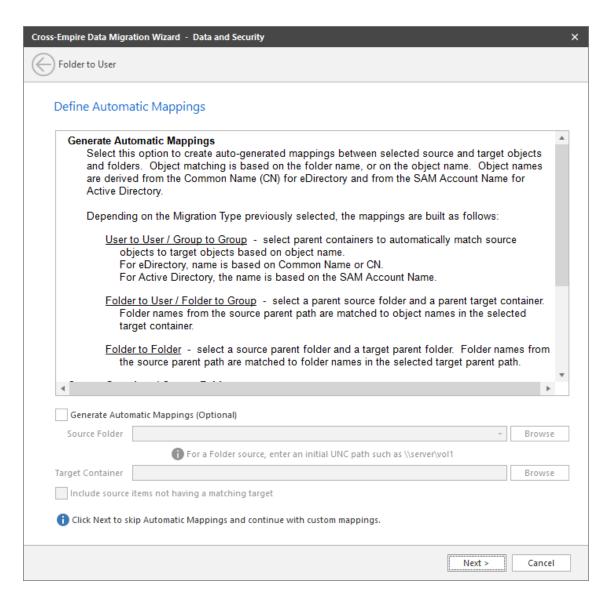
- 1 Make sure you have completed the prerequisites and have created a migration proxy account. For more information on the prerequisites, see Section 1.3, "Prerequisites," on page 11. For more information on creating a migration proxy account, see Section 1.4, "Creating the Migration Proxy Account," on page 13.
- 2 In the Admin Client, click the Cross-Empire Data Migration tab.
- 3 Click eDirectory to Active Directory.
- 4 Select Migration Wizards > Data and Security.



- **5** From the Migration Type drop-down menu, select Folder to User.
- **6** From the **Path Type** drop-down menu, select the target path type for the data that you will migrate.

For example, if you select **Home Folder**, the data is copied to each user's home folder path as defined in directory services.

7 Click Next.



### **8** Do one of the following:

• Fill in the following fields:

**Generate Automatic Mappings (Optional):** If you are migrating a large number of folders, select this check box to activate the other fields.

**Source Folder:** Specify an initial UNC path for a server and volume to browse.

For example, \\server\_name\volume\_name\ or \\ip\_address\volume\_name\

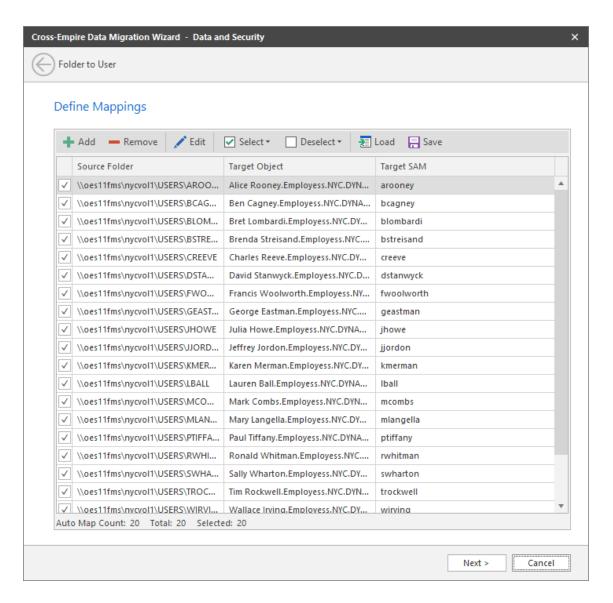
Target Container: Browse to select the target container.

**Include source items not having a matching target:** Indicate if you want to identify source data not having a matching target.

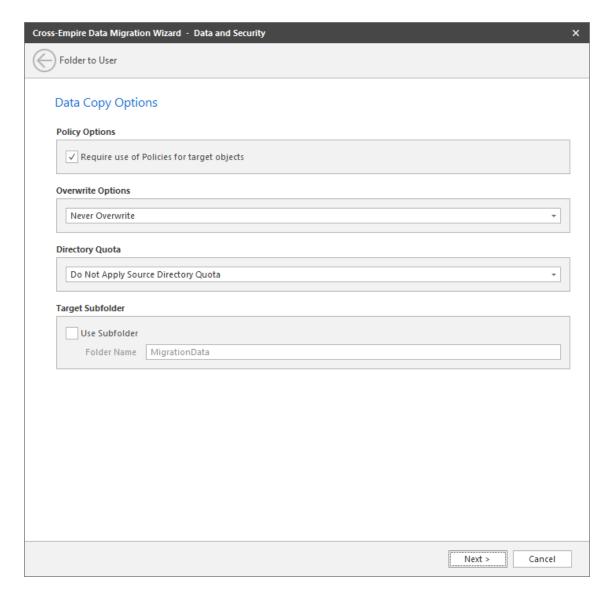
If you are migrating only a few users, use the Add button on the next wizard page to add the
users individually.

### 9 Click Next.

The Data Migration Wizard attempts to match the names of the subfolders of the source path with the SAM (Security Accounts Manager) Account Names in the Active Directory target. If there is a match, the listed folder in the **Source Folder** field is selected and a corresponding match is listed in the **Target Object** column.



- **10** Specify a target object for each source object that is not automatically matched by double-clicking the name to bring up the Modify Data Map Entry dialog box.
- 11 Click Browse, specify the target object, then click OK.
  - The target object is displayed in the Target Object column.
- 12 Click the check box corresponding to the listing with the new target.
- 13 Repeat Step 10 and Step 11 to specify all target objects that are not listed.
  - To change the specified target object, use the Edit button.
  - To add an object to the Source Object column, use the Add button.
- 14 When all of the objects you want to migrate are selected and have an associated target object, click Next.



### **15** Fill in the following fields:

**Require use of Policies for target objects:** If you are migrating data for objects to an Active Directory container that has an associated File Dynamics policy, leave this check box selected.

If this check box is selected and there is no associated File Dynamics policy, the object's data is not eligible for migration.

Additionally, if you are migrating a folder and the target user is not currently managed by an associated policy, but the user does have a policy that would apply to it, File Dynamics automatically applies that policy to the target user.

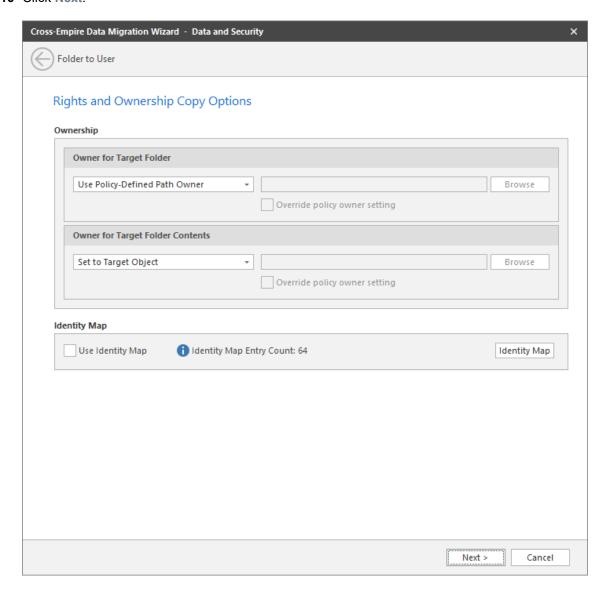
If you are migrating folders to an Active Directory container that does not have an associated File Dynamics policy, deselect this check box.

**Overwrite Options:** Indicate what you want to take place when duplicate filenames are encountered in the source and target.

**Directory Quota:** Specify how quota settings from the source Novell or Micro Focus file system should be applied after the migration.

**Target Subfolder:** If you want migrated data to be placed in a subfolder, select the **Use subfolder** check box and specify the subfolder name in the field.

### 16 Click Next.



### 17 Fill in the following fields:

**Owner for Target Folder:** Use these settings to specify how ownership of the migrated folder is determined.

If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Use Policy-Defined Path Owner and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- Set to Target Object: Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Use Policy-Defined Path Owner: Ownership of the files is determined according to the settings in the File Dynamics policy associated with the container where the object is managed.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder, unless the policy specifies another object as the owner. To override the policy's configuration, select the Override policy owner setting check box.

**Owner for Target Folder Contents:** Use these settings to specify how ownership of the migrated folder contents is determined.

If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Set to Target Object, and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- **Set to Target Object:** Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder, unless the policy specifies another object as the owner. To override the policy's configuration, select the Override policy owner setting check box.

**Use the Identity Map:** Selecting this check box indicates that you want File Dynamics to utilize the identity map you created earlier and use the corresponding IDs to copy security rights and file ownership from the Novell or Micro Focus network file system to the Windows network file system.

- Transfer Rights and Ownership: Selecting this option indicates that you want to transfer the file and folder security rights along with the ownership settings.
  - Be aware that when you transfer the ownership of a file or folder in a Windows network, you are granting the owner Full Rights, which you might not want to provide.
- Transfer Rights Only: Selecting this option indicates that you want to transfer only the file and folder security rights.
- Overwrite Trustees: Selecting this option indicates that you want any existing trustee assignments for a target file or folder, to be overridden by the established eDirectory trustee assignments for those files and folders.
- Merge Trustees: Selecting this option indicates that you want the established eDirectory
  trustee assignments merged with those of the target files or folders in the Windows network
  file system.

**Identity Map:** Clicking this button opens your identity map where you can make any desired changes.

- 18 Click Next.
- 19 (Conditional) If you want to use a filter to include or exclude specific files, select the Use Copy Filter check box and click the Add button.
  - **19a** Fill in the following fields:

**Description:** Specify a description of the filter.

**Action:** From the drop-down menu, select either **Migrate** or **Ignore**, based on whether the filter specifies to migrate files or folders or to ignore them.

Files, Folders: Specify if the filter applies to files or folders.

Masks: List the file types to migrate or ignore.

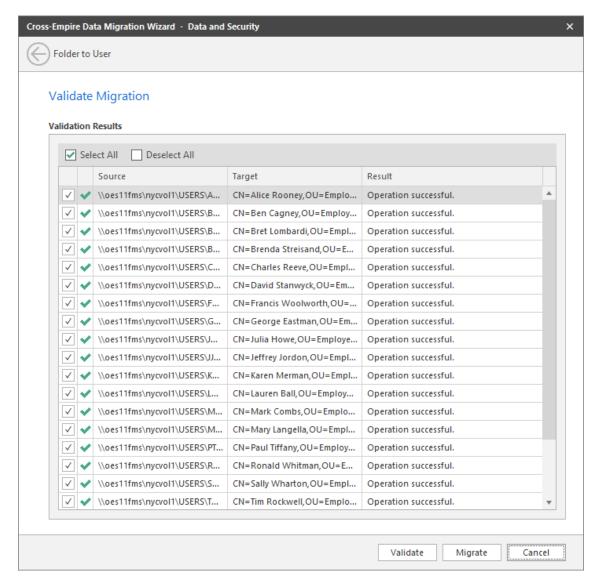
**19b** Specify any additional filter criteria in the menus and fields that remain.

For a detailed explanation of this region of the dialog box, see Setting Vault Rules in the *Micro Focus File Dynamics 6.5 Administration Guide*.

19c Click OK.

### 20 Click Validate.

**Validate** shows the result of certain checks that can be run prior to the migration. The **Result** column shows the status of the validation checks. If errors are displayed, you can choose to correct those errors prior to running the migration.



- 21 (Conditional) Take any necessary action in the Windows network file system target and then validate again.
- 22 Click Migrate.

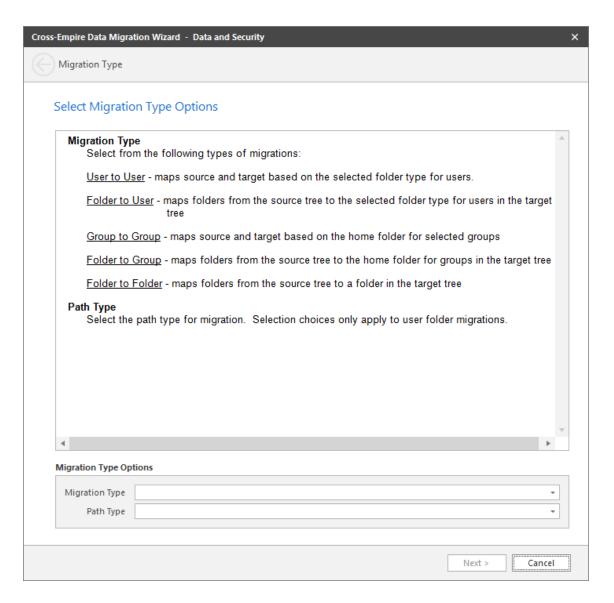
A page appears with details of the data migration events that are queued for processing. To view the status of migration events, click **Events**. For more information on Events, see Pending Events in the *Micro Focus File Dynamics 6.5 Administration Guide*.

23 Click Finish to close the Data Migration Wizard.

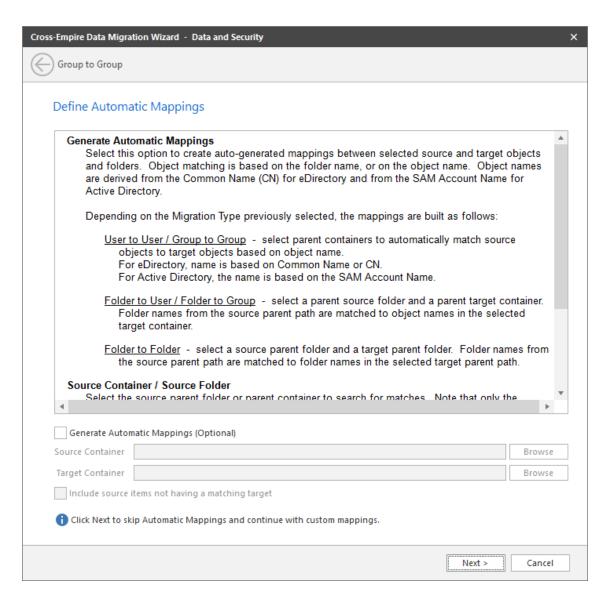
### 1.10 Performing a Group to Group Data Migration

**IMPORTANT:** This migration option can be performed only if the source volume from which you are migrating has group home folders being managed by Micro Focus Storage Manager for eDirectory group-based collaborative storage policies.

- 1 Make sure you have completed the prerequisites and have created a migration proxy account. For more information on the prerequisites, see Section 1.3, "Prerequisites," on page 11. For more information on creating a migration proxy account, see Section 1.4, "Creating the Migration Proxy Account," on page 13.
- 2 In the Admin Client, click the Cross-Empire Data Migration tab.
- 3 Click eDirectory to Active Directory.
- 4 Select Migration Wizards > Data and Security.



- 5 From the Migration Type drop-down menu, select Group to Group.
- 6 Click Next.



### **7** Do one of the following:

• Fill in the following fields:

**Generate Automatic Mappings:** If you are migrating a large number of groups, select this check box to activate the other fields.

**Source Container:** Browse to select the source container.

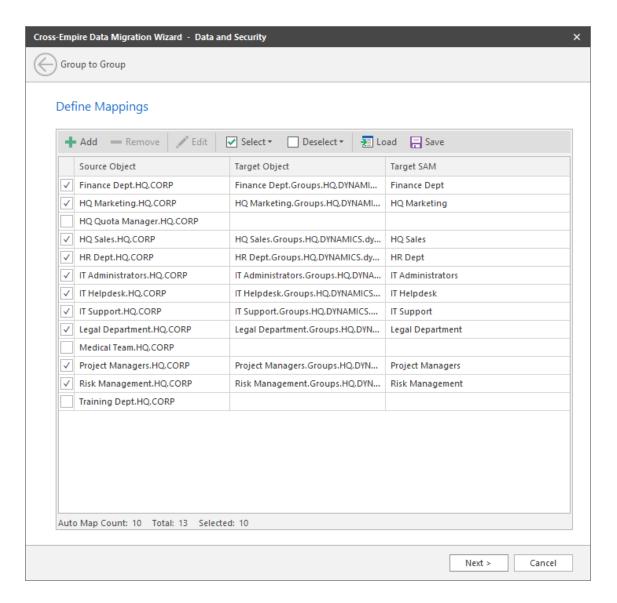
**Target Container:** Browse to select the target container.

**Include source items not having a matching target:** Indicate if you want to identify source data not having a matching target.

 If you are migrating only a few groups, use the Add button in the next wizard page to add the groups individually.

#### 8 Click Next.

The Data Migration Wizard attempts to match the Common Names (CN) of objects from the eDirectory source with the SAM (Security Accounts Manager) Account Names in the Active Directory target. If there is a match, the listed object in the **Source Object** field is selected and a corresponding match is listed in the **Target Object** column.



- **9** Specify a target object for each source object that is not automatically matched by double-clicking the name to bring up the Modify Data Map Entry dialog box.
- 10 Click Browse, specify the target object, then click OK.

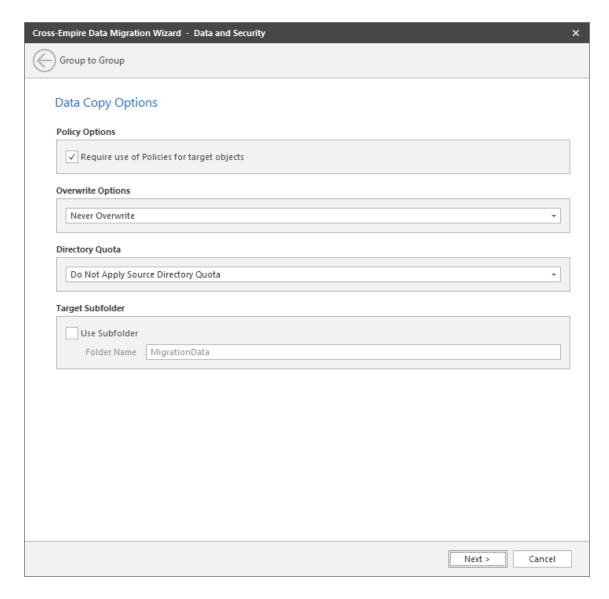
The target object is displayed in the Target Object column.

- 11 Click the check box corresponding to the listing with the new target.
- 12 Repeat Step 9 and Step 10 to specify all target objects that are not listed.

To change the specified target object, use the Edit button.

To add an object to the Source Object column, use the Add button.

13 When all of the objects you want to migrate are selected and have an associated target object, click Next.



### **14** Fill in the following fields:

**Require use of Policies for target objects:** If you are migrating data for objects to an Active Directory container that has an associated File Dynamics policy, leave this check box selected.

If this check box is selected and there is no associated File Dynamics policy, the object's data is not eligible for migration.

Additionally, if you are migrating a group folder and the target group is not currently managed by an associated policy, but the object does have a policy that would apply to it, File Dynamics will automatically apply that policy to the target object.

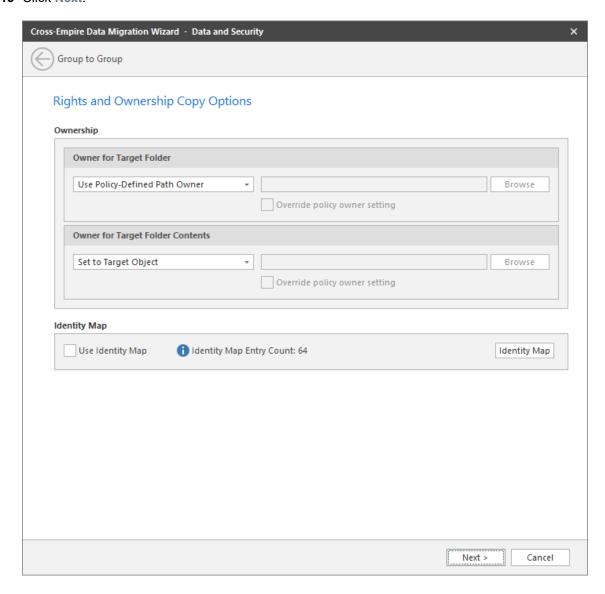
If you are migrating group folders to Active Directory objects that do not have policy associations, deselect this check box.

**Overwrite Options:** Indicate what you want to take place when duplicate filenames are encountered in the source and target.

**Directory Quota:** Specify how quota settings from the source Novell or Micro Focus file system should be applied after the migration.

**Target Subfolder:** If you want migrated data to be placed in a subfolder, select the **Use subfolder** check box and specify the subfolder name in the field.

### 15 Click Next.



### **16** Fill in the following fields:

**Owner for Target Folder:** Use these settings to specify how ownership of the migrated folder is determined.

If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Use Policy-Defined Path Owner and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- Set to Target Object: Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Use Policy-Defined Path Owner: Ownership of the files is determined according to the settings in the File Dynamics policy associated with the container where the object is managed.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder, unless the policy specifies another object as the owner. To override the policy's configuration, select the Override policy owner setting check box.

**Owner for Target Folder Contents:** Use these settings to specify how ownership of the migrated folder contents is determined.

If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Set to Target Object and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- **Set to Target Object:** Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of all of the migrated files, unless the policy specifies another object as the owner. To override the policy's configuration, select the Override policy owner setting check box.

**Use the Identity Map:** Selecting this check box indicates that you want File Dynamics to utilize the identity map you created earlier and use the corresponding IDs to copy security rights and file ownership from the Novell or Micro Focus network file system to the Windows network file system.

- Transfer Rights and Ownership: Selecting this option indicates that you want to transfer the file and folder security rights along with the ownership settings.
  - Be aware that when you transfer the ownership of a file or folder in a Windows network, you are granting the owner Full Rights, which you might not want to provide.
- Transfer Rights Only: Selecting this option indicates that you want to transfer only the file and folder security rights.
- Overwrite Trustees: Selecting this option indicates that you want any existing trustee assignments for a target file or folder to be overridden by the established eDirectory trustee assignments for those files and folders.
- Merge Trustees: Selecting this option indicates that you want the established eDirectory
  trustee assignments merged with those of the target files or folders in the Windows network
  file system.

**Identity Map:** Clicking this button opens your identity map where you can make any desired changes.

- 17 Click Next.
- 18 (Conditional) If you want to use a filter to include or exclude specific files, select the Use Copy Filter check box and click the Add button.
  - **18a** Fill in the following fields:

**Description:** Specify a description of the filter.

**Action:** From the drop-down menu, select either **Migrate** or **Ignore**, based on whether the filter specifies to migrate files or folders or to ignore them.

**Files, Folders:** Specify if the filter applies to files or folders.

Masks: List the file types to migrate or ignore.

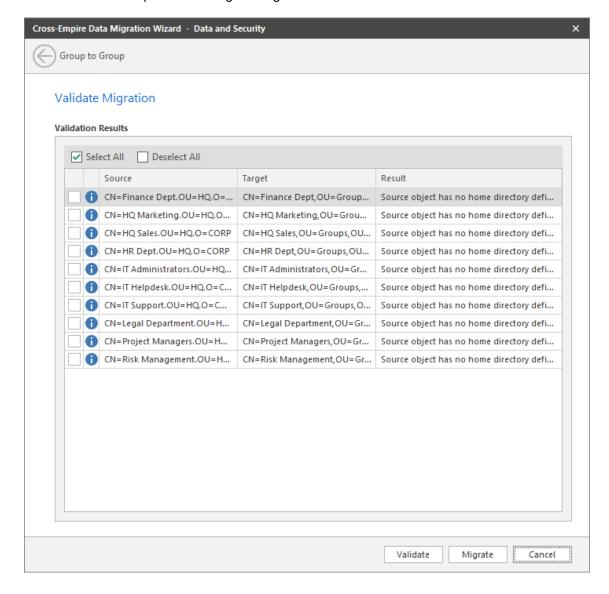
**18b** Specify any additional filter criteria in the menus and fields that remain.

For a detailed explanation of this region of the dialog box, see Setting Vault Rules in the *Micro Focus File Dynamics 6.5 Administration Guide*.

18c Click OK.

### 19 Click Validate.

**Validate** shows the result of certain checks that can be run prior to the migration. The **Result** column shows the status of the validation checks. If errors are displayed, you can choose to correct those errors prior to running the migration.



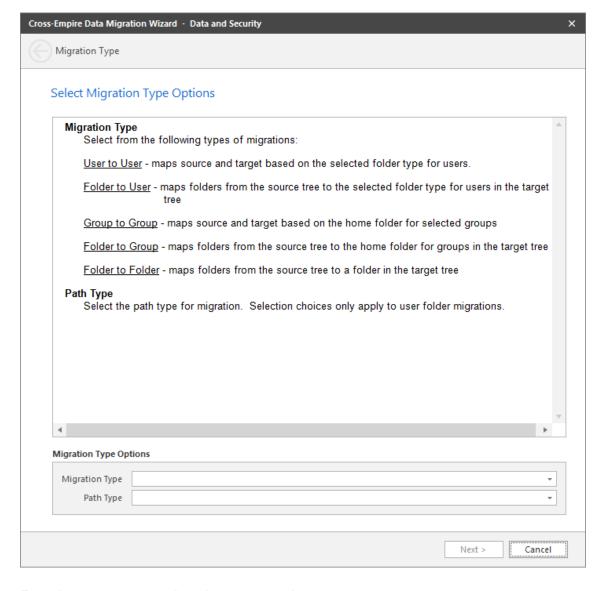
- **20** (Conditional) Take any necessary action in the Windows network file system target and then validate again.
- 21 Click Migrate.

A page appears with details of the data migration events that are queued for processing. To view the status of migration events, click **Events**. For more information on Events, see Pending Events in the *Micro Focus File Dynamics 6.5 Administration Guide*.

22 Click Finish to close the Data Migration Wizard.

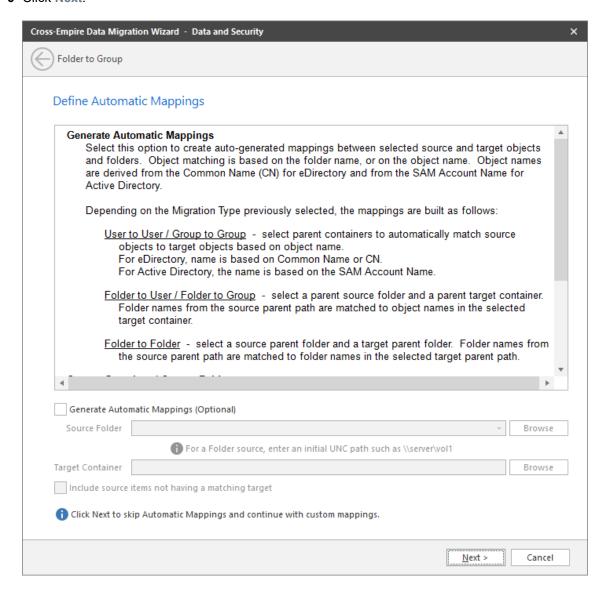
## 1.11 Performing a Folder to Group Migration

- 1 Make sure you have completed the prerequisites and have created a migration proxy account. For more information on the prerequisites, see Section 1.3, "Prerequisites," on page 11. For more information on creating a migration proxy account, see Section 1.4, "Creating the Migration Proxy Account," on page 13.
- 2 In the Admin Client, click the Cross-Empire Data Migration tab.
- 3 Click eDirectory to Active Directory.
- 4 Select Migration Wizards > Data and Security.



5 From the Migration Type drop-down menu, select Folder to Group.

#### 6 Click Next.



### 7 Do one of the following:

Fill in the following fields:

**Generate Automatic Mappings:** If you are migrating a large number of folders, select this check box to activate the other fields.

**Source Folder:** Specify an initial UNC path for a server and volume to browse.

For example \\server\_name\\volume\_name\\ or \\ip\_address\\volume\_name\

After a path is entered, you can click the Browse button to browse to the folder you want.

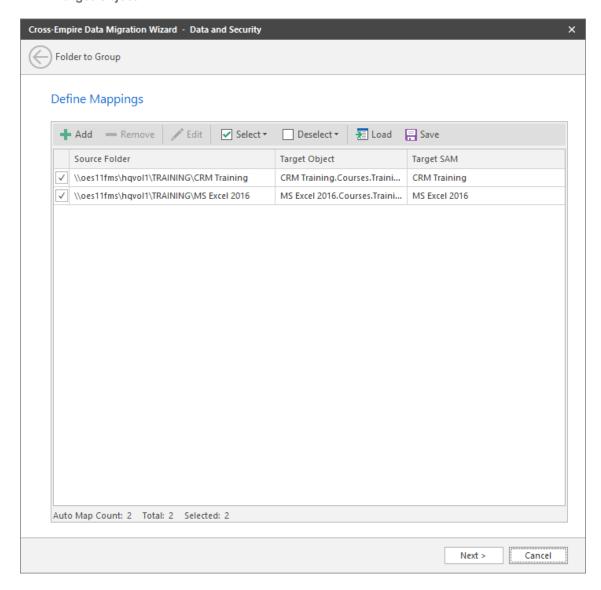
**Target Container:** Browse to select the target container.

**Include source items not having a matching target:** Indicate if you want to identify source data not having a matching target object.

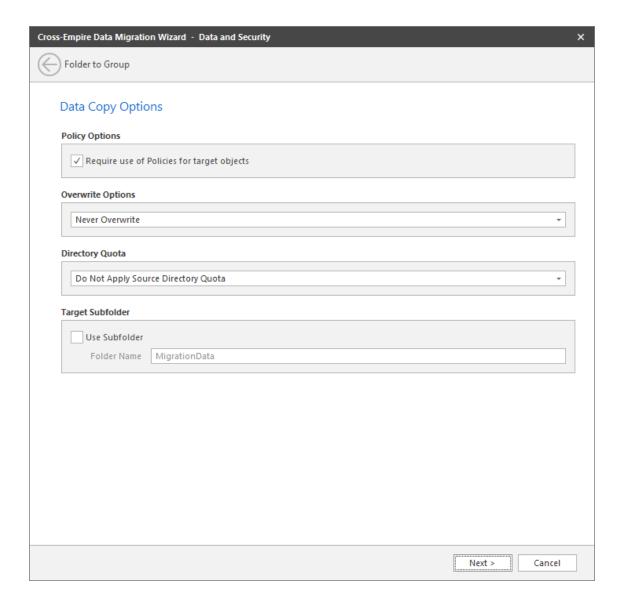
If you are migrating only a few users, use the Add button on the next wizard page to add the
users individually.

#### 8 Click Next.

The Data Migration Wizard attempts to match the names of subfolders of the source path with the SAM (Security Accounts Manager) Account Names in the Active Directory target. If there is a match, the listed folder in the **Source Folder** field is selected and a corresponding match is listed in the **Target Object** column.



- **9** Specify a target object for each source folder that is not automatically matched by double-clicking the name to bring up the Modify Data Map Entry dialog box.
- 10 Click Browse, specify the target object, then click OK.
  The target object is displayed in the Target Object column.
- 11 Click the check box corresponding to the listing with the new target.
- 12 Repeat Step 9 and Step 10 to specify all target objects that are not listed.
  - To change the specified target object, use the Edit button.
  - To add an object to the Source Object column, use the Add button.
- 13 When all of the objects you want to migrate are selected and have an associated target object, click Next.



### **14** Fill in the following fields:

**Require use of Policies for target objects:** If you are migrating data for objects to an Active Directory container that has an associated File Dynamics policy, leave this check box selected.

If this check box is selected and there is no associated File Dynamics policy, the object's data is not eligible for migration.

Additionally, if you are migrating a folder and the target group is not currently managed by an associated policy, but the group does have a policy that would apply to it, File Dynamics automatically applies that policy to the target group.

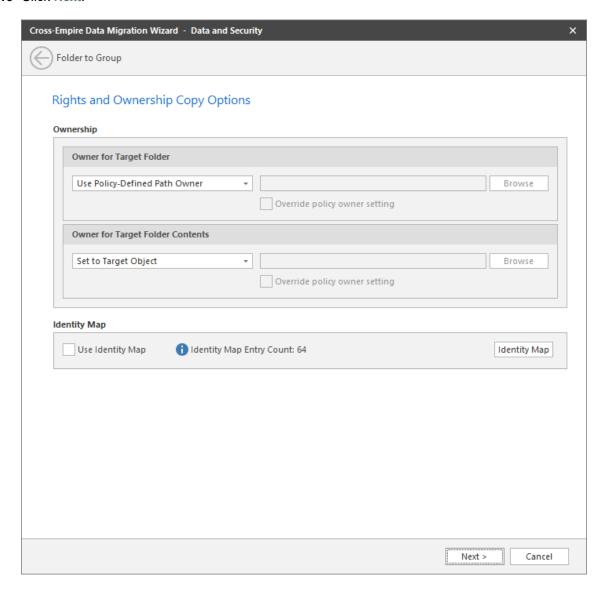
If you are migrating folder data to Active Directory objects that do not have policy associations, deselect this check box.

**Overwrite Options:** Indicate what you want to take place when duplicate filenames are encountered in the source and target.

**Directory Quota:** Specify how quota settings from the source Novell or Micro Focus file system should be applied after the migration.

**Target Subfolder:** If you want migrated data to be placed in a subfolder, select the **Use subfolder** check box and specify the subfolder name in the field.

### 15 Click Next.



### **16** Fill in the following fields:

**Owner for Target Folder:** Use these settings to specify how ownership of the migrated folder is determined.

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If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Use Policy-Defined Path Owner and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- **Set to Target Object:** Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Use Policy-Defined Path Owner: Ownership of the files is determined according to the settings in the File Dynamics policy associated with the container where the object is managed.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder, unless the policy specifies another object as the owner. To override the policy's configuration, select the Override policy owner setting check box.

**Owner for Target Folder Contents:** Use these settings to specify how ownership of the migrated folder contents is determined.

If you selected the Require use of Policies for target objects check box in the previous wizard page, only the Set to Target Object and Set Explicit Owner options are available on the drop-down menu.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- **Set to Target Object:** Specifies the target object as the owner of the migrated files. If the policy specifies a different owner, the policy's owner is applied.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated files, unless the policy specifies another object as the owner. To override the policy's configuration, select the Override policy owner setting check box.

**Use the Identity Map:** Selecting this check box indicates that you want File Dynamics to utilize the identity map you created earlier and use the corresponding IDs to copy security rights and file ownership from the Novell or Micro Focus network file system to the Windows network file system.

- Transfer Rights and Ownership: Selecting this option indicates that you want to transfer the file and folder security rights along with the ownership settings.
  - Be aware that when you transfer the ownership of a file or folder in a Windows network, you are granting the owner Full Rights, which you might not want to provide.
- Transfer Rights Only: Selecting this option indicates that you want to transfer only the file and folder security rights.
- Overwrite Trustees: Selecting this option indicates that you want any existing trustee assignments for a target file or folder to be overridden by the established eDirectory trustee assignments for those files and folders.
- Merge Trustees: Selecting this option indicates that you want the established eDirectory
  trustee assignments merged with those of the target files or folders in the Windows network
  file system.

**Identity Map:** Clicking this button opens your identity map where you can make any desired changes.

- 17 Click Next.
- 18 (Conditional) If you want to use a filter to include or exclude specific files, select the Use Copy Filter check box and click the Add button.
  - **18a** Fill in the following fields:

**Description:** Specify a description of the filter.

**Action:** From the drop-down menu, select either **Migrate** or **Ignore**, based on whether the filter specifies to migrate files or folders or to ignore them.

**Files, Folders:** Specify if the filter applies to files or folders.

Masks: List the file types to migrate or ignore.

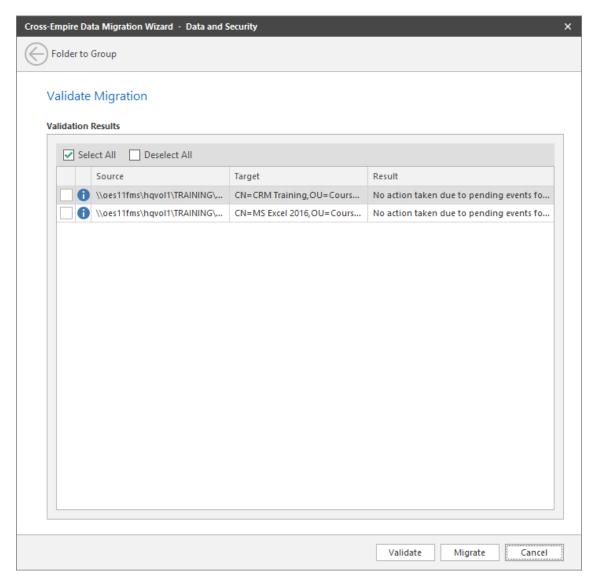
**18b** Specify any additional filter criteria in the menus and fields that remain.

For a detailed explanation of this region of the dialog box, see Setting Vault Rules in the *Micro Focus File Dynamics 6.5 Administration Guide*.

18c Click OK.

### 19 Click Validate.

**Validate** shows the result of certain checks that can be run prior to the migration. The **Result** column shows the status of the validation checks. If errors are displayed, you can choose to correct those errors prior to running the migration.



- **20** (Conditional) Take any necessary action in the Windows network file system target and then validate again.
- 21 Click Migrate.

A page appears with details of the data migration events that are queued for processing. To view the status of migration events, click **Events**. For more information on Events, see Pending Events in the *Micro Focus File Dynamics 6.5 Administration Guide*.

22 Click Finish to close the Data Migration Wizard.

## 1.12 Performing a Folder to Folder Migration

A folder to folder migration has flexible target specification options that are not available in the other migration options. When you perform a folder to folder migration, you can either specify an existing target folder or create a target folder in the Data Migration Wizard. You can also decide whether to migrate all of the files at once, or skip some files and migrate them later.

The preferred time for performing a folder to folder migration is when all files located in the folders to be migrated are closed, such as during the weekend. However, if you have large data sets to migrate, some folder to folder migrations might need to be started during the week, when some of the files intended for migration are open. In cases such as these, we recommend a two-phased folder to folder migration:

**Migrating Unopened Files:** While users are still logged in, you migrate all of the unopened files in the source location. This will be the vast majority of your network files. Because the **Skip Open Files** option is selected, open files are not migrated, but the filenames and paths of all of the open files are logged in a text file.

**NOTE:** If you perform a Cross-Empire Data Migration when all users are logged off, you do not need to migrate skipped files.

**Migrating Skipped, New, and Modified Files:** After having all users log off or all previously open files have been closed, migrate the skipped files, migrate the new and modified files, then compare the files on the source and target servers to verify that everything migrated correctly.

- Section 1.12.1, "Determine Whether You Will Be Migrating to an Existing Target Folder or Creating a Target Folder During the Migration," on page 65
- Section 1.12.2, "Migrating to an Existing Target Folder," on page 66
- Section 1.12.3, "Scanning the Source Server for New or Modified Directories and Files," on page 78
- Section 1.12.4, "Migrating the New and Modified Directories and Files," on page 80
- Section 1.12.5, "Verifying that All Directories and Files were Migrated by Comparing Source Server and Target Server Contents," on page 84
- Section 1.12.6, "Creating a Target Folder in the Data Migration Wizard," on page 86

# 1.12.1 Determine Whether You Will Be Migrating to an Existing Target Folder or Creating a Target Folder During the Migration

You have the option of migrating data to an existing target folder on the target server, or creating the target folder on the target server during the migration. The procedures differ for both, so at this point you must decide and then follow the appropriate procedures.

If you are plan to migrate folder data to an existing target folder on the target server, proceed with Section 1.12.2, "Migrating to an Existing Target Folder," on page 66.

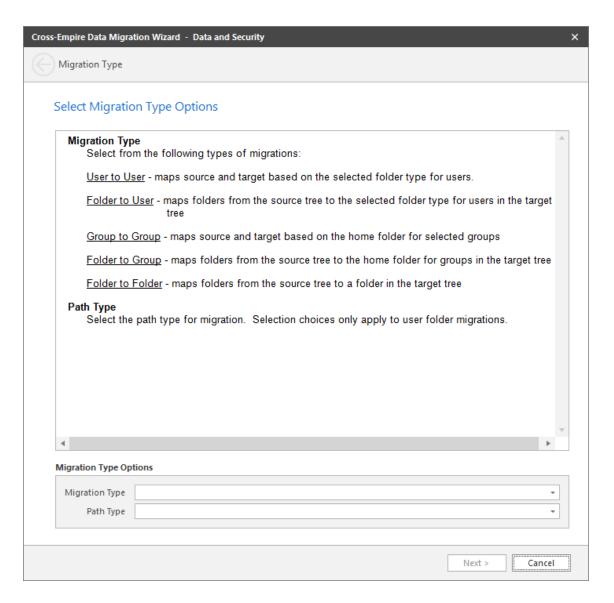
If you plan to migrate folder data to a target folder that you create during the migration, proceed with Section 1.12.6, "Creating a Target Folder in the Data Migration Wizard," on page 86.

### 1.12.2 Migrating to an Existing Target Folder

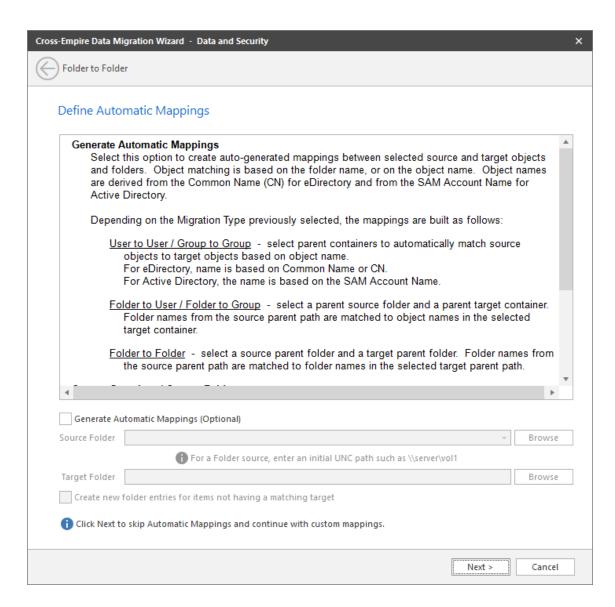
- "Migrating Unopened Files" on page 66
- "Migrating Skipped Files" on page 74

### **Migrating Unopened Files**

- 1 Make sure you have completed the prerequisites and have created a migration proxy account. For more information on the prerequisites, see Section 1.3, "Prerequisites," on page 11. For more information on creating a migration proxy account, see Section 1.4, "Creating the Migration Proxy Account," on page 13.
- 2 (Conditional) If you want to migrate closed files now and skip some files to migrate later:
  - 2a From the Utilities\CEDM folder on the File Dynamics ISO image, copy the CEDMScanCompare.exe utility to either the Windows target server or to a Windows server where you are going to administer the migration.
  - **2b** On each NetWare or Open Enterprise Server from which you are going to migrate data, create a new subdirectory and name it Open.
- 3 In the Admin Client, click the Cross-Empire Data Migration tab.
- 4 Click eDirectory to Active Directory.
- 5 Select Migration Wizards > Data and Security.



- **6** From the Migration Type drop-down menu, select Folder to Folder.
- 7 Click Next.



### **8** Fill in the following fields:

Generate Automatic Mappings: Select this check box to activate the other fields.

**Source Folder:** Specify an initial UNC path for a server and volume to browse.

For example, \\server\_name\volume\_name\ or \\ip\_address\volume\_name\

After a path is entered, you can click the Browse button to browse to the folder you want.

**Target Folder:** Browse to select the target folder.

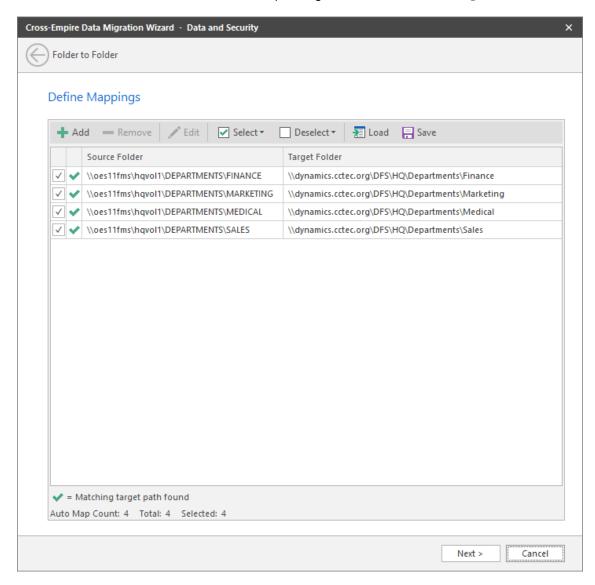
Create new folder entries for items not having a matching target: Selecting this check box indicates that you want File Dynamics to display both matching and non-matching source and target folders.

Selecting this check box also indicates that you want File Dynamics to create and populate any subfolders that do not exist in the target folder.

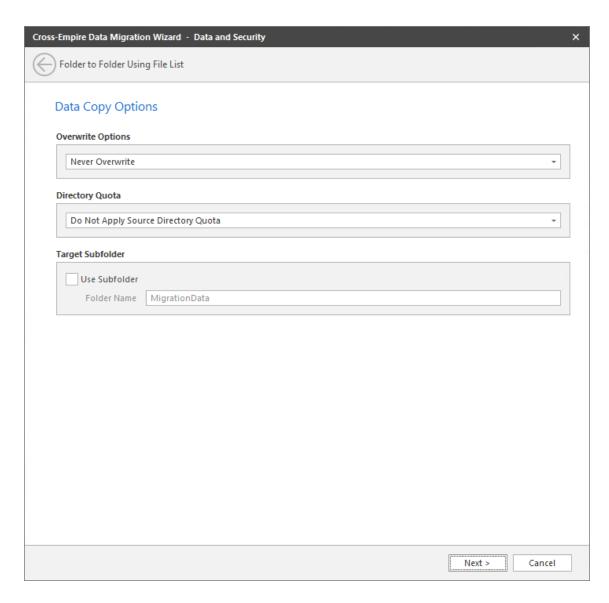
For example, assume that the source path at  $\10.10.233\$ Vol2\Departments is being migrated to \Corpserver\Departments and the Departments directory on the source server has a Finance subfolder. If there is no Finance subfolder in the target folder, a Finance subdirectory is created to include the directory contents.

9 Click Next.

The Data Migration Wizard attempts to match the names of the subfolders of the source path with the subfolders of the specified target directory. If there is a match, the listed folder in the **Source Folder** field is selected and a corresponding match is listed in the **Target Folder** column.



- 10 Specify a target folder for each source folder that is not automatically matched by double-clicking the name to bring up the Modify Data Map Entry dialog box.
- 11 Click Browse, specify the target folder, then click OK.
  The target folder is placed in the Target Folder column.
- 12 Click the check box corresponding to the listing with the new target.
- 13 When all of the folders you want to migrate are selected and have an associated target folder, click Next.



### **14** Fill in the following fields:

**Overwrite Options:** Indicate what you want to take place when duplicate filenames are encountered in the source and target.

**Directory Quota:** Specify how quota settings from the source NSS file system should be applied after the migration.

**Target Subfolder:** If you want migrated data to be placed in a subfolder, select the **Use subfolder** check box and specify the subfolder name in the field.

**Open File Options:** If you want the Cross-Empire Data Migration subsystem to skip all open files on the network and not migrate them, select **Skip Open Files**.

Selecting **Skip Open Files** activates the **File List UNC Path** field where you specify the name and location of the log file listing all of the open files that are skipped during the migration.

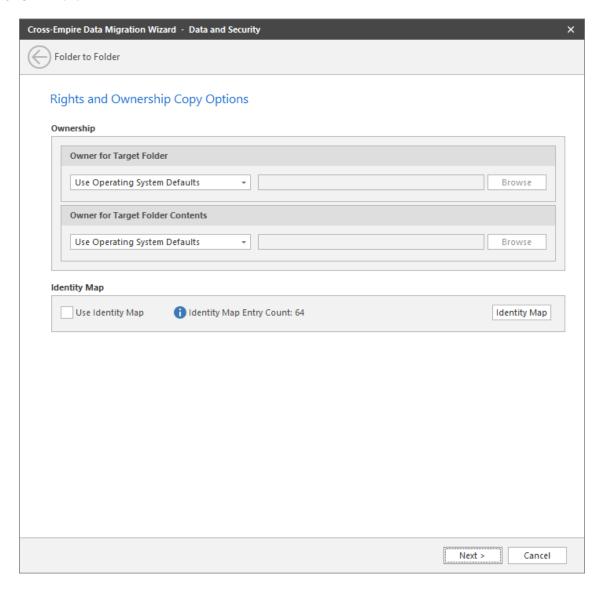
Specify the UNC path for the Open directory you created along with a filename for the text file that will list the skipped files.

For example, \\server\_name\volume\_name\directory\_name\Open\skip.txt or

\\ip\_address\volume\_name\Open\skip.txt

The Cross-Empire Data Migration subsystem does not validate the path, so you must make sure that the path entered is correct. Otherwise, the migration fails.

#### 15 Click Next.



### **16** Fill in the following fields:

**Owner for Target Folder:** Use these settings to specify how ownership of the migrated folder is determined.

- **Use Operating System Defaults:** This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the setting on the target server.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder.

**Owner for Target Folder Contents:** Use these settings to specify how ownership of the migrated folder contents is determined.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of all of the migrated files.

**Use the Identity Map:** Select this check box if you want File Dynamics to utilize the identity map you created earlier and use the corresponding IDs to copy security rights and file ownership from the Novell or Micro Focus network file system to the Windows network file system.

• Transfer Rights and Ownership: Select this option if you want to transfer the file and folder security rights along with the ownership settings.

Be aware that when you transfer the ownership of a file or folder in a Windows network, you are granting the owner Full Rights, which you might not want to provide.

- Transfer Rights Only: Select this option to transfer only the file and folder security rights.
- Overwrite Trustees: Select this option to override any existing trustee assignments for a target file or folder with the established eDirectory trustee assignments for those files and folders.
- Merge Trustees: Select this option to merge the established eDirectory trustee assignments with those of the target files or folders in the Windows network file system.

**Identity Map:** Clicking this button opens your identity map where you can make any desired changes.

- 17 Click Next.
- 18 (Conditional) If you want to use a filter to include or exclude specific files, select the Use Copy Filter check box and click the Add button.
  - 18a Fill in the following fields:

**Description:** Specify a description of the filter.

**Action:** From the drop-down menu, select either **Migrate** or **Ignore**, based on whether the filter specifies to migrate files or folders or to ignore them.

Files, Folders: Specify if the filter applies to files or folders.

**Masks:** List the file types to migrate or ignore.

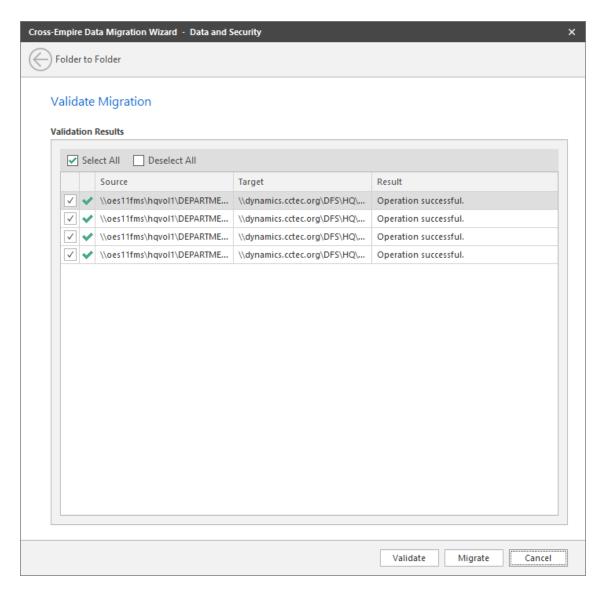
**18b** Specify any additional filter criteria in the menus and fields that remain.

For a detailed explanation of this region of the dialog box, see Setting Vault Rules in the *Micro Focus File Dynamics 6.5 Administration Guide*.

18c Click OK.

19 Click Validate.

**Validate** shows the result of certain checks that can be run prior to the migration. The **Result** column shows the status of the validation checks. If errors are displayed, you can choose to correct those errors prior to running the migration.



- **20** (Conditional) Take any necessary action in the Windows network file system target and then validate again.
- 21 Click Migrate.

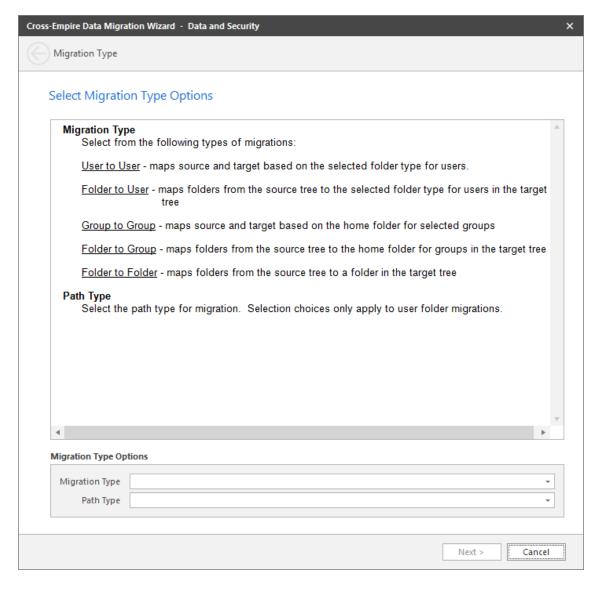
A page appears with details of the data migration events that are queued for processing. To view the status of migration events, click **Events**. For more information on Events, see Pending **Events** in the *Micro Focus File Dynamics 6.5 Administration Guide*.

- **22** Do one of the following:
  - If you skipped some files to migrate later, click Finish and then continue with "Migrating Skipped Files" on page 74.
  - If you have migrated all of your data, click Finish.
     You are now finished with the folder to folder migration.

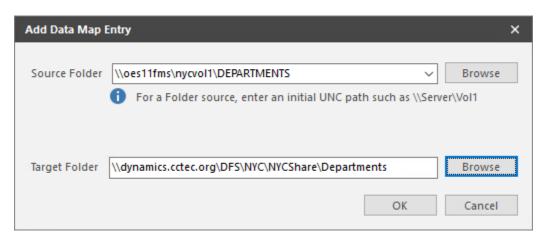
#### **Migrating Skipped Files**

The second phase of a folder to folder data migration is conducted when all of the users are logged off the network, so all network files are closed.

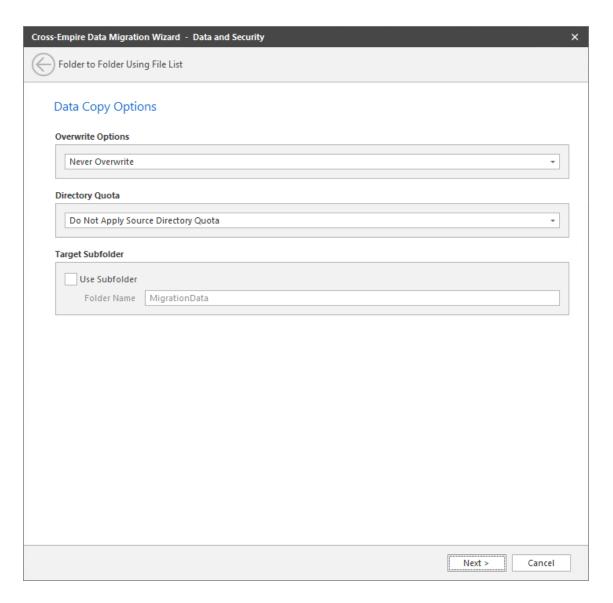
- 1 Have everyone log off the network so that there are no open files on the source NetWare or Open Enterprise Server machines.
- 2 Open the text file that you created in Step 14 on page 70 and view the files that were skipped. Do not make any changes to the file. Doing so causes errors during the migration.
- 3 Save a copy of the text file.
  - For example, if you named the file skip.txt, save a copy as skip\_copy.txt.
  - After the Cross-Empire Data Migration subsystem migrates the skipped files, it deletes the text file. You can use the copy to verify that the files were migrated.
- 4 In the Admin Client, click the Cross-Empire Data Migration tab.
- 5 Click eDirectory to Active Directory.
- 6 Select Migration Wizards > Data and Security.



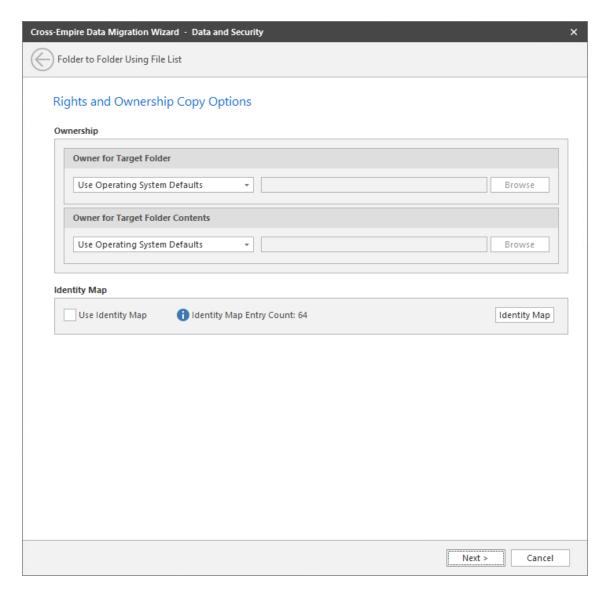
- 7 From the Migration Type drop-down menu, select Delta File.
- 8 Click Next.
- 9 Skip the Automatic Mappings settings by clicking Next.
- 10 On the Define Mappings wizard page, click Add.
- 11 In the Add Data Map Entry dialog box, browse to and select the source and target folders.



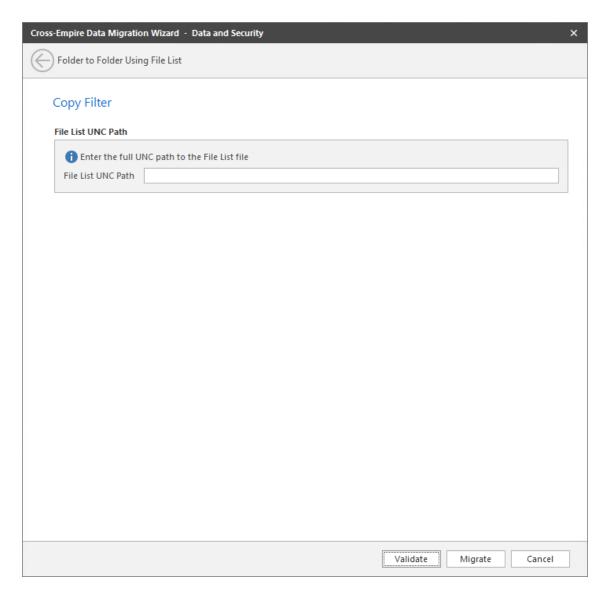
- 12 Click OK.
- **13** On the Define Mappings wizard page, verify the source folder and the destination folder and click **Next**.



14 On the Data Copy Options wizard page, from the drop-down menu in the Overwrite Options region, select Overwrite if Newer and click Next.



- **15** (Optional) On the Rights and Ownership Copy Options wizard page, from the drop-down menu of the Owner for Target Folder region, select Set Explicit Owner.
- **16** (Conditional) If you chose to set an explicit owner for the folder, click the corresponding **Browse** button and browse to specify an owner for the target folder.
- 17 (Optional) From the drop-down menu of the Owner for Target Folder Contents region, select Set Explicit Owner.
- **18** (Conditional) if you chose to set an explicit owner for the folder contents, click the corresponding **Browse** button and browse to specify an owner for the target folder contents.
- 19 Select the Use Identity Map check box and click Next.
- 20 On the Copy Filter wizard page, specify the UNC path to the file you created in Step 14 on page 70.



- 21 Click Validate to confirm that the path is correct.
- 22 Click Migrate.

The skipped files are migrated and the text file that you created in Step 14 on page 70 is deleted.

- 23 Click Finish.
- **24** Continue with "Scanning the Source Server for New or Modified Directories and Files" on page 78.

# 1.12.3 Scanning the Source Server for New or Modified Directories and Files

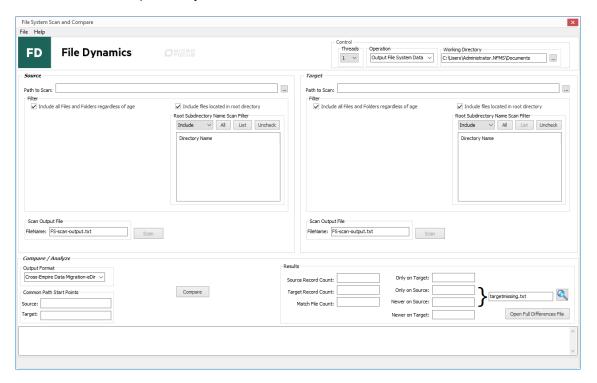
Before you can migrate all of the new and modified directories and files since the first phase of the migration, you must first generate a list of these new and modified directories and files. This is done using the CEDMScanCompare utility.

1 Launch the CEDMScanCompare utility. The following message appears:



- 2 Click OK.
- 3 Click the ellipses button pertaining to the Working Directory field to browse to a folder where you want to store the comparison data.

The CEDMScanCompare utility interface is launched.



The selected folder location is specified in the Working Directory field.

4 In the Source region, for the Path to Scan field, browse to specify the UNC path to the directory on the NetWare or Open Enterprise Server you want to scan.

For example: \\oesnw\vol2\dept\_shares

You can scan both NetWare and OES Linux servers in your tree by using the above syntax. For example, to scan Vol2 of an OES Linux server, you would use a syntax like the following:

\\oeslinux\vol2

- 5 In the Target region, for the Path to Scan field, browse to specify the UNC path to the folder in the target forest you want to scan.
- 6 In the Source region, click Scan.
- 7 In the Scan Result region, note the findings in the Folders and Files fields.
- 8 In the Target region, click Scan.

- 9 In the Scan Result region, note the findings in the Folders and Files fields.
- 10 In the Compare / Analyze region, from the Output Format drop-down menu, verify that Cross-Empire Data Migration-eDir is selected.
- 11 Click Compare.
- **12** Do one of the following:
  - If the results show no discrepancies between the source and target, there are no new or modified directories and files. You are finished with the folder to folder data migration.
  - If the results show discrepancies between the source and target, follow the remaining procedures in this section.
- 13 Click Open Full Differences File.

A spreadsheet appears listing:

- All files on the source that are newer than the same named files on the target, along with the source and target path of each file.
- All files on the source that are missing from the target.

1	Status	S_Modified	T_Modified	SourcePath	TargetPat	h						
44	NewOnTarget				F:\HQSha	F:\HQShare\Departments\Training\Training Items needed.docx						
45	NewOnTarget				F:\HQShare\Departments\Training\TS Training Agenda v2.doc							
46	NewOnTarget				F:\HQShare\Departments\Training\TS Training Agenda.docx							
47	MissingOnTarget			\\OES11FMS\HQVOL1\DEPARTMENTS\FINANCE\How To Use Filr on Android.pdf								
48	MissingOnTarget			\\OES11FMS\HQVOL1\DEPARTMENTS\FINANCE\Mobile Device Acceptable Use Policies.pdf								
49	MissingOnTarget			\\OES11FMS\HQVOL1\DEPARTMENTS\FINANCE\How To Use Filr on Windows Desktop.pdf								
50	MissingOnTarget			\\OES11FMS\HQVOL1\DEPARTMENTS\FINANCE\How To Use Filr on Apple MAC.pdf								
51	MissingOnTarget			\\OES11FMS\HQVOL1\DEPARTMENTS\FINANCE\How To Use Filr on iOS - iPhone iPad.pdf								

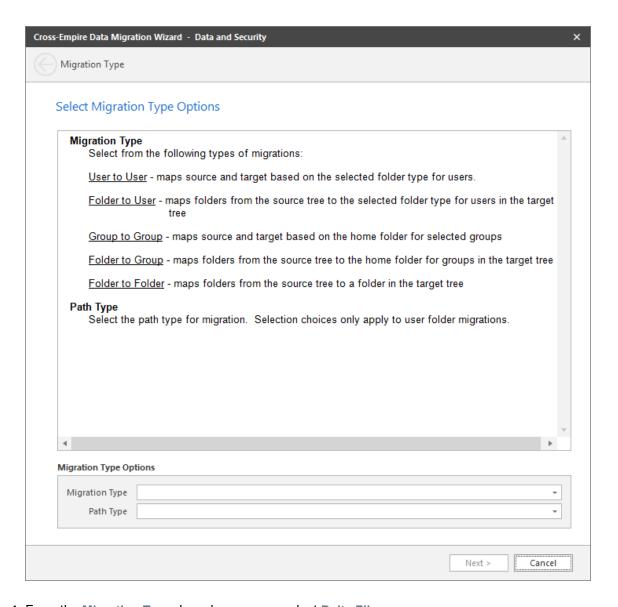
- 14 View the files that are newer on the source server as well as those files on the source server that were not migrated.
- 15 In the CEDMScanCompare utility interface, note the targetmissing.txt output file.

  This is the file listing all of the new and modified directories and files on the source server.
- 16 Locate the targetmissing.txt file in the folder you specified earlier and copy the file to a location on the source server.
- 17 Have all of your network users close any open files in the source area, and then proceed to "Migrating the New and Modified Directories and Files" on page 80.

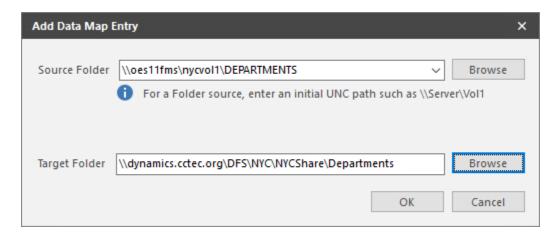
### 1.12.4 Migrating the New and Modified Directories and Files

Migrating all of the directories and files that are new or modified since the first phase of the folder to folder migration follows the same process as migrating the skipped files. The only difference is that you enter a different UNC path.

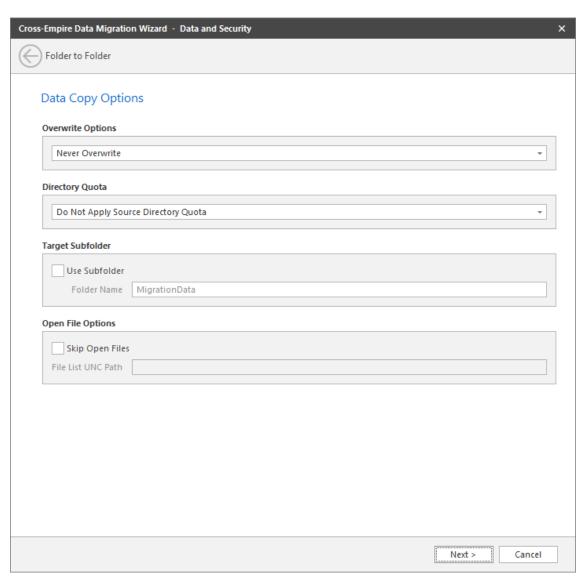
- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click eDirectory to Active Directory.
- 3 Select Migration Wizards > Data and Security.



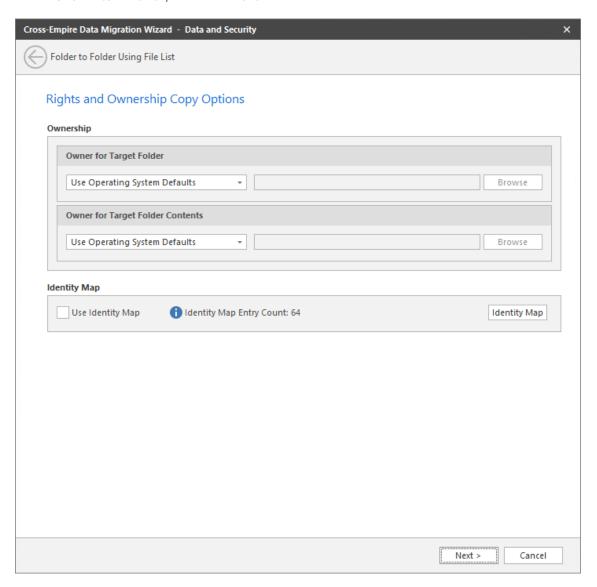
- 4 From the Migration Type drop-down menu, select Delta File.
- 5 Click Next.
- **6** Skip the Automatic Mappings settings by clicking **Next**.
- 7 On the Define Mappings wizard page, click Add.
- 8 In the Add Data Entry dialog box, browse to and select the source and target folders.



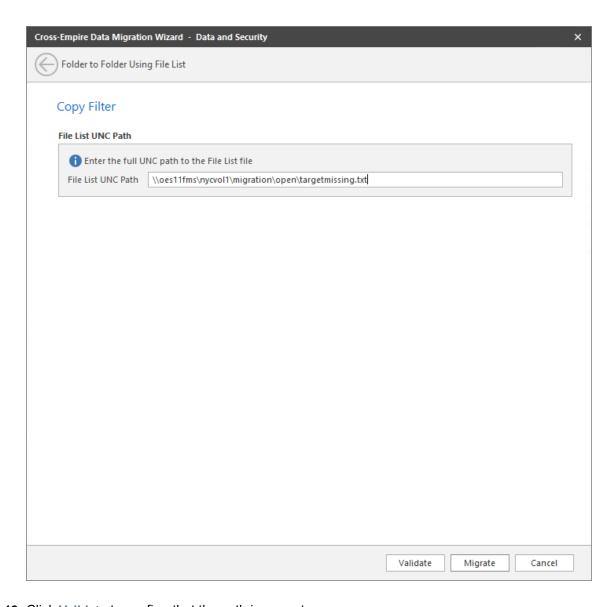
- 9 Click OK.
- 10 On the Define Mappings wizard page, verify the source folder and the destination folder and click Next.



11 On the Data Copy Options page, from the drop-down menu in the Overwrite Options region, select Overwrite if Newer, then click Next.



- 12 (Optional) On the Rights and Ownership Copy Options wizard page, from the drop-down menu of the Owner for Target Folder region, select Set Explicit Owner.
- **13** (Conditional) If you chose to set an explicit owner for the folder, click the corresponding **Browse** button and browse to specify an owner for the target folder.
- 14 (Optional) From the drop-down menu of the Owner for Target Folder Contents region, select Set Explicit Owner.
- 15 (Conditional) If you chose to set an explicit owner for the folder contents, click the corresponding Browse button and browse to specify an owner for the target folder contents.
- 16 Select the Use Identity Map check box and click Next.
- 17 On the Copy Filter wizard page, specify the UNC path to the targetmissing.txt file that you copied to the source server.



- **18** Click **Validate** to confirm that the path is correct.
- 19 Click Migrate.

The new and modified files are migrated.

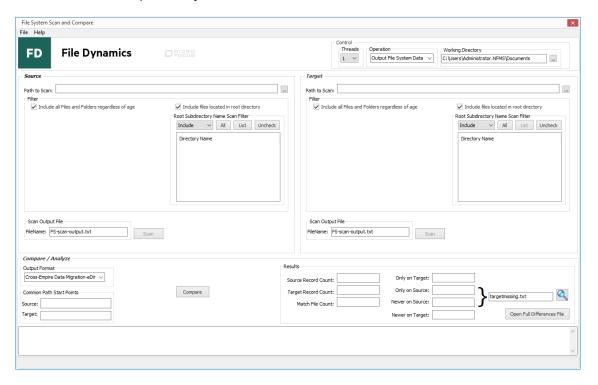
**20** Continue with Section 1.12.5, "Verifying that All Directories and Files were Migrated by Comparing Source Server and Target Server Contents," on page 84.

# 1.12.5 Verifying that All Directories and Files were Migrated by Comparing Source Server and Target Server Contents

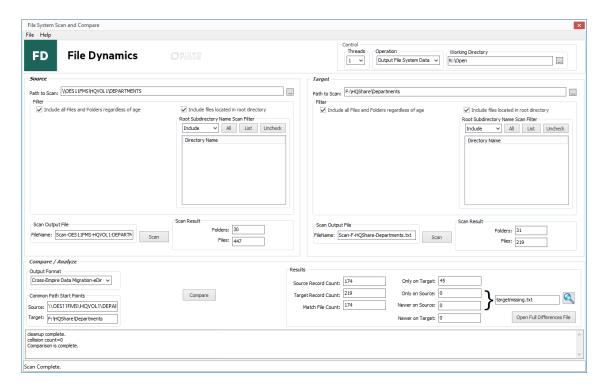
With all of the directories and files now migrated, you should now compare the contents of the source server and target server to verify that everything migrated properly. The process is as follows:

- 1 Launch the CEDMScanCompare utility.
- 2 When the message appears about the need to specify a working directory for the scan and comparison data, click **OK**.
- 3 Browse to a folder where you want to store the comparison data and click Select Folder.

#### The CEDMScanCompare utility interface is launched.



- 4 In the Source region, for the Path to Scan field, browse to specify the UNC path to the folder from the source server you want to scan.
- 5 In the Target region, for the Path to Scan field, browse to specify the UNC path to the folder in the target server you want to scan.
- 6 In the Source region, click Scan.
- 7 In the Target region, click Scan.
- 8 In the Compare / Analyze region, from the FileName drop-down menu, select Cross-Empire Data Migration-eDir.
- 9 Click Compare.

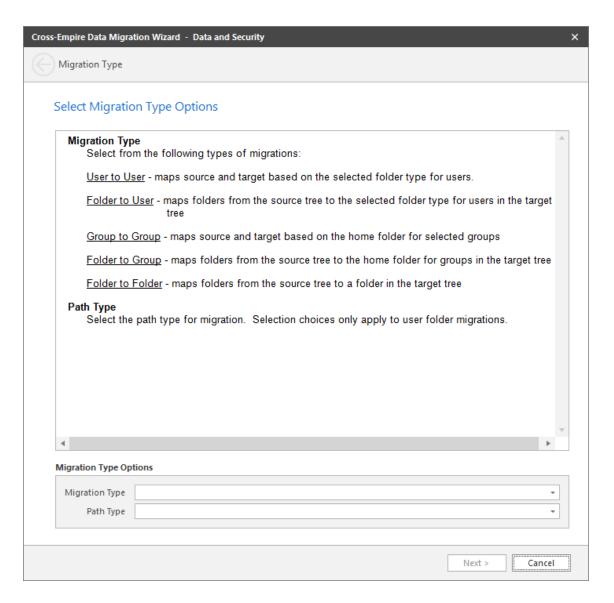


#### **10** Do one of the following:

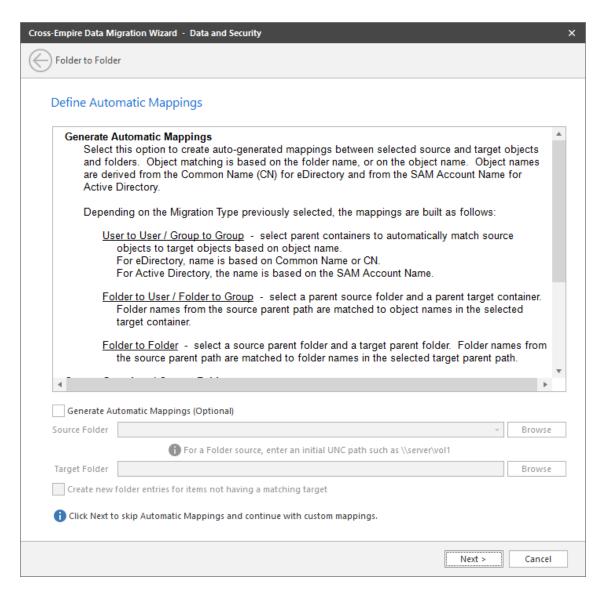
- If the results show no discrepancies between the source and target, all of the folders and files were migrated. You can close the CEDMScanCompare utility as you are now finished with the folder to folder data migration.
- If the results show discrepancies between the source and target, take measures to close the open files and repeat the procedures in "Migrating the New and Modified Directories and Files" on page 80.

### 1.12.6 Creating a Target Folder in the Data Migration Wizard

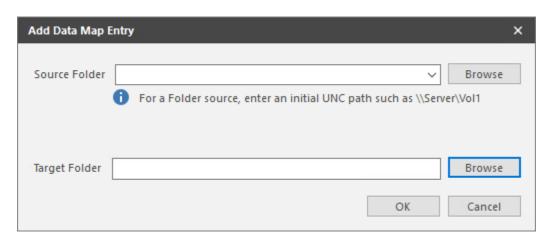
- 1 Make sure you have completed the prerequisites and have created a migration proxy account. For more information on the prerequisites, see Section 1.3, "Prerequisites," on page 11. For more information on creating a migration proxy account, see Section 1.4, "Creating the Migration Proxy Account," on page 13.
- 2 (Conditional) If you want to migrate closed files now and skip some files to migrate later:
  - 2a From the Utilities\CEDM folder on the File Dynamics ISO image, copy the CEDMScanCompare.exe utility to either the Windows target server or to a Windows server where you are going to administer the migration.
  - **2b** On each NetWare or Open Enterprise Server from which you are going to migrate data, create a new subdirectory and name it Open.
- 3 In the Admin Client, click the Cross-Empire Data Migration tab.
- 4 Click eDirectory to Active Directory.
- 5 Select Migration Wizards > Data and Security.



- 6 From the Migration Type drop-down menu, select Folder to Folder.
- 7 Click Next.



- 8 Click Next.
- 9 Click Add.



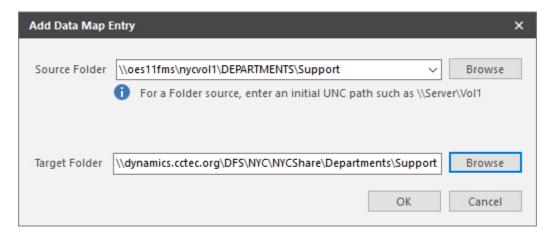
10 In the Source Folder field, specify an initial UNC path for a server and volume to browse.

88

For example, \\server\_name\volume\_name\ or \\ip\_address\volume\_name.

After a path is entered, you can click the Browse button to browse to the folder you want.

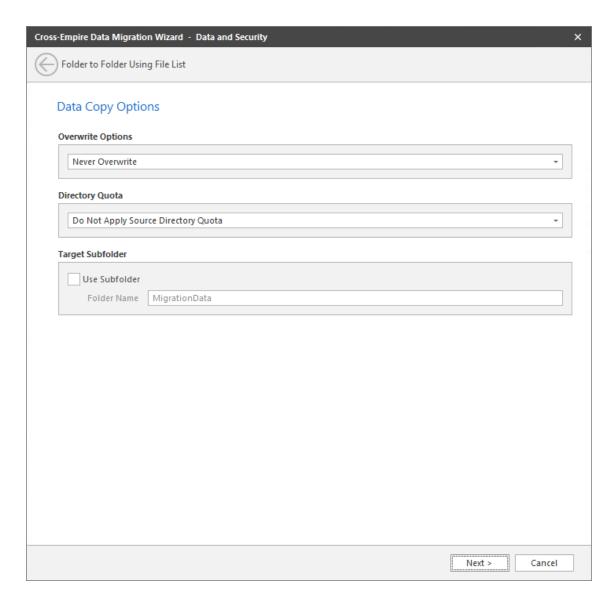
- 11 Click the **Browse** button that corresponds to the **Target Folder** field to locate the share where you want to create the new folder for the migrated data.
- 12 Right-click the share, select Create Folder, name the new folder, and click OK.
- 13 Click OK to close the Target File System Path Browser.
- 14 In the Add Data Map Entry dialog box, click the **Browse** button that corresponds to the **Target** Folder field again, browse to and select the new folder, then click **OK**.



15 Click OK.

The defined source and target mappings are displayed.

16 Click Next.



#### **17** Fill in the following fields:

Overwrite Options: Indicate what you want to take place when duplicate filenames are encountered in the source and target.

Directory Quota: Specify how quota settings from the source NSS file system should be applied after the migration.

Target Subfolder: If you want migrated data to be placed in a subfolder, select the Use subfolder check box and specify the subfolder name in the field.

Open File Options: If you want the Cross-Empire Data Migration subsystem to skip all open files on the network and not migrate them, select Skip Open Files.

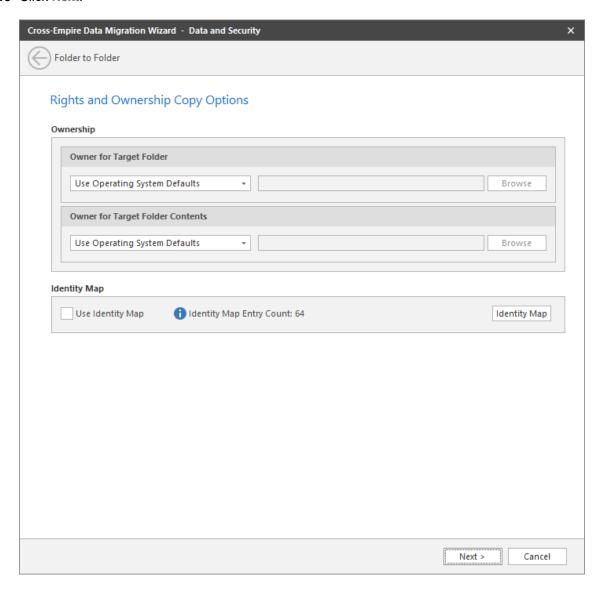
Selecting Skip Open Files activates the File List UNC Path field where you specify the name and location of the log file listing all of the open files that are skipped during the migration.

Specify the UNC path for the Open directory you created along with a filename for the text file that will list the skipped files.

For example, \\server\_name\volume\_name\directory\_name\Open\skip.txt or

The Cross-Empire Data Migration subsystem does not validate the path, so you must make sure that the path entered is correct. Otherwise, the migration fails.

#### 18 Click Next.



#### **19** Fill in the following fields:

**Owner for Target Folder:** Use these settings to specify how ownership of the migrated folder is determined.

- **Use Operating System Defaults:** This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the setting on the target server.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder.

**Owner for Target Folder Contents:** Use these settings to specify how ownership of the migrated folder contents is determined.

- Use Operating System Defaults: This default setting allows the target Microsoft Windows Server to adjust the file ownership according to the settings on the target server.
- Set Explicit Owner: Allows you to browse and select an object as the explicit owner of the migrated folder.

**Use the Identity Map:** Select this check box if you want File Dynamics to utilize the identity map you created earlier and use the corresponding IDs to copy security rights and file ownership from the Novell or Micro Focus network file system to the Windows network file system.

- Transfer Rights and Ownership: Select this option if you want to transfer the file and folder security rights along with the ownership settings.
  - Be aware that when you transfer the ownership of a file or folder in a Windows network, you are granting the owner Full Rights, which you might not want to provide.
- Transfer Rights Only: Select this option to transfer only the file and folder security rights.
- Overwrite Trustees: Select this option to override any existing trustee assignments for a target file or folder with the established eDirectory trustee assignments for those files and folders.
- Merge Trustees: Select this option to merge the established eDirectory trustee assignments with those of the target files or folders in the Windows network file system.

**Identity Map:** Clicking this button opens your identity map where you can make any desired changes.

- 20 Click Next.
- 21 (Conditional) If you want to use a filter to include or exclude specific files, select the Use Copy Filter check box and click the Add button.
  - 21a Fill in the following fields:

**Description:** Specify a description of the filter.

**Action:** From the drop-down menu, select either **Migrate** or **Ignore**, based on whether the filter specifies to migrate files or folders or to ignore them.

Files, Folders: Specify if the filter applies to files or folders.

**Masks:** List the file types to migrate or ignore.

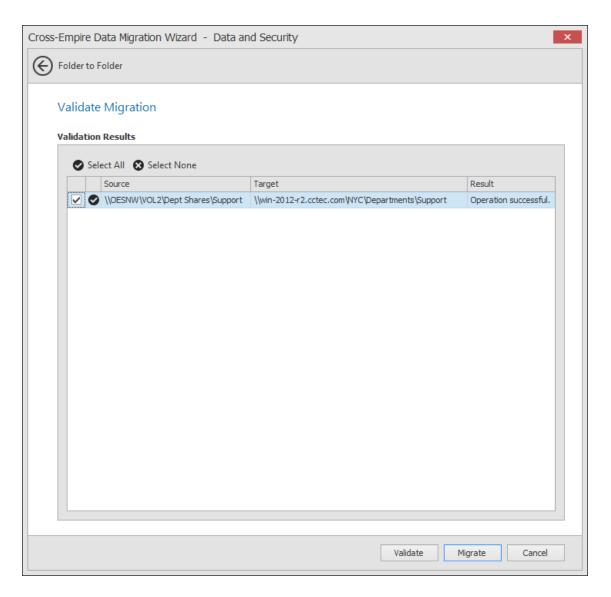
**21b** Specify any additional filter criteria in the menus and fields that remain.

For a detailed explanation of this region of the dialog box, see Setting Vault Rules in the *Micro Focus File Dynamics 6.5 Administration Guide*.

21c Click OK.

#### 22 Click Validate.

**Validate** shows the result of certain checks that can be run prior to the migration. The **Result** column shows the status of the validation checks. If errors are displayed, you can choose to correct those errors prior to running the migration.



- 23 (Conditional) Take any necessary action in the Windows network file system target and then rerun the Data Migration Wizard.
- 24 Click Migrate.

A page appears with details of the data migration events that are queued for processing. To view the status of migration events, click **Events**. For more information on Events, see Pending Events in the *Micro Focus File Dynamics 6.5 Administration Guide*.

- **25** Do one of the following:
  - If you skipped some files to migrate later, click Finish and then continue with "Migrating Skipped Files" on page 74.
  - If you have migrated all of you data, click Finish.
- **26** Scan the source server for new of modified directories and files by following the procedures in Section 1.12.3, "Scanning the Source Server for New or Modified Directories and Files," on page 78.

- 27 Migrate all new and modified directories and files by following the procedures in Section 1.12.4, "Migrating the New and Modified Directories and Files," on page 80.
- 28 Verify that all directories and files were migrated by following the procedures in Section 1.12.5, "Verifying that All Directories and Files were Migrated by Comparing Source Server and Target Server Contents," on page 84.

# Performing an Active Directory to Active Directory Cross-Empire Data Migration

- Section 2.1, "Overview," on page 95
- Section 2.2, "Prerequisite Tasks," on page 95
- Section 2.3, "Perform an Active Directory to Active Directory Cross-Empire Data Migration," on page 96

#### 2.1 Overview

The Active Directory to Active Directory Cross-Empire Data Migration subsystem enables you to migrate user and group folders from one Active Directory forest to another, and in the process, maintain the original permissions, ownership, and disk quota settings.

Of course, you can modify the permissions, ownership, and disk quota settings automatically following the migration through File Dynamics policies and Management Actions.

**IMPORTANT:** Because of the potential complexity of an Active Directory to Active Directory Cross-Empire Data Migration, Micro Focus highly recommends that you utilize the expertise of a Micro Focus Support representative or a qualified partner.

# 2.2 Prerequisite Tasks

Before you can perform an Active Directory to Active Directory Cross-Empire Data Migration, you must first perform some prerequisite tasks on the source and target servers, along with establishing a configured trust relationship between the two.

- 1. Create matching user and group objects in the target forest for objects in the source forest.
- 2. Make sure you have installed all File Dynamics components in the target forest.
- 3. Disable file screening and virus protection software on the target server during the migration.
- 4. Configure DNS so that the source and target forest can communicate.
- Configure a forest trust between the source and target forest.
   At a minimum, a one-way trust is required so that the target forest can access the source forest.
   For a detailed explanation of forest trust requirements, see Forest Trusts in the Micro Focus File Dynamics 6.5 Administration Guide.
- 6. From the Utilities\CEDM folder on the File Dynamics ISO image, copy the CEDMScanCompare.exe utility to either the Windows target server or to a Windows server where you are going to administer the migration.

# 2.3 Perform an Active Directory to Active Directory Cross-Empire Data Migration

- Section 2.3.1, "Establish a Forest Trust Configuration in the Admin Client," on page 96
- Section 2.3.2, "Assign Administrative Rights to the fdproxyrights Group," on page 96
- Section 2.3.3, "Assign Permissions to the fdproxyrights Group," on page 97
- Section 2.3.4, "Verify that the Admin Client Can See Shares on the Source Server," on page 98
- Section 2.3.5, "Create an Identity Map," on page 98
- Section 2.3.6, "Preview the Source Paths for the Migration," on page 102
- Section 2.3.7, "Add Unmapped Objects to the Identity Map," on page 104
- Section 2.3.8, "Generating a Preview Report Before Migrating," on page 105
- Section 2.3.9, "Determine If You Are Going to Migrate the Data in Two Phases or One," on page 105
- Section 2.3.10, "Migrate Group Data," on page 106
- Section 2.3.11, "Migrate User Data," on page 110
- Section 2.3.12, "Determine If Any Files Were Skipped," on page 111
- Section 2.3.13, "Migrate Skipped, Modified, and New Files," on page 111
- Section 2.3.14, "Using CEDMScanCompare.exe to Compare Folders and Files Between the Source and Target," on page 113
- Section 2.3.15, "Manage the Migrated User Folders through a File Dynamics Home Folder Policy," on page 115

### 2.3.1 Establish a Forest Trust Configuration in the Admin Client

- 1 Launch the Admin Client and click the Home tab.
- 2 Click Forest Trusts and select the check box next to the displayed source forest.
- 3 Click Apply.
- 4 Close out of the Admin Client.
- 5 Launch the Admin Client and log in.
- 6 From the Home tab, click Forest Trusts and verify that the status for forest trust reads:

Trust is fully configured and usable.

# 2.3.2 Assign Administrative Rights to the fdproxyrights Group

Follow these procedures to add the fdproxyrights group of the target forest as a member of the local administrators group on the server or appliance in the source forest.

- 1 On the source server, launch Active Directory Users and Computers.
- **2** From the Builtin directory of the forest, double-click Administrators.
- 3 Click the Members tab.
- 4 Click Add.

This opens the Select Users, Contacts, Computers, Service Accounts, or Groups dialog box.

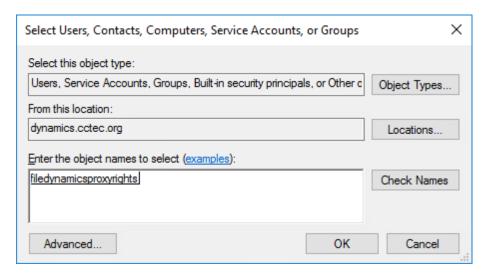
5 Click Locations.

This opens the Locations dialog box.

- 6 Select the target forest and click OK.
- 7 In the Enter the object names to select field of the Select Users, Contacts, Computers, Service Accounts, or Groups dialog box, type fdp and click check names.

This opens the Multiple Names Found dialog box.

8 Select fdproxyrights and click OK.



9 Click OK to close the Select Users, Contact, Computers, Service Accounts, or Groups dialog box.

fdproxyrights is added to the list of members in the Administrators dialog box.

10 Click OK to close the Administrators dialog box.

# 2.3.3 Assign Permissions to the fdproxyrights Group

Follow these procedures to assign the fdproxyrights group of the target server, FULL Share Permissions to shares that File Dynamics will be migrating from the source forest.

1 Using Windows Explorer on the source server, right-click the shares you plan to migrate and select **Properties**.

This opens the Properties dialog box.

2 Click the Sharing tab and click Advanced Sharing.

This opens the Advanced Sharing dialog box.

3 Click Permissions.

This opens the Permissions dialog box.

4 Click Add.

This opens the Select Users, Computers, Service Accounts, or Groups dialog box.

5 Click Locations.

This opens the Locations dialog box.

- 6 Select the target forest and click OK.
- 7 In the Enter the object names to select field of the Select Users, Computers, Service Accounts, or Groups dialog box, type fdproxy and click Check names.

This opens the Multiple Names Found dialog box.

- 8 Select fdproxyrights and click OK.
- **9** In the Permissions dialog box pertaining to the share you selected previously, assign fdproxyrights Full Control.
- **10** Click **OK** to save the setting and close the Permission dialog box.
- 11 Repeat these steps for all other shares you plan to migrate.
- **12** Close the Advanced Sharing and Properties dialog boxes.

# 2.3.4 Verify that the Admin Client Can See Shares on the Source Server

Follow these procedures to verify that the Admin Client can see the shares that you plan to migrate.

- 1 Launch the Admin Client and click the Home tab.
- 2 Click Storage Resources.
- **3** Verify that the shares you want to migrate are listed.
- 4 (Conditional) If the shares are not listed, click Rebuild.

### 2.3.5 Create an Identity Map

File Dynamics uses an identity map to specify associations between the users and groups of the source forest with the users and groups of the target forest.

As specified in Section 2.2, "Prerequisite Tasks," on page 95, you must create the associated target server users, groups, and shares before you migrate as the Active Directory to Active Directory Cross-Empire Data Migration subsystem does not create these associated objects on the target server.

**IMPORTANT:** If you are creating an identity map of more than 25,000 objects, we recommend 8GB to 12GB of memory for the workstation or server running the Admin Client.

- 1 Launch the Admin Client and click the Cross-Empire Data Migration tab.
- 2 Click Active Directory to Active Directory.
- 3 Select the source Active Directory forest.
- 4 Click Edit Identity Map.
- 5 Click Identity Map Entry Wizard.
- 6 Select both the User to User and Group to Group check boxes.
- 7 From the Match Attribute drop-down menu, select one of the following options:

**SAM-Account-Name:** This attribute can be used when you want to populate the identity map with objects in the source and target forest that have the same corresponding attribute value. By choosing **SAM-Account-Name** (SAM) as the Match Attribute, (depending on your Source and Target Scopes) the engine will search the source and target forests for objects whose SAM are the same value.

**Common-Name:** This attribute selection functions in the same manner as the SAM-Account Name, but for Common-Names (CN).

**Object-SID:** This option is only applicable in the case where accounts have been migrated from the source to the target using a tool such as Active Directory Migration Tool (ADMT). When ADMT is used, you can opt to copy the Object-Sid. This results in the target object containing the Object-Sid of the originating source object in the SID-History attribute.

For more information, refer to these Microsoft documents:

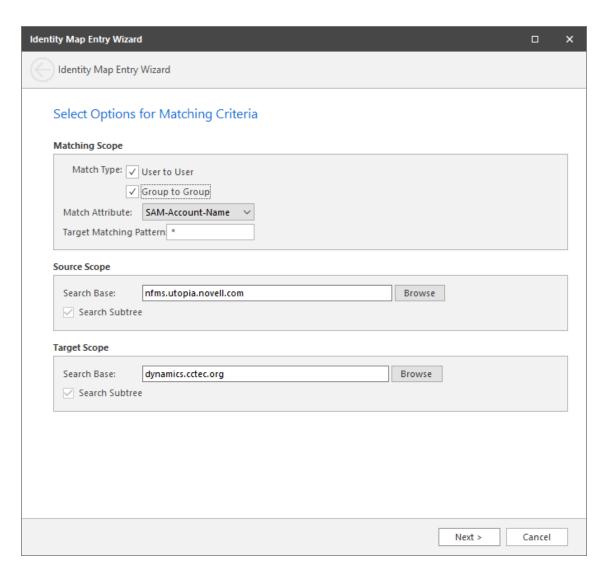
- https://msdn.microsoft.com/en-us/library/ms679833(v=vs.85).aspx
- https://technet.microsoft.com/en-us/library/cc778824(v=ws.10).aspx

When this Match Attribute is chosen, the engine will enumerate objects in the source and then search for objects whose SID-History attribute contains the source object's Object-Sid. If objects have not been migrated such that the source's Object-Sid is in the target's SID-History, you must use either SAM-Account-Name or Common-Name to populate the identity map.

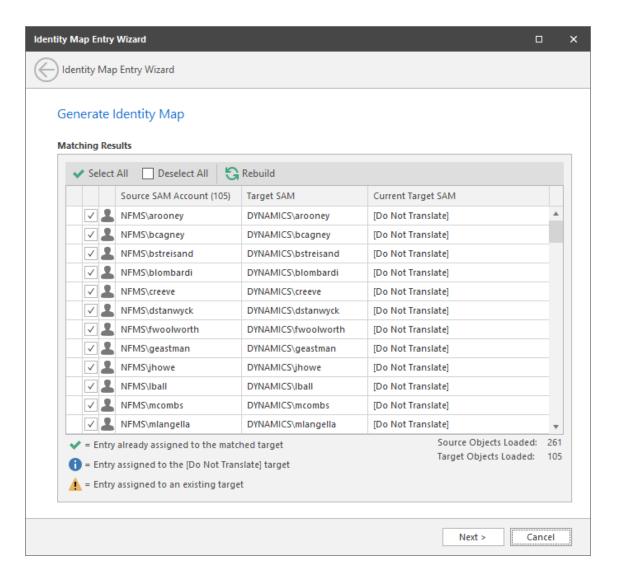
**Well-known SIDS:** This option should be used when you want to populate the identity map with well-known SIDs whose relative identifiers (RIDs) are relative to each domain (e.g. chronicle\administrator) and whose domain identifier is not "Builtin" (32).

For more information, refer to this Microsoft document: https://msdn.microsoft.com/en-us/library/windows/desktop/aa379649(v=vs.85).aspx

Builtin well-known SIDs can be added and mapped manually in the Identity Map editor by selecting an object from the Well-known SIDs tab, right-clicking and selecting **Add Identity Map Entry**.



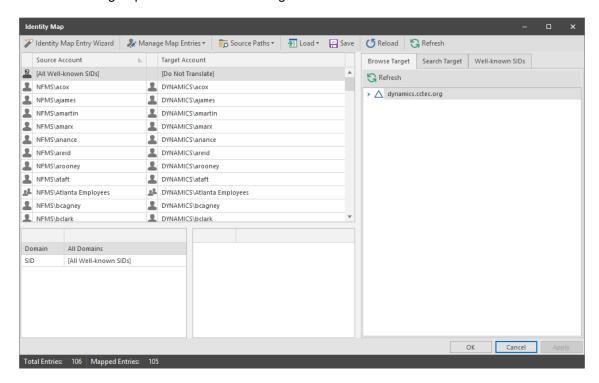
- 8 Verify that the source forest and target forest in the Source Scope and Target Scope regions respectively, are correct and click Next.
- **9** Observe the matching results of source and target groups and users.



#### 10 Click Next.

11 In the Import Map Entries page, leave the Auto-save Identity Map updates to Engine check box selected and click Finish.

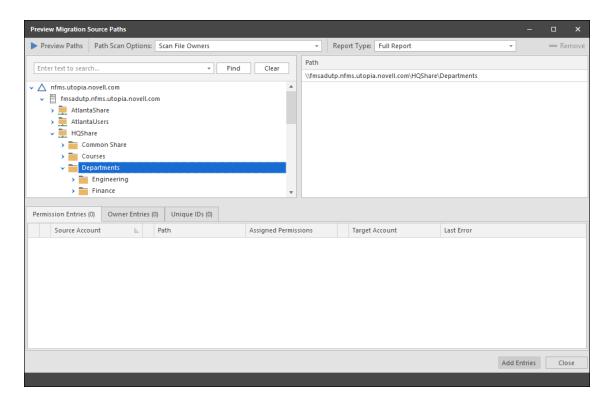
The users and groups on the source and target forests are now matched.



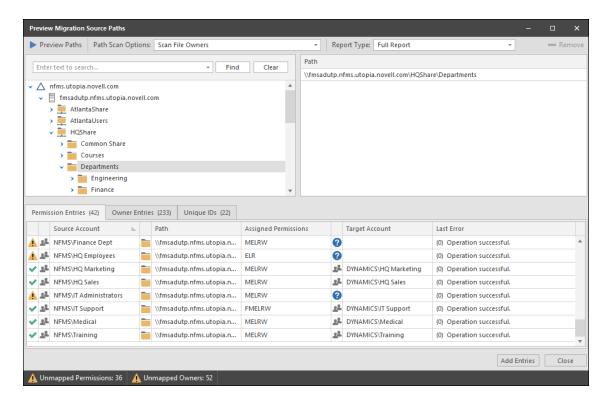
# 2.3.6 Preview the Source Paths for the Migration

Follow these procedures to preview the migration source paths as well as add and match any missing objects to the identity map.

- 1 In the Identity Map interface, click Source Paths > Generate Preview Report.
- 2 In the Preview Migration Source Paths dialog box, in the upper left-hand pane, navigate to the desired share and double-click it to add it to the Path window to the right.



- 3 From the Path Scan Options drop-down menu, select from the following options:
  - Scan Folders Only: Scans only the folder permissions in the specified paths.
  - Scan File Owners: Scans the folder permissions and the file owners in the specified paths.
  - **Scan File Owners and Permissions:** Scans the folder permissions, file owners, and file permissions in the specified paths.
- 4 Click Preview Paths.



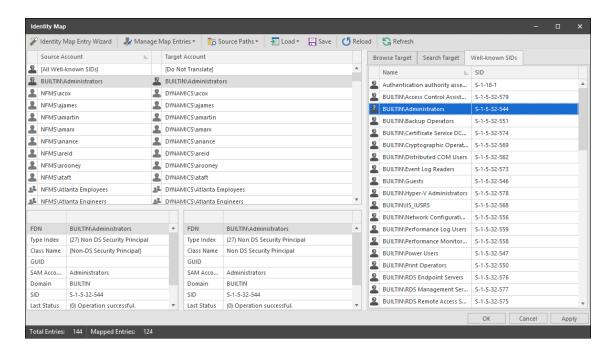
For ease in identifying all unmapped (orphaned) SIDs, use the sort arrow which is located on the first column heading in the lower portion of the interface.

- 5 Repeat Step 2 for all shares you want to migrate.
- 6 Click the Owner Entries tab and view the orphaned SIDs, meaning all of the folders and files without owners.
- 7 Click the Unique IDs tab and view the unmatched objects.
  These are objects that you will need to add to the identity map.
- 8 Click Add Entries to add the new entries to the identity map.
- 9 Click Close to close the Preview Paths page.

### 2.3.7 Add Unmapped Objects to the Identity Map

Follow these procedures to add any unmapped objects listed in the Unique IDs tab to the identity map.

- 1 In the identity map, click the **Target Account** column heading to sort unmapped objects so they are all listed as a group at the top of the list.
- 2 From the Browser Target tab on the right pane, locate an object you want to indicate as an owner for an unmapped object and drag the object up to the unmapped object's corresponding Target Account column entry.



This changes the unmapped object's Target Account listing from [Do Not Translate] to the new owner object.

- **3** When you are finished specifying owners for your unmapped objects, click **Apply**.
- 4 Click OK.

### 2.3.8 Generating a Preview Report Before Migrating

You can easily generate a preview report as a CSV file before you migrate. This might be useful if you needed to provide a report to a CIO or other members of the migration team.

- 1 Launch the Admin Client and click the Cross-Empire Data Migration tab.
- 2 Click Preview Source Path.
- 3 Double-click the top entry in the list.
- 4 From the View Report page, click the CSV icon to save the report as a CSV file.

# 2.3.9 Determine If You Are Going to Migrate the Data in Two Phases or One

Before you migrate data from the source to the target forest, you must determine if you will be migrating in two phases or one.

#### Two-Phase Migration

In the first phase, you migrate all unopened files while skipping all opened files. In the second phase, you get all of your users to log off of the network (assuring that they have no files opened), then you migrate all of the skipped files, then all of the new and modified files.

A two-phased migration is more suitable to organizations with data sets too large to migrate over a weekend.

#### **Single-Phase Migration**

This approach lets you migrate all of the data in one phase. You must have all users logged off of the network and be able to migrate the data before the users return to work.

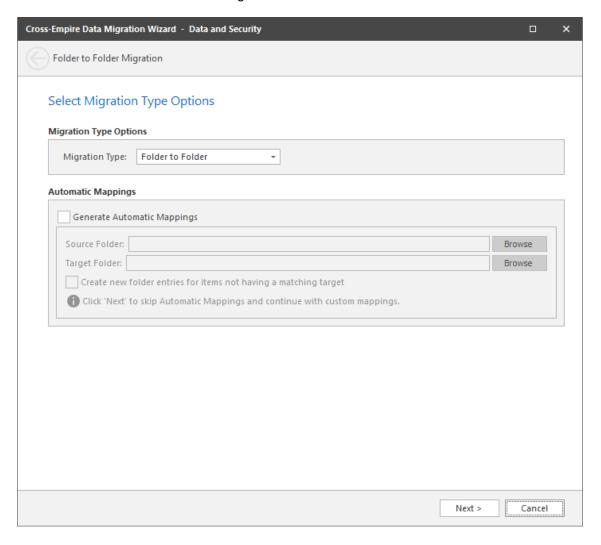
### 2.3.10 Migrate Group Data

**TIP:** To view the status of the migration, we recommend that you install and run a Tail program and use it to tail the Agent log path located at: "%programdata%\Micro Focus\File Dynamics\Agent\log\fsagent-xxx-xxx.log"

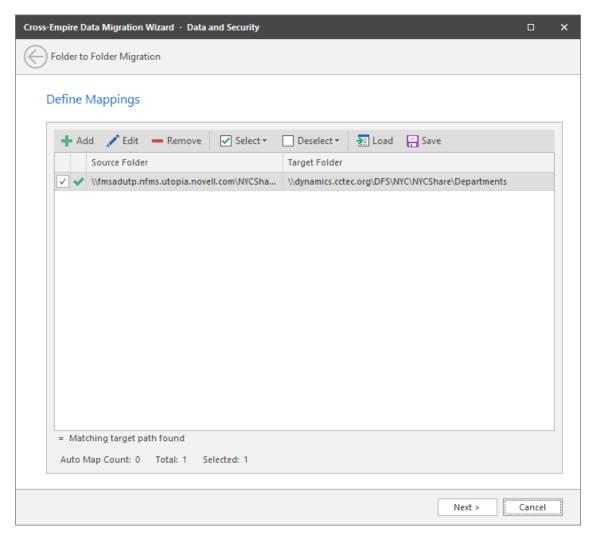
Follow these procedures to migrate group data from the source forest to the target forest.

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click Active Directory to Active Directory.
- 3 Select Migration Wizards > Data and Security.

This launches the Folder to Folder Migration wizard.

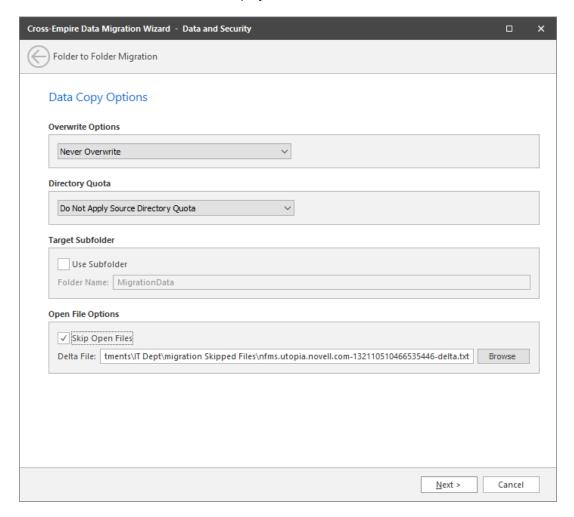


- 4 Do one of the following:
  - If you plan to do a two-phase migration by skipping open files, leave the Generate
     Automatic Mappings check box deselected and click Next. Browse to specify the source
     and target folders and click Next.
    - This method will create a single source path and single target path, which alleviates potential problems that can surface when skipping open files during a migration.
  - If you plan to do a single-phase migration, you can select the Generate Automatic
     Mappings check box to create any needed subfolders on the target that do not already
     exist. Browse to specify the source and target folders and click Next.
- **5** In the Define Mappings page of the wizard, observe the migration events that are now queued up.



- 6 Click Next.
- 7 (Conditional) If you are doing a two-phase migration, in the Data Copy Options page, select the Skip Open Files check box.
  - **7a** Click the **Browse** button that corresponds to the **Delta File** field and through the path browser, select the folder where you want to store the delta file.
  - 7b Right-click and select New Folder and click OK.

The delta file name is created and displayed in the **Delta File** field.

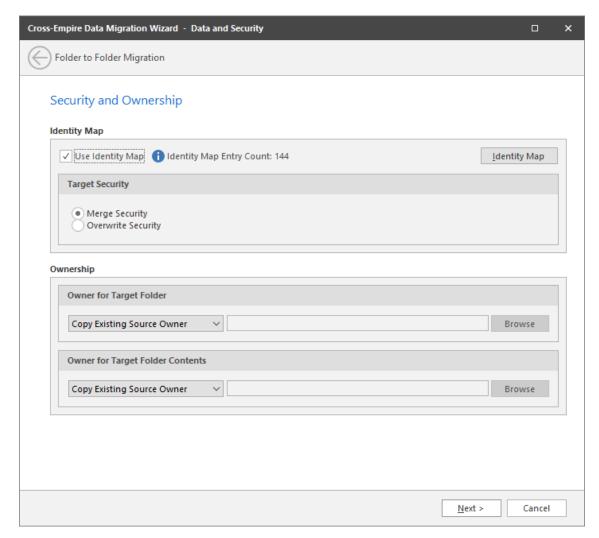


- 8 Click Next.
- 9 In the Data and Security page, select the Use the Identity Map check box.
- 10 Select either the Merge Security or Overwrite Security option.

**Merge Security:** This option merges the permissions of the source folder with those of the target folder.

**Overwrite Security:** This option overwrites the permissions of the target folder with those of the source folder.

- 11 From the Owner for Target Folder drop-down menu, select your preferred option.
  - 11a If you select either Default Owner if not in Identity Map or Set Explicit Owner, browse to assign an owner.
- 12 From the Owner for Target Folder Contents drop-down menu, select your preferred option.
  - 12a If you select either Default Owner if not in Identity Map or Set Explicit Owner, browse to assign an owner.



- 13 Click Next.
- 14 Click Migrate.

The queued migration events are listed.

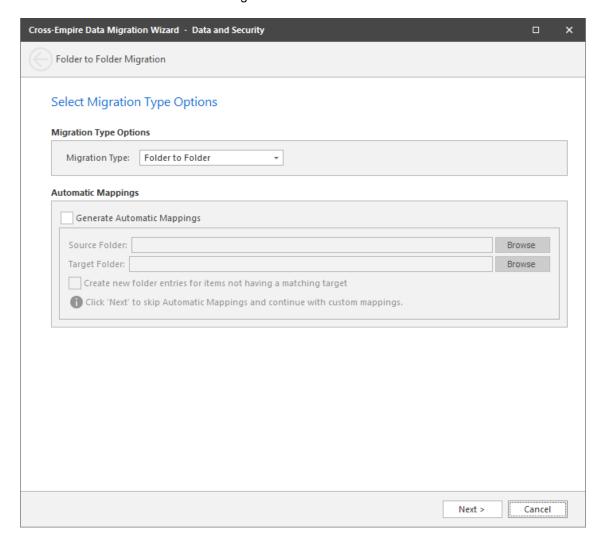
- 15 Click Finish.
- 16 In the Admin Client, from the Identity Driven tab, click Events to view the status of the migration.
- 17 (Optional) If you have a Tail program, you can view the status of the migration.

#### 2.3.11 Migrate User Data

Use these procedures to migrate user home folders from the source forest to the target forest.

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click Active Directory to Active Directory.
- 3 Select Migration Wizards > Data and Security.

This launches the Folder to Folder Migration wizard.



- **4** Do one of the following:
  - If you plan to do a two-phase migration by skipping open files, leave the Generate
     Automatic Mappings check box deselected and click Next. Browse to specify the source
     and target folders and click Next.
    - This method will create a single source path and single target path, which alleviates potential problems that can surface when skipping open files during a migration.
  - If you plan to do a single-phase migration, you can select the Generate Automatic
     Mappings check box to create any needed subfolders on the target that do not already
     exist. Browse to specify the source and target folders and click Next.

- **5** In the Define Mappings page of the wizard, observe the migration events that are now queued up.
- 6 Click Next.
- 7 Select the appropriate Overwrite and Directory Quota options, and whether the migrated user data will be located in a subfolder of the target, then click Next.
- 8 In the Security and Ownership page, select the Use the Identity Map check box.
- 9 Select either the Merge Security or Overwrite Security option.
- 10 Within the Owner for Target Folder and Owner for Target Contents drop-down menus, leave the Copy Existing Source Owner options selected.

As a best practice, each user should be established as the owner of their files and folders. For those instances where folders and files that aren't owned by the users, we will address them later once we create a policy and then perform Management Actions following the migration.

- 11 Click Next.
- 12 In the Copy Filter page, select the User Copy Filter check box.
- 13 Click Add to create a copy filter of those files you do not want to copy to the target forest. For example, you probably want to avoid copying . TMP files.
- 14 Click Validate and observe what will be migrated.
  If you observe any potential problems, you will want to correct them at this time.
- 15 Click Migrate.

The queued migration events are listed.

- 16 Click Finish.
- 17 In the Admin Client, from the Identity Driven tab, click Events to view the status of the migration.
- **18** (Optional) If you have a Tail program, you can view the status of the migration.

### 2.3.12 Determine If Any Files Were Skipped

Follow these procedures to see if the Delta file lists any skipped files.

- 1 From the location where you saved the Delta file, open it to see if any files are listed.

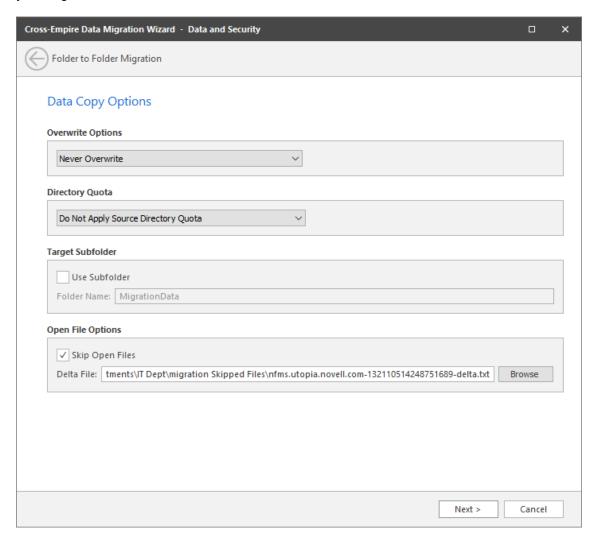
  If any are listed, those are all of the files that were skipped during the first phase of the migration.
- 2 (Conditional) If files are listed, you must have the owners of these files close the files before proceeding with Section 2.3.13, "Migrate Skipped, Modified, and New Files," on page 111

#### 2.3.13 Migrate Skipped, Modified, and New Files

Follow these procedures to migrate any files that were skipped, modified or that were created since the first phase of the migration.

- 1 In the Admin Client, click the Cross-Empire Data Migration tab.
- 2 Click Active Directory to Active Directory.
- 3 Select Migration Wizards > Data and Security.
- 4 In the Select Migration Type Options page, click Next.
- 5 In the Define Mappings page, specify the same source and target paths that you specified in Section 2.3.11, "Migrate User Data," on page 110 and click Next.

6 In the Data Copy Options page, from the Overwrite Options drop-down menu, select Overwrite if Newer, select the Skip Open Files check box, and browse to the location where you stored your original Delta file to create a new Delta file.



- 7 Click Next.
- 8 In the Security and Ownership page, select the Use Identity Map check box, and specify the same Owner for Target Folder, Owner for Target Folder Contents, and related paths as you did in Section 2.3.11, "Migrate User Data," on page 110.
- 9 Click Next.
- 10 Click Validate and observe what will be migrated.
  If you observe any potential problems, you will want to correct them at this time.
- 11 Click Migrate.

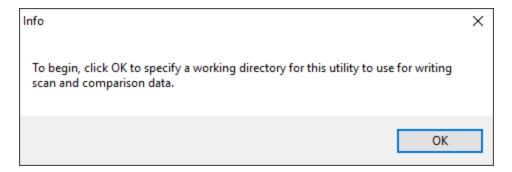
The queued migration events are listed.

- 12 Click Finish.
- 13 In the Admin Client, from the Identity Driven tab, click Events to view the status of the migration.
- **14** (Optional) If you have a Tail program, you can view the status of the migration.

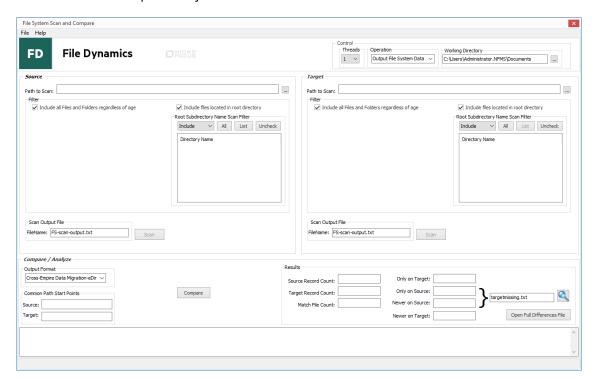
# 2.3.14 Using CEDMScanCompare.exe to Compare Folders and Files Between the Source and Target

With the skipped, modified, and new files and folders migrated, you are now ready to compare the folders and files between the source and target forests to verify that everything migrated properly.

1 Launch the CEDMScanCompare utility that you copied earlier.
The following message appears:



- 2 Click OK.
- **3** Browse to a folder where you want to store the comparison data and click **Select Folder**. The CEDMScanCompare utility interface is launched.

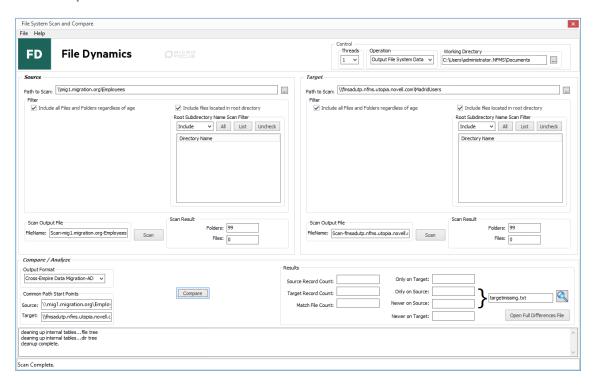


The selected folder location is specified in the Working Directory field.

4 In the Source region, for the Path to Scan field, browse to specify the UNC path to the folder in the source forest you want to scan.

For example: \\WIN-2012-A1ForestB.ORG\NYCvol1\DeptShares

- 5 In the Target region, for the Path to Scan field, browse to specify the UNC path to the folder in the target forest you want to scan.
  - For example: \\WIN-2012-R2.CCTEC.COM\NYC\Departments
- 6 In the Source region, click Scan.
- 7 In the Scan Result region, note the findings in the Folders and Files fields.
- 8 In the Target region, click Scan.
- 9 In the Scan Result region, note the findings in the Folders and Files fields.
- 10 In the Compare / Analyze region, from the FileName drop-down menu, select Cross-Empire Data Migration-AD.
- 11 Click Compare.



- **12** Do one of the following:
  - If the results show no discrepancies between the source and target, all of the folders and files were migrated. Proceed with Section 2.3.15, "Manage the Migrated User Folders through a File Dynamics Home Folder Policy," on page 115.
  - If the results show discrepancies between the source and target, follow the remaining procedures in this section.
- 13 Click Open Full Differences File.

A spreadsheet appears listing:

- All files on the source that are newer than the same named files on the target, along with the source and target path of each file.
- All files on the source that are missing from the target.
- 14 View the files that are newer on the source server as well as those files on the source server that were not migrated.

- 15 Have all of your network users close any open files in the source area, and once again, follow the procedures in Section 2.3.13, "Migrate Skipped, Modified, and New Files," on page 111.
- 16 Run the CEDMScanCompare utility again. When the you have verified that all of the folders and files have migrated, proceed with Section 2.3.15, "Manage the Migrated User Folders through a File Dynamics Home Folder Policy," on page 115.

# 2.3.15 Manage the Migrated User Folders through a File Dynamics Home Folder Policy

Once you have migrated all of the user data, you will want to manage it through File Dynamics. Follow these procedures to create a Home Folder policy and then enforce the policies settings through Management Actions.

#### **Prerequisite**

If the container where you migrated the user home folders does not already have a File Dynamics policy, create a Home Folder policy by following the procedures in Creating a User Home Folder Policy in the *Micro Focus File Dynamics 6.5 Administration Guide*.

#### **Enforcing the Policy through Management Actions**

Perform the following tasks and Management Actions to enforce the policy settings on the migrated home folders.

- 1 Run a Consistency Check.
  - For more information, see Performing a Consistency Check in the *Micro Focus File Dynamics* 6.5 Administration Guide.
- 2 Perform the following Management Actions:
  - Assign Managed Path
     See Assign Managed Path in the Micro Focus File Dynamics 6.5 Administration Guide.
  - Manage
    - See Manage in the Micro Focus File Dynamics 6.5 Administration Guide.
  - Apply Permissions
    - See Apply Permissions in the Micro Focus File Dynamics 6.5 Administration Guide.
  - Apply Owner
    - See Apply Owner in the Micro Focus File Dynamics 6.5 Administration Guide.