

Novell NetWare® Migration Wizard

6.5

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ADMINISTRATION GUIDE

July 1, 2003



Novell®

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NetWare Migration Wizard 6.5 Administration Guide

[July 1, 2003](#)

Online Documentation: To access the online documentation for this and other Novell products, and to get updates, see www.novell.com/documentation.

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About This Guide

This guide describes how to use the Novell® NetWare® Migration Wizard to copy data from one NetWare server to another NetWare server in your network. The guide is intended for network administrators and is divided into the following sections:

- ♦ **Chapter 1, “Overview,” on page 9** explains the capabilities of Novell NetWare Migration Wizard.
- ♦ **Chapter 2, “Migrating Data from NetWare 3,” on page 11** explains the prerequisites and instructions for migrating files, directories, and bindery objects from NetWare 3 servers.
- ♦ **Chapter 3, “Migrating Data from NetWare 4, 5, or 6,” on page 19** explains the prerequisites and instructions for migrating data from a NetWare 4, NetWare 5, or NetWare 6 server.
- ♦ **Chapter 4, “Troubleshooting,” on page 31** provides solutions for resolving errors encountered during the migration.

Additional Documentation

The entire NetWare 6.5 documentation set is available online at the [Novell NetWare 6.5 Product Documentation Web site](http://www.novell.com/documentation/lg/nw65) (<http://www.novell.com/documentation/lg/nw65>).

Novell Education offers a variety of courses that help you maximize your investment in NetWare. For course descriptions, details, and locations of training events, visit the [Novell Education Web site](http://www.novell.com/education/netware6) (<http://www.novell.com/education/netware6>).

Documentation Updates

For the most recent version of the *NetWare Migration Wizard 6.5 Administration Guide*, see the [NetWare Migration Wizard 6.5 online documentation](http://www.novell.com/documentation/lg/migwiz65/) (<http://www.novell.com/documentation/lg/migwiz65/>).

Documentation Conventions

In this documentation, a greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path.

A trademark symbol (®, ™, etc.) denotes a Novell trademark. An asterisk (*) denotes a third-party trademark.

When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as UNIX*, should use forward slashes as required by your software.

1

Overview

Novell® NetWare® Migration Wizard lets you copy data from one NetWare server to another NetWare server in your network.

Migrating Data from NetWare 3—Migration Wizard copies the NetWare 3 file system and bindery objects to a destination NDS® tree. When the bindery objects are copied they are automatically converted to NDS objects.

Migrating Data from NetWare 4, 5, or 6—Migration Wizard migrates the file system and NDS database from a NetWare 4, NetWare 5, NetWare 6, or NetWare 6.5 source server to a faster, more reliable NetWare 6 or NetWare 6.5 destination server. After NDS is migrated, the destination server replaces and assumes the identity of the source server on the network.

Valid destination servers must be running NetWare 5.1, 6.0, or 6.5 if migrating from a NetWare 3, 4, or 5 source server. If migrating from NetWare 6, valid destination servers must be running NetWare 6. Migrations from NetWare 6 to NetWare 6.5 can be accomplished in one of two ways:

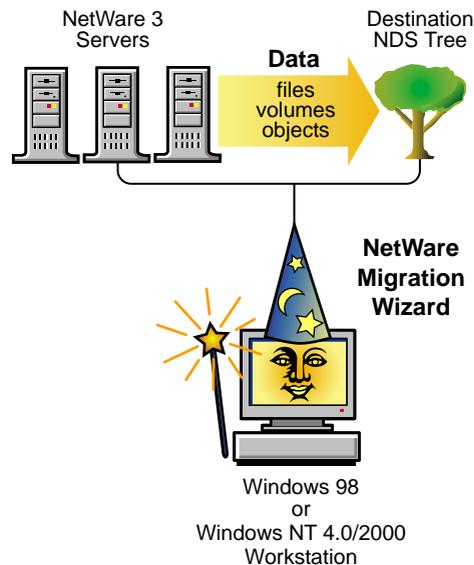
- ◆ Migrate from a NetWare 6.0 source server to a NetWare 6.0 destination server, then upgrade the destination server to NetWare 6.5 with either an in-place or remote upgrade.
- ◆ Upgrade the NetWare 6.0 source server to NetWare 6.5 with either an in-place or remote upgrade, then migrate the upgraded NetWare 6.5 source server to a NetWare 6.5 destination server.

2

Migrating Data from NetWare 3

Novell® NetWare® Migration Wizard 6.5 copies and consolidates your NetWare 3 bindery and file system from one or more existing NetWare 3 servers to a destination NDS® tree.

The following figure shows how the Migration Wizard manages the migration of data from multiple NetWare 3 servers to a destination NDS tree.



To migrate data from NetWare 3, complete the following tasks in the order they are listed:

1. [Meet System and Software Requirements \(page 11\)](#).
2. [Run Migration Wizard \(page 13\)](#).
3. [Migrate Users and Data to the Destination NDS Tree \(page 16\)](#).
4. [Perform Post-Migration Tasks \(page 18\)](#).

Meet System and Software Requirements

Ensuring Your Access

- Log in to your destination NDS tree as a user. Make sure the user has the Supervisor right to the destination servers that you are migrating file data to and three available user licenses.

For more information on how to enable the Supervisor right, see the [ConsoleOne® documentation \(http://www.novell.com/documentation\)](http://www.novell.com/documentation).

- Make sure you have the Write right to all NDS containers and directories that are receiving data from NetWare 3.

Workstation Requirements

- A Windows* NT* (4.0 or later), Windows 2000, or Windows XP Professional Edition workstation with 50 MB of available disk space.

If running on a Windows 2000 workstation, Service Pack 2 or later must be installed.

The Migration Wizard Utility does not work with Windows XP Home Edition or Windows 95/98.

- Novell Client™ software installed and connected to the network.

Windows NT/2000/XP workstations must be running Novell Client for Windows NT/2000/XP version 4.83 or later.

IMPORTANT: If the destination server is running NetWare 6.5 and the Universal Password feature is enabled, you must run the Migration Wizard Utility on a workstation running the Novell Client for Windows NT/2000/XP version 4.9 or later. Universal Password is disabled by default on NetWare 6.5.

To check the Novell Client version, right-click the N icon on the workstation toolbar, then click Novell Client Properties > Client. To download the latest client, see the [Novell Software Downloads site \(http://download.novell.com\)](http://download.novell.com).

- Microsoft* Jet Database drivers installed if running on a Windows NT 4.0 workstation.

If Microsoft Jet Database drivers are not installed on your NT 4.0 workstation, they can be downloaded from www.microsoft.com/downloads by searching for the Jet 4.0 Service Pack 3 Update.

- Microsoft Data Access Components (MDAC) 2.7 installed on the workstation.

If MDAC 2.7 is not installed on your workstation, it can be downloaded from www.microsoft.com/downloads.

- The IPX™ protocol running on your Novell Client workstation.

Make sure that your client workstation has an IPX connection to your source server and destination tree.

Source Server Requirements

The source server is the existing server that contains the data that will be copied to the destination NDS tree.

- The source server must be running NetWare 3.11 or later.

Load one of the following NLM™ programs at the server console of each NetWare 3 source server that you are planning to migrate:

- ◆ TSA311.NLM (for NetWare 3.11)
- ◆ TSA312.NLM (for NetWare 3.12 and 3.2)

- Use SYSCON to verify that you have the console operator right to the source server.
- Back up all data on the source server.

Destination Tree and Server Requirements

The destination NDS tree is the NDS tree that contains the servers that will receive the data migrated from the NetWare 3 source server. After data is copied from the source server, it appears in the destination NDS tree.

Make sure that all the servers that you are *migrating data to* in the destination NDS tree have the following:

- NetWare 4, NetWare 5, NetWare 6, or NetWare 6.5 installed.

NetWare Migration Wizard 6.5 does not migrate to NetWare 4.10 servers.

- The IPX protocol running and bound to the network card of each NetWare server in the destination NDS tree that you are migrating files to.

IMPORTANT: If IPX is not bound and running on the destination server, the file migration will fail. To check whether IPX is bound, enter `CONFIG` at the server console of the destination server.

Continue with the next section, "[Creating a Template Object](#)."

Creating a Template Object

This is an optional prerequisite task. A Template object is used to define additional NDS user attributes to NetWare 3 users during the migration. We recommend that you use a Template object because it is an organized way to migrate your NetWare 3 users to the NDS tree and manage them after they are there.

If there is a conflict between the properties of a Template object and properties of a NetWare 3 user, the properties of the Template object will, in most cases, take priority. For example, if a minimum password length of seven characters is specified for the NetWare 3 user, Jeff, and a minimum password length of nine characters is specified in the Template object, then when Jeff's object is migrated, the object will be created in NDS with a password length of nine characters.

If you want to know what additional NDS attributes can be defined in a Template object, run ConsoleOne and double-click a Template object to view all of the existing properties.

The last name, full name, and description of every NetWare 3 object are always migrated, and their corresponding properties from the Template object are overwritten.

If you decide to use a Template object, you can create one in ConsoleOne by clicking File > New > Object > Template.

Continue with the next section, "[Run Migration Wizard](#)."

Run Migration Wizard

- 1 Install NetWare Migration Wizard 6.5 from the products\migrtwzd directory on *NetWare 6.5 CD 1 (Operating System)*.

Expand the utility and install it on a workstation by double-clicking the migrtwzd.exe file.

- 2 Run Migration Wizard from the location where you installed it.

The installation program, by default, installs Migration Wizard at this location: Start > Programs > Novell > Netware Migration Wizard > NetWare Migration Wizard.

- 3 Read the Welcome screen, then click OK.
- 4 Click Create a New Project > OK.

5 Click NetWare 3 to NetWare 4+ > OK.

6 Click View Online Documentation.

This launches your default Web browser and takes you to the NetWare Migration Wizard 6.5 online documentation.

7 Make sure you have completed the system and software requirements in "**Meet System and Software Requirements**" on page 7, then close your browser.

8 Click Next.

9 Name your migration project, select a place to save it, then click Next.

By default, Migration Wizard saves your project in c:\Program Files\Novell\NetWare Migration Wizard.

10 Select the source servers that you want to migrate.

Only servers that you are already logged in to appear in the Attached Servers text box. To log in to a server, click Login. When you are finished selecting your servers, click Next.

11 Select your destination NDS tree, then click Next.

12 Decide whether you want Migration Wizard to find any NetWare 3 and NDS User objects that have the same name, click Yes or No, then click Next.

If you choose to do this, Migration Wizard will look for duplicate usernames in the destination NDS tree and on the NetWare 3 source servers. Migration Wizard will then display its findings and you can choose to merge the matching User objects.

13 To create and save your project, click Create.

When a project is created and saved, Migration Wizard also creates success and error logs which contain the details of what took place during the migration.

14 Do one of the following:

- ◆ If you clicked No in **Step 12**, skip the rest of these steps and continue with "**Model Your Migration Project**" on page 15.

- ◆ If you clicked Yes in **Step 12**, continue with the next step.

15 Click the Browse button, select an NDS container on the destination NDS tree, then click OK.

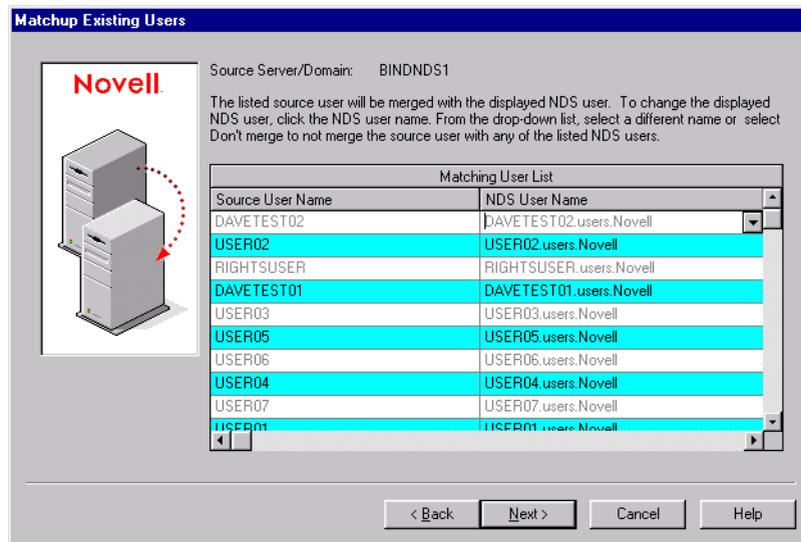
Migration Wizard will search this container and all subcontainers for matching NDS usernames.

16 To begin searching for duplicate usernames, click Next.

17 Decide how to handle duplicate usernames.

The following screen is an example of the username table in Migration Wizard. Carefully review this screen. If you do not make any changes, Migration Wizard will automatically merge the NetWare 3 user with the displayed NDS user.

Figure 1 Merging NetWare 3 Users with Duplicate NDS Users



You have the following options for *each* NetWare 3 user:

- ◆ Merge the NetWare 3 user with the displayed NDS user
Simply leave the NetWare 3 user displayed as it is in the table and continue with the next user.
- ◆ Merge with an NDS user other than the currently displayed NDS user
Click the arrow by the NDS username to view a drop-down list containing all the NDS users that have the same username (including contexts) as the adjacent NetWare 3 user. Select one of the NDS names, then continue with the next NetWare 3 user.
- ◆ Do not merge the NetWare 3 user with any of the NDS users
If you know that none of the listed NDS users represents the same person as the adjacent NetWare 3 user, click the arrow by the NDS username and then click Don't Merge.

18 When you have made a decision for each listed NetWare 3 user, click Finish.

The NetWare 3 users that you chose to merge with NDS User objects appear automatically as dropped objects in the destination NDS tree.

Continue with the next section, "[Model Your Migration Project](#)."

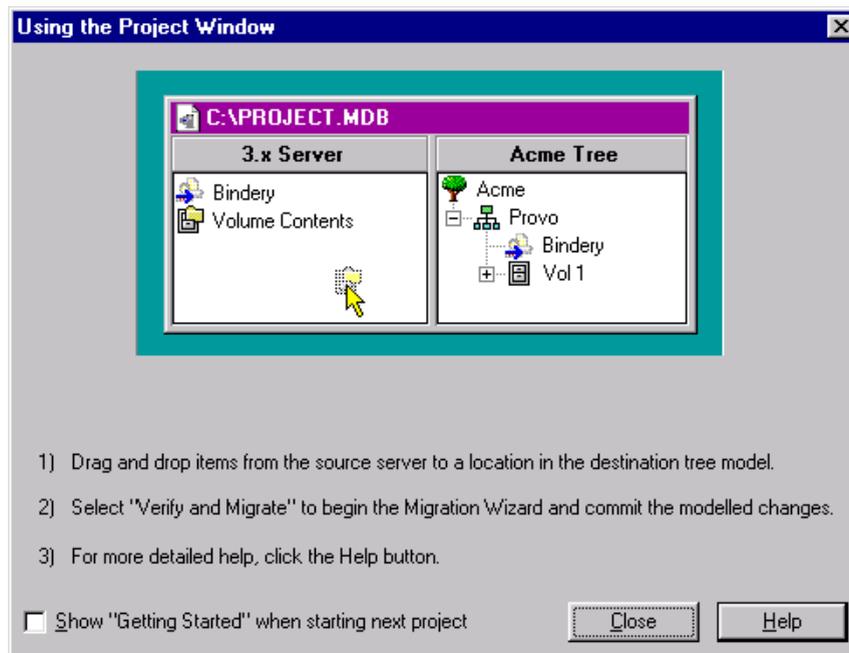
Model Your Migration Project

Most of your work will be done in the Project Window, where you can drag-and-drop NetWare 3 bindery objects and volume data into NDS containers in the destination NDS tree.

The Project Window is a place to model different migration scenarios before you begin the actual migration. The source server's bindery objects and volume data are shown in the left side of the Project Window, and the destination NDS tree is displayed in the right side of the Project Window. All of the planning in the Project Window is done offline, meaning that items moved and created in the Project Window are not actually moved or created until you begin the migration.

The Project Window and the Using the Project Window dialog box appear after you have created the migration project. The following figure is an example of the Using the Project Window dialog box that appears on top of the Project Window.

Figure 2 Using the Project Window Dialog Box



The three basic steps outlined in this dialog box should be performed for each migration project. When you are familiar with the tasks that you will be performing, click Close to access the Project Window and begin modeling your migration.

- 1** Determine which NetWare 3 bindery objects and volume data will be copied to which containers in the destination server's NDS tree.
- 2** If needed, create new objects in the destination NDS tree.
 - ◆ To create a new NDS Organizational Unit (also called a container), right-click the parent of the Organizational Unit.
 - ◆ To create a new folder, right-click an existing folder or volume.
- 3** Drag-and-drop NetWare 3 bindery objects, folders, and volumes into NDS containers.

Continue with the next section, "[Migrate Users and Data to the Destination NDS Tree.](#)"

Migrate Users and Data to the Destination NDS Tree

After you have modeled your migration by dragging-and-dropping bindery objects and volume data in the Project Window, you should verify your project. The Verification Wizard will inform you of such things as name conflicts, insufficient rights, name spaces that are not loaded, disk space limitation, and improper TSAs.

Remember, dragged-and-dropped items appearing in the NDS tree are merely *assigned* to be copied to that area in the NDS tree. Objects will not actually be migrated until you begin the migration.

To begin the verification and migration:

- 1** On the Migration Wizard toolbar, click Project > Verify and Migrate Project, or click the Verify and Migrate button.

IMPORTANT: If you are notified during the verification that certain NLM files are outdated on your NetWare 3 source server, you must update those files. If you receive this notification, manually reload the NLMs.

- 2** Read the Welcome Screen, then click Next.
- 3** (Conditional) If you are migrating more than one server, choose the order that you want your servers migrated in and then click Next.

This matters only if you have duplicate User objects among your source servers.

- 4** If prompted, select what volume you want to migrate your NetWare 3 print queue volume to and then click Next.
- 5** If you want to apply a Template object to newly created users, browse the tree, select the Template object from the tree view, and then click Next.

If you do not want to use a Template object, uncheck the check box and click Next.

IMPORTANT: Home directories are not automatically migrated. To migrate them, you must drag-and-drop the NetWare 3 directory that lists the home directories into the destination NDS tree. Then use a Template object when migrating your NetWare 3 users to the destination NDS tree and make sure that the specified home directory path in the Template object points to the location where you dropped the NetWare 3 directory in the destination NDS tree.

HINT: If you have not created a Template object but you want to use one now, save the project, go to ConsoleOne, and create the Template object. Next, run Migration Wizard again and click Open Last Project. Then restart the migration procedure beginning with [Step 1 on page 17](#).

- 6** Decide how you want to handle any duplicate filenames between the NetWare 3 source servers and the destination NDS tree, select one of the following, then click Next:
 - ◆ Don't Copy Over Existing Files
 - ◆ Copy the Source File If It Is Newer
 - ◆ Always Copy the Source File

- 7** If you are migrating this NetWare 3 server for the first time, click Yes > Next. If you are continuing with a previous migration, click No > Next.

When you migrate users and groups from NetWare 3, Migration Wizard stores a table in the bindery of each source server of the NDS names that it associates with the migrated NetWare 3 users as they are migrated to the destination NDS tree. This way, you can migrate a few users at different times and Migration Wizard will remember where you migrated them to. Also, by storing this information, Migration Wizard can assign the correct file permissions to the appropriate users.

- 8** Type the password for the destination NDS tree, then click Next.
- 9** Type the password for the source server that you are migrating, then click Next.

If you are migrating multiple servers at one time, you will see this screen for every source server that you are migrating.

- 10** To begin the verification process, click Next.

Migration Wizard scans the contents of all dropped folders and verifies that you have sufficient rights to migrate them.

- 11** If prompted, resolve any naming conflicts between different-type objects and then click Next.
You can choose to rename different-type objects or to not migrate them. If you are migrating multiple servers at one time, you will see this screen for every source server that you are migrating.
- 12** If prompted, resolve any naming conflicts between same-type objects and then click Next.
You can choose to merge same-type objects or to not migrate them. If you are migrating multiple servers at one time, you will see this screen for every source server that you are migrating.
- 13** Verify that you do not want to migrate the listed NetWare 3 users and then click Next.
You will see this screen for every source server that you are migrating. If you have made a mistake, click Cancel to return to the Project Window and drag-and-drop the users that you want to migrate.
- 14** Verify that you do not want to migrate the listed NetWare 3 groups and then click Next.
You will see this screen for every source server that you are migrating. If you have made a mistake, click Cancel to return to the Project Window and drag-and-drop the users that you want to migrate.
- 15** Resolve any critical errors, then click Next.
Warnings (noncritical errors) can be resolved after the migration. To resolve a critical error or warning, read the description in the text field located beneath it. This description should give you a good idea of what could be the possible cause of the error and a suggestion for fixing it.
- 16** Read the Verification Summary, then click Proceed to start the actual migration.
- 17** Review the error and success logs, then click Done.

Continue with the next section, "[Perform Post-Migration Tasks](#)."

Perform Post-Migration Tasks

After you've migrated the bindery objects and file system to the destination server, complete the following tasks:

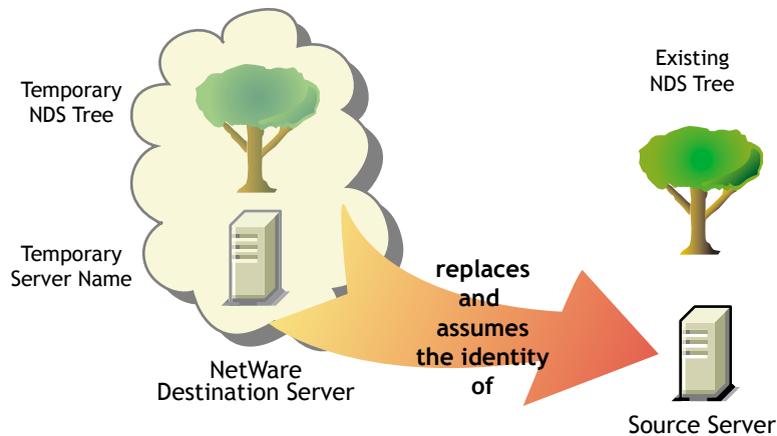
- 1** Modify the print configuration if you want to convert your queue-based printing to iPrint.
For more information, see the [iPrint online documentation \(http://www.novell.com/documentation/lg/nw65/index.html?page=/documentation/lg/nw65/iprint/data/front.html\)](http://www.novell.com/documentation/lg/nw65/index.html?page=/documentation/lg/nw65/iprint/data/front.html).
- 2** Make sure that applications have migrated correctly.
After migration, if you want to install additional network products and services, you can do so from the GUI screen on the server by clicking Novell > Install.
- 3** Make sure that each migrated user has the correct Novell Client properties to log in to the destination NDS tree.
- 4** Modify user login scripts to accommodate the new location of data in the NDS tree.
For more information, see "[Setting Up Login Scripts](http://www.novell.com/documentation/beta/noclienu/index.html?page=/documentation/beta/noclienu/noclienu/data/aj7owg5.html)" in the Novell Client online documentation (<http://www.novell.com/documentation/beta/noclienu/index.html?page=/documentation/beta/noclienu/noclienu/data/aj7owg5.html>).
- 5** Reassign home directories if they were not migrated.

3

Migrating Data from NetWare 4, 5, or 6

When you migrate data from a NetWare[®] 4, NetWare 5, or NetWare 6 source server to a NetWare destination server, Novell[®] NetWare Migration Wizard 6.5 copies the file system and NDS[®] database from the source server to the newly installed NetWare destination server.

After the source server's file system and NDS database is migrated to the destination server, the source server is automatically brought down and the destination server reboots and assumes the name and identity of the source server on your existing network.



Before you can migrate your data, you must first install a destination NetWare server in a temporary NDS tree. A temporary tree is simply a tree that contains one server with a basic installation of NetWare and no additional products installed (other than SMS[™] or any other default products).

To migrate data from NetWare 4, NetWare 5, or NetWare 6, complete the following tasks in the order they are listed:

1. [Meet System and Software Requirements \(page 20\)](#).
2. [Run Migration Wizard \(page 23\)](#).
3. [Model Your Migration Project \(page 23\)](#).
4. [Verify Your Migration Project \(page 24\)](#).
5. [Copy File System Data \(page 24\)](#).
6. [Edit Configuration Files \(page 25\)](#).
7. [Begin NDS Migration \(page 26\)](#).
8. [Finish the NDS/eDirectory Migration \(page 28\)](#).
9. [Perform Post-Migration Tasks \(page 29\)](#).

Meet System and Software Requirements

Workstation Requirements

- ❑ A Windows NT (4.0 or later), Windows 2000, or Windows XP Professional Edition workstation with 50 MB of available disk space.

If running on a Windows 2000 workstation, Service Pack 2 or later must be installed.

The Migration Wizard Utility does not work with Windows XP Home Edition or Windows 95/98.

- ❑ Novell Client™ software installed and connected to the network.

Windows NT/2000/XP workstations must be running Novell Client for Windows NT/2000/XP version 4.83 or later.

IMPORTANT: If the destination server is running NetWare 6.5 and the Universal Password feature is enabled, you must run the Migration Wizard Utility on a workstation running the Novell Client for Windows NT/2000/XP version 4.9 or later. Universal Password is disabled by default on NetWare 6.5.

To check the Novell Client version, right-click the N icon on the workstation toolbar, then click Novell Client Properties > Client. To download the latest client, see the [Novell Software Downloads site \(http://download.novell.com\)](http://download.novell.com).

- ❑ Microsoft* Jet Database drivers installed if running on a Windows NT 4.0 workstation.

If Microsoft Jet Database drivers are not installed on your NT 4.0 workstation, they can be downloaded from www.microsoft.com/downloads by searching for the Jet 4.0 Service Pack 3 Update.

- ❑ Microsoft Data Access Components (MDAC) 2.7 installed on the workstation.

If MDAC 2.7 is not installed on your workstation, it can be downloaded from www.microsoft.com/downloads.

- ❑ (Conditional) If migrating from NetWare 4, the IPX™ protocol should be configured on your Novell Client workstation.
- ❑ For better performance, we strongly recommend that the source server, destination server, and client workstation run on a common LAN segment.

Source Server Requirements

The source server is the NetWare server that contains the files, volumes, and NDS objects that will be copied to the NetWare destination server. Valid source servers can be running NetWare 4.11, 4.2, 5.0, 5.1, 6.0, or 6.5. Migrations to a NetWare 6.5 destination server can be successfully completed from a NetWare 4.11, 4.2, 5.0, 5.1, 6.0, or 6.5 source server. However, migrating from NetWare 6.0 to NetWare 6.5 must be done in one of two ways:

- ◆ Migrate from a NetWare 6.0 source server to a NetWare 6.0 destination server, then upgrade the destination server to NetWare 6.5 with either an in-place or remote upgrade.
- ◆ Upgrade the NetWare 6.0 source server to NetWare 6.5 with either an in-place or remote upgrade, then migrate the upgraded NetWare 6.5 source server to a NetWare 6.5 destination server.
- ❑ Use ConsoleOne® to verify that you have the Supervisor right to the source server's file system and the source server itself.

- ❑ Update the source server with the latest NetWare Support Pack.
Updates are available at the [Consolidated Support Pack home page \(http://support.novell.com/tools/csp\)](http://support.novell.com/tools/csp).
- ❑ Any applications, products, or services (virus scan software, backup software, etc.) running on the server to be migrated should be shut down before beginning the migration.
- ❑ (Conditional) If you are migrating data from NetWare 4, make sure that the source server's volumes are running long name space support on all volumes to be copied.
To add long name space support to a NetWare 4.11 or NetWare 4.2 volume, enter the following at the server console:

LOAD LONG

ADD NAME SPACE LONG TO *volume_name*
- ❑ (Conditional) If you are migrating data from NetWare 4, make sure that `clibaux.nlm` is loaded.
To load `clibaux.nlm` on a NetWare 4.11 or 4.2 server, enter the following at the server console:

load clibaux
- ❑ Load DSREPAIR and run the following three options:
 - ◆ Unattended Full Repair
 - ◆ Time Synchronization
 - ◆ Report Synchronization Status
 Make sure that these finish with no errors.
- ❑ Back up NDS and all data.

Destination Server Requirements

The destination server is the new computer that will receive the data from the source server. This server must be installed into a temporary tree.

After data is migrated from the source server to the destination server, the destination server reboots and Migration Wizard automatically modifies the destination server's `autoexec.ncf` file to include the source server's name and internal IPX number/server ID. You don't have to modify these manually.

Valid destination servers can be running NetWare 5.1, 6.0, and 6.5. Migration Wizard does not migrate to NetWare 4 destination servers. If migrating from NetWare 6.0, valid destination servers must be running NetWare 6.0. Migrations from NetWare 6.0 to NetWare 6.5 can be accomplished in one of two ways:

- ◆ Migrate from a NetWare 6.0 source server to a NetWare 6.0 destination server, then upgrade the destination server to NetWare 6.5 with either an in-place or remote upgrade.
- ◆ Upgrade the NetWare 6.0 source server to NetWare 6.5 with either an in-place or remote upgrade, then migrate the upgraded NetWare 6.5 source server to a NetWare 6.5 destination server.
- ❑ Install the destination server with the NetWare operating system that you are migrating to.
 - ◆ For instructions on installing NetWare 5.1, see the [NetWare 5.1 Installation Guide \(http://www.novell.com/documentation/lg/nw51/docui/index.html\)](http://www.novell.com/documentation/lg/nw51/docui/index.html).

Make sure that you select the custom option on the Installation Options screen during the NetWare 5.1 installation, and deselect all deselectable products except SMS. Don't worry about any default products that you can't deselect.

- ◆ For instructions on installing NetWare 6.0, see the *NetWare 6 Overview and Installation Guide* (<http://www.novell.com/documentation/lg/nw6p/index.html?page=/documentation/lg/nw6p/setupenu/data/hz8pck9v.html>).

Make sure that you select the Pre-migration Server option described in **Selecting the Type of Installation** in the *NetWare 6 Overview and Installation Guide* during the NetWare 6 installation. And then select the custom option so that you can verify that you have enough room on your destination server to accommodate your source server data.

- ◆ For instructions on installing NetWare 6.5, see the *NetWare 6.5 Installation and Overview Guide* (<http://www.novell.com/documentation/lg/nw65/>).

Make sure that you select the Pre-migration Server pattern described in the *NetWare 6.5 Overview and Installation Guide* (<http://www.novell.com/documentation/lg/nw65/index.html?page=/documentation/lg/nw65/install/data/aj8szb0.html>) under the Choosing the Server Type heading during the NetWare 6.5 installation.

- Use ConsoleOne to verify that you have the Supervisor right to the destination server's file system and the destination server itself.
- If the destination server is running NetWare 6.5, the Universal Password feature must be disabled until the migration completes.

Universal Password is disabled by default on NetWare 6.5.

- Create a temporary NDS tree with a temporary NDS tree name.

IMPORTANT: The temporary name and temporary NDS tree name must not be the same as the source server's name or NDS tree name; otherwise, the destination server will not assume the identity of the source server after the migration.

- Migration Wizard migrates compressed volumes. If you are migrating compressed volumes to uncompressed volumes, Migration Wizard decompresses the volumes during the migration. Make sure you have enough room on the uncompressed volume to accommodate the source volumes after they are decompressed.
- During the installation, assign a different IP address to the destination server than is assigned to the source server.

After the migration completes and the source server is taken offline, you can change the destination server's IP address to match what had been assigned to the source server.

- (Conditional) If migrating a NetWare 4.11 or 4.2 server to a NetWare 6.0 or 6.5 destination server, you must first generate GUIDs for the NetWare 4.11 and 4.2 servers in the tree.

To generate GUIDs on NetWare 4 servers in your tree, launch the Deployment Manager (nwdeploy.exe) on a workstation in your tree and click the Generate GUIDs on NetWare 4 Servers link. Follow the instructions in the Deployment Manager.

NOTE: Always run the Deployment Manager *before* installing NetWare 6.5 servers, including NetWare 6.5 pre-migration servers.

The GUID generator in Deployment Manager does not work with NetWare 4.10 servers, only with 4.11 or 4.2 servers. If there is a NetWare 4.10 server in your tree, it must be removed or you cannot migrate.

- ❑ (Conditional) If migrating from NetWare 4, install and configure the IPX protocol.

The IPX protocol must be bound to the destination server for the migration to work. (You can remove IPX after completing the migration.)

IMPORTANT: IP addresses for the source server will not be migrated. For more information on changing your IP addresses, see [Step 3 on page 25](#).

Continue with the next section, "[Run Migration Wizard](#)."

Run Migration Wizard

- 1 Install NetWare Migration Wizard 6.5 from the products\migrtwzd directory on *NetWare 6.5 CD 1 (Operating System)*.

Expand the utility and install it on a workstation by double-clicking the migrtwzd.exe file.

- 2 Run Migration Wizard from the location where you installed it.

The installation program, by default, installs Migration Wizard at this location: Start > Programs > Novell > Netware Migration Wizard > NetWare Migration Wizard.

- 3 Read the Welcome screen, then click OK.
- 4 Click Create a New Project > OK.
- 5 Click NetWare 4, 5, or 6 to NetWare 5 or 6 > OK.
- 6 Click View Online Documentation.

This launches your default Web browser and takes you to the NetWare Migration Wizard 6.5 online documentation.

- 7 Make sure you have completed the system and software requirements in "[Meet System and Software Requirements](#)" on page 18, then close your browser.

- 8 Click Next.

- 9 Name the project, select a place to save it, then click Next.

By default, Migration Wizard saves all projects to c:\Program Files\Novell\NetWare Migration Wizard.

- 10 Select the NDS tree that contains your source server, then click Next.
- 11 Select your source server from the NDS tree, then click Next.
- 12 Select the NDS tree that contains your destination server, then click Next.
- 13 Select your destination server from the destination NDS tree, then click Next.
- 14 To save your project and access the Project Window, click Create.

Continue with the next section, "[Model Your Migration Project](#)."

Model Your Migration Project

Most of your work will be done in the Project Window, where you can drag-and-drop NetWare 4, 5, and 6 data into volumes and folders in the destination NDS tree.

The Project Window is a place to model different migration scenarios before you begin the actual migration. The source server's volume data is shown in the left side of the Project Window, and the destination NDS tree is displayed in the right side of the Project Window. All of the planning

in the Project Window is done offline, meaning that folders moved and created in the Project Window are not actually copied or created until you begin the migration.

The Project Window and the Using the Project Window dialog box appear after you have created the migration project.

- 1** Determine what NetWare 4, 5, or 6 volume data will be copied to which folders in the destination server's NDS tree.
- 2** If needed, create new folders in the destination NDS tree.
 - ◆ To create a new folder, right-click an existing folder or volume.
- 3** Drag-and-drop NetWare 4, 5, or 6 folders and volumes into NDS containers.

IMPORTANT: If you are migrating NDPS® information to the destination server, make sure you migrate the sys:ndps directory and the sys:login/ippdocs directory. They are necessary for NDPS to function properly.

Continue with the next section, "[Migrate Users and Data to the Destination NDS Tree.](#)"

Verify Your Migration Project

After you have modeled your migration by dragging-and-dropping volume data in the Project Window, you should verify your project. The Verification Wizard will inform you of such things as insufficient rights, name spaces that are not loaded, disk space limitation, and improper TSAs.

Remember, dragged-and-dropped items appearing in the NDS tree are merely *assigned* to be copied to that area in the NDS tree. Objects will not actually be migrated until you begin the migration.

To begin the verification and migration:

- 1** On the Migration Wizard toolbar, click Project > Verify and Migrate Project, or click the Verify and Migrate button.

Continue with the next section, "[Copy File System Data.](#)"

Copy File System Data

During the Copy File System step, all source server trustees and ownerships are backed up to special trustee backup files. These files can be used in case the NDS/eDirectory on the source server has to be removed and the trustees and ownerships restored. For more information on NDS restoration, see "[NDS Migration](#)" on page 34.

Additionally, all source server standard sys: volume trustees and ownerships will be backed up to special trustee backup files and these files are copied to the destination server. They are restored during the fourth phase of the migration.

All trustees for dropped folders are also backed up to special backup files and these files are copied to the destination server during this step. Also, dropped directories are copied to the destination server and created directories are added to the destination server during this step.

- 1** In the Project View dialog box, click Copy File System Data.

Before Migration Wizard starts copying files, it backs up your directory and file trustees and saves them in files located on the source and the destination server. When the NDS migration is complete, Migration Wizard restores the trustees from the files it stored on the destination server.

- 2** Decide how you want to handle any duplicate filenames between the source server and the destination NDS tree, select one of the following, then click Next:
 - ♦ Don't Copy Over Existing Files
 - ♦ Copy the Source File If It Is Newer
 - ♦ Always Copy the Source File
- 3** Decide how you want to copy your volumes, select one of the following, then click Next.
 - ♦ Copy Volumes with Users Logged In
 - ♦ Disable Login

Migration Wizard does not copy open files. If you disable user login, you can be sure that no other users will log in to the network and open files during the file copy.
- 4** Type the passwords for the source and destination trees, then click Next.
- 5** If prompted, resolve any critical errors or warnings and then click Next.
- 6** (Conditional) If newer NLMs are available, a dialog box displays asking if you want to copy these newer NLMs to your system. To have the Migration Wizard Utility copy the NLMs for you, click Yes.
- 7** In the Ready to Copy Files dialog box, read the explanation of the file copy process and then click Proceed.

The Back Up the Source Server's Trustees? screen displays.
- 8** If your source server has previously been backed up by the Migration Wizard during this step, you can click No. If the source server has not undergone a Migration Wizard backup, back it up now by clicking Yes.
- 9** Review the error and success logs, then click Done.

Continue with the next section, "[Edit Configuration Files](#)."

Edit Configuration Files

The Edit Configuration Files step compares the configuration files between the source and destination servers and lets you make changes to those files if you want.

- 1** In the Project View dialog box, click Edit Configuration Files.

Migration Wizard lets you modify any .ncf or .cfg files on the destination server. These files contain default LOAD statements and parameters.

IMPORTANT: Make sure that all files are closed before you migrate your NDS database.
- 2** In the text box, select the configuration file that you want to edit and then click Edit File.
- 3** Copy and paste the commands from the configuration file on the source server to the corresponding configuration file on the destination server, then click Save & Close.

If you intend to change the IP address on your destination server to be the same as the IP address of your source server, you must edit your configuration files and change the IP address in two places: autoexec.ncf and sys:\etc\hosts.

Copy the source server's IP address and paste it into the destination server's autoexec.ncf file. (This works only if your IP LOAD and BIND statements are located in autoexec.ncf.) You also need to go to the server console of the destination server and change the IP address in the sys:\etc\hosts file. Look for the original name of the destination server.

If you use INETCFG to assign IP addresses, change the IP addresses *after* the migration is complete.

- 4** (Conditional) If you are using configured time sources (timesync.cfg), then copy and paste your Timesync information from the source server's timesync.cfg file to the destination server's timesync.cfg file.
- 5** Close the Compare Configurations dialog box.

Continue with the next section, "[Begin NDS Migration](#)."

Begin NDS Migration

The Begin NDS Migration step migrates the NDS/eDirectory files from the source server to the destination server. The source server is brought down and the destination server is restarted during this step.

- 1** In the Project View dialog box, click Begin NDS/eDir Migration.
- 2** Back up all volumes that you are *not* planning to migrate and ensure the following before continuing:
 - ◆ All volume data migrated successfully
 - ◆ All critical errors from the file copy are resolved
 - ◆ The servers in your source NDS tree are in time sync and NDS is synchronized.

For more information, see "[Source Server Requirements](#)" on page 20.

- 3** Click Next.
- 4** Insert the licensing diskette, browse to or type the path to the licensing file, then click Next.

If you have an MLA, you also have the option of selecting the MLA instead of inserting the licensing diskette.

- 5** Select Yes or No to update the source server's schema, then click Next.

Migration Wizard can update the source server's schema to include the NDS classes of the default applications that are installed on the destination server.

By default, Yes is selected, which causes Migration Wizard to compare the source and destination schemas. This comparison will help you determine how to extend your schema in preparation for the migration.

- 6** (Optional but recommended) Verify that you have run the DSREPAIR procedures in "[Source Server Requirements](#)" on page 20 to verify that the NDS tree containing the source server is functioning correctly, click Yes or No to acknowledge that your tree is healthy, then click Next.

Migration Wizard does not prevent you from continuing if you have not run DSREPAIR to verify the health of your tree. However, if your tree is unhealthy before you begin the migration, the migration might not complete successfully.

- 7** (Conditional) If you are migrating from NetWare 4 running Border Manager[®], NetWare 5, NetWare 6, or NetWare 6.5, you are now prompted to copy and transfer the NICI configuration files from the source server to the destination server.

To ensure the security certificate works properly on the destination server, you must copy the source server's NICI configuration files to the destination server. To facilitate the NICI file copy, nuwnici.nlm is first copied to both the source and destination servers.

7a To copy the nuwnici.nlm to the source and destination servers, click Copy NLM.

7b Click Next.

7c Insert a blank formatted diskette into the floppy drive on the destination server.

7d At the destination server console, enter **load nuwnici -1**.

7e Remove the diskette from the destination server and insert it into the source server's floppy drive.

7f At the source server console, enter **load nuwnici -2**.

This copies the NCI files to the diskette.

7g Remove the diskette from the source server and insert it into the destination server's floppy drive.

7h At the destination server console, enter **load nuwnici -3**.

This copies the NCI files to the destination server.

7i Click Next.

HINT: If you get NCI errors when NDS tries to load or when you copy the NCI files, check and see if pki.nlm will load on the destination server. If it won't load, see ["NICI Errors" on page 33](#).

8 Delete all user connections (except your own) to the source and destination servers, then click Next.

If you want to first broadcast a logout message to any users logged in to the server, click Broadcast Logout Message, type the message in the field, and then click OK.

9 Type the passwords for the source and destination trees, then click Next.

10 Resolve any critical errors or warnings on the Migrate NDS Verification Results screen, then click Next.

11 Perform the eDirectory step-by-step migration.

The eDirectory migration is broken into several steps. This is for diagnostic purposes. If the eDirectory migration fails for any reason, you will know exactly what step it failed on and can take the appropriate measures to fix the problem.

For more information on the eDirectory/NDS migration process, including steps to restore the source and destination servers, see ["NDS Migration" on page 34](#).

11a Click Next.

The first step changes autoexec.ncf and timesync.cfg; modifies the server name in hosts, hostname, and snmp.cfg; and renames smdr.cfg to smdr.mig. The first step also renames rootcert.der in both the sys:system and sys:public directories to rootcert.der.bak.

At the end of the migration process, the source server is brought down and the destination server reboots and takes over the name and identity of the source server.

Migration Wizard automatically modifies the following items in the destination server's autoexec.ncf file:

- ◆ The file server name is changed to the name of the source server
- ◆ The time zone is changed to the time zone stored in the source server's autoexec.ncf file
- ◆ The server ID is changed to the IPX internal net value or server ID stored in the source server's autoexec.ncf file

- ◆ The default time server type is changed to the value stored in the source server's autoexec.ncf file
- ◆ The bindery context is changed to the bindery context stored in source server's autoexec.ncf file

IMPORTANT: During the migration, the source server's Timesync information is not automatically migrated.

- 11b** To begin the next step (backing up eDirectory, copying the eDirectory backup files to the destination server, and copying the eDirectory backup files to sys:system\nuw30\ndsbu on the source server), click Next.
- 11c** Down the source server by clicking Next.
The Source Server Status dialog box displays.
- 11d** Verify that the source server is down, then click OK.
- 11e** To begin the next step (removing eDirectory from the destination server and deleting the client connection), click Next.
- 11f** To begin the next step (upgrading eDirectory on the destination server if necessary, restoring eDirectory on the destination server, and preparing to reboot the destination server), click Next.
- 11g** Reboot the destination server by clicking Next.
- 11h** If you are ready to proceed, click Yes > Finish.
- 12** Check the former destination server and verify that it has restarted and taken on the name of the source server.
- 13** Reboot your workstation and log in to the former destination server.
This clears old connections from the workstation and establishes a clean connection to the former destination server.
If you can't log in, refer to [“Workstation-to-Server Connections” on page 31](#).
- 14** Restart the Migration Wizard utility.
- 15** Read the Welcome screen, then click OK.
- 16** Click Open Last Project > OK.
The utility verifies that the first three steps of the project file are complete.
- 17** If you are ready to finish the migration, click Yes.

Finish the NDS/eDirectory Migration

The Finish the NDS/eDirectory Migration step upgrades the schema and restores the trustees to the new server after it has restarted.

- 1** In the Project View dialog box, click Finish NDS/eDir Migration.
The Continue NDS/eDir Migration dialog box appears, outlining the NDS backlink process that needs to be run on the destination server.
- 2** At the destination server console, enter the following:

```
set dstrace=on
```

then

```
set dstrace=+blink
```

then

```
set dstrace=*b
```

- 3 Click Yes > Next.
- 4 Type the tree password in the field provided, then click Next > Continue.
- 5 Review the error and success logs, then click Done.
- 6 In the Project View dialog box, click Close.

Continue with the next section, "[Perform Post-Migration Tasks.](#)"

Perform Post-Migration Tasks

- 1 Run DSREPAIR on the destination server and select Unattended Full Repair.
- 2 Make sure that user information migrated successfully.
- 3 Run DSREPAIR > Time Synchronization to verify that your source server is synchronized with the rest of your servers.
- 4 Verify that the correct IP address is assigned to the new server in all appropriate files.

For example, autoexec.ncf, sys:\etc\hosts, and sys:\etc\hostname.

IMPORTANT: Failure to have the correct IP address in the hosts or hostname files causes the post-installation of some products to fail.

- 5 Reinstall any applications.

IMPORTANT: Because the source server's identity replaces the destination server, all NDS objects on the destination server, including those representing applications, are removed and replaced by the NDS objects that exist on the source server. However, the NLM programs associated with the destination server's applications still exist. Because you cannot manage applications without their corresponding NDS objects, you must reinstall the applications to restore their NDS objects to the NDS tree.

If your destination server was running NetWare 5.1, you might see warnings on your server referring to SMS, LDAP, Novell Certificate Server, or NetWare Management Portal. Just ignore the warnings and reinstall the products after NDS has been migrated.

To reinstall these network products and services, go to the NetWare Deployment Manager utility (nwdeploy.exe) located on *NetWare 6.5 CD 1 (Operating System)*, or go to the GUI interface and click the Novell icon on the servertop.

- 6 If you haven't already done so, install the latest NetWare Support Pack.

This ensures that you get the latest code for the applications that you are reinstalling. The latest Support Packs are available at the [Novell Support Web site \(http://support.novell.com/misc/patlst.htm\)](http://support.novell.com/misc/patlst.htm).

Installing Tomcat and exteNd Application Server After the Migration

After completing a NetWare 6.5 to NetWare 6.5 migration using the Migration Wizard, complete the following steps to ensure that Tomcat installs correctly:

- 1 Copy sys:\sys.mig\java to sys:\java, overwriting all existing files.
- 2 Copy sys:\sys.mig\adminsrv to sys:\adminsrv, overwriting all existing files.

- 3** Copy `sys:\sys.mig\system\ipconf` to `sys:\system\ipconf`, overwriting all existing files.

After completing a NetWare 6.5 to NetWare 6.5 migration using the Migration Wizard, complete the following steps to ensure that exteNd Application Server installs correctly:

- 1** Copy `sys:\sys.mig\java` to `sys:\java`, overwriting all existing files.
- 2** Copy `sys:\sys.mig\etc\my.cnf` to `sys:\etc\my.cnf`.

4 Troubleshooting

Refer to the appropriate section if you are having trouble with any of the following:

- ◆ [General Connection Problems \(page 31\)](#)
- ◆ [Workstation-to-Server Connections \(page 31\)](#)
- ◆ [Server-to-Server Connections \(page 32\)](#)
- ◆ [File Copy \(page 32\)](#)
- ◆ [SMDR Errors \(page 33\)](#)
- ◆ [Restoring Trustees \(page 33\)](#)
- ◆ [Nuwagent.nlm \(page 33\)](#)
- ◆ [NICI Errors \(page 33\)](#)
- ◆ [NDS Migration \(page 34\)](#)

General Connection Problems

To eliminate unnecessary connection problems, make sure that

- ◆ The source and destination servers have enough available server and workstation licenses to do the migration.
- ◆ The NDS[®] user that you are using to do the migration has no concurrent connection limitations. To check this, do the following:
 - ◆ Run ConsoleOne[®] on the workstation.
 - ◆ Edit the properties of the NDS User object.
 - ◆ Click the Login Restrictions tab.
 - ◆ Uncheck the Limit Concurrent Connections check box.
- ◆ The NDS user that you are using to do the migration has the Supervisor right to the source server's NDS object. Use ConsoleOne to verify that the NDS object of the NDS user is listed in the source server's Operators list.

Workstation-to-Server Connections

If you have problems establishing or maintaining connections between your servers and workstations, try one or more of the following:

- ◆ Reboot the client workstation to clear the cache in the Novell[®] Client[™] software.
- ◆ Map a drive to the server instead of logging in. This is especially useful when connecting with the IPX[™] protocol.

- ◆ Search for the server by its IP or IPX address instead of its name. Type the IP or IPX address in the Server field of the Novell Login dialog box.
- ◆ Try connecting to the server and not the NDS tree by specifying only the name of the server and leaving the tree name and context blank.
- ◆ Clear all unauthenticated connections. To do this, right-click the N icon and then click NetWare Connections. Detach from all servers and trees that you are not authenticated to, then try logging in again.
- ◆ Make sure your Preferred NetWork Protocol is set correctly by doing the following:
 - ◆ Right-click the N icon.
 - ◆ Click Novell Client Properties > Protocol Preferences.
 - ◆ Select the desired preferred network protocol, then click OK.
 - ◆ Reboot the workstation.
- ◆ Unbind the protocol you are not using from the destination server. For example, if you are using IPX for the migration but IP is bound on the destination server, unbind the IP protocol on the destination server during the migration.

Server-to-Server Connections

If you have problems establishing or maintaining connections between your servers, try one or more of the following:

- ◆ Do not remove the source or destination server from the NDS tree. The servers must be able to communicate with the other servers in the tree during the migration.
- ◆ Make sure the destination and source servers can communicate with each other.
For IPX connections, enter **DISPLAY SERVERS** at the server console. For IP connections, enter **PING** at the server console.
- ◆ If you are using IPX, make sure the frame type and the IPX network number/server ID are consistent between the source and destination servers. For IP connections, verify that you have corresponding addressing, subnet mask, and gateway information.
- ◆ Reboot the destination server.

File Copy

If you are having problems during the file copy, try one or more of the following:

- ◆ Enable login on both the destination and source servers. If you have disabled login before you started the file copy, the servers can't log in to each other in order to migrate the files.
NOTE: If you have selected to do so, Migration Wizard disables login for you during the migration.
- ◆ If files are copying very slowly, make sure that the servers and workstation are configured at the lowest common LAN speed. Verify that the NICs and anything in between are all hard coded to either communicate half-duplex or full-duplex; they need to be the same throughout. If there are problems with full-duplex, use half-duplex.
NOTE: If compressed files are migrated to uncompressed volumes, file copy might be slower.

SMDR Errors

Sometimes the `smdr.nlm` program that is running on the destination server can't make a connection to the source server. To correct this problem, try one or more of the following:

- ◆ Unbind the protocol you are not using from the destination server. For example, if you are using IPX for the migration but IP is bound on the destination server, unbind the IP protocol on the destination server during the migration.
- ◆ If Migration Wizard can't load the appropriate `tsa.nlm` on your destination server, manually load it from the destination server console and following the onscreen instructions. Or, enter **SMDR NEW** at the server console to re-create the SMDR object.
- ◆ Load `smdr.nlm` at the destination server console and then enter **SMDR NEW** at the destination server console to solve SMS™ problems.
- ◆ Make sure the latest NLM™ programs are loaded.

Migration Wizard automatically copies the required NLMs to the source and destination servers. To verify that you have the latest NLMs loaded, check the files in the NetWare Migration Wizard\products\nw3x directory. You might have to load TSA312 manually.

- ◆ Check your primary connections. Right-click the N icon in the system tray, then click NetWare Connections. Make sure the destination tree and server are marked as "primary."
- ◆ If you are migrating from NetWare® 3, make sure the bindery context is set on the destination server. If you are migrating to NetWare 6.5, enter **set bindery context = o=context** on the destination server console.
- ◆ Reboot the source server.

Restoring Trustees

- ◆ If the trustees fail to restore and you get a 0xfffffb error, this means that you did not modify your IP address in all the necessary places. For more information, see [“Edit Configuration Files” on page 25](#).
- ◆ If you need to restore trustees, in the Migration Wizard, you can click the Finish NDS Migration button or select Restore Trustees on the toolbar.

Nuwagent.nlm

Nuwagent.nlm is the NLM program that the Migration Wizard uses to do much of its work. If you get errors that the `nuwagent.nlm` won't load, try the following:

- ◆ Manually load `nuwagent.nlm` at the server console.
- ◆ Enter **SMDR NEW** at the destination server console. This re-creates the SMDR configuration and allows `nuwagent.nlm` to load.

NICI Errors

If you are getting NICI errors when NDS is trying to load or when you are copying the NICI files in the Migration Wizard, this might mean that your NICI files are corrupt. To correct the problem, follow these steps on the server that is getting NICI errors:

- 1 Copy the *.nfk file from *NetWare 6.5 CD 1 (Operating System)* to the server's sys:system directory.
- 2 Rename the *.nfk file that you just copied to nicifk (this has no extension).
- 3 Go to the [Novell Support Web site \(http://support.novell.com/filefinder\)](http://support.novell.com/filefinder) and download nrepair3.exe.
- 4 Extract nrepair3.exe and locate nrepair.nlm.
- 5 Run nrepair.nlm on the server, clicking Yes at all the prompts.
- 6 Reboot the server.
- 7 Load pki.nlm on the server and verify that you are no longer getting NICI errors.

If you still see NICI errors, go to the [Novell Support Home Page \(http://support.novell.com/search/kb_index.jsp\)](http://support.novell.com/search/kb_index.jsp) and search for TID #10025666.

NDS Migration

If the migration fails during the NDS Migration step, you need to restore the source and destination servers to their original configuration before you can retry the NDS migration. The instructions for restoring the servers to their original configurations are different depending on when the migration of data failed.

If Begin NDS Migration, button 3, failed and the destination server did *not* reboot and take on the name and identity of the source server, complete the steps in “[Restore Source Server to Its Original Configuration](#)” on page 34.

If Begin NDS Migration, button 3, successfully completed and the destination server has already rebooted and taken on the name and identity of the source server, complete the steps in the following sections:

1. “[Remove NDS from the Destination Server](#)” on page 35.
2. “[Remove NDS from the Source Server](#)” on page 35.
3. “[Restore NDS to the Source Server](#)” on page 36.
4. “[Reinstall the Destination Server](#)” on page 37.

Restore Source Server to Its Original Configuration

If Begin NDS Migration, button 3, failed and the destination server did *not* reboot and take on the name and identity of the source server, you need only restore NDS to the source server. When NDS has been restored, you have restored the source server to its original configuration and you are ready to try the NDS migration again.

- 1 Enter one of the following at the server console of the source server:
 - ♦ **LOAD INSTALL** if the source server is running NetWare 4
 - ♦ **NWCONFIG** if the source server is running NetWare 5 or later
- 2 Select Directory Options > Directory Backup and Restore > Restore Local DS Information after Hardware Upgrade.
- 3 Press F3 and enter **SYS : SYSTEM \NUW30 \NDSBU** when prompted for the location of the backup files.

NDS has now been restored to the source server.

IMPORTANT: Do *not* reboot the destination server. Because the destination server did not take over the identity of the source server, no other action is required prior to performing the NDS migration again.

- 4 To perform the NDS migration again, launch Migration Wizard and then open the project you were previously working on. When the project opens and you see the Project Window, click the Begin NDS Migration button and follow the instructions in “[Begin NDS Migration](#)” on [page 26](#).

Remove NDS from the Destination Server

If Begin NDS Migration, button 3, successfully completed and the destination server has already rebooted and taken on the name and identity of the source server, you must remove NDS from the destination server before you can restore NDS to the source server.

- 1 At the destination server console, enter **NWCONFIG**.
- 2 Select Directory Options > Remove Directory Services from This Server.
- 3 Press Enter when you see a warning instructing you to not remove Directory Services.
Ignore any other errors during the removal of NDS.

- 4 Select Yes to Remove Directory Services.

- 5 Specify the Admin username and password.

- 6 Press Enter to reference a different object.

This object is used when NDS is restored back to the source server.

WARNING: Do not press Esc. If you do, the server references you entered will not be saved or restored to the server.

- 7 Specify the full Admin username as the placeholder object distinguished name.

- 8 Specify Root as the distinguished name to change from.

- 9 (Conditional) If the information about single reference time source appears, review the information and press Enter.

- 10 (Conditional) If your server holds the Master copy of a replica, press enter when you see a warning.

- 11 Designate another server to hold the Master replica.

You can choose to let NWCONFIG randomly select another server, or you can designate one yourself.

- 12 Return to the NWCONFIG utility and verify that NDS has been removed by selecting Remove Directory Services from This Server.

If the message appears saying that NDS has already been removed, *bring the destination server down* and continue with the next section, “[Remove NDS from the Source Server](#).”

If NDS was *not* successfully removed, exit NWCONFIG and enter **NWCONFIG -DSREMOVE** at the destination server console. Then follow this procedure again, beginning with [Step 2](#).

Remove NDS from the Source Server

After NDS has been removed from the destination server, remove NDS from the source server.

- 1 Restart the source server by entering **server** at the DOS command prompt.

2 Enter one of the following:

- ♦ **LOAD INSTALL -DSREMOVE** (if source server is running NetWare 4)
- ♦ **NWCONFIG -DSREMOVE** (if source server is running NetWare 5 or later)

INSTALL or NWCONFIG will now ignore any warnings or errors during the removal of NDS.

3 Select Directory Options > Remove Directory Services from This Server.

4 Press Enter to skip past any warning screens.

5 Select Yes to remove NDS.

6 Press Enter to skip the error message warning you that NDS is locked.

Ignore, but keep track of, any additional NDS error messages that appear.

7 When the INSTALL or NWCONFIG menu appears again, select Remove Directory Services again.

If a message indicates that NDS is already removed, continue with the next section, "[Restore NDS to the Source Server.](#)"

If NDS was *not* properly removed, contact Novell Technical ServicesSM at 1-800-858-4000.

Restore NDS to the Source Server

By removing NDS from the source server, you removed the server from any replica rings that held a partition of the source server. Now you must complete the following procedure to restore NDS to the source server.

1 Enter one of the following at the server console:

- ♦ **LOAD INSTALL.** (if source server was running NetWare 4)
- ♦ **LOAD NWCONFIG.** (if source server was running NetWare 5 or later)

2 Select Directory Services > Install Directory Services onto This Server.

3 Select the NDS tree where the source server existed prior to migration.

4 Select a time zone and time configuration parameters.

Ignore any warnings or errors that appear during the restoration of NDS, but make a note of the errors before pressing Esc.

5 Type the Admin name and password.

6 Type the context where the source server existed prior to migration, then press F10.

7 Save the NDS (Directory) information.

8 Wait while the server synchronizes with the NDS tree, which might take a while.

9 Return to the INSTALL or NWCONFIG utility and select Directory Options > Select Directory Back Up and Restore > Restore Reference from another Object to This Server.

This restores all references that you assigned to the Server object when you removed NDS from the destination server.

10 Press Enter.

11 Type the full Admin username as the placeholder object distinguished name, then specify Root as the distinguished name to change from.

- 12** Exit the NWCONFIG or INSTALL utility.
- 13** At the server console of the source server, enter **LOAD DSREPAIR**.
- 14** Select Unattended Full Repair > Advanced Options > Check Volume Objects and Trustees.
- 15** Type the Admin username and password.
- 16** Exit DSREPAIR.
- 17** At the workstation where you performed the migration, open your project.
- 18** From the Migration Wizard Tools menu, select Restore Trustees to restore the trustee assignments.
- 19** (Conditional) If the source server held the master replica of any partitions and you want to restore these partitions prior to doing the NDS migration again, use DSREPAIR to re-create them.

The source server is now restored to its original configuration.

Continue with the next section, "[Reinstall the Destination Server](#)."

Reinstall the Destination Server

To perform the migration again, you must reinstall the operating system on the destination server.

HINT: If you had your server imaged, you can just restore the image rather than reinstall the server.

- 1** Bring down the destination server.
- 2** Install NetWare and follow the on-screen instructions during the installation.

After NetWare is installed on the destination server, you are ready to perform the NDS migration again. Go to "[Begin NDS Migration](#)" on page 26.

