

Upgrade and Migration Guide

Identity Manager 4.0.1

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About This Guide

Novell Identity Manager is a data sharing and synchronization service that enables applications, directories, and databases to share information. It allows you to integrate, manage, and control your distributed identity information so you can securely deliver the right resources to the right people. Novell Identity Manager has long been valued by a wide variety of businesses and other organizations, ranging from small businesses to multinational enterprises.

It is extremely important to take the time to plan an Identity Manager solution, so that it can be effectively implemented in your environment. To create an effective Identity Manager solution for your environment, you first must take time to plan and design the solution. For more information on planning your Identity Manager solution, see “[Planning](#)” in the *Identity Manager 4.0.1 Framework Installation Guide*.

What This Guide Provides

This guide contains information about how to upgrade or migrate an Identity Manager system.

- ♦ [Chapter 1, “Frequently Asked Questions,”](#) on page 7
- ♦ [Chapter 2, “Supported Versions and System Requirements for Upgrades and Migrations,”](#) on page 11
- ♦ [Chapter 3, “Upgrading or Migrating,”](#) on page 13
- ♦ [Chapter 4, “Performing an Upgrade,”](#) on page 15
- ♦ [Chapter 5, “Performing a Migration,”](#) on page 47

Audience

This guide is intended for administrators, consultants, and network engineers who plan and deploy Identity Manager.

Documentation Updates

For the most recent version of this document, see the [Identity Manager Documentation Web site](http://www.novell.com/documentation/idm401/index.html) (<http://www.novell.com/documentation/idm401/index.html>).

Additional Documentation

For additional Identity Manager Drivers documentation, see the [Identity Manager Drivers Documentation Web site](http://www.novell.com/documentation/idm401drivers/index.html) (<http://www.novell.com/documentation/idm401drivers/index.html>).

For User Application documentation, see the [Identity Manager Roles Based Provisioning Module Documentation Web site](http://www.novell.com/documentation/idmrbp401/index.html) (<http://www.novell.com/documentation/idmrbp401/index.html>).

1 Frequently Asked Questions

You probably have a few questions up front. Here are some answers.

- ♦ [Section 1.1, “What’s New in Identity Manager 4.0.1?,” on page 7](#)
- ♦ [Section 1.2, “What Are the Differences Between Identity Manager Advanced Edition and Standard Edition?,” on page 7](#)
- ♦ [Section 1.3, “How Do I Plan My Identity Manager Upgrade/Migration?,” on page 7](#)
- ♦ [Section 1.4, “What Training Is Available?,” on page 8](#)
- ♦ [Section 1.5, “Does Novell Have Community Support to Help Me with the Upgrade/Migration?,” on page 8](#)

1.1 What’s New in Identity Manager 4.0.1?

The “[What’s New](#)” section in the [Identity Manager 4.0.1 Overview Guide](#) includes brief summaries of the new features in Identity Manager 4.0.1. You might want to take a few minutes to look at the section.

If you have any questions about the different components that make up an Identity Manager solution, see the [Identity Manager 4.0.1 Overview Guide](#) for more information about each component.

1.2 What Are the Differences Between Identity Manager Advanced Edition and Standard Edition?

There are some differences between the Identity Manager Advanced Edition and Identity Manager Standard Edition. These differences are provided in greater detail in the [Identity Manager 4.0.1 Overview Guide](#).

1.3 How Do I Plan My Identity Manager Upgrade/Migration?

You must carefully plan upgrading or migrating Identity Manager. For more information to help you plan and carry out the upgrade see the partnership options at, the [Novell Solution Partner Web site \(http://www.novell.com/partners/\)](http://www.novell.com/partners/). Novell Education also offers courses that address Identity Manager implementation.

1.4 What Training Is Available?

Here are some of the avenues you can use to get the training you need:

- ♦ Section 1.4.1, “Novell Training Services,” on page 8
- ♦ Section 1.4.2, “Complimentary Training,” on page 8
- ♦ Section 1.4.3, “Product Documentation,” on page 8

1.4.1 Novell Training Services

Novell certification and training options change periodically as new needs are identified and courses are developed. To learn more about these and other training options, visit the Identity Manager Novell training Web site at www.novell.com/training (<http://www.novell.com/training>).

- ♦ To find the dates and local availability of the Novell Advanced Technical Training and other Novell offerings, go to: www.novell.com/training/pep/map.html (<http://www.novell.com/training/pep/map.html>).
- ♦ To request additional information on Novell Advanced Technical Training, send an e-mail to technicaltraining@novell.com (technicaltraining@novell.com).
- ♦ To subscribe to the Technical Training Newsletter, see <http://www.novell.com/info/list> (<http://www.novell.com/info/list>).

1.4.2 Complimentary Training

For a good introduction to Identity Manager 4.0 Advanced Edition, see the [Identity Manager Product Website](http://www.novell.com/products/identitymanager/) (<http://www.novell.com/products/identitymanager/>).

To help you get started with Identity Manager, Novell also provides some [training material at no cost on the Web](http://www.novell.com/training/freelearning/course/view.php?id=130) (<http://www.novell.com/training/freelearning/course/view.php?id=130>).

1.4.3 Product Documentation

This guide contains cross-references to sections relative to a specific topic or component. If you can't find what you need on Novell's documentation site, add a comment, tell us what we missed, and we'll see that you get the answer you need. Identity Manager 4.0.1 documentation is available at the [Identity Manager documentation Web site](http://www.novell.com/documentation/idm401/index.html) (<http://www.novell.com/documentation/idm401/index.html>).

1.5 Does Novell Have Community Support to Help Me with the Upgrade/Migration?

Through [Cool Solutions](http://www.novell.com/communities/coololutions/) (<http://www.novell.com/communities/coololutions/>), [Support Forums](http://www.novell.com/support/browse.do?WidgetName=BROWSE_PRODUCT&BROWSE_PRODUCT.TaxoName=SG_SupportGoals&NodeType=leaf&NodeName=Identity+Manager&TaxoName=SG_SupportGoals&BROWSE_PRODUCT.isProductTaxonomy=true&BROWSE_PRODUCT.NodeId=SG_IDENTITYMANAGER_1_1&BROWSE_PRODUCT.NodeType=leaf&BROWSE_PRODUCT.thisPageUrl=%2Fproduct%2Fproductview.jsp&NodeId=SG_IDENTITYMANAGER_1_1&AppContext=AC_ProductPage&sendEventForumBrowse=true&kwidget01.docType=SG_IDENTITYMANAGER_1_1&kwidget02.docType=SG_IDENTI) (http://www.novell.com/support/browse.do?WidgetName=BROWSE_PRODUCT&BROWSE_PRODUCT.TaxoName=SG_SupportGoals&NodeType=leaf&NodeName=Identity+Manager&TaxoName=SG_SupportGoals&BROWSE_PRODUCT.isProductTaxonomy=true&BROWSE_PRODUCT.NodeId=SG_IDENTITYMANAGER_1_1&BROWSE_PRODUCT.NodeType=leaf&BROWSE_PRODUCT.thisPageUrl=%2Fproduct%2Fproductview.jsp&NodeId=SG_IDENTITYMANAGER_1_1&AppContext=AC_ProductPage&sendEventForumBrowse=true&kwidget01.docType=SG_IDENTITYMANAGER_1_1&kwidget02.docType=SG_IDENTI).

TYMANAGER_1_1), and [Communities \(http://www.novell.com/communities/node/12198/more-whats-new-idm-4\)](http://www.novell.com/communities/node/12198/more-whats-new-idm-4) you can connect with other administrators, ask questions, and find answers to your specific migration questions.

2 Supported Versions and System Requirements for Upgrades and Migrations

Use this information to understand whether your version of Identity Manager is supported for an update or migration. An upgrade is when you update the software on the existing hardware. A migration is when you move to new hardware and a new version of the software.

- ♦ [Section 2.1, “Upgrades,” on page 11](#)
- ♦ [Section 2.2, “Migrations,” on page 12](#)

2.1 Upgrades

- ♦ [Section 2.1.1, “Supported Versions for Upgrades,” on page 11](#)
- ♦ [Section 2.1.2, “System Requirements,” on page 12](#)

2.1.1 Supported Versions for Upgrades

The following table indicates the supported upgrades for previous versions of Identity Manager.

Table 2-1 *Supported Versions for Upgrades*

Installed Version	Newest Version	Upgrade Supported
DirXML 1.1a	Identity Manager 4.0.1	No
Identity Manager 2.x	Identity Manager 4.0.1	No
Identity Manager 3.0.x	Identity Manager 4.0.1	No
Identity Manager 3.5.x ¹	Identity Manager 4.0.1	Yes
Identity Manager 3.6.x ¹	Identity Manager 4.0.1	Yes
Identity Manager 4.0	Identity Manager 4.0.1	Yes

¹If you are running the Roles Based Provisioning Module, you cannot do an upgrade. You must do a migration. For more information, see the [Identity Manager 4.0.1: RBPM and Reporting Migration Guide](#).

2.1.2 System Requirements

In order to upgrade to Identity Manager 4.0.1, the servers running the Identity Manager services need to meet the minimum requirements. See “[System Requirements](#)” in the *Identity Manager 4.0.1 Framework Installation Guide* for the list of minimum requirements for each platform.

2.2 Migrations

- ♦ [Section 2.2.1, “Supported Versions for Migrations,”](#) on page 12
- ♦ [Section 2.2.2, “System Requirements,”](#) on page 12

2.2.1 Supported Versions for Migrations

The following table indicates the supported migration paths for earlier versions of Identity Manager.

Table 2-2 *Supported Versions for Migrations*

Installed Version	Newest Version	Upgrade Supported
DirXML 1.1a	Identity Manager 4.0.1	No
Identity Manager 2.x	Identity Manager 4.0.1	No
Identity Manager 3.0.x	Identity Manager 4.0.1	No
Identity Manager 3.5.x	Identity Manager 4.0.1	Yes
Identity Manager 3.6.x	Identity Manager 4.0.1	Yes
Identity Manager 4.0	Identity Manager 4.0.1	Yes

2.2.2 System Requirements

In order to migrate to Identity Manager 4.0.1, the servers running the Identity Manager services need to meet the minimum requirements. For the list of minimum requirements for each platform, see “[System Requirements](#)” in the *Identity Manager 4.0.1 Framework Installation Guide*.

3 Upgrading or Migrating

The following sections contain information about upgrading or migrating your existing Identity Manager solution:

- ♦ [Section 3.1, “Upgrading,” on page 13](#)
- ♦ [Section 3.2, “Migrating,” on page 14](#)
- ♦ [Section 3.3, “Multiple Servers Associated with a Single Driver Set,” on page 14](#)

3.1 Upgrading

An upgrade is when you install the new version of Identity Manager on the existing server. To install Identity Manager, you must upgrade the current versions of the operating system and eDirectory to the supported versions for Identity Manager 4.0.1. For a list of the supported platforms, see “[System Requirements](#)” in the *Identity Manager 4.0.1 Framework Installation Guide*.

There are several advantages to performing an upgrade:

- ♦ No new hardware
- ♦ No migration of data

There are also disadvantages to performing an upgrade:

- ♦ Downtime when eDirectory is updated and is restarted

There are certain scenarios when an upgrade is not feasible, or when multiple upgrades must be performed. Because Identity Manager 3.5.x and later are the only supported migration paths, these are the only versions that are described in the following scenarios.

The only supported situation for an upgrade is to have Identity Manager 3.5.x or Identity Manager 3.6.x on a supported operating system. However, there are some scenarios where an upgrade is not feasible. The following are some examples:

- ♦ **Unsupported OS:** If the current version of the operating system is not supported by Identity Manager 4.0.1, the only supported upgrade path is to perform a migration to a new server.
- ♦ **Identity Manager 3.0.x:** If the current version of Identity Manager is 3.0.x, you cannot perform a direct upgrade. The two options are:
 - ♦ Perform an upgrade to Identity Manager 3.5.x, upgrade to eDirectory 8.8.6, then perform an upgrade to Identity Manager 4.0.1.
 - ♦ Perform a migration to a new server.
- ♦ **Roles Based Provisioning Module:** If you have the Roles Based Provisioning Module installed, you cannot perform an upgrade. You must perform a migration. For more information see the *Identity Manager 4.0.1: RBPM and Reporting Migration Guide*.

IMPORTANT: If Identity Manager 3.6.x is installed into an existing RBPM 3.7 system, the 3.6.1 Roles driver (which was launched automatically and silently by the Identity Manager 3.6.x installer) causes the `nrfLocalizedNames` and `nrfLocalizedDescrs` attributes setting to change from case-ignore string to case-exact string and overwrites the objects which results in a non-functional RBPM 3.7 system. When the environment becomes non-functional, the only way to correct it is to utilize a back-up of the driver that was created before the current launching of the Identity Manager 3.6.x installer. For more information on restoring Invalidated User Application Drivers, see [Restoring Invalidated User Application Drivers](#)

If you are performing an upgrade, proceed to [Chapter 4, “Performing an Upgrade,”](#) on page 15.

3.2 Migrating

A migration is when you install Identity Manager 4.0.1 on a new server, then migrate the existing data to this new server. Follow the “[Basic Identity Manager System Checklist](#)” in the *Identity Manager 4.0.1 Framework Installation Guide* to verify that the installation is complete.

The advantage of performing a migration is that there is minimal downtime for the drivers. The disadvantage is that it requires new hardware.

If you are performing a migration, proceed to [Chapter 5, “Performing a Migration,”](#) on page 47.

3.3 Multiple Servers Associated with a Single Driver Set

If you have multiple servers associated with a driver set, you can perform an upgrade or a migration on one server at a time. If you don’t have time to upgrade the servers at the same time, the drivers continue to work with the different versions of Identity Manager until the upgrades for each server can be completed.

The Identity Manager engine is backward compatible, so the Identity Manager 4.0.1 engine can run Identity Manager 3.6.x drivers without problems.

IMPORTANT: If you enable features for drivers that are supported only on Identity Manager 4.0 or later, the drivers stop working on the servers with mixed versions. The older engines cannot handle the new functionality. This breaks the drivers until all servers are upgraded to Identity Manager 4.0 or later.

4 Performing an Upgrade

Before beginning, make sure you have reviewed the differences between an upgrade and a migration. See [Chapter 3, “Upgrading or Migrating,”](#) on page 13.

The following upgrade scenarios are supported:

- ♦ [Section 4.1, “Upgrading Identity Manager 4.0.1 Standard Edition to Identity Manager 4.0.1 Advanced Edition,”](#) on page 16
- ♦ [Section 4.2, “Identity Manager 4.0 Advanced Edition to Identity Manager 4.0.1 Advanced Edition,”](#) on page 18
- ♦ [Section 4.3, “Identity Manager 3.6.1 with User Application 3.7 to Identity Manager 4.0.1 Advanced Edition,”](#) on page 20
- ♦ [Section 4.4, “Identity Manager 3.6.1 with User Application 3.6.1 to Identity Manager 4.0.1 Advanced Edition,”](#) on page 22
- ♦ [Section 4.5, “Identity Manager 3.6 with User Application 3.6.1 \(Non-provisioning Version\) to Identity Manager 4.0.1 Standard Edition,”](#) on page 25
- ♦ [Section 4.6, “Identity Manager 3.5.1 with User Application 3.6.1 to Identity Manager 4.0.1 Advanced Edition,”](#) on page 27
- ♦ [Section 4.7, “Upgrading Identity Manager 3.5.1 with User Application 3.6.1 \(Non-provisioning Version\) to Identity Manager 4.0.1 Standard Edition,”](#) on page 30
- ♦ [Section 4.8, “Creating a Backup of the Current Configuration,”](#) on page 32
- ♦ [Section 4.9, “Upgrading iManager,”](#) on page 34
- ♦ [Section 4.10, “Stopping the Drivers,”](#) on page 35
- ♦ [Section 4.11, “Upgrading Analyzer,”](#) on page 36
- ♦ [Section 4.12, “Upgrading Designer,”](#) on page 37
- ♦ [Section 4.13, “Upgrading the Metadirectory Server,”](#) on page 37
- ♦ [Section 4.14, “Upgrading the Remote Loader,”](#) on page 39
- ♦ [Section 4.15, “Upgrading Drivers to Packages,”](#) on page 40
- ♦ [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42
- ♦ [Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver \(Deprecated\),”](#) on page 43
- ♦ [Section 4.18, “Deploying the Converted Project,”](#) on page 44
- ♦ [Section 4.19, “Starting the Drivers,”](#) on page 44
- ♦ [Section 4.20, “Upgrading the User Application,”](#) on page 45
- ♦ [Section 4.21, “Upgrading the Identity Reporting Module,”](#) on page 46

The following sections contain detailed procedures for each of the steps required for upgrading Identity Manager.

- ♦ [Section 4.8, “Creating a Backup of the Current Configuration,”](#) on page 32

- Section 4.9, “Upgrading iManager,” on page 34
- Section 4.10, “Stopping the Drivers,” on page 35
- Section 4.11, “Upgrading Analyzer,” on page 36
- Section 4.12, “Upgrading Designer,” on page 37
- Section 4.13, “Upgrading the Metadirectory Server,” on page 37
- Section 4.14, “Upgrading the Remote Loader,” on page 39
- Section 4.15, “Upgrading Drivers to Packages,” on page 40
- Section 4.16, “Restoring Custom Policies and Rules to the Driver,” on page 42
- Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver (Deprecated),” on page 43
- Section 4.18, “Deploying the Converted Project,” on page 44
- Section 4.19, “Starting the Drivers,” on page 44
- Section 4.20, “Upgrading the User Application,” on page 45
- Section 4.21, “Upgrading the Identity Reporting Module,” on page 46

4.1 Upgrading Identity Manager 4.0.1 Standard Edition to Identity Manager 4.0.1 Advanced Edition

Use the following checklist for a successful upgrade of the Identity Manager system.

Table 4-1 Identity Manager Component Upgrade Checklist

Identity Manager Component	Need Upgrade (Yes/No)
Metadirectory Server	Yes
Remote Loader	No change
eDirectory	No change
Designer	No change
User Application	Yes
Role Mapping Administrator	Not available with the Identity Manager 4.0.1 Standard Edition. You must separately install it in order to use it.
Identity Reporting Module	Yes
Analyzer	Not available with the Identity Manager 4.0.1 Standard Edition. You must separately install it in order to use it.
iManager	No change

Upgrading Identity Manager 4.0.1 Standard Edition to Identity Manager 4.0.1 Advanced Edition involves configuration changes for Identity Manager components. You don't need to run the Identity Manager installer to upgrade to Identity Manager Advanced Edition from the Standard Edition. The Role Mapping Administrator is not available with the Standard Edition. You need to separately install it in order to use it. For installing the Role Mapping Administrator, refer to the [Identity Manager Role Mapping Administrator 4.0.1 Installation and Configuration Guide](#).

Perform the following steps to upgrade Identity Manager Standard Edition to the Advanced Edition.

- ♦ [Section 4.1.1, “Upgrading the Metadirectory Server,” on page 17](#)
- ♦ [Section 4.1.2, “Upgrading the User Application,” on page 17](#)
- ♦ [Section 4.1.3, “Upgrading the Identity Reporting Module,” on page 17](#)

4.1.1 Upgrading the Metadirectory Server

In iManager, make sure that you apply the Identity Manager 4.0 Advanced Edition activation. The Metadirectory Server upgrade does not proceed if you don't apply the Identity Manager 4.0 Advanced Edition activation.

4.1.2 Upgrading the User Application

1 Stop the JBoss server.

- ♦ **Linux:** Run the `/etc/init.d/jboss_init stop` command.
- ♦ **Windows:** Run the `<RBPM Installation Location>/UserApplication/stop-jboss.bat` command.

2 Run the `<RBPM installation directory>/configupdate.sh` from the Identity Manager Standard Edition installation subdirectory.

For example, on Windows, run the following command:

```
C:\Novell\IdentityManager\rbpm\UserApplication\configupdate.bat.
```

By default, the installer runs in console mode. For GUI mode, replace the `-use_console true` Java command argument with `-use_console false` in the `configupdate.bat` file.

3 Edit the admin fields by changing the value of `-edit_admin` setting to `true`.

The admin fields are disabled by default.

4 Fill the following fields in the default view of the Roles Based Provisioning Module Configuration panel:

- ♦ Press the Tab key, which displays a prompt. When you click *Yes*, additional admin fields are displayed in the Identity Vault DNs section of the Roles Based Provisioning Module Configuration page.
- ♦ Update all the admin fields with the appropriate users if you want the admin to be anything other than the User Application admin.
- ♦ Verify if the advanced options are displayed. Click *Show Advanced Options* to display the advanced options.

5 In the Miscellaneous section, select the *Reinitialize RBPM Security* check box, then click *OK*.

6 Start the JBoss server.

- ♦ **Linux:** Run the `/etc/init.d/jboss_init start` command.
- ♦ **Windows:** Run the `<RBPM Installation Location>/UserApplication/start-jboss.bat` command.

This redeploys the WAR file. If you are running in a JBoss cluster, the WAR file needs to be updated in each JBoss server in the cluster.

4.1.3 Upgrading the Identity Reporting Module

1 Configure the Managed System Gateway Driver (MSGW) driver by using Designer.

Refer to the “[Configuring the Managed System Gateway Driver](#)” section in the *Identity Reporting Module Guide*.

- 2 Update the configuration information of the Identity Manager Driver for Data Collection Service (DCS). Launch Designer, then go to *DCS Driver Configuration > Driver Parameters > Driver Options*.

In the Managed System Gateway Registration section, change the settings as below:

- ♦ Set *Register Manage System Gateway* to *Yes*.
- ♦ Change the *MSGW Driver DN*. For example, *CN=Managed System Gateway Driver,cn=driverset1,o=system*.
- ♦ Change the *User DN*. For example, *cn=admin,ou=sa,o=system*.
- ♦ Specify the password for the *User DN*.

For more information on configuring the driver, refer to the “[Configuring the Identity Manager Driver for Data Collection Service](#)” section in the *Identity Reporting Module Guide*.

- 3 Save the settings, then deploy the DCS driver.

- 4 Restart the DCS driver.

- 5 Download the Identity Manager 4.0.1 Advanced Edition Report Templates from the [Identity Reporting \(http://cdn.novell.com/cached/designer/idmrpt/\)](http://cdn.novell.com/cached/designer/idmrpt/) download page.

Upgrading the Identity Reporting Module might not immediately show the Advanced Version. The version change occurs after the next batch of events is processed.

4.2 Identity Manager 4.0 Advanced Edition to Identity Manager 4.0.1 Advanced Edition

Use the following checklist for a successful upgrade of the Identity Manager system.

Table 4-2 *Identity Manager Component Upgrade Checklist*

Component	Need Upgrade (Yes/No)
Metadirectory Server	Yes
Remote Loader	Yes
eDirectory	No change
Designer	Yes
User Application	Yes
Role Mapping Administrator	Yes
Identity Reporting Module	Yes
Analyzer	Yes
iManager	Yes

Follow these steps for each Identity Manager server:

- 1 Make sure you have downloaded the Identity Manager ISO files. For more information, see “[Where to Get Identity Manager](#)” in the *Identity Manager 4.0.1 Framework Installation Guide*.
- 2 Upgrade to Designer 4.0.1. For more information, see [Section 4.12, “Upgrading Designer,” on page 37](#).

- 3 Create a backup of the current configuration of your Identity Manager solution by creating a Designer project of your Identity Manager solution. For more information, see [Section 4.8, “Creating a Backup of the Current Configuration,”](#) on page 32.
- 4 Upgrade your iManager server to iManager 2.7.4. For more information, see [Section 4.9, “Upgrading iManager,”](#) on page 34.
- 5 Stop the drivers that are associated with the server you are upgrading. For more information, see [Section 4.10, “Stopping the Drivers,”](#) on page 35.
- 6 Upgrade the Metadirectory server. For more information, see [Section 4.13, “Upgrading the Metadirectory Server,”](#) on page 37.
- 7 (Optional) If any of the drivers in the driver set for this server are Remote Loader drivers, upgrade the Remote Loader servers for each driver. For more information, see [Section 4.14, “Upgrading the Remote Loader,”](#) on page 39.
- 8 (Conditional) If you have a User Application server, perform the following additional steps:
 - 8a Upgrade the User Application package from 4.0 to 4.0.1.
 - 8b Deploy the upgraded User Application driver into the Identity Vault. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 8c Upgrade the User Application. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
- 9 Install Role Mapping Administrator. For more information, see the [Identity Manager Role Mapping Administrator 4.0.1 Installation and Configuration Guide](#).
- 10 (Optional) Upgrade the drivers.
 - 10a If you are using packages instead of driver configuration files, upgrade the packages on the existing drivers to get new policies. This is only required if a newer version of a package is available and there is a new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [“Upgrading Installed Packages”](#) in the [Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide](#).
 - Or
 - 10b If you are using configuration files, overlay the new driver configuration files over the existing drivers to get new policies. This is required only if there is new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver \(Deprecated\),”](#) on page 43
- 11 (Optional) Restore custom policies and rules to the drivers. When you overlay the new driver configuration files, the policies are overwritten, so restoring policies is required only if you did an overlay of the new driver configuration file. For more information, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42.
- 12 Start the drivers associated with this server. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.
- 13 Upgrade the Identity Reporting Module:
 - 13a Upgrade the DCS driver package to the latest version.
 - 13b Upgrade the MSGW driver package to the latest version.
 - 13c Upgrade the EAS to the latest version.

For more information on upgrading the Identity Reporting Module, see [Section 4.21, “Upgrading the Identity Reporting Module,”](#) on page 46.
- 14 (Optional) If you are using Analyzer, upgrade to Analyzer 4.0.1. For more information, see [Section 4.11, “Upgrading Analyzer,”](#) on page 36.

- 15 (Conditional) If you are using Novell Sentinel, ensure that you are running the latest service pack. For more information about upgrading Sentinel, see the *Sentinel Installation Guide* (http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf).
- 16 Activate the Metadirectory server and any upgraded driver. For more information, see “Activating Novell Identity Manager Products” in the *Identity Manager 4.0.1 Framework Installation Guide*.

4.3 Identity Manager 3.6.1 with User Application 3.7 to Identity Manager 4.0.1 Advanced Edition

Use the following checklist for a successful upgrade of the Identity Manager system.

Table 4-3 Identity Manager Component Upgrade Checklist

Identity Manager Component	Need Upgrade (Yes/No)
Metadirectory Server	Yes
Remote Loader	Yes
eDirectory	Yes
Designer	Yes
User Application	Yes
Role Mapping Administrator	Not available with the Identity Manager 3.6.1. You must separately install it in order to use it.
Identity Reporting Module	Not available with the Identity Manager 3.6.1. You must separately install it in order to use it.
Analyzer	Not available with the Identity Manager 3.6.1. You must separately install it in order to use it.
iManager	Not available with the Identity Manager 3.6.1. You must separately install it in order to use it.

Follow these steps for each Identity Manager server:

- 1 Make sure you have downloaded the Identity Manager ISO files. For more information, see “Where to Get Identity Manager” in the *Identity Manager 4.0.1 Framework Installation Guide*.
- 2 Upgrade to Designer 4.0.1. For more information, see [Section 4.12, “Upgrading Designer,” on page 37](#).
- 3 Create a backup of the current configuration of your Identity Manager solution by creating a Designer project of your Identity Manager solution. For more information, see [Section 4.8, “Creating a Backup of the Current Configuration,” on page 32](#).
- 4 Verify that the operating system on the servers running Identity Manager is a supported version. See “System Requirements” in the *Identity Manager 4.0.1 Framework Installation Guide* for a list of supported operating systems. If the operating system requires only a service pack to meet the system requirements, then proceed with the upgrade.

If your operating system is not listed in the supported platform list for Identity manager 4.0.1, you need to either upgrade it to a supported version before performing an Identity Manager upgrade or perform a migration instead of an upgrade.

- 5 Install iManager. For more information, see [Installing iManager \(\(http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html) section in the [Novell iManager 2.7 Installation Guide \(http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html).
- 6 Upgrade eDirectory to 8.8.6 or later on the server running Identity Manager. For more information, see the [Novell eDirectory 8.8 Installation Guide \(http://www.novell.com/documentation/edir88/\)](http://www.novell.com/documentation/edir88/). Upgrading eDirectory stops ndsd, which in turn stops all drivers.
- 7 Start the drivers and verify that the drivers start. This also verifies that the upgrade to eDirectory 8.8.6 was successful. For more information, see [Section 4.19, “Starting the Drivers,” on page 44.](#)

NOTE: Perform this step only if you are upgrading from a 32-bit Identity Manager to another 32-bit version. Skip to step 7 if you are upgrading from 32-bit to 64-bit Identity Manager.

For more information on successfully running Identity Manager and Identity Manager drivers after upgrading to eDirectory 8.8.6, see [TID 7007184 \(http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1\)](http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1).

- 8 Convert the Designer project. For more information, see [“Converting Earlier Projects”](#) in the [Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide](#).
- 9 Stop the drivers that are associated with the server you are upgrading. For more information, see [Section 4.10, “Stopping the Drivers,” on page 35.](#)
- 10 Upgrade the Metadirectory server. For more information, see [Section 4.13, “Upgrading the Metadirectory Server,” on page 37.](#)
- 11 (Optional) If any of the drivers in the driver set for this server are Remote Loader drivers, upgrade the Remote Loader servers for each driver. For more information, see [Section 4.14, “Upgrading the Remote Loader,” on page 39.](#)
- 12 (Optional) If you have a User Application server, perform the following additional steps:
 - 12a Run the NrfCaseUpdate utility for providing support for mixed-case searching on roles and resources. This procedure updates the schema by modifying the nrfLocalizedDescrs and nrfLocalizedNames attributes, which are used by User Application drivers. For more information, see [“Running the NrfCaseUpdate Utility”](#) in the [Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide](#).
 - 12b The User Application driver must be migrated in Designer 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12c Create a new Role and Resource Service driver. The Role and Resource Service driver is not migrated. If you have an existing Role and Resource Service driver, delete it and create a new driver for Identity Manager 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12d Deploy the migrated User Application driver and the Role and Resource Service driver into the Identity Vault. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12e Upgrade the User Application. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
- 13 (Optional) Upgrade the drivers.
 - 13a If you are using packages instead of driver configuration files, upgrade the packages on the existing drivers to get new policies. This is only required if a newer version of a package is available and there is a new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [“Upgrading Installed Packages”](#) in the [Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide](#).

Or

- 13b** If you are using configuration files, overlay the new driver configuration files over the existing drivers to get new policies. This is required only if there is new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver \(Deprecated\),”](#) on page 43
- 14** (Optional) Restore custom policies and rules to the drivers. When you overlay the new driver configuration files, the policies are overwritten, so restoring policies is required only if you did an overlay of the new driver configuration file. For more information, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42.
- 15** Deploy the changes performed in the above steps into the Identity Vault. For more information, see [“Deploying and Exporting”](#) in *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 16** Start the drivers associated with this server. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.
- 17** (Conditional) Install the Identity Reporting Module. For more information, see [“Installation and Driver Configuration”](#) in the *Identity Reporting Module Guide*.
- 18** (Optional) Install Role Mapping Administrator. For more information, see [“Installing the Role Mapping Administrator”](#) section in the *Identity Manager Role Mapping Administrator 4.0.1 Installation and Configuration Guide*.
- 19** (Optional) If you are using Novell Sentinel, you must update to Novell Sentinel 6.1. For more information about upgrading Sentinel, see the *Sentinel Installation Guide* (http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf).
- 20** (Optional) Install Analyzer. For more information, see [Installing Analyzer](#) section in the *Analyzer 4.0.1 for Identity Manager Administration Guide*.
- 21** Activate the Metadirectory server and any upgraded driver. For more information, see [“Activating Novell Identity Manager Products”](#) in the *Identity Manager 4.0.1 Framework Installation Guide*.

4.4 Identity Manager 3.6.1 with User Application 3.6.1 to Identity Manager 4.0.1 Advanced Edition

Use the following checklist for a successful upgrade of the Identity Manager system.

Table 4-4 Identity Manager Component Upgrade Checklist

Identity Manager Component	Need Upgrade (Yes/No)
Metadirectory Server	Yes
Remote Loader	Yes
eDirectory	Yes
Designer	Yes
User Application	Yes
Role Mapping Administrator	Not available with Identity Manager 3.6.1. You must separately install it in order to use it.
Identity Reporting Module	Not available with Identity Manager 3.6.1. You must separately install it in order to use it.

Identity Manager Component	Need Upgrade (Yes/No)
Analyzer	Not available with Identity Manager 3.6.1. You must separately install it in order to use it.
iManager	Not available with Identity Manager 3.6.1. You must separately install it in order to use it.

Follow these steps for each Identity Manager server:

- 1 Make sure you have downloaded the Identity Manager ISO files. For more information, see [“Where to Get Identity Manager”](#) in the *Identity Manager 4.0.1 Framework Installation Guide*.
- 2 Upgrade to Designer 4.0.1. For more information, see [Section 4.12, “Upgrading Designer,”](#) on page 37.
- 3 Create a backup of the current configuration of your Identity Manager solution. This is done by creating exports of your drivers or creating a Designer project of your Identity Manager solution. For more information, see [Section 4.8, “Creating a Backup of the Current Configuration,”](#) on page 32.
- 4 Verify that the operating system on the servers running Identity Manager is a supported version. See [“System Requirements”](#) in the *Identity Manager 4.0.1 Framework Installation Guide* for a list of supported operating systems. If the operating system requires only a service pack to meet the system requirements, then proceed with the upgrade.

If your operating system is not listed in the supported platform list for Identity manager 4.0.1, you need to either upgrade it to a supported version before performing an Identity Manager upgrade or perform a migration instead of an upgrade.

- 5 Install iManager. For more information, see [Installing iManager \(http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html) section in the *Novell iManager 2.7 Installation Guide (http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html)*.
- 6 Upgrade eDirectory to 8.8.6 or later on the server running Identity Manager. For more information, see the *Novell eDirectory 8.8 Installation Guide (http://www.novell.com/documentation/edir88/)*.
- 7 Start the drivers and verify that the drivers start. This also verifies that the upgrade to eDirectory 8.8.6 was successful. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.

NOTE: Perform this step only if you are upgrading from a 32-bit Identity Manager to another 32-bit version. Skip this step if you are upgrading from 32-bit to 64-bit Identity Manager.

For more information on successfully running Identity Manager and Identity Manager drivers after upgrading to eDirectory 8.8.6, see [TID 7007184 \(http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1\)](http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1).

- 8 Convert the Designer project. For more information, see [“Converting Earlier Projects”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 9 Stop the drivers that are associated with the server you are upgrading. For more information, see [Section 4.10, “Stopping the Drivers,”](#) on page 35.
- 10 Upgrade the Metadirectory server. For more information, see [Section 4.13, “Upgrading the Metadirectory Server,”](#) on page 37.
- 11 (Conditional) If any of the drivers in the driver set for this server are Remote Loader drivers, upgrade the Remote Loader servers for each driver. For more information, see [Section 4.14, “Upgrading the Remote Loader,”](#) on page 39.

- 12 (Conditional) If you have a User Application server, perform the following additional steps:
 - 12a Run the NrfCaseUpdate utility for providing support for mixed-case searching on roles and resources. This procedure updates the schema by modifying the nrfLocalizedDescrs and nrfLocalizedNames attributes, which are used by User Application drivers. For more information, see [“Running the NrfCaseUpdate Utility”](#) in the *Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide*.
 - 12b The User Application driver must be migrated in Designer 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12c Create a new Role and Resource Service driver. The Role and Resource Service driver is not migrated. If you have an existing Role and Resource Service driver, delete it and create a new driver for Identity Manager 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12d Deploy the migrated User Application driver and the Role and Resource Service driver into the Identity Vault. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12e Upgrade the User Application. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
- 13 (Optional) Upgrade the drivers.
 - 13a If you are using packages instead of driver configuration files, upgrade the packages on the existing drivers to get new policies. This is only required if a newer version of a package is available and there is a new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [“Upgrading Installed Packages”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

Or
 - 13b If you are using configuration files, overlay the new driver configuration files over the existing drivers to get new policies. This is required only if there is new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver \(Deprecated\),”](#) on page 43
- 14 (Optional) Restore custom policies and rules to the drivers. When you overlay the new driver configuration files, the policies are overwritten, so restoring policies is required only if you did an overlay of the new driver configuration file. For more information, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42.
- 15 Deploy the changes performed in the above steps into the Identity Vault. For more information, see [“Deploying and Exporting”](#) in *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 16 Start the drivers associated with this server. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.
- 17 (Optional) Install the Identity Reporting Module. For more information, see [“Installation and Driver Configuration”](#) in the *Identity Reporting Module Guide*.
- 18 (Optional) Install the Role Mapping Administrator. For more information, see [“Installing the Role Mapping Administrator”](#) section in the *Identity Manager Role Mapping Administrator 4.0.1 Installation and Configuration Guide*.
- 19 (Optional) Install Analyzer. For more information, see [Installing Analyzer](#) section in the *Analyzer 4.0.1 for Identity Manager Administration Guide*.

- 20 (Optional) If you are using Novell Sentinel, ensure that you are running the latest service pack. For more information about upgrading Sentinel, see the *Sentinel Installation Guide* (http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf).
- 21 Activate the Metadirectory server and any upgraded driver. For more information, see “Activating Novell Identity Manager Products” in the *Identity Manager 4.0.1 Framework Installation Guide*.

4.5 Identity Manager 3.6 with User Application 3.6.1 (Non-provisioning Version) to Identity Manager 4.0.1 Standard Edition

Use the following checklist for a successful upgrade of the Identity Manager system.

Table 4-5 Identity Manager Component Upgrade Checklist

Identity Manager Component	Need Upgrade (Yes/No)
Metadirectory Server	Yes
Remote Loader	Yes
eDirectory	Yes
Designer	Yes
User Application	Yes
Identity Reporting Module	Not available with the Identity Manager 3.6. You must separately install it in order to use it.
Analyzer	Not available with the Identity Manager 3.6. You must separately install it in order to use it.
iManager	Not available with the Identity Manager 3.6. You must separately install it in order to use it.

Follow these steps for each Identity Manager server:

- 1 Make sure you have downloaded the Identity Manager ISO files. For more information, see “Where to Get Identity Manager” in the *Identity Manager 4.0.1 Framework Installation Guide*.
- 2 Upgrade to Designer 4.0.1. For more information, see [Section 4.12, “Upgrading Designer,” on page 37](#).
- 3 Create a backup of the current configuration of your Identity Manager solution. This is done by creating exports of your drivers or creating a Designer project of your Identity Manager solution. For more information, see [Section 4.8, “Creating a Backup of the Current Configuration,” on page 32](#).
- 4 Verify that the operating system on the servers running Identity Manager is a supported version. See “System Requirements” in the *Identity Manager 4.0.1 Framework Installation Guide* for a list of supported operating systems. If the operating system requires only a service pack to meet the system requirements, then proceed with the upgrade.

If your operating system is not listed in the supported platform list for Identity manager 4.0.1, you need to either upgrade it to a supported version before performing an Identity Manager upgrade or perform a migration instead of an upgrade.

- 5 Install iManager. For more information, see [Installing iManager \(\(http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html) section in the [Novell iManager 2.7 Installation Guide \(http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html).
- 6 Upgrade eDirectory to 8.8.6 or later on the server running Identity Manager. eDirectory upgrade stops ndsd, which in turn stops all drivers.
For more information, see the [Novell eDirectory 8.8 Installation Guide \(http://www.novell.com/documentation/edir88/\)](http://www.novell.com/documentation/edir88/).
- 7 (Conditional) Start the drivers and verify that the drivers start. This also verifies that the upgrade to eDirectory 8.8.6 was successful. For more information, see [Section 4.19, “Starting the Drivers,” on page 44.](#)

NOTE: Perform this step only if you are upgrading from a 32-bit Identity Manager to another 32-bit version. Skip to Step 8 if you are upgrading from 32-bit to 64-bit Identity Manager.

For more information on successfully running Identity Manager and Identity Manager drivers after upgrading to eDirectory 8.8.6, see [TID 7007184 \(http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1\)](http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1).

- 8 Convert the Designer project. For more information, see [“Converting Earlier Projects”](#) in the [Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide](#).
- 9 Upgrade the Metadirectory server. For more information, see [Section 4.13, “Upgrading the Metadirectory Server,” on page 37.](#)
- 10 (Conditional) If any of the drivers in the driver set for this server are Remote Loader drivers, upgrade the Remote Loader servers for each driver. For more information, see [Section 4.14, “Upgrading the Remote Loader,” on page 39.](#)
- 11 (Conditional) If you have a User Application server, perform the following additional steps:
 - 11a Run the NrfCaseUpdate utility for providing support for mixed-case searching on roles and resources. This procedure updates the schema by modifying the nrfLocalizedDescrs and nrfLocalizedNames attributes, which are used by User Application drivers. For more information, see [“Running the NrfCaseUpdate Utility”](#) in the [Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide](#).
 - 11b The User Application driver must be migrated in Designer 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 11c Create a new Role and Resource Service driver. The Role and Resource Service driver is not migrated. If you have an existing Role and Resource Service driver, delete it and create a new driver for Identity Manager 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 11d Deploy the migrated User Application driver and the Role and Resource Service driver into the Identity Vault. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 11e Upgrade the User Application. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
- 12 (Optional) Upgrade the drivers.
 - 12a If you are using packages instead of driver configuration files, upgrade the packages on the existing drivers to get new policies. This is only required if a newer version of a package is available and there is a new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [“Upgrading Installed Packages”](#) in the [Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide](#).

Or

- 12b** If you are using configuration files, overlay the new driver configuration files over the existing drivers to get new policies. This is required only if there is new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver \(Deprecated\),”](#) on page 43
- 13** (Optional) Restore custom policies and rules to the drivers. When you overlay the new driver configuration files, the policies are overwritten, so restoring policies is required only if you did an overlay of the new driver configuration file. For more information, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42.
- 14** Deploy the changes performed in the above steps into the Identity Vault. For more information, see [“Deploying and Exporting”](#) in *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 15** Start the drivers associated with this server. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.
- 16** (Optional) Install the Identity Reporting Module. For more information, see [“Installation and Driver Configuration”](#) section in the *Identity Reporting Module Guide*.
- 17** (Optional) Install the Role Mapping Administrator. For more information, see the [“Installing the Role Mapping Administrator”](#) section in the *Identity Manager Role Mapping Administrator 4.0.1 Installation and Configuration Guide*.
- 18** (Optional) Install Analyzer. For more information, see [Installing Analyzer](#) section in the *Analyzer 4.0.1 for Identity Manager Administration Guide*.
- 19** (Optional) If you are using Novell Sentinel, ensure that you are running the latest service pack. For more information about upgrading Sentinel, see the [Sentinel Installation Guide \(http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf\)](http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf).
- 20** Activate the Metadirectory server and any upgraded driver. For more information, see [“Activating Novell Identity Manager Products”](#) in the *Identity Manager 4.0.1 Framework Installation Guide*.

4.6 Identity Manager 3.5.1 with User Application 3.6.1 to Identity Manager 4.0.1 Advanced Edition

Use the following checklist for a successful upgrade of the Identity Manager system.

Table 4-6 Identity Manager Component Upgrade Checklist

Identity Manager Component	Need Upgrade (Yes/No)
Metadirectory Server	Yes
Remote Loader	Yes
eDirectory	Yes
Designer	Yes
User Application	Yes
Role Mapping Administrator	Not available with Identity Manager 3.5.1. You must separately install it in order to use it.
Identity Reporting Module	Not available with Identity Manager 3.5.1. You must separately install it in order to use it.

Identity Manager Component	Need Upgrade (Yes/No)
Analyzer	Not available with Identity Manager 3.5.1. You must separately install it in order to use it.
iManager	Not available with Identity Manager 3.5.1. You must separately install it in order to use it.

Follow these steps for each Identity Manager server:

- 1 Make sure you have downloaded the Identity Manager ISO files. For more information, see [“Where to Get Identity Manager”](#) in the *Identity Manager 4.0.1 Framework Installation Guide*.
- 2 Upgrade to Designer 4.0.1. For more information, see [Section 4.12, “Upgrading Designer,”](#) on page 37.
- 3 Create a backup of the current configuration of your Identity Manager solution. This is done by creating exports of your drivers or creating a Designer project of your Identity Manager solution. For more information, see [Section 4.8, “Creating a Backup of the Current Configuration,”](#) on page 32.
- 4 Verify that the operating system on the servers running Identity Manager is a supported version. See [“System Requirements”](#) in the *Identity Manager 4.0.1 Framework Installation Guide* for a list of supported operating systems. If the operating system requires only a service pack to meet the system requirements, then proceed with the upgrade.

If your operating system is not listed in the supported platform list for Identity manager 4.0.1, you need to either upgrade it to a supported version before performing an Identity Manager upgrade or perform a migration instead of an upgrade.
- 5 Install iManager. For more information, see [Installing iManager \(http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html) section in the *Novell iManager 2.7 Installation Guide (http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html)*.
- 6 Stop the drivers that are associated with the server you are upgrading. For more information, see [Section 4.10, “Stopping the Drivers,”](#) on page 35.
- 7 Upgrade eDirectory to 8.8.6 or later on the server running Identity Manager. Upgrading eDirectory stops ndsd, which in turn stops all drivers.

For more information, see the *Novell eDirectory 8.8 Installation Guide (http://www.novell.com/documentation/edir88/)*.
- 8 (Optional) Start the drivers and verify that the drivers start. This also verifies that the upgrade to eDirectory 8.8.6 was successful. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.

NOTE: Perform this step only if you are upgrading from a 32-bit Identity Manager to another 32-bit version. Skip to step 9 if you are upgrading from 32-bit to 64-bit Identity Manager.

For more information on successfully running Identity Manager and Identity Manager drivers after upgrading to eDirectory 8.8.6, see [TID 7007184 \(http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1\)](http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1).

- 9 Convert the Designer project. For more information, see [“Converting Earlier Projects”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 10 Stop the drivers that are associated with the server you are upgrading. For more information, see [Section 4.10, “Stopping the Drivers,”](#) on page 35.
- 11 Upgrade the Metadirectory server. For more information, see [Section 4.13, “Upgrading the Metadirectory Server,”](#) on page 37.

- 12 (Optional) If any of the drivers in the driver set for this server are Remote Loader drivers, upgrade the Remote Loader servers for each driver. For more information, see [Section 4.14, “Upgrading the Remote Loader,”](#) on page 39.
- 13 (Optional) If you have a User Application server, perform the following additional steps:
 - 13a Run the NrfCaseUpdate utility for providing support for mixed-case searching on roles and resources. This procedure updates the schema by modifying the nrfLocalizedDescrs and nrfLocalizedNames attributes, which are used by User Application drivers. For more information, see [“Running the NrfCaseUpdate Utility”](#) in the *Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide*.
 - 13b The User Application driver must be migrated in Designer 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 13c Create a new Role and Resource Service driver. The Role and Resource Service driver is not migrated. If you have an existing Role and Resource Service driver, delete it and create a new driver for Identity Manager 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 13d Deploy the migrated User Application driver and the Role and Resource Service driver into the Identity Vault. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 13e Upgrade the User Application. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
- 14 (Optional) Upgrade the drivers.
 - 14a If you are using packages instead of driver configuration files, upgrade the packages on the existing drivers to get new policies. This is only required if a newer version of a package is available and there is a new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [“Upgrading Installed Packages”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
Or
 - 14b If you are using configuration files, overlay the new driver configuration files over the existing drivers to get new policies. This is required only if there is new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver \(Deprecated\),”](#) on page 43
- 15 (Optional) Restore custom policies and rules to the drivers. When you overlay the new driver configuration files, the policies are overwritten, so restoring policies is required only if you did an overlay of the new driver configuration file. For more information, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42.
- 16 Deploy the changes performed in the above steps into the Identity Vault. For more information, see [“Deploying and Exporting”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 17 Start the drivers associated with this server. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.
- 18 (Optional) Install the Identity Reporting Module. For more information, see [“Installation and Driver Configuration”](#) in the *Identity Reporting Module Guide*.
- 19 (Optional) Install the Role Mapping Administrator. For more information see [“Installing the Role Mapping Administrator”](#) section in the *Identity Manager Role Mapping Administrator 4.0.1 Installation and Configuration Guide*.
- 20 (Optional) Install Analyzer. For more information, see [Installing Analyzer](#) section in the *Analyzer 4.0.1 for Identity Manager Administration Guide*.

- 21 (Optional) If you are using Novell Sentinel, ensure that you are running the latest service pack. For more information about upgrading Sentinel, see the *Sentinel Installation Guide* (http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf).
- 22 Activate the Metadirectory server and any upgraded driver. For more information, see “Activating Novell Identity Manager Products” in the *Identity Manager 4.0.1 Framework Installation Guide*.

4.7 Upgrading Identity Manager 3.5.1 with User Application 3.6.1 (Non-provisioning Version) to Identity Manager 4.0.1 Standard Edition

Use the following checklist for a successful upgrade of the Identity Manager system.

Table 4-7 Identity Manager Component Upgrade Checklist

Identity Manager Component	Need Upgrade (Yes/No)
Metadirectory Server	Yes
Remote Loader	Yes
eDirectory	Yes
Designer	Yes
User Application	Yes
Identity Reporting Module	Not available with Identity Manager 3.5.1. You must separately install it in order to use it.
Analyzer	Not available with Identity Manager 3.5.1. You must separately install it in order to use it.
iManager	Not available with Identity Manager 3.5.1. You must separately install it in order to use it.

Follow these steps for each Identity Manager server:

- 1 Make sure you have downloaded the Identity Manager ISO files. For more information, see “Where to Get Identity Manager” in the *Identity Manager 4.0.1 Framework Installation Guide*.
- 2 Upgrade to Designer 4.0.1. For more information, see [Section 4.12, “Upgrading Designer,” on page 37](#).
- 3 Create a backup of the current configuration of your Identity Manager solution. This is done by creating exports of your drivers or creating a Designer project of your Identity Manager solution. For more information, see [Section 4.8, “Creating a Backup of the Current Configuration,” on page 32](#).
- 4 Verify that the operating system on the servers running Identity Manager is a supported version. See “System Requirements” in the *Identity Manager 4.0.1 Framework Installation Guide* for a list of supported operating systems. If the operating system requires only a service pack to meet the system requirements, then proceed with the upgrade.

If your operating system is not listed in the supported platform list for Identity Manager 4.0.1, you need to either upgrade it to a supported version before performing an Identity Manager upgrade or perform a migration instead of an upgrade.

- 5 Install iManager. For more information, see [Installing iManager \(\(http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/alw39eb.html) section in the [Novell iManager 2.7 Installation Guide \(http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html\)](http://www.novell.com/documentation/imanager27/imanager_install_274/data/hk42s9ot.html).
- 6 Upgrade eDirectory to 8.8.6 or later on the server running Identity Manager. eDirectory upgrade stops ndsd which in turn stops all drivers.
For more information on upgrading eDirectory, see the [Novell eDirectory 8.8 Installation Guide \(http://www.novell.com/documentation/edir88/\)](http://www.novell.com/documentation/edir88/).
- 7 (Optional) Start the drivers and verify that the drivers start. This also verifies that the upgrade to eDirectory 8.8.6 was successful. For more information, see [Section 4.19, “Starting the Drivers,” on page 44](#).

NOTE: Perform this step only if you are upgrading from a 32-bit Identity Manager to another 32-bit version. Skip to step 8 if you are upgrading from 32-bit to 64-bit Identity Manager.

For more information on successfully running Identity Manager and Identity Manager drivers after upgrading to eDirectory 8.8.6, see [TID 7007184 \(http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1\)](http://www.novell.com/support/viewContent.do?externalId=7007184&sliceId=1).

- 8 Convert the Designer project. For more information, see [“Converting Earlier Projects”](#) in the [Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide](#).
- 9 Stop the drivers that are associated with the server you are upgrading. For more information, see [Section 4.10, “Stopping the Drivers,” on page 35](#).
- 10 Upgrade the Metadirectory server. For more information, see [Section 4.13, “Upgrading the Metadirectory Server,” on page 37](#).
- 11 (Optional) If any of the drivers in the driver set for this server are Remote Loader drivers, upgrade the Remote Loader servers for each driver. For more information, see [Section 4.14, “Upgrading the Remote Loader,” on page 39](#).
- 12 (Optional) If you have a User Application server, perform the following additional steps:
 - 12a Run the NrfCaseUpdate utility for providing support for mixed-case searching on roles and resources. This procedure updates the schema by modifying the nrfLocalizedDescrs and nrfLocalizedNames attributes, which are used by User Application drivers. For more information, see [“Running the NrfCaseUpdate Utility”](#) in the [Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide](#).
 - 12b The User Application driver must be migrated in Designer 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12c Create a new Role and Resource Service driver. The Role and Resource Service driver is not migrated. If you have an existing Role and Resource Service driver, delete it and create a new driver for Identity Manager 4.0.1. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12d Deploy the migrated User Application driver and the Role and Resource Service driver into the Identity Vault. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
 - 12e Upgrade the User Application. For more information, see the [Migrating to the Roles Based Provisioning Module Version 4.0.1](#) guide.
- 13 (Optional) Upgrade the drivers.
 - 13a If you are using packages instead of driver configuration files, upgrade the packages on the existing drivers to get new policies. This is only required if a newer version of a package is available and there is a new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [“Upgrading Installed Packages”](#) in the [Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide](#).

Or

- 13b** If you are using configuration files, overlay the new driver configuration files over the existing drivers to get new policies. This is required only if there is new functionality included in the policies for a driver that you want to add to your existing driver. For more information, see [Section 4.17, “Overlaying the Existing Driver Configuration File with the New Driver \(Deprecated\),”](#) on page 43.
- 14** (Optional) Restore custom policies and rules to the drivers. When you overlay the new driver configuration files, the policies are overwritten, so restoring policies is required only if you did an overlay of the new driver configuration file. For more information, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42.
- 15** Deploy the changes performed in the above steps into the Identity Vault. For more information, see [“Deploying and Exporting”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 16** Start the drivers associated with this server. For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.
- 17** (Optional) Install the Identity Reporting Module. For more information, see [“Installation and Driver Configuration”](#) section in the *Identity Reporting Module Guide*.
- 18** (Optional) Install Analyzer. For more information, see [Installing Analyzer](#) section in the *Analyzer 4.0.1 for Identity Manager Administration Guide*.
- 19** (Optional) If you are using Novell Sentinel, ensure that you are running the latest service pack. For more information about upgrading Sentinel, see the [Sentinel Installation Guide \(http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf\)](http://www.novell.com/documentation/sentinel6/pdfdoc/sentinel60_installationguide.pdf).
- 20** Activate the Metadirectory server and any upgraded driver. For more information, see [“Activating Novell Identity Manager Products”](#) in the *Identity Manager 4.0.1 Framework Installation Guide*.

4.8 Creating a Backup of the Current Configuration

Before upgrading, it is important to create a backup of the current configuration of your Identity Manager system. There are no additional steps required if you are using the User Application. All User Application configuration is stored in the User Application driver. There are two ways to create a backup:

- ♦ [Section 4.8.1, “Ensuring that Your Designer Project is Current,”](#) on page 32
- ♦ [Section 4.8.2, “Creating an Export of the Drivers,”](#) on page 34

4.8.1 Ensuring that Your Designer Project is Current

A Designer project contains the schema and all driver configuration information. Creating a project of your Identity Manager solution allows you to export all of the driver in one step instead of creating a separate export file for each drivers.

- ♦ [“Exporting the Current Project”](#) on page 33
- ♦ [“Creating a New Project from the Identity Vault”](#) on page 33

Exporting the Current Project

If you already have a Designer project, verify that the information in the project is synchronized with what is in the Identity Vault:

- 1 In Designer, open your project.
- 2 In the Modeler, right-click the Identity Vault, then select *Live > Compare*.
- 3 Evaluate the project and reconcile any differences, then click *OK*.
- 4 On the toolbar, select *Project > Export*.
- 5 Click *Select All* to select all resources to export.
- 6 Select where to save the project and in what format, then click *Finish*.

For more information, see “[Using the Compare Feature When Deploying](#)” in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

Save the project in any location, other than the current workspace. When you upgrade to Designer, you must create a new workspace location. For more information, see “[Exporting a Project](#)” in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

Creating a New Project from the Identity Vault

If you don't have a Designer project of your current Identity Manager solution, you must create a project in order to back up your current solution.

- 1 Install Designer 4.0.1.
You can create an Identity Manager 3.6.x project with Designer 4.0.1. For more information, see “[Installing Designer](#)” in the *Identity Manager 4.0.1 Framework Installation Guide*.
- 2 Launch Designer, then specify a location for your workspace.
- 3 Select whether you want to check for online updates, then click *OK*.
- 4 On the Welcome page, click *Run Designer*.
- 5 On the toolbar, select *Project > Import Project > Identity Vault*.
- 6 Specify a name for the project, then either use the default location for your project or select a different location.
- 7 Click *Next*.
- 8 Specify the Identity Vault connection information:
 - ♦ **Host Name:** Specify the IP address or DNS name of the Identity Vault server.
 - ♦ **User name:** Specify the DN of the user used to authenticate to the Identity Vault.
 - ♦ **Password:** Specify the password of the authentication user.
- 9 Click *Next*.
- 10 Leave the Identity Vault Schema and the Default Notification Collection selected.
- 11 Expand the Default Notification Collection, then deselect the languages you don't need.
The Default Notification Collections are translated into many different languages. You can import all languages or select only the languages that you use.
- 12 Click *Browse*, then browse to and select a driver set to import.
- 13 Repeat [Step 12](#) for each driver set in this Identity Vault, then click *Finish*.
- 14 Click *OK* after the project is imported.

- 15 If you only have one Identity Vault, you are finished. If you have multiple Identity Vaults, proceed with [Step 16](#).
- 16 Click *Live > Import* on the toolbar.
- 17 Repeat [Step 8](#) through [Step 14](#) for each additional Identity Vault.

4.8.2 Creating an Export of the Drivers


Creating an export of the drivers makes a backup of your current configuration. However, Designer currently does not create a backup of the Roles Based Entitlements driver and policies. Use iManager to verify that you have an export of the Roles Based Entitlement driver.

- ♦ [“Using Designer to Create an Export of the Driver” on page 34](#)
- ♦ [“Using iManager to Create an Export of the Driver” on page 34](#)

Using Designer to Create an Export of the Driver

- 1 Verify that your project in Designer has the most current version of your driver. For instructions, see [“Importing a Library, a Driver Set, or a Driver from the Identity Vault”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 2 In the Modeler, right-click the driver line of the driver you are upgrading.
- 3 Select *Export to a Configuration File*.
- 4 Browse to a location to save the configuration file, then click *Save*.
- 5 Click *OK* on the results page.
- 6 Repeat [Step 1](#) through [Step 5](#) for each driver.

Using iManager to Create an Export of the Driver

- 1 In iManager, select *Identity Manager > Identity Manager Overview*.
- 2 Browse to and select the location in the tree to search for Driver Set objects, then click the search icon .
- 3 Click the Driver Set object that holds the driver you want to upgrade.
- 4 Click the driver you want to upgrade, then click *Export*.
- 5 Click *Next*, then select *Export all contained policies, linked to the configuration or not*.
- 6 Click *Next*, then click *Save As*.
- 7 Select *Save to Disk*, then click *OK*.
- 8 Click *Finish*.
- 9 Repeat [Step 1](#) through [Step 8](#) for each driver.

4.9 Upgrading iManager

You must upgrade iManager to be able to use the updated functionality in the Identity Manager plug-ins. iManager 2.7.x is supported.

iManager can only be installed on Windows or Linux. If your Metadirectory server is installed on Solaris, you must have iManager installed on a separate server.

To upgrade iManager from 2.7.x:

- 1 (Conditional) If you are installing on Linux, log in as `root` before launching the installation.
- 2 Access the Identity Manager installation media on your platform.
- 3 Launch the appropriate iManager installer for your platform:
 - ♦ **Linux:** `IDM4.0.1_Lin/products/iManager/installs/linux/iManagerInstallLinux.bin`
To execute the binary, enter `./iManagerInstallLinux.bin` from the installation directory.
 - ♦ **Windows:** `IDM4.0.1_Win:\product\iManager\installs\win\iManagerinstall.exe`
- 4 Select the language you want to install iManager in.
- 5 Read and accept the license agreement.
- 6 Select to install Novell iManager 2.7, Tomcat, and JVM.
- 7 Click *OK* to remove the older version of Tomcat that is installed with the older version of iManager.
- 8 Click *Yes* to download plug-ins.
- 9 Access the default location to download plug-ins.
- 10 Select to install the default selected plug-ins.
- 11 Click *No* when you are asked to install plug-ins from a local directory.
- 12 Specify the HTTP port for Tomcat to run on. By default, it is 8080.
- 13 Specify the SSL port for Tomcat to run on. By default, it is 8443.
- 14 Review your selections, then click *OK* to run the upgrade.
- 15 After the installation finishes, restart Tomcat to see the changes.




If you have iManager 2.6 or earlier installed, use the upgrade procedure in the *Novell iManager 2.7 Installation Guide* (http://www.novell.com/documentation/imanager27/imanager_install_27/data/bhxda4r.html).

4.10 Stopping the Drivers



Before you upgrade any files, it is important to stop the drivers.

- ♦ [Section 4.10.1, “Using Designer to Stop the Drivers,” on page 35](#)
- ♦ [Section 4.10.2, “Using iManager to Stop the Drivers,” on page 36](#)

4.10.1 Using Designer to Stop the Drivers

- 1 In Designer, select the Identity Vault  object in the *Outline* tab.
- 2 In the Modeler toolbar, click the *Stop All Drivers* icon .
This stops all drivers that are part of the project.
- 3 Set the drivers to manual start to ensure that the drivers do not start until the upgrade process is complete:
 - 3a Double-click the driver icon  in the *Outline* tab.
 - 3b Select *Driver Configuration > Startup Options*.
 - 3c Select *Manual*, then click *OK*.
 - 3d Repeat [Step 3a](#) through [Step 3c](#) for each driver.

4.10.2 Using iManager to Stop the Drivers

- 1 In iManager, select *Identity Manager > Identity Manager Overview*.
- 2 Browse to and select the location in the tree to search for Driver Set objects, then click the search icon .
- 3 Click the Driver Set object.
- 4 Click *Drivers > Stop all drivers*.
- 5 Repeat [Step 2](#) through [Step 4](#) for each Driver Set object.
- 6 Set the drivers to manual start to ensure that the drivers do not start until the upgrade process is complete:
 - 6a In iManager, select *Identity Manager > Identity Manager Overview*.
 - 6b Browse to and select the location in the tree to search for Driver Set objects, then click the search icon .
 - 6c Click the Driver Set object.
 - 6d In the upper right corner of the driver icon, click *Edit properties*.
 - 6e On the Driver Configuration page under *Startup Options*, select *Manual*, then click *OK*.
 - 6f Repeat [Step 6a](#) through [Step 6e](#) for each driver in your tree.

4.11 Upgrading Analyzer

If you have Analyzer installed, you must upgrade it to work with Identity Manager 4.0.1. If you don't have Analyzer installed, skip this section and proceed with [Section 4.12, "Upgrading Designer,"](#) on [page 37](#).

Analyzer can only be installed on Windows or Linux. If your Metadirectory server is installed on Solaris, you must have Analyzer installed on a separate server.

To upgrade Analyzer:

- 1 Launch the Analyzer installer from the Identity Manager media:
 - ♦ **Linux:** `IDM4.0.1_Lin/products/Analyzer/install`
To execute the binary file, enter `./install`.
 - ♦ **Windows:** `IDM4.0.1_Win:\products\ANALZYER\install.exe`
- 2 Select the language you want to run Analyzer in, then read and accept the license agreement.
- 3 Specify the directory where Analyzer is installed, then click *Yes* in the message stating you already have Analyzer installed.
- 4 Select whether the shortcuts should be placed on your desktop and in your desktop menu.
- 5 Review the summary, then click *Install*.
- 6 Review the installation summary, then click *Done*.

4.12 Upgrading Designer

Before upgrading Designer, make sure you export your projects to create a backup of them. For instructions on how to export your project, see “[Exporting a Project](#)” in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

Designer can only be installed on Windows or Linux. If your Metadirectory server is installed on Solaris, you must have Designer installed on a separate server.

To upgrade Designer:

- 1 Launch the Designer installer from Identity Manager media:
 - ♦ **Linux:** `IDM4.0.1_Lin/products/Designer/install`
To execute the binary file, enter `./install`.
 - ♦ **Windows:** `IDM4.0.1_Win:\products\Designer\install.exe`
- 2 Select the language to install Designer in, then read and accept the license agreement.
- 3 Specify the directory where Designer is installed, then click *Yes* in the message stating you already have Designer installed.
- 4 Select whether the shortcuts should be placed on your desktop and in your desktop menu.
- 5 Review the summary, then click *Install*.
- 6 Review the Readme, then click *Next*.
- 7 Select to launch Designer, then click *Done*.
- 8 Specify a location for your Designer workspace, then click *OK*.
- 9 Click *OK* in the warning message stating that your project needs to be closed and converted.
- 10 In the Project view, expand the project, then double-click *Project needs conversion*.
- 11 Review the steps that the Project Converter Wizard performs, then click *Next*.
- 12 Specify a name for the backup of your project, then click *Next*.
- 13 Review the summary of what happens during the conversion, then click *Convert*.
- 14 Review the summary after the conversion finishes, then click *Open*.

Designer is upgraded and the project is converted to the current format.

4.13 Upgrading the Metadirectory Server

You can upgrade Identity Manager in the following ways:

- ♦ [Section 4.13.1, “GUI Upgrade,” on page 38](#)
- ♦ [Section 4.13.2, “Silent Upgrade,” on page 38](#)

NOTE

- ♦ Ensure that you run the `./opt/novell/eDirectory/bin/ndspath` command before invoking Identity Manager upgrade on Solaris, in both GUI and silent mode.
- ♦ Before invoking Metadirectory upgrade on a server with multiple eDirectory instances in both GUI and silent mode, make sure that you have only one eDirectory instance file in the `/etc/opt/novell/eDirectory/conf/.edir/` directory. You must upgrade each eDirectory instance separately to inject the edition information for each instance and to extend the schema for each instance. Refer to [TID 7008633 \(http://www.novell.com/support/php/\)](http://www.novell.com/support/php/)

search.do?cmd=displayKC&docType=kc&externalId=7008633&sliceId=2&docTypeID=DT_TID_1_1&dialogID=238490556&stateId=0%20%20238492510) for more information on upgrading Metadirectory on a server with multiple eDirectory instances.

4.13.1 GUI Upgrade

After the supporting components have been upgraded, you upgrade the Metadirectory server. During the upgrade process, the driver shim files that are stored in the file system are updated.

- 1 Verify that the drivers are stopped. For instructions, see [Section 4.10, “Stopping the Drivers,” on page 35](#).
- 2 On Linux, stop the lcache process.
 - ♦ If the Metadirectory server and Remote Loader are on the same server, manually stop the lcache process.
 - ♦ If the Metadirectory server and Remote Loader are not on the same server, the lcache process is automatically stopped by the ndsd process during upgrade.

On Windows and Solaris, kill the lcache process before starting the upgrade. Run the following commands depending on your platform:

- ♦ **Linux and Solaris:** Run the `$ kill -TERM `pgrep lcache`` command.
 - ♦ **Windows:** Run the `> process -k "lcache.exe"` command or stop it from the Task Manager.
- 3 Launch the Metadirectory server installer from the Identity Manager media:
 - ♦ **Linux:** `IDM4.0.1_Lin/products/IDM/install.bin`
 - ♦ **Solaris:** `IDM4.0.1_Solaris/products/IDM/install.bin`
To execute the binary file, enter `./install.bin`.
 - ♦ **Windows:** `IDM4.0.1_Win:\products\IDM\Windows\setup\idm_install.exe`
 - 4 Select the language to install in, then read and accept the license agreement.
 - 5 Select the *Novell Identity Manager Metadirectory Server*, *Novell iManager Plug-ins for Identity Manager*, and *Utilities* options to update the Metadirectory server and driver shim files.
 - 6 Specify a user and the user password with administrative rights to eDirectory in LDAP format.
 - 7 Review the summary, then click *Install*.
 - 8 Read the installation summary, then click *Done*.

NOTE: After upgrading Identity Manager from 32-bit to 64-bit, the GroupWise driver and the native custom drivers do not work.

4.13.2 Silent Upgrade

In order to run a silent upgrade of the Identity Manager components, you must create a properties file with the parameters necessary to complete the upgrade. There is a sample file included on the Identity Manager media:

- ♦ **Linux:** `IDM4.0.1_Lin/products/IDM/linux/setup/silent.properties`
- ♦ **Solaris:** `IDM4.0.1_Lin/products/IDM/solaris/setup/silent.properties`
- ♦ **Windows:** `IDM4.0.1_Win:\products\IDM\Windows\setup\silent.properties`

Start the silent upgrade by using the correct program for your platform:

- ♦ **Linux/Solaris:** `./install.bin -i silent -f <filename>.properties`
To execute the binary file, enter `./install.bin -i silent -f <filename>.properties`.
- ♦ **Windows:** `IDM4.0.1_Win:\products\IDM\windows\setup\idm_install.exe -i silent -f <filename>.properties`

Set the following attributes in the `silent.properties` file in the location from where you run the Identity Manger upgrade:

```
EDIR_USER_NAME=cn=admin,o=test
EDIR_USER_PASSWORD=test
METADIRECTORY_SERVER_SELECTED=true
CONNECTED_SYSTEM_SELECTED=false
X64_CONNECTED_SYSTEM_SELECTED=true
WEB_ADMIN_SELECTED=false
UTILITIES_SELECTED=false
```

NOTE: If you want to upgrade the Remote Loader while upgrading the Metadirectory server, set the `CONNECTED_SYSTEM_SELECTED` attribute to true.

4.14 Upgrading the Remote Loader

If you are running the Remote Loader, you also need to upgrade the Remote Loader files.

- 1 Create a backup of the Remote Loader configuration files. The default location of the files is as follows:
 - ♦ **Windows:** `C:\Novell\RemoteLoader\remoteloadername-config.txt`
 - ♦ **Linux:** Create your own configuration file in the path of `rdxml`.
- 2 Verify that the drivers are stopped. For instructions, see [Section 4.10, “Stopping the Drivers,” on page 35](#).
- 3 Stop the Remote Loader service or daemon for each driver.
 - ♦ **Windows:** In the Remote Loader Console, select the Remote Loader instance, then click *Stop*.
 - ♦ **Linux:** `rdxml -config path_to_configfile -u`
 - ♦ **Java Remote Loader:** `dirxml_jremote -config path_to_configfile -u`
- 4 On Linux, stop the `lcache` process.
 - ♦ If the Metadirectory server and Remote Loader are on the same server, manually stop the `lcache` process.
 - ♦ If the Metadirectory server and Remote Loader are not on the same server, the `lcache` process is automatically stopped by the `ndsd` process during upgrade.

On Windows and Solaris, kill the `lcache` process before starting the upgrade.
- 5 Run the installation programs for the Remote Loader.

The installation process updates the files and binaries to the current version. For more information, see “[Installing the Remote Loader](#)” in the *Identity Manager 4.0.1 Framework Installation Guide*.

- 6 After the installation finishes, verify that your configuration files contain your environment’s information.
- 7 (Conditional) If there is a problem with the configuration file, copy the backup file you created in [Step 1](#). Otherwise, continue with [Step 8](#).
- 8 Start the Remote Loader service or daemon for each driver.
 - ♦ **Windows:** In the Remote Loader Console, select the Remote Loader instance, then click *Start*.
 - ♦ **Linux:** `rdxml -config path_to_config_file`
 - ♦ **Java Remote Loader:** `dirxml_jremote -config path_to_config_file`

NOTE: After upgrading the Remote Loader from 32-bit to 64-bit, the GroupWise driver and the native custom drivers do not work.

4.15 Upgrading Drivers to Packages

Packages are the new content management feature in Identity Manager 4.0.1. All new driver content is delivered through packages instead of through driver configuration files.

Packages are managed, maintained, and created through Designer. iManager is package aware, but any changes to driver content through iManager are not maintained in Designer. For more information about managing packages, see “[Managing Packages](#)” in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

There are three different ways to upgrade your drivers to packages:

- ♦ [Section 4.15.1, “Creating a New Driver,”](#) on page 40
- ♦ [Section 4.15.2, “Replacing Existing Content with Content from Packages,”](#) on page 40
- ♦ [Section 4.15.3, “Keeping the Current Content and Adding New Content with Packages,”](#) on page 41

4.15.1 Creating a New Driver

The simplest and cleanest way to upgrade drivers to packages is to delete your existing driver and create a new driver with packages. Add all the functionality you want in the new driver. The steps are different for each driver. For instructions, see the individual driver guides on the [Identity Manager Drivers documentation Web site](http://www.novell.com/documentation/idm40drivers/) (<http://www.novell.com/documentation/idm40drivers/>).

4.15.2 Replacing Existing Content with Content from Packages

If you need to keep the associations created by the driver, you shouldn’t delete and re-create the driver. This option allows you to keep the associations, but still create the driver content with packages.

To replace the existing content with content from packages:

- 1 Create a backup of the driver and all of the customized content in the driver.
For instructions, see [Section 4.8.2, “Creating an Export of the Drivers,”](#) on page 34.

- 2 In Designer, delete all objects stored inside of the driver. Delete the policies, filters, entitlements, and all other items stored inside of the driver.
- 3 Import the driver packages into the package catalog.
For instructions, see “[Importing Packages into the Package Catalog](#)” in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 4 Install the packages to the driver.
For instructions, see each driver guide at the [Identity Manager Drivers documentation Web site \(http://www.novell.com/documentation/idm40drivers/\)](http://www.novell.com/documentation/idm40drivers/).
- 5 Add the base, mandatory, and optional packages to the driver to get the desired functionality. These steps are specific for each driver.
For instructions, see each driver guide at the [Identity Manager Drivers documentation Web site \(http://www.novell.com/documentation/idm40drivers/\)](http://www.novell.com/documentation/idm40drivers/).
- 6 Restore any custom policies and rules to the driver. For instructions, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,” on page 42](#).

The driver now functions as before, but with content from packages instead of from a driver configuration file.

4.15.3 Keeping the Current Content and Adding New Content with Packages

You can keep the driver as it currently is and add new functionality to the driver through packages, as long as the functionality in packages does not overlap the current functionality of the driver.

When you install a package, it can overwrite existing policies, which might cause the driver to not work, hence creating a backup is necessary. If any policy is overwritten you can import the backup driver config file and recreate the overwritten policy.

Before you begin, make sure that any customized policies have different policy names than the default policies. When a driver configuration is overlaid with a new driver file, the existing policies are overwritten. If your custom policies do not have a unique name, you lose those custom policies

To add new content to the driver with packages:

- 1 Create a backup of the driver and all of the customized content in the driver.
For instructions, see [Section 4.8.2, “Creating an Export of the Drivers,” on page 34](#).
- 2 Import the driver packages into the package catalog.
For instructions, see “[Importing Packages into the Package Catalog](#)” in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.
- 3 Install the packages on the driver.
For instructions, see each driver guide at the [Identity Manager Drivers documentation Web site \(http://www.novell.com/documentation/idm40drivers/\)](http://www.novell.com/documentation/idm40drivers/).
- 4 Add the desired packages to the driver. These steps are specific for each driver.
For instructions, see the [Identity Manager Drivers documentation Web site \(http://www.novell.com/documentation/idm40drivers/\)](http://www.novell.com/documentation/idm40drivers/).

The driver contains the new functionality added by the packages.

4.16 Restoring Custom Policies and Rules to the Driver

After installing the new packages, if you have custom policies or rules, they must be restored to the driver after you overlay the new driver configuration file. If these policies have different names, they are still stored in the driver, but the links are broken and need to be reestablished.

- ♦ [Section 4.16.1, “Using Designer to Restore Custom Policies and Rules to the Driver,” on page 42](#)
- ♦ [Section 4.16.2, “Using iManager to Restore Custom Policies and Rules to the Driver,” on page 42](#)


4.16.1 Using Designer to Restore Custom Policies and Rules to the Driver

You can add policies into the policy set by:

- ♦ [“Adding a Customized Policy through the Show Policy Flow View” on page 42](#)

Adding a Customized Policy through the Show Policy Flow View

Perform these steps in a test environment before you move the upgraded driver to your production environment.


- 1 In the *Outline* view, select the upgraded driver, then click the *Show Policy Flow* icon .
- 2 Right-click the policy set where you need to restore the customized policy to the driver, then select *Add Policy > Copy Existing*.
- 3 Browse to and select the customized policy, then click *OK*.
- 4 Specify the name of the customized policy, then click *OK*.
- 5 Click *Yes* in the file conflict message to save your project.
- 6 After the Policy Builder opens the policy, verify that the information is correct in the copied policy.
- 7 Repeat [Step 2](#) through [Step 6](#) for each customized policy you need to restore to the driver.
- 8 Start the driver and test the driver.

For more information on starting the driver, see [Section 4.19, “Starting the Drivers,” on page 44](#). For more information on testing the driver, see [“Testing Policies with the Policy Simulator” in Policies in Designer 4.0.1](#).

- 9 After you verify that the policies work, move the driver to the production environment.

4.16.2 Using iManager to Restore Custom Policies and Rules to the Driver

Perform these steps in a test environment before you move the upgraded driver to your production environment.

- 1 In iManager, select *Identity Manager > Identity Manager Overview*.
- 2 Browse to and select the location in the tree to search for Driver Set objects, then click the search icon .
- 3 Click the Driver Set object that contains the upgraded driver.
- 4 Click the driver icon, then select the policy set where you need to restore the customized policy.
- 5 Click *Insert*.
- 6 Select *Use an existing policy*, then browse to and select the custom policy.
- 7 Click *OK*, then click *Close*.

8 Repeat [Step 3](#) through [Step 7](#) for each custom policy you need to restore to the driver.

9 Start the driver and test the driver.

For information on starting the driver, see [Section 4.19, “Starting the Drivers,” on page 44](#). There is no policy simulator in iManager. To test the policies, cause events to happen that make the policies execute. For example, create a user, modify a user, or delete a user.

10 After you verify that the policies work, move the driver to the production environment.

4.17 Overlaying the Existing Driver Configuration File with the New Driver (Deprecated)

Identity Manager 4.0.1 uses packages instead of driver configuration files. There are no new configuration files for this release. All new driver content is delivered in packages from 4.0 and later.

Before you begin, make sure that any customized policies have different policy names than the default policies. When a driver configuration is overlaid with a new driver file, the existing policies are overwritten. If your custom policies do not have a unique name, you lose those custom policies.

You overlay the new driver configuration file over your existing driver to update the driver with any new policies or functionality that are in the driver configuration file.

- ♦ [Section 4.17.1, “Using Designer to Overlay the Existing Driver Configuration File with the New Driver,” on page 43](#)
- ♦ [Section 4.17.2, “Using iManager to Overlay the Existing Driver Configuration File with the New Driver,” on page 44](#)

4.17.1 Using Designer to Overlay the Existing Driver Configuration File with the New Driver

IMPORTANT: Make sure that your customized policies have different names than the default policies, so you do not lose any data.

1 In the Modeler, right-click the driver line of the driver you are upgrading.

2 Select *Run Configuration Wizard*.

3 Click *Yes* on the warning page.

The warning informs you that all of the driver settings and policies will be reset.

4 Browse to and select the driver configuration for the driver you are upgrading, then click *Run*.

5 Specify the information for the driver, then click *Next*.

There might be more than one page of information to specify.


6 Click *OK* on the results page.

7 Look at the driver parameters and policies to make sure everything is set how you want it.

8 If you have custom policies, proceed to [Section 4.16, “Restoring Custom Policies and Rules to the Driver,” on page 42](#). Otherwise, proceed to [Section 4.19, “Starting the Drivers,” on page 44](#).

4.17.2 Using iManager to Overlay the Existing Driver Configuration File with the New Driver

IMPORTANT: Make sure that any customized policies have a different name than the default, so you do not lose any data.

- 1 In iManager, select *Identity Manager > Identity Manager Overview*.
- 2 Browse to and select the location in the tree to search for Driver Set objects, then click the search icon .
- 3 Click the Driver Set object.
- 4 Click *Drivers > Add driver*, then click *Next* on the New Driver Wizard page.
- 5 Select the driver configuration you want to overlay, then click *Next*.
- 6 In the *Existing drivers* field, browse to and select the driver you want to upgrade.
- 7 Specify the information for the driver, then click *Next*.
- 8 On the summary page, select *Update everything about that driver and policy libraries*.
- 9 Click *Next*, then click *Finish* on the Summary page.
- 10 Look at the driver parameters and policies to make sure everything is set how you want it.
- 11 If you have custom policies, proceed to [Section 4.16, “Restoring Custom Policies and Rules to the Driver,” on page 42](#). Otherwise, proceed to [Section 4.19, “Starting the Drivers,” on page 44](#).

4.18 Deploying the Converted Project




Deploy the converted Designer project into the Identity Vault. For more information, see [“Deploying and Exporting”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

4.19 Starting the Drivers

After all of the Identity Manager components are upgraded, the drivers must be restarted. It is also important to test the drivers after they are running to verify that all of the policies still work.


- ♦ [Section 4.19.1, “Using Designer to Start the Drivers,” on page 44](#)
- ♦ [Section 4.19.2, “Using iManager to Start the Drivers,” on page 45](#)

4.19.1 Using Designer to Start the Drivers

- 1 In Designer, select the Identity Vault  object in the *Outline* tab.
- 2 Click the *Start All Drivers* icon  in the Modeler toolbar. This starts all of the drivers in the project.
- 3 Set the driver startup options:
 - 3a Double-click the driver icon  in the *Outline* tab.
 - 3b Select *Driver Configuration > Startup Option*.


- 3c** Select *Auto start* or select your preferred method of starting the driver, then click *OK*.
- 3d** Repeat [Step 3a](#) through [Step 3c](#) for each driver.
- 4** Test the drivers to verify the policies are working as designed. For information on how to test your policies, see [“Testing Policies with the Policy Simulator”](#) in *Policies in Designer 4.0.1*.

4.19.2 Using iManager to Start the Drivers

- 1** In iManager, select *Identity Manager > Identity Manager Overview*.
- 2** Browse to and select the location in the tree to search for Driver Set objects, then click the search icon .
- 3** Click the Driver Set object.
- 4** Click *Drivers > Start all drivers* to start all of the drivers at the same time.

or

In the upper right corner of the driver icon, click *Start driver* to start each driver individually.

- 5** If you have multiple drivers, repeat [Step 2](#) through [Step 4](#).
- 6** Set the driver startup options:
 - 6a** In iManager, select *Identity Manager > Identity Manager Overview*.
 - 6b** Browse to and select the location in the tree to search for Driver Set objects, then click the search icon .
 - 6c** Click the Driver Set object.
 - 6d** In the upper right corner of the driver icon, click *Edit properties*.
 - 6e** On the Driver Configuration page, under *Startup Options*, select *Auto start* or select your preferred method of starting the driver, then click *OK*.
 - 6f** Repeat [Step 6b](#) through [Step 6e](#) for each driver.
- 7** Test the drivers to verify the policies are working as designed.

There is no policy simulator in iManager. To test the policies, cause events to happen that make the policies execute. For example, create a user, modify a user, or delete a user.

4.20 Upgrading the User Application

If you are upgrading your User Application 4.0 server, you must have a User Application base package that can be upgraded to User Application 4.0.1. For more information on creating the User Application driver through Designer, see [“Creating the Drivers in Designer”](#) in the *Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide*.

4.21 Upgrading the Identity Reporting Module

The Identity Reporting Module is available with Identity Manager 4.0 and later. If you are upgrading from Identity Manager 3.6 to Identity Manager 4.0.1, you can install the Identity Reporting Module if you want to use it. You can install Identity Reporting Module by launching the Identity Reporting installer from the Identity Manager media. For more information on Identity Manager Reporting installation, see “[Installation and Driver Configuration](#)” in the *Identity Reporting Module Guide*.

If you have Identity Manager 4.0, you can install Identity Reporting 4.0.1 Module on top of your existing Identity Reporting 4.0 Module. For more information on Identity Manager Reporting installation, see “[Installation and Driver Configuration](#)” section in the *Identity Reporting Module Guide*.

NOTE: You must upgrade the User Applications before upgrading the Identity Reporting module.

The process of upgrading the Identity Reporting Module requires you to upgrade the Event Auditing Service (EAS) and Identity Reporting Module. You need to run the EAS binary upgrade before running the installation program for the Identity Reporting Module.

5 Performing a Migration

Before beginning, make sure that you have reviewed the differences between an upgrade and a migration. See [Chapter 3, “Upgrading or Migrating,”](#) on page 13.

- ♦ [Section 5.1, “Migration Checklist,”](#) on page 47
- ♦ [Section 5.2, “Adding the New Server to the Driver Set,”](#) on page 48
- ♦ [Section 5.3, “Copying Server-Specific Information,”](#) on page 49
- ♦ [Section 5.4, “Removing the Old Server from the Driver Set,”](#) on page 50

5.1 Migration Checklist


Use the following checklist to verify that all of the steps are completed in the correct order for a successful migration of the Identity Manager system. Follow these steps for each Identity Manager server in your environment.

- Make sure that you have downloaded the Identity Manager ISO files. For more information, see [“Where to Get Identity Manager”](#) in the *Identity Manager 4.0.1 Framework Installation Guide*.
- Create a backup of the current configuration of your Identity Manager solution. You do this by creating exports of your drivers or creating a Designer project of your Identity Manager solution. For more information, see [Section 4.8, “Creating a Backup of the Current Configuration,”](#) on page 32.
- Install the desired operating system. For a list of supported platforms, see [“System Requirements”](#) in the *Identity Manager 4.0.1 Framework Installation Guide*.
- Install eDirectory 8.8.6 on the server. For more information, see the *Novell eDirectory 8.8 Installation Guide* (<http://www.novell.com/documentation/edir88/index.html>).
- Add the same eDirectory replicas that are on the current Identity Manager server to this new server. For more information, see [“Administering Replicas”](#) (<http://www.novell.com/documentation/edir88/edir88/data/fbgciaad.html>) in the *eDirectory Administration Guide* (<http://www.novell.com/documentation/edir88/pdfdoc/edir88/edir88.pdf>).
- Install Identity Manager 4.0.1. Use the [“Basic Identity Manager System Checklist”](#) in the *Identity Manager 4.0.1 Framework Installation Guide* to verify that all steps are completed.
- If any of the drivers in the driver set are Remote Loader drivers, upgrade the Remote Loader server for each driver. For more information, see [Section 4.14, “Upgrading the Remote Loader,”](#) on page 39.
- (Conditional) If the old server is your User Application server, perform the following additional steps:
 - Run the NrfCaseUpdate utility. For more information, see [“Running the NrfCaseUpdate Utility”](#) in the *Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide*.

- The User Application driver must be migrated in Designer. For more information, see the [Identity Manager 4.0.1: RBPM and Reporting Migration Guide](#).
- Create a new Role and Resource Service driver. The Role and Resource Service driver is not migrated. If you have an existing Role and Resource Service driver, you must create a new driver for Identity Manager 4.0.1. For more information, see the [Identity Manager 4.0.1: RBPM and Reporting Migration Guide](#).
- Deploy the migrated User Application driver into the Identity Vault. For more information, see the [Identity Manager 4.0.1: RBPM and Reporting Migration Guide](#).
- Install the User Application on this new server. For more information, see the [Identity Manager 4.0.1: RBPM and Reporting Migration Guide](#).
- Add the new server to the driver set. For more information, see [Section 5.2, “Adding the New Server to the Driver Set,”](#) on page 48.
- Change the server-specific information for each driver. If you use iManager, it is a manual process. You should use iManager if you are migrating from an Identity Manager server earlier than 3.5 version to an Identity Manager server earlier than or equal to 3.5. For all other supported migration paths, you can use Designer. For more information, see [Section 5.3, “Copying Server-Specific Information,”](#) on page 49.
- (Conditional) Run `configupdate.sh` or `configupdate.bat` to change server-specific information from the old server to the new server for the User Application configuration. For more information, see “[User Application Configuration Reference](#)” in the [Identity Manager Roles Based Provisioning Module 4.0.1 User Application: Installation Guide](#).
- (Optional) Upgrade your drivers to use packages. All content for drivers is delivered through packages instead of a driver configuration file. For more information, see [Section 4.15, “Upgrading Drivers to Packages,”](#) on page 40.
- (Optional) Restore custom policies and rules to the drivers. When you update your drivers to packages, the policies are overwritten, so restoring policies is required only if you upgraded your driver to use packages. For more information, see [Section 4.16, “Restoring Custom Policies and Rules to the Driver,”](#) on page 42.
- Remove the old server from the driver set. For more information, see [Section 5.4, “Removing the Old Server from the Driver Set,”](#) on page 50.
- If you are using Novell Sentinel, you must update to Novell Sentinel 6.1. For more information about upgrading Sentinel, see the [Sentinel Installation Guide](#) (http://www.novell.com/documentation/sentinel6/pdffdoc/sentinel60_installationguide.pdf).
- Activate the Metadirectory server and any upgraded driver. For more information, see “[Activating Novell Identity Manager Products](#)” in the [Identity Manager 4.0.1 Framework Installation Guide](#).

5.2 Adding the New Server to the Driver Set

If you are using iManager, you must add the new server to the driver set. Designer contains a Migration Wizard for the server that does this step for you. If you are using Designer, skip to [Section 5.3, “Copying Server-Specific Information,”](#) on page 49. If you are using iManager, complete the following procedure:

- 1 In iManager, click  to display the Identity Manager Administration page.
- 2 Click *Identity Manager Overview*.
- 3 Browse to and select the container that holds the driver set.

- 4 Click the driver set name to access the Driver Set Overview page.
- 5 Click *Servers > Add Server*.
- 6 Browse to and select the new Identity Manager 4.0.1 server, then click *OK*.

5.3 Copying Server-Specific Information

You must copy all server-specific information that is stored in each driver and driver set to the new server's information. This also includes GCV's and other data on the driver set that will not be there on the new server and need to be copied. The server-specific information is contained in:

- ♦ Global configuration values
- ♦ Engine control values
- ♦ Named passwords
- ♦ Driver authentication information
- ♦ Driver startup options
- ♦ Driver parameters
- ♦ Driver set data

You can do this in Designer or iManager. If you use Designer, it is an automated process. If you use iManager, it is a manual process. You should use iManager if you are migrating from an Identity Manager server earlier than 3.5 version to an Identity Manager server greater than or equal to 3.5. For all other supported migration paths, you can use Designer.

- ♦ [Section 5.3.1, "Copying the Server-Specific Information in Designer," on page 49](#)
- ♦ [Section 5.3.2, "Changing the Server-Specific Information in iManager," on page 50](#)

5.3.1 Copying the Server-Specific Information in Designer

The procedure affects all drivers stored in the driver set.

- 1 In Designer, open your project.
- 2 In the *Outline* tab, right-click the server, then select *Migrate*.
- 3 Read the overview to see what items are migrated to the new server, then click *Next*.
- 4 Select the target server from the list available servers, then click *Next*.

The only servers listed are servers that are not currently associated with a driver set and are equal to or newer than the source server's Identity Manager version.

- 5 Select *Make the target server active*.

There are three options, but *Make the target server active* is recommended.

- ♦ **Make the target server active:** Copies the settings from the source server to the target server and disables the drivers on the source server.
- ♦ **Keep the source server active:** Does not copy the settings and disables all drivers on the target server.
- ♦ **Makes both target and source servers active:** Copies settings from the source server to the target server without disabling the drivers on the source or target servers. This option is not recommended. If both drivers are started, the same information is written to two different queues and this can cause corruption.

- 6 Click *Migrate*.

7 Deploy the changed drivers to the Identity Vault.

For more information, see [“Deploying a Driver to an Identity Vault”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

8 Start the drivers.

For more information, see [Section 4.19, “Starting the Drivers,”](#) on page 44.

5.3.2 Changing the Server-Specific Information in iManager

1 In iManager, click  to display the Identity Manager Administration page.

2 Click *Identity Manager Overview*.

3 Browse to and select the contain that holds the driver set.

4 Click the driver set name to access the Driver Set Overview page.

5 Click the upper right corner of the driver, then click *Stop driver*.

6 Click the upper right corner of the driver, then click *Edit properties*.

7 Copy or migrate all server-specific driver parameters, global configuration values, engine control values, named passwords, driver authentication data, and driver startup options that contain the old server’s information to the new server’s information. Global configuration values and other parameters of the driver set, such as max heap size, Java settings, and so on, must have identical values to those of the old server.

8 Click *OK* to save all changes.

9 Click the upper right corner of the driver to start the driver.

10 Repeat [Step 5](#) through [Step 9](#) for each driver in the driver set.

5.4 Removing the Old Server from the Driver Set

After the new server is running all of the drivers, the old server can be removed from the driver set.

- ♦ [Section 5.4.1, “Using Designer to Remove the Old Server from the Driver Set,”](#) on page 50
- ♦ [Section 5.4.2, “Using iManager to Remove the Old Server from the Driver Set,”](#) on page 51
- ♦ [Section 5.4.3, “Decommissioning the Old Server,”](#) on page 51

5.4.1 Using Designer to Remove the Old Server from the Driver Set

1 In Designer, open your project.

2 In the Modeler, right-click the driver set, then select *Properties*.

3 Select *Server List*.


4 Select the old Identity Manager server in the *Selected Servers* list, then click the < to remove the server from the *Selected Servers* list.

5 Click *OK* to save the changes.

6 Deploy the change to the Identity Vault.

For more information, see [“Deploying a Driver Set to an Identity Vault”](#) in the *Designer 4.0.1 for Identity Manager 4.0.1 Administration Guide*.

5.4.2 Using iManager to Remove the Old Server from the Driver Set

- 1 In iManager, click  to display the Identity Manager Administration page.
- 2 Click *Identity Manager Overview*.
- 3 Browse to and select the container that holds the driver set.
- 4 Click the driver set name to access the Driver Set Overview page.
- 5 Click *Servers > Remove Server*.
- 6 Select the old Identity Manager server, then click *OK*.

5.4.3 Decommissioning the Old Server

At this point, the old server is not hosting any drivers. If you no longer need this server, you must complete additional steps to decommission it:

- 1 Remove the eDirectory replicas from this server.

For more information, see “Deleting Replicas” (<http://www.novell.com/documentation/edir88/edir88/data/fbgciaad.html>) in the *eDirectory Administration Guide* (<http://www.novell.com/documentation/edir88/pdfdoc/edir88/edir88.pdf>).

- 2 Remove eDirectory from this server.

For more information, see TID 10056593, “Removing a Server From an NDS Tree Permanently” (http://www.novell.com/support/php/search.do?cmd=displayKC&docType=kc&externalId=10056593&sliceId=&docTypeID=DT_TID_1_1&dialogID=35218849&stateId=0%20%2035214815).

