

License Association Guide

Novell® Identity Manager

3.6

July 23, 2008

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About This Guide

This guide provides information about the Novell Identity Manager License Association Tool. This tool lets you identify how many directory objects are associated with Identity Manager, SecretStore, and SecureLogin licenses. This guide contains the following sections:

- ♦ Chapter 1, “Associating Identity Manager Licenses,” on page 7

Feedback

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Documentation Updates

For the most recent version of this document, see the [Identity Manager 3.6 documentation Web site \(http://www.novell.com/documentation/idm36\)](http://www.novell.com/documentation/idm36).

Additional Documentation

For additional Identity Manager 3.6 documentation, see the [Identity Manager 3.6 documentation Web site \(http://www.novell.com/documentation/idm36\)](http://www.novell.com/documentation/idm36).

Documentation Conventions

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

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

Associating Identity Manager Licenses

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The Novell® Identity Manager License Association Tool enables you to determine how many of the following are being used:

- ♦ Identity Manager licenses in a given tree
- ♦ Licenses for specific additional fee drivers
- ♦ Novell SecretStore® licenses
- ♦ Novell SecureLogin* licenses

An Identity Manager license is counted for each object that meets the following criteria:

- ♦ The object is associated within an Identity Manager driver.
- ♦ The Identity Manager driver association has a valid association key.
- ♦ The association key isn't marked as disabled.

Additional driver licenses are counted for any object that has one or more valid non-disabled associations to an additional fee driver. This concept is more thoroughly explained in [Section 1.3, “Understanding the Review Results,” on page 12](#).

The License Association Tool generates reports on demand. You can also schedule reviews to run at a later time. After a review has been scheduled, the License Association Tool's graphical user interface is locked to prevent tampering. It remains locked until after the review completes, unless you unlock it by providing a password.

This section contains information about the following topics:

- ♦ [Section 1.1, “Installing the License Association Tool,” on page 7](#)
- ♦ [Section 1.2, “Reviewing a System,” on page 9](#)
- ♦ [“Understanding the Review Results” on page 12](#)
- ♦ [Section 1.4, “Disabling License Associations,” on page 15](#)

1.1 Installing the License Association Tool

You can install the License Association Tool on a Windows or Linux machine. After it is installed, the License Association Tool can review the associations of a specified eDirectory™ server.

- ♦ [Section 1.1.1, “Installing on Windows,” on page 8](#)
- ♦ [Section 1.1.2, “Installing on Linux,” on page 8](#)

1.1.1 Installing on Windows

The Identity Manager installation routine installs the License Association Tool on Windows by default. If you deselected the *Utilities* check box during the Identity Manager installation, you need to install the License Association Tool separately. For additional instructions on installing the License Association Tool separately, see “[Installing Identity Manager](#)” in the *Identity Manager 3.6 Installation Guide*.

- 1** Launch the Identity Manager install (`install.exe`) utility.
Proceed through the installation routine until you get to the *Please Select Components to Install* page.
- 2** Select *Utilities*, then click *Next*.
- 3** Specify an installation path, then click *Next*.
The default location is `C:\Novell\NDS\DirXMLUtilities`.
- 4** Select the utilities that you want to install, then click *Next*.
Make sure *License Association Tool* is selected.
- 5** On the Installation Summary page, click *Finish* to install the selected utilities.
- 6** On the Installation Complete page, click *Close*.
The License Association Tool is now installed.

The License Association Tool consists of five `.jar` files (`idmlat.jar`, `forms_rt.jar`, `itext-2.1.0.jar`, `ldap.jar`, and `ObjDisabler.jar`) and two `.bat` files (`idmadt.bat` and `idmlat.bat`.) On the Identity Manager CD-ROM or in the image file, these files are located at `\nt\dirxml\utilities\idm_lat`.

1.1.2 Installing on Linux

Although the License Association Tool is available for Linux/UNIX platforms, it is not installed as part of the Installation routine.

To install the License Association Tool:

- 1** Locate the License Association Tool files on the Identity Manager CD-ROM or in the image file.
The License Association Tool files are located in `/linux/setup/utilities/idm_lat`.
- 2** Copy the following files to the Linux/UNIX file system:
 - ♦ `idmlat.jar`
 - ♦ `forms_rt.jar`
 - ♦ `ldap.jar`
 - ♦ `ObjDisabler.jar`
 - ♦ `idmadt`
 - ♦ `idmlat`
 - ♦ `itext-2.1.0.jar`

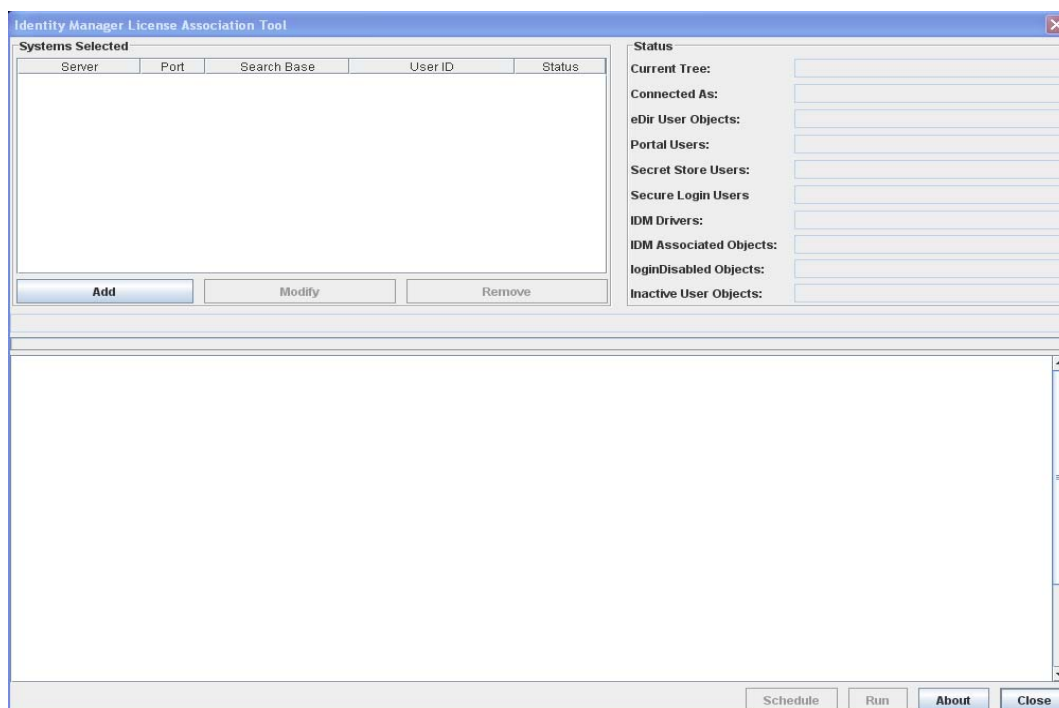
1.2 Reviewing a System

Reviewing a system with the License Association Tool involves several tasks, each of which is described in its own section.

- ♦ Section 1.2.1, “Setting the Parameters of a Review,” on page 9
- ♦ Section 1.2.2, “Scheduling a Review,” on page 11
- ♦ Section 1.2.3, “Unlocking the License Association Tool,” on page 11
- ♦ “Viewing the Review Results” on page 12

1.2.1 Setting the Parameters of a Review

- 1 Open the License Association Tool by launching `idmlat`, which is a `.bat` file for Windows and a script file for Linux/UNIX. The following figure shows the License Association Tool user interface.



- 2 Click *Add* to select a server to review.

- 3 Provide the required information about the target LDAP server.

LDAP Server Name or IP Address: Specify the LDAP server to which the License Association Tool connects in order to review a directory tree.

LDAP Port: Specify the port that the License Association Tool uses to locate LDAP services on the specified server.

Port 389 is the default LDAP port, and port 636 is the default port for secure LDAP access (via SSL.) However, because the Identity Vault's LDAP ports are configurable, make sure you use valid ports for the specified server.

LDAP User ID: Specify the user ID that the License Association Tool uses to connect to the LDAP server.

If you are connecting via SSL, you must specify this parameter.

Make sure that the User ID you specify has access to all objects in the tree. You can specify *anonymous* for this value, but it might not have enough rights to see all the objects for the review.

User Password: Specify the user password that the License Association Tool uses to connect to the LDAP server.

This is the password for the user specified in the *LDAP User ID* field. If you specified *anonymous* for the LDAP User ID, don't enter a value here.

Search Entire Tree: By default, this box is selected. However, if the tree is particularly large, you might need to narrow the scope of the search. Provide this information in the *Specify Search Base* field.

Specify Search Base: When *Search Entire Tree* is not selected, specify the directory container in which the License Association Tool performs the review. Use a valid LDAP DN (for example *ou=dirxml,o=provo*).

Generate Association List: Select this option to generate a detailed list of associations.

NOTE: In large environments with many associations, the License Association Tool might run out of memory resources. If this occurs, the association list cannot complete.

- 4 Click *OK*.
- 5 (Optional) Repeat Step 2 and Step 3 as needed to add other LDAP servers on which you want to perform a review.

1.2.2 Scheduling a Review

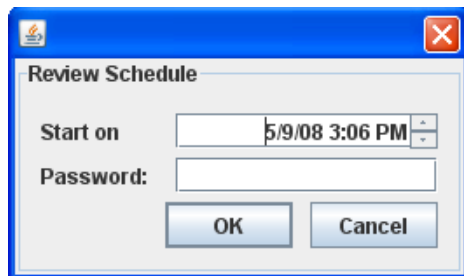
After you provide the required LDAP parameters, you can run the review immediately by clicking the *run* button. Alternatively, click *Schedule* to configure the review to run on a specific date and time. Because a tree review can take quite awhile, depending on the size of the tree, you should schedule the review to run during off hours if possible.

When you schedule a review, the License Association Tool's interface is locked.

To schedule a review:

- 1 In the License Association Tool, click *Schedule*.

You must have at least one LDAP server configured in order to schedule a review.



- 2 Specify the required scheduling information.

Start on: Specify the date and time to start the review.

Specify the date and time in the format shown.

Password: Specify a password for this review.

The password you enter here becomes the key to unlock the License Association Tool.

- 3 Click *OK*.

When you schedule a review, the License Association Tool's interface locks to prevent anyone tampering with the review parameters or results. If you need to unlock the interface to modify the review schedule or parameters, see [“Unlocking the License Association Tool” on page 11](#).

1.2.3 Unlocking the License Association Tool

When you schedule a review, the License Association Tool's interface locks to prevent anyone tampering with the review parameters or results. To unlock the License Association Tool interface to modify the review schedule or parameters, you must use the password you specified when you scheduled the review.

Unlocking the License Association Tool interface prior to a scheduled review terminates the currently scheduled review.

- 1 In the License Association Tool, click *Unlock*.



- 2 Specify the review password and click *OK*.

1.2.4 Viewing the Review Results

As the License Association Tool performs a review, it displays results in the Status window. Additionally, a complete review report displays in the text window at the bottom of the License Association Tool interface. Because of the potential length of the report, the License Association Tool also saves the review data to a series of PDF files.

treename-summary.pdf: Contains the complete review report.

treename-logindisabled.pdf: Contains a list of DNS object names that are disabled for login. This is only produced if the search encounters login-disabled users.

treename-inactiveusers.pdf: Contains a list of DNS object names that haven't authenticated in over a year. This is only produced if the search encounters inactive users.

1.3 Understanding the Review Results

The major components of the review report that are displayed in the License Association Tool include the following:

Parameters: Displays the parameters for the review, including LDAP server information and the directory tree being reviewed.

Results Summary: Displays a summary of the Identity Manager review findings, including the number of associated objects, which corresponds to the number of Identity Manager base licenses being used in the tree.

Driver Association Summary: Displays object associations by Identity Manager driver. If the License Association Tool recognizes the driver, it displays the driver name. Otherwise, it identifies the driver only as <Custom>.

Driver: Displays a summary for each Identity Manager driver identified in the review, including driver name and context, driver module, and the number of processed and disabled object associations for the driver.

A review report looks similar to the following:

```
Novell Identity Manager License Tool v3.6.0
Copyright© 2006 - 2008 Novell, Inc. All rights reserved.
Started on Mon May 12 14:44:27 MDT 2008
```

```
Parameters:
  LDAP Server Name: 10.1.1.222
```

LDAP Server Port: 636
Search Base: <none>

Tree Name: LABTEST
Connected as: cn=admin,o=lab1
Found 10 Identity Manager Drivers

Results Summary:
Found 90 user objects
Found 0 Portal users
Found 0 Secret Store users
Found 0 NSL users
Found 96 Associated Objects
Found 57 Associated Objects with attribute loginDisabled==true
Found 0 Associated Objects that appear inactive

Results:
Found 2 Integration Modules
Associations by Integration Module:
Identity Manager Engine Services is associated to 96 objects.
89 User (inetOrgPerson) objects.
7 DirXML-SharedProfile objects.

Identity Manager Core Drivers is associated to 88 objects.
88 User (inetOrgPerson) objects.

Associations by Driver Type:
Identity Manager Engine Services
ENTITLEMENT drivers are associated to 96 objects.
89 User (inetOrgPerson) objects.
7 DirXML-SharedProfile objects.
LBACK drivers are associated to 88 objects.
88 User (inetOrgPerson) objects.
DirXML drivers are associated to 88 objects.
88 User (inetOrgPerson) objects.
UAPROV drivers are associated to 17 objects.
17 User (inetOrgPerson) objects.
Identity Manager Core Drivers
LDAP drivers are associated to 88 objects.
88 User (inetOrgPerson) objects.

Driver: cn=AD,cn=driverset1,dc=idm,dc=services,dc=system
Driver Name: Identity Manager Driver for Netscape
Driver hosted on server: cn=metaserver1,dc=metaserver1,dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.netscape.
netscapedrivershim via Remote Loader
Processed Associations: 0
Disabled Associations: 0
Pending Associations: 0

Driver: cn=Generic Loopback,cn=driverset1,dc=idm,dc=services,dc=system
Driver Name: Identity Manager Loopback Service Driver v. 3.5.10.20070918
Driver hosted on server: cn=metaserver1,dc=metaserver1,dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.loopback.

```

LoopbackDriverShim
Processed Associations: 0
Disabled Associations: 0
Pending Associations: 0

Driver: cn=state-machine,cn=driverset1,dc=idm,dc=services,dc=system
Driver Name: Identity Manager Driver for LDAP v. 3.5.2
Driver hosted on server: cn=metaserver1,dc=metaserver1,
dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.ldap.LDAPDriverShim
Processed Associations: 88
Disabled Associations: 0
Pending Associations: 0

Driver: cn=id-provider,cn=driverset1,dc=idm,dc=services,dc=system
Driver Name: Identity Manager Driver for ID Provider v.
3.5.10.20070918
Driver hosted on server: cn=metaserver1,dc=metaserver1,
dc=servers,dc=system
Driver Module: com.novell.idm.driver.idprovider.IDProviderShim
Processed Associations: 88
Disabled Associations: 0
Pending Associations: 0

Driver: cn=user-application,cn=driverset1,dc=idm,dc=services,dc=system
Driver Name: Identity Manager Driver for Composer v.
0.20070917.135625
Driver hosted on server: cn=metaserver1,dc=metaserver1,
dc=servers,dc=system
Driver Module: com.novell.idm.driver.ComposerDriverShim
Processed Associations: 17
Disabled Associations: 0
Pending Associations: 0

Driver: cn=work-order,cn=driverset1,dc=idm,dc=services,dc=system
Driver Name: Identity Manager Driver for WorkOrder v. 3.5.1
Driver hosted on server: cn=metaserver1,dc=metaserver1,
dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.workorder.
WorkOrderDriverShim
Processed Associations: 0
Disabled Associations: 0
Pending Associations: 0

Driver: cn=image-import-export,cn=driverset1,dc=idm,dc=services,
dc=system
Driver Name: Identity Manager Driver for Delimited Text v. 3.5.1
Driver hosted on server: cn=metaserver1,dc=metaserver1,
dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.delimitedtext.
DelimitedTextDriver
Processed Associations: 0
Disabled Associations: 0
Pending Associations: 0

Driver: cn=business-logic,cn=driverset1,dc=idm,dc=services,dc=system
Driver Name: Identity Manager Loopback Service Driver v.
3.5.10.20070918
Driver hosted on server: cn=metaserver1,dc=metaserver1,

```

```

dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.loopback.
LoopbackDriverShim
Processed Associations: 88
Disabled Associations: 0
Pending Associations: 0

Driver: cn=user-import-export,cn=driverset1,dc=idm,dc=services,
dc=system
Driver Name: Identity Manager Driver for Delimited Text v. 3.5.1
Driver hosted on server: cn=metaserver1,dc=metaserver1,
dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.delimitedtext.
DelimitedTextDriver
Processed Associations: 0
Disabled Associations: 0
Pending Associations: 0

Driver: cn=role-based-entitlements,cn=driverset1,dc=idm,dc=services,
dc=system
Driver Name: Identity Manager Entitlements Service Driver v.
3.5.0
Driver hosted on server: cn=metaserver1,dc=metaserver1,
dc=servers,dc=system
Driver Module: com.novell.nds.dirxml.driver.entitlement.
EntitlementServiceDriver
Processed Associations: 96
Disabled Associations: 0
Pending Associations: 0

Ended Mon May 12 14:44:43 MDT 2008

```

1.4 Disabling License Associations

The Identity Manager Association Disabling Tool (IDMADT) lets you disable associations on objects that you don't want serviced by Identity Manager. IDMADT leverages License Association Tool output files to identify a list of objects from these log files, and changes the association state for those objects to `ASSOCIATION_DISABLED`. This tells Identity Manager to stop synchronizing information for these objects. After this is done, the License Association Tool no longer counts these objects, so you don't need licenses for them.

- ♦ [Section 1.4.1, "Installing IDMADT," on page 15](#)
- ♦ [Section 1.4.2, "Using IDMADT," on page 16](#)

1.4.1 Installing IDMADT

IDMADT is a Java application compatible with Java v1.4.2 or later. To install IDMADT, simply copy the following files to a directory of your choice. These files are located on the Identity Manager CD-ROM or in the file.

ObjDisabler.jar: IDMADT Java classes.

Ldap.jar: LDAP Java classes.

Forms_rt.jar: User interface Java classes.

Idmadt.bat: Windows batch file to execute IDMADT.

Idmadt: Linux script file to execute IDMADT.

1.4.2 Using IDMADT

1 Launch IDMADT.

Execute either the Windows batch file (`Idmadt.bat`), or the Linux script file (`Idmadt`), as determined by the operating system you are using.

2 Provide the required parameters.

LDAP Server Name or IP Address: Specify the LDAP server to which IDMADT connects to review the tree.

LDAP Port: Specify the port that IDMADT uses to locate LDAP services. Make sure you specify a valid SSL port for the specified LDAP server. Port 636 is the default SSL port.

User ID: Specify the User ID that IDMADT uses to connect to the specified LDAP server. The specified User ID must have access to all objects in the tree. Although you can select `<anonymous>` for this value, it likely does not have sufficient rights.

Specify the User ID in LDAP comma-delimited, typeful format. For example:
`cn=admin,ou=IST,o=MyCompany.`

User Password: Specify a valid password for the specified User ID.

Input File: Specify the name of the License Association Tool file that contains the list of objects to process. The two relevant files are `<treename>-logindisabled.log` and `<treename>-inactiveusers.log`. Click *Open* to browse for the desired file.

NOTE: To generate these files you must run the License Association Tool by using the `GenLogFiles` parameter. Open the `idmlat.bat` or `idmlat` (script file for Linux) in a text editor and add `GenLogFiles` to the end of the line.

You must run IDMADT once for each file you want to process.

Use SSL and Trust eDir Server: Because IDMADT modifies objects, select this option to turn on SSL authentication with a trust relationship.

3 Click *Start*.

IDMADT displays information about the LDAP server in the System Information section of the IDMADT user interface, and displays the progress of the current operation in the log pane at the bottom of the IDMADT user interface.

Click *Abort* to halt the current operation.

Identity Manager Association Disabler Tool

System Parameters	System Information
LDAP Server IP Address: 137.65.150.45	Current Tree: YCOUG-TREE
LDAP Port: 636	Connected As: cn=admin,o=novell
LDAP User ID: cn=admin,o=novell	IDM Associated Objects: 1
LDAP User Password: *****	loginDisabled Objects: 1
Input File: YCOUG-TREE-logindisabled.log <input type="button" value="Open"/>	
<input checked="" type="checkbox"/> Use SSL <input checked="" type="checkbox"/> Trust eDir Server	

Processing associated object # 0

Novell Identity Manager Association Disabling Tool v 3.5
 Novell, Inc. Copyright 2006
 Process Started Mon Aug 06 11:21:41 MDT 2007

System Parameters
 LDAP Server Name: 137.65.150.45
 LDAP Server Port: 636
 Input File Name: YCOUG-TREE-logindisabled.log

Tree Name: YCOUG-TREE
 Connected as: cn=admin,o=novell
 Processed 2 Associated Objects
 including 1 User Objects
 IDMATD Disabled 1 associations.

Process Completed Mon Aug 06 11:21:42 MDT 2007