Oracle® Identity Manager

Connector Guide for Microsoft Windows NT 4.0

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Contents

Preface

Oracle Identity Manager Connector Guide for Microsoft Windows NT provides information about integrating Oracle Identity Manager with Microsoft Windows NT 4.0.

> **Note:** This is a transitional release following Oracle's acquisition of Thor Technologies. Some parts of the product and documentation still refer to the original Thor company name and Xellerate product name and will be rebranded in future releases.

Audience

This guide is intended for users who want to deploy the Oracle Identity Manager connector for Microsoft Windows NT 4.0.

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Related Documents

For more information, refer to the following documents in the Oracle Identity Manager documentation set:

- *Oracle Identity Manager Release Notes*
- *Oracle Identity Manager Installation and Upgrade Guide for JBoss*
- *Oracle Identity Manager Installation and Upgrade Guide for WebLogic*
- *Oracle Identity Manager Installation and Upgrade Guide for WebSphere*
- *Oracle Identity Manager Administrative and User Console Guide*
- *Oracle Identity Manager Administrative and User Console Customization Guide*
- *Oracle Identity Manager Design Console Guide*
- *Oracle Identity Manager Tools Reference Guide*
- *Oracle Identity Manager Audit Report Developer Guide*
- *Oracle Identity Manager Best Practices Guide*
- *Oracle Identity Manager Connector Framework Guide*
- Connector guides for various third-party applications

Documentation Updates

Oracle is committed to delivering the best and most recent information available. For information about updates to the Oracle Identity Manager 9.0.1 connector documentation set, visit Oracle Technology Network at

http://www.oracle.com/technology/documentation/index.html

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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About the Connector

Oracle Identity Manager automates access rights management, security, and provisioning of IT resources. Oracle Identity Manager connectors are used to integrate Oracle Identity Manager with third-party applications. The connector for Microsoft Windows NT 4.0 is used to integrate Oracle Identity Manager with Microsoft Windows NT 4.0.

> **Note:** Oracle Identity Manager connectors were referred to as *resource adapters* prior to the acquisition of Thor Technologies by Oracle.

This chapter contains the following sections:

- Supported Functionality
- Provisioning Module
- Files and Directories That Comprise the Connector

Supported Functionality

The following table lists the functions that are available with this connector.

Function	Type	Description
Create NT User	Provisioning	Creates a user
Delete User	Provisioning	Deletes a provisioned user
Create User Group and Add User to Group	Provisioning	Creates a user group and adds an existing user to it
Disable User	Provisioning	Disables a provisioned user
Create Folder at File Server	Provisioning	Creates a directory
Create Share	Provisioning	Creates a share on a directory
Add User to Share	Provisioning	Adds an NT server user to a share
Set Home Drive and Directory	Provisioning	Updates the configuration of a user according to a change in the Home Drive and Directory attribute
Set User Flag	Provisioning	Updates the configuration of a user according to a change in the User Flag attribute

Function	Type	Description
Set Account Expiration Date	Provisioning	Updates the configuration of a user according to a change in the Account Expiration Date attribute
Date Expiration Updated	Provisioning	Updates the configuration of a user according to a change in the Date Expiration attribute
Never Expires Updated	Provisioning	Updates the configuration of a user according to a change in the Password Never Expires attribute
Update User ID	Provisioning	Updates the configuration of a user according to a change in the User ID attribute
Update Password	Provisioning	Updates the configuration of a user according to a change in the Password attribute
Update Share Name	Provisioning	Updates the configuration of a user according to a change in the Share Name attribute
Share Path Updated	Provisioning	Updates the configuration of a user according to a change in the Share Path attribute
Update Must Change Password Setting	Provisioning	Updates the configuration of a user according to a change in the User Must Change Password attribute
Update User Full Name	Provisioning	Updates the configuration of a user according to a change in the Full Name attribute
Update User Cannot Change Password Setting	Provisioning	Updates the configuration of a user according to a change in the User Cannot Change Password attribute

Provisioning Module

The following fields are provisioned:

- User ID
- Password
- Full Name
- User Description
- Group
- Share Path
- Domain
- Cannot Change
- Never Expires
- Must Change
- Full Control
- Read

- Change

- Date Expires

- Home Drive

- Share Name

Files and Directories That Comprise the Connector

The files and directories that comprise this connector are compressed in the following ZIP file on the installation media:

`Operating Systems\Microsoft Windows\Microsoft WindowsNT4 Rev 2.1.1.zip`

These files and directories are listed in the following table.

File in the Installation Media Directory	Description
`xml\WindowsNT4Object_DM.xml`	This XML file contains the following components of the connector: ■ IT resource type ■ Custom process form ■ Process task and adapters (along with their mappings) ■ Resource object ■ Provisioning process ■ Pre-populate rules ■ Reconciliation process ■ Lookup definitions
`lib\xliWindowsNT4.jar`	This JAR file contains the class files required for provisioning and reconciliation.
`dll\tcWindowsNT40.dll`	This DLL file contains the native code required for provisioning users on a Microsoft Windows NT server.
`docs\B31123_01.pdf` `docs\html`	These are PDF and HTML versions of this guide, which provides instructions to deploy the connector.

The "Step 2: Copying the Connector Files" section on page 2-1 provides instructions to copy these files into the required directories.

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Deploying the Connector

Deploying the connector involves the following steps:

- Step 1: Verifying Deployment Requirements
- Step 2: Copying the Connector Files
- Step 3: Configuring the Target System
- Step 4: Configuring the Oracle Identity Manager Server
- Step 5: Importing the Connector XML File
- Step 6: Compiling Adapters

Step 1: Verifying Deployment Requirements

The following table lists the deployment requirements for the connector.

Item	Requirement
Oracle Identity Manager	Oracle Identity Manager release 8.5.3 or later
Target systems	Microsoft Windows NT 4.0 server
Infrastructure requirements	An additional computer running any one of the following:
	■ Microsoft Windows 2000 Professional
	■ Microsoft Windows 2000 Server
	■ Microsoft Windows NT
	This computer is meant for use as a file server.

Step 2: Copying the Connector Files

The connector files to be copied and the directories to which you must copy them are given in the following table.

> **Note:** The directory paths given in the first column of this table correspond to the location of the connector files in the following ZIP file on the installation media:
>
> ```
> Operating Systems\Microsoft Windows\Microsoft
> WindowsNT4 Rev 2.1.1.zip
> ```
>
> Refer to "Files and Directories That Comprise the Connector" on page 1-3 for more information about these files.

File in the Installation Media Directory	Destination Directory
`xml\WindowsNT4Object_DM.xml`	`xellerate_home`\xellerate\XLIntegrations\WindowsNT4\xml
`lib\xliWindowsNT4.jar`	`xellerate_home`\xellerate\Javatasks
`dll\tcWindowsNT40.dll`	`xellerate_home`\xellerate\XLIntegrations\WindowsNT4\lib

The following contents of the `docs` directory:
 	
`B31123_01.pdf`
`html`
	`xellerate_home`\xellerate\XLIntegrations\WindowsNT4\docs

Step 3: Configuring the Target System

Configuring the target system involves setting up a trust relationship between the domain of the Microsoft Windows NT 4.0 server and the domain of the Oracle Identity Manager server.

Step 4: Configuring the Oracle Identity Manager Server

Edit the following file:

`xellerate_home`\xellerate\bin\xlStartServer.bat

In this file, add the following line at the start:

`SET PATH=xellerate_home\xellerate\XLIntegrations\WindowsNT4\dll`

Step 5: Importing the Connector XML File

To import the connector XML file into Oracle Identity Manager:

1. Open the Oracle Identity Manager Administrative and User Console.

2. Click the **Deployment Management** link on the left navigation bar.

3. Click the **Import** link under Deployment Management. A dialog box for locating files is displayed.

4. Locate and open the `WindowsNT4Object_DM.xml` file, which is in the `xellerate_home`\xellerate\XLIntegrations\WindowsNT4\xml directory. Details of this XML file are shown on the File Preview page.

5. Click **Add File.** The Substitutions page is displayed.

6. Click **Next**. The Confirmation page is displayed.

7. Click **Next.** The Provide IT Resource Instance Data page for the NT Server IT resource is displayed.

8. Specify values for the parameters of the NT Server IT resource. Refer to the table in the "Defining IT Resources" section on page 2-3 for information about the values to be specified.

9. Click **Next.** The Provide IT Resource Instance Data page for a new instance of the NT Server IT resource type is displayed.

10. Click **Skip** to specify that you do not want to define another IT resource of the NT Server IT resource type. The Provide IT Resource Instance Data page for the NT File Server IT resource is displayed.

> **See Also:**   If you want to define another IT resource, then refer to
> *Oracle Identity Manager Tools Reference Guide* for instructions.

11. Specify values for the parameters of the NT File Server IT resource. Refer to the table in the "Defining IT Resources" section on page 2-3 for information about the values to be specified.

12. Click **Next.** The Provide IT Resource Instance Data page for a new instance of the NT File Server IT resource type is displayed.

13. Click **Skip** to specify that you do not want to define another IT resource. The Confirmation page is displayed.

> **See Also:**   If you want to define another IT resource, then refer to
> *Oracle Identity Manager Tools Reference Guide* for instructions.

14. Click **View Selections**.

    The contents of the XML file are displayed on the Import page. You may see a cross-shaped icon along with some nodes. You must remove these nodes. To do this, right-click each such node and then select **Remove.**

15. Click **Import**. The connector XML file is imported into Oracle Identity Manager.

After you import the connector XML file, proceed to the "Step 6: Compiling Adapters" section on page 2-4.

Defining IT Resources

The following sections provide values for parameters of the following predefined IT resources:

- NT Server
- NT File Server

NT Server

You must specify values for the NT Server IT resource parameters listed in the following table.

Parameter Name	Parameter Description
Computer Name	Host name or IP address of the target Microsoft Windows NT 4.0 server
Domain Admin UserID	User ID of the administrator account that is used to create users on the Microsoft Windows NT 4.0 server Sample value: administrator
Domain Admin Password	Password of the administrator account that is used to create users on the Microsoft Windows NT 4.0 server Sample value: password
Domain Name	Domain of the Microsoft Windows NT 4.0 server Sample value: DOMAIN

After you specify values for these IT resource parameters, go to Step 9 of the procedure to import connector XML files.

NT File Server

You must specify values for the `NT File Server` IT resource parameters listed in the following table.

Parameter Name	Parameter Description
AdminName	User ID of the administrator account on the Microsoft Windows NT 4.0 server, through which users will be created
	Sample value: `administrator`
AdminPassword	Password of the administrator account on the Microsoft Windows NT 4.0 server, through which users will be created
	Sample value: `password`
ComputerName	Host name or IP address of the target Microsoft Windows NT 4.0 server
	Sample value: `192.168.15.79`
DomainName	Domain of the Microsoft Windows NT 4.0 server
	Sample value: `DOMAIN`

After you specify values for these IT resource parameters, go to Step 12 of the procedure to import connector XML files.

Step 6: Compiling Adapters

The following adapters are imported into Oracle Identity Manager when you import the connector XML file. You must compile these adapters before you can use them to provision accounts on the target system.

- `NTDeleteUser`
- `NTCreateUser`
- `NTSetFullName`
- `NTUpdateShareName`
- `NT set expiration date`
- `NT set must change password`
- `NT set user flag`
- `NT Add to Group`
- `NTDisableUser`
- `NTSetSharePath`
- `NTSetPassword`
- `NTSetUserDescription`
- `NT Rename User`
- `NT Create Share`
- `NTEnableUser`

- ◾ `NT add user to share`

- ◾ `NT set home drive and directory`

To compile adapters by using the Adapter Manager form:

1. Open the Adapter Manager form.

2. To compile all the adapters that you import into the current database, select the **Compile All** option.

   To compile multiple (but not all) adapters, select the adapters you want to compile. Then, select the **Compile Selected** option.

3. Click **Start.** Oracle Identity Manager compiles the adapters that you specify.

To view detailed information about an adapter:

1. Highlight the adapter in the Adapter Manager form.

2. Double-click the row header of the adapter, or right-click the adapter.

3. Select **Launch Adapter** from the shortcut menu that is displayed. Details of the adapter are displayed.

> **Note:** To compile multiple adapters simultaneously, use the Adapter Manager form. To compile one adapter at a time, use the Adapter Factory form. Refer to *Oracle Identity Manager Tools Reference Guide* for information about how to use these forms.

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Known Issues

The following are known issues associated with this release of the connector:

- If the target system and Oracle Identity Manager are on different subnets, then you cannot provision a Microsoft Windows NT 4.0 user by using Oracle Identity Manager.

  The following example illustrates this limitation:

  Suppose M1 is the computer on which Oracle Identity Manager is installed and M2 is the target Microsoft Windows NT 4.0 server. If you provision a Microsoft Windows NT 4.0 user through Oracle Identity Manager, then the provisioning operation fails if M1 and M2 are on different subnets. For example, if the IP address of M1 is 192.168.6.23 and the IP address of M2 is 192.168.0.28.

  The provisioning operation fails because the subnets, 0 and 6, are different.

  However, if you put M1 on the same subnet as M2 (for example, if the IP address of M1 is 192.168.0.23 and the IP address of M2 is 192.168.0.28), then the Microsoft Windows NT 4.0 user is provisioned successfully.

- The Create Folder at File Server function is rejected if the Oracle Identity Manager server and the Microsoft Windows NT 4.0 server are not in the same domain. This function works only if the computer on which Oracle Identity Manager is running and the file server computer are in the same domain, but not on the same computers. This function also works if the Oracle Identity Manager server is in a workgroup and not in a domain, and the file server is on a different domain.

- There are some known response codes that have not yet been added in the Create NT User function. These codes and their descriptions are given in the following table.

Response Code	Description
0x8007005	Your NT account is locked out.
0x80070056	The old NT account password is invalid.
0x800708ad	The specified NT account does not exist.
0x800708c5	Your new password cannot be the same as any of your previous passwords. In addition, your new password must meet the password uniqueness rule set for the domain.

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