

Oracle® Identity Manager

Connector Guide for Microsoft Windows 2000

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Primary Authors: Debapriya Datta, Shiladitya Guha

Contributing Authors: Don Gosselin, Lyju Vadassery

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Preface

Oracle Identity Manager Connector Guide for Microsoft Windows 2000 provides information about integrating Oracle Identity Manager with Microsoft Windows 2000.

Note: 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 2000.

Documentation Accessibility

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Related Documents

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

- *Oracle Identity Manager Release Notes*
- *Oracle Identity Manager Installation Guide for JBoss*
- *Oracle Identity Manager Installation Guide for Oracle Containers for J2EE*
- *Oracle Identity Manager Installation Guide for WebLogic*
- *Oracle Identity Manager Installation 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 Globalization Guide*
- *Oracle Identity Manager Glossary of Terms*

The following document is available in the Oracle Identity Manager Connector Pack documentation library:

- *Oracle Identity Manager Connector Framework Guide*

Documentation Updates

Oracle is committed to delivering the best and most recent information available. For information about updates to the Oracle Identity Manager 9.0.3 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.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

What's New in the Oracle Identity Manager Connector for Microsoft Windows 2000?

This chapter provides an overview of the updates made to the connector and documentation for Microsoft Windows 2000 in release 9.0.3 of the Oracle Identity Manager connector pack.

See Also: The 9.0.2 release of this guide for information about updates that were new for the 9.0.2 release

The updates discussed in this chapter are divided into the following categories:

- [Software Updates](#)

These include updates made to the connector software.

- [Documentation-Specific Updates](#)

These include major changes made to the connector documentation. These changes are not related to software updates.

See Also: *Oracle Identity Manager Release Notes*

Software Updates

This section discusses updates made to this release of the connector software.

Enhancement in the Multilanguage Support Feature

In addition to the three languages supported by the earlier release, this release of the connector supports seven new languages. All the supported languages are listed in the "[Multilanguage Support](#)" section on page 1-2.

Support for OC4J

Earlier releases of the connector supported the following application servers:

- JBoss Application Server
- BEA WebLogic
- IBM WebSphere

This release of the connector also supports Oracle Containers for J2EE (OC4J).

Changes in the Known Issues List

In the Known Issues list in [Chapter 3](#), the following changes have been made:

- Issues related to the creation of shares have been removed.
- The limitation that this release of the connector does not support the Enabling Logging functionality has been added.

Documentation-Specific Updates

The following documentation-specific updates have been made in this release of the guide:

- In the ["Supported Functionality"](#) section on page 1-1, the following functions have been removed from the list of supported functions:
 - New Share Path Updated
 - Update Share Path
- For BEA WebLogic and OC4J, instructions to copy the `tcWindowsNT40.dll` file into the required directories have been added in the ["Step 3: Copying the Connector Files"](#) section on page 2-2.
- In the ["Step 6: Compiling Adapters"](#) section on page 2-5, the instruction about restarting the node has been removed from Step 4 of the procedure to compile adapters.
- A limitation that requires the same locale (language and country) setting to be in use on the target system and the Oracle Identity Manager server has been added to the Known Issues list in [Chapter 3](#).

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 2000 is used to integrate Oracle Identity Manager with Microsoft Windows 2000.

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](#)
- [Multilanguage Support](#)
- [Provisioning Module](#)
- [Files and Directories That Comprise the Connector](#)
- [Determining the Release Number of the Connector](#)

Supported Functionality

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

Function	Type	Description
Create Directory for User	Provisioning	Creates a directory on the Microsoft Windows 2000 server
Create Share	Provisioning	Creates a share on a directory on the Microsoft Windows 2000 server
Add User To Folder	Provisioning	Adds a user to a shared directory on the Microsoft Windows 2000 server
Delete Share	Provisioning	Deletes the share on a provisioned directory on the Microsoft Windows 2000 server
Write Updated	Provisioning	Updates the properties of a directory on the Microsoft Windows 2000 server according to a change in the Write permission attribute
None Updated	Provisioning	Updates the properties of a directory on the Microsoft Windows 2000 server according to a change in the No Sharing Permissions attribute

Function	Type	Description
Full Control Updated	Provisioning	Updates the properties of a directory on the Microsoft Windows 2000 server according to a change in the Full Control Permission attribute
Change Updated	Provisioning	Updates the properties of a directory on the Microsoft Windows 2000 server according to a change in the Change Permission attribute
Read Updated	Provisioning	Updates the properties of a directory on the Microsoft Windows 2000 server according to a change in the Read Permission attribute
Remove User From Folder	Provisioning	Removes the rights given to a user on a shared directory on the Microsoft Windows 2000 server

Multilanguage Support

This release of the connector supports the following languages:

- English
- Brazilian Portuguese
- French
- German
- Italian
- Japanese
- Korean
- Simplified Chinese
- Spanish
- Traditional Chinese

See Also: *Oracle Identity Manager Globalization Guide* for information about supported special characters

Provisioning Module

The following fields are provisioned:

- New Share Path
- Full Control
- Change
- Read
- Share Path
- Write
- None

Files and Directories That Comprise the Connector

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

Operating Systems\Microsoft Windows 2000

These files and directories are listed in the following table.

File in the Installation Media Directory	Description
dll\tcWindowsNT40.dll	This DLL file contains the native code required for provisioning directories on a Microsoft Windows 2000 server.
lib\xliWindowsNT4.jar	This JAR file contains the class files required for provisioning.
Files in the resources directory	Each of these resource bundle files contains language-specific information that is used by the connector. Note: A resource bundle is a file containing localized versions of the text strings that are displayed on the user interface of Oracle Identity Manager. These text strings include GUI element labels and messages displayed on the Administrative and User Console.
xml\Windows2000Object_DM.xml	This XML file contains definitions for the following components of the connector: <ul style="list-style-type: none"> ■ 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

The "Step 3: Copying the Connector Files" section on page 2-2 provides instructions to copy these files into the required directories.

Determining the Release Number of the Connector

To determine the release number of the connector that you have deployed:

1. Extract the contents of the xliWindowsNT4.jar file. For a connector that has been deployed, this file is in the following directory:

OIM_home\xellerate\JavaTasks

2. Open the manifest.mf file in a text editor. The manifest.mf file is one of the files bundled inside the xliWindowsNT4.jar file.

In the manifest.mf file, the release number of the connector is displayed as the value of the Version property.

See Also: *Oracle Identity Manager Design Console Guide*

Deploying the Connector

Deploying the connector involves the following steps:

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

If you want to configure the connector for multiple installations of Microsoft Windows 2000, then perform the following procedure:

- [Configuring the Connector for Multiple Installations of the Target System](#)

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	The target system can be any one of the following: <ul style="list-style-type: none">■ Microsoft Windows 2000■ Microsoft Windows 2003
Infrastructure requirements	An additional computer running any one of the following operating systems: <ul style="list-style-type: none">■ Microsoft Windows 2000 Professional■ Microsoft Windows 2000 Server This computer is meant for use as a file server.
Other applications	Microsoft Active Directory
Target system user account	Microsoft Windows 2000 File Server administrator You provide the credentials of this user account while performing the procedure in the " Defining IT Resources " section on page 2-4.

Step 2: Configuring the Target System

To configure the target system:

1. Ensure that Microsoft Active Directory is installed on the target Microsoft Windows 2000 server.
2. Configure the file server and the target Microsoft Windows 2000 server on the domain on which you install Microsoft Active directory.

Step 3: 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 directory on the installation media:

Operating Systems\Microsoft Windows 2000

Refer to the ["Files and Directories That Comprise the Connector"](#) section on page 1-2 for more information about these files.

File in the Installation Media Directory	Destination Directory
dll\tcWindowsNT40.dll	<p><i>OIM_home\xellerate\XLIntegrations\Microsoft Windows 2000\dll</i></p> <ul style="list-style-type: none"> ■ For Oracle Containers for J2EE (OC4J), you must also copy this file into the following directory: <i>OC4J_home\bin</i> <p>For example: C:\product\10.1.3.1\OracleAS_1\BIN</p> <ul style="list-style-type: none"> ■ For BEA WebLogic, you must also copy this file into the following directory: <i>WebLogic_home\server\bin</i> <p>For example: C:\WebLogic\weblogic81\server\bin</p>
lib\xliWindowsNT4.jar	<p><i>OIM_home\xellerate\JavaTasks</i> <i>OIM_home\xellerate\ScheduleTask</i></p>
Files in the resources directory	<i>OIM_home\xellerate\connectorResources</i>
xml\Windows2000object_DM.xml	<i>OIM_home\xellerate\XLIntegrations\Microsoft Windows 2000\xml</i>

Note: While installing Oracle Identity Manager in a clustered environment, you copy the contents of the installation directory to each node of the cluster. Similarly, you must copy the `connectorResources` directory and the JAR files to the corresponding directories on each node of the cluster.

Step 4: Configuring the Oracle Identity Manager Server

To configure the Oracle Identity Manager server:

Note: In a clustered environment, you must perform this step on each node of the cluster.

1. Deploy the Microsoft Active Directory connector before you can deploy and use the Microsoft Windows 2000 connector. In addition, the Microsoft Windows 2000 user account must be provisioned only to an Xellerate User who already has a Microsoft Active Directory user account provisioned.

You must deploy the connector for Microsoft Active Directory in the following directory:

`OIM_home\xellerate\XLIntegrations\ActiveDirectory`

See Also: *Oracle Identity Manager Connector Guide for Microsoft Active Directory*

2. Edit the following file:

`OIM_home\xellerate\bin\xlStartServer.bat`

Add the following line at the start of this file:

`SET PATH=OIM_home\xellerate\XLIntegrations\Windows2000\dll`

3. Change to the required input locale as follows:
 - a. Open Control Panel.
 - b. Double-click **Regional Options**.
 - c. On the Input Locales tab of the Regional Options dialog box, add the input locale that you want to use and then switch to the input locale.
4. Clear the server cache.

Clearing Content Related to Connector Resource Bundles from the Server Cache

Whenever you add a new resource bundle in the `OIM_home\xellerate\connectorResources` directory or make a change in an existing resource bundle, you must clear content related to connector resource bundles from the server cache.

To clear content related to connector resource bundles from the server cache:

1. In a command window, change to the `OIM_home\xellerate\bin` directory.
2. Enter one of the following commands:

Note: You must perform Step 1 before you perform this step. If you run the command as follows, then an exception is thrown:

`OIM_home\xellerate\bin\batch_file_name`

- On Microsoft Windows:

`PurgeCache.bat ConnectorResourceBundle`

- On UNIX:

PurgeCache.sh ConnectorResourceBundle

In this command, `ConnectorResourceBundle` is one of the content categories that you can remove from the server cache. Refer to the following file for information about the other content categories:

`OIM_home\xellerate\config\xlConfig.xml`

Note: You can ignore the exception that is thrown when you perform Step 2.

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 `Windows2000Object_DM.xml` file, which is in the `OIM_home\xellerate\XMLIntegrations\Microsoft Windows 2000\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 W2K File Server IT resource is displayed.
8. Specify values for the parameters of the W2K File Server IT resource. Refer to the table in the "[Defining IT Resources](#)" section on page 2-4 for information about the values to be specified.
9. Click **Next**. The Provide IT Resource Instance Data page for a new instance of the W2K File Server IT resource type is displayed.
10. 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.

11. 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. Remove these nodes by right-clicking each node and then selecting **Remove**.

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

After you import the connector XML files, proceed to the "[Step 6: Compiling Adapters](#)" section on page 2-5.

Defining IT Resources

You must specify values for the W2K File Server IT resource parameters listed in the following table.

Parameter	Parameter Description
AdminName	User ID of the admin user on the Microsoft Windows 2000 computer that is used as the file server
AdminPassword	Password of the admin user on the Microsoft Windows 2000 computer that is used as the file server
ComputerName	Host name or IP address of the Microsoft Windows 2000 computer that is used as the file server
DomainName	Domain of the Microsoft Windows 2000 computer that is used as the file server

After you specify values for these IT resource parameters, proceed to Step 9 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:

- Win2K Create Directory
- Win2K Delete Share
- Win2K Add User To Folder
- Win2K Target Server Update
- Win2K Update File Server
- Win2K Update Share Path
- Win2K Remove User From Folder
- Win2K Delete User Share Directory
- Win2K Chk Process User
- Win2K Create Share

You must compile these adapters before you can use them to provision accounts on the target system.

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 **Compile All**.

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

Note: Click **Compile Previously Failed** to recompile only those adapters that were not compiled successfully. Such adapters do not have an OK compilation status.

3. Click **Start**. Oracle Identity Manager compiles the selected adapters.
4. If Oracle Identity Manager is installed in a clustered environment, then copy the compiled adapters from the *OIM_home\xellerate\Adapter* directory to the

same directory on each of the other nodes of the cluster. If required, overwrite the adapter files on the other nodes.

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 one adapter at a time, use the Adapter Factory form. Refer to *Oracle Identity Manager Tools Reference Guide* for information about using the Adapter Factory and Adapter Manager forms.

Configuring the Connector for Multiple Installations of the Target System

Note: Perform this procedure only if you want to configure the connector for multiple installations of Microsoft Windows 2000. Refer to *Oracle Identity Manager Design Console Guide* for detailed instructions on performing each step of this procedure.

To configure the connector for multiple installations of the target system:

1. Create and configure one IT resource for each target system installation.

The IT Resources form is in the Resource Management folder. An IT resource is created when you import the connector XML file. You can use this IT resource as the template for creating the remaining IT resources, of the same resource type.

2. If required, modify the fields to be reconciled for the Xellerate User resource object.

When you use the Administrative and User Console to perform provisioning, you can specify the IT resource corresponding to the Microsoft Windows 2000 installation to which you want to provision the user.

Known Issues

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

- To enable folders to be created on a target system on which the Japanese or French language is in use, Oracle Identity Manager must be running on a server on which the same language, Japanese or French, is in use.
- This release of the connector does not support the Enabling Logging functionality.

Attribute Mappings Between Oracle Identity Manager and Microsoft Windows 2000

The following table discusses attribute mappings between Oracle Identity Manager and Microsoft Windows 2000.

To view the Microsoft Windows 2000 attributes listed in the table:

1. Click **Start, Programs, Administrative Tools, and Computer Management**.
2. Expand **Shared Folders**.
3. Click **Shares**.
4. Right-click the folder that is generated after the user is provisioned.
5. Select **Properties**.
6. Click the **Security** tab.

The attributes listed in the table are GUI elements in the Permission for Administrators area.

Oracle Identity Manager Attribute	Microsoft Windows 2000 Attribute
Share Path	Folder Path
Full Control	Full Control
Change	Modify
Write	Write
Read	Read
None	The check boxes in the Deny column must be selected. Alternatively, the check boxes in the Allow column must not be selected.
New Share Path	Folder Path

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