

Oracle® Identity Manager

Connector Guide for Microsoft Windows

Release 9.0.4

E10431-04

July 2009

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Preface

This guide provides information about Oracle Identity Manager Connector for Microsoft Windows.

Audience

This guide is intended for resource administrators and target system integration teams.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at <http://www.oracle.com/accessibility/>.

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Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Related Documents

For information about installing and using Oracle Identity Manager, see the Oracle Identity Manager documentation library.

For generic information about connectors, see *Oracle Identity Manager Connector Concepts*.

The following Oracle Technology Network page provides links to Oracle Identity Manager documentation:

<http://www.oracle.com/technology/documentation/oim.html>

Documentation Updates

Oracle is committed to delivering the best and most recent information available. For information about updates to the Oracle Identity Manager Connectors documentation, 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 Oracle Identity Manager Connector for Microsoft Windows?

This chapter provides an overview of the updates made to the software and documentation for the Microsoft Windows connector in release 9.0.4.2.

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

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

- [Software Updates](#)
This section describes updates made to the connector software. This section also points out the sections of this guide that have been changed in response to each software update.
- [Documentation-Specific Updates](#)
This section describes major changes made to this guide. These changes are not related to software updates.

Software Updates

The following sections discuss updates made from release 9.0.4 to the current release of the connector:

- [Software Updates in Release 9.0.4.1](#)
- [Software Updates in Release 9.0.4.2](#)

Software Updates in Release 9.0.4.1

In release 9.0.4.1, changes have been made in the names and directory structure of the connector installation files.

Software Updates in Release 9.0.4.2

The following are software updates in release 9.0.4.2:

- [Using the Connector Installer](#)
- [Resolved Issues in Release 9.0.4.2](#)

Using the Connector Installer

From Oracle Identity Manager release 9.1.0 onward, the Administrative and User Console provides the Connector Installer feature. This feature can be used to automate the connector installation procedure.

See ["Installing the Connector on Oracle Identity Manager Release 9.1.0 or Later"](#) on page 2-2 for details.

Resolved Issues in Release 9.0.4.2

The following are issues resolved in release 9.0.4.2:

Bug Number	Issue	Resolution
5180725 and 5180704	The share name set for a user's directory on the target system could not be updated through the Update User provisioning operation.	This issue has been resolved. You can update the share name through the Update User provisioning operation.
5573882	On the Administrative and User Console, the Provisioned status was displayed for a user even when the user's directory could not be created through the Create User provisioning operation.	This issue has been resolved. The Provisioning status is displayed for a user if the directory cannot be created during the Create User provisioning operation.
7597465	The Microsoft Windows connector could not be used with the Microsoft Active Directory connector release 9.0.4.10 or later.	This issue has been resolved. The Microsoft Windows connector can now be used with any release of the Microsoft Active Directory connector.

Documentation-Specific Updates

The following sections discuss documentation-specific updates made from release 9.0.4 to the current release of the connector:

- [Documentation-Specific Updates in Release 9.0.4.1](#)
- [Documentation-Specific Updates in Release 9.0.4.2](#)

Documentation-Specific Updates in Release 9.0.4.1

The following documentation-specific updates have been made in release 9.0.4.3:

- In ["Verifying Deployment Requirements"](#) on page 2-1, the Oracle Identity Manager host platform names have been added.

Documentation-Specific Updates in Release 9.0.4.2

The following documentation-specific updates have been made in release 9.0.4.2:

- In ["Supported Functionality"](#) on page 1-2, the Add New Share Path provisioning function has been added to the list of supported functions.
- In the ["Known Issues"](#) chapter:
 - The following point has been removed:

The locale of the server on which Oracle Identity Manager is installed must be set to the language that is used to enable folders to be created on the target system. For example, if Japanese is in use on the target system, then Oracle Identity Manager must be installed on a server running the Japanese language locale.

- The following points have been added:

Bug 5691610: The connector does not support deployment scenarios in which Oracle Identity Manager is installed on an operating system other than Microsoft Windows.

Bug 7490324: For a provisioning operation, the file server, Oracle Identity Manager, and the target system account used by Oracle Identity Manager to perform provisioning operations must be on the same domain.

- Microsoft Windows 2000 is no longer a supported host for the target system. All occurrences of "Microsoft Windows 2000" have been removed from this guide.
- In the "[Verifying Deployment Requirements](#)" section, changes have been made in the "Target systems" and "Target system host platform" rows.

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. This guide discusses the procedure to deploy the connector that is used to integrate Oracle Identity Manager with Microsoft Windows.

This chapter contains the following sections:

- [Provisioning Module](#)
- [Supported Functionality](#)
- [Multilanguage Support](#)
- [Files and Directories on the Installation Media](#)
- [Determining the Release Number of the Connector](#)

Note: In this guide, the term *Oracle Identity Manager server* refers to the computer on which Oracle Identity Manager is installed.

At some places in this guide, Microsoft Windows has been referred to as the *target system*.

1.1 Provisioning Module

Provisioning involves creating or modifying a user's account information on the target system through Oracle Identity Manager. You use the Oracle Identity Manager Administrative and User Console to perform provisioning operations.

Note: For a provisioning operation, the file server, Oracle Identity Manager, and the target system account used by Oracle Identity Manager to perform provisioning operations must be on the same domain.

See the "Deployment Configurations of Oracle Identity Manager" section in *Oracle Identity Manager Connector Concepts Guide* for conceptual information about provisioning.

For this target system, the following fields are provisioned:

- New Share Path
- Full Control

- Change
- Read
- Share Path
- Write
- None

1.2 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
Create Share	Provisioning	Creates a share on a directory
Add User To Folder	Provisioning	Adds a user to a shared directory
Delete Share	Provisioning	Deletes the share on a provisioned directory
Write Updated	Provisioning	Updates the properties of a directory according to a change in the Write permission attribute
None Updated	Provisioning	Updates the properties of a directory according to a change in the No Sharing Permissions attribute
Full Control Updated	Provisioning	Updates the properties of a directory according to a change in the Full Control Permission attribute
Change Updated	Provisioning	Updates the properties of a directory according to a change in the Change Permission attribute
Read Updated	Provisioning	Updates the properties of a directory 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
Add New Share Path	Provisioning	Assigns a new share name to an existing shared folder

1.3 Multilanguage Support

The connector supports the following languages:

- Arabic
- Chinese Simplified
- Chinese Traditional
- Danish
- English
- French
- German
- Italian
- Japanese
- Korean
- Portuguese (Brazilian)

- Spanish

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

1.4 Files and Directories on the Installation Media

The files and directories on the installation media are listed and described in [Table 1–1](#).

Table 1–1 Files and Directories on the Installation Media

File in the Installation Media Directory	Description
configuration/MS_Windows-CI.xml	This XML file contains configuration information that is used during connector installation.
config\debug.properties	This file contains the debug parameter that you use to specify whether or not the connector must run in debug mode.
lib\tcWindowsNT40.dll	This DLL file contains the native code required for provisioning directories on a Microsoft Windows 2003 server.
lib\xliWindows2000.jar	This JAR file contains the class files required for provisioning. During connector deployment, this file is copied into the following directory: <i>OIM_HOME/xellerate/JavaTasks</i>
Files in the resources directory	Each of these resource bundles contains language-specific information that is used by the connector. During connector deployment, these resource bundles are copied into the following directory: <i>OIM_HOME/xellerate/connectorResources</i> 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.
test\config\config.properties	This file contains the attributes for Oracle Identity Manager to connect to the target system and perform provisioning operations.
test\scripts\runWindowsTest.bat	This file is used to start the testing utility.
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 ■ Process form ■ Process task and adapters (along with their mappings) ■ Resource object ■ Provisioning process ■ Pre-populate rules ■ Lookup definitions

Note: The files in the test directory are used only to run tests on the connector.

1.5 Determining the Release Number of the Connector

You might have a deployment of an earlier release of the connector. While deploying the latest release, you might want to know the release number of the earlier release. To determine the release number of the connector that has already been deployed:

1. In a temporary directory, extract the contents of the following JAR file:

OIM_HOME/xellerate/JavaTasks/xliWindows2000.jar

2. Open the `manifest.mf` file in a text editor. The `manifest.mf` file is one of the files bundled inside the `xliWindows2000.jar` file.

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

Deploying the Connector

Deploying the connector involves the following steps:

- [Verifying Deployment Requirements](#)
- [Configuring the Target System](#)
- Depending on the release of Oracle Identity Manager that you use, perform the procedures described in one of the following sections:
 - [Installing the Connector on Oracle Identity Manager Release 9.1.0 or Later](#)
 - [Installing the Connector on Oracle Identity Manager Release 8.5.3.1 Through 9.0.3.1](#)
- [Configuring the Oracle Identity Manager Server](#)

2.1 Verifying Deployment Requirements

The following table lists the deployment requirements for the connector.

Item	Requirement
Oracle Identity Manager	Oracle Identity Manager release 8.5.3.1 or later
Target systems	Microsoft Windows Server 2003
Target system host platform	Microsoft Windows Server 2003
Oracle Identity Manager host platform	Microsoft Windows Server 2003
Infrastructure requirements	An additional computer running the Microsoft Windows 2003 operating system. This computer is meant for use as a file server.
Other applications	Microsoft Active Directory
Target system user account	Microsoft Windows 2003 File Server administrator You provide the credentials of this user account while configuring the IT resource. The procedure is described later in this guide.

2.2 Configuring the Target System

To configure the target system:

1. Ensure that the Microsoft Active Directory connector is installed on the target Microsoft Windows 2003 server.
2. Configure the file server and the target Microsoft Windows 2003 server on the domain on which you install Microsoft Active directory.

2.3 Installing the Connector on Oracle Identity Manager Release 9.1.0 or Later

Note: In this guide, the term **Connector Installer** has been used to refer to the Connector Installer feature of the Oracle Identity Manager Administrative and User Console.

Installing the connector on Oracle Identity Manager release 9.1.0 or later involves the following procedures:

- [Running the Connector Installer](#)
- [Configuring the IT Resource](#)

2.3.1 Running the Connector Installer

To run the Connector Installer:

1. Copy the contents of the connector installation media into the following directory:

`OIM_HOME/xellerate/ConnectorDefaultDirectory`

2. Log in to the Administrative and User Console by using the user account described in the "Creating the User Account for Installing Connectors" section of *Oracle Identity Manager Administrative and User Console*.
3. Click **Deployment Management**, and then click **Install Connector**.
4. From the Connector List list, select **Microsoft Windows 9.0.4.2**. This list displays the names and release numbers of connectors whose installation files you copy into the default connector installation directory:

`OIM_HOME/xellerate/ConnectorDefaultDirectory`

If you have copied the installation files into a different directory, then:

- a. In the **Alternative Directory** field, enter the full path and name of that directory.
 - b. To repopulate the list of connectors in the Connector List list, click **Refresh**.
 - c. From the Connector List list, select **Microsoft Windows 9.0.4.2**.
5. Click **Load**.
 6. To start the installation process, click **Continue**.

The following tasks are performed in sequence:

- a. Configuration of connector libraries
- b. Import of the connector XML files (by using the Deployment Manager)
- c. Compilation of adapters

On successful completion of a task, a check mark is displayed for the task. If a task fails, then an X mark and a message stating the reason for failure are displayed. Depending on the reason for the failure, make the required correction and then perform one of the following steps:

- Retry the installation by clicking **Retry**.
- Cancel the installation and begin again from Step 1.

7. If all three tasks of the connector installation process are successful, then a message indicating successful installation is displayed. In addition, a list of the steps that you must perform after the installation is displayed. These steps are as follows:

- a. Ensuring that the prerequisites for using the connector are addressed

Note: At this stage, run the `PurgeCache` utility to load the server cache with content from the connector resource bundle in order to view the list of prerequisites. Refer to ["Clearing Content Related to Connector Resource Bundles from the Server Cache"](#) on page 2-9 for information about running the `PurgeCache` utility.

There are no prerequisites for some predefined connectors.

- b. Configuring the IT resource for the connector

Record the name of the IT resource displayed on this page. The procedure to configure the IT resource is described later in this guide.

- c. Configuring the scheduled tasks that are created when you installed the connector

Record the names of the scheduled tasks displayed on this page. The procedure to configure these scheduled tasks is described later in this guide.

8. Copy the files listed in the first column of the following table to the destination directories specified in the second column:

File in the Installation Media Directory	Destination Directory
<code>config\debug.properties</code>	<code>OIM_HOME\xellerate\XLIntegrations\Windows2000\config</code>
<code>lib\tcWindowsNT40.dll</code>	<code>OIM_HOME\xellerate\XLIntegrations\Windows2000\dll</code>
	<ul style="list-style-type: none"> For Oracle Application Server, you must also copy this file into the following directory: <code>OAS_HOME\bin</code> For BEA WebLogic Server, you must also copy this file into the following directory: <code>WEBLOGIC_HOME\server\bin</code>
Files in the <code>test\config</code> directory	<code>OIM_HOME\xellerate\XLIntegrations\Windows2000\config</code>
Files in the <code>test\scripts</code> directory	<code>OIM_HOME\xellerate\XLIntegrations\Windows2000\scripts</code>

Note: When you run the Connector Installer, it copies the connector files and external code files to destination directories on the Oracle Identity Manager host computer. These files are listed in [Table 1–1](#).

Installing the Connector in an Oracle Identity Manager Cluster

While installing Oracle Identity Manager in a clustered environment, you must copy all the JAR files and the contents of the `connectorResources` directory into the corresponding directories on each node of the cluster. See ["Files and Directories on the](#)

[Installation Media](#)" on page 1-3 for information about the files that you must copy and their destination locations on the Oracle Identity Manager server.

2.3.2 Configuring the IT Resource

Note: Perform this procedure if you are installing the connector on Oracle Identity Manager release 9.1.0 or later.

You must specify values for the parameters of the IT resource as follows:

1. Log in to the Administrative and User Console.
2. Expand **Resource Management**.
3. Click **Manage IT Resource**.
4. On the Manage IT Resource page, select **W2K File Server** from the IT Resource Type field and then click **Search**.
5. Click the edit icon for the IT resource.
6. From the list at the top of the page, select **Details and Parameters**.
7. Specify values for the parameters of the IT resource. The following table describes each parameter:

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

8. To save the values, click **Update**.
9. On the Manage IT Resource page, select **Windows AD Server** from the IT Resource Name list and then click **Search**.

Note: This IT resource is used to connect to Microsoft Active Directory.

10. Click the edit icon for the IT resource.
11. From the list at the top of the page, select **Details and Parameters**.
12. Specify values for the parameters of the IT resource. The following table describes each parameter:

Parameter	Parameter Description
Admin FQDN	<p>Enter the fully qualified domain name of the admin user account whose user ID you enter as the value of the AdminName parameter of the W2K File Server IT resource.</p> <p>You can use any one of the following formats to enter the domain name:</p> <ul style="list-style-type: none"> ▪ <code>user_login@domain.com</code> ▪ <code>cn=user_login,cn=Users,dc=domain,dc=com</code> <p>Sample values:</p> <p><code>john_doe@example.com</code></p> <p><code>cn=OIMAdmin,cn=Users,dc=domain,dc=com</code></p>
Admin Login	Enter the user ID that you specify as the value of the AdminName parameter of the W2K File Server IT resource.
Admin Password	Enter the password that you specify as the value of the AdminPassword parameter of the W2K File Server IT resource.
Root Context	<p>Enter the fully qualified domain name of the parent or root organization.</p> <p>For example, the root suffix.</p> <p>Format: <code>ou=ORGANIZATION_NAME,dc=DOMAIN</code></p> <p>Sample value: <code>ou=Adapters, dc=adomain</code></p>
Server Address	<p>Enter the host name or IP address of the Microsoft Windows computer on which Microsoft Active Directory is installed.</p> <p>Sample values:</p> <p><code>w2khost</code></p> <p><code>172.20.55.120</code></p>
Use SSL	<p>Use this parameter to specify whether or not SSL has been used to secure communication between Oracle Identity Manager and Microsoft Active Directory.</p> <p>Default value: <code>true</code></p> <p>Note: It is recommended that you enable SSL to secure communication with the target system.</p>
SSL Port Number	<p>Enter the number of the port at which SSL is running on the target system host computer.</p> <p>Sample values:</p> <ul style="list-style-type: none"> ▪ <code>636</code>, if the Use SSL parameter is set to <code>yes</code> ▪ <code>389</code>, if the Use SSL parameter is set to <code>no</code>
Target Locale: Country	<p>Enter the country code.</p> <p>Default value: <code>US</code></p> <p>Note: You must specify the value in uppercase.</p>
Target Locale: Language	<p>Enter the language code.</p> <p>Default value: <code>en</code></p> <p>Note: You must specify the value in lowercase.</p>

13. To save the values, click **Update**.

2.4 Installing the Connector on Oracle Identity Manager Release 8.5.3.1 Through 9.0.3.1

Installing the connector on any Oracle Identity Manager release between releases 8.5.3.1 and 9.0.3.1 involves the following procedures:

- [Copying the Connector Files](#)
- [Importing the Connector XML File](#)

2.4.1 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.

See Also: ["Files and Directories on the Installation Media"](#) section on page 1-3 for more information about these files

File in the Installation Media Directory	Destination Directory
config\debug.properties	<i>OIM_HOME</i> \xellerate\XLIntegrations\Windows2000\config
lib\tcWindowsNT40.dll	<i>OIM_HOME</i> \xellerate\XLIntegrations\Windows2000\dll
	<ul style="list-style-type: none"> ■ For Oracle Application Server, you must also copy this file into the following directory: <i>OAS_HOME</i>\bin ■ For BEA WebLogic Server, you must also copy this file into the following directory: <i>WEBLOGIC_HOME</i>\server\bin
Files in the test\config directory	<i>OIM_HOME</i> \xellerate\XLIntegrations\Windows2000\config
Files in the test\scripts directory	<i>OIM_HOME</i> \xellerate\XLIntegrations\Windows2000\scripts
xml\Windows2000Object_DM.xml	<i>OIM_HOME</i> \xellerate\XLIntegrations\Windows2000\xml

Note: In a clustered environment, copy the JAR files and the contents of the connectorResources directory to the corresponding directories on each node of the cluster.

2.4.2 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 opening files is displayed.
4. Locate and open the Windows2000Object_DM.xml file, which is in the *OIM_HOME*\xellerate\XLIntegrations\Windows2000\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 following table for information about the values to be specified:

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

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 Provide IT Resource Instance Data page for a new instance of the Windows AD Server IT resource type is displayed.
11. Specify values for the parameters of the Windows AD Server IT resource. Refer to the following table for information about the values to be specified:

Parameter	Parameter Description
Admin FQDN	<p>Enter the fully qualified domain name of the admin user account whose user ID you enter as the value of the AdminName parameter of the W2K File Server IT resource.</p> <p>You can use any one of the following formats to enter the domain name:</p> <ul style="list-style-type: none"> <code>user_login@domain.com</code> <code>cn=user_login,cn=Users,dc=domain,dc=com</code> <p>Sample values:</p> <p><code>john_doe@example.com</code></p> <p><code>cn=OIMadmin,cn=Users,dc=domain,dc=com</code></p>
Admin Login	Enter the user ID that you specify as the value of the AdminName parameter of the W2K File Server IT resource.
Admin Password	Enter the password that you specify as the value of the AdminPassword parameter of the W2K File Server IT resource.
Root Context	<p>Enter the fully qualified domain name of the parent or root organization.</p> <p>For example, the root suffix.</p> <p>Format: <code>ou=ORGANIZATION_NAME,dc=DOMAIN</code></p> <p>Sample value: <code>ou=Adapters, dc=adomain</code></p>
Server Address	<p>Enter the host name or IP address of the Microsoft Windows computer on which Microsoft Active Directory is installed.</p> <p>Sample values:</p> <p><code>w2khost</code></p> <p><code>172.20.55.120</code></p>
Use SSL	<p>Use this parameter to specify whether or not SSL has been used to secure communication between Oracle Identity Manager and Microsoft Active Directory.</p> <p>Default value: <code>true</code></p> <p>Note: It is recommended that you enable SSL to secure communication with the target system.</p>

Parameter	Parameter Description
SSL Port Number	Enter the number of the port at which SSL is running on the target system host computer. Sample values: <ul style="list-style-type: none"> 636, if the Use SSL parameter is set to yes 389, if the Use SSL parameter is set to no
Target Locale: Country	Enter the country code. Default value: US Note: You must specify the value in uppercase.
Target Locale: Language	Enter the language code. Default value: en Note: You must specify the value in lowercase.

12. Click **Next**. The Provide IT Resource Instance Data page for a new instance of the Windows AD 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 Administrative and User Console 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. These nodes represent Oracle Identity Manager entities that are redundant. Before you import the connector XML file, you must remove these entities by right-clicking each node and then selecting **Remove**.

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

2.5 Configuring the Oracle Identity Manager Server

Configuring the Oracle Identity Manager server involves performing the following steps:

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

- [Deploying the Microsoft Active Directory Connector](#)
- [Modifying the xlStartServer.bat File](#)
- [Changing to the Required Input Locale](#)
- [Clearing Content Related to Connector Resource Bundles from the Server Cache](#)
- [Enabling Logging](#)

2.5.1 Deploying the Microsoft Active Directory Connector

Deploy the Microsoft Active Directory connector before you can deploy and use the Microsoft Windows connector. In addition, the Microsoft Windows user account must be provisioned only to an Xellerate User (OIM 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*

2.5.2 Modifying the xlStartServer.bat File

Use a text editor to open 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`

2.5.3 Changing to the Required Input Locale

Changing to the required input locale (language and country setting) involves installing the required fonts and setting the required input locale.

You may require the assistance of the system administrator to change to the required input locale.

2.5.4 Clearing Content Related to Connector Resource Bundles from the Server Cache

While performing the instructions described in the ["Copying the Connector Files"](#) section on page 2-6, you copy files from the `resources` directory on the installation media into the `OIM_HOME\xellerate\connectorResources` directory. Whenever you add a new resource bundle in the `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.

Note: You must perform Step 1 before you perform Step 2. An exception is thrown if you run the command described in Step 2 as follows:

`OIM_HOME\xellerate\bin\batch_file_name`

2. Enter the following command:

`PurgeCache.bat ConnectorResourceBundle`

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

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`

2.5.5 Enabling Logging

When you enable logging, Oracle Identity Manager automatically stores in a log file information about events that occur during the course of provisioning operations.

To enable logging:

1. Use a text editor to open the following file:

`OIM_HOME\xellerate\XLIntegrations\Windows2000\config\debug.properties`

2. In this file, set the value of the `debug` attribute to `true`.

Note: If you want to disable logging, set the value of the `debug` attribute to `false`.

Configuring the Connector

After you deploy the connector, you must configure it to meet your requirements. This chapter discusses the following connector configuration procedures:

Note: These sections provide both conceptual and procedural information about configuring the connector. It is recommended that you read the conceptual information before you perform the procedures.

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

3.1 Configuring Provisioning

As mentioned earlier in this guide, provisioning involves creating or modifying a user's account information on the target system through Oracle Identity Manager.

Note: You must perform the procedure described in this section if you want to use the provisioning features of Oracle Identity Manager for this target system.

You need not perform the procedure to compile adapters if you have performed the procedure described in ["Installing the Connector on Oracle Identity Manager Release 9.1.0 or Later"](#) on page 2-2.

Adapters are used to implement provisioning functions. The following adapters are imported into Oracle Identity Manager when you import the connector XML file:

See Also: The ["Supported Functionality"](#) section on page 1-2 for a listing of the provisioning functions that are available with this connector

- 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 they can be used in provisioning operations.

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.

If you want to compile one adapter at a time, then use the Adapter Factory form.

See Also: *Oracle Identity Manager Tools Reference Guide* for information about using the Adapter Factory and Adapter Manager forms

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.

3.2 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.

You may want to configure the connector for multiple installations of Microsoft Windows. The following example illustrates this requirement:

The Tokyo, London, and New York offices of Example Multinational Inc. have their own installations of Microsoft Windows. The company has recently installed Oracle

Identity Manager, and they want to configure Oracle Identity Manager to link all the installations of Microsoft Windows.

To meet the requirement posed by such a scenario, you must configure the connector for multiple installations of Microsoft Windows.

To configure the connector for multiple installations of the target system, 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.

See Also: *Oracle Identity Manager Design Console Guide* for detailed instructions on performing this procedure

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

Testing Connector Functionality

You can use the testing utility to directly use the connector for identifying the cause of problems associated with connecting to the target system server and performing basic operations on the target system.

To use the testing utility:

1. Copy the files in the `test/config` directory on the installation media to the `OIM_HOME\xellerate\XLIntegrations\Windows2000\config` directory.
Copy the files in the `test/scripts` directory on the installation media to the `OIM_HOME\xellerate\XLIntegrations\Windows2000\scripts` directory.
2. Open the following file:
`OIM_HOME\xellerate\Windows2000\config\config.properties`
3. Specify values for the attributes in this file. These attributes are described in the following table.

Attribute	Description	Sample Value
Action	Specifies the provisioning action to be performed by the testing utility	CREATE_DIRECTORY CREATE_SHARE DELETE_SHARE
Admin_ID	Specifies the user ID of the Microsoft Windows 2003 server administrator	dmsadmin
Domain_Name	Specifies the domain name of the Microsoft Windows 2003 server	sagemdms
Computer_Name	Specifies the IP address or computer name of the Microsoft Windows 2003 server	172.21.106.90
Share_Path	Specifies the share path Note: The path separator must be '\\\' and not '\\\'.	c:\\temp
Share_Name	Specifies the name of the share	testshare

4. Run the testing utility file by using the following command:
`OIM_HOME\xellerate\XLIntegrations\Windows2000\scripts\runWindowsTest.bat`
5. If the script runs without any error, then verify that the required provisioning action has been carried out on the target system.

Known Issues

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

- **Bug 5691610**

The connector does not support deployment scenarios in which Oracle Identity Manager is installed on an operating system other than Microsoft Windows.

- **Bug 7490324**

For a provisioning operation, the file server, Oracle Identity Manager, and the target system account used by Oracle Identity Manager to perform provisioning operations must be on the same domain.

Attribute Mappings Between Oracle Identity Manager and Microsoft Windows

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

To view the Microsoft Windows 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 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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