Oracle® Identity Manager

Connector Guide for JD Edwards EnterpriseOne User Management

Release 9.0.4

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Preface

This guide provides information about Oracle Identity Manager Connector for JD Edwards EnterpriseOne User Management.

Audience

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

Documentation Accessibility

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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/oim.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.

What's New in Oracle Identity Manager Connector for JD Edwards EnterpriseOne User Management?

This chapter provides an overview of the updates made to the software and documentation for the JD Edwards EnterpriseOne User Management connector in release 9.0.4.2.

> **See Also:** Release 9.0.4 of this guide for information about updates that were new for release 9.0.4

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

- Software Updates

  This section describes updates made to the connector software.

- 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

The following are software updates in release 9.0.4.1:

- Separate JAR Files for Provisioning and Reconciliation
- New Connector XML Files

Separate JAR Files for Provisioning and Reconciliation

The `JDEConnector.jar` file has been split into two files, `JDEConnectorProv.jar` and `JDEConnectorRecon.jar`. Corresponding changes have been made in the following sections:

- Files and Directories on the Installation Media on page 1-4

New Connector XML Files

The connector XML file for target resource reconciliation has been changed from `JDEResourceObject.xml` to `JDEConnectorResourceObject.xml`.

The connector XML file for trusted source reconciliation has been changed from `JDEXLResourceObject.xml` to `JDEConnectorXLResourceObject.xml`.

See "Files and Directories on the Installation Media" on page 1-4 for more information.

Software Updates in Release 9.0.4.2

The following are software updates in release 9.0.4.2:

- Using the Connector Installer

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 2-8 for details.

Documentation-Specific Updates

The following are the documentation-specific updates in release 9.0.4.2:

- In the "Verifying Deployment Requirements" section, changes have been made in the "Target system" row.
- The "Configuring the Connector for Multiple Installations of the Target System" section has been removed from the "Deploying the Connector" chapter. The connector does not directly support this feature.

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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. This guide discusses the procedure to deploy the connector that is used to integrate Oracle Identity Manager with JD Edwards EnterpriseOne.

This chapter contains the following sections:

- Reconciliation Module
- 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, JD Edwards EnterpriseOne has been referred to as the *target system.*

1.1 Reconciliation Module

Reconciliation involves duplicating in Oracle Identity Manager the creation of and modifications to user accounts on the target system. It is an automated process initiated by a scheduled task that you configure.

> **See Also:** The "Deployment Configurations of Oracle Identity Manager" section in *Oracle Identity Manager Connector Concepts Guide* for conceptual information about reconciliation configurations

This section discusses the elements that the reconciliation module extracts from the target system to construct reconciliation event records. The following are features of these records:

- The default data elements of each reconciliation event record are Organization, User Type, and Employee Type.
- The default labels for the data elements in each reconciliation event record are:
  - `Event Linked` (for successful reconciliation)

–   `No Match Found` (for failed reconciliation)

Based on the type of data reconciled from the target system, reconciliation can be divided into the following types:

■   Lookup Fields Reconciliation

■   User Reconciliation

1.1.1 Lookup Fields Reconciliation

For user reconciliation to work, the following lookup definitions must be available and the lookup values must be reconciled:

■   Lookup.JDE.DateSeparationCharacter

■   Lookup.JDE.Language

■   Lookup.JDE.Roles

■   Lookup.JDE.LocalizationCountryCode

■   Lookup.JDE.DateFormat

■   Lookup.JDE.FastPathCreate

■   Lookup.JDE.UniversalTime

■   Lookup.JDE.TimeFormat

■   Lookup.JDE.DecimalFormatCharector

1.1.2 User Reconciliation

User reconciliation can be divided into the following:

■   Reconciled Target System Fields

■   Reconciled Xellerate User (OIM User) Fields

1.1.2.1 Reconciled Target System Fields

The following target system fields are reconciled**:**

■   User ID

■   Language

■   Date Format

■   Date Separation Character

■   Localization Country Code

■   Universal Time

■   Time Format

■   Decimal Format Character

■   Fast Path Create

■   Disable User

■   Roles

1.1.2.2 Reconciled Xellerate User (OIM User) Fields

If trusted source reconciliation is implemented, then the following additional fields are reconciled:

- User ID
- First Name
- Last Name
- Organization
- User Type
- Employee Type

1.2 Provisioning Module

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

> **See Also:** 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:

- User ID
- Password

> **Note:** If you create a user in Oracle Identity Manager and do not assign a role to the user, then the user would not be able to log in to the JD Edwards system.

1.3 Supported Functionality

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

Function	Type	Description
Create User	Provisioning	Creates a user in the JD Edwards system
Update User	Provisioning	Updates a user in the JD Edwards system
Reset Password	Provisioning	Updates the user password in the JD Edwards system
Enable User	Provisioning	Enables a user in the JD Edwards system
Disable User	Provisioning	Disables a user in the JD Edwards system
Delete User	Provisioning	Deletes a user from the JD Edwards system
Add User Role	Provisioning	Adds a role to a user in the JD Edwards system
Remove User Role	Provisioning	Removes the Role from a user in the JD Edwards system
List Roles of User	Reconciliation	Lists the roles of a user in the JD Edwards system
List All Roles	Reconciliation	Lists all the roles present in the JD Edwards system

Function	Type	Description
Reconciliation Insert Received	Reconciliation	Inserts information in Oracle Identity Manager about a user that is created in the JD Edwards system
Reconciliation Update Received	Reconciliation	Updates Oracle Identity Manager with information about a user that is updated in the JD Edwards system
Reconciliation Delete Received	Reconciliation	Deletes information in Oracle Identity Manager about a user that is deleted from the JD Edwards system

1.4 Multilanguage Support

This release of 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

1.5 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 Connector Installation Media

File in the Installation Media Directory	Description
configuration/JDEdwards-CI.xml	This XML file contains configuration information that is used during connector installation.
lib/JDEConnectorProv.jar	This JAR file contains all the classes and definitions required for provisioning. During connector deployment, this file is copied into the following directory: *OIM_HOME*/xellerate/JavaTasks
lib/JDEConnectorRecon.jar	This JAR file contains all the classes and definitions required for reconciliation. During connector deployment, this file is copied into the following directory: *OIM_HOME*/xellerate/ScheduleTask

Table 1–1   (Cont.) Files and Directories On the Connector Installation Media

File in the Installation Media Directory	Description
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: *OIM_HOME*/xellerate/connectorResources **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/TroubleShootUtility.class	This utility is used to test connector functionality.
test/global.properties	This file is used to specify the parameters and settings required to connect to the target system by using the Troubleshoot utility.
test/log.properties	This file is used to specify the log level and the directory in which the log file is to be created when you run the Troubleshoot utility.
xml/JDEConnectorResourceObject.xml	This XML file contains definitions for the following components of the connector: ■ IT resource definition ■ JD Edwards User form ■ Lookup definitions ■ Adapters ■ Resource object ■ Process definition ■ Reconciliation scheduled tasks
xml/JDEConnectorXLResourceObject.xml	This XML file contains the configuration for the Xellerate User (OIM User). You must import this file only if you plan to use the connector in trusted source reconciliation mode.

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

1.6 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/JDEConnectorProv.jar

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

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

2

Deploying the Connector

Deploying the connector involves the following steps:

- Verifying Deployment Requirements

- Using External Code Files

- 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 system	JD Edwards EnterpriseOne Tools 8.96 and Application 8.9
Target system user account	JD Edwards EnterpriseOne user account to which the `SYSADMIN` and `PKGBLD` rights have been assigned.
	You provide the credentials of this user account while configuring the IT resource. The procedure is described later in this guide.
	If this user account were not assigned the required rights, then a connection error would be thrown when Oracle Identity Manager tries to communicate with the target system.

2.2 Using External Code Files

> **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 contents of the `connectorResources` directory and the JAR files to the corresponding directories on each node of the cluster.

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

File on the Target System Server	Destination Directory
The following JAR files from the *JDE_installation_dir*/E812/DDP/system/classes directory on the JD Edwards EnterpriseOne server:	*OIM_HOME*/Xellerate/ThirdParty
■ ApplicationAPIs_JAR.jar	
■ Base_JAR.jar	
■ BizLogicContainer_JAR.jar	
■ BizLogicContainerClient_JAR.jar	
■ BusinessLogicServices_JAR.jar	
■ castor.jar	
■ Connector.jar	
■ Generator_JAR.jar	
■ JdbjBase_JAR.jar	
■ JdbjInterfaces_JAR.jar	
■ JdeNet_JAR.jar	
■ log4j.jar	
■ Metadata.jar	
■ MetadataInterface.jar	
■ PMApi_JAR.jar	
■ Spec_JAR.jar	
■ System_JAR.jar	
■ xalan.jar	
■ xerces.jar	
■ xml-apis.jar	
Extract the following template files from the *JDE_installation_dir*/E812/DDP/system/classes/ConnectorSamples.zip file:	*OIM_HOME*/Xellerate/JDE/Properties
■ jdbj.ini.templ	
■ jdeinterop.ini.templ	
■ jdelog.properties	
Rename jdbj.ini.templ to jdbj.ini, and rename jdeinterop.ini.templ to jdeinterop.ini.	
Then, copy all three files to the specified destination directory.	
If the EnterpriseOne server is running on Oracle Database, then copy the tnsnames.ora file to the specified destination directory.	*OIM_HOME*/Xellerate/JDE/Properties

2.2.1 Changes to Be Made in the Property Files

You must modify the following property files to suit your deployment requirements:

- jdbj.ini
- jdeinterop.ini
- jdelog.properties

> **Note:** The lists of configuration properties included in the following subsections are not comprehensive and include only those properties that are essential for the functioning of the connector. The files allow further customization of the connector functionality with other optional properties. Explicit descriptions and instructions to use the other configuration properties are included in the configuration files.

2.2.1.1 jdbj.ini

You need to modify the jdbj.ini file based on you requirements. This file contains configuration information for JDBj, which provides general database access capabilities for JD Edwards EnterpriseOne.

> **Note:** All property values in this file are case-sensitive.

In the [JDBj-BOOTSTRAP SESSION] section of this file, specify values for the parameters described in the following table:

Property	Sample Value	Description
user	user=JDE	User ID to connect to the target system This is an optional parameter.
password	password=Password	Password of the user This is an optional parameter.
environment	environment=PY812	Environment in which the user connects to the target system The is a required parameter and *must* be specified in the jdbj.ini file. The target system provides the following environments in which a user can access the system: ■ Development Environment (DV812) ■ Production Environment (PD812) ■ Prototype Environment (PY812) ■ Pristine Environment (PS812) To access the system in a particular environment, the user needs privileges for that environment.
role	role=*ALL	Role of the connecting user This is an optional parameter.

In the [JDBj-BOOTSTRAP DATA SOURCE] section of this file, specify values for the properties specified in the following table.

Property	Description
name	Name of the data source This property is not important for bootstrap connections. However, it shows up in error messages and logs. Sample value: name=System - 812

Property	Description
databaseType	Type of database used by the target system
	This value depends on the database used by the system. It can be any of the following:
	■ I = AS/400
	■ O = Oracle
	■ S = SQL Server
	■ W = UDB
	■ M = MSDE
	Sample value: databaseType=O
server	Name of the EnterpriseOne host server.
	Applicable for IBM AS/400 and SQL Server.
	Sample value: server=ibm1
serverPort	EnterpriseOne host server port number.
	Applicable only for Microsoft SQL Server
database	Database instance name
	Applicable only for Oracle Database and IBM DB2 UDB
	Sample value: database=ora10g
physicalDatabase	The physical database (used as library qualifier for IBM AS/400).
	This is applicable for Microsoft SQL Server and IBM AS/400
owner	Owner of the data source
	This is applicable for Oracle Database, Microsoft SQL Server, and IBM DB2 UDB.
	Sample value: owner=SY812
lob	Boolean value that indicates support for LOBs.
	This is applicable for Oracle Database and IBM AS/400.
	Sample value: lob=Y
unicode	Boolean value that indicates support for Unicode conversion is supported.
	This is applicable for Microsoft SQL Server.
	Sample value: unicode=N

> **Note:** A client of the EnterpriseOne server, also known as the Fat Client, has settings that correspond with the settings in the [JDBj-BOOTSTRAP DATA SOURCE] section in the jdbj.ini file. The values in this file must match those specified on the Fat Client. On the Fat Client, these settings are in the [DB SYSTEM SETTINGS] section of the jde.ini file.

In the [JDBj-JDBC DRIVERS] section of this file, specify the JDBC driver to connect to EnterpriseOne server. To do this, uncomment the line that specifies the driver for the database you are using. For example, if you are using Oracle Database, uncomment the line that specifies the driver for Oracle Database.

```
ORACLE=oracle.jdbc.driver.OracleDriver
```

In the `[JDBj-ORACLE]` section of this file, specify the location of the `tnsnames.ora` that you copy from the EnterpriseOne server. The following setting is required only when you use Oracle Database:

`tns=`*`OIM_HOME`*`/Xellerate/JDE/Properties/tnsnames.ora`

2.2.1.2 jdeinterop.ini

The jdeinterop.ini file is a configuration file that is used by the connector to enable interoperability between the Oracle Identity Manager and JD Edwards system.

Modify the `jdeinterop.ini` file and specify values for the properties described in the following table:

Section in the File	Property/Sample Value	Description
`[OCM]`	`OCMEnabled=false`	Boolean value that specifies whether the connector uses Object Configuration Mapping (OCM) to find the EnterpriseOne server
`[JDENET]`	`serviceNameConnect =6014`	Port number to connect to EnterpriseOne server from Oracle Identity Manager
`[SERVER]`	`glossaryTextServer =ibm1:6014`	Name and port number to connect to glossary Text server
	`codePage=1252`	Code page number for a particular language
`[SECURITY]`	`SecurityServer=ibm 1`	Name of the security server
		Note: The security server is the same as the EnterpriseOne server.
`[INTEROP]`	`enterpriseServer=i bm1`	Name of the EnterpriseOne server
	`port=6014`	Port number to connect to EnterpriseOne server

2.2.1.3 jdelog.properties

You can customize this file to enable logging at different levels. To enable logging, you need to specify the properties described in the following table:

Property	Description	Sample Value
`FILE`	Location of the log file	`FILE=//jderoot.log`
`LEVEL`	Logging level	`LEVEL=WARN`
	You can specify any of the following values:	
	■ `SEVERE`	
	■ `WARN`	
	■ `APPS`	
	■ `DEBUG`	
	These values are in decreasing order of priority.	
`FORMAT`	Logging format	`FORMAT=APPS`
	This property can be set to:	
	■ `APPS`	
	■ `TOOLS`	
	■ `TOOLS_THREAD`	
	In a production environment, this must be set to `APPS`.	
`MAXFILESIZE`	Maximum size of the log file in MB	`MAXFILESIZE=10MB`

Property	Description	Sample Value
MAXBACKUPINDEX	Maximum number of log file backups to be maintained	MAXBACKUPINDEX=20
COMPONENTS	Components for which events are logged in the log file You can specify other components as well. A list of all the components is specified in the template for this file.	COMPONENT=RUNTIME|JAS|JDBJ
APPEND	Boolean value that specifies that log entries must be appended at the end of the file The value can be TRUE or FALSE.	APPEND=TRUE

After configuring the property files, you must add the directory in which the property files are present to the classpath environment variable. This variable is on the application server where Oracle Identity Manager is installed. The procedure to set the classpath depends on the application server on which Oracle Identity Manager is installed:

- Setting the Classpath on BEA WebLogic Server Running on Microsoft Windows

- Setting the Classpath on BEA WebLogic Server Running on Linux

- Setting the Classpath on IBM WebSphere Application Server on Microsoft Windows

- Setting the Classpath on JBoss Application Server Running on Microsoft Windows

- Setting the Classpath on JBoss Application Server Running on Linux

- Setting the Classpath on Oracle Application Server

2.2.1.3.1 Setting the Classpath on BEA WebLogic Server Running on Microsoft Windows To add the directory into the classpath in the WebLogic Application Server on Windows:

1. In the WebLogic server installation directory, navigate to the domain name directory.

2. Open startWebLogic.cmd in a text editor.

3. Edit the following command:

   ```
   set CLASSPATH=%WEBLOGIC_CLASSPATH%;%POINTBASE_CLASSPATH%;
   %JAVA_HOME%\jre\lib\rt.jar;%WL_HOME%\server\lib\webservices.jar;%CLASSPATH%
   ```

   Add the JDE_CONFIG directory into the classpath that contains the property files as shown below:

   ```
   set CLASSPATH=JDE_CONFIG;%WEBLOGIC_CLASSPATH%;%POINTBASE_CLASSPATH%;
   %JAVA_HOME%\jre\lib\rt.jar;%WL_HOME%\server\lib\webservices.jar;%CLASSPATH%
   ```

In this command, replace JDE_CONFIG with full path and name of the JDE_CONFIG directory. This directory contains the property files jdbj.ini, jdeinterop.ini, and jdelog.properties.

2.2.1.3.2 Setting the Classpath on BEA WebLogic Server Running on Linux To add the directory into the classpath in the WebLogic Application Server on Linux:

1. In the WebLogic server installation directory, navigate to the domain name directory.

2. Open startWebLogic.sh in a text editor.

3. Edit the following command:

```
CLASSPATH="${WEBLOGIC_CLASSPATH}:${POINTBASE_CLASSPATH}:
${JAVA_HOME}/jre/lib/rt.jar:${WL_HOME}/server/lib/webservices.jar:${CLASSPATH}"
```

Add the `JDE_CONFIG` directory into the classpath that contains the property files as shown below:

```
CLASSPATH=JDE_CONFIG:${WEBLOGIC_CLASSPATH}:${POINTBASE_CLASSPATH}:
${JAVA_HOME}/jre/lib/rt.jar:${WL_HOME}/server/lib/webservices.jar:${CLASSPATH}"
)
```

In this command, replace JDE_CONFIG with full path and name of the JDE_CONFIG directory. This directory contains the property files `jdbj.ini`, `jdeinterop.ini`, and `jdelog.properties`.

2.2.1.3.3 Setting the Classpath on IBM WebSphere Application Server on Microsoft Windows To add the directory into the classpath in the WebSphere Application Server on Windows:

1. In the WebSphere server installation directory, navigate to the bin directory.

2. Open `startServer.bat` in a text editor.

3. Edit the following command:

```
set CLASSPATH=%WAS_CLASSPATH%
```

Add the `JDE_CONFIG` directory into the classpath that contains the property files as shown below:

```
set CLASSPATH=JDE_CONFIG;%WAS_CLASSPATH%
```

In this command, replace `JDE_CONFIG` with full path and name of the JDE_CONFIG directory. This directory contains the property files `jdbj.ini`, `jdeinterop.ini`, and `jdelog.properties`.

2.2.1.3.4 Setting the Classpath on JBoss Application Server Running on Microsoft Windows To add the directory into the classpath in the JBoss Application Server on Windows:

1. In the JBoss installation directory, navigate to the bin directory.

2. Open run.bat in a text editor.

3. Edit the following command:

```
if "%JBOSS_CLASSPATH%" == "" (
set JBOSS_CLASSPATH=%JAVAC_JAR%;%RUNJAR%
) ELSE (
set JBOSS_CLASSPATH=%JBOSS_CLASSPATH%;%JAVAC_JAR%;%RUNJAR%
)
```

Add the `JDE_CONFIG` directory into the classpath that contains the property files as shown below:

```
if "%JBOSS_CLASSPATH%" == "" (
set JBOSS_CLASSPATH=JDE_CONFIG;%JAVAC_JAR%;%RUNJAR%
) ELSE (
set
JBOSS_CLASSPATH=JDE_CONFIG;%JBOSS_CLASSPATH%;%JAVAC_JAR%;%RUNJAR%
)
```

In this command, replace `JDE_CONFIG` with full path and name of the JDE_CONFIG directory. This directory contains the property files `jdbj.ini`, `jdeinterop.ini`, and `jdelog.properties`.

2.2.1.3.5 Setting the Classpath on JBoss Application Server Running on Linux To add the directory into the classpath in the JBoss Application Server on Linux:

1. In the JBoss installation directory, navigate to the bin directory.

2. Open run.sh in a text editor.

3. Edit the following command:

```
if [ "x$JBOSS_CLASSPATH" = "x" ]; then
JBOSS_CLASSPATH="$JBOSS_BOOT_CLASSPATH:$JAVAC_JAR"
ELSE
JBOSS_CLASSPATH="$JBOSS_CLASSPATH:$JBOSS_BOOT_CLASSPATH:$JAVAC_JAR"
fi
```

Add the JDE_CONFIG directory into the classpath that contains the property files as shown below:

```
if [ "x$JBOSS_CLASSPATH" = "x" ]; then
JBOSS_CLASSPATH="$JBOSS_BOOT_CLASSPATH:$JAVAC_JAR"
ELSE
JBOSS_CLASSPATH="$JBOSS_CLASSPATH:$JBOSS_BOOT_CLASSPATH:$JAVAC_JAR"
fi
 JBOSS_CLASSPATH=JDE_CONFIG:$JBOSS_CLASSPATH
```

In this command, replace JDE_CONFIG with the full path and name of the JD Edwards configuration directory. This directory contains the jdbj.ini, jdeinterop.ini, and jdelog.properties files.

2.2.1.3.6 Setting the Classpath on Oracle Application Server To add the directory into the classpath in the Oracle application server:

1. In the Oracle application server installation directory, navigate to the opmn directory.

2. Open the opmn.xml file in a text editor.

3. Edit the following command:

```
-Xbootclasspath^/p:D:\product\10.1.3.1\OracleAS_3\bpel\lib\orabpel-boot.jar
```

Add the JDE_CONFIG directory into the classpath that contains the property files as shown below:

```
-Xbootclasspath^/p:D:\product\10.1.3.1\OracleAS_3\bpel\lib\orabpel-boot.jar;
JDE_CONFIG
```

In this command, replace JDE_CONFIG with full path and name of the JDE_CONFIG directory. This directory contains the property files jdbj.ini, jdeinterop.ini, and jdelog.properties.

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 **JDEdwards 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 **JDEdwards 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 2-13 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.

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 Table 1–1 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 `JDE IT Resource` IT resource as follows:

1. Log in to the Administrative and User Console.

2. Expand **Resource Management.**

3. Click **Manage IT Resource**.

4. In the IT Resource Name field on the Manage IT Resource page, enter `JDE IT Resource` 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 `JDE IT Resource` IT resource. The following table describes each parameter:

Parameter	Description
User	User ID of the user account for connecting to the target system

Parameter	Description
Password	Password of the user account for connecting to the target system
Environment	Environment of the user account for connecting to the target system Sample value: DV812
Role	Role of the user account for connecting to the target system Sample value: *ALL
ProxyUser	User ID of the system user in the target system
ProxyUserPassword	Password of the system user in the target system
TimeStamp	Timestamp for the first reconciliation run, the timestamp value is not set. For subsequent rounds of reconciliation, the time at which the previous round of reconciliation was completed is stored in this parameter. The following is sample timestamp value: Jun 01, 2006 at 10:00:00 GMT+05:30

8. 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 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:** The "Files and Directories on the Installation Media" section on page 1-4 for more information about these files

File in the Installation Media Directory	Destination Directory
Files in the xml directory	OIM_HOME/xellerate/JDE/xml
Files in the resources directory	OIM_HOME/xellerate/connectorResources
lib/JDEConnectorProv.jar	OIM_HOME/xellerate/JDE/lib OIM_HOME/xellerate/JavaTasks
lib/JDEConnectorRecon.jar	OIM_HOME/xellerate/JDE/lib OIM_HOME/xellerate/ScheduleTask
Files in the test directory	OIM_HOME/xellerate/JDE/test

> **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

As mentioned in the "Files and Directories on the Installation Media" section on page 1-4, the connector XML file contains definitions of the components of the connector. By importing the connector XML file, you create these components in Oracle Identity Manager.

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 `JDEConnectorResourceObject.xml` file, which is in the `OIM_HOME/xellerate/JDE/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 `JDE IT Resource` IT resource is displayed.

8. Specify values for the parameters of the `JDE IT Resource` IT resource. Refer to the following table for information about the values to be specified:

Parameter	Description
User	User ID of the user account for connecting to the target system
Password	Password of the user account for connecting to the target system
Environment	Environment of the user account for connecting to the target system Sample value: `DV812`
Role	Role of the user account for connecting to the target system Sample value: `*ALL`
ProxyUser	User ID of the system user in the target system
ProxyUserPassword	Password of the system user in the target system
TimeStamp	Timestamp for the first reconciliation run, the timestamp value is not set. For subsequent rounds of reconciliation, the time at which the previous round of reconciliation was completed is stored in this parameter. The following is sample timestamp value: `Jun 01, 2006 at 10:00:00 GMT+05:30`

9. Click **Next**. The Provide IT Resource Instance Data page for a new instance of the `JDE 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 Administrative and User Console 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. 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**.

12. 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 procedures:

■ Changing to the Required Input Locale

■ Clearing Content Related to Connector Resource Bundles from the Server Cache\

■ Enabling Logging

2.5.1 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.

2.5.2 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 2-11, 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 one of the following commands:

■ On Microsoft Windows:

```
PurgeCache.bat ConnectorResourceBundle
```

■ On UNIX:

```
PurgeCache.sh 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

2.5.3 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 and reconciliation operations. To specify the type of event for which you want logging to take place, you can set the log level to one of the following:

- `ALL`

  This level enables logging for all events.

- `DEBUG`

  This level enables logging of information about fine-grained events that are useful for debugging.

- `INFO`

  This level enables logging of messages that highlight the progress of the application at a coarse-grained level.

- `WARN`

  This level enables logging of information about potentially harmful situations.

- `ERROR`

  This level enables logging of information about error events that may allow the application to continue running.

- `FATAL`

  This level enables logging of information about very severe error events that could cause the application to stop functioning.

- `OFF`

  This level disables logging for all events.

The file in which you set the log level and the log file path depend on the application server that you use:

- **BEA WebLogic Server**

  To enable logging:

  1. Add the following lines in the *OIM_HOME*/xellerate/config/log.properties file:

     ```
     log4j.logger.XELLERATE=log_level
     log4j.logger.XL_INTG.JDECONNECTOR=log_level
     ```

  2. In these lines, replace *log_level* with the log level that you want to set.

     For example:

     ```
     log4j.logger.XELLERATE=INFO
     log4j.logger.XL_INTG.JDECONNECTOR=INFO
     ```

  After you enable logging, log information is displayed on the server console.

■ **IBM WebSphere Application Server**

To enable logging:

1. Add the following lines in the
   OIM_HOME/xellerate/config/log.properties file:

```
log4j.logger.XELLERATE=log_level
log4j.logger.XL_INTG.JDECONNECTOR=log_level
```

2. In these lines, replace *log_level* with the log level that you want to set.

   For example:

```
log4j.logger.XELLERATE=INFO
log4j.logger.XL_INTG.JDECONNECTOR=INFO
```

After you enable logging, log information is written to the following file:

WEBSPHERE_HOME/AppServer/logs/*SERVER_NAME*/SystemOut.log

■ **JBoss Application Server**

To enable logging:

1. In the *JBoss_home*/server/default/conf/log4j.xml file, locate or add
   the following lines if they are not already present in the file:

```
<category name="XELLERATE">
    <priority value="log_level"/>
</category>

<category name="XL_INTG.JDECONNECTOR">
    <priority value="log_level"/>
</category>
```

2. In the second XML code line of each set, replace *log_level* with the log level
   that you want to set. For example:

```
<category name="XELLERATE">
    <priority value="INFO"/>
</category>

<category name="XL_INTG.JDECONNECTOR">
    <priority value="INFO"/>
</category>
```

After you enable logging, log information is written to the following file:

JBoss_home/server/default/log/server.log

■ **Oracle Application Server**

To enable logging:

1. Add the following lines in the
   OIM_HOME/xellerate/config/log.properties file:

```
log4j.logger.XELLERATE=log_level
log4j.logger.XL_INTG.JDECONNECTOR=log_level
```

2. In these lines, replace *log_level* with the log level that you want to set.

   For example:

```
log4j.logger.XELLERATE=INFO
```

```
log4j.logger.XL_INTG.JDECONNECTOR=INFO
```

After you enable logging, log information is written to the following file:

OC4J_home/opmn/logs/default_group~home~default_group~1.log

3

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 Reconciliation
- Configuring Provisioning

> **Note:** This chapter provides both conceptual and procedural information about configuring the connector. It is recommended that you read the conceptual information before you perform the procedures.

3.1 Configuring Reconciliation

As mentioned earlier in this guide, reconciliation involves duplicating in Oracle Identity Manager the creation of and modifications to user accounts on the target system. This section discusses the following topics related to configuring reconciliation:

- Configuring Trusted Source Reconciliation
- Configuring the Reconciliation Scheduled Tasks

3.1.1 Configuring Trusted Source Reconciliation

While configuring the connector, the target system can be designated as a trusted source or target resource. If you designate the target system as a **trusted source**, then during a reconciliation run:

- For each newly created user on the target system, an OIM User is created.
- Updates made to each user on the target system are propagated to the corresponding OIM User.

If you designate the target system as a **target resource**, then during a reconciliation run:

- For each account created on the target system, a resource is assigned to the corresponding OIM User.

- Updates made to each account on the target system are propagated to the corresponding resource.

> **Note:** Skip this section if you do not want to designate the target system as a trusted source for reconciliation.

Enabling trusted source reconciliation involves the following steps:

1. Import the XML file for trusted source reconciliation, `JDEConnectorXLResourceObject.xml`, by using the Deployment Manager. This section describes the procedure to import the XML file.

2. Set the `isTrustedSource` scheduled task attribute to `True`. You specify a value for this attribute while configuring the user reconciliation scheduled task, which is described later in this guide.

To import the XML file for trusted source reconciliation:

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 `JDEConnectorXLResourceObject.xml` file, which is in the *OIM_HOME*`/xellerate/JDE/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 **Import**.

8. In the message that is displayed, click **Import** to confirm that you want to import the **XML** file and then click **OK**.

After you import the XML file for trusted source reconciliation, you must set the value of the `isTrustedSource` reconciliation scheduled task attribute to `True`. This procedure is described in the "Configuring the Reconciliation Scheduled Tasks" section on page 3-2.

3.1.2 Configuring the Reconciliation Scheduled Tasks

When you perform the procedure described in the "Importing the Connector XML File" section on page 2-12, the scheduled tasks for lookup fields and user reconciliations are automatically created in Oracle Identity Manager. To configure these scheduled tasks:

1. Open the Oracle Identity Manager Design Console.

2. Expand the `Xellerate Administration` folder.

3. Select **Task Scheduler.**

4. Click **Find**. The details of the predefined scheduled tasks are displayed on two different tabs.

5. For the first scheduled task, enter a number in the **Max Retries** field. This number represents the number of times Oracle Identity Manager must attempt to complete the task before assigning the FAILED status to the task.

6. Ensure that the **Disabled** and **Stop Execution** check boxes are not selected.

7. In the Start region, double-click the **Start Time** field. From the date-time editor that is displayed, select the date and time at which you want the task to run.

8. In the Interval region, set the following schedule parameters:

   - To set the task to run on a recurring basis, select the **Daily**, **Weekly**, **Recurring Intervals**, **Monthly**, or **Yearly** option. If you select the **Recurring Intervals** option, then you must also specify the time interval at which you want the task to run on a recurring basis.

   - To set the task to run only once, select the **Once** option.

9. Provide values for the attributes of the scheduled task. Refer to the "Specifying Values for the Scheduled Task Attributes" section on page 3-3 for information about the values to be specified.

10. Click **Save**. The scheduled task is created. The INACTIVE status is displayed in the **Status** field, because the task is not currently running. The task is run at the date and time that you set in Step 7.

11. Repeat Steps 5 through 10 to create the second scheduled task.

3.1.2.1 Specifying Values for the Scheduled Task Attributes

This section provides information about the values to be specified for the following scheduled tasks:

- Lookup Fields Reconciliation Scheduled Task

- User Reconciliation Scheduled Task

3.1.2.1.1 Lookup Fields Reconciliation Scheduled Task You must specify values for the following attributes of the JDE LookUp Recon lookup fields reconciliation scheduled task.

Note:

- Attribute values are predefined in the connector XML file that you import. Specify values only for those attributes that you want to change.

- Values (either default or user-defined) must be assigned to all the attributes. If even a single attribute value were left empty, then reconciliation would not be performed.

Attribute	Description	Sample Value
Language	Code of the language to be used in the lookup reconciliation	en
Country	Code of the country to be used in the lookup reconciliation	us
ITResource	Name of the IT resource for setting up a connection to JD Edwards	JDE IT Resource
isRoleLookup	Specifies whether or not to perform a lookup for the Role value during reconciliation The value can be true or false.	true

Attribute	Description	Sample Value
isDateSeparation CharacterLookup	Specifies whether or not to perform a lookup for the Date Separation Character value during reconciliation The value can be `true` or `false`.	`true`
isLanguageLookup	Specifies whether or not to perform a lookup for the Language value during reconciliation The value can be `true` or `false`.	`true`
isLocalizationCo untryCodeLookup	Specifies whether or not to perform a lookup for the Localization Country Code value during reconciliation The value can be `true` or `false`.	`true`
isDateFormatLook up	Specifies whether or not to perform a lookup for the Date Format value during reconciliation The value can be `true` or `false`.	`true`
isUniversalTimeL ookup	Specifies whether or not to perform a lookup for the Universal Time value during reconciliation The value can be `true` or `false`.	`true`
isDecimalFormatC haracterLookup	Specifies whether or not to perform a lookup for the Decimal Format Character value during reconciliation The value can be `true` or `false`.	`true`
isTimeFormatLook up	Specifies whether or not to perform a lookup for the Time Format value during reconciliation The value can be `true` or `false`.	`true`
LanguagePreferen ceForLookup	Specifies the language setting for lookup field entries	You can specify one of the following values: ■ For English: `E` ■ For French: `F` ■ For German: `G` ■ For Italian: `I` ■ For Japanese: `J` ■ For Korean: `KO` ■ For Simplified Chinese: `CS` ■ For Spanish: `S` ■ For Traditional Chinese: `CT`

After you specify values for the task attributes, proceed to Step 10 of the procedure to create scheduled tasks.

3.1.2.1.2 User Reconciliation Scheduled Task You must specify values for the following attributes of the `JDE User Recon` user reconciliation scheduled task.

> **Note:**
>
> - Attribute values are predefined in the connector XML file that you import. Specify values only for those attributes that you want to change.
>
> - Values (either default or user-defined) must be assigned to all the attributes. If even a single attribute value were left empty, then reconciliation would not be performed.

Attribute	Description	Sample Value
Organization	Default organization assigned to a new user	Xellerate Users
Xellerate Type	Default type assigned to a new user	End-User Administrator
Role	Default employee type assigned to a new user	Consultant
ITResource	Name of the IT Resource for setting up a connection with JD Edwards	JDE IT Resource
ResourceObject	Name of the resource object that is used for	JDE Resource Object
isTrustedSource	Specifies whether or not trusted source reconciliation is to be performed If it is set to true, then the target system is treated as a trusted source. If it is set to false, then the target system is treated as a nontrusted target. By default, the value is false.	false
XLDeleteUsersAllowed	Specifies whether or not users are to be deleted in Oracle Identity Manager during user reconciliation	false

After you specify values for the task attributes, proceed to Step 10 of the procedure to create scheduled tasks.

Stopping Reconciliation

Suppose the User Reconciliation Scheduled Task for the connector is running and user records are being reconciled. If you want to stop the reconciliation process:

1. Perform Steps 1 through 4 of the procedure to configure reconciliation scheduled tasks.

2. Select the **Stop Execution** check box in the task scheduler.

3. Click **Save**.

3.2 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:** Skip this section if either of the following conditions is true:
>
> - You performed the procedure described in "Installing the Connector on Oracle Identity Manager Release 9.1.0 or Later" on page 2-8.
>
> - You do not want to use the provisioning features of Oracle Identity Manager for this target system.

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 1-3 for a listing of the provisioning functions that are available with this connector

- `Enable and Disable User`
- `JDE Delete User`
- `Modify Password`
- `PrePopulate JDE Form`
- `JDE Remove Role`
- `JDE Modify User`
- `JDE Create User`
- `JDE Add Role`

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.

4

Testing the Connector

After you deploy the connector, you must test it to ensure that it functions as expected. This chapter discusses procedure to test connector.

You can use the testing utility to identify the cause of problems associated with connecting to the target system and performing basic operations on the target system

To use the utility:

1. Copy the contents of the `test` directory on the installation media, to the *OIM_HOME*`/xellerate/JDE/test` directory.

2. Specify the required values in the `global.properties` file. This file is in the *OIM_HOME*`/Xellerate/JDE 9.0.3/test` directory. The following table describes the sections of this file in which you must provide information for runing the tests.

Section	Description
Server Information	Connection parameters required to connect to the target system
Create User Parameter	Field information required to create or delete a user profile
Modify User Parameter	Field information required to modify a user profile
Password Reset	Field information required to reset a password for a user profile
Modify Enable / Disable User Parameters	Field information required to enable or disable a user profile
Add Role to User Parameters	Field information required add a role to a user profile
Remove Role from User Parameters	Field information required remove a role from a user profile
Reconcile Users	The From Date timestamp
	The To Date is set to the current date and time by default.

3. Add all the JAR files mentioned in the "Copying the Connector Files" section on page 2-11 to the `CLASSPATH` environment variable.

   Add all the files in the *OIM_HOME*`/Xellerate/JDE/Properties` directory to the `CLASSPATH` environment variable.

4. In the `log.properties` file in the same directory:

   a. In the following parameter, set the path of the directory in which you want to create the log files:

   ```
   log4j.appender.logfile.File=log_file_path
   ```

Here, *log_file_path* is the path of the directory in which you want to create the log file.

b. Specify any one of the following log levels:

- DEBUG
- INFO
- WARN
- ERROR
- FATAL

For example, if the log level for DEBUG is to be enabled, then you must add the following entry file:

```
log4j.logger.ADAPTERS.ACTIVEDIRECTORY=DEBUG
```

5. Create an ASCII-format copy of the global.properties file as follows:

a. In a command window, change to the following directory:

```
OIM_HOME/Xellerate/JDE/test
```

b. Enter the following command:

```
native2ascii global.properties troubleshoot.properties
```

The troubleshoot.properties file is created when you run the native2ascii command. The contents of this file are an ASCII-format copy of the contents of the global.properties file.

6. Perform the following tests:

- Enter the following command to create a user:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility C
```

- Enter the following command to delete a user:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility D
```

- Enter the following command to modify a user:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility M
```

- Enter the following command to reset the password of a user:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility P
```

- Enter the following command to enable and disable a user:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility ED
```

- Enter the following command to add a role to user:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility AUR
```

- Enter the following command to remove a role from user:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility RUR
```

- Enter the following command to test reconcile users:

```
java -DTproperties=OIM_HOME/test/troubleShoot.properties
-Dlog4j.configuration=file:/OIM_HOME/test/log.properties
TroubleShootUtility R
```

5

Known Issues

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

■ The target system does not accept a user ID that is longer than 10 characters. During provisioning, if you specify a user ID that is longer than 10 characters, then the first 10 characters are used to create the user ID on the target system.

This limitation also applies to the password that you specify for the new user.

■ While reconciling users from the target system, the User ID value is used to populate the First Name and Last Name fields of the Xellerate User (OIM User) account in Oracle Identity Manager.

■ This connector does not support secure connection between Oracle Identity Manager and the target system because the interoperability solution used in building the connector does not support this type of connection.

The only way to secure communication between Oracle Identity Manager and the target system is to place both on a secure network.

■ Linking in Oracle Identity Manager is asynchronous. If a user is first created and then disabled in the JD Edwards system, then that user might not be disabled in Oracle Identity Manager in the first reconciliation run. The user will be disabled in Oracle Identity Manager in the second reconciliation run.

■ While creating a user in a provisioning operation, if you specify the login credentials in a multibyte language (for example, Japanese or Korean), then the user account may not be correctly created on the target system. The user will not be able to log in to the target system.

The following sample scenario illustrates this problem:

While installing the operating system on the target system server, suppose you had selected the English language for installation. Now, you are using a language pack for the Japanese language that you want to use on that server. As mentioned earlier, on this target system, the login credentials of newly created user accounts will not work.

However, suppose you had selected the Japanese language while installing the operating system on the target system server. You do not need to use the Japanese language pack on this server. On a target system installed on this server, a user would be able to log in using user credentials created on Oracle Identity Manager.

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Attribute Mappings Between Oracle Identity Manager and JD Edwards

The following table discusses attribute mappings between Oracle Identity Manager and JD Edwards.

Oracle Identity Manager Attribute	JD Edwards Attribute	Description
sUserId	USER	Login ID
sLanguagePreference	LNGP	Language preference
sDateFormat	FRMT	Date format character
sDateSeparator	DSEP	Date separation character
sDecimalFormat	DECF	Decimal format character
sCountry	CTR	Country
sUniversalTime	UTCTIME	Universal time
sTimeFormat	UTCTIME	Time format
sFastPath	FSTP	Fast path
EnabledUser	EUSER	Enable or disable user This is a Boolean value that toggles the enabling and disabling of the user.
RoleName	FRROLE	Name of the role
EffectiveDate	EFFDATE	Effective date of the role
ExpirationDate	EXPIRDATE	Expiration date of the role
IncludeAll	FUROLE1	Include a role or privilege in the *ALL role

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