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Connector Guide for Sun Java System Directory

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Primary Authors: Debapriya Datta, Shiladitya Guha

Contributing Authors: Don Gosselin, Lyju Vadassery

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Contents

Preface	v
Audience	v
Documentation Accessibility	v
Related Documents	vi
Documentation Updates	vi
Conventions	vi
1 About the Connector	
Supported Functionality	1-1
Reconciliation Module	1-2
Lookup Fields Reconciliation	1-2
User Reconciliation	1-2
Reconciled Resource Object Fields	1-2
Reconciled Xellerate User Fields.....	1-3
Provisioning Module	1-3
Files and Directories That Comprise the Connector	1-4
2 Deploying the Connector	
Step 1: Verifying Deployment Requirements	2-1
Step 2: Copying the Connector Files and External Code	2-1
Step 3: Importing the Connector XML Files	2-2
Defining IT Resources	2-3
Step 4: Configuring Reconciliation	2-4
Specifying Values for the Scheduled Task Attributes	2-5
Lookup Fields Reconciliation Scheduled Task.....	2-5
User Reconciliation Scheduled Task	2-6
Step 5: Compiling Adapters	2-6
Step 6: Configuring SSL	2-7
3 Testing the Connector	
Running Test Cases	3-1
Troubleshooting	3-2

4 Known Issues

Index

Preface

Oracle Identity Manager Connector Guide for Sun Java System Directory provides information about integrating Oracle Identity Manager with Sun Java System Directory.

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

Audience

This guide is intended for users who want to deploy the Oracle Identity Manager connector for Sun Java System Directory.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. 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

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Related Documents

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

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

Documentation Updates

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

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

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	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.

About the Connector

Oracle Identity Manager automates access rights management, security, and provisioning of IT resources. Oracle Identity Manager connectors are used to integrate Oracle Identity Manager with third-party applications. The connector for Sun Java system directory is used to integrate Oracle Identity Manager with Sun Java System Directory.

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

This chapter contains the following sections:

- [Supported Functionality](#)
- [Reconciliation Module](#)
- [Provisioning Module](#)
- [Files and Directories That Comprise the Connector](#)

Supported Functionality

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

Process Task	Type	Description
Create User	Provisioning	Creates a user
Delete User	Provisioning	Deletes a user
Enable User	Provisioning	Enables a user
Disable User	Provisioning	Disables a user
Move User	Provisioning	Moves a user from one container to another
Password Updated	Provisioning	Updates the password of a user
First Name Updated	Provisioning	Updates the first name of a user
Last Name Updated	Provisioning	Updates the last name of a user
Department Updated	Provisioning	Updates the password of a user
Email ID Updated	Provisioning	Updates the e-mail address of a user
Location Updated	Provisioning	Updates the location of a user

Process Task	Type	Description
Middle Name Updated	Provisioning	Updates the middle name of a user
Communication Language Updated	Provisioning	Updates the language of a user
Telephone Updated	Provisioning	Updates the telephone number of a user
Title Updated	Provisioning	Updates the title of the user
Organization DN Updated	Provisioning	Updates the organization DN of a user
Add User to Group	Provisioning	Adds a user to a group
Remove User from Group	Provisioning	Removes a user from a group
Add User to Role	Provisioning	Adds a user to a role
Remove User from Role	Provisioning	Removes a user from a role
Reconciliation Delete Received	Reconciliation	Deletes a user in Oracle Identity Manager if the user is deleted from Sun Java System Directory
Reconciliation Insert Received	Reconciliation	Inserts a user in Oracle Identity Manager
Reconciliation Update Received	Reconciliation	Updates user attributes, such as the first name or last name, in Oracle Identity Manager

Reconciliation Module

This section discusses the elements that the reconciliation module extracts from the target system to construct reconciliation event records.

Reconciliation can be divided into the following types:

- [Lookup Fields Reconciliation](#)
- [User Reconciliation](#)

Lookup Fields Reconciliation

Lookup fields reconciliation involves reconciling the fields for groups, roles, and organization.

User Reconciliation

User reconciliation involves reconciling the fields discussed in this section.

Reconciled Resource Object Fields

The following fields are reconciled:

- User ID
- First Name
- Last Name
- Middle Name
- Department

- Location
- Telephone
- Email
- Communication Language
- Title
- Organization Unit
- Server Name (IT resource)
- Group
- Role

Reconciled Xellerate User Fields

The following fields are reconciled only if reconciliation is implemented in trusted mode:

- UserID
- Password
- Organization
- FirstName
- LastName
- Xellerate Type
- Xellerate
- Role

Provisioning Module

The following fields are provisioned:

- User ID
- First Name
- Last Name
- Middle Name
- Department
- Location
- Telephone
- Email
- Communication Language
- Title
- Organization Unit
- Server Name (IT resource)
- Group
- Role

Files and Directories That Comprise the Connector

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

Directory Servers\Sun Java System Directory Server\Sun Java System Directory Server Rev 4.1.1.0.zip

These files and directories are listed in the following table.

File Name with Path	Description
xml\iPlanetResourceObject.xml	This XML file contains all the components of the connector. These components include the following: <ul style="list-style-type: none"> IT resource type Custom process form Process task and rule-generator adapters (along with their mappings) Resource object Provisioning process Pre-populate rules Reconciliation process Lookup definitions
xml\iPlanetXLResourceObject.xml	This XML file contains the configuration for the Xellerate User. You must import this file only if you plan to use the connector in trusted source reconciliation mode.
lib\xliiPlanet.jar	This JAR file contains the class files required for provisioning and reconciliation.
troubleshoot\log.properties	This file contains the settings required to create a log file for output generated by the troubleshooting utility.
troubleshoot\TroubleShootingUtilityIPlanet.class	This is the standalone class that interacts with the target system. This is the class that has the code required to run the test cases.
troubleshoot\TroubleShootIPlanet.properties	This file contains the connection details that are required to connect to the target system and user details. It also contains details about the commands to be run.
docs\B31139_01.pdf docs\html	These are PDF and HTML versions of this guide, which provides instructions to deploy the connector.

The "[Step 2: Copying the Connector Files and External Code](#)" section on page 2-1 provides instructions to copy these files into the required directories.

Deploying the Connector

Deploying the connector involves the following steps:

- [Step 1: Verifying Deployment Requirements](#)
- [Step 2: Copying the Connector Files and External Code](#)
- [Step 3: Importing the Connector XML Files](#)
- [Step 4: Configuring Reconciliation](#)
- [Step 5: Compiling Adapters](#)
- [Step 6: Configuring SSL](#)

Step 1: Verifying Deployment Requirements

The following table lists the deployment requirements for the connector.

Item	Requirement
Oracle Identity Manager	Oracle Identity Manager release 8.5.2 or later
Target systems	Sun ONE Directory Server 5.2
Target system host platforms	Microsoft Windows 2000

Step 2: Copying the Connector Files and External Code

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

Note: The directory paths given in the first column of this table correspond to the location of the connector files in the following ZIP file on the installation media:

Directory Servers\Sun Java System Directory Server\Sun Java System Directory Server Rev 4.1.0.zip

Refer to "[Files and Directories That Comprise the Connector](#)" on page 1-4 for more information about these files.

Files in the Installation Media Directory	Destination Directory
xml\iPlanetResourceObject.xml	xellerate_home\xellerate\iPlanet-versionno\xml
xml\iPlanetXLResourceObject.xml	xellerate_home\xellerate\iPlanet-versionno\xml
lib\xliiPlanet.jar	xellerate_home\xellerate\JavaTasks
The following files in the troubleshoot directory: log.properties TroubleShootingUtilityiPlanet.class TroubleShootiPlanet.properties	xellerate_home\xellerate\troubleshoot
docs\B31139_01.pdf docs\html	xellerate_home\xellerate\docs

Note: In the destination directory path, the version number specified in the directory name `iPlanet-versionno` would change depending on the actual version number of the software.

Step 3: Importing the Connector XML Files

To import the connector XML files into Oracle Identity Manager:

1. Open the Oracle Identity Manager Administrative and User Console.
2. Click the **Deployment Management** link on the left navigation bar.
3. Click the **Import** link under Deployment Management. A dialog box for locating files is displayed.
4. Locate and open the `iPlanetXLResourceObject.xml` file, which is in the `xellerate_home\xellerate\iPlanet-versionno\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 `iPlanet User IT` resource is displayed.
8. Specify values for the parameters of the `iPlanet User IT` resource. Refer to the table in the "[Defining IT Resources](#)" section on page 2-3 information about the values to be specified.
9. Click **Next**. The Provide IT Resource Instance Data page for a new instance of the `LDAP Server IT` resource type is displayed.
10. Click **Skip** to specify that you do not want to define another IT resource. The Confirmation page is displayed.

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

11. Click **View Selections**.

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

12. Click **Import**. The connector file is imported into Oracle Identity Manager.
13. If you plan to use the connector in trusted source reconciliation mode, then perform the same procedure to import the `iPlanetResourceObject.xml` file. This file is in the `xellerate_home\xellerate\iPlanet-versionno\xml` directory.

Caution: Only one connector can be configured as a trusted source. If you import the `iPlanetResourceObject.xml` file while you have another trusted source configured, then both connector reconciliations would stop working.

After you import the connector XML files, proceed to the "[Step 4: Configuring Reconciliation](#)" section on page 2-4.

Defining IT Resources

You must specify values for the `iPlanet User` IT resource parameters listed in the following table.

Parameter Name	Parameter Description
Admin Id	DN value of the user who has administrator rights on the target Sun Java System Directory server The default value is <code>uid=admin,ou=administrators,ou=topologymanagement,ou=netscaperootAdmin</code>
Admin Password	Password of the administrator
Server Address	Server address of the target Sun Java System Directory server The value can be <code>164.164.164.164</code> .
Port	Port number to connect to the target Sun Java System Directory server The default value is <code>389</code> .
Root DN	Base DN where all the user operations are to be carried out The value can be <code>o=xyz</code>
SSL	Specifies whether or not an SSL connection is used for communication between Oracle Identity Manager and the target Sun Java System Directory server The value can be <code>true</code> or <code>false</code> .
Last Recon TimeStamp	The value is empty the first time the reconciliation process is run. From then onward, this parameter stores the time at which the last reconciliation process was completed.
Prov Attribute Lookup Code	Name of the lookup definition that has the target attribute mappings required for provisioning The default value of this parameter is <code>AttrName.Prov.Map.iPlanet</code>

Parameter Name	Parameter Description
Recon Attribute Lookup Code	Name of the lookup definition that has the target attribute mappings required for reconciliation The default value of this parameter is <code>AttrName.Recon.Map.iPlanet</code>
Use XL Org Structure	A configurable option for the user If set to <code>true</code> , then the provisioned user is created under the Organization structure of Oracle Identity Manager. If set to <code>false</code> , then the value of the Organization field in the process form is used and the provisioned user is created under the Organization structure that is specified in the process form while provisioning.

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

Step 4: Configuring Reconciliation

Configuring reconciliation involves creating scheduled tasks for lookup fields and user reconciliations. To create 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. Enter a number in the **Max Retries** field. This number represents the number of times Oracle Identity Manager should attempt to complete the task before assigning the `ERROR` status to the task.
6. Ensure that the **Disabled** and **Stop Execution** check boxes are cleared.
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 appropriate table in the "[Specifying Values for the Scheduled Task Attributes](#)" section on page 2-5 for information about the values to be specified.

See Also: *Oracle Identity Manager Design Console Guide* for information about adding and removing task attributes
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.

After you create both scheduled tasks, proceed to the ["Step 5: Compiling Adapters"](#) section on page 2-6.

Specifying Values for the Scheduled Task Attributes

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

- [Lookup Fields Reconciliation Scheduled Task](#)
- [User Reconciliation Scheduled Task](#)

Lookup Fields Reconciliation Scheduled Task

You must specify values for the following attributes of the 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.

Attribute Name	Description	Default/Sample Value
LookupCodeName	Name of the lookup definition to which the values are to be reconciled	Lookup.IPNT.UserGroup
ITResourceName	Name of the IT resource for setting up a connection to the Sun Java System Directory server	iPlanet User
SearchContext	Search context to be used for searching for users	DC=mycompany, DC=com
ObjectClass	Name of the group object class For example, <code>groupOfUniqueNames</code> and <code>ldapsubentry</code> .	<code>groupOfUniqueNames</code> (for Group reconciliation) <code>ldapsubentry</code> (for Role reconciliation)
CodeKeyLTrimStr	String value for left-trimming the value obtained from the search For example: <code>cn=</code> or <code>uid=</code> If there is nothing to be trimmed, then specify the value <code>[NONE]</code> .	[NONE]
CodeKeyRTrimStr	String value for right-trimming the value obtained from the search For example: <code>, DC=mycompany, DC=com</code> If there is nothing to be trimmed, then specify the value <code>[NONE]</code> .	<code>, DC=mycompany, DC=com</code>
ReconMode	Specify <code>REFRESH</code> to completely refresh the existing lookup. Specify <code>UPDATE</code> to update the lookup with the new values.	<code>REFRESH</code> or <code>UPDATE</code> (specified in uppercase)

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

User Reconciliation Scheduled Task

You must specify values for the following attributes of the 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.

Attribute Name	Description	Default/Sample Value
ITResourceName	Name of the IT resource for setting up a connection to the Sun Java System Directory server	iPlanet User
ResourceObjectName	Name of the resource object in which users are reconciled	iPlanet User
XLDeleteUsersAllowed	If this attribute is set to <code>true</code> , then the Delete reconciliation event is started. Users who are deleted from the target system are removed from Oracle Identity Manager. This requires all the users on the target system to be compared with all the users in Oracle Identity Manager. Note: This process affects performance.	<code>true</code>
UserContainer	DN value from where the users are reconciled from the target system to Oracle Identity Manager	<code>ou=user</code>
TrustedSource	Configurable option for trusted reconciliation	<code>True</code>
Xellerate Type	Default Xellerate Type for the Xellerate User	End-User Administrator
Password	Default password for the Xellerate User	Dummy123
Organization	Default organization of the Xellerate User	Xellerate Users
Role	Default role for the Xellerate User	Consultant

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

Step 5: Compiling Adapters

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

- `iPlanet Create User`
- `iPlanet Delete User`
- `iPlanet Modify User`
- `iPlanet Move User`
- `iPlanet Add User to Group`
- `iPlanet Remove User from Group`
- `iPlanet Add Role to User`
- `iPlanet Remove Role from User`
- `iPlanet PP String`

To compile adapters by using the Adapter Manager form:

1. Open the Adapter Manager form.
2. To compile all the adapters that you import into the current database, select the **Compile All** option.

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

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 adapters that you specify.

To view detailed information about an adapter:

1. Highlight the adapter in the Adapter Manager form.
2. Double-click the row header of the adapter, or right-click the adapter.
3. Select **Launch Adapter** from the shortcut menu that is displayed. Details of the adapter are displayed.

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

Step 6: Configuring SSL

Note: This is an optional step of the deployment procedure.

To enable SSL connectivity between the connector and the target Sun Java System Directory server:

1. Import the certificate from the target system into the JSDK (the JSDK that is used during installation of Oracle Identity Manager) `cacerts` keystore as follows:

```
keytool -import -file certificate_file_name -alias iplanetcert -keystore
java_home\jre\lib\security\cacerts
```

Here, `java_home` is the directory in which JDK is installed.

2. Restart the Oracle Identity Manager server.
3. In the `iPlanet User IT Resource`:
 - Set the `SSL` parameter value to `true`.
 - Change the `Port` parameter value to the SSL port number. Typically, this number is 636.

Testing the Connector

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

This chapter contains the following sections:

- [Running Test Cases](#)
- [Troubleshooting](#)

Running Test Cases

This section discusses test cases that you can perform by using the troubleshooting utility.

You can use the troubleshooting 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.

Before you can use the troubleshooting utility, you must set the required values in the `TroubleShootIPlanet.properties` file. This file is in the `xellerate_home\xellerate\troubleshoot` directory. The following tables describes the sections of this file.

Section Name	Information
Sun Java System Directory Server Connection Parameters	Connection parameters required to connect to the target system
Create User	Values required to create a user on the target system
Modify User	Values required to modify a user
Delete User	DN of the user to be deleted

After you specify the required values in the `TroubleShootIPlanet.properties` file, set the classpath for the `xliIPlanet.jar` file. Refer to the "[Step 2: Copying the Connector Files and External Code](#)" section on page 2-1 for information about the location of this file.

In addition, you must set the classpath for the following JAR files:

- `xellerate_home\xellerate\lib\xlLogger.jar`
- `xellerate_home\xellerate\lib\xlUtils.jar`
- `xellerate_home\xellerate\JavaTasks\xliPlanet.jar`
- `log4j.jar` file in the application server installation directory

Then, perform the following tests:

- Create a user as follows:

```
java -DpropertyFile=
xellerate_home/xellerate/troubleshoot/TroubleShootIPlanet.properties
-Dlog4j.configuration=file:/xellerate_home/xellerate/troubleshoot
/log.properties TroubleshootingUtilityIPlanet createUser
```

- Modify a user as follows:

```
# java -DpropertyFile=
xellerate_home/xellerate/troubleshoot/TroubleShootIPlanet.properties
-Dlog4j.configuration=file:/xellerate_home/xellerate/troubleshoot
/log.properties TroubleshootingUtilityIPlanet modifyUser
```

- Delete a user as follows:

```
# java -DpropertyFile=
xellerate_home/xellerate/troubleshoot/TroubleShootIPlanet.properties
-Dlog4j.configuration=file:/xellerate_home/xellerate/troubleshoot/log.propertie
s TroubleshootingUtilityIPlanet deleteUser
```

Note: Ensure that the location of the `TroubleShootIPlanet.properties` and `log.properties` files is correctly specified.

Troubleshooting

The following table lists solutions to some commonly encountered problems associated with the connector.

Problem Description	Solution
Oracle Identity Manager cannot establish a connection to the Sun Java System Directory server. Returned Error Message: LDAP Connection exception Returned Error Code: INVALID_CONNECTION_ERROR	<ul style="list-style-type: none"> ■ Ensure that the Sun Java System Directory server is running. ■ Ensure that the Oracle Identity Manager is running (that is, the database is running). ■ Ensure that all the adapters have been compiled. ■ Examine the Oracle Identity Manager record (from the IT Resources form). Verify that the specified IP address, admin ID, and admin password are correct.
Target not available Returned Error Message: Connection error - unable to create Initial LDAP. Returned Error Code: TARGET_UNAVAILABLE_ERROR	Ensure that the specified Sun Java System Directory server connection values are correct.

Problem Description	Solution
<p>Authentication error</p> <p>Returned Error Messages</p> <p>Connection error - unable to create Initial LDAP</p> <p>Returned Error Code</p> <p>AUTHENTICATION_ERROR</p>	<p>Ensure that the specified Sun Java System Directory connection values are correct.</p>
<p>Oracle Identity Manager cannot create a user.</p> <p>Returned Error Message:</p> <p>Require information missing</p> <p>Returned Error Code:</p> <p>INSUFFICIENT_INFORMATION_PROVIDED</p>	<ul style="list-style-type: none"> ■ Ensure that the IP address, admin ID, and admin password are correct. ■ Ensure that the following information is provided: <ul style="list-style-type: none"> User Container User First Name User Last Name User ID User Password
<p>Oracle Identity Manager cannot create a user.</p> <p>Returned Error Message:</p> <p>User already exists</p> <p>Returned Error Code:</p> <p>USER_ALREADY_EXISTS</p>	<p>Check if a user with the assigned ID already exists in Sun Java System Directory.</p> <p>Assign a new ID for this user, and try again.</p>
<p>Oracle Identity Manager cannot create a user.</p> <p>Returned Error Message:</p> <p>Connection error - unable to create Initial LDAPContext</p> <p>Returned Error Code:</p> <p>INVALID_NAMING_ERROR</p>	<ul style="list-style-type: none"> ■ Check if the given Sun Java System Directory connection values are correct. ■ Check if an attribute value violates the schema definition.
<p>Oracle Identity Manager cannot create a user.</p> <p>Returned Error Message:</p> <p>User creation failed</p> <p>Returned Error Code:</p> <p>USER_CREATION_FAILED</p>	<p>Check if an attribute value violates the schema definition.</p>
<p>Trying to add a value to a nonexistent attribute. Therefore, the Create User operation failed.</p> <p>Returned Error Message:</p> <p>Attribute does not exist</p> <p>Returned Error Code:</p> <p>ATTRIBUTE_DOESNOT_EXIST</p>	<p>In the <code>AttrName.Recon.Map.iPlanet</code> lookup definition, check if the decode values are valid attribute names in the target system.</p>

Problem Description	Solution
<p>Trying to add an invalid value. Therefore, the Create User operation failed.</p> <p>Returned Error Message: Invalid value specified for an attribute</p> <p>Returned Error Code: INVALID_ATTR_VALUE_ERROR</p>	<p>Check the values entered during user creation.</p>
<p>Oracle Identity Manager cannot delete a user.</p> <p>Returned Error Message: User does not exist in target</p> <p>Returned Error Code: USER_DOESNOT_EXIST</p>	<p>The specified user ID does not exist in Sun Java System Directory.</p>
<p>Oracle Identity Manager cannot modify the attribute value of a user.</p> <p>Returned Error Message: Invalid attribute value or state</p> <p>Returned Error Code: INVALID_ATTR_MODIFY_ERROR</p>	<p>Check the specified user ID.</p>
<p>Trying to add a value to a nonexistent attribute. Therefore, the Modify User operation failed.</p> <p>Returned Error Message: Attribute does not exist</p> <p>Returned Error Code: ATTRIBUTE_DOESNOT_EXIST</p>	<ol style="list-style-type: none"> 1. From the corresponding process task, get the value being passed for <code>AttrName</code> of the connector. 2. Using the name obtained in the previous step, check in the <code>AttrName.Recon.Map.iPlanet</code> lookup definition if the decode value is a valid attribute name in the target.
<p>Trying to add an invalid value. Therefore, the Modify User operation failed.</p> <p>Returned Error Message: Invalid value specified for an attribute</p> <p>Returned Error Code: INVALID_ATTR_VALUE_ERROR</p>	<p>Check the value specified.</p>
<p>Trying to add a value to an attribute that does not exist in the <code>AttrName.Recon.Map.iPlanet</code> lookup definition. Therefore, the Modify User operation failed.</p> <p>Returned Error Message: One or more attribute mappings are missing</p> <p>Returned Error Code: ATTR_MAPPING_NOT_FOUND</p>	<ol style="list-style-type: none"> 1. From the corresponding process task, get the value being passed for <code>AttrName</code> of the connector. 2. Using the name obtained in the previous step, check if an entry has been made in the <code>AttrName.Recon.Map.iPlanet</code> lookup definition.

Problem Description	Solution
<p>Trying to add a duplicate value to an attribute</p> <p>Returned Error Message: Duplicate value</p> <p>Returned Error Code: DUPLICATE_VALUE_ERROR</p>	<p>Check the value specified.</p>
<p>Oracle Identity Manager cannot move a user from one container to another.</p> <p>Returned Error Message: Moving user to different container failed</p> <p>Returned Error Code: USER_MOVE_FAILED</p>	<p>Generic error. Review the log for more details.</p>
<p>Oracle Identity Manager cannot add a user to a security group.</p> <p>Returned Error Message: Group does not exist</p> <p>Returned Error Code: GROUP_DOESNOT_EXIST</p>	<p>The user security group specified does not exist in Sun Java System Directory. Check the group name.</p>
<p>Oracle Identity Manager cannot add a user to a group.</p> <p>Returned Error Message: User is already a member of this group</p> <p>Returned Error Code: DUPLICATE_VALUE</p>	<p>The user is already a member of the group.</p>
<p>Oracle Identity Manager cannot add a role to a user.</p> <p>Returned Error Message: Role does not exist</p> <p>Returned Error Code: ROLE_DOESNOT_EXIST</p>	<p>The specified role for the user in Oracle Identity Manager does not exist in Sun Java System Directory. Create the role in Sun Java System Directory.</p>
<p>Oracle Identity Manager cannot add a role to a user.</p> <p>Returned Error Message: Error while updating user info</p> <p>Returned Error Code: USER_UPDATE_FAILED</p>	<p>Generic error. Review the log for more details.</p>
<p>Oracle Identity Manager cannot add a role to a user.</p> <p>Returned Error Message: User has already been assigned this role</p> <p>Returned Error Code: DUPLICATE_VALUE</p>	<p>The user has already been assigned this role.</p>

Problem Description	Solution
<p>Oracle Identity Manager cannot remove a role assigned to a user.</p> <p>Returned Error Message:</p> <p>Removing Assigned role failed</p> <p>Returned Error Code:</p> <p>USER_DELETE_ROLE_FAILED</p>	<p>Generic error. Review the log for more details.</p>
<p>Oracle Identity Manager cannot reconcile users from Sun Java System Directory.</p> <p>Returned Error Message:</p> <p>javax.naming.NamingException: tcUtilLDAPOperations -> : NamingException : Unable to search LDAP</p> <p>Returned Error Code:</p> <p>LDAP: error code 11 - Administrative Limit Exceeded</p>	<p>Change the Sun Java System Directory configuration as follows:</p> <ol style="list-style-type: none"> 1. Open the Sun ONE Directory Server admin console. 2. Select Configuration, Performance, and Client Control. 3. Set the size limit to unlimited. 4. Set the look-through limit to unlimited. 5. Save the changes, and restart Sun Java System Directory.

Known Issues

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

- The user search is based on the user ID only.
- The user ID in the process form should be the same as that of the Oracle Identity Manager User login. Otherwise, reconciliation of the following operations would fail because these operations require direct API calls to update the information:
 - Enable status of user
 - Disable status of user
 - Organization update

Index

A

Adapter Factory form, 2-7
Adapter Manager form, 2-7
adapters compiling, 2-6
Administrative and User Console, 2-2
attributes
 lookup fields reconciliation scheduled task, 2-5
 user reconciliation scheduled task, 2-6

C

compiling adapters, 2-6
configuring reconciliation, 2-4
configuring SSL, 2-7
connector files and directories
 copying, 2-1
 description, 1-4
 destination directories, 2-1
 installation media file, 1-4, 2-1
connector testing, 3-1
connector XML files
 See XML files
creating scheduled tasks, 2-4

D

defining IT resources, 2-3
defining scheduled tasks, 2-4
deployment requirements, 2-1
Design Console, 2-4

E

errors, 3-2

F

files
 See also XML files
files and directories of the connector
 See connector files and directories
functionality supported, 1-1
functions available, 1-1

I

importing connector XML files, 2-2
issues, 4-1
IT resources
 defining, 2-3
 iPlanet User, 2-2, 2-3, 2-5, 2-7
 parameters, 2-3
 types, LDAP Server, 2-2

L

limitations, 4-1
lookup fields reconciliation, 1-2
lookup fields reconciliation scheduled task, 2-5

O

Oracle Identity Manager Administrative and User Console, 2-2
Oracle Identity Manager Design Console, 2-4

P

parameters of IT resources, 2-3
problems, 3-2
process tasks, 1-1
provisioning
 fields, 1-3
 functions, 1-1
 module, 1-3

R

reconciliation
 configuring, 2-4
 functions, 1-1
 lookup fields, 1-2
 module, 1-2
 trusted source mode, 1-4, 2-3
 user, 1-2
requirements for deploying, 2-1

S

scheduled tasks
 attributes, 2-5

- defining, 2-4
- lookup fields reconciliation, 2-5
- user reconciliation, 2-6
- SSL, configuring, 2-7
- supported
 - functionality, 1-1
 - releases of Oracle Identity Manager, 2-1
 - target system host platforms, 2-1
 - target systems, 2-1

T

- target system host platforms supported, 2-1
- target systems supported, 2-1
- test cases, 3-1
- testing the connector, 3-1
- troubleshooting, 3-2
- troubleshooting utility, 3-1
- trusted source reconciliation, 1-4, 2-3

U

- user reconciliation, 1-2
- user reconciliation scheduled task, 2-6

X

- XML files
 - copying, 2-2
 - description, 1-4
 - for trusted source reconciliation, 1-4, 2-3
 - importing, 2-2