HP OpenView Select Identity

Connector for Oracle® Internet Directory (One-Way LDAP Based)

Software Version: 4.3

Installation and Configuration Guide

hp ®

i n v e n t

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Select Identity uses software from the Apache Jakarta Project including:

- Commons-beanutils
- Commons-collections
- Commons-logging
- Commons-digester
- Commons-httpclient
- Element Construction Set (ecs)
- Jakarta-poi
- Jakarta-regexp
- Logging Services (log4j)

Additional third party software used by Select Identity includes:

- JasperReports developed by SourceForge
- iText (for JasperReports) developed by SourceForge
- BeanShell
- Xalan from the Apache XML Project
- Xerces from the Apache XML Project
- Java API for XML Processing from the Apache XML Project
- SOAP developed by the Apache Software Foundation
- JavaMail from SUN Reference Implementation
- Java Secure Socket Extension (JSSE) from SUN Reference Implementation
- Java Cryptography Extension (JCE) from SUN Reference Implementation
- JavaBeans Activation Framework (JAF) from SUN Reference Implementation

- OpenSPML Toolkit from OpenSPML.org

- JGraph developed by JGraph

- Hibernate from Hibernate.org

- BouncyCastle engine for keystore management, bouncycastle.org

Trademark Notices

Support

Please visit the HP OpenView support web site at:

http://www.hp.com/managementsoftware/support

This web site provides contact information and details about the products, services, and support that HP OpenView offers.

HP OpenView online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valuable support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest

- Submit enhancement requests online

- Download software patches

- Submit and track progress on support cases

- Manage a support contract

- Look up HP support contacts

- Review information about available services

- Enter discussions with other software customers

- Research and register for software training

Most of the support areas require that you register as an HP Passport user and log in. Many also require a support contract.

To find more information about access levels, go to:

http://www.hp.com/managementsoftware/access_level

To register for an HP Passport ID, go to:

http://www.managementsoftware.hp.com/passport-registration.html

Contents

1 Documentation Map

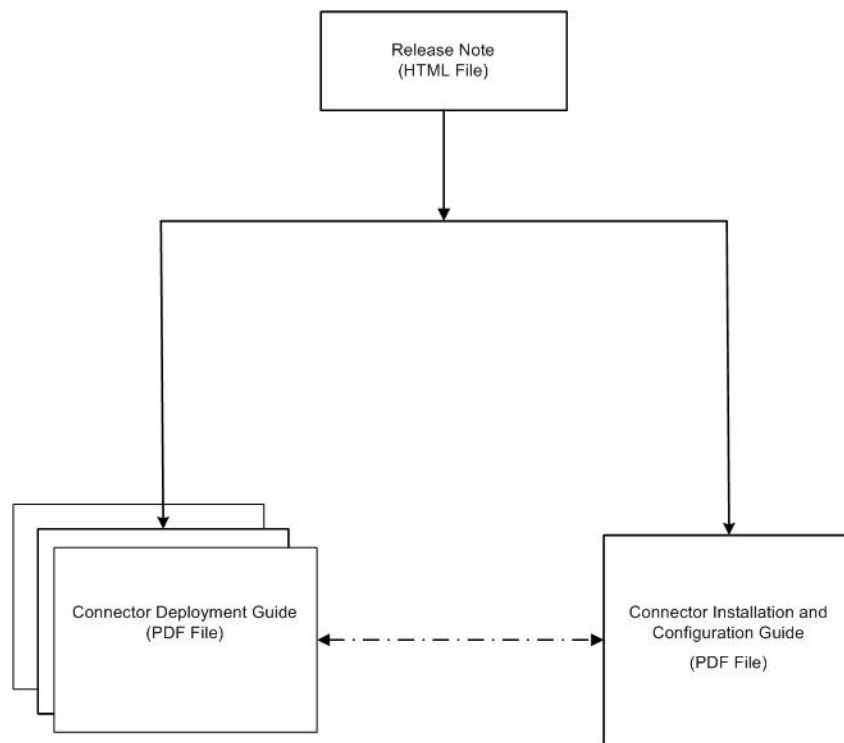This chapter describes the organization of HP OpenView Select Identity connector documentation and provides necessary information on how to use the documentation set to install and configure the connectors.

Figure 1 illustrates the documentation map for HP OpenView Select Identity connector. For a list of available product documentation, refer to the Table 1.

Figure 1   Documentation Map

Table 1   Connector Documentation

Document Title and Filename	Contents	Location
Release Note `Oracle Internet Directory Connector v4.3 Release Note.htm`	This file contains necessary information on new features of the connector, enhancements, known problems or limitations, and support information.	`/Docs/` subdirectory under the connector directory.

Connector Deployment Guide (for Select Identity 4.10)
`connector_deploy_SI4.1.pdf`
 	
Connector Deployment Guide (for Select Identity 4.0/4.01.000)
`connector_deploy_SI4.pdf`
	Connector deployment guides provide detailed information on:
	• Deploying a connector on an application server.
	• Configuring a connector with Select Identity.
	Refer to these guides when you need generic information on connector installation.
		`/Docs/` subdirectory under the connector directory.

Connector Installation and Configuration Guide `Oracle Internet Directory_install.pdf`	Connector installation and configuration guide provides installation instructions for a specific connector. It contains resource specific configuration details.	`/Docs/` subdirectory under the connector directory.

2 Introduction

This chapter gives an overview of the HP OpenView Select Identity connector for Oracle Internet Directory. An HP OpenView Select Identity connector for Oracle Internet Directory enables you to provision users and manage identities on Oracle Internet Directory server. At the end of this chapter, you will be able to know about:

- The benefits of the HP OpenView Select Identity.
- The role of a connector.
- The connector for Oracle Internet Directory.

About HP OpenView Select Identity

HP OpenView Select Identity provides a new approach to identity management. Select Identity helps you automate the process of provisioning and managing user accounts and access privileges across platforms, applications, and corporate boundaries. Select Identity communicates with the enterprise information system through connectors, and automates the tasks of identity management. The enterprise information system, which is also referred to as **resource**, can be a database, a directory service, or an ERP package, among many others.

About Connectors

You can establish a connection between a resource and Select Identity by using a connector. A connector is resource specific. The combination of Select Identity and connector helps you perform a set of tasks on the resource to manage identity. A connector can be **unidirectional** or **bidirectional**. A unidirectional connector helps you manage identities from Select Identity, but if any change takes place in resource, it cannot communicate that back to Select Identity. On the other hand, a bidirectional connector can reflect the changes made on resource back to Select Identity. This property of bidirectional connectors is known as **reverse synchronization**.

About Oracle Internet Directory Connector

The one-way LDAP based connector for Oracle Internet Directory server — hereafter referred to as Oracle Internet Directory connector — enables HP OpenView Select Identity to Select Identity to perform the following operations on Oracle Internet Directory server:

- Add, update, and remove users
- Retrieve user attributes

- Enable and disable users

- Verify a user's existence

- Change user passwords

- Reset user passwords

- Retrieve all entitlements

- Retrieve a list of supported user attributes

- Grant and revoke entitlements to and from users, including the addition of users to multiple OUs.

The Oracle Internet Directory connector is a one-way connector that pushes changes made to user data in the Select Identity database to a target Oracle Internet Directory server. The mapping file controls how Select Identity fields are mapped to LDAP fields..

This connector can be used with Select Identity 4.10, 4.01.000, and 4.0.

Overview of Installation Tasks

Before you start installing the connector, you must ensure that system requirements and all the installation prerequisites are met. Refer to the Table 2 for an overview of installation tasks.

Table 2   Organization of Tasks

Task Number	Task Name	Reference
1	Install the connector on the Select Identity server.	See Installing the Connector on page 13.
	— Meet the system requirements.	See System Requirements on page 13.
	— Extract contents of the Schema file (file that contains the mapping files for the connector) to location on the Select Identity server.	See Extracting Contents of the Schema File on page 14.
	— Install the Resource Adapter Archive (RAR) of the connector on an application server.	See Installing the Connector RAR on page 14.
2	Configure the connector with the Select Identity server.	See Configuring the Connector with Select Identity on page 15.

3 Installing the Connector

This chapter elaborates the procedure to install Oracle Internet Directory connector on Select Identity server and agent on Oracle Internet Directory server. At the end of this chapter, you will know about

- Software requirements to install the Oracle Internet Directory connector.
- Prerequisite conditions to install Oracle Internet Directory connector.
- Procedure to install Oracle Internet Directory connector.

Oracle Internet Directory Connector Files

Oracle Internet Directory connector is packaged with the following files.

Table 3   Oracle Internet Directory Connector Files

Serial Number	File Name	Description
1	TALDAPv3.rar	The connector RAR file (the binaries).
2	schema.jar	It contains the attribute mapping file (oid40.xml) for this system, which control how Select Identity fields are mapped to Oracle Internet Directory LDAP fields.

These files are located in the `LDAP Oracle Internet Directory` directory on the Select Identity Connector CD.

System Requirements

The Oracle Internet Directory connector is supported in the following environment:

Table 4   Platform Matrix for the Oracle Internet Directory Connector

Select Identity Version	Application Server	Database
4.0/4.01.000/4.10	The Oracle Internet Directory connector is supported on all the platform configurations of Select Identity 4.0, 4.01.000, and 4.10.	

This connector is supported with Oracle Internet Directory 9.0.2 on Windows 2000

The Oracle Internet Directory connector is internationalized and able to operate with languages that are supported by the Java Unicode specification. If you wish to use the connector on non-English platforms, make sure that the following prerequisites are met:

- The Select Identity server should be configured for internationalization. Refer to the *HP OpenView Select Identity Installation and Configuration Guide* for more information.

- The resource should be configured to support local language characters.

Extracting Contents of the Schema File

The Schema file of the connector contains necessary mapping information to map resource attributes to Select Identity. Extract contents of the `schema.jar` file to a directory that is in the application server `CLASSPATH`. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed instruction to extract contents of the Schema file.

Installing the Connector RAR

To install the RAR file of the connector (`TALDAPv3.rar`) on the Select Identity server, you must copy the file to a local subdirectory on the Select Identity server, and then deploy on the application server. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed information on deploying a RAR file on an application server.

While deploying the RAR on WebSphere, enter the JNDI Pool Name as **eis/LDAPv3**.

After deploying the connector RAR on application server, you must configure Oracle Internet Directory connector with Select Identity. Refer to Configuring the Connector with Select Identity on page 15 for configuration steps.

4 Configuring the Connector with Select Identity

This chapter describes the procedure to configure the Oracle Internet Directory connector with Select Identity. At the end of this chapter, you will know the procedure to configure the Oracle Internet Directory connector with Select Identity.

Configuration Procedure

After you deploy the connector RAR on application server, you must configure the connector with Select Identity. Perform the following steps to configure the Oracle Internet Directory connector with Select Identity.

1   Add a New Connector

2   Add a New Resource

3   Map Attributes

Add a New Connector

Add a new connector in Select Identity by using the user interface. While adding the connector, do the following:

- In the Connector Name text box, specify a name for the connector.

- In the Pool Name text box, enter **eis/LDAPv3**.

- Select No for the Mapper Available section.

Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed information on adding a new connector in Select Identity.

Add a New Resource

Add a new resource in Select Identity that uses the newly added connector. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed instructions on adding a resource in Select Identity.

Refer to the following table while entering the parameters in the Basic Information and the Access Information pages:

Table 5   **Resource Configuration Parameters**

Field Name	Sample Values	Description
Resource Name	*Oracle*	Name of the target resource.
Connector Name	OID	The newly deployed connector.
Authoritative Source	No	Whether this resource is a system that is considered to be the authoritative source for user data in your environment. You must specify **No** because the connector cannot synchronize account data with the Select Identity server.
Delete User	No	Specifies whether the user should be deleted from the resource when a DeleteServiceMembership operation is performed for the user in Select Identity.
Access URL	ldap://server1:3060	URL to access the resource.
Suffix	dc=qa, dc=hp, dc=com	The domain(s) to which the users will be provisioned.
Login Name	cn-orcladmin	Login account with administrative privileges to add and delete users. This is required to log in to the resource.
Password	Password123	Password corresponding to the login account.
User Suffix	cn=users	Suffix of user's distinguished name. This is the location in the tree where the users will be provisioned.
User Object Class	top,person,organizationalperson, inetorgperson,orclprivilegegroup,orcluser,orcluserV2	Object class for the users.
Group Suffix	cn=groups	Suffix part of group's distinguished name. This is the location in the tree where the user groups will be provisioned. This parameter is optional (you can leave this field blank).
Group Object Class	top, groupofuniquenames	Object class of user groups.
Mapping File	`oid40.xml`	Location of the connector mapping file, which is used to map resource attributes to Select Identity attributes.
Cleanup Groups	Selected	Whether to delete the user's entitlements when the user is deleted from Select Identity.

Map Attributes

After successfully adding a resource for the Oracle Internet Directory connector, you must map the resource attributes to Select Identity attributes. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for information on mapping and creating attributes.

Create an `IsEnabled` attribute. This attribute is used internally by the onnector to enable or disable the user in the Oracle Internet Directory LDAP user store.

While mapping attributes, refer to the following table for resource specific mapping information.

Table 6   Oracle Internet Directory Mapping Information

Select Identity Resource Attribute	Oracle Internet Directory LDAP Attribute	Description
UserName	uid	Key field on the resource
Password	userpassword	Password
Email	mail	Mail ID
MailHost	mailHost	Mail host
FirstName	givenName	First name
LastName	sn	Last name
Common Name (FirstName+LastName)	cn	Common name
Employee ID	employeeNumber	Employee ID
Business Phone	telephoneNumber	Business phone
Address1	postalAddress	Postal address
Address2	roomNumber	Room number
City	l	City
State	st	State
Zip	postalCode	Zip code
Title	title	Title
Business category	businessCategory	Business category
DepartmentNumber	departmentNumber	Departmant number
Description	description	Description
CarLicense	carLicense	Car license
FacsimileTelephoneNumber	facsimileTelephoneNumber	Fax telephone number
HomePhone	homePhone	Home phone

Table 6   Oracle Internet Directory Mapping Information

Select Identity Resource Attribute	Oracle Internet Directory LDAP Attribute	Description
HomePostalAddress	homePostalAddress	Home postal address
Initials	initials	Initials
InternationaliSDN-Number	internationaliSDNNumber	International SDN number
LabeledURI	labeledURI	Labeled URI
Mobile	mobile	Mobile number
Pager	pager	Pager number
PhysicalDeliveryOffice-Name	physicalDeliveryOffice-Name	Physical delivery office name
PostOfficeBox	postOfficeBox	Post office box
PreferredDeliveryMethod	preferredDeliveryMethod	Preferred delivery method
PreferredLanguage	preferredLanguage	Preferred language
RegisteredAddress	registeredAddress	Registered address
Street	street	Street
TeletexTerminalIdentifier	teletexTerminalIdentifier	Teletex terminal identifier
TelexNumber	telexNumber	Telex number

After mapping the attributes, you can use the connector to create a service, or you can associate the connector with an existing service. Refer to the *Service Studio* chapter of the *HP OpenView Select Identity Administration Online Help* for information on Select Identity services.

— Do not add the IsEnabled attribute to any Service view; it is for internal use by the connector.
— Do not add the password attribute as part of the Service view; it is used for user modification only.

5 Uninstalling the Connector

If you want to uninstall a connector from Select Identity, perform the following steps:

- Remove all resource dependencies.
- Delete the connector from Select Identity.
- Delete the connector from application server.

See *HP OpenView Select Identity Deployment Guide* to for information on deleting a connector from Select Identity and application server.