

Oracle® WebCenter Interaction Identity Service for LDAP

Installation and Upgrade Guide

10g Release 3 (10.3)

November 2008

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Welcome to Oracle WebCenter Interaction Identity Service for LDAP

This book describes how to install and deploy Oracle WebCenter Interaction Identity Service for LDAP 10.3. It also provides instructions for upgrading to Oracle WebCenter Interaction Identity Service for LDAP 10.3 from earlier versions.

Oracle WebCenter Interaction Identity Service for LDAP enables you to import and synchronize users, associated profile information, and groups into the portal from an external LDAP source. User profile information can then be mapped to portal properties and stored in the database. At the time of login, the user's user name and password are passed to the LDAP source for purposes of authentication. This replaces native LDAP authentication.

This guide describes the following installation and setup steps in the order in which you should perform them:

1. Complete pre-installation procedures.
2. Install software on the remote server host computer.
3. Register the remote server with the portal.
4. Tune configuration for deployment components.
5. This guide also includes procedures for uninstalling Oracle WebCenter Interaction Identity Service for LDAP software.

Typographical Conventions

This book uses the following typographical conventions.

Table 1-1 Typographical Conventions

Convention	Typeface	Examples/Notes
<ul style="list-style-type: none"> Items you need to take action on (such as files or screen elements) 	bold	<ul style="list-style-type: none"> Upload Procedures.doc to the portal. To save your changes, click Apply Changes.
<ul style="list-style-type: none"> User-defined variables New terms Emphasis Object example names 	<i>italic</i>	<ul style="list-style-type: none"> The migration package file is located in <i>install_dir</i>\serverpackages. <i>Portlets</i> are Web tools embedded in your portal. The URI <i>must</i> be a unique number. The example Knowledge Directory displayed in Figure 5 shows the <i>Human Resources</i> folder.
<ul style="list-style-type: none"> Text you enter Computer generated text (such as error messages) Code samples 	<code>computer</code>	<ul style="list-style-type: none"> Type <code>Marketing</code> as the name of your community. This script may generate the following error: ORA-00942 table or view does not exist Example: <pre><setting name="SSOCookieIsSecure"> <value xsi:type="xsd:integer">0</value> </setting></pre>
<ul style="list-style-type: none"> Environment variables 	<code>ALL_CAPS</code>	<ul style="list-style-type: none"> <code>ORACLE_HOME</code> specifies the directory where Oracle products are installed.

Oracle Documentation and Resources

This section describes other documentation and resources provided by Oracle.

Table 1-2 Oracle Documentation and Resources

Resource	Description
Configuration Worksheet	<p>This worksheet allows you to record prerequisite information necessary for installing and configuring Oracle WebCenter Interaction Identity Service for LDAP.</p> <p>It is available on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/integration/ldapids/docs103/index.html.</p>
Release Notes	<p>The release notes provide information about new features, issues addressed, and known issues in the release.</p> <p>They are available on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/integration/ldapids/docs103/index.html.</p>
Online Help	<p>The online help is written for all levels of Oracle WebCenter Interaction Identity Service for LDAP users. It describes the user interface for Oracle WebCenter Interaction Identity Service for LDAP and gives detailed instructions for completing tasks in Oracle WebCenter Interaction Identity Service for LDAP.</p> <p>To access online help, click the help icon.</p>
Oracle Technology Network (OTN)	<p>The Oracle Technology Network is the world's largest community of developers, DBAs, and architects using Oracle products and industry-standard technologies. Every day, members collaborate via OTN to share real-world insight, expertise, and best practices on how to build, deploy, manage, and optimize applications.</p> <p>As a member of the Oracle Technology Network you will enjoy access to software downloads, discussion forums, documentation, wikis, podcasts, blogs, plus much more.</p> <p>Access the Oracle Technology Network at http://www.oracle.com/technology/index.html.</p>
Oracle Support	<p>The Oracle Support site provides access to all Oracle support resources including online support, software and patches, technical articles, and contact numbers.</p> <p>Access the Oracle Support site at http://www.oracle.com/support/index.html.</p>
dev2dev.bea.com	<p>Download developer tools and documentation, get help with your development project, and interact with other developers via BEA's dev2dev Newsgroups.</p>

Welcome to Oracle WebCenter Interaction Identity Service for LDAP

Completing Pre-Installation Steps

This section describes the following pre-installation steps that will ensure a successful installation:

1. Download the most up-to-date documentation from http://download.oracle.com/docs/cd/E13158_01/alui/integration/ldapids/docs103/index.html.
2. Read the release notes for additional information on compatibility issues, known problems, and workarounds that might affect how you proceed with your deployment. Release notes are located at http://download.oracle.com/docs/cd/E13158_01/alui/integration/ldapids/docs103/index.html.
3. Provision host computers for your deployment and install prerequisite software. For details, see “[Hardware and Software Requirements](#)” on page 2-2.
4. Organize the information needed for the installation process by completing the *Configuration Worksheet for Oracle WebCenter Interaction Identity Service for LDAP*.

Hardware and Software Requirements

The following table summarizes the hardware, operating system, and software requirements for Oracle WebCenter Interaction Identity Service for LDAP.

Caution: IPv6 is not supported. Verify that IPv6 is not enabled prior to installing Oracle WebCenter Interaction Identity Service for LDAP.

Table 2-1 Hardware and Software Requirements

Component	Requirement
Oracle WebCenter Interaction Identity Service for LDAP Host Computer	Hardware
	<ul style="list-style-type: none">1.6 GHz or higher, with 2MB L2 cache1 GB memory2 GB disk space
	Operating System
	<ul style="list-style-type: none">AIX 5.3 Technology Level 5300-05, on POWER3, POWER4, POWER5HP-UX 11i v2 & V3 (Itanium) (64-bit)Microsoft Windows Server 2003 SP2, on x86Red Hat Enterprise Linux ES 4, Update 3, on x86 or ES 5.2, on x86Solaris 9, and 10, on SPARCSUSE Enterprise Linux 9, on x86, Linux 10 (on x86)Oracle Enterprise Linux 5.2
Portal Software	Oracle WebCenter Interaction 10.3
Certified LDAP Vendors	Novell eDirectory, Lotus Notes, iPlanet/SunONE

Installing Oracle WebCenter Interaction Identity Service for LDAP

This section describes the following steps that allow for the successful installation and deployment of Oracle WebCenter Interaction Identity Service for LDAP:

1. Ensure that you have performed pre-installation procedures. For details, see [“Completing Pre-Installation Steps” on page 2-1](#).
2. Grant user and group access rights to Oracle Inventory Directories. For details, see [“Granting User and Group Access Rights to Oracle Inventory Directories” on page 3-1](#).
3. Install product files on the remote server host and the Image Service. For details, see [“Installing Oracle WebCenter Interaction Identity Service for LDAP” on page 3-3](#).
4. Run a diagnostic test to verify successful installation. For details, see [“Verifying Deployment” on page 3-5](#).

Granting User and Group Access Rights to Oracle Inventory Directories

(Linux/UNIX only) Oracle Inventory contains files that provide the Oracle Universal Installer with the locations of the ORACLE_HOME directories on a particular machine. For Oracle Inventory to function properly, the user that installs Oracle WebCenter Interaction Identity Service for LDAP must have access rights to the directories that contain Oracle Inventory’s files. This section describes how to run the **ouais.sh** shell script, which sets user and group access rights for these directories.

Note: You do not need to perform this procedure if you are installing Oracle WebCenter Interaction Identity Service for LDAP on Windows.

Note: If you are installing Oracle WebCenter Interaction Identity Service for LDAP on Linux or UNIX operating systems, you do not need to perform this procedure if, *as the same user that is installing Oracle WebCenter Interaction Identity Service for LDAP*, you have already installed at least one of the following products *on the same machine* on which you are installing Oracle WebCenter Interaction Identity Service for LDAP:

- Oracle WebCenter Interaction 10.3
- Oracle WebCenter Collaboration 10.3
- Oracle WebCenter Ensemble 10.3
- Oracle WebCenter Analytics 10.3
- Oracle WSRP Consumer 10.3
- Oracle WebCenter Content Service for Documentum 10.3

To grant user and group access rights to Oracle Inventory directories:

1. Log in to the remote server host computer as the root user.
2. Copy the **ouais.sh** script to the machine onto which you will be installing Oracle WebCenter Interaction Identity Service for LDAP.

This script is located in the same location as the Oracle WebCenter Interaction Identity Service for LDAP installer file.

3. Change the current directory (`cd`) to be the directory to which you copied the `ouais.sh` script.
4. Run the **ouais.sh** shell script.

As arguments to the script, specify the user and group that will be running the Oracle WebCenter Interaction Identity Service for LDAP installer. For example, you would use the following command to run the `ouais.sh` script from the root shell:

```
./ouais.sh -u <oracleuser> -g <oraclegroup>
```

5. The `ouais.sh` script creates the Oracle Inventory directory if it did not exist before you ran the script. Additionally, the script grants user and group ownership to the directories that contain the files that are used by Oracle Inventory.

Installing Oracle WebCenter Interaction Identity Service for LDAP

Oracle WebCenter Interaction Identity Service for LDAP is implemented as a remote server in the context of the portal deployment; you install the product on a remote server host computer that can communicate with the portal. For host requirements, see [“Hardware and Software Requirements” on page 2-2](#).

Note: For UNIX and Linux installations: the installer creates a new **pthome.xml** file in any install location that does not already contain the file. For that reason, you should install Oracle WebCenter Interaction Identity Service for LDAP in the same location as all other Oracle WebCenter components on the machine.

Note: For UNIX and Linux installations: the installation wizard is a graphical application. If you run it interactively, you must do so from an X-windows client. If you are running remotely, for example in an xterm, make sure the DISPLAY environment variable is set correctly.

To install product files:

1. Log in to the host computer using an administrator account that has access to the portal installation.

Note: For UNIX and Linux installations, you must run the Oracle WebCenter Interaction Identity Service for LDAP installer as the user that you specified in the procedure [“Granting User and Group Access Rights to Oracle Inventory Directories” on page 3-1](#). You specified the user who will run the product installer as an argument to the ouais.sh script.

2. Copy the Oracle WebCenter Interaction Identity Service for LDAP installation package to a location on the remote server host.
3. To launch the installer, double-click the **WebCenterInteractionIdentityServiceForLDAP_10.3.0.0.0** file.
4. Complete the installation wizard pages as described in the following table.

Note: We recommend that you keep the default settings.

Table 3-1 Installation Wizard Pages

Wizard Page	Values
Introduction	Click Next .
Choose Server Type	Choose Remote Server to install files for Oracle WebCenter Interaction Identity Service for LDAP. Choose Image Service to install files for the Image Service.
Choose Installation Folder	Click Next to accept the default: Windows: C:\bea\alui UNIX and Linux: /opt/bea/alui
Specify Image Service Folder	Specify the location of your Image Service folder. Note: We recommend using: \ptimages
Application Port	Choose whether to use a secure HTTP protocol for the Web service (https) or a standard Web protocol (http). Also select your port number. The installer specifies the default port 11950 . Make sure to enter the SSL port number if using https.
Pre-Installation Summary	Verify the information in the panel and click Install .

5. Click **Done** to exit the installer.
6. (Windows only) Reboot your computer and start the Oracle WebCenter Interaction Identity Service for LDAP using **Administrative Tools | Services**.
7. (UNIX and Linux Only) You must set the PT_HOME environment variable, where PT_HOME is the root directory for installed Oracle WebCenter products, and restart Oracle WebCenter Interaction Identity Service for LDAP before verifying installation:
 - a. Open a terminal window.
 - b. Type the commands:


```
source <pt_home>/pthome.sh
<pt_home>/ptldapaws/10.3.0/bin/ptldapawsd.sh restart
```

Verifying Deployment

After you have deployed the Oracle WebCenter Interaction Identity Service for LDAP package, you can run a diagnostic utility to verify connectivity among deployment components.

To verify your deployment of the Oracle WebCenter Interaction Identity Service for LDAP package:

1. In a Web browser, open the URL for the remote server diagnostics utility, for example:
`http://<remoteserver>:<port>/ldapaws/install/index.html`
2. Complete the steps as described in the utility summary page to verify the correct configuration of deployment components.

Registering Oracle WebCenter Interaction Identity Service for LDAP and Creating Related Portal Objects

After you have run the installation wizard and verified correct installation you must register, create, and implement Oracle WebCenter Interaction Identity Service for LDAP and its objects into the portal. This section includes information on the following topics:

- [“Registering Oracle WebCenter Interaction Identity Service for LDAP” on page 4-2](#)
- [“Creating a Remote Authentication Source” on page 4-2](#)
- [“Creating a Remote Profile Source” on page 4-3](#)

Registering Oracle WebCenter Interaction Identity Service for LDAP

The portal registers new identity services when you migrate them into the portal using the Migration Wizard. When you register the identity service, you import the remote server and Web services for the Oracle WebCenter Interaction Identity Service for LDAP.

Note: You must have administrative rights in the portal to deploy the migration packages for the Web Components and portlets.

To register Oracle WebCenter Interaction Identity Service for LDAP:

1. Log in to the portal as an administrator.
2. Click **Administration**.
3. In the Select Utilities menu, select **Migration - Import**.
4. Browse to the migration package. If you accepted installation defaults, the location is:
`\\<LDAPIDSHostComputer>\bea\alui\ptldapaws\10.3.0\serverpackages\IdentityService-LDAP.pte`
5. Click **Load Package**.
6. Click **Finish**.

Creating a Remote Authentication Source

Create a remote authentication source to import users and groups from LDAP:

1. Log in to the portal as an administrator.
 2. Click **Administration**.
 3. Click the **LDAP IDS** folder.
 4. From the Create Object menu, choose **Authentication Source - Remote**.
 5. In the Choose Web Service dialog box, choose **LDAP IDS**.
 6. Configure the authentication source as described in the online help.
- Stay logged in to the portal with the LDAP IDS folder open for the next procedure.

Creating a Remote Profile Source

Create a remote profile source to import users' profile information from LDAP. To create a remote profile source, in the LDAP IDS folder of the portal's Administrative Object Directory:

1. From the Create Object menu, choose **Profile Source - Remote**.
2. In the Choose Web Service dialog box, choose **LDAP IDS**.
3. Configure the profile source as described in the online help.

Registering Oracle WebCenter Interaction Identity Service for LDAP and Creating Related Portal Objects

Advanced Configuration

This section describes the following optional advanced procedures for LDAP configuration:

- [“Configuring Logging” on page 5-1.](#)
- [“Configuring Application Server Session Settings” on page 5-3.](#)
- [“Configuring LDAP Server Settings” on page 5-3.](#)
- [“Using Oracle WebCenter Interaction Identity Service for LDAP over SSL” on page 5-3.](#)
- [“Migrating Users from the Native LDAP Provider to Oracle WebCenter Interaction Identity Service for LDAP” on page 5-5.](#)

Configuring Logging

The **ldapws.war** file contains the **log4j.properties** file. The **log4j.properties** controls the logging settings for the application. You can open the **log4j.properties** file and edit it within the **ldapws.war** file.

There are two appenders defined:

- A1 is for the authentication source log
- A2 is for the profile source log

The default settings for the parameters in this file should be sufficient but there are several settings that you can change:

Table 5-1 Logging Settings

Files	Function
Append	Determines whether writes to the log file are appended at the end of the file, or if the file is overwritten. This should be set to true.
MaxFileSize	<p>Specifies the maximum size a log file can be before it is rolled over into a new file if the appender is a RollingFileAppender.</p> <p>If you choose to roll over based on the date, the MaxFileSize setting does not take effect.</p>
MaxBackupIndex	Sets the number of rolled-over files that are saved. The number of roll-over files you set for the MaxBackupIndex value depends on how much disk space you choose to devote to log files.
DatePattern	Determines the basis on which files are rolled over if the appender is a DailyRollingFileAppender . YYY-mm means the file is rolled over once a month. YYYY-mm-dd means the file is rolled over every day. YYYY-mm-dd-HH rolls over every hour and so forth.
RollingFileAppender	If several synchronization jobs are run once a day use the RollingFileAppender so that the individual log files do not grow excessively large.
DailyRollingFileAppender	<p>In changing the DailyRollingFileAppender from RollingFileAppender, the MaxFileSize setting is ignored. This allows you to set the type of appender to either rollover based on date or size.</p> <p>If you use a DailyRollingFileAppender then you must look at the average size of the log created by a single synchronization run to determine what the total disk space is. If synchronizations are run once a week, then setting MaxBackupIndex to 10 provides approximately two months of job histories.</p>

Configuring Application Server Session Settings

Within the **ldapws.war** file there is a **web.xml** file that contains settings for the application session. You can open this file and edit it within the **ldapws.war** file.

During large synchronizations, the portal must create database objects for all the users and groups returned by the Oracle WebCenter Interaction Identity Service for LDAP. This might cause session time-outs between the calls to **GetGroups**, **GetUsers**, and **GetMembers**.

You can avoid this time-out error by increasing the session-time-out value in the session-config object of **web.xml**.

Configuring LDAP Server Settings

LDAP servers allow you to set the maximum return size of a query result as well as the time limit for a query. If the Oracle WebCenter Interaction Identity Service for LDAP log file ever indicates a **SizeLimitExceeded** or **TimeLimitExceeded** error it is most likely that you need to adjust these values on the LDAP server. Different LDAP server administration consoles have these settings in different locations and you should contact your LDAP system administrator if you have questions about the location of the settings.

Using Oracle WebCenter Interaction Identity Service for LDAP over SSL

In order to use the Oracle WebCenter Interaction Identity Service for LDAP over SSL there are two connections you must secure. This section includes the following topics:

- [“Setting Up SSL Between the Portal and the Remote Server” on page 5-4.](#)
- [“Setting Up SSL Between the Remote Server and the LDAP Server” on page 5-4.](#)

Setting Up SSL Between the Portal and the Remote Server

In order to connect to the Oracle WebCenter Interaction Identity Service for LDAP from the portal over SSL, you must connect to the remote server on an SSL port and import its trusted certificate.

From a Web browser on the portal server navigate to:

`https://<remote_server>:<app_server_ssl_port>`

If the computer hosting the portal does not already have a certificate from the remote server it prompts you with a Security Alert. Choose to view the certificate and install it to the Trusted Root Certification Authorities store.

When running the installer for Oracle WebCenter Interaction Identity Service for LDAP, choose https protocol and enter the SSL port for the application server. In the portal, when you configure the remote server object, use https and the SSL port.

Setting Up SSL Between the Remote Server and the LDAP Server

To connect to the LDAP server over SSL, import the certificate for the LDAP server into the **cacerts** file in the jre of the application server.

1. From a Web browser on the remote server navigate to:
`https://<ldap_server>:<ldap_ssl_port>`. You should be prompted with a Security Alert.
2. Choose to view the certificate and import it.
3. Navigate to the **Tools | Internet Options** menu.
4. Select the **Content** tab and click **Certificates**.
5. Find the certificate for the LDAP server that you just imported and choose to export it as a DER encoded binary. Export it to the **<APP_SERVER_JAVA_HOME>/jre/lib/security** folder.
6. Use the java keytool to import this certificate to the **cacerts** file at **<APP_SERVER_JAVA_HOME>/jre/lib/security**.

For instructions on using the keytool refer to the SunJava documentation.

When you create the authentication source in the portal, enter 2 as the Security Mode. The standard SSL port is 636. If your LDAP server is using a different SSL port, enter this in the Alternate Port box.

Migrating Users from the Native LDAP Provider to Oracle WebCenter Interaction Identity Service for LDAP

Plumtree Corporate Portal 5.0.x included a native LDAP provider. If you have been using the native LDAP provider, you may want to migrate your users to the LDAP IDS authentication source you created to preserve the MyPage and community settings.

Knowledge Base article DA_224007 “Migrating Users and Groups in 5.0.x Portals” discusses migrating users and groups in a 5.0.x portal. Read this article for instructions on the SQL commands needed to migrate the user information.

Uninstalling Oracle WebCenter Interaction Identity Service for LDAP

To uninstall Oracle WebCenter Interaction Identity Service for LDAP:

1. Remove the software from your remote server:
 - For Windows: Use the Windows Add/Remove Programs utility.
 - For UNIX and Linux: Use the **Uninstall ptldapaws** executable located at **<install_location>/uninstall/ptldapaws/10.3.0**.

The uninstaller removes the war files and Java application files that were installed.

2. After the uninstallation process has completed, it is safe to delete the installation directory.

Uninstalling Oracle WebCenter Interaction Identity Service for LDAP

Upgrading Oracle WebCenter Interaction Identity Service for LDAP

Oracle WebCenter Interaction Identity Service for LDAP 10.3 installs with its own embedded application server. Therefore, installing it will not overwrite an existing LDAP IDS 2.x installation on another application server. You must uninstall the previous version, install the new version, and perform post-installation steps to complete upgrade.

To upgrade from 2.x:

1. Uninstall the previous version. Refer to the installation guide for the previous version of LDAP IDS.
2. Grant user and group access rights to Oracle Inventory directories, as described in [“Granting User and Group Access Rights to Oracle Inventory Directories”](#) on page 3-1.
3. Run the installer as described in [“Installing Oracle WebCenter Interaction Identity Service for LDAP”](#) on page 3-1.
4. Copy any template files you may have created from
`<PT_HOME>/ptldapaws/<version>/settings/ldap/templates` to
`<PT_HOME>/ptldapaws/10.3/settings/config/ldap/templates`.
5. Import the 2.x encryption key to your 10.3 installation:
 - a. In a Web browser, open the remote server diagnostics utility, which can be found at:
`http://<remoteserver>:<port>/ldapws/install/index.html`
 - b. Complete the steps as described in the utility summary page in the diagnostics utility.

At the encryption key import step, click **Import** and browse to the LDAPKeyStore file that was created for your version 2.x installation and select the key. The file can be

found at:

<JRE_HOME_FOR_YOUR_OLD_APP_SERVER>/lib/ext/LDAPKeyStore

6. In the portal, go to the remote server object for Oracle WebCenter Interaction Identity Service for LDAP and change the port number to the one you set when you installed version 10.3.