Oracle® Data Service Integrator

Installation Guide

10*g* Release 3 (10.3)

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Oracle Data Service Integrator Installation Guide, 10*g* Release 3 (10.3)

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CHAPTER 1

Preparing to Install Oracle Data Service Integrator

Before you install Oracle Data Service Integrator, you need to verify that your system meets minimum requirements. This chapter provides information about supported platforms, system hardware and software requirements, and installation prerequisites. It also provides an overview of the Oracle Data Service Integrator components that get installed.

The following sections are included:

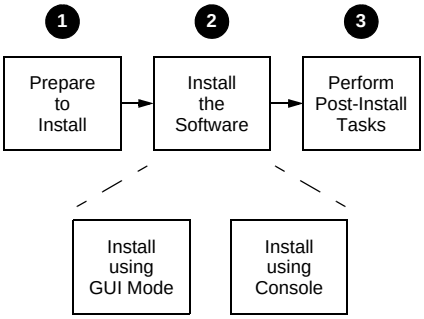
- Installation Overview
- Supported Configurations
- Installation Notes
- Oracle Data Service Integrator Installation Components

Note: Oracle Data Service Integrator was originally named Liquid Data. Some instances of the original name remain in the product, installation path, and components.

Installation Overview

This section provides a high-level overview of the tasks required to install Oracle Data Service Integrator, illustrated in Figure 1-1.

Figure 1-1 Overview of Installation Process



Task 1: Prepare to install

1. Preparing to install Oracle Data Service Integrator involves checking the supported platforms and databases, and verifying that you have the installation prerequisites in place. In addition, you can familiarize yourself with a description of the components that get installed on your system.
2. Uninstall any previous versions of Oracle Data Service Integrator. For details see Chapter 5, "Uninstalling Oracle Data Service Integrator."

   Note: The uninstall option does not remove any Oracle Data Service Integrator or other Oracle Workshop for WebLogic projects that you have created.

Task 2: Install Oracle Data Service Integrator.

You can install Oracle Data Service Integrator in the following modes:

- GUI mode — Features an easy-to-use graphical installer application
- Console mode — Is suitable on UNIX systems without a graphics (windowing) workstation
- Silent mode — Reads an installer properties file to determine the install options on Windows or UNIX systems

For more information about using GUI mode, see Chapter 2, "Installing Oracle Data Service Integrator Using GUI Mode." For more information about using Console mode and Silent mode, see Chapter 3, "Installing Oracle Data Service Integrator Using Console or Silent Mode."

Task 3: Perform post-installation tasks

After installation, you can verify that the installation was successful and explore Windows shortcuts and UNIX paths to key components. For more information, see Chapter 4, "Post-Installation Tasks."

Supported Configurations

For information on supported operating systems, DBMS vendors, and other configurations, see Supported Configurations.

Installation Notes

The Oracle Data Service Integrator installer application installs the following additional software, as required:

- Oracle WebLogic Server 10gR3, if it is not already present in the `<bea_home>` directory you select
- The latest JRockit version to ensure higher Oracle Data Service Integrator performance

The Oracle Data Service Integrator IDE runs as a Workshop for WebLogic plug-in.

Note: If you are using Windows 2000, the maximum classpath size can be exceeded. For this reason, it is recommended that when you install Oracle Data Service Integrator you install it into the `<bea_home>` directory with a directory name of four characters or less, such as <*bea*>.

Oracle Data Service Integrator Installation Components

Table 1-1 provides a list of components that are installed with Oracle Data Service Integrator.

Table 1-1 Oracle Data Service Integrator Installation Components

Component Name	Sub-components
Oracle Data Service Integrator Runtime **Note:** Installing the runtime is mandatory for Oracle Data Service Integrator and is a prerequisite for installing other components.	• Oracle Data Service Integrator runtime including the XQuery engine • Configuration framework • Oracle Data Service Integrator Administration Console • Oracle Data Service Integrator base domain template **Note:** Oracle WebLogic Server 10gR3 is a prerequisite for Oracle Data Service Integrator runtime.
Oracle Data Service Integrator IDE and Client Tools	• Workshop for WebLogic • Oracle Data Service Integrator IDE plugins • Oracle Workspace SCA Common Components and Oracle Workspace Service Consumption Tooling **Note:** Workshop for WebLogic is required to run the Oracle Data Service Integrator perspective.
Oracle Data Service Integrator Samples	• Samples domain • Sample project predeployed in the samples domain • Retail Dataspace Sample Application **Note:** Tou need to perform a custom installation to have the Oracle Data Service Integrator samples installed; the standard installation does not install the server samples nor the IDE samples.

Preconfigured Samples Domain

The full Oracle Data Service Integrator installation provides a preconfigured samples domain, as shown in Table 1-2.

Table 1-2 Oracle Data Service Integrator Samples Preconfigured Domain and Start Commands for Samples Server

Platform	Windows and UNIX Paths to Start in Each Domain	Description

Windows	Start > All Programs > Oracle WebLogic > User Projects > base_domain > Start Server for Oracle Data Service Integrator
	or
	Run `startWebLogic.cmd` from any one of the following locations:
	`<aldsp_home>\user_projects\domains\base_domain\`
	or
	`<aldsp_home>\user_projects\domains\base_domain\bin`
		Starts the Oracle Data Service Integratorsamples server on Windows
		
		Starts the Oracle Data Service Integrator samples server on Windows

UNIX	Run the `startWebLogic.sh` command from any of the following locations:
	`<aldsp_home>/user_projects/domains/base_domain`
	or
	`<aldsp_home>/user_projects/domains/base_domain/bin`
		Starts the Oracle Data Service Integrator samples server on UNIX

Note: `<aldsp_home>` is the home directory for installing Oracle Data Service Integrator.

For a detailed explanation of domains, see "Creating WebLogic Configurations Using the Domain Control Wizard" in the WebLogic Server documentation.

Internationalization Support

Oracle Data Service Integrator is internationalized and supports multi-byte data from the underlying data sources. Specifically, Oracle Data Service Integrator works with Japanese character sets, where the underlying databases are running in Japanese locales.

CHAPTER 2

Installing Oracle Data Service Integrator Using GUI Mode

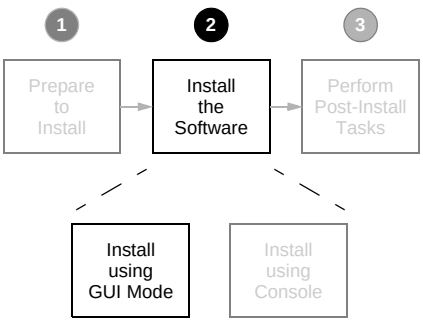
This chapter describes how to install Oracle Data Service Integrator using GUI mode.

It includes the following sections:

- Before You Install
- Installing Using GUI Mode

Figure 2-1 illustrates the current task in the overall installation process.

Figure 2-1 GUI Mode Installation Task



Before You Install

Before you begin installing Oracle Data Service Integrator, confirm that the following prerequisites are met:

- WebLogic Server 10g Release 3 is installed in the `<bea_home>` directory in which you are installing Oracle Data Service Integrator. The Oracle Data Service Integrator installer application installs WebLogic Server 10g Release 3 if it is not present.
- Any previous installations of Oracle Data Service Integrator have been uninstalled. For details see Chapter 5, "Uninstalling Oracle Data Service Integrator."
- For Windows (and UNIX and Linux), an entry for the JDK160_05 bin directory (for example: `<bea_home>/JDK160_05/bin`) is included in your PATH environment variable setting before any other JDK `bin` directories.

Note: By default, Workshop for WebLogic (Eclipse 3.3.2) is available for installation with Oracle Data Service Integrator in the `<bea_home>\workshop_10.3\workshop4WP directory`. If you are planning to use an Eclipse version that is not bundled with Oracle Data Service Integrator, you need to manually clean up the Eclipse configuration directory to avoid some known issues in Eclipse 3.2.2. All files except `config.ini` and files under `.settings` subdirectory should be deleted.

For additional information about installation prerequisites, see Installation Notes in Chapter 1, "Preparing to Install Oracle Data Service Integrator."

Installing Using GUI Mode

This section describes how to install Oracle Data Service Integrator using the GUI mode on Microsoft Windows and supported UNIX and Linux-based platforms.

To install Oracle Data Service Integrator in GUI mode:

1. Launch the GUI installer.

   On Microsoft Windows-based systems:

   a. Navigate to the folder to which you downloaded the Oracle Data Service Integrator installer using Windows Explorer.

   b. Double-click the installer executable file. For example:

   `odsi1030_win32.exe`

On UNIX and Linux-based systems:

a. Verify that the console attached to the machine on which you are installing the software supports a Java-based GUI.

b. Open a command window, and change (cd) to the directory to which you downloaded the Oracle Data Service Integrator installer file.

c. Start the installer in a new shell by entering the following:

```
sh filename.bin
```

where `filename.bin` is the name of the Oracle Data Service Integrator installation program specific to your platform. For example, enter the following to start the Solaris version of the Oracle Data Service Integrator installation program:

```
sh odsi1030_solaris32.bin
```

The installer application welcomes you to install Oracle Data Service Integrator.

2. Click **Next** to begin the installation. A screen appears enabling you to specify the BEA Home directory.

   The BEA Home directory (`<bea_home>`) serves as the central support directory for Oracle Data Service Integrator.

3. Specify the BEA Home directory, and click **Next**.

   You can also choose to create a new BEA Home directory if this is an initial installation.

   Or you can choose a directory from the list or type the directory name in the BEA Home Directory field. You must install Oracle Data Service Integrator in the same home directory where you installed WebLogic Server 10g Release 3.

   A screen appears enabling you to choose the products and components to install.

4. Choose the components and click **Next**.

   A screen appears enabling you to specify the directory where you want to install Oracle Data Service Integrator and related components. By default, Oracle Data Service Integrator is installed in `<bea_home>\odsi_10.3`.

5. Specify the installation directories, and click **Next**.

   A screen appears enabling you to select the Start Menu folder in which you want to create the shortcuts.

6. Select the shortcut location, and click **Next**.

   The Installation Summary screen appears.

7. Click **Next**.

8. The installer displays a progress screen, and begins installing the files on your system. When the installation is complete, the Installation Complete screen appears. Click **Done**.

   You have successfully installed an instance of Oracle Data Service Integrator.

9. After you have installed Oracle Data Service Integrator, you may choose to launch quickstart. If you choose this option, the quickstart window displays, showing links to start applications, upgrade applications, or access product documentation.

CHAPTER 3

Installing Oracle Data Service Integrator Using Console or Silent Mode

This section describes how to install Oracle Data Service Integrator using either Console mode or Silent mode. Console mode is an interactive installation that you can use on UNIX systems without a graphics (windowing) workstation.

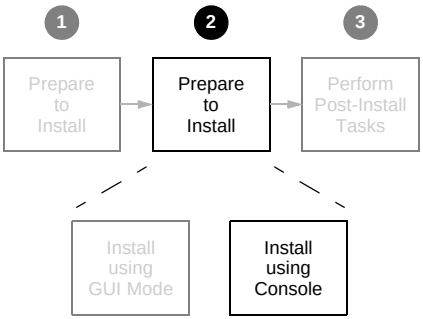
Silent mode is a non-interactive installation on a Windows or UNIX system. In Silent mode, the installer application uses a properties file to obtain installation parameters.

The chapter includes the following sections:

- Before You Install
- Installing Using Console Mode
- Using Silent Console Mode to Install Oracle Data Service Integrator

Figure 3-1 illustrates the current step in the overall installation process.

Figure 3-1 Console Mode Installation Task



Before You Install

Before you begin installing Oracle Data Service Integrator, confirm that the following conditions are met:

- WebLogic Server 10g Release 3 is installed in the `<bea_home>` directory in which you are installing Oracle Data Service Integrator. The Oracle Data Service Integrator installer application installs WebLogic Server 10g Release 3 if it is not present.
- Oracle Data Service Integrator is not running on the system.

  You must remove Oracle Data Service Integrator in cases where it is located in the same `<aldsp_home>` directory to which you plan to install. For details see Chapter 5, "Uninstalling Oracle Data Service Integrator."
- An entry for the JDK160_05 `bin` directory (for example `<bea_home>/JDK160_05/bin`) must be included in your PATH environment variable setting before any other JDK bin directories.
- By default, Workshop for WebLogic (Eclipse 3.3.2) is available for installation with Oracle Data Service Integrator in the `<bea_home>\workshop_10.3\workshop4WP directory`. If you are planning to use an Eclipse version that is not bundled with Oracle Data Service Integrator, then you need to manually clean up the Eclipse configuration directory to avoid some known issues in Eclipse 3.2.2. All files except `config.ini` and files under `.settings` subdirectory should be deleted.

For additional information about installation prerequisites, see "Installation Notes" on page 1-3 in Chapter 1, "Preparing to Install Oracle Data Service Integrator."

Installing Using Console Mode

This section describes the console-mode installation procedure.

Note: You cannot install Oracle Data Service Integrator in console mode on Solaris systems running in a Japanese locale. In cases when you are installing on a Japanese Solaris system, change your locale in the shell in which you are installing to English, and then install the product. After Oracle Data Service Integrator is installed, you can run it in a Japanese locale.

To install Oracle Data Service Integrator on a UNIX system in console mode:

1. Change to the directory (cd) that contains the Oracle Data Service Integrator installer.
2. Start the installation program.

   The installer file name has the following form:

   ```
   filename.bin
   ```

   where *filename* is the name of the Oracle Data Service Integrator installation program specific to your platform. For example, enter the following to start the Solaris version of the Oracle Data Service Integrator installation program:

   ```
   sh odsi1030_solaris32.bin -mode=console
   ```

   Similarly, enter the following to start the Linux version of the Oracle Data Service Integrator installation program:

   ```
   ./odsi1030_linux32.bin -mode=console
   ```

   A message appears indicating that the software is being extracted, followed by a welcome message, as shown in the following text:

   ```
   <---- Oracle Installer - Oracle Data Service Integrator 10.3 ---->
   Welcome:
   --------
   This installer will guide you through the installation of Oracle Data
   Service Integrator 10.3. Type "Next" or enter to proceed to the next
   prompt. If you want to change data entered previously, type "Previous".
   You may quit the installer at any time by typing "Exit".

   Enter [Exit][Next]>
   ```

3. Press Enter to continue.

   You are prompted to choose the BEA home directory, as shown in the following text:

   ```
   <---- Oracle Installer - Oracle Data Service Integrator 10.3 ---->
   Choose BEA Home Directory:
   --------------------------

   "BEA Home" = [Enter new value or use default /usr/local/bea]

   Enter new BEA Home OR [Exit][Previous][Next]>
   ```

   The <bea_home> directory serves as the central support directory for all Oracle products installed on your system. For a detailed description of how this directory is used, see "BEA Home Directory" in "Preparing to Install WebLogic Server" in *Installing Oracle WebLogic Server*.

   A warning message is displayed in cases when a previous installation of Oracle Data Service Integrator is found.

4. Press Enter to accept the default BEA home directory, or enter an alternative directory.

   When prompted, confirm the directory you selected. You are prompted to choose whether you want to perform a complete or custom installation, as shown in the following text:

   Select the type of installation you want to perform.

   ```
   ->1¦Complete
       ¦ Install the following software products and examples:
       ¦ - WebLogic Server
       ¦ - Oracle Data Service Integrator
       ¦ - Workshop

      2¦Custom
       ¦ Choose software products and components to install and perform
       ¦ optional configuration.

   Enter index number to select OR [Exit][Previous][Next]>
   ```

5. Enter `1` or `2` to choose a complete or custom installation respectively.

   When you specify a custom installation, the installer enables you to choose the components to install, as shown in the following text:

```
<------- Oracle Installer - Oracle Data Service Integrator 10.3------>

Choose Components to install:
-----------------------------

    Release 10.3.0.0
    +----WebLogic Server [1] v
    ¦    +----Core Application Server [1.1] v
    ¦    +----Administration Console [1.2] v
    ¦    +----Configuration Wizard and Upgrade Framework [1.3] v
    ¦    +----Web 2.0 HTTP Pub-Sub Server [1.4] v
    ¦    +----WebLogic JDBC Drivers [1.5] v
    ¦    +----Third Party JDBC Drivers [1.6] v
    ¦    +----WebLogic Server Clients [1.7] v
    ¦    +----WebLogic Web Server Plugins [1.8] v
    ¦    +----UDDI and XQuery Support [1.9] v
    ¦    +----Server Examples [1.10]
    +----Oracle Data Service Integrator [2] v
    ¦    +----Data Services Server [2.1] v
    ¦    +----Eclipse Plug-Ins [2.2] v
    ¦    +----Samples [2.3] v
    +----Workshop [3] v
         +----Workshop for WebLogic [3.1] v
         +----Workshop Runtime Framework [3.2] v

Enter number exactly as it appears in brackets to toggle selection OR
[Exit][Previous][Next]>
```

   Enter the value for the component, for example, 1.1 for the Oracle Data Service Integrator Server. The installer prompts you for additional component values. Continue selecting components, and press Enter without a value when you are done.

6. Enter the Eclipse installation options. Option 1 allows you to install Eclipse bundled with Oracle Data Service Integrator. Option 2 allows you to specify a different Eclipse home directory and not install the Eclipse bundle available with Oracle Data Service Integrator.

7. Review the Oracle Data Service Integrator product installation directories and press Enter.

8. The installation begins and the installation status is displayed as it progresses. When the installation is complete, “Congratulations!” is displayed. Press Enter to exit the installer.

   This completes the Console mode installation process.

Using Silent Console Mode to Install Oracle Data Service Integrator

The Windows, UNIX, and Linux versions of the installer provide a noninteractive, or *silent-mode* installation, that you can use in cases when you want to install Oracle Data Service Integrator without needing to supply information from the keyboard during the installation process. Instead, the installer gets the required information from a properties file that you provide.

Before launching a silent-mode installation, make sure that all installation prerequisites are met and that all the information in the properties file is correct. After the silent installer is started, it proceeds in the background and does not report exceptions. Some exceptions are ignored.

However, if a previously installed copy of Oracle Data Service Integrator is detected, a dialog box appears asking if you want to override the old version. Other exceptions cause the installer to fail. For example, if the specified BEA home directory `<bea_home>` or the specified Oracle Data Service Integrator install directory (`USER_INSTALL_DIR`) do not exist or are incorrect, the installer fails.

Note: On UNIX systems, the installer displays the message `Installation Complete` when it finishes. This message does not necessarily indicate that the installer was successful; it means only that the process has finished running.

If a fatal exception occurs during installation, the installer displays a message and no changes are made to the system.

Using Silent Mode on Windows and UNIX Systems

This section describes how to install Oracle Data Service Integrator on Windows and UNIX systems using Silent Mode.

To install using silent mode:

1. Create the required installer properties file.

   The content of the file is described in "Exploring the Silent Mode Installer Properties File" on page 3-9. You can use any legal file name for the installer properties file. Verify that the *<BEAHOME>*, *<USER_INSTALL_DIR>*, and other values specified in the properties file are correct and that all requirements have been met.

2. Open a command window.

3. Navigate to the directory containing the Oracle Data Service Integrator installer.
   – On Windows, the installer application is:

     `odsi1030_win32.exe`

   – On UNIX and Linux, the installer application is:

     `filename.bin`

     where *`filename.bin`* is the name of the Oracle Data Service Integrator installation program specific to your platform; for example, `odsi1030_solaris32.bin` for the Solaris version of Oracle Data Service Integrator.

     You will find similarly-named installer files for all UNIX and Linux versions of Oracle Data Service Integrator.

4. Run the installer application, specifying the properties file and the log file name as options.
   – On Windows, run the following command:

     `odsi1030_win32.exe -mode=silent`
     `-silent_xml=<`*drive:\properties_file_path*`>`
     `-log=<`*drive:\log_file_path*`>`

     where `drive` is the letter that identifies the hard disk drive, *`properties_file_path`* is the complete pathname of the Oracle Data Service Integrator silent installation properties file, and *`log_file_path`* is the complete pathname of the log file.

     For example, you could enter the following:

     ```
     odsi1030_win32.exe -mode=silent
     -silent_xml=c:\temp\silent.xml
     -log=c:\temp\logfile.txt
     ```

     You are returned to the command prompt and the Oracle Data Service Integrator installation preparation dialog box is briefly displayed. The installation proceeds in the background with the information specified in the installer properties file.

     To verify that the installer is running, open the Windows Task Manager. The installer is listed as the `javaw.exe` process.

– On UNIX, run the following command:

```
sh odsi1030_solaris32.bin -mode=silent
-silent_xml=complete_properties_file_path
-log=complete_log_file_path
```

where *complete_properties_file_path* is the complete pathname of the properties file and *complete_log_file_path* is the complete pathname of the log file. A complete path is required, even when the file resides in the same directory as the `odsi1030_solaris32.bin` file.

The message Preparing to Install is displayed. After the installer decompresses the required files, the installation proceeds with the information specified in the installer properties file. When the process is successful, Installation Complete is displayed.

– On Linux, run the following command:

```
./odsi1030_linux32.bin -mode=silent
-silent_xml=complete_properties_file_path
-log=complete_log_file_path
```

where *complete_properties_file_path* is the complete pathname of the properties file and *complete_log_file_path* is the complete pathname of the log file. A complete path is required, even when the file resides in the same directory as the `odsi1030_linux32.bin` file.

The message `Preparing to Install` is displayed. After the installer decompresses the required files, the installation proceeds with the information specified in the installer properties file. When the process is successful, Installation Complete is displayed.

Exploring the Silent Mode Installer Properties File

Table 3-1 describes the required installer properties used with a Silent Mode installation.

Table 3-1 Installer Properties

Sample Property Setting	Description
`BEAHOME`	The BEA Home directory. This is the complete pathname to the BEA Home directory that will contain this installation. For Windows, specify the absolute path, including the drive. For UNIX, specify the absolute path.
`USER_INSTALL_DIR`	The WebLogic Server installation directory. For Windows, specify the absolute path, including the drive. For UNIX, specify the absolute path.
`ALDSP_INSTALL_DIR`	The Oracle Data Service Integrator installation directory. For Windows, specify the absolute path, including the drive. For UNIX, specify the absolute path.
`INSTALL_MERCURY_PROFILING_TOOLS`	Optionally install the Mercury profiling tools. Possible values are `true`, `yes`, `false`, and `no`. The default is true.
`INSTALL_NODE_MANAGER_SERVICE`	Install Node Manager as a Windows service. The default value is set to no; you need Administrative privileges to set this value to yes.
`NODEMGR_PORT`	Set the Node Manager listen port number. If you do not specify a port, then the installer uses default port 5556. To set this value the INSTALL_NODE_MANAGER_SERVICE option needs to be set to yes.

Table 3-1 Installer Properties (Continued)

Sample Property Setting	Description
COMPONENT_PATHS	Specify the components and subcomponents to install. To install multiple components, separate the components with a bar (|). To install subcomponents, specify a component/subcomponent combination. For example, to install Web Server Plug-Ins, use "WebLogic Server/Web Server Plug-Ins".
INSTALL_SHORTCUTS_IN_ALL_USESRS_FOLDER	The Windows Start menu folder in which you want the Start menu shortcuts created. The user performing the installation must have Administrator privileges to install the shortcuts in the All Users folder. The possible values are: • true/yes—The shortcuts are created in the All Users folder (default) • false/no—The shortcuts are created in the local user's folder
USE_EXTERNAL_ECLIPSE	Specify whether to use an existing Eclipse installation, from among the following values: • true—Only the Eclipse plug-ins are installed in the Eclipse instance located at EXTERNAL_ECLIPSE_DIR. • false (default)—The complete Eclipse instance is installed in the default location.
EXTERNAL_ECLIPSE_DIR	The directory where the existing external Eclipse instance is installed.
ECLIPSE32_HOME	The home directory where Eclipse should be installed. This setting is for backward compatibility; you should typically use EXTERNAL_ECLIPSE_DIR instead.

The following shows a sample Silent Mode installer properties file (silent.xml):

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<bea-installer>
  <input-fields>
    <data-value name="BEAHOME" value="C:/bea103"/>
    <data-value name="ALDSP_INSTALL_DIR" value="C:/bea103/odsi_10.3"/>
    <data-value name="USER_INSTALL_DIR" value="C:/bea103/wlserver_10.3"/>
    <data-value name="COMPONENT_PATHS" value="WebLogic Server|
    Oracle Data Service Integrator/Data Services Server|Oracle Data
    Service Integrator/Eclipse Plug-Ins|Oracle Data Service
    Integrator/Samples"/>
    <data-value name="INSTALL_SHORTCUT_IN_ALL_USERS_FOLDER" value="yes"/>
  </input-fields>
</bea-installer>
```

CHAPTER 4

Post-Installation Tasks

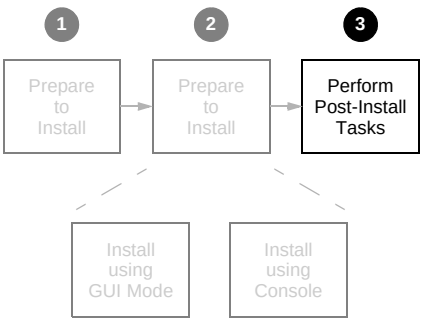
This chapter describes tasks you can do after installation of an instance of Oracle Data Service Integrator, including verifying the installation, starting development of applications, and exploring Windows shortcuts and UNIX paths.

The chapter includes the following sections:

- Verifying the Installation
- Starting the Development of a Data Integration Solution

Figure 4-1 illustrates the current step in the overall installation process.

Figure 4-1 Post-Installation Task



Verifying the Installation

To verify that the Oracle Data Service Integrator installation is follow the steps described in "How To Configure the Retail Dataspace Sample Application" in the *Data Services Developer's Guide*.

Starting the Development of a Data Integration Solution

Developing your own data integration solution consists of a design phase and an implementation phase.

- When you are ready to start setting up and configuring your own data sources, refer to the Oracle Data Service Integrator *Administration Guide*.
- When you are ready to start mapping source and target XML schemas and constructing queries using Workshop for WebLogic, refer to *Data Services Developer's Guide*.
- When your application developer is ready to access data services, see the *Client Application Developer's Guide*.
- For information on the XQuery engine, functions and the XQSE language see the *XQuery and XQSE Developer's Guide*.

CHAPTER 5

Uninstalling Oracle Data Service Integrator

For most platforms you can automatically remove system-installed, unmodified Oracle Data Service Integrator artifacts from your system. After Oracle Data Service Integrator has been uninstalled, you can manually remove any extra files, such as modified samples or other user-created files, which were not removed automatically by the uninstaller.

You should undeploy any Oracle Data Service Integrator applications before uninstalling Oracle Data Service Integrator from your system. For information about undeploying, see the topic "Undeploying Deployed Applications" in the WebLogic Server documentation.

Automated Uninstallation

To uninstall Oracle Data Service Integrator:

1. Back up any data you want to retain for use with a new installation.
2. Shut down your server.
3. Run the Oracle Data Service Integrator uninstaller.
   - On Windows systems, choose the following:

     Start > All Programs > Oracle WebLogic > Uninstall Oracle WebLogic
   - On UNIX and Linux systems, run the following command in cases when you installed using GUI mode (as described in Chapter 2, "Installing Oracle Data Service Integrator Using GUI Mode"):

     ```
     <aldsp_home>/uninstall/uninstall.sh
     ```

     Alternatively, run the following command with the `-i CONSOLE` option in cases when you installed using Console mode (as described in Chapter 3, "Installing Oracle Data Service Integrator Using Console or Silent Mode")

     ```
     <aldsp_home>/uninstall/uninstall.sh -i CONSOLE
     ```
4. After the uninstallation, delete the `odsi_10.3` folder in the `<bea_home>` directory. In addition. you may need to remove some other files manually.

   When the uninstall is completed, you may be notified that some files could not be removed. This could be a result of new files that were either generated or user-created after Oracle Data Service Integrator was installed.

   For example, if you added new target schemas, stored queries, Web services, and so on to the Oracle Data Service Integrator repository make sure that you save them elsewhere before proceeding to the next step.

   Note: The Uninstall option does not remove any Oracle Data Service Integrator dataspaces or other Workshop for WebLogic applications that you have created if they are created outside the `<aldsp_home>` directory. It is advised that you created your domains and other projects outside `<aldsp_home>` directory.

CHAPTER 6

Upgrading from ALDSP 3.0 or 2.5 to Oracle Data Service Integrator 10gR3

This chapter describes the steps to upgrade ALDSP 2.5 and ALDSP 3.0/3.2 applications to Oracle Data Service Integrator 10gR3 dataspaces. It includes the following sections:

- Upgrading from ALDSP 3.0/3.2 to Oracle Data Service Integrator 10gR3
- Upgrading from ALDSP 2.5 to Oracle Data Service Integrator 10gR3
- ALDSP 2.5 Upgrade: Known Issues and Workarounds

Note the following:

- ALDSP 2.5 applications are created in the WebLogic Workshop 8.x environment and deployed on WebLogic Server 8.1.
- ALDSP 3.0 applications are created in the Data Services Studio environment and deployed on WebLogic Server 9.2.
- ALDSP 3.2 applications are created within the WorkSpace Studio framework and are deployed on WebLogic Server 10.0 MP1.
- Oracle Data Service Integrator 10gR3 applications are created using Oracle Workshop for WebLogic and are deployed on Oracle WebLogic Server 10gR3.

While upgrading an ALDSP 2.5 application to Oracle Data Service Integrator 10gR3, data service projects within the data service application are upgraded to single a dataspace project. The dataspace project contains all the data services along with the relevant artifacts which need to be deployed on Oracle WebLogic 10gR3.

Upgrading from ALDSP 3.0/3.2 to Oracle Data Service Integrator 10gR3

Upgrading from ALDSP 3.0 or ALDSP 3.2 to Oracle Data Service Integrator 10gR3 is a very straightforward process, and involves the following:

- **Development environment.** To upgrade to the Oracle Data Service Integrator 10gR3 development environment, uninstall ALDSP 3.0 or ALDSP 3.2 and install Oracle Data Service Integrator 10gR3, as described in Chapter 1, "Preparing to Install Oracle Data Service Integrator." You can then use an existing Oracle Data Service Integrator workspace, or create a new one and import the contents of an ALDSP 3.0/3.2-level workspace.
- **Deployment environment.** From Workshop for WebLogic, you can build and deploy projects created under ALDSP 3.0 or ALDSP 3.2. Alternatively, you can deploy a JAR file created under ALDSP 3.0/3.2 to an Oracle Data Service Integrator-enabled Oracle WebLogic 10gR3 server.

Upgrading from ALDSP 2.5 to Oracle Data Service Integrator 10gR3

This section describes how to upgrade from ALDSP 2.5 to Oracle Data Service Integrator 10gR3, and covers the following topics:

- Upgrading from ALDSP 2.5 Prerequisites
- Upgrading ALDSP 2.5 Artifacts to Oracle Data Service Integrator 10gR3
- Upgrading an ALDSP 2.5 Application
- Upgrading an ALDSP 2.5 Control to Oracle Data Service Integrator 10gR3
- Importing ALDSP 2.5 Configuration to Oracle Data Service Integrator 10gR3
- Post-Upgrade Artifact Mapping in Oracle Data Service Integrator 10gR3
- Post-Upgrade Tasks for Java Web Service

Upgrading from ALDSP 2.5 Prerequisites

Before you start upgrading an ALDSP 2.5 data service application to Oracle Data Service Integrator 10gR3, make sure that you perform Build > Clean Application in the Workshop 8.1 environment. This ensures that the application upgrade can be successful and does not require manual clean up of files later.

Upgrading ALDSP 2.5 Artifacts to Oracle Data Service Integrator 10gR3

Oracle Data Service Integrator source upgrade allows you to upgrade ALDSP 2.5 data service projects and bring them into Workshop for WebLogic as a dataspace project. It also upgrades data service related artifacts such as schema, model diagram, .java files, and WSDL files.

Note: To upgrade any ALDSP 2.5 data service applications developed in versions prior to 2.5, you need to first upgrade the application to ALDSP 2.5. For more information about upgrading to ALDSP 2.5, refer to Upgrading AquaLogic Data Services Platform Application To Version 2.5 in the ALDSP 2.5 *Installation Guide*.

This section describes the upgrade of the following artifacts from ALDSP 2.5 to Oracle Data Service Integrator 10gR3:

- Applications
- Projects
- Schemas
- Java Files within the ALDSP Project
- JAR Data Service Projects
- Shredder Based Artifacts
- Other Artifacts

Notes:

- You cannot use Data Services Studio with Eclipse WTP to upgrade non-data service projects such as Portal and Java web services. To upgrade non-data service projects, refer to the Upgrading WebLogic Workshop 8.1 Applications chapter in the *Workshop for WebLogic Platform Programmer's Guide*.
- Java projects and Schema projects on which the data service project depends, can be upgraded along with data service projects.

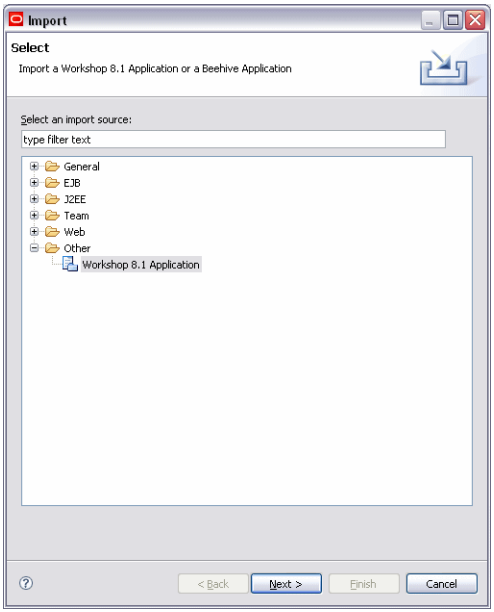
For steps to upgrade an ALDSP Control to Oracle Data Service Integrator 10gR3, refer to Upgrading an ALDSP 2.5 Control to Oracle Data Service Integrator 10gR3.

Upgrading an ALDSP 2.5 Application

To upgrade using Workshop for WebLogic, do the following:

1. Launch Workshop for WebLogic.
2. Right-click in the Project Explorer, and choose Import > Import. This displays the Import dialog box, as shown in Figure 6-1.

Figure 6-1 Import Dialog

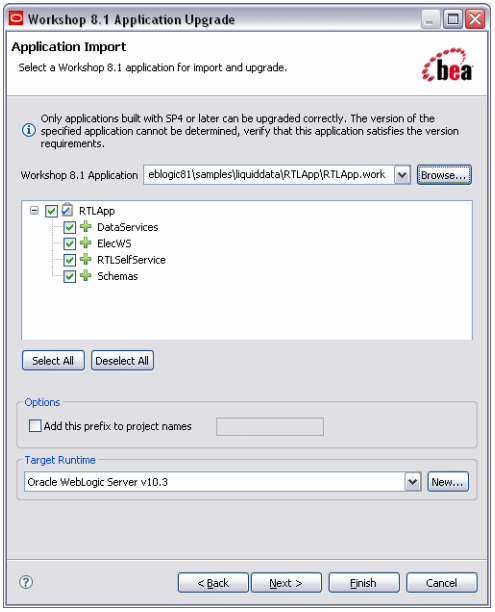


3. Expand the Other option, select Workshop 8.1 Application, and click Next. The Workshop 8.1 Application Upgrade: Application Import dialog is displayed.

4. Browse and select the ALDSP 2.5 application to be upgraded, as shown in Figure 6-2.

   Note: All projects within an ALDSP 2.5 application, along with dependent schemas and Java projects, are upgraded to the same dataspace in Oracle Data Service Integrator 10gR3. Select all the Data Service project dependents such as Java projects and Schema projects, if any. If you do not want to upgrade all the projects within the application to the same dataspace, then select only the projects that you want to upgrade.

Figure 6-2 Workshop 8.1 Application Upgrade: Application Import Dialog

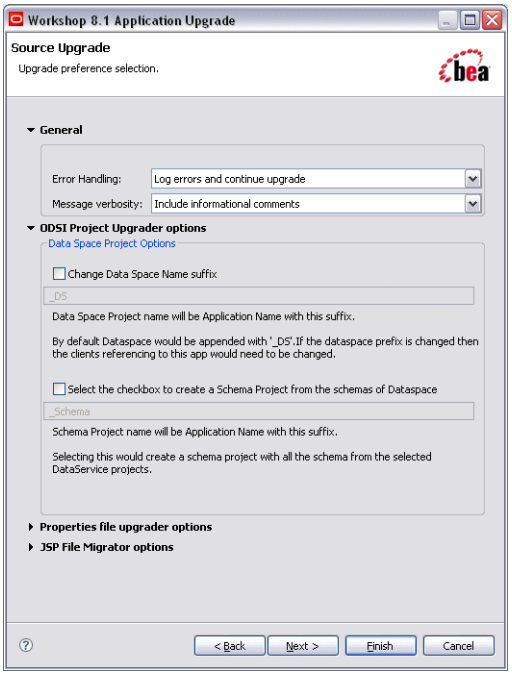


5. Select the Add this prefix to project names option if you want to specify a prefix for the project being upgraded.

Note: All project files upgraded from ALDSP 2.5 will add the specified prefix, including Java and schema projects created from Data Service projects. The Deployment name property also includes the prefix. However, the ALDSP 2.5 Data Service project folder within the dataspace name will not carry the prefix and therefore, the LD namespace URI does not need to be changed.

6. Ensure that runtime environment is set to Oracle WebLogic Server v10.3.
7. Click Next. The Workshop 8.1 Application Upgrade: Source Upgrade dialog is displayed as shown in Figure 6-3.

Figure 6-3 Workshop 8.1 Application Upgrade: Source Upgrade Dialog

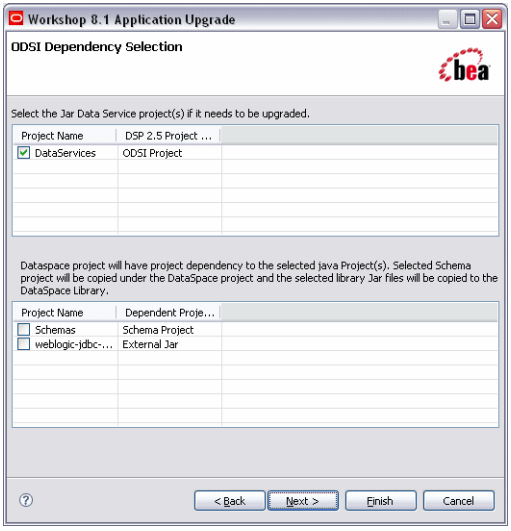


8. In the Source Upgrade dialog box:
   a. Select the Error Handling option, which includes:
      – Log errors and continue upgrade
      – Log errors and abort upgrade
      – Display dialog on error
   b. Select the Message verbosity option from the list. The options include:
      – Include informational comments
      – Include warning comments
      – Include error comments

c. Select the Change Dataspace Name suffix option to change the name of the dataspace suffix. By default, the dataspace project name will be `<application_name>_DS`. You can also select a checkbox to create a schema project with the name `<Application_Name>_Schema` from the selected Data Service projects. For example, you can use this option when the schema or the XMLBeans created are to be used outside of the project.

9. Click Next. This displays the Workshop 8.1 Application Upgrade:ODSI Dependency Selection dialog.

Figure 6-4 Workshop 8.1 Application Upgrade: DSP Dependency Selection Dialog

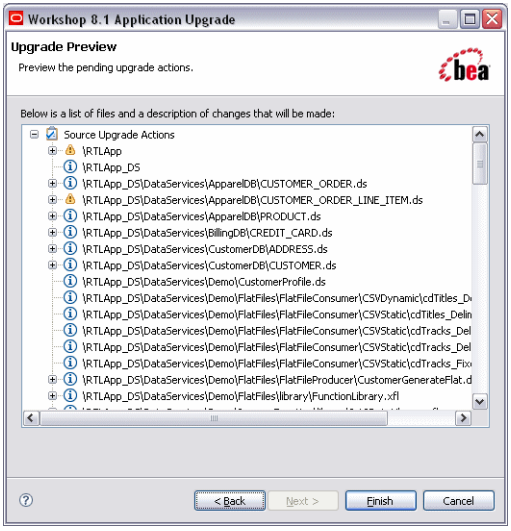


The dialog lists the data service project selected for upgrade along with project JARs including the catalog services project (if available). By default, the data service JAR projects are selected for upgrade. You need to review and deselect them if you do not want them to be upgraded. Because the data service projects are already selected, you cannot edit the selection here.

The dialog also lists the dataspace dependencies such as schemas, Java projects, and library JARs. You need to select the Java projects, schema projects or any library JARs if they are used by one or more data service projects that are bring upgraded. However, internal JAR files such as `ldclient.jar` and `ld-server-app.jar` are not listed.

10. Click Next. This completes the upgrade process and a summary of the upgraded files is displayed in the Upgrade Preview, as shown in Figure 6-5.

Figure 6-5 Application Upgrade: Upgrade Preview Dialog



The Upgrade Preview provides the following details:

- List of the actions performed during the upgrade
- List of files added and deleted
- List of files that do not require an upgrade

11. Click Finish. The imported dataspace shows up in the Project Explorer.

Note: After completing upgrade, an empty EAR project folder is also created. This EAR project is not relevant to the upgraded dataspace and can be deleted if you are not planning to use it at a later stage.

Upgrading an ALDSP 2.5 Control to Oracle Data Service Integrator 10gR3

Oracle Data Service Integrator 10gR3 does not automatically upgrade ALDSP 2.x Controls. This is because ALDSP 2.x Controls use certain deprecated API methods that preclude a seamless migration path for these controls.

This means that ALDSP 2.x Controls within a project are not considered for upgrade. During upgrade, the preview screen displays the message “If you have Data Service controls, those classes will need to be upgraded manually” to remind you of this condition.

After the upgrade process is complete, you can delete the control file and recreate it as an Oracle Data Service Integrator control.

Importing ALDSP 2.5 Configuration to Oracle Data Service Integrator 10gR3

After you upgrade an ALDSP 2.5 application to Oracle Data Service Integrator 10gR3, you may want to import your existing administration and project configuration to the new environment. You can import the ALDSP 2.5 configuration file using the ALDSP Administration Console in Oracle Data Service Integrator 10gR3. The ALDSP 2.5 configuration file is located at:

`<domain_dir>\liquiddata\<applicationname>config.xml`

where `<domain_dir>` is usually located at <bea_home>`\weblogic81\samples\domains\`

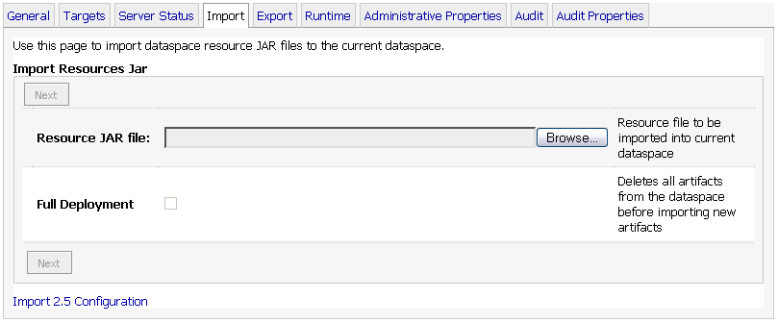
Note: The Allow Default Anonymous Access option from ALDSP 2.5 is not imported into Oracle Data Service Integrator 10gR3. For more information about setting default anonymous access in Oracle Data Service Integrator 10gR3, refer to “Allowing Anonymous Access” section in Securing Oracle Data Service Integrator Resources.

Oracle Data Service Integrator configuration import requires the ALDSP 2.5 data service projects to be upgraded to a Oracle Data Service Integrator 10gR3 dataspace project and deployed in an Oracle Data Service Integrator 10gR3 runtime environment.

To import the ALDSP 2.5 configurations:

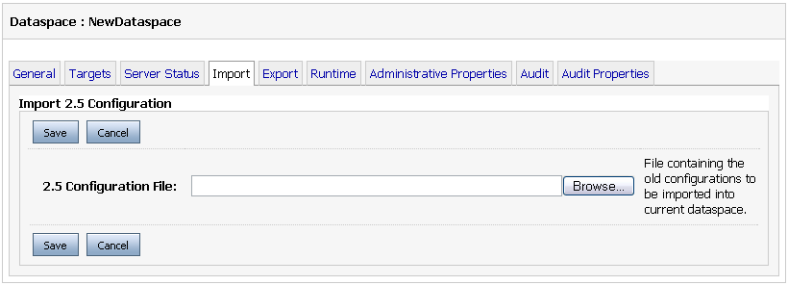
1. Launch ALDSP Administration Console using the following URL and then log in:
   `http://localhost:7001/odsiconsole`
2. Select the upgraded dataspace project.
3. Select the System Administration category and then click the Import tab.
4. Click Lock & Edit to acquire the lock.
5. Click the Import 2.5 Configuration link as shown in Figure 6-6.

Figure 6-6 Import Tab



6. In the Import 2.5 Configuration section, browse and specify the path where the ALDSP 2.5 configuration file is located, as shown in Figure 6-7.

Figure 6-7 Import 2.5 Configuration



7. Click Save > Activate Changes to complete upgrading the configuration file.

Post-Upgrade Artifact Mapping in Oracle Data Service Integrator 10gR3

This section highlights the results after upgrading from ALDSP 2.5 to Oracle Data Service Integrator 10gR3 and provides information about mapping artifacts between ALDSP 2.5 and Oracle Data Service Integrator 10gR3.

Note: After upgrade, you can continue to use ALDSP 2.5 static clients to communicate with the Oracle Data Service Integrator-enabled server. If you want to change the upgraded dataspace to use ALDSP 2.5 clients, then you need to apply the changes to the original ALDSP 2.5 application, generate the 2.5 static clients, and use the clients in Oracle Data Service Integrator 10gR3.

Table 6-1 provides details about the upgrade and the mappings of artifacts after upgrading to Oracle Data Service Integrator 10gR3.

Table 6-1 Upgrade Features and Artifact Mapping

ALDSP 2.5 Artifact	Oracle Data Service Integrator 10gR3 Mapping	Features
Application	Dataspace	The dataspace name is the 2.5 application name with the _DS suffix. For example, RTLApp_DS. You can change the suffix during the upgrade process. For more information, refer to Upgrading an ALDSP 2.5 Application.
Projects	Dataspace projects under the upgraded dataspace.	• Multiple data service projects are upgraded to a single dataspace. The data service project becomes a folder under the dataspace. • The project retains the URI for data service and schemas. • To allow ALDSP 2.5 mediator APIs access to the upgraded application, the dataspace project uses the application name (EAR project name) for deployment.

Table 6-1 Upgrade Features and Artifact Mapping (Continued)

ALDSP 2.5 Artifact	Oracle Data Service Integrator 10gR3 Mapping	Features
Project Dependencies	JAR files, schema projects, and Java projects	• Schema projects that you mark as dependent projects are copied under the dataspace project. For information about marking or selecting project dependencies, refer to step 9 in Upgrading an ALDSP 2.5 Application. • Library files marked as dependent are copied to the dataspace project's `DSP-INF\lib` folder. • Dataspace project depends on the created Java projects and dependant Java projects. All the created Java projects and dependant Java projects depends on the schema project, if created.
Other Project Files	index.xml	• Individual `index.xml` files are removed from projects within the upgraded dataspace. Instead, a single `index.xml` file is created for the entire dataspace when you build the project. • For different projects within a dataspace, the `sdo.xsdconfig.xml` file is removed at the root level. • The `xquery-types.xsd` file is removed for individual projects and one file is created for the dataspace. • The SQL index file from each of the projects in a dataspace are merged and placed under `DSP-INF/sql/sql-index.xml` for the dataspace.

Table 6-1 Upgrade Features and Artifact Mapping (Continued)

ALDSP 2.5 Artifact	Oracle Data Service Integrator 10gR3 Mapping	Features
Java Files	`<dataservice_project_name>_java`	• In Oracle Data Service Integrator 10gR3, dataspace projects cannot store Java files. Therefore, during upgrade of ALDSP 2.5 data service projects, they are moved under a new Java project for each data service project. This project has the name: `<dataservice_project_name>_java`. • For the Java projects that are created from the data service project, the dependency is set at the dataspace level. • While building the dataspace project, the dependent JAR or binary files, are copied to the `DSP-INF/lib` folder.

Table 6-1 Upgrade Features and Artifact Mapping (Continued)

ALDSP 2.5 Artifact	Oracle Data Service Integrator 10gR3 Mapping	Features
Schema Files	Same as 2.5	The folder structure and name of the schema remains the same after upgrade. The schema files from ALDSP 2.5 applications must be recompiled with XMLBeans v2to run them inside the Oracle Data Service Integrator 10gR3 server environment. You can do this using the XMLBeans Builder facet. If you choose to create a separate schema project, then all the schema files from different selected data service projects are placed in a separate schema project with name `<dataspace_name>_Schema`. For information about selecting separate schema project, refer to step c in Upgrading an ALDSP 2.5 Application.
Catalog Data Service Projects	Exploded as `_catalogservices` folder under dataspace project	Catalog services JAR under `APP-INF/lib` in ALDSP 2.5 are upgraded in the exploded form under the dataspace. • All catalog services are upgraded like other data services. • All class files are filtered out and deleted after upgraded and a new `catalogservicelib.jar` is added under `DSP-INF/lib` folder.

There are other artifacts such as data services, xfl and Java files, schemas, and WSDL files, which are outlined in Table 6-2.

Table 6-2 Mapping and Features of Other Artifacts Post-Upgrade

Other Files	Features
.ds	• The .ds files are upgraded as entity data services with the .ds extension. • Data service namespaces are not changed. • Pragma information that contains the version number changes to include the 10gR3 stamp. • All read functions are upgraded with `visibility=public, kind=retrieve` • All navigation functions are retained with `visibility=public, kind=navigate` • All procedures (side effecting functions) have `visibility=public, kind=library`. In addition: – Function declarations use the following declaration for external functions: `procedure declare procedure` for external functions – Function declarations use the following declaration if the function is not external and has a body: `function (declare function)` **Note:** After the upgrade, mark the `kind` for side-effecting functions as CUD if they are from the libraryProcedure. • All functions are marked as `primary = false` with the new validation rules. • A key schema file is created and added, if key element is present in the data service pragma. This key schema is `TargetTypeSchemaName_KEY`. It shares the same namespace as the target type schema such as XML or other return type schemas.

Table 6-2 Mapping and Features of Other Artifacts Post-Upgrade (Continued)

Other Files	Features
.xfl	• These files are changed to library data service files and have no return type pragma. • The namespace prefix are changed from `lib` to `ld` and all its references are also modified. • The name of the `xfl` is retained if there are no DS files with the name in the same folder. If another data service with the same name exists, then it is resolved with numbered suffixes. • All functions are set to `visibility=protected` during upgrade and in case of private functions, are retained as private. • All functions are set to `kind=library` and function declaration is `function(declare function)`
.java files	These files are moved to separate Java projects.
WSDL files	WSDL files are upgraded as is. However, in some cases, you may need to upgrade the WSDL manually.
XML, CSV	No change occurs to these files after upgrade.
Model Diagram	Model diagrams are upgraded as is.

Note: If you have configured the max thread per application property in ALDSP 2.5 using the ALDSP Administration Console, then this configuration is not upgraded to Oracle Data Service Integrator 10gR3.

Post-Upgrade Tasks for Java Web Service

After completing the upgrade of Java Web Service (JWS), you need to perform the following steps to retrieve values from a dynamic JWS client:

1. Save the WSDL file for the JWS locally and remove the `parameterOrder` attribute from operations tag.
2. Modify the client code to use the saved WSDL to create the service. Examples of the ALDSP 2.5 configuration and the modified version are shown in Listing 6-1 and Listing 6-2.

Listing 6-1 ALDSP 2.5 Client

```
QName serviceName = new QName(targetNamespace, 'testSimplePhyCtrlTest');

URL wsdlLocation = new

URL('http://localhost:7001/testWSProj/controls/testSimplePhyCtrlTest.jws?WSDL');

Service service = factory.createService(wsdlLocation, serviceName);
```

Listing 6-2 Modified ALDSP 2.5 Client

```
QName serviceName = new QName(targetNamespace, 'testSimplePhyCtrlTest');

URL wsdlLocation = new

URL('file:///D:/dynwsclient/testSimplePhyCtrlTest.wsdl');

Service service = factory.createService(wsdlLocation, serviceName);
```

Note: While modifying the client, ensure that the port name matches the port name of the migrated JWS.

3. Recompile and run the client with the ALDSP 2.5 classpath. This allows you to run the JWS successfully.

ALDSP 2.5 Upgrade: Known Issues and Workarounds

Table 6-3 are some of the known issues after you upgrade various components from ALDSP 2.5 environment to Oracle Data Service Integrator 10gR3:

Table 6-3 Known Issues and Workarounds

Known Issues	Workaround
An XQueryTypeException occurs when a read function, which is shredded from a custom Java function, is invoked.	The schema (.xsd) file needs to be recompiled using XMLBeans v2, using the following command: `java -classpath ${WL_HOME}/common/lib/javax.xml.stream_1.0.0.0.jar;${WL_HOME}/server/lib/xbean.jar com.bea.xbean.tool.SchemaCompiler *.xsd -d testbin -src testsrc -out <jarfilename>.jar` where `<WL_HOME>` is root directory, which contains the Oracle WebLogic Server 10gR3 installation and `<jarfilename>` is the name of the schema JAR file.
ALDSP 2.5 update properties are not displayed in the Properties view in WorkSpace Studio. For example, DS pragma elements are not displayed.	No workaround available.
The max thread per application property in ALDSP 2.5 is not imported into the Oracle Data Service Integrator 10gR3 configuration.	You can obtain similar results by configuring the dataspace Work Manager. However, the value is not the same because the pool of thread is shared across async/timeout spawned threads and the top-level EJB threads. In addition, because the Work Manager is self-tuning, it is advised that you do not specify a maximum- or minimum-threads constraint unless you have a specific need to do so. For additional information on the Oracle WebLogic 10gR3 Work Manager see: http://download.oracle.com/docs/cd/E12840_01/wls/docs103/config_wls/self_tuned.html
Schema projects that only exist in JAR format in the Libraries folder are not upgraded to create schemas in the dataspace project.	Obtain the original expanded schema project and include it in the application before starting upgrade.