### **Oracle® Fusion Middleware**

Installing Data Service Integrator 12*c* (12.1.3) **E47945-01** 

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Oracle Fusion Middleware Installing Data Service Integrator, 12c (12.1.3)

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# Preface

This document contains information about installing Oracle Data Service Integrator.

### Audience

This document is intended for users who want to work with Oracle Data Service Integrator.

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# **Related Documents**

For more information, see the following documents in the Oracle Data Service Integrator documentation set:

- Oracle Fusion Middleware Data Service Integrator Developer's Guide
- Oracle Fusion Middleware Administering Data Service Integrator
- Oracle Fusion Middleware Developing Data Service Integrator Applications
- Oracle® Fusion Middleware Using Data Service Integrator XQuery Engine

## Conventions

The following text conventions are used in this document:

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

Convention	Meaning
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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# Preparing to Install Oracle Data Service Integrator

Before you install Oracle Data Service Integrator, 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:

- Section 1.1, "Installation Overview"
- Section 1.2, "Verifying Certification and System Requirements"
- Section 1.3, "Understanding Oracle Data Service Integrator Install Versions"
- Section 1.4, "Understanding the Oracle Data Service Integrator Installation Topologies"

**Note:** Oracle Data Service Integrator was originally known as Liquid Data and AquaLogic Data Services Platform (ALDSP). Some instances of the original names remain in the product, installation path, and components.

### 1.1 Installation Overview

This section provides an overview of the tasks required to install Oracle Data Service Integrator.

#### **Task 1: Prepare to Install**

- 1. Check the supported platforms and databases, and verify that you have the installation prerequisites in place. For more information, see Section 1.2, "Verifying Certification and System Requirements."
- 2. Uninstall any previous versions of Oracle Data Service Integrator. For details see Chapter 5, "Deinstalling Oracle Data Service Integrator."

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

- **3.** Add an entry for the JDK bin directory (for example, JDK170\_40/bin) to your PATH environment variable. Java is a required software for running Oracle Data Service Integrator. The current release of Oracle Data Service Integrator requires the JDK version JDK170\_40 or later.
- **4.** Install WebLogic Server 12*c* (12.1.3) with JRF or WebLogic Server 12*c* (12.1.3) with JRF and JDBC. Oracle Data Service Integrator IDE runs as a WebLogic Server plugin and requires one of these WebLogic Server products to be installed.

Install WebLogic Server into the directory in which you are installing Oracle Data Service Integrator. Installing either of these WebLogic Server products will create an Oracle Middleware home (*<ORACLE\_HOME>*). An (*<ORACLE\_HOME>*) is required for installing Oracle Data Service Integrator.

For more information about WebLogic Server and downloads, see this URL:

http://www.oracle.com/us/products/middleware/cloud-app-founda
tion/weblogic/enterprise-edition/overview/index.html

**5.** Install Oracle Enterprise Pack for Eclipse (OEPE) version 12.1.3 (or later) if you will be using Eclipse to model dataspaces. The Developer installation of Oracle Data Service Integrator installs Eclipse plugins.

For more information about OEPE and downloads, see this URL:

http://www.oracle.com/technetwork/developer-tools/eclipse/ove
rview/index.html

Task 2: Install Oracle Data Service Integrator

You can install Oracle Data Service Integrator in either of the following modes on Windows, Linux, or UNIX systems:

- Oracle Universal Installer—Features an easy-to-use graphical installer application.
   For more information about using Oracle Universal Installer, see Chapter 2,
   "Installing Oracle Data Service Integrator Using Oracle Universal Installer."
- Silent mode—Reads an installer response file to determine the install options. For more information about using Silent mode, see Chapter 3, "Installing Oracle Data Service Integrator Using Silent Mode."

#### **Task 3: Perform Post-installation Tasks**

After installation, you can verify that the installation was successful and perform post-installation tasks for integration with WebLogic Server and Eclipse. For more information, see Chapter 4, "Post-Installation Tasks."

- If you will be using Oracle Data Service Integrator with WebLogic Server, you can
  install either the Developer or the Runtime version of the product, then create a
  preconfigured sample domain. See Section 4.2, "Creating a Sample Domain in
  WebLogic Server."
- If you will be using Oracle Data Service Integrator with Oracle Eclipse, you must install the Developer version of the product, and then complete some post-installation tasks. See Section 4.3, "Post-Installation Tasks for Oracle Eclipse."

# **1.2 Verifying Certification and System Requirements**

The certification matrix and system requirements documents should be used in conjunction with each other to verify that your environment meets the necessary requirements for installation.

### Step 1 Verify Your Environment Meets Certification Requirements

Make sure that you are installing your product on a supported hardware or software configuration. For more information, see the certification document for your release on the *Oracle Fusion Middleware Supported System Configurations* page.

Oracle has tested and verified the performance of your product on all certified systems and environments; whenever new certifications occur, they are added to the proper certification document right away. New certifications can occur at any time, and for this reason the certification documents are kept outside of the documentation libraries and are available on Oracle Technology Network.

### Step 2 Using the System Requirements Document to Verify Certification

The Oracle Fusion Middleware System Requirements and Specifications document should be used to verify that the requirements of the certification are met. For example, if the certification document indicates that your product is certified for installation on 64-Bit Oracle Linux 5, this document should be used to verify that your Oracle Linux 5 system has met the required minimum specifications, like disk space, available memory, specific platform packages and patches, and other operating system-specific items. System requirements can be updated at any time, and for this reason the system requirement documents are kept outside of the documentation libraries and are available on Oracle Technology Network.

### **1.3 Understanding Oracle Data Service Integrator Install Versions**

You can install either the Development version or the Runtime version of Oracle Data Service Integrator.

- Runtime version allows you to import, export, deploy, and administer Oracle Data Service Integrator deployment JARs.
- Development version provides all of the functionality as the Runtime version and also includes plugins for Oracle Eclipse. You can use the Eclipse environment to create and modify dataspaces and artifacts in data services.

### 1.4 Understanding the Oracle Data Service Integrator Installation Topologies

The following sections describe the topologies into which you can install Oracle Data Service Integrator.

- Single (Managed) Server Mode
- Multiple Managed Servers in a Cluster

### 1.4.1 Single (Managed) Server Mode

In this scenario, the WebLogic domain contains Machine 1, which contains the Administration Server, the Node Manager and Managed Server 1. Oracle Data Service Integrator is deployed in the Managed Server.

This scenario is illustrated in Figure 1–1. The elements in the illustration are described in Table 1–1.

Figure 1–1 Single (Managed) Server Mode



### 1.4.2 Multiple Managed Servers in a Cluster

In this scenario, the WebLogic Domain contains Machine 1 and Machine 2. Machine 1 contains the Administration Server, the Node Manager and Managed Server 1 within Cluster 1. Oracle Data Service Integrator is deployed in the Managed Server.

Machine 2 contains a Node Manager and Oracle Data Service Integrator deployed on Managed Server 2. Managed Server 2 is also contained in Cluster 1. The cluster is under the control of the Administration Server on Machine 1.

This scenario is illustrated in Figure 1–2. The elements in the illustration are described in Table 1–1.



Figure 1–2 Multiple Managed Servers in a Cluster

Topology		
Element	Description and Links to Additional Documentation	
WebLogic Domain	A logically related group of Java components (in this case, the administration Server, Managed Servers, and other related software components).	
	For more information, see "What is an Oracle WebLogic Server Domain" in <i>Understanding Oracle Fusion Middleware</i> .	
Administration Server	The central control entity of a domain which maintains the domain's configuration objects and distributes configuration changes to Managed Servers.	
	For more information, see "What is the Administration Server" in <i>Understanding Oracle Fusion Middleware</i> .	
Node Manager	A Java utility that runs as a separate process from Oracle WebLogic Server and allows you to perform common operations for a Managed Server, regardless of its location with respect to its Administration Server, and for system components	
	For more information, see "What Is Node Manager" in <i>Understanding Oracle Fusion Middleware</i> .	
Cluster	A collection of multiple WebLogic Server instances running simultaneously and working together.	
	For more information, see "Understanding Managed Servers and Managed Server Clusters" in <i>Understanding Oracle Fusion Middleware</i> .	
Machine	Logical representation of the computer that hosts one or more WebLogic Server instances (servers). Machines are also the logical glue between WebLogic Managed Servers and the Node Manager; in order to start or stop a Managed Server with Node Manager, the Managed Server must be associated with a machine.	
Managed Server	Host for your applications, application components, Web services, and their associated resources.	
	For more information, see "Understanding Managed Servers and Managed Server Clusters" in <i>Understanding Oracle Fusion Middleware</i> .	
Oracle Data Service Integrator	Oracle Data Service Integrator is deployed on the Managed Servers.	

Table 1–1Description of the Elements in the Oracle Data Service Integrator InstallationTopology

# Installing Oracle Data Service Integrator Using Oracle Universal Installer

This chapter describes how to install Oracle Data Service Integrator using Oracle Universal Installer. The Oracle Universal Installer can be used on Microsoft Windows and supported UNIX and Linux-based platforms.

This chapter has the following sections:

- Section 2.1, "Starting the Installation Program."
- Section 2.2, "Navigating the Oracle Data Service Integrator Installation Screens"
- Section 2.3, "Next Steps"

### 2.1 Starting the Installation Program

To install Oracle Data Service Integrator using Oracle Universal Installer:

- 1. Ensure that all installation prerequisites are met. See Section 1.1, "Installation Overview."
- **2.** Log in to the target system.
- **3.** The installer requires that a certified JDK already exists on your system. For more information, see the appropriate certification document for 12*c* (12.1.3) on the *Oracle Fusion Middleware Supported System Configurations* page.
- 4. Launch the Oracle Universal Installer.
  - **a.** Open a command prompt and navigate to the folder where you downloaded the Oracle Data Service Integrator installer odsi\_generic.jar.

**Note:** On Windows systems, you must have administrator privileges. On Linux or UNIX systems, you do not need administrator privileges.

**b.** Execute the JAR file by using the java - jar command. For example:

java -jar odsi\_generic.jar

The Oracle Universal Installer Welcome screen appears. Click **Next** to begin installing Oracle Data Service Integrator.

# 2.2 Navigating the Oracle Data Service Integrator Installation Screens

The installation program displays a series of screens, in the order listed in Table 2–1.

If you need additional help with any of the installation screens, click the screen name.

Screen	Description	
Installation Inventory Setup	This screen will appear if this is the first time you are installing any Oracle product on this host. Specify the location where you want to create your central inventory. Make sure that the operating system group name selected on this screen has write permissions to the central inventory location.	
	For more information about the central inventory, see "Understanding the Oracle Inventory" in <i>Installing Software with</i> <i>the Oracle Universal Installer</i> .	
Welcome	This screen introduces you to the product installer.	
Installation Location	Use this screen to specify the location of your Oracle home directory.	
	The Oracle Home directory serves as the central support directory for Oracle Data Service Integrator. Enter the name of the directory in the <b>Oracle Home</b> field, or choose a directory from the drop-down list. You must install Oracle Data Service Integrator in the same home directory where you installed WebLogic Server 12c (12.1.3) with JRF. Once you select a directory, you can click <b>View</b> to display the Oracle features installed at that location.	
	For more information, see "Selecting Directories for Installation and Configuration" in <i>Planning an Installation of Oracle Fusion</i> <i>Middleware</i> .	
Installation Type	Use this screen to select the type of installation and consequently, the products and feature sets you want to install.	
	In the Installation Type screen, choose whether you want to install the Developer version of Oracle Data Service Integrator or the Runtime version.	
	The Developer version installs these components:	
	<ul> <li>Data Services Runtime</li> </ul>	
	<ul> <li>Eclipse Plugins</li> </ul>	
	<ul> <li>Samples</li> </ul>	
	<ul> <li>SOA Common Components</li> </ul>	
	The Runtime version also installs these components, with the exception of the Eclipse Plugins. For more detail on the installed components, see Appendix A, "Understanding the Oracle Data Service Integrator Distribution."	
Prerequisite Checks	This screen verifies that your system meets the minimum necessary requirements.	
	The screen displays checks for the operating system certification, physical memory, and Java version. At any time you can stop the prerequisite checks, rerun the checks, and skip the checks by clicking <b>Stop</b> , <b>Rerun</b> , and <b>Skip</b> , respectively. Click <b>View Log</b> to display the results of the checks.	

 Table 2–1
 Oracle Data Service Integrator Install Screens

Screen	Description	
Installation Summary	The Installation Summary screen displays the components that will be installed and their installation locations.	
	Click <b>Save Response File</b> to save a copy of the installation details in the location of your choice. For examples of responce files, see Section 3.2, "Creating a Response File."	
Installation Progress	This screen allows you to see the progress of the installation. Click <b>View Messages</b> to view installation messages at the bottom of the screen. Click <b>View Log</b> to view detailed messages sent to the logger in a separate progress dialog box.	
Installation Complete	This screen appears when the installation is complete. Review the information on this screen, then click <b>Finish</b> to dismiss the installer.	
	You have successfully installed an instance of Oracle Data Service Integrator. If you selected the <b>Automatically Launch</b> <b>Configuration Utility</b> checkbox, then the Configuration Wizard launches.	

Table 2–1 (Cont.) Oracle Data Service Integrator Install Screens

# 2.3 Next Steps

See Section 4.1, "Verifying the Installation" for information on how to verify that Oracle Data Service Integrator installed correctly.

You can integrate Oracle Data Service Integrator with WebLogic Server and with Oracle Eclipse. For more information, see Section 4.2, "Creating a Sample Domain in WebLogic Server" and Section 4.3, "Post-Installation Tasks for Oracle Eclipse."

# Installing Oracle Data Service Integrator Using Silent Mode

This chapter describes how to install Oracle Data Service Integrator using Silent mode. Silent mode is ideal for remote installations or when incorporating the installation as part of a script. 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 response 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 response 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 Oracle home directory or the specified Oracle Data Service Integrator install directory 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.

The chapter includes the following sections:

- Section 3.1, "Using Silent Mode"
- Section 3.2, "Creating a Response File"
- Section 3.3, "Next Steps"

### 3.1 Using Silent Mode

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

To install using silent mode:

- 1. Ensure that all installation prerequisites are met. See Section 1.1, "Installation Overview."
- 2. Provide the appropriate installer response file.

When you run the Oracle Data Service Integrator installer in silent mode, you must provide a response file for the installation program. The response file specifies the location of the ORACLE\_HOME and the type of installation you want to perform (either Developer or Runtime). For more information, see Section 3.2, "Creating a Response File."

- **3.** Open a command window with Administrator privileges.
- 4. Navigate to the directory containing the Oracle Data Service Integrator installer, odsi\_generic.jar.
- **5.** Enter the following command to run the installer in silent mode. The command has the following format:

java -jar odsi\_generic.jar -silent -responseFile<response\_file\_absolute\_path>
-waitForCompletion

where *response\_file\_absolute\_path* represents the absolute path to the response file.

**6.** Run the installer application, specifying the response file and the log file name as options.

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

# 3.2 Creating a Response File

Silent mode typically uses a response file (.rsp) that contains the installation parameters as name=value pairs. An easy way to create a response file is to run the installer in graphical mode and then save the installation parameters to a response file at the Installation Summary screen. Use the saved file to replicate the installation on other computers or modify the file to change the installation as required.

If you must write your own response file, it must contain the parameters described in Table 3–1. The response file must be saved with the extension ".rsp".

Parameter	Description
Response File Version	The version of the response file for this version of Oracle Data Service Integrator. For the current release, the value must be 1.0.0.0.0.
ORACLE_HOME	The value must be an absolute path. If the directory does not exist, the installer creates the directory. If the directory already exists, it must be empty or it must be an existing valid ORACLE_HOME.
INSTALL_TYPE	The version of Oracle Data Service Integrator that you are installing. Valid values are either ODSI Developer Installation or ODSI Runtime Installation.

Table 3–1 Response File Parameters

Example 3–1 illustrates the contents of a response file for a Developer installation.

#### Example 3–1 Sample Contents of a Developer Response File

[ENGINE]

#DO NOT CHANGE THIS. Response File Version=1.0.0.0.0

[GENERIC]

#The oracle home location. This can be an existing Oracle Home or a new Oracle Home ORACLE HOME=/scratch/aaa/bbbb

#Set this variable value to the Installation Type selected. e.g. ODSI Developer Installation, ODSI Runtime Installation. INSTALL\_TYPE=ODSI Developer Installation

Example 3–2 illustrates the contents of a response file for a Runtime installation.

#### Example 3–2 Sample Contents of a Runtime Response File

[ENGINE]

#DO NOT CHANGE THIS. Response File Version=1.0.0.0.0

[GENERIC]

#The oracle home location. This can be an existing Oracle Home or a new Oracle
Home
ORACLE\_HOME=/scratch/aaa/bbbb

#Set this variable value to the Installation Type selected. e.g. ODSI Developer Installation, ODSI Runtime Installation. INSTALL\_TYPE=ODSI Runtime Installation

### 3.3 Next Steps

See Section 4.1, "Verifying the Installation" for information on how to verify that Oracle Data Service Integrator installed correctly.

You can integrate Oracle Data Service Integrator with WebLogic Server and with Oracle Eclipse. For more information, see Section 4.2, "Creating a Sample Domain in WebLogic Server" and Section 4.3, "Post-Installation Tasks for Oracle Eclipse."

# **Post-Installation Tasks**

This chapter describes tasks you can perform after installing 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:

- Section 4.1, "Verifying the Installation"
- Section 4.2, "Creating a Sample Domain in WebLogic Server"
- Section 4.3, "Post-Installation Tasks for Oracle Eclipse"
- Section 4.4, "Starting the Development of a Data Integration Solution"

### 4.1 Verifying the Installation

After you complete the installation, you can verify it by successfully completing the following tasks:

- Reviewing Installation Log Files
- Checking the Directory Structure

### 4.1.1 Reviewing Installation Log Files

Review the contents of the installation log files to make sure that no problems were encountered. The installation and configuration log files can contain useful information to help troubleshoot any issues you may encounter. For more information about these log files and their contents, see "Configuring Installation and Configuration Log Files" in *Installing Software with the Oracle Universal Installer*.

### 4.1.2 Checking the Directory Structure

The contents of your Oracle Data Service Integrator installation vary based on the options you selected during the installation.

For more information about the directory structure you should see after installation, see "What are the Key Oracle Fusion Middleware Directories?" in *Understanding Oracle Fusion Middleware*.

### 4.2 Creating a Sample Domain in WebLogic Server

This section describes the two modes in which you can configure Oracle Data Service Integrator to work with a sample WebLogic Server domain. It also describes how to start the WebLogic Servers.

- Create a Sample Domain in Compact Mode—In this configuration, the sample domain contains only an administration server.
- Create a Sample Domain in Expanded Mode—In this configuration, the sample domain contains an administration server and a managed server.

**Note:** •Managed Servers should always be assigned to the server-group ODSI-MGD-SVRS to get the Oracle Data Service Integrator specific domain configurations.

• For a detailed description of WebLogic Server domains and the domain configuration script, see *Creating WebLogic Domains Using the Configuration Wizard*. For more information on starting WebLogic Servers, see "Starting and Stopping Servers" in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

### 4.2.1 Create a Sample Domain in Compact Mode

In Compact Mode, the sample domain contains only an administration server. In this case, you can use the WebLogic Server Quickstart domain configuration scripts. The Quickstart scripts can be found under <code>\$ODSI\_HOME/common/bin</code>. Run the create\_ sample\_domain.sh script for the Linux or UNIX platform; create\_sample\_domain.cmd for Windows platforms.

The create\_sample\_domain script invokes the Configuration wizard. In the wizard, specify the domain location, the port, and the WebLogic Server user name and password. The create\_sample\_domain script will also inherit the samples domain template and create a pre-configured samples domain in the location you specify.

To create an Oracle Data Service Integrator sample domain using the Quickstart configuration scripts, follow these steps:

- 1. Ensure that you have set the Middleware home (MW\_HOME) environment variable.
- 2. Navigate to the odsi/common/bin folder, for example:

cd \$MW\_HOME/odsi/common/bin

3. Run the create\_sample\_doman script, for example:

./create\_sample\_domain.sh (Linux or UNIX) or,

create\_sample\_domain.cmd (Windows)

This script launches the Weblogic Server Domain Configuration Wizard. For a detailed description of WebLogic Server domains and the domain configuration script, see *Creating WebLogic Domains Using the Configuration Wizard*.

- 4. Once you have completed the wizard and created the domain, start the domain by invoking the startWebLogic script under <*DOMAIN\_HOME*>/bin.
- 5. Deploy the sample dataspace to the newly created domain.

Use the odsiconsole to import the sample dataspace, MediatorSamples.jar, from the \$MW\_HOME/odsi/samples/wlstscripts folder.

### 4.2.2 Create a Sample Domain in Expanded Mode

In Expanded Mode, the sample domain contains an administration server on port 7001 and a managed server (Oracle Data Service Integrator server) on port 15501.

These instructions require the Repository Creation Utility (RCU). RCU is a Fusion Middleware tool which creates database-based repositories. Oracle Data Service Integrator does not have a repository by itself, but it relies on some Fusion Middleware schemas for WebLogic Server and JCF when using a full domain.

- **1.** Run the RCU utility to create a JRF schema (this is required because Oracle Data Service Integrator depends on the JRF feature set).
  - a. Navigate to the oracle\_common/bin folder, for example:

cd \$MW\_HOME/oracle\_common/bin

**b.** Run the RCU utility, for example:

./rcu

- 2. Run Oracle Data Service Integrator configuration wizard.
  - **a.** Navigate to the WebLogic Server wlserver/common/bin folder, for example:

cd \$MW\_HOME/wlserver/common/bin

**b.** Run the WebLogic Server Configuration Wizard, for example:

./config.sh

- **c.** Select Oracle Data Service Integrator base template from the list of available domain templates.
- d. For RCU, provide the RCU schema details created in Step 1.
- **e.** Accept the provided defaults for the Administration Server, Managed Server, Node Manager, and so on.

#### Start the WebLogic Servers

Once you have created the Oracle Data Service Integrator domain, follow these steps to start the Administration and Managed servers.

To Start the Administration Server:

1. Navigate to the \$DOMAIN\_HOME/bin folder, for example:

cd \$DOMAIN\_HOME/bin

- 2. Run the startWeblogic script to start the WebLogic Server Administration Server, for example:
  - ./startWeblogic.cmd (Windows)
  - ./startWeblogic.sh (Linux, UNIX)

The Administration Server starts in foreground mode with the default port 7001 (http://hostname:7001/console).

**3.** Open another web browser and connect to the Oracle Data Service Integrator Console by using the URL http://hostname:7001/odsiconsole.

To Start a Managed Server:

**Note:** If the WebLogic Server domain is created in Expanded Mode, then a managed server is required. Otherwise, this is optional.

1. Navigate to the \$DOMAIN\_HOME/bin folder, for example:

#### cd \$DOMAIN\_HOME/bin

- 2. Run the startManagedWebLogic script to start the managed Oracle Data Service Integrator server, for example:
  - ./startManagedWebLogic.sh ODSI\_server1 (Windows)
  - ./startManagedWebLogic.sh ODSI\_server1 (Linux, UNIX)

In this example, ODSI\_server1 is the name given to the managed Oracle Data Service Integrator server. The managed server starts in foreground mode with the default port 15501 (http://hostname:15501/ODSI\_server1) with the associated administration server port 7001 (http://hostname:7001/console).

After startup, no dataspaces are deployed on the Oracle Data Service Integrator server. However, you can deploy dataspaces on the administration and managed servers. For example, for dataspaces deployed on managed servers that are Web Service enabled, you can access the endpoints from the managed server port.

## 4.3 Post-Installation Tasks for Oracle Eclipse

If you have installed the Developer version of Oracle Data Service Integrator, then you can integrate it as a plugin with Eclipse. To integrate with Eclipse, Oracle Data Service Integrator provides a script in the *MW\_HOME/odsi/bin/directory* to guide you through the integration process. The file is named:

- odsiconfig.cmd (Windows)
- odsiconfig.sh (Linux and UNIX)
- 1. Open a command prompt and run the odsiconfig executable for your platform.

The command starts a wizard to guide you through the integration process.

**2.** If the system detects that you do not have an Oracle inventory file, then the Installation Inventory Setup screen will appear. If your system detects that you *do* have an inventory file, then this screen will not appear and you can skip this step.

Enter (or browse for) the location of the directory where Oracle inventory files will be stored in the **Inventory Directory** field. Also, enter the name of the group that will have write permission to the inventory directory in the **Operating System Group** field. Click **OK** to start the Oracle Data Service Integrator Configuration Wizard.

Oracle Fusio	on Middleware 12c i	nstallation Inventory Setu	n x	
Installation Inv	entory Setup			
Central Inventory Directory Enter the Central inventory directory for all your oracle installations.The installer will create a new central inventory directory if it does not exist.				
Inventory <u>D</u> irectory:	/home/bjagdees/oralnver Enter the full path for the c	ntory directory.	<u>B</u> rowse	
Operating <u>S</u> ystem Group :	svrtech Specify a group with write directory	permission to the inventory		
Central Inventory Pointer	File			
Click OK to create a script (createCentralInventory.sh) in the inventory directory. Run this script to create a pointer file, which is used to identity the location of the central inventory for future installations and administrative operations, such as patching and upgrade.				
Help		<u></u> K	Cancel	

Figure 4–1 Installation Inventory Setup Page

**3.** Click **Next** in the Oracle Data Service Integrator Configuration wizard Welcome page.

### Figure 4–2 Welcome Page



**4.** Browse for the location of the Oracle Data Service Integrator Eclipse home in the Specify Eclipse Home page. Click **Next**.

Oracle Fusion Middleware	12c Oracle Data Service Integrator Configuration Step 2	of 5 – X
Specify Eclipse Home		
Welcome		
Specify Eclipse Home		
<u>Configuration Summary</u>		
Configuration Progress		
Configuration Complete		
	Oracle Data Service Integrator Eclipse Home:	
	Browse	

Figure 4–3 Specify Eclipse Home Page

5. Review the configuration in the Configuration Summary screen.

If the Eclipse plugin is configured as you want it, click **Next**.

If you need to make changes to the configuration, click **Previous** to return to the appropriate screen for the settings you want to change.

**6.** View the progress of the Eclipse plugin installation in the Configuration Progress screen.

When the process completes, click Next.

**7.** Review the Eclipse plugin installation results in the Configuration Complete screen. Click **Finish**.

You can use the Eclipse IDE to import the MediatorSamples.jar sample dataspace into your workspace. For more information, see "Sample Static Mediator Application" in *Developing Data Service Integrator Applications*.

### 4.4 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 *Administering Data Service Integrator*.

- When you are ready to start mapping source and target XML schemas and constructing queries using WebLogic Server, refer to *Data Service Integrator Developer's Guide*.
- When your application developer is ready to access data services, see *Developing Data Service Integrator Applications*.
- For information on the XQuery engine, functions and the XQSE language see *Using Data Service Integrator XQuery Engine*.

# **Deinstalling 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 deinstaller.

You should undeploy any Oracle Data Service Integrator applications before deinstalling Oracle Data Service Integrator from your system. For information about undeploying, see "Undeploying an Application or Module" in *Deploying Applications to Oracle WebLogic Server*.

To deinstall Oracle Data Service Integrator using Oracle Universal Installer:

- 1. Back up any data you want to retain for use with a new installation.
- 2. Shut down your server.
- **3.** Run the deinstaller.
  - On Windows systems, choose the Uninstall Oracle Middleware option on the Windows Start Menu. The Uninstall Oracle Middleware option can be found on a path similar to the following:

### Start > All Programs > Oracle > OracleHome > Uninstall Oracle Middleware

• You can also start the deinstallation process from the command line. Navigate to the <ORACLE\_HOME>/oui/bin folder. Execute the deinstall.cmd command for Windows platforms or the deinstall.sh command for Linux or UNIX platforms.

The Distribution to Uninstall screen appears.

**4.** In the Distribution to Uninstall screen, ensure that Oracle Data Service Integrator appears in the **Select Distribution to Uninstall** field. If it does not, select it from the drop-down list.

Figure 5–1 illustrates the Distribution to Uninstall screen. The screen displays the Oracle Data Service Integrator components that will be uninstalled. Click **Uninstall**.

Figure 5–1 Oracle Data Service Integrator Uninstall Screen

Distribution to Uninstall		
Distribution to Uninstall	ORACLE	$\mathbf{x}$
Select Distribution to Uninstall		
Orade_Data_Service_Integrator 12.1.3.0.0		•
Distribution Contents:		-
<ul> <li>DMS For JSE 12, 1, 3, 0, 0</li> </ul>		
<ul> <li>JRF Preso Tools 12.1.3.0.0</li> </ul>		
Next Generation Install Core 13.2.0.0.0		
• OPatch 13.2.0.0.0		22
<ul> <li>Fusion Middleware Installer UI Framework 12.1.3.0.0</li> </ul>		
<ul> <li>Fusion Middleware ODSI Installer UI Files 12.1.3.0.0</li> </ul>		
Data Services ThirdParty Libraries 12.1.3.0.0		
<ul> <li>SOA Common Components 12, 1, 3, 0, 0</li> </ul>		
Data Services Runtime 12.1.3.0.0		
Eclipse Plugins 12.1.3.0.0		-
	Uninst	al Cancel

**5.** The Oracle Universal Installer Deinstallation wizard opens and displays the Welcome screen.

Figure 5–2 illustrates the Welcome screen. Click Next.

Figure 5–2 Deinstallation Wizard Welcome Screen



**6.** The Deinstallation Summary screen displays the components that will be deinstalled and their location in the filesystem.

Figure 5–3 illustrates the Deinstallation Summary screen. Click **Save Response File** to save a record of the deinstallation process. Click **Deinstall** to start deinstallation.



Figure 5–3 Deinstallation Wizard Deinstallation Summary Screen

**7.** The Deinstallation Progress screen displays the progress of the deinstallation process.

Figure 5–4 illustrates the Deinstallation Progress screen. Click **View Messages** to display the detailed messages that are sent during deinstallation. Click **View Log** to display the deinstallation log. Click **Next** to proceed.

Oracle Fusion Middleware 12c D	einstallation	- Step 3 of 4	_			
Deinstallation Progress	5				FUSION MIDDLEWARE	
Q Welcome	1					
Deinstallation Summary				100%		
Deinstallation Progress		Delected				
<ul> <li>Deinstallation Complete</li> </ul>	- <b>-</b>	Deinstall				
	View	Messages	C	View Succes	asful <u>T</u> aska	View Log
	7	5-4		3	Hardware and S Engineered to Work	<mark>oftware</mark> Together
Hclp					≺Back Next> Eir	tish Cancel

Figure 5–4 Deinstallation Wizard Deinstallation Progress Screen

**8.** The Deinstallation Complete screen displays the Oracle Data Service Integrator components that have been removed.

Figure 5–5 illustrates the Deinstallation Complete screen. Click **Finish** to dismiss the Deinstallation Wizard.

Figure 5–5 Deinstallation Wizard Deinstallation Complete Screen



# Upgrading Oracle Data Service Integrator 10gR3 Dataspaces to 12.1.3

This chapter describes the steps to upgrade Oracle Data Service Integrator runtime and development environments from 10gR3 dataspaces to 12.1.3 dataspaces.

This chapter has the following sections:

- Section 6.1, "Upgrading the Runtime Environment from 10gR3 Dataspaces to 12.1.3"
- Section 6.2, "Upgrading the Development Environment from 10gR3 Dataspaces to 12.1.3"

# 6.1 Upgrading the Runtime Environment from 10*g*R3 Dataspaces to 12.1.3

Follow these steps to migrate the runtime (deployment) environment from 10.3 dataspaces to 12.1.3 dataspaces:

- 1. Use the Oracle Data Service Integrator Dataspace Export in the Oracle Data Service Integrator 10gR3 domain to export the entire dataspace to a JAR archive. Repeat this step for each dataspace.
  - **a.** In the Oracle Data Service Integrator Administration Console, click the **System Administration Category** and the dataspace that you want to export as a JAR.
  - **b.** Click the Export tab. In the Export tab, ensure that you select the **Include configuration with artifacts** checkbox.

For more information, see "Exporting Dataspace Artifacts" in *Administering Data Service Integrator*.

#### Notes:

- Before exporting the data sources, you must ensure that the underlying drivers are supported in 12.1.3 WebLogic Server. If they are not supported, then you must align them manually.
- The list of datasources that must be migrated for a given dataspace are obtained from the .sources file in the exported Oracle Data Service Integrator JAR archive.
- 2. Shutdown the Oracle Data Service Integrator 10gR3 domain.

**3.** Install Oracle Data Service Integrator 12.1.3 in a new Oracle Middleware Home.

For more information, see Chapter 2, "Installing Oracle Data Service Integrator Using Oracle Universal Installer" and Chapter 3, "Installing Oracle Data Service Integrator Using Silent Mode."

**4.** Create a new Oracle Data Service Integrator domain in 12.1.3. Recreate the 10gR3 topology in the 12*c* domain.

For more information, see Section 4.2, "Creating a Sample Domain in WebLogic Server."

**5.** Use the WebLogic Server Console or WLST to recreate all of the JNDI data sources that you used in your 10gR3 configuration in your 12*c* configuration.

\*\* (You can also refer on how to export/import data source from a WLS guide)?

6. Import the 10gR3 dataspace into the new 12*c* domain.

For more information, see "Importing Dataspace Artifacts" in *Administering Data Service Integrator*.

7. Start the Oracle Data Service Integrator 12*c* domain.

For more information, see "Starting and Stopping WebLogic Server" and "Launching Oracle Data Service Integrator Administration Console" in *Administering Data Service Integrator*.

# 6.2 Upgrading the Development Environment from 10*g*R3 Dataspaces to 12.1.3

Follow these steps to migrate the development environment from 10.3 dataspaces to 12.1.3 dataspaces:

1. In the 10gR3 Eclipse environment, use the export tools in the Eclipse IDE to export the Oracle Data Service Integrator dataspace project.

For more information, see "Exporting Dataspace Projects or Project Folders" and "Generating a Data Service Definitions and Artifacts JAR" in *Oracle Fusion Middleware Data Service Integrator Developer's Guide*.

- **2.** Download and install the 12.1.3 version of Oracle Enterprise Pack for Eclipse (OEPE).
- **3.** Install 12.1.3 Oracle Data Service Integrator. Install the Developer version of the product. See Chapter 2, "Installing Oracle Data Service Integrator Using Oracle Universal Installer" and Chapter 3, "Installing Oracle Data Service Integrator Using Silent Mode".
- 4. Complete the post-installation tasks to integrate Oracle Data Service Integrator with Eclipse. For more information, see Section 4.3, "Post-Installation Tasks for Oracle Eclipse."
- **5.** In the 12.1.3 Eclipse environment, use the import tools to import the Oracle Data Service Integrator dataspace project. See "Importing a Dataspace Project" in *Oracle Fusion Middleware Data Service Integrator Developer's Guide*.

# Understanding the Oracle Data Service Integrator Distribution

This appendix describes the components that are installed with the Oracle Data Service Integrator distribution. You can install the Developer version of the product or the Runtime version.

The following components are available:

- Oracle Data Service Integrator Runtime component is available if you install either the Developer or the Runtime version of Oracle Data Service Integrator. This component is a prerequisite for installing other components.
- Oracle Eclipse Plugins component is available *only* if you install the Developer version of Oracle Data Service Integrator. It is not available if you install the Runtime version.
- Oracle Data Service Integrator Samples component is available if you install either the Developer or the Runtime version of Oracle Data Service Integrator.

Table A-1 describes the contents of each component.

Component Name	Sub-components
Oracle Data Service Integrator Runtime	<ul> <li>Oracle Data Service Integrator runtime including the XQuery engine</li> </ul>
	<ul> <li>Oracle Data Service Integrator Administration Console</li> </ul>
	<ul> <li>Oracle Data Service Integrator base domain template</li> </ul>
	<ul> <li>OSB Common Components</li> </ul>
	<b>Note:</b> Oracle WebLogic Server 12 <i>c</i> (12.1.3) with JRF (or JRF and JDBC) is a prerequisite for Oracle Data Service Integrator runtime.

Component Name	Sub-components				
Oracle Eclipse Plugins	Oracle Data Service Integrator Main Plug-in				
	Plugins:				
	<ul> <li>ODSI Applications plugin</li> </ul>				
	<ul> <li>ODSI Common plugin</li> </ul>				
	<ul> <li>ODSI Common Core plugin</li> </ul>				
	<ul> <li>ODSI Common UI Palette COmponent</li> </ul>				
	<ul> <li>ODSI Compiler Services plugin</li> </ul>				
	<ul> <li>ODSI Eclipse IDE help</li> </ul>				
	<ul> <li>ODSI External Libraries plugin</li> </ul>				
	<ul> <li>ODSI Import Metadata plugin</li> </ul>				
	<ul> <li>ODSI Main plugin</li> </ul>				
	<ul> <li>ODSI Model plugin</li> </ul>				
	<ul> <li>ODSI Refactor plugin</li> </ul>				
	<ul> <li>ODSI Samples</li> </ul>				
	<ul> <li>ODSI Serviceview Design Views</li> </ul>				
	<ul> <li>ODSI Views Plugin</li> </ul>				
Oracle Data Service Integrator Samples	<ul> <li>ODSI sample domain template</li> </ul>				
	<ul> <li>Sample Domain Creation scripts</li> </ul>				
	<ul> <li>Sample Derby Datasource Pre-Configured Dump</li> </ul>				
	<ul> <li>Sample Scripts for creating Derby Datasource</li> </ul>				
	Retail Dataspace Sample Application				

Table A–1 (Cont.) Oracle Data Service Integrator Installation Components