# Oracle® Fusion Middleware

Installing SOA Suite and Business Process Management Suite

Quick Start for Developers

12*c* (12.2.1.1)

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Describes how to use Quick Install to establish a development or evaluation JDeveloper environment.

ORACLE

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# Contents


Preface ..... ix

Audience ..... ix
Documentation Accessibility ..... ix
Conventions ..... ix

**Part I** Preparing to Install Quick Start

**1** Introducing the Quick Start Distributions

1.1 Orientation ..... 1-1
1.2 Planning Your Installation ..... 1-2
1.3 Understanding Quick Start ..... 1-2
1.4 Understanding the Oracle SOA Quick Start Distribution ..... 1-2
1.5 Understanding the Oracle Business Process Management Suite Quick Start Distribution ..... 1-3
1.6 Understanding How to Add More Components ..... 1-4
1.6.1 About Oracle Stream Analytics ..... 1-4
1.6.2 About Oracle B2B ..... 1-5
1.6.3 About Oracle SOA Suite for Healthcare Integration ..... 1-5
1.6.4 About Oracle Managed File Transfer ..... 1-5
1.7 Understanding Domain Configurations ..... 1-6

**2** Preparing to Install Quick Start

2.1 Verifying Certification, System Requirements, and Interoperability ..... 2-1
2.2 Understanding the Software Required for an Oracle Fusion Middleware Product Installation ..... 2-2
2.2.1 Understanding Database Requirements for an Oracle Fusion Middleware Installation ..... 2-2
2.2.2 Understanding JDK Requirements for an Oracle Fusion Middleware Installation ..... 2-4
2.3 Selecting an Installation User ..... 2-4
2.3.1 Understanding User Permissions ..... 2-5
2.3.2 Understanding Non-Default User Permissions on UNIX Operating Systems ..... 2-7
2.3.3 Verifying the Installation User has Administrator Privileges on Windows Operating Systems ..... 2-7

2.4 Setting JAVA_HOME ..... 2-8
2.5 Next Steps ..... 2-8

**Part II** Quick Start for Oracle SOA Suite

**3** Installing Oracle SOA Suite Quick Start for Developers

3.1 Orientation ..... 3-1
3.2 Downloading the Oracle SOA Suite Quick Start Installer ..... 3-1
3.3 Launching the Oracle SOA Suite Quick Start Installer ..... 3-2
3.4 Navigating the Installation Screens ..... 3-2
3.5 Next Steps ..... 3-3

**4** Configuring an Integrated WebLogic Server Domain

4.1 Orientation ..... 4-1
4.2 Understanding Quick Start Domains ..... 4-2
4.3 Preparing to Launch the Integrated WebLogic Server ..... 4-2
4.3.1 Setting the JDEV_USER_DIR Environment Variable ..... 4-3
4.3.2 Setting the ORACLE_HOME Environment Variable ..... 4-4
4.3.3 Checking Entropy for Oracle Linux ..... 4-4
4.4 Configuring JDeveloper's Default Domain ..... 4-4
4.4.1 Launching the Integrated WebLogic Server ..... 4-4
4.4.2 Verifying Your Domain ..... 4-8
4.4.3 Disabling Secure Sockets Layer (SSL) ..... 4-8
4.5 Configuring a Standalone Domain ..... 4-8
4.5.1 Starting the Standalone Domain Configuration Wizard ..... 4-9
4.5.2 Navigating the Configuration Wizard Screens ..... 4-9
4.5.3 Launching the Application Server Connection Wizard ..... 4-10
4.5.4 Navigating the Create Application Server Connection Wizard Screens ..... 4-11
4.5.5 Verifying Your Connection ..... 4-12
4.6 Understanding Basic JDeveloper Functions ..... 4-12
4.6.1 Stopping the Integrated WebLogic Server ..... 4-12
4.6.2 Re-launching JDeveloper ..... 4-13
4.7 Managing Multiple Installations on the Same Machine ..... 4-13
4.8 Switching Between Quick Start Distributions ..... 4-14
4.9 Next Steps ..... 4-14

**5** Configuring a Compact Domain

5.1 Orientation ..... 5-1
5.2 Preparing to Configure a Compact Domain for a Quick Start Installation ..... 5-1
5.2.1 Closing Oracle JDeveloper, Extra Server Connections, or Java DB ..... 5-2
5.2.2 Downloading and Installing a Supported Database ..... 5-2
5.2.3 Configuring a 12c Database for Quick Start ..... 5-2
5.3 Installing Required Schemas ..... 5-3

5.3.1 Running Installers for Additional Components ..... 5-3
5.3.2 Creating Schemas for Quick Start with the Repository Creation Utility ..... 5-3
5.4 Configuring a Compact Domain ..... 5-6
5.4.1 Starting the Configuration Wizard ..... 5-7
5.4.2 Selecting the Domain Type and Domain Home Location ..... 5-7
5.4.3 Selecting Configuration Templates for Oracle SOA Suite Quick Start ..... 5-8
5.4.4 Selecting the Application Home Location ..... 5-9
5.4.5 Configuring the Administrator Account ..... 5-9
5.4.6 Specifying the Domain Mode and JDK ..... 5-9
5.4.7 Specifying the Datasource Configuration Type ..... 5-9
5.4.8 Specifying JDBC Component Schema Information ..... 5-10
5.4.9 Testing the JDBC Connections ..... 5-10
5.4.10 Specifying the Path to the Keystore Certificate or Key ..... 5-10
5.4.11 Selecting Advanced Configuration ..... 5-11
5.4.12 Configuring the Domain ..... 5-11
5.4.13 Reviewing Your Domain Location ..... 5-11
5.5 Connecting JDeveloper to the Compact Domain ..... 5-12
5.5.1 Launching the Application Server Connection Wizard ..... 5-12
5.5.2 Reviewing Your Domain Location ..... 5-13
5.5.3 Verifying Your Connection ..... 5-13
5.6 Next Steps ..... 5-14

**Part III** Quick Start for Oracle Business Process Management Suite

**6** Installing Oracle Business Process Management Suite Quick Start for Developers

6.1 Orientation ..... 6-1
6.2 Downloading the Oracle Business Process Management Suite Quick Start Installer ..... 6-1
6.3 Launching the Oracle Business Process Management Suite Quick Start Installer ..... 6-2
6.4 Navigating the Installation Screens ..... 6-3
6.5 Next Steps ..... 6-3

**7** Configuring an Integrated WebLogic Server Domain

7.1 Orientation ..... 7-1
7.2 Understanding Quick Start Domains ..... 7-2
7.3 Preparing to Launch the Integrated WebLogic Server ..... 7-2
7.3.1 Setting the JDEV_USER_DIR Environment Variable ..... 7-3
7.3.2 Setting the ORACLE_HOME Environment Variable ..... 7-4
7.3.3 Checking Entropy for Oracle Linux ..... 7-4
7.4 Configuring JDeveloper's Default Domain ..... 7-4
7.4.1 Launching the Integrated WebLogic Server ..... 7-4
7.4.2 Verifying Your Domain ..... 7-8
7.4.3 Disabling Secure Sockets Layer (SSL) ..... 7-8
7.5 Configuring a Standalone Domain ..... 7-8

7.5.1 Starting the Standalone Domain Configuration Wizard ..... 7-9
7.5.2 Navigating the Configuration Wizard Screens ..... 7-9
7.5.3 Launching the Application Server Connection Wizard ..... 7-10
7.5.4 Navigating the Create Application Server Connection Wizard Screens ..... 7-11
7.5.5 Verifying Your Connection ..... 7-12
7.6 Understanding Basic JDeveloper Functions ..... 7-12
7.6.1 Stopping the Integrated WebLogic Server ..... 7-12
7.6.2 Re-launching JDeveloper ..... 7-13
7.7 Managing Multiple Installations on the Same Machine ..... 7-13
7.8 Switching Between Quick Start Distributions ..... 7-14
7.9 Next Steps ..... 7-14

**8** Configuring a Compact Domain

8.1 Orientation ..... 8-1
8.2 Preparing to Configure a Compact Domain for a Quick Start Installation ..... 8-1
8.2.1 Closing Oracle JDeveloper, Extra Server Connections, or Java DB ..... 8-2
8.2.2 Downloading and Installing a Supported Database ..... 8-2
8.2.3 Configuring a 12c Database for Quick Start ..... 8-2
8.3 Installing Required Schemas ..... 8-3
8.3.1 Running Installers for Additional Components ..... 8-3
8.3.2 Creating Schemas for Quick Start with the Repository Creation Utility ..... 8-3
8.4 Configuring a Compact Domain ..... 8-6
8.4.1 Starting the Configuration Wizard ..... 8-7
8.4.2 Selecting the Domain Type and Domain Home Location ..... 8-7
8.4.3 Selecting Configuration Templates for Oracle Business Process Management Suite ..... 8-8
8.4.4 Selecting the Application Home Location ..... 8-9
8.4.5 Configuring the Administrator Account ..... 8-9
8.4.6 Specifying the Domain Mode and JDK ..... 8-9
8.4.7 Specifying the Datasource Configuration Type ..... 8-9
8.4.8 Specifying JDBC Component Schema Information ..... 8-10
8.4.9 Testing the JDBC Connections ..... 8-10
8.4.10 Specifying the Path to the Keystore Certificate or Key ..... 8-10
8.4.11 Selecting Advanced Configuration ..... 8-11
8.4.12 Configuring the Domain ..... 8-11
8.4.13 Reviewing Your Domain Location ..... 8-11
8.5 Connecting JDeveloper to the Compact Domain ..... 8-12
8.5.1 Launching the Application Server Connection Wizard ..... 8-12
8.5.2 Reviewing Your Domain Location ..... 8-13
8.5.3 Verifying Your Connection ..... 8-13
8.6 Next Steps ..... 8-14

**Part IV** Post-configuration Tasks for Oracle Quick Start

**9** Adding Components to a Quick Start Installation

9.1 Orientation ... 9-1
9.2 About Adding Components to a Quick Start Installation ... 9-1
9.3 Installing Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer for Quick Start ... 9-2
9.3.1 Installing Oracle B2B for Quick Start ... 9-2
9.3.2 Installing Oracle SOA Suite for Healthcare Integration for Quick Start ... 9-3
9.3.3 Installing Oracle Managed File Transfer for Quick Start ... 9-6
9.4 Creating Schemas for Quick Start Components ... 9-7
9.5 Updating a Compact Domain ... 9-7
9.5.1 Launching the Domain Configuration Wizard ... 9-7
9.5.2 Selecting the Domain Type and Domain Home Location ... 9-8
9.5.3 Selecting the Configuration Templates ... 9-8
9.5.4 Specifying the Datasource Configuration Type ... 9-8
9.5.5 Verifying the Component Datasources ... 9-9
9.5.6 Testing the JDBC Connections ... 9-9
9.5.7 Selecting Advanced Configuration ... 9-9
9.5.8 Configuring the Domain ... 9-9
9.5.9 Reviewing Your Domain Location ... 9-9
9.6 Understanding Oracle Stream Analytics Design Time ... 9-9
9.7 Next Steps ... 9-10

**10** Running a Sample Application

10.1 Creating an Oracle Business Process Management Suite Sample Application ... 10-1
10.2 Creating an Oracle Stream Analytics Project in JDeveloper ... 10-1
10.3 Next Steps ... 10-1

**11** Deinstalling Oracle Quick Start

11.1 Performing Pre-Deinstallation Tasks ... 11-1
11.2 Deinstalling a Quick Start Distribution ... 11-1
11.2.1 Starting the Deinstaller ... 11-1
11.2.2 Manually Removing the Oracle Home ... 11-2
11.2.3 Cleaning Up JDeveloper Artifacts ... 11-2

# Preface

This document describes how to install a development or evaluation environment and to build or test applications using one of the following Oracle Fusion Middleware distributions:

- Oracle SOA Suite Quick Start for Developers
- Oracle Business Process Management Suite Quick Start for Developers

This Preface describes:

Audience

Documentation Accessibility

Conventions

## Audience

*Installing SOA Suite and Business Process Management Suite Quick Start for Developers* is intended for Oracle SOA Suite application developers. It can also be used by those who want to evaluate the Oracle SOA Suite and Oracle Business Process Management features and capabilities available within Oracle JDeveloper.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at `http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc`.

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## 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. |
| *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. |

# Part I

# Preparing to Install Quick Start

Before you install Oracle Quick Start, use this part to understand the Quick Start distributions and verify that your system is certified and capable of running Quick Start.


Introducing the Quick Start Distributions

Preparing to Install Quick Start

Before installing Quick Start, you must verify that it can run on your system.

# 1

# Introducing the Quick Start Distributions

The Oracle SOA Suite and Oracle Business Process Management Suite Quick Start distributions allow you to quickly install a development or evaluation environment on a single host computer. This chapter will help you plan your installation by explaining each Quick Start distribution and giving you an overview of the entire process.

Note that you cannot expand or scale a Quick Start installation into a production environment. Quick Starts are installations for development or evaluation only. If you want a production environment, start with Understanding Oracle SOA Suite and Oracle Business Process Management Installation in *Installing and Configuring Oracle SOA Suite and Business Process Management* to install a full-scale development environment that can be scaled into a production environment.


Orientation

Planning Your Installation

Understanding Quick Start

Understanding the Oracle SOA Quick Start Distribution

Understanding the Oracle Business Process Management Suite Quick Start Distribution

Understanding How to Add More Components

Understanding Domain Configurations


## 1.1 Orientation

This is the Quick Start installation and configuration roadmap. You are planning your installation.

| Step | Description |
|---|---|
| **Plan your installation.** | **Use this chapter to decide which distribution and configuration path suits your goals.** |
| Download and install a Quick Start distribution | You will download and install Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite. |
| Configure a default or standalone domain. | You will configure a default domain, a standalone domain, or compact domain for your developed applications. |
| Develope or test an application. | You will develop or test an application. |

## 1.2 Planning Your Installation

You should use this chapter to make the following key decisions:

1. Make sure that a Quick Start installation suits your needs. Its limitations are described in Understanding Quick Start.
2. Choose between the SOA Suite Quick Start or Business Process Management Suite Quick Start distribution. These are described in Understanding the Oracle SOA Quick Start Distribution and Understanding the Oracle Business Process Management Suite Quick Start Distribution.
3. Decide if you want to add any SOA Suite components that were not included in the default Quick Start distribution. Supported components for Quick Start are described in Understanding How to Add More Components.
4. Decide what type of domain you want to use during development. The three domain types available for Quick Start are described in Table 1-1 of Understanding Domain Configurations.

Making these decisions by the end of this chapter will simplify your installation experience.

## 1.3 Understanding Quick Start

Quick Start is available for Oracle SOA Suite and Oracle Business Process Management Suite. A Quick Start installation differs from a full installation in setup speed and limited uses.

When you use a Quick Start installer, you create a new Oracle home that contains all the software required for a development or evaluation environment on a single host. After running the installation wizard, you can quickly start developing and testing your SOA applications by running Oracle JDeveloper from the Oracle home.

However, Quick Start installations are limited to one Administration server with no option to add Managed servers. You also cannot upgrade your Quick Start distribution to a production environment.

If you know you want a production environment with additional managed servers or clusters, you should not use Quick Start. Instead, see Understanding Oracle SOA Suite and Oracle Business Process Management Installation in *Installing and Configuring Oracle SOA Suite and Business Process Management* to install a full-scale development environment that can be scaled into a production environment.

There are two different Quick Start distributions. You can choose the best distribution for your use case by reading the following descriptions:

- Understanding the Oracle SOA Quick Start Distribution
- Understanding the Oracle Business Process Management Suite Quick Start Distribution

## 1.4 Understanding the Oracle SOA Quick Start Distribution

Oracle SOA Suite is an integration platform centered around BPEL Process Manager for integration and orchestration. Oracle SOA Suite is a comprehensive software suite to build, deploy and manage Service-Oriented Architectures (SOA). The components of the suite benefit from common capabilities including consistent tooling, a single

deployment and management model, end-to-end security and unified metadata management.

By default, the Oracle SOA Suite Quick Start installation contains Oracle JDeveloper and an Integrated WebLogic Server.

The JDeveloper in this distribution is pre-configured with some JDeveloper IDE extensions so that you can create various kinds of applications immediately. These pre-installed IDE extensions include the following:

- Oracle BPEL Process Manager
- Oracle Human Workflow
- Oracle Business Rules
- Oracle Mediator
- Oracle Service Bus
- Oracle Enterprise Scheduler
- SOA Spring Component Design Time
- Oracle Stream Analytics design time (formerly Oracle Event Processing design time)

The Integrated WebLogic Server is pre-configured with Java DB and the runtime software for the all of the components listed above except for Oracle Enterprise Scheduler and Oracle Stream Analytics. This means you can run any JDeveloper application that does not use Oracle Enterprise Scheduler or Oracle Stream Analytics on the Integrated WebLogic Server immediately after you finish installing a Quick Start distribution.

If you want to configure your installation to use Oracle Enterprise Scheduler, Oracle Stream Analytics, or other SOA components, see Understanding How to Add More Components.

## 1.5 Understanding the Oracle Business Process Management Suite Quick Start Distribution

Oracle Business Process Management Suite is layered on top of Oracle SOA Suite. As a result, it includes all of the Oracle SOA Suite components and additional components that emphasize human-focused business processes. If you plan on designing applications with end-user responses and other human task flows in mind, you should install Oracle Business Process Management Suite.

The Oracle Business Process Management Suite Quick Start installation contains Oracle JDeveloper and an Integrated WebLogic Server.

The JDeveloper in this distribution is pre-configured with some JDeveloper IDE extensions so that you can create various kinds of applications immediately. These pre-installed IDE extensions include the following:

- All Oracle SOA Suite components listed in Understanding the Oracle SOA Quick Start Distribution
- Oracle Business Process Management Composer
- Oracle Business Process Management Workspace

- Oracle Case Management
- Oracle BPMN Process Manager

The Integrated WebLogic Server is pre-configured with Java DB and the runtime software for the listed components so that you can immediately test and run applications using these components within the development environment.

If you want to configure your installation to use Oracle Enterprise Scheduler, Oracle Stream Analytics, or other SOA components, see Understanding How to Add More Components.

## 1.6 Understanding How to Add More Components

Some Oracle SOA Suite components are not included with the Quick Start distributions, and some are not supported to run with the included Java DB database. These components include the following:

- Oracle Stream Analytics
- Oracle Business Activity Monitoring
- Oracle B2B
- Oracle SOA Suite for healthcare integration
- Oracle Enterprise Scheduler
- Oracle Managed File Transfer

**Tip:**

If you are not sure what components you want to include in your installation, see Key Components in *Understanding Oracle SOA Suite* for descriptions of each component.

To add any of these components, you must install and use an Oracle database. You can then use the domain configuration software included in the Quick Start installation to configure a compact domain, which is a limited developer domain consisting of an Administration server and no Managed servers.

Decide which runtime components you want before beginning the domain configuration process. The process is the same for a majority of the listed components, but you should be aware of additional procedures for the following components:

About Oracle Stream Analytics

About Oracle B2B

About Oracle SOA Suite for Healthcare Integration

About Oracle Managed File Transfer

### 1.6.1 About Oracle Stream Analytics

In order to test your Oracle JDeveloper applications in an environment with Oracle Stream Analytics (formerly called Oracle Event Processing) runtime software, you must install a separate Oracle home for Oracle Stream Analytics and launch the Oracle Stream Analytics-specific server.

Once you have launched the Oracle Stream Analytics server, use JDeveloper to target and deploy applications.

The installation process for Oracle Stream Analytics is covered in *Installing and Configuring Oracle Stream Analytics*.

### 1.6.2 About Oracle B2B

Oracle B2B is an e-commerce gateway that enables the secure and reliable exchange of business documents between an enterprise and its trading partners. See Protocols Supported in B2B in *User's Guide for B2B* for a list of the industry-standard e-commerce protocols supported in Oracle B2B.

The capability to exchange Custom Documents is already included in a standard Quick Start installation. You can activate this limited version of Oracle B2B by following the activation steps detailed in Activating a Limited Oracle B2B Interface without a Full Installation.

To obtain the full B2B user interface for more document management capabilities, you must use the regular Oracle B2B installer on your Quick Start Oracle home and configure a standalone32ewr compact domain. The complete installation will give you the Oracle B2B user interface and Oracle B2B JDeveloper adapter. A walkthrough of this process is covered in Installing Oracle B2B for Quick Start.

### 1.6.3 About Oracle SOA Suite for Healthcare Integration

Oracle SOA Suite for healthcare integration uses several features of Oracle SOA Suite to help you design, create, and manage applications that process healthcare data. There are two configurations possible for two use cases:

- X12 HIPAA users should install the full Oracle B2B installation configured with Healthcare Integration.
- Healthcare providers using HL7 documents should install the full Oracle SOA Suite for Healthcare Integration software.

TheOracle B2B user interface is the default when you finish installing Oracle SOA Suite for healthcare integration into your Oracle home. If you want to use the Oracle SOA Suite for healthcare integration user interface, you must complete both of the following post-installation configurations:

1. Use the Repository Creation Utility (RCU) to set a custom variable before running the domain configuration wizard.
2. Select an Oracle SOA Suite for healthcare integration-specific template during domain configuration.

The Oracle SOA Suite for healthcare integration user interface will not function properly if you do not do both tasks. These configurations are detailed further in Activating the Oracle SOA Suite for Healthcare Integration User Interface.

### 1.6.4 About Oracle Managed File Transfer

Oracle Managed File Transfer is a product that can be configured without Oracle SOA Suite or Oracle Business Process Management Suite. If you want to configure a compact domain solely for Oracle Managed File Transfer, launch the domain configuration wizard as described in this guide and only select the Oracle Managed File Transfer template when prompted.

## 1.7 Understanding Domain Configurations

Once you have installed a Quick Start distribution, you need to configure a domain to test applications during development. To simplify your installation and configuration experience, you should decide on a domain type now.

The three possible domain types are described and compared in Table 1-1. Note that if you plan to install any of the Oracle SOA Suite components listed in Understanding How to Add More Components, your only choice is the compact domain.

For all of these domain options, SOA and B2B use the MDS file system. This means that the edit function in SOA Composer is not supported in Quick Start.

***Table 1-1 Domain Types***

| Default Domain | Standalone Domain | Compact Domain |
|---|---|---|
| • Generated by launching Integrated WebLogic Server from JDeveloper<br>• Pre-configured with SOA Suite or Business Process Management Suite runtime components<br>• Works with a pre-configured Java DB | • Generated by running software in the Quick Start Oracle home from the command line<br>• Pre-configured with SOA Suite or Business Process Management Suite runtime components<br>• Works with a pre-configured Java DB<br>• Must be explicitly targeted by user in JDeveloper | • Generated by using software in the Quick Start Oracle home<br>• Configured by user<br>• Works with an Oracle database that you must install and then configure with RCU<br>• Must be explicitly targeted by user in JDeveloper |
| This domain option is best for demos or evaluation purposes because the Integrated WebLogic Server will shut down every time you end a JDeveloper session. You will have to relaunch the server every time you wanted to access your domain. | This option is best for developers, especially for developers who want to use the Oracle Service Bus Design Time Console instead of JDeveloper. This domain type saves you from having to relaunch the server from JDeveloper every time you want to test your application. | You should only use this domain option if you want to add SOA components that are incompatible with JavaDB. These components include Enterprise Scheduler, Managed File Transfer, B2B, Heathcare, or Business Activity Monitoring. |

# 2

# Preparing to Install Quick Start

Before installing Quick Start, you must verify that it can run on your system.

Before using Quick Start, prepare your system by completing the following tasks:

Verifying Certification, System Requirements, and Interoperability
: Oracle recommends that you use the certification matrix and system requirements documents with each other to verify that your environment meets the requirements for installation.

Understanding the Software Required for an Oracle Fusion Middleware Product Installation
: Before you install Oracle Fusion Middleware, you should understand and verify the database and JDK requirements.

Selecting an Installation User
: The user who performs installation and configuration on your system requires sufficient permissions and privileges.

Setting JAVA_HOME
: Set the environment variable `JAVA_HOME` to point to the location of your JDK.

Next Steps

## 2.1 Verifying Certification, System Requirements, and Interoperability

Oracle recommends that you use the certification matrix and system requirements documents with each other to verify that your environment meets the requirements for installation.

1. **Verifying your environment meets certification requirements**

   Make sure that you are installing your product on a supported hardware and 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 be released at any time. Therefore, the certification documents are kept outside the documentation libraries and are available on Oracle Technology Network.

2. **Using the system requirements document to verify certification**

   Oracle recommends that you use the *Oracle Fusion Middleware System Requirements and Specifications* document to verify that the certification requirements are met. For example, if the certification document indicates that your product is certified for installation on 64-Bit Oracle Linux 6.5, use this document to verify that your system meets the required minimum specifications. These include disk space,

available memory, specific platform packages and patches, and other operating system-specific items. System requirements can change in the future. Therefore, the system requirement documents are kept outside of the documentation libraries and are available on Oracle Technology Network.

3. **Verifying interoperability among multiple products**

   See Oracle Fusion Middleware 12c Interoperability and Compatibility in *Understanding Interoperability and Compatibility* to learn how to install and run multiple Fusion Middleware products from the same release or mixed releases with each other.

## 2.2 Understanding the Software Required for an Oracle Fusion Middleware Product Installation

Before you install Oracle Fusion Middleware, you should understand and verify the database and JDK requirements.

The following topics contain information about the software required for an Oracle Fusion Middleware installation:

Understanding Database Requirements for an Oracle Fusion Middleware Installation
: Many Oracle Fusion Middleware products require database schemas prior to configuration. If you do not already have a database where you can install these schemas, you must install and configure a certified database.

Understanding JDK Requirements for an Oracle Fusion Middleware Installation
: Most Fusion Middleware products are in `.jar` file format. These distributions do *not* include a JDK. To run a `.jar` distribution installer, you must have a certified JDK already installed on your system.

### 2.2.1 Understanding Database Requirements for an Oracle Fusion Middleware Installation

Many Oracle Fusion Middleware products require database schemas prior to configuration. If you do not already have a database where you can install these schemas, you must install and configure a certified database.

To find a certified database for your operating system, see the certification document for your release on the *Oracle Fusion Middleware Supported System Configurations* page.

To make sure your database is properly configured for schema creation, see "Repository Creation Utility Requirements" in the *Oracle Fusion Middleware System Requirements and Specifications* document.

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**Note:**

For 12*c*, only a certified Oracle database can be used for the Oracle Fusion Middleware Infrastructure standard installation topology.

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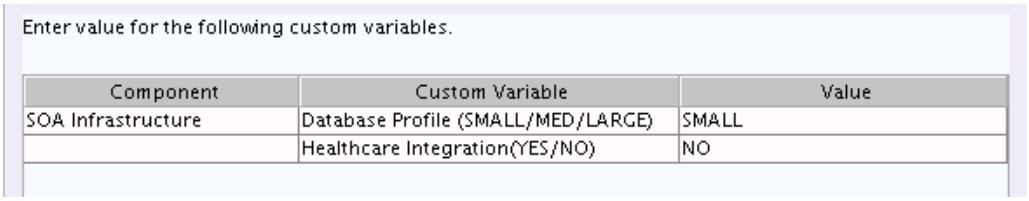
After your database is properly configured, you use the Repository Creation Utility (RCU) to create product schemas in your database. This tool is available in the Oracle home for your Oracle Fusion Middleware product. For more information about RCU,

see Understanding Repository Creation Utility in *Creating Schemas with the Repository Creation Utility*.

About the Custom Variables Required for the SOA Suite Schemas
When you install the Oracle SOA Suite schemas, you are prompted to set two custom variables, which affect the way in which these schemas are created in the database.

### 2.2.1.1 About the Custom Variables Required for the SOA Suite Schemas

When you install the Oracle SOA Suite schemas, you are prompted to set two custom variables, which affect the way in which these schemas are created in the database.


Enter value for the following custom variables.

| Component | Custom Variable | Value |
|---|---|---|
| SOA Infrastructure | Database Profile (SMALL/MED/LARGE) | SMALL |
| | Healthcare Integration(YES/NO) | NO |

These variables are explained further in the following sections:

About the Database Profile Custom Variable
The Database Profile custom variable on the Repository Creation Utility (RCU) Custom Variables screen allows you to identify the predicted size or "profile" of the database on which you are installing the SOA Infrastructure schema.

About the Healthcare Integration Custom Variable
The Healthcare Integration custom variable helps to activate the Healthcare Integration User Interface for Oracle SOA Suite. The interface is not supported for Oracle Business Process Management.

#### 2.2.1.1.1 About the Database Profile Custom Variable

The Database Profile custom variable on the Repository Creation Utility (RCU) Custom Variables screen allows you to identify the predicted size or "profile" of the database on which you are installing the SOA Infrastructure schema.

To estimate the size of the database required for your Oracle SOA Suite configuration, consider the information in Developing a Database Growth Management Strategy in *Administering Oracle SOA Suite and Oracle Business Process Management Suite*.

If you enter **SMALL** or **MEDIUM** as the database profile, RCU performs no special actions when the schema is created. The **SMALL** and **MEDIUM** options should be entered for informational purposes only.

If you enter **LARGE** as the database profile, RCU creates the SOA Infrastructure schema using an Oracle database feature called Interval Partitioning. Interval partitioning improves the efficiency of the database when large numbers of composite applications must be processed. When you select the **LARGE** database profile, RCU creates the interval partitioned tables in a manner supported by the Oracle SOA Suite purging scripts and guidelines.

For more information about database partitioning, see the following sections of the *Oracle Database VLDB and Partitioning Guide*:

- Partitioning Concepts
- Interval Partitioning

For more information about the database profile, see *Tuning Performance*.

#### 2.2.1.1.2 About the Healthcare Integration Custom Variable

The Healthcare Integration custom variable helps to activate the Healthcare Integration User Interface for Oracle SOA Suite. The interface is not supported for Oracle Business Process Management.

If you are *not* planning to use the Healthcare Integration User Interface for Oracle SOA Suite, then set the value of the Healthcare Integration custom variable to **NO**. If you *are* planning to use the Healthcare Integration User Interface for Oracle SOA Suite, set it to **YES**. Otherwise, the Healthcare Integration User Interface will not function properly after it is installed and configured.

When set to **YES**, RCU creates additional materialized views in the database, which are required by the Healthcare Integration User Interface. When set to **NO**, you can perform these additional schema configuration tasks later by running the following SQL script on the database. This script is installed in the Oracle Fusion Middleware Oracle home when you select the Healthcare with B2B installation type:

*ORACLE_HOME*`/common/sql/soainfra/sql/oracle/b2b_mv.sql`

For more information about the Healthcare Integration User Interface, see Using the Oracle SOA Suite for Healthcare Integration User Interface in *Healthcare Integration User's Guide for Oracle SOA Suite*.

### 2.2.2 Understanding JDK Requirements for an Oracle Fusion Middleware Installation

Most Fusion Middleware products are in `.jar` file format. These distributions do *not* include a JDK. To run a `.jar` distribution installer, you must have a certified JDK already installed on your system.

Make sure that the JDK is installed *outside* of the Oracle home. If you install the JDK under the Oracle home, you will encounter problems when you try to perform tasks in the future. Oracle Universal Installer validates that the Oracle home directory is empty; the install will not progress until you specify an empty directory. Oracle recommends that you locate your JDK installation in the `/home/oracle/products/jdk` directory.

Some products (such as Oracle HTTP Server and Oracle JDeveloper) are available as **platform-specific distributions**. Platform-specific distributions have a `.bin` (for UNIX operating systems) or `.exe` (for Windows operating systems) installer; in these cases, a platform-specific JDK is in the distribution and you do not need to install a JDK separately. However, you may need to upgrade this JDK to a more recent version, depending on the JDK versions that are certified.

Always verify the required JDK version by reviewing the certification information on the *Oracle Fusion Middleware Supported System Configurations* page.

To download the required JDK, navigate to the following URL and download the Java SE JDK:

http://www.oracle.com/technetwork/java/javase/downloads/index.html

## 2.3 Selecting an Installation User

The user who performs installation and configuration on your system requires sufficient permissions and privileges.

Understanding User Permissions
The user who installs a Fusion Middleware product owns the files and has certain permissions on the files.

Understanding Non-Default User Permissions on UNIX Operating Systems
Changing the default permissions setting reduces the security of the installation and possibly your system. Oracle does not recommend changing default permission settings.

Verifying the Installation User has Administrator Privileges on Windows Operating Systems
To update the Windows Registry, you must have Administrator privileges.

## 2.3.1 Understanding User Permissions

The user who installs a Fusion Middleware product owns the files and has certain permissions on the files.

- Read and write permissions on all non-executable files (for example, `.jar`, `.properties`, or `.xml`). All other users in the same group as the file owner have read permissions only.
- Read, write, and execute permissions on all executable files (for example, `.exe`, `.sh`, or `.cmd`). All other users in the same group as the file owner have read and execute permissions only.

This means that someone other than the person who installs the software can use the installed binaries in the Oracle home to configure a domain or set of Fusion Middleware products.

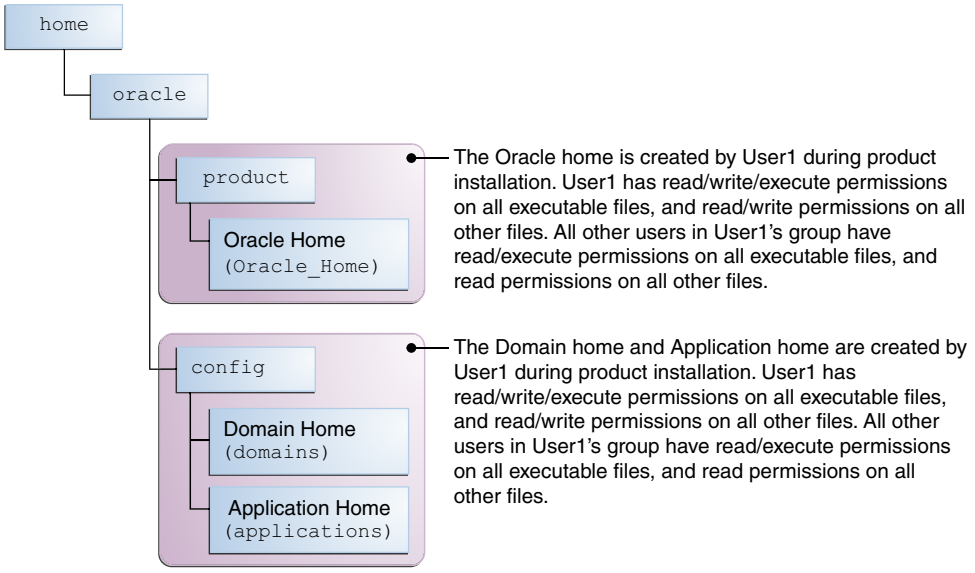
During configuration, the files generated by the configuration process are owned by the user who ran the Configuration Wizard, with the same permissions as described above for the installation user. However, security-sensitive files are not created with group permissions. Only the user that created the domain has read and write permissions and can administer the domain.

Consider the following examples:

- **Example 1: A Single User Installs the Software and Configures the Domain**

  This example shows the permissions if the same user installs the software and configures the domain.

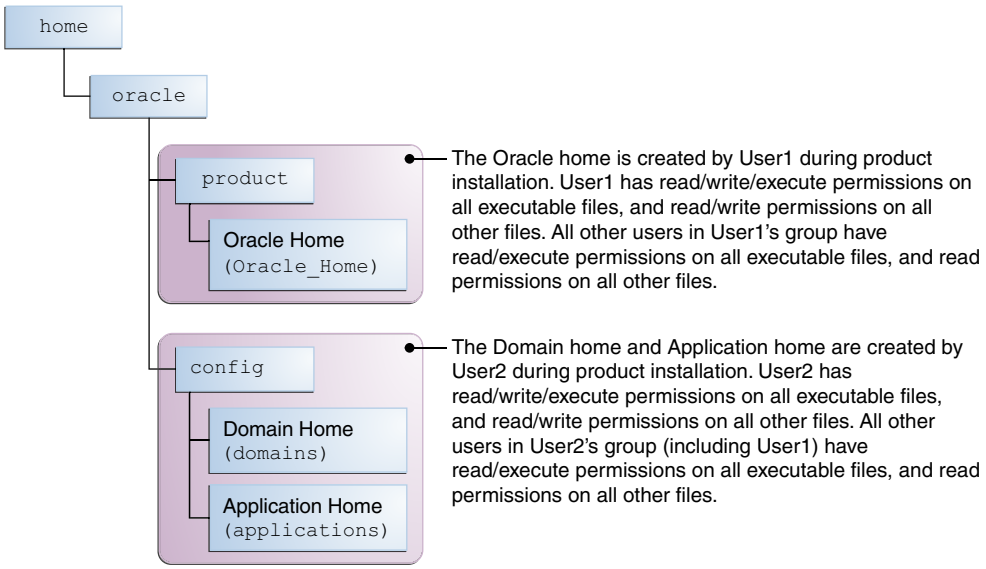
  To ensure the proper permissions and privileges for all files, Oracle recommends that the same owner perform both tasks: install the Oracle Fusion Middleware product and configure the WebLogic Server domain using the Configuration Wizard.




If the user who creates the domain is different than the user who installed the software, then both users must have the same privileges, as shown in the next example.

- **Example 2: The Oracle Home and Domain are Created by Different Users**

  This example shows the permissions where one user creates the Oracle home and another user configures the domain.




---

**Note:** Certain domain files do not have group permissions. For example, cwallet.sso.

---

Consider the following items before running the installer:

- On UNIX operating systems, Oracle recommends that you set `umask` to `027` on your system before you install the software. This ensures that file permissions are set properly during installation. Use the following command:

```
umask 027
```

You must enter this command in the same terminal window from which you plan to run the product installer.

- On UNIX operating systems, do not run the installation program as the `root` user. If you run the installer as a root user, the startup validation may fail and you cannot continue the installation.
- When you manage a product installation (for example, applying patches or starting managed Servers), use the same user ID that you used to install the product.
- On Windows operating systems, you must have Administrative privileges to install the product. See Verifying the Installation User has Administrator Privileges on Windows Operating Systems for more information.

### 2.3.2 Understanding Non-Default User Permissions on UNIX Operating Systems

Changing the default permissions setting reduces the security of the installation and possibly your system. Oracle does not recommend changing default permission settings.

If other users require access to particular files or executable, consider using the UNIX `sudo` command (or other similar command) in lieu of changing file permissions.

Refer to your UNIX operating system Administrator's Guide or contact your operating system vendor if you need further assistance.

### 2.3.3 Verifying the Installation User has Administrator Privileges on Windows Operating Systems

To update the Windows Registry, you must have Administrator privileges.

By default, members with the Administrator privilege sign in to the system with regular privileges, but can request elevated permissions to perform administrative tasks.

To perform a task with elevated privileges:

1. Find the Command Prompt item, either from the Start menu or the Windows icon in the lower-left hand corner.
2. Right-click Command Prompt and select **Run as administrator**.

   This opens a new command prompt window, and all actions performed in this window will be done with administrator privileges.

   **Note:** If you have User Access Control enabled on your system, you may see an additional window asking you to confirm this action. Confirm and continue with this procedure.

3. Perform the desired task.

   For example, to start the product installer:

   For a jar file, enter:

   ```
   java –jar distribution_name.jar
   ```

   For an executable (`.exe`, `.bin`, or `.sh` file), enter:

```
distribution_name.exe
```

## 2.4 Setting JAVA_HOME

Set the environment variable `JAVA_HOME` to point to the location of your JDK.

Your path definition should look something like the following:

| Environment | Run Command |
|---|---|
| UNIX | `JAVA_HOME=$HOME/Java/jdk1.8.0_xx`<br>`export JAVA_HOME` |
| Windows | Search for `cmd.exe` in the **Start** menu. Right-click the `cmd.exe` and select **Run as Administrator**.<br>`SET JAVA_HOME="C:\Program Files\Java\jdk1.8.0_xx"` |

- Note that `JAVA_HOME` must be in all caps.
- Your JDK folder may not be named the same or located at the destination in the above example. Make sure you point to the actual destination.

## 2.5 Next Steps

The rest of this book describes how to install a Quick Start distribution, how to configure your distribution to use an external Oracle Database and compact domain, how to test your distribution with a sample application, and how to deinstall your Quick Start distribution. Each chapter will end with a list of actions you can take to navigate through this guide.

Note that the overall installation and configuration processes for both Oracle SOA Suite and Oracle Business Process Management Suite are identical. This book offers separate parts for them to simplify the presentation of detailed instructions.

Choose a distribution to begin using Quick Start:

| Action | Resource |
|---|---|
| Begin installing Oracle SOA Suite with Quick Start. | See Installing Oracle SOA Suite Quick Start for Developers . |
| Begin installing Oracle Business Process Management Suite with Quick Start. | See Installing Oracle Business Process Management Suite Quick Start for Developers . |

# Part II

## Quick Start for Oracle SOA Suite

This part covers the steps to install Oracle SOA Suite using Quick Start. You should have reviewed the information in  of this book before proceeding to the chapters contained in this part.


Installing Oracle SOA Suite Quick Start for Developers

Configuring an Integrated WebLogic Server Domain

Configuring a Compact Domain

# 3

# Installing Oracle SOA Suite Quick Start for Developers

During the Oracle SOA Suite Quick Start installation, you will use the Integrated WebLogic Server's default domain or create a standalone domain.

Before beginning this installation, you should review Introducing the Quick Start Distributions.


Orientation

Downloading the Oracle SOA Suite Quick Start Installer

Launching the Oracle SOA Suite Quick Start Installer

Navigating the Installation Screens

Next Steps


## 3.1 Orientation

This is where you are in the Quick Start installation and configuration roadmap.

| Step | Description |
|---|---|
| Plan your installation. | You used Chapter 1 to decide which distribution and configuration path suits your goals. |
| **Download and install a Quick Start distribution** | **You will download and install Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.** |
| Configure a default or standalone domain. | You will configure a default domain, a standalone domain, or compact domain for your developed applications. |
| Develop or test an application. | You will develop or test an application. |

## 3.2 Downloading the Oracle SOA Suite Quick Start Installer

To download the Oracle SOA Suite Quick Start installer:

1. Log into the host computer where you want to install your Quick Start installation.
2. Find and download the Oracle SOA Suite Quick Start installer zip file. This is located on the Oracle Technology Network under Oracle SOA Suite Downloads.

If you cannot find the installers at the specified location, verify the download location in the Oracle Fusion Middleware Download, Installation, and Configuration Readme File.

## 3.3 Launching the Oracle SOA Suite Quick Start Installer

After you have downloaded your distribution and installed a certified JDK, you can launch the Quick Start installer using the following instructions:

1. Unzip the contents into a location you can find easily. You may have several .jar files.
2. Using the command prompt, navigate to the directory where you unzipped the jar files.

   Launch the installation wizard with the appropriate command. The example command shows how to run the SOA Quick Start installer.

| Installer | Run Command |
|---|---|
| Generic Installer for UNIX | *JAVA_HOME*/bin/java -jar fmw_12.2.1.1.0_soa_quickstart_generic.jar |
| Generic Installer for Windows | *JAVA_HOME*\bin\java.exe -jar fmw_12.2.1.1.0_soa_quickstart_generic.jar |

**Note:**

You can also launch the installer in silent mode to ensure that no configuration options are displayed during the installation process. For more information about silent or command line installation, see Using the Oracle Universal Installer in Silent Mode in *Installing Software with the Oracle Universal Installer*.

3. The installation wizard should launch. If you have any problems getting the installer to run, double-check your system preparations.

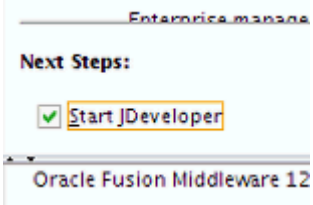
**Note:**

Though you may have multiple jar files, you do not need to run the install command on all of them. You only need to run the above command on `fmw_12.2.1.1.0_soa_quickstart_generic.jar`.

## 3.4 Navigating the Installation Screens

Once you have launched the Quick Start installer, the installation wizard displays the screens described in the following table. If you need additional help with an installation screen, click **Help** in the installer.

*Table 3-1 Quick Start Install Screens*

| Screen | Description |
|---|---|
| Welcome | This screen introduces you to the product installer. |
| Installation Location | Use this screen to specify the location of your Oracle home directory. Ensure that the name of the directory that you choose does not contain spaces.<br>For more about Oracle Fusion Middleware directory structure, see Understanding Directories for Installation and Configuration in *Planning an Installation of Oracle Fusion Middleware*. |
| Prerequisite Checks | This screen verifies that your system meets the minimum necessary requirements. |
| Installation Summary | Use this screen to verify the installation options you selected. If you want to save these options to a response file, click **Save Response File** and provide the location and name of the response file. Response files can be used later in a silent installation situation. |
| Installation Progress | This screen shows the installation progress.<br>When the progress bar reaches 100% complete, click **Finish** to dismiss the installer, or click **Next** to see a summary. |
| Installation Complete | This screen appears when the installation is complete. Review the information on this screen.<br>At the bottom of this screen, there is a checkbox to launch Oracle JDeveloper upon closing the installation wizard.<br>  <br>Oracle recommends that you deselect this box.<br>Click **Finish**. |

## 3.5 Next Steps

Once you have verified your installation, you should configure a domain. See Understanding Domain Configurations for detailed descriptions of your domain options.

Otherwise, use the following table to help you decide quickly.

| Action | Resource |
| --- | --- |
| Immediately launch the Integrated WebLogic Server to initiate a domain with Java DB.<br>This option does not require any additional installations. | See Configuring an Integrated WebLogic Server Domain. |
| Install and configure an Oracle database to work with your Quick Start installation.<br>This option requires you to install an Oracle database but allows you to use more Oracle SOA Suite components, such as Oracle Managed File Transfer, Oracle Stream Analytics, or Oracle B2B/Healthcare. | See Configuring a Compact Domain. |

# 4

# Configuring an Integrated WebLogic Server Domain

You can configure the Integrated WebLogic Server's default domain or standalone domain for a Quick Start distribution.

After following the steps in this section, you will be able to test applications using the Integrated WebLogic Server and Java DB.


Orientation

Understanding Quick Start Domains

Preparing to Launch the Integrated WebLogic Server

Configuring JDeveloper's Default Domain

Configuring a Standalone Domain

Understanding Basic JDeveloper Functions

Managing Multiple Installations on the Same Machine

Switching Between Quick Start Distributions

Next Steps


## 4.1 Orientation

This is where you are in the Quick Start installation and configuration roadmap.

| Step | Description |
|---|---|
| Plan your installation. | Use Chapter 1 to decide which distribution and configuration path suits your goals. |
| Download and install a Quick Start distribution | You downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite. |
| **Configure a default or standalone domain.** | **You are configuring a default domain, a standalone domain, or compact domain for your developed applications.** |
| Develop or test an application. | You will develop or test an application. |

## 4.2 Understanding Quick Start Domains

There are three supported ways to configure a domain with Quick Start. All domains will be pre-configured with IDE plugins for the Oracle SOA Suite components of your choice.

Use the following table to decide which domain would best suit your needs.

| Suggested Use Case | Method | Description |
|---|---|---|
| Evaluation | Configure the Integrated WebLogic Server's default domain in JDeveloper. | Launch the Integrated WebLogic Server from inside JDeveloper to create the default domain.<br>In this case, the server is tethered to your current JDeveloper session. When you quit JDeveloper, the Integrated WebLogic Server shuts down as well. Every time you start a new JDeveloper session, you need to relaunch the Integrated WebLogic Server.<br>See Configuring JDeveloper's Default Domain for more information. |
| Development with Java DB | Configure a standalone domain. | Create a standalone version of the Integrated WebLogic Server. The server and domain run independently of JDeveloper.<br>This will save you startup time if you plan on developing an application in JDeveloper over a series of separate sessions, or if you plan to develop applications in the Oracle Service Bus browser-based console.<br>See Configuring a Standalone Domain for more information. |
| Development with an Oracle Database | Configure a compact domain. | You can configure your Quick Start installation to use an Oracle database with an external compact domain.<br>You should only choose this option if you know you want your domain to be compatible with Enterprise Scheduler, Managed File Transfer, B2B, Heathcare, or BAM components.<br>See Configuring a Compact Domain for more information. |

Any other method of creating a domain is not recommended.

## 4.3 Preparing to Launch the Integrated WebLogic Server

Follow steps to prepare your environment before launching the Integrated WebLogic Server.

Setting the JDEV_USER_DIR Environment Variable

Setting the ORACLE_HOME Environment Variable

Checking Entropy for Oracle Linux

### 4.3.1 Setting the JDEV_USER_DIR Environment Variable

You can set the `JDEV_USER_DIR` environment variable to define the location of your user home directory. This should be a unique location for your distribution. The user home directory will contain subdirectories for your domain files and your user-generated application files.

---

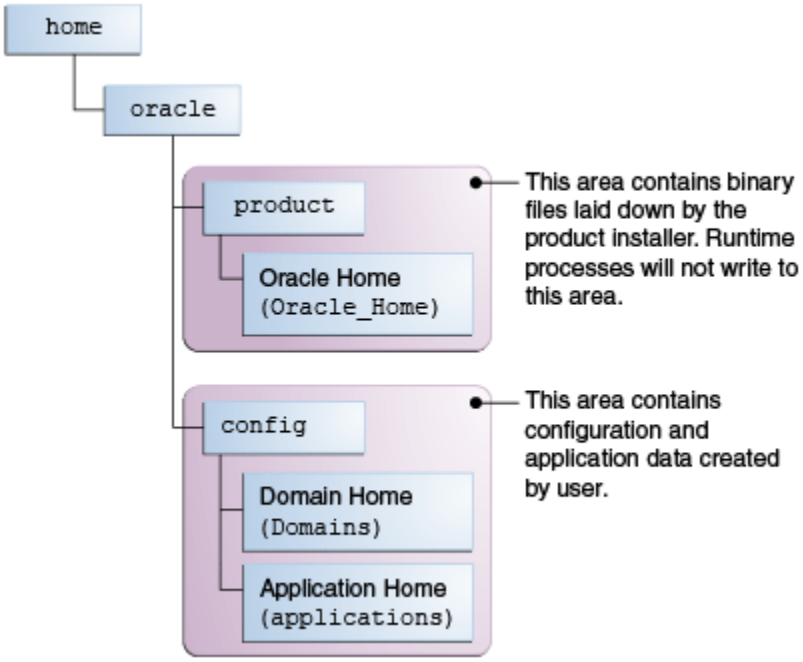
**Note:**

This step is crucial if you are planning to install and run multiple distributions of JDeveloper on the same machine. Assign a unique user home directory for each distribution you install.

---

Oracle recommends a directory structure similar to the one shown below, where `config` shows the location of the user home directory.

***Figure 4-1 Recommended Oracle Fusion Middleware Directory Structure***




If you do not define `JDEV_USER_DIR`, your domain home and application home will be created at two different locations.

On an UNIX host, the default domain home will be created at `$HOME/.jdeveloper/system12.2.1.1.x.x.xxxx/DefaultDomain`. The default application home will be created at `$HOME/jdeveloper/mywork`.

On a Windows host, the default domain home will be created at `%USERPROFILE%\AppData\Roaming\JDeveloper\system12.2.1.1.x.x.xxxx\DefaultDomain`. Your default application home will be created at `C:\JDeveloper\mywork`.

Once you have set `JDEV_USER_DIR`, the domain home and application home will be collocated as subdirectories under the defined location. For example, on a UNIX system, the domain home will be located in `JDEV_USER_DIR`

`\system12.2.1.1.x.x.xxx`. The application home will be located in `JDEV_USER_DIR\mywork`.

### 4.3.2 Setting the ORACLE_HOME Environment Variable

You can set the `ORACLE_HOME` environment variable to simplify navigating to the various directories when you are running installation and configuration commands.

The path definition should look something like this:

| Environment | Run Command |
|---|---|
| UNIX | `ORACLE_HOME=$HOME/Oracle/Middleware/Oracle_Home`<br>`export ORACLE_HOME` |
| Windows | `SET ORACLE_HOME=C:\Oracle\Middleware\Oracle_Home` |

### 4.3.3 Checking Entropy for Oracle Linux

If you are installing on an Oracle Linux (formally Oracle Enterprise Linux) machine, you should ensure that you have sufficient entropy. You need at least 500 for the Integrated WebLogic Server to start up in a timely manner.

To check for entropy, run the following command:

```
cat /proc/sys/kernel/random/entropy_avail
```

If you have less than 500, use the following command to replenish bytes to `/dev/random` using `/dev/urandom` as the source:

```
rngd -r /dev/urandom -o /dev/random -b
```

You can configure this command by editing `/etc/sysconfig/rngd` and add the following line:

```
EXTRAOPTIONS="-i -r /dev/urandom -o /dev/random -b -t 60 -W 2048"
```

## 4.4 Configuring JDeveloper's Default Domain

You can configure JDeveloper's default domain by launching the Integrated WebLogic Server.

Launching the Integrated WebLogic Server

Verifying Your Domain

Disabling Secure Sockets Layer (SSL)

### 4.4.1 Launching the Integrated WebLogic Server

To launch the integrated WebLogic server:

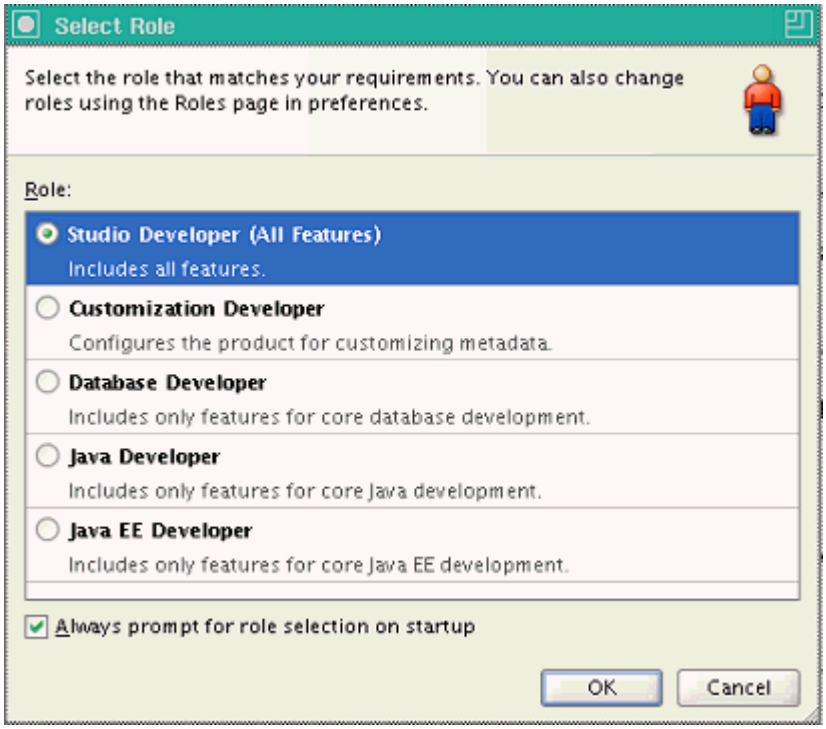
1. Launch JDeveloper.

   If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

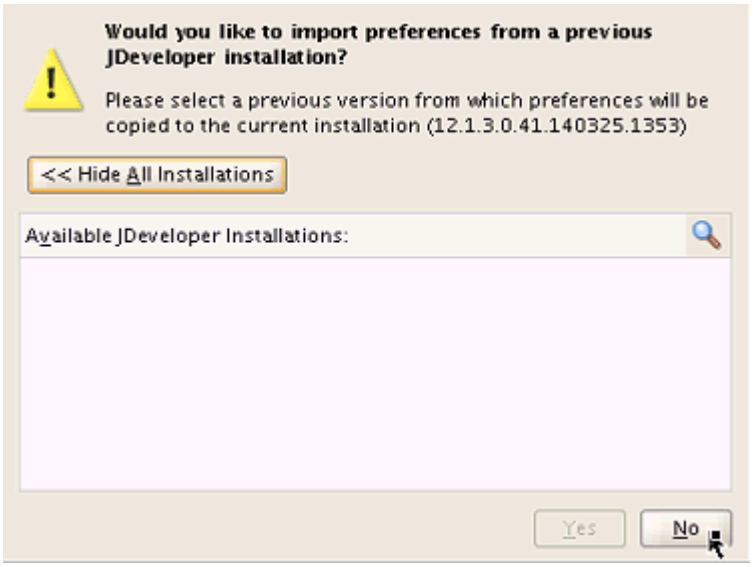
| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

As Oracle JDeveloper launches, you will get three prompts.

When prompted, select **Studio Developer** as your role and click **OK**.




When prompted, click **No** to import preferences from a previous JDeveloper installation.

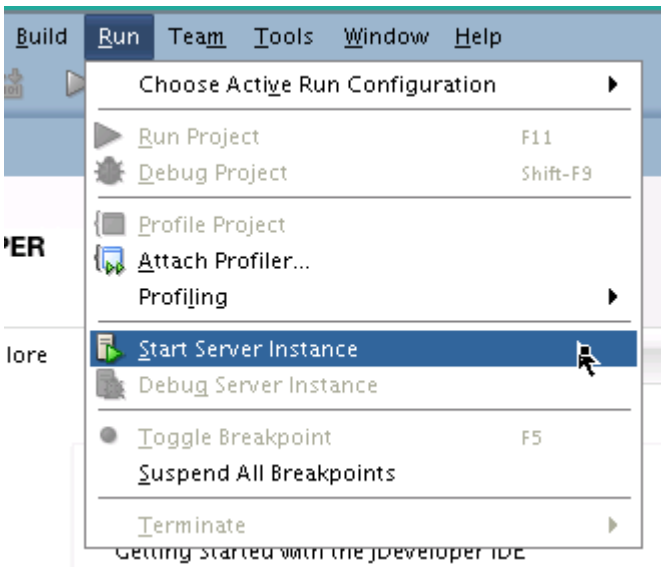



When prompted about **Oracle Usage Tracking**, check whether or not you want Oracle JDeveloper to send automated usage reports to Oracle and click **OK**.

JDeveloper has fully launched at this point.

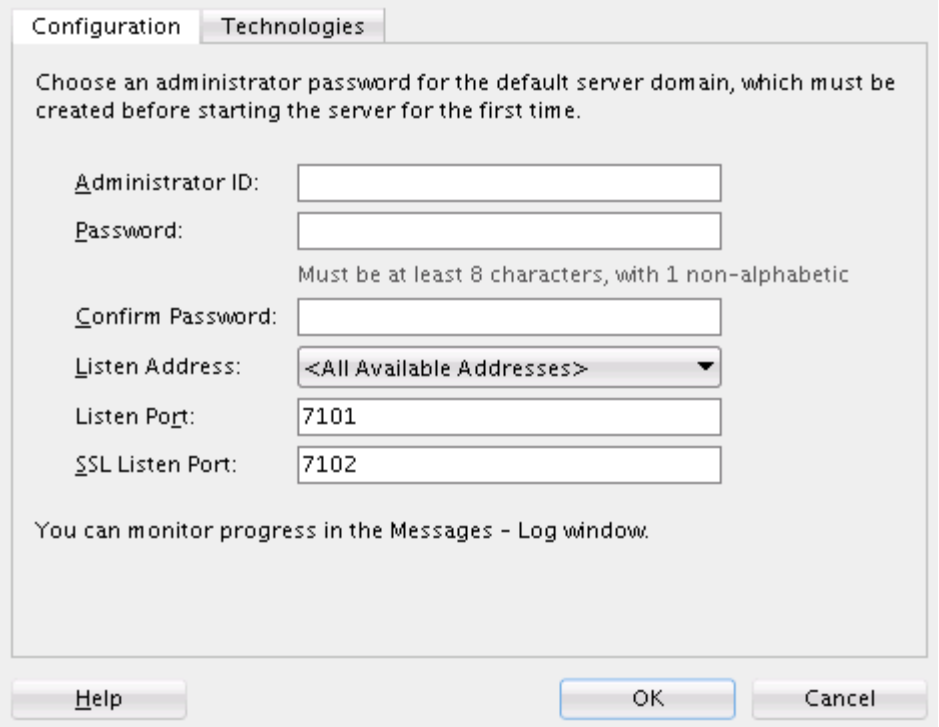
2. Launch the Integrated WebLogic Server by choosing **Run** from top menu bar. Select **Start Server Instance** from the drop-down menu.

***Figure 4-2 Starting the Integrated WebLogic Server***




3. The first time you launch the server instance, you will be prompted to enter a password for your default domain.

***Figure 4-3 Specifying a Password for Default Domain***




The **Administrator ID**, **Listen Address**, **Listen Port**, and **SSL Listen Port** should already have values. Review them and make any appropriate changes.

4. Launching the integrated server will take several minutes.

   You can track the server's launch in the **Messages** window pane. This window should automatically open at the bottom of the JDeveloper screen. If it is not there, you can open it by selecting **Window** from the top bar menu and **Log** from the drop-down menu. You can also activate it with the keyboard shortcut `Ctrl +Shift+L`.

   ---

   **Note:**

   If the creation of the Integrated WebLogic Server domain fails with the following error:

   ```
   Failed to query contents of table SERVICETABLE. - Schema
   'DEMODB' does not exist
   ```

   Make sure to shut down all running servers, even if they are not using Java DB, and try the domain creation again.

   ---

   ---

   **Note:**

   If your machine is connected through a VPN, Coherence may be confusing the local and VPN IP addresses. Change the Coherence cluster to multicast.

   ---

5. When you see the following messages appear in the log, the Integrated WebLogic Server has launched successfully.

```
[SOA Platform is running and accepting requests
[IntegratedWebLogicServer started.]
```

### 4.4.2 Verifying Your Domain

Your default domain is already configured with Oracle SOA Suite and Oracle Service Bus runtime components. To verify your domain installation:

1. Access the Enterprise Manager Fusion Middleware Control, which is located at a URL following this format:

   `http://hostname.domain:7101/em`

   **Note:**

   The default port for the Integrated WebLogic Server should always be `7101` unless you changed it during configuration.

   Log in using the username and password that you specified when launching the Integrated Weblogic Server.

   For more information on using Fusion Middleware Control, see Getting Started Using Oracle Enterprise Manager Fusion Middleware Control in *Administering Oracle Fusion Middleware*.

2. Alternatively, if you plan to develop projects using the Oracle Service Bus console, you can check to see if Oracle Service Bus is running.

   The Oracle Service Bus console is located at an URL with the following format:

   `http://hostname.domain:7101/servicebus`

   Log in using the username and password that you specified when creating your standalone domain.

   For more information on using the Oracle Service Bus console, see Getting Started with the Oracle Service Bus Console in *Developing Services with Oracle Service Bus*.

### 4.4.3 Disabling Secure Sockets Layer (SSL)

This is an optional task. SSL is enabled by default in the Integrated WebLogic Server. If you do not have stringent design time requirements, you can disable SSL as follows:

1. Go to the Administrator Console at `http://localhost:7101/console`
2. Log in with your credentials.
3. Select **Environments**, then **Servers**, then **Admin Server**.
4. Uncheck **SSL Listen Port Enabled**.
5. Restart the Integrated WebLogic Server.

## 4.5 Configuring a Standalone Domain

You can launch a standalone version of the Integrated WebLogic Server and domain.

Starting the Standalone Domain Configuration Wizard

Navigating the Configuration Wizard Screens

Launching the Application Server Connection Wizard

Navigating the Create Application Server Connection Wizard Screens

Verifying Your Connection

## 4.5.1 Starting the Standalone Domain Configuration Wizard

Before launching the configuration wizard, make sure no other servers are running on your system.

To start the configuration wizard to create a standalone domain:

1. Go to the `bin` directory.
2. Set the environment variable `QS_TEMPLATES` to either the SOA domain template or to both SOA and OSB domain template.
3. Launch the standalone domain configuration wizard.

If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/oracle_common/common/bin`<br>`QS_TEMPLATES="$ORACLE_HOME/soa/common/templates/wls/`<br>`oracle.soa_template.jar, $ORACLE_HOME/osb/common/templates/wls/`<br>`oracle.osb_template.jar"`<br>`export QS_TEMPLATES`<br>`./qs_config.sh` |
| Windows | `cd %ORACLE_HOME%\oracle_common\common\bin`<br>`set QS_TEMPLATES=%ORACLE_HOME%\soa\common\templates\wls`<br>`\oracle.soa_template.jar, %ORACLE_HOME%\osb\common\templates`<br>`\wls\oracle.osb_template.jar`<br>`qs_config.cmd` |

## 4.5.2 Navigating the Configuration Wizard Screens

Navigate through the following screens in the configuration wizard:

*Table 4-1 Quick Start WebLogic Server Configuration Screens*

| Screen | Description |
|---|---|
| Configuration | Specify a password for your default domain.<br>Edit the **Domain Location**. By default, the domain will be created at *ORACLE_HOME*/user_projects/domains/base_domain. To prevent confusion in the future, replace base_domain in the **Domain Location** path with standalone_domain.<br>Replace base_domain with standalone_domain in the **Application Location** path as well.<br>Review the port numbers.<br>Press **Create**. |
| Configuration Progress | This screen allows you to see the progress of the configuration. |
| End of Configuration | This screen appears when the installation is complete. Take note of the information on this screen.<br>You can leave the option to launch your new domain unchecked if you want to launch it manually from the domain location listed on this screen.<br>Click **Finish** to exit the wizard. |

If you chose not to launch the domain automatically after creation, you can launch your standalone manually by using the command line to navigate to the domain home and to launch the `startWebLogic.sh` or `startWebLogic.cmd` file.

Domain configuration will take several minutes. When you see the following message appear in the terminal, the WebLogic Server has launched and your standalone domain has been created successfully.

```
SOA Platform is running and accepting requests
```

Your standalone domain is already configured with Oracle SOA Suite runtime components.

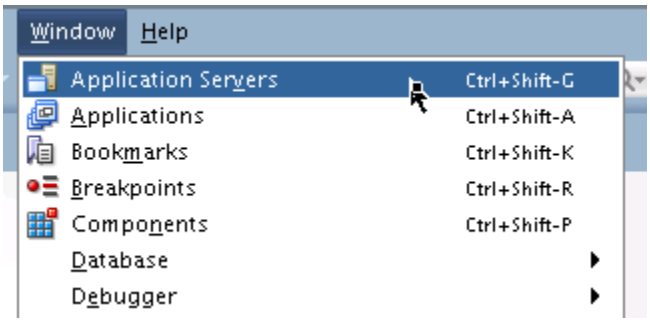
### 4.5.3 Launching the Application Server Connection Wizard

Launch Oracle JDeveloper with the appropriate command.

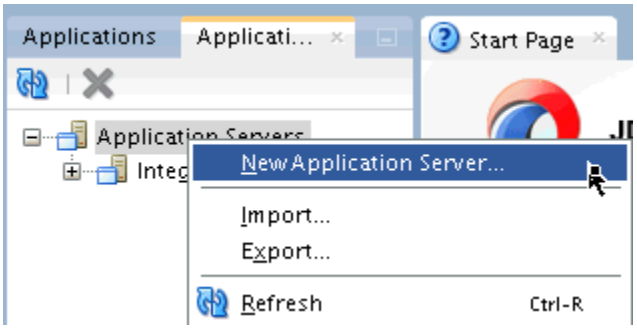
If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

Select **Window** from the top menu, and then choose **Application Server** from the drop-down menu. Alternatively, use the keyboard shortcut `Ctrl-Shift-G`. This will open the Application Server Navigator in the left-hand pane.




Right-click on **Application Server** in the Application Server Navigator. Select **New Application Server** from the drop-down menu to launch the **Create Application Server Connection** wizard.




## 4.5.4 Navigating the Create Application Server Connection Wizard Screens

The Create Application Server Connection wizard includes the following screens:

***Table 4-2 Application Server Connection Creation Screens***

| Screen | Description |
|---|---|
| Usage | Select **Standalone Server**.<br>Click **Next**. |
| Name and Type | Specify an intuitive **Connection Name** for your server.<br>Leave **WebLogic 12.x** selected as the **Connection Type**.<br>Click **Next**. |
| Authentication | Input the **Username** and **Password** you created during domain configuration.<br>Click **Next**. |
| Connections | Input the standalone domain's name. Then click **Next** without changing anything else on the screen. |

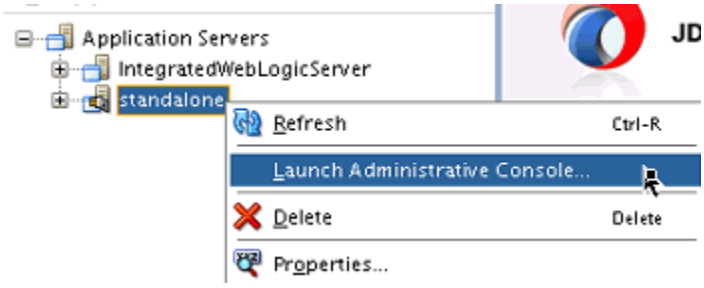
*Table 4-2 (Cont.) Application Server Connection Creation Screens*

| Screen | Description |
|---|---|
| Test | Click the **Test Connection** button at the top. If any of the tests fail, you should press **Back** to the **Connections** or **Authentication** screens to make sure you entered everything correctly.<br>If everything passes, click **Next**. |
| Finish | The **Finish** screen tells you how to launch your new connection, covered in the following task. Click **Finish**. |

### 4.5.5 Verifying Your Connection

Expand the connection node beside **Application Servers** in the Application Server Navigator. You should see your standalone domain listed by the **Connection Name** you specified on the **Name and Type** screen.

Right-click on your standalone domain's name and choose **Launch Administrative Console**.




Log into your administrative console. If you log in successfully, then you can begin creating applications.

## 4.6 Understanding Basic JDeveloper Functions

You should be familiar with basic Oracle JDeveloper functions to manage JDeveloper effectively.

You can learn more about using Oracle JDeveloper in Working with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*.

Stopping the Integrated WebLogic Server

Re-launching JDeveloper

### 4.6.1 Stopping the Integrated WebLogic Server

If you started the Integrated WebLogic Server from inside Oracle JDeveloper, you can simply close out of Oracle JDeveloper to end a running server.

If you do not want to close out of JDeveloper for any reason, you can also click the red stop button in the ribbon menu.

If you have launched an independent WebLogic Server, you should do the following:

| Environment | Run Command |
|---|---|
| UNIX | `cd DOMAIN_HOME/bin`<br>`./stopWebLogic.sh` |
| Windows | `CD DOMAIN_HOME\bin`<br>`stopWebLogic.cmd` |

### 4.6.2 Re-launching JDeveloper

If you have closed Oracle JDeveloper and need to reopen it, you can use the following commands:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

## 4.7 Managing Multiple Installations on the Same Machine

When you install multiple Quick Start distributions on the same machine, each distribution has its own JDeveloper that runs its own unique instance of Java DB. All Java DB instances on the same machine initialize on the same port. For these reasons, you cannot perform the following actions:

- You cannot simultaneously launch two Integrated WebLogic Servers from different distributions.
- You cannot access your Oracle SOA Suite runtime environment by launching the WebLogic Server from your Oracle Business Process Management Suite Quick Start Oracle home.
- You cannot access your Oracle Business Process Management Suite runtime environment by launching the WebLogic Server from your Oracle SOA Suite Quick Start Oracle home.

## 4.8 Switching Between Quick Start Distributions

If you want to switch between different servers using Java DB on the same machine, you need to take the following steps to ensure you are launching the desired development environment:

1. If you have not done so already, decide on separate user directory home locations for each of your JDeveloper distributions. The user home directory will contain subdirectories for your domain files and your user-generated application files.

   For example, you may want to install and use both an Oracle Business Process Management Suite JDeveloper and an Oracle SOA Suite JDeveloper on the same machine. You could designate the user home directory for your Oracle SOA Suite JDeveloper to be located at `C:/jdev12cworkarea/soa`, while your Oracle Business Process Management Suite user home directory could be located at `C:/jdev12cworkarea/bpm`.

2. Set the environment variable `JDEV_USER_DIR` to the location of the user directory home for the JDeveloper distribution that you want to use.

   For the example in the previous step, set `JDEV_USER_DIR=C:/jdev12cworkarea/soa` if you want to use the Oracle SOA Suite environment.

   **Note:**

   Redefining `JDEV_USER_DIR` changes the default save location for your application projects. If you already launched and used JDeveloper without defining `JDEV_USER_DIR`, you may have saved applications in the default application home. The default application home is located at the user's root directory under `JDeveloper/mywork`.

3. Go to the JDeveloper home of the distribution you want to use.

   For example, if you want to use your Oracle SOA Suite environment, go to your Oracle SOA Suite Oracle home and navigate to `/jdeveloper/jdev/bin`.

4. Launch the JDeveloper executable from there.

You must reset the `JDEV_USER_DIR` variable every time you switch between distributions using Java DB.

## 4.9 Next Steps

Once you have verified your installation, you can perform any of the following tasks:

| Action | Resource |
|---|---|
| Configure your Quick Start installation to use an external Oracle database and standalone compact domain. | See Configuring a Compact Domain. |
| Deploy a sample application. | See Running a Sample Application. |

| Action | Resource |
| --- | --- |
| Make or test an application of your own. | See Working with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*. |
| Delete your installation. | If you have tested your installation out and are done, see Deinstalling Oracle Quick Start . |

# 5

# Configuring a Compact Domain

After configuring a compact domain for a Quick Start installation, you will have created an external Oracle Database.

Follow the steps in this section only if you want create applications with components that are incompatible with the Integrated WebLogic Server's Java DB. These components include Oracle Enterprise Scheduler, Oracle B2B, Oracle Healthcare, Oracle Business Activity Monitoring, and Oracle Managed File Transfer.


Orientation

Preparing to Configure a Compact Domain for a Quick Start Installation

Installing Required Schemas

Configuring a Compact Domain

Connecting JDeveloper to the Compact Domain

Next Steps


## 5.1 Orientation

This is where you are in the Quick Start installation and configuration roadmap.

| Step | Description |
|---|---|
| Plan your installation. | Use Chapter 1 to decide which distribution and configuration path suits your goals. |
| Download and install a Quick Start distribution | You downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite. |
| **Configure a compact domain.** | **You are configuring a default domain, a standalone domain, or compact domain for your developed applications.** |
| Develop or test an application. | You will develop or test an application. |

## 5.2 Preparing to Configure a Compact Domain for a Quick Start Installation

You will need to prepare your system for configuring a compact domain.

A compact domain is a developer domain consisting of a single Administration server and no managed servers. Configuring a compact domain will allow you to use an

Oracle Database so that you can install additional components incompatible with the Java DB included by default in the Quick Start installation.

Make sure that you have verified that your Quick Start installation works before moving on to the following tasks:

Closing Oracle JDeveloper, Extra Server Connections, or Java DB

Downloading and Installing a Supported Database

Configuring a 12*c* Database for Quick Start

## 5.2.1 Closing Oracle JDeveloper, Extra Server Connections, or Java DB

Close any instance of Oracle JDeveloper.

To make sure there are no other server connections or instances of Java DB running in the background, use the following command:

| Environment | Run Command |
|---|---|
| UNIX | `ps -ef \| grep java`<br><br>Then `kill -9` extra running servers or instances of Java DB. |
| Windows | Bring up the Task Manager and select the **Processes** tab. Kill any running instances of JDeveloper, Java DB, or running servers.<br>You can also use:<br>`wmic process where "name='java.exe'" get ProcessID, Commandline /format:list`<br><br>Then use `taskkill /f /pid <PID>` to end extra running servers or Java DB. |

## 5.2.2 Downloading and Installing a Supported Database

To download and install a supported database:

1. Refer to the Oracle Fusion Middleware Download, Installation, and Configuration Readme Files for the download location of a supported database for Oracle Fusion Middleware 12*c*.
2. Run the installer. The installation guide for your database of choice is linked on the same Oracle Technology Network page, under the **Documentation** tab next to **Downloads**.

   During installation, make note of your service name and port number. You will need this information for schema creation.

## 5.2.3 Configuring a 12*c* Database for Quick Start

If you are using a 12*c* multitenant database, you must configure it to use the AL32UTF8 character set.

Quick Start's Repository Creation Utility will not be able to connect to a container database (CDB). You can choose not to create a container database on the "Global Database Creation" screen during database creation.

If you do create container database, you can create a pluggable database (PDB) within the CDB. Then point the RCU to the PDB. See the 12*c Database Administrator's Guide* for how to configure a compatible PDB.

## 5.3 Installing Required Schemas

You will need to create the schemas required for a Quick Start compact domain.

Running Installers for Additional Components

Creating Schemas for Quick Start with the Repository Creation Utility

### 5.3.1 Running Installers for Additional Components

If you know you want to add Oracle Managed File Transfer, Oracle B2B, or Oracle SOA Suite for healthcare integration, you should download and run their installers before running the RCU for the first time. Refer to Installing Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer for Quick Start for brief walkthroughs of these installations.

You do not need to run separate installers to add Oracle Enterprise Scheduler or Oracle Business Activity Monitoring.

If you are not sure which additional products you want yet, you can add any component after creating your compact domain. However, deciding now will minimize the number of times you have to restart your server and run the domain configuration wizard or RCU.

---

**Note:**

In 12*c*, the Repository Creation Utility (RCU) is included in the Oracle SOA Suite install. Do not download or use a separate version.

---

If you have finished configuring a compact domain but want to add new schemas, see Updating a Compact Domain for how to update a compact domain.

### 5.3.2 Creating Schemas for Quick Start with the Repository Creation Utility

To create schemas with the Repository Creation Utility (RCU):

1. Launch the RCU packaged with your Quick Start installation to create schemas in your new database. Do not download or use any other version of RCU to configure a database with Quick Start.

   If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/oracle_common/bin`<br>`./rcu` |
| Windows | `cd %ORACLE_HOME\oracle_common\bin`<br>`rcu.bat` |

2. Navigate through the following screens. For more information about the options on a specific screen, click Help or see Understanding Repository Creation Utility Screens in *Creating Schemas with the Repository Creation Utility*.

***Table 5-1 RCU Schema Creation Screens***

| Screen | Description |
|---|---|
| Welcome | This screen provides an introduction to what RCU is and its purpose. Click **Next**. |
| Create Repository | Choose **Create Repository** and **System Load and Product Load Concurrently**.<br>If the second option doesn't appear for you, you do not have the necessary permissions or privileges to perform DBA activities. |
| Database Connection Details | Fill the **Host Name**, **Username**, and **Password** blanks with the credentials for your Oracle database. Your **Service Name** and **Port** number were created when you installed your database.<br>If you using a 12*c* multitenant database and are having connection issues, make sure you have configured your database properly.<br>Click **Next**. |
| Checking Prerequisites | This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click **OK** to continue. |

***Table 5-1 (Cont.) RCU Schema Creation Screens***

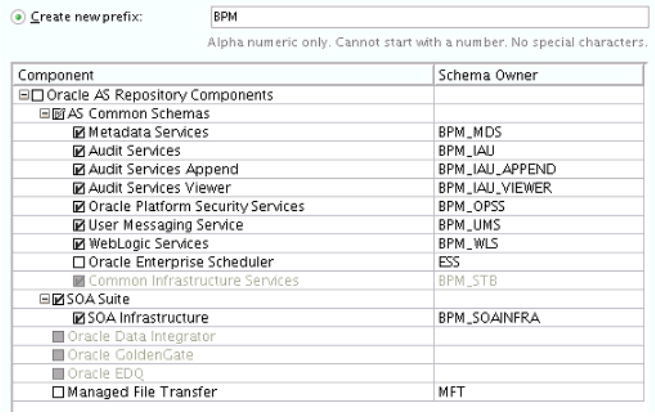
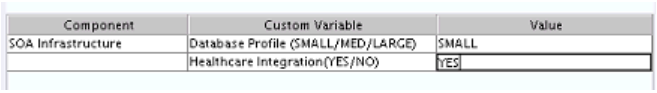
| Screen | Description |
|---|---|
| Select Components | Specify an intuitive prefix for your new schemas, such as **SOAQS** or **BPMQS**, so you can target them easily when you are configuring a domain.<br>Select **AS Common Schemes** and **SOA Suite** to select all of their dependencies.<br>  <br><br>If you are installing Oracle Managed File Transfer, select **Managed File Transfer** from the list. You will not see this option listed if you have not run the corresponding installer yet.<br>Click **Next**. |
| Schema Passwords | Select **Use same passwords for all schemas**. Then create a password you will remember. |
| Custom Variables | This screen will show up because you are installing SOA Infrastructure. See About the Custom Variables Required for the SOA Suite Schemas in *Installing and Configuring Oracle SOA Suite and Business Process Management* for descriptions of these variables.<br>If you are a healthcare provider and want the Healthcare Integration user interface, change the **Value** field for **Healthcare Integration** to **Yes**. If you do not set this value now, the Healthcare Integration user interface will not function properly. See Activating the Oracle SOA Suite for Healthcare Integration User Interface for more information.<br>  <br><br>Otherwise, accept the defaults and press **Next**. |
| Map Tablespaces | This screen displays default and temporary tablespaces for the components you want to create schemas for. You can review this information and click **Next**<br>Click **OK** through the next two confirmation dialogues. Then click **Next** again to progress to the next screen. |

*Table 5-1 (Cont.) RCU Schema Creation Screens*

| Screen | Description |
|---|---|
| Summary | This screen summarizes the component schemas that will be created. Take note of the **Database details** at the top of this screen.<br>Click **Create** to begin schema creation.<br>A progress dialog shows the progress of schema creation. Green checks will appear next to the names of successfully created schemas. |
| Completion Summary | This screen displays the log files created with the database schemas. You can open any of the log files to review information or to troubleshoot a creation issue.<br>If any operation failed, you can check the **Cleanup for failed components** box. Upon clicking **Close**, this option will drop failed schemas from your database.<br>When you click **Close**, schema creation is complete. |

If you encountered any problems during schema creation, verify the following:

- You are using the RCU included in your Quick Start installation.
- Your database server and listeners are running.
- If you are using a 12*c* database, you have configured your database properly.

You can also troubleshoot the issue using the log files generated on the **Completion Summary** screen. For more information, see Troubleshooting Repository Creation Utility in *Creating Schemas with the Repository Creation Utility*.

## 5.4 Configuring a Compact Domain

In a developer environment, you can create a compact domain using the Configuration Wizard.

Starting the Configuration Wizard

Selecting the Domain Type and Domain Home Location

Selecting Configuration Templates for Oracle SOA Suite Quick Start

Selecting the Application Home Location

Configuring the Administrator Account

Specifying the Domain Mode and JDK

Specifying the Datasource Configuration Type

Specifying JDBC Component Schema Information

Testing the JDBC Connections

Specifying the Path to the Keystore Certificate or Key

Use the Keystore screen to specify either the path to the trusted certificate for each keystore, or the path to each keystore's private key and other private key information.

Selecting Advanced Configuration

Configuring the Domain

Reviewing Your Domain Location

## 5.4.1 Starting the Configuration Wizard

To start the configuration wizard to create a compact domain:

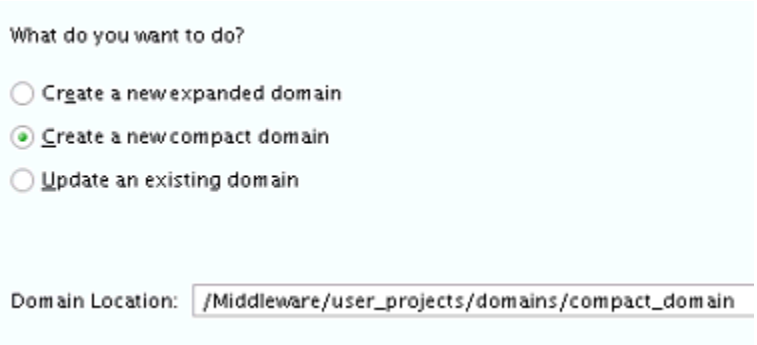
1. Go to the `bin` directory.
2. Set the environment variable `CONFIG_JVM_ARGS` to `-Dcom.oracle.cie.config.showProfile=true`. This enables the compact domain option in the configuration wizard.
3. Launch the configuration wizard.

If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Operating System | Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/oracle_common/common/bin`<br>`CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true`<br>`export CONFIG_JVM_ARGS`<br>`./config.sh` |
| Windows | `cd %ORACLE_HOME\oracle_common\common\bin`<br>`SET CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true`<br>`config.cmd` |

## 5.4.2 Selecting the Domain Type and Domain Home Location

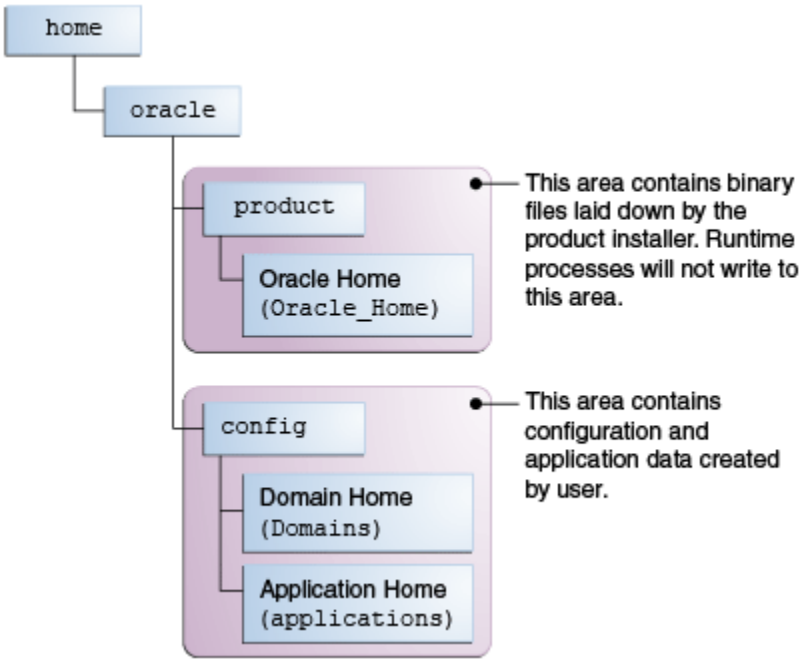
On the Configuration Type screen, select **Create a new compact domain**. If you do not see this option, you did not set the `CONFIG_JVM_ARGS` environment variable successfully.




In the **Domain Location** field, specify your Domain home directory. If you already launched the Integrated WebLogic Server and generated the default domain, you should create a new domain outside of base_domain.

You should create your Domain home outside the Oracle home directory. See the location of **Application Home** relative to **Oracle Home** in the following figure.

***Figure 5-1 Recommended Oracle Fusion Middleware Directory Structure***




This directory structure will help you avoid issues when you need to upgrade or reinstall your software. See What are the Key Oracle Fusion Middleware Directories? in *Understanding Oracle Fusion Middleware* for more information.

## 5.4.3 Selecting Configuration Templates for Oracle SOA Suite Quick Start

On the Templates screen, make sure **Create Domain Using Product Templates** is selected, then select the following templates:

- Oracle SOA Suite - 12.2.1.1.0 [soa]

  Selecting this template automatically selects the following as dependencies:

  – Oracle Enterprise Manager

  – Oracle WSM Policy Manager

  – Oracle JRF

  – WebLogic Coherence Cluster Extension

- Oracle Service Bus - 12.2.1.1.0 [osb]

  Selecting this template automatically selects the following as a dependency:

  – WebLogic Advanced Web Services for JAX-RPC Extension

- Oracle Enterprise Scheduler Service Basic - 12.2.1.1.0 [oracle_common]
- Oracle Enterprise Manager Plugin for ESS - 12.2.1.1.0 [em]

Optionally, you can select the following:

- Oracle SOA Suite for healthcare integration -12.2.1.1.0 [soa]

---

**Note:**

For HIPAA documents, select both the **Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]** template and **Oracle B2B - 12.2.1.1.0 [soa]** template.

For HL7 documents, select **Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]** only.

---

- Oracle Business Activity Monitoring - 12.2.1.1.0 [soa]
- Oracle B2B - 12.2.1.1.0 [soa]
- Oracle Managed File Transfer -12.2.1.1.0 [mft]

If you have not run the installers for Oracle B2B, Oracle Healthcare Integration, or Oracle Managed File Transfer, you will not see the options to select those templates. See About Adding Components to a Quick Start Installation for installation instructions for these components.

### 5.4.4 Selecting the Application Home Location

On the Application Location screen, select the location where you want to store your applications associated with your domain. This location is also known as the *Application home* directory.

Your Application home should be created at the same location you specified for your Domain home above.

### 5.4.5 Configuring the Administrator Account

On the Administrator Account screen, specify the user name and password for the default WebLogic Administrator account for the domain. You will use these credentials to connect to the domain's Administrator Server.

### 5.4.6 Specifying the Domain Mode and JDK

On the Domain Mode and JDK screen:

- In the Domain Mode field, select **Development**.
- In the JDK field, select **Oracle HotSpot JDK**.

### 5.4.7 Specifying the Datasource Configuration Type

On the Database Configuration Type screen, select **RCU Data** to activate the fields. The **RCU Data** option instructs the Configuration Wizard to connect to the database and Service Table (STB) schema to automatically retrieve schema information for the schemas needed to configure the domain.

---

**Note:**

If you choose to select **Manual Configuration** on this screen, you will have to manually fill in the parameters for your schema on the following screen.

---

After selecting **RCU Data**, fill in the following fields:

| Field | Description |
|---|---|
| DBMS/Service | Enter the database DBMS name, or service name if you selected a service type driver. If you are using a 12*c* multitenant database, make sure you use the service name for a configured pluggable database (PDB) and not the container. |
| Host Name | Enter the name of the server hosting the database. |
| Port | Enter the port number on which the database listens. |
| Schema Owner<br>Schema Password | Enter the username and password for connecting to the database's Service Table schema. This is the schema username and password that was specified for the Service Table component on the "Schema Passwords" screen in the RCU.<br>The default username is *prefix*_STB, where *prefix* is the custom prefix that you defined in RCU. |

Click **Get RCU Configuration** when you are finished specifying the database connection information. The following output in the Connection Result Log indicates that the operation succeeded:

```
Connecting to the database server...OK
Retrieving schema data from database server...OK
Binding local schema components with retrieved data...OK

Successfully Done.
```

**Tip:**

For more information about the **RCU Data** option, see Understanding the Service Table Schema in *Creating Schemas with the Repository Creation Utility*.

## 5.4.8 Specifying JDBC Component Schema Information

Verify that the values on the JDBC Component Schema screen are correct for all schemas. If you selected **RCU Data** on the previous screen, the schema table should already be populated appropriately.

## 5.4.9 Testing the JDBC Connections

Use the JDBC Component Schema Test screen to test the datasource connections you have just configured.

A green check mark in the Status column indicates a successful test. If you encounter any issues, see the error message in the Connection Result Log section of the screen, fix the problem, then try to test the connection again.

## 5.4.10 Specifying the Path to the Keystore Certificate or Key

Use the Keystore screen to specify either the path to the trusted certificate for each keystore, or the path to each keystore's private key and other private key information.

Use the screen to specify either the path to the trusted certificate for each keystore, or the path to each keystore's private key and other private key information.

When you click in the Trusted Certificate, Private Key, or Identity Certificate fields, a browse icon appears to the right of the field. Click this icon to browse to the appropriate file.

**Tip:**

See Keystore in *Creating WebLogic Domains Using the Configuration Wizard* for more information about other options on this screen.

## 5.4.11 Selecting Advanced Configuration

You do not need any advanced configuration for a compact domain. You can skip through the Advanced Configuration screen without selecting anything.

## 5.4.12 Configuring the Domain

The Configuration Summary screen shows the final directory structure and the components and extensions with which your compact domain will be configured. Review this information and click **Create**.

The configuration progress bar will appear on the Configuration Progress screen.

## 5.4.13 Reviewing Your Domain Location

Upon successful configuration, the Configuration Success screen shows the directory location of your domain and the URL for your administration console access. Take note of both and click **Close**.

When the configuration wizard is done, navigate to your compact domain's home and start the administrator server with the following command:

| Operating System | Command |
|---|---|
| UNIX | `cd DOMAIN_HOME/bin`<br>`./startWebLogic.sh` |
| Windows | `cd DOMAIN_HOME\bin`<br>`startWebLogic.cmd` |

If you want to use JDeveloper's Integrated WebLogic Server, on the same system in conjunction with your compact domain, add the flag `-noderby` to the end of the command. For example, the Linux launch command will look like the following:

```
./startWebLogic.sh noderby
```

The `-noderby` option will prevent the Derby Java Database from starting in the Java Virtual Machine. This will prevent any conflicts with the Integrated WebLogic Server, which needs to initialize the Derby Java Database to start up successfully.

You know that the administrator server is running when you see the following output:

```
Server state changed to RUNNING.
```

# 5.5 Connecting JDeveloper to the Compact Domain

After configuring a compact domain, you need to prepare JDeveloper to target the new compact domain for launching applications.

Launching the Application Server Connection Wizard

Reviewing Your Domain Location

Verifying Your Connection

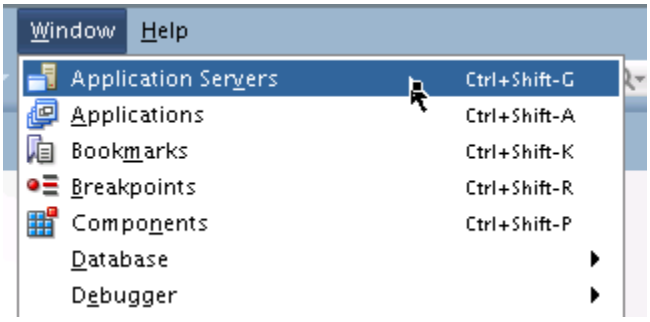
## 5.5.1 Launching the Application Server Connection Wizard

Launch Oracle JDeveloper with the appropriate command.

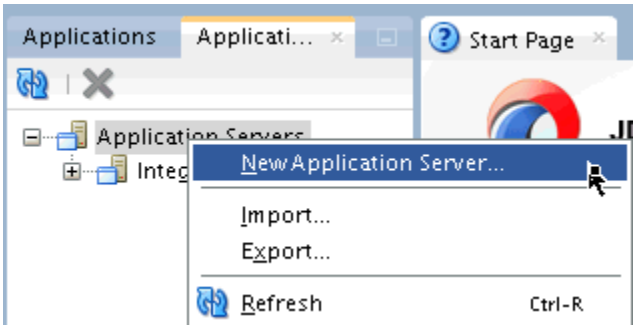
If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

Select **Window** from the top menu, and then choose **Application Server** from the drop-down menu. Alternatively, use the keyboard shortcut `Ctrl-Shift-G`. This will open the Application Server Navigator in the left-hand pane.




Right-click on **Application Server** in the Application Server Navigator. Select **New Application Server** from the drop-down menu to launch the **Create Application Server Connection** wizard.




## 5.5.2 Reviewing Your Domain Location

Upon successful configuration, the Configuration Success screen shows the directory location of your domain and the URL for your administration console access. Take note of both and click **Close**.

When the configuration wizard is done, navigate to your compact domain's home and start the administrator server with the following command:

| Operating System | Command |
|---|---|
| UNIX | `cd DOMAIN_HOME/bin`<br>`./startWebLogic.sh` |
| Windows | `cd DOMAIN_HOME\bin`<br>`startWebLogic.cmd` |

If you want to use JDeveloper's Integrated WebLogic Server, on the same system in conjunction with your compact domain, add the flag `-noderby` to the end of the command. For example, the Linux launch command will look like the following:

```
./startWebLogic.sh noderby
```

The `-noderby` option will prevent the Derby Java Database from starting in the Java Virtual Machine. This will prevent any conflicts with the Integrated WebLogic Server, which needs to initialize the Derby Java Database to start up successfully.

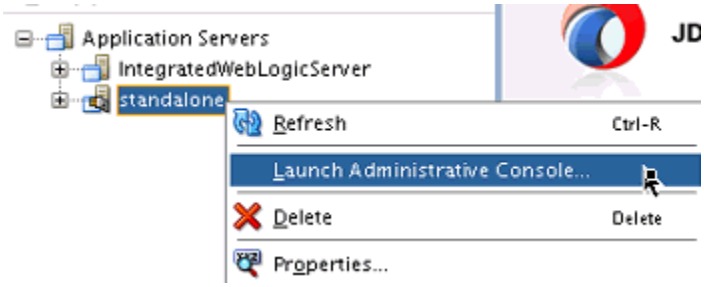
You know that the administrator server is running when you see the following output:

```
Server state changed to RUNNING.
```

## 5.5.3 Verifying Your Connection

Expand the connection node beside **Application Servers** in the Application Server Navigator. You should see your standalone domain listed by the **Connection Name** you specified on the **Name and Type** screen.

Right-click on your standalone domain's name and choose **Launch Administrative Console**.




Log into your administrative console. If you log in successfully, then you can begin creating applications.

## 5.6 Next Steps

Once you have verified your Quick start installation and compact domain connection, you can take any of the following actions:

| Action | Resource |
|---|---|
| Deploy a sample application for Oracle SOA Suite Quick Start. | See Running a Sample Application. |
| Make or test an application of your own. | See Getting Started with Developing Applications with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*. |
| Add Oracle Managed File Transfer, Oracle Stream Analytics, or Oracle B2B/Healthcare. | See Adding Components to a Quick Start Installation for instructions on adding components to a fully configured compact domain. |
| Delete your installation. | If you have tested your installation out and are done, see Deinstalling Oracle Quick Start . |

# Part III

# Quick Start for Oracle Business Process Management Suite

This part covers the steps to install Oracle Business Process Management Suite using Quick Start.


Installing Oracle Business Process Management Suite Quick Start for Developers

Configuring an Integrated WebLogic Server Domain

Configuring a Compact Domain

# 6

# Installing Oracle Business Process Management Suite Quick Start for Developers

During the Oracle Business Process Management Suite Quick Start installation, you will use the Integrated WebLogic Server's default domain or create a standalone domain.

Before beginning this installation, you should review Introducing the Quick Start Distributions.


Orientation

Downloading the Oracle Business Process Management Suite Quick Start Installer

Launching the Oracle Business Process Management Suite Quick Start Installer

Navigating the Installation Screens

Next Steps


## 6.1 Orientation

This is where you are in the Quick Start installation and configuration roadmap.

| Step | Description |
|---|---|
| Plan your installation. | You used Chapter 1 to decide which distribution and configuration path suits your goals. |
| **Download and install a Quick Start distribution** | **You will download and install Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.** |
| Configure a default or standalone domain. | You will configure a default domain, a standalone domain, or compact domain for your developed applications. |
| Develop or test an application. | You will develop or test an application. |

## 6.2 Downloading the Oracle Business Process Management Suite Quick Start Installer

To download the Oracle Business Process Management Suite installer:

1. Log into the host computer where you want to install Oracle Business Process Management Suite.
2. Download the Oracle Business Process Management Suite Quick Start installer zip file. This is located on the Oracle Software Delivery Cloud as part of the Oracle Fusion Middleware 12*c* Media Pack.

   If you cannot find the installer at the specified location, verify the download location in the Oracle Fusion Middleware Download, Installation, and Configuration Readme File.

## 6.3 Launching the Oracle Business Process Management Suite Quick Start Installer

After you have installed a certified JDK and downloaded the Quick Start installer zip file, you can launch the Quick Start installer

1. Unzip the zip file contents into a location you can find easily. You may have several .jar files.
2. Using the command prompt, navigate to the directory where you unzipped the jar files. Launch the installation wizard with the appropriate command.

| Installer | Run Command |
|---|---|
| Generic Installer for Linux | *JAVA_HOME*/bin/java -jar fmw_12.2.1.1.0_bpm_quickstart_generic.jar |
| Generic Installer for Windows | *JAVA_HOME*\bin\java.exe -jar fmw_12.2.1.1.0_bpm_quickstart_generic.jar |

**Note:**

You can also launch the installer in silent mode to ensure that no configuration options are displayed during the installation process. For more information about silent or command line installation, see Using the Oracle Universal Installer in Silent Mode in *Installing Software with the Oracle Universal Installer*.

3. The installation wizard should launch. If you have any problems getting the installer to run, double-check your system preparations.

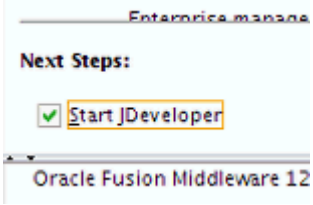
**Note:**

Though you may have multiple jar files, you do not need to run the install command on all of them. You only need to run the above command on `fmw_12.2.1.1.0_bpm_quickstart_generic.jar`.

## 6.4 Navigating the Installation Screens

Once you have launched the Quick Start installer, the installation wizard displays the screens described in the following table. If you need additional help with an installation screen, click **Help** in the installer.

***Table 6-1 Quick Start Install Screens***

| Screen | Description |
|---|---|
| Welcome | This screen introduces you to the product installer. |
| Installation Location | Use this screen to specify the location of your Oracle home directory. Ensure that the name of the directory that you choose does not contain spaces.<br>For more about Oracle Fusion Middleware directory structure, see Understanding Directories for Installation and Configuration in *Planning an Installation of Oracle Fusion Middleware*. |
| Prerequisite Checks | This screen verifies that your system meets the minimum necessary requirements. |
| Installation Summary | Use this screen to verify the installation options you selected. If you want to save these options to a response file, click **Save Response File** and provide the location and name of the response file. Response files can be used later in a silent installation situation. |
| Installation Progress | This screen shows the installation progress.<br>When the progress bar reaches 100% complete, click **Finish** to dismiss the installer, or click **Next** to see a summary. |
| Installation Complete | This screen appears when the installation is complete. Review the information on this screen.<br>At the bottom of this screen, there is a checkbox to launch Oracle JDeveloper upon closing the installation wizard.<br>  <br>Oracle recommends that you deselect this box.<br>Click **Finish**. |

## 6.5 Next Steps

Once you have verified your installation, you should configure a domain. See Understanding Domain Configurations for detailed descriptions of your domain options.

Otherwise, use the following table to help you decide quickly.

| Action | Resource |
| --- | --- |
| Immediately launch the Integrated WebLogic Server to initiate a domain with Java DB.<br>This option does not require any additional installations. | See Configuring an Integrated WebLogic Server Domain. |
| Install and configure an Oracle database to work with your Quick Start installation.<br>This option requires you to install an Oracle database but allows you to use more Oracle SOA Suite components, such as Oracle Managed File Transfer, Oracle Stream Analytics, or Oracle B2B/Healthcare. | See Configuring a Compact Domain. |

# 7

# Configuring an Integrated WebLogic Server Domain

You can configure the Integrated WebLogic Server's default domain or standalone domain for a Quick Start distribution.

After following the steps in this section, you will be able to test applications using the Integrated WebLogic Server and Java DB.


Orientation

Understanding Quick Start Domains

Preparing to Launch the Integrated WebLogic Server

Configuring JDeveloper's Default Domain

Configuring a Standalone Domain

Understanding Basic JDeveloper Functions

Managing Multiple Installations on the Same Machine

Switching Between Quick Start Distributions

Next Steps


## 7.1 Orientation

This is where you are in the Quick Start installation and configuration roadmap.

| Step | Description |
|---|---|
| Plan your installation. | Use Chapter 1 to decide which distribution and configuration path suits your goals. |
| Download and install a Quick Start distribution | You downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite. |
| **Configure a default or standalone domain.** | **You are configuring a default domain, a standalone domain, or compact domain for your developed applications.** |
| Develop or test an application. | You will develop or test an application. |

## 7.2 Understanding Quick Start Domains

There are three supported ways to configure a domain with Quick Start. All domains will be pre-configured with IDE plugins for the Oracle Business Process Management Suite components of your choice.

Use the following table to decide which domain would best suit your needs.

| Suggested Use Case | Method | Description |
|---|---|---|
| Evaluation | Configure the Integrated WebLogic Server's default domain in JDeveloper. | Launch the Integrated WebLogic Server from inside JDeveloper to create the default domain.<br>In this case, the server is tethered to your current JDeveloper session. When you quit JDeveloper, the Integrated WebLogic Server shuts down as well. Every time you start a new JDeveloper session, you need to relaunch the Integrated WebLogic Server.<br>See Configuring JDeveloper's Default Domain for more information. |
| Development with Java DB | Configure a standalone domain. | Create a standalone version of the Integrated WebLogic Server. The server and domain run independently of JDeveloper.<br>This will save you startup time if you plan on developing an application in JDeveloper over a series of separate sessions, or if you plan to develop applications in the Oracle Service Bus browser-based console.<br>See Configuring a Standalone Domain for more information. |
| Development with an Oracle Database | Configure a compact domain. | You can configure your Quick Start installation to use an Oracle database with an external compact domain.<br>You should only choose this option if you know you want your domain to be compatible with Enterprise Scheduler, Managed File Transfer, B2B, Heathcare, or BAM components.<br>See Configuring a Compact Domain for more information. |

Any other method of creating a domain is not recommended.

## 7.3 Preparing to Launch the Integrated WebLogic Server

Follow steps to prepare your environment before launching the Integrated WebLogic Server.

Setting the JDEV_USER_DIR Environment Variable

Setting the ORACLE_HOME Environment Variable

Checking Entropy for Oracle Linux

### 7.3.1 Setting the JDEV_USER_DIR Environment Variable

You can set the `JDEV_USER_DIR` environment variable to define the location of your user home directory. This should be a unique location for your distribution. The user home directory will contain subdirectories for your domain files and your user-generated application files.

---

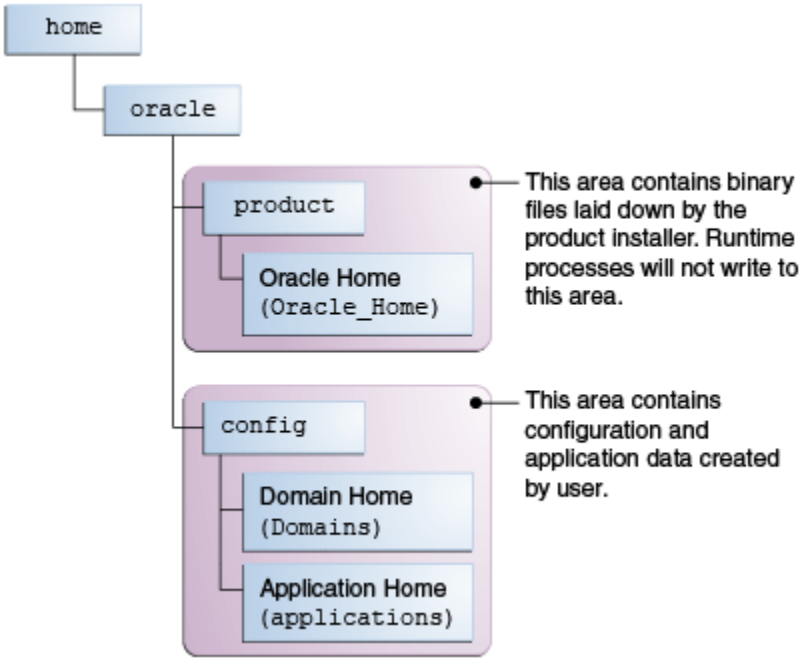
**Note:**

This step is crucial if you are planning to install and run multiple distributions of JDeveloper on the same machine. Assign a unique user home directory for each distribution you install.

---

Oracle recommends a directory structure similar to the one shown below, where `config` shows the location of the user home directory.

***Figure 7-1 Recommended Oracle Fusion Middleware Directory Structure***




If you do not define `JDEV_USER_DIR`, your domain home and application home will be created at two different locations.

On an UNIX host, the default domain home will be created at `$HOME/.jdeveloper/system12.2.1.1.x.x.xxxx/DefaultDomain`. The default application home will be created at `$HOME/jdeveloper/mywork`.

On a Windows host, the default domain home will be created at `%USERPROFILE%\AppData\Roaming\JDeveloper\system12.2.1.1.x.x.xxxx\DefaultDomain`. Your default application home will be created at `C:\JDeveloper\mywork`.

Once you have set `JDEV_USER_DIR`, the domain home and application home will be collocated as subdirectories under the defined location. For example, on a UNIX system, the domain home will be located in `JDEV_USER_DIR`

`\system12.2.1.1.x.x.xxx`. The application home will be located in `JDEV_USER_DIR\mywork`.

### 7.3.2 Setting the ORACLE_HOME Environment Variable

You can set the `ORACLE_HOME` environment variable to simplify navigating to the various directories when you are running installation and configuration commands.

The path definition should look something like this:

| Environment | Run Command |
|---|---|
| UNIX | `ORACLE_HOME=$HOME/Oracle/Middleware/Oracle_Home`<br>`export ORACLE_HOME` |
| Windows | `SET ORACLE_HOME=C:\Oracle\Middleware\Oracle_Home` |

### 7.3.3 Checking Entropy for Oracle Linux

If you are installing on an Oracle Linux (formally Oracle Enterprise Linux) machine, you should ensure that you have sufficient entropy. You need at least 500 for the Integrated WebLogic Server to start up in a timely manner.

To check for entropy, run the following command:

```
cat /proc/sys/kernel/random/entropy_avail
```

If you have less than 500, use the following command to replenish bytes to `/dev/random` using `/dev/urandom` as the source:

```
rngd -r /dev/urandom -o /dev/random -b
```

You can configure this command by editing `/etc/sysconfig/rngd` and add the following line:

```
EXTRAOPTIONS="-i -r /dev/urandom -o /dev/random -b -t 60 -W 2048"
```

## 7.4 Configuring JDeveloper's Default Domain

You can configure JDeveloper's default domain by launching the Integrated WebLogic Server.

Launching the Integrated WebLogic Server

Verifying Your Domain

Disabling Secure Sockets Layer (SSL)

### 7.4.1 Launching the Integrated WebLogic Server

To launch the integrated WebLogic server:

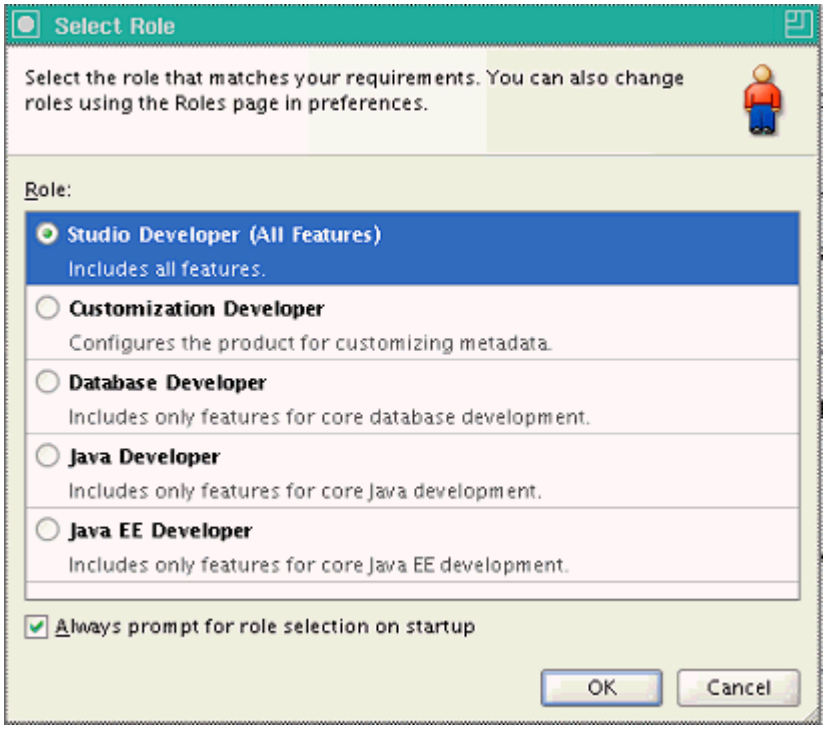
1. Launch JDeveloper.

   If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

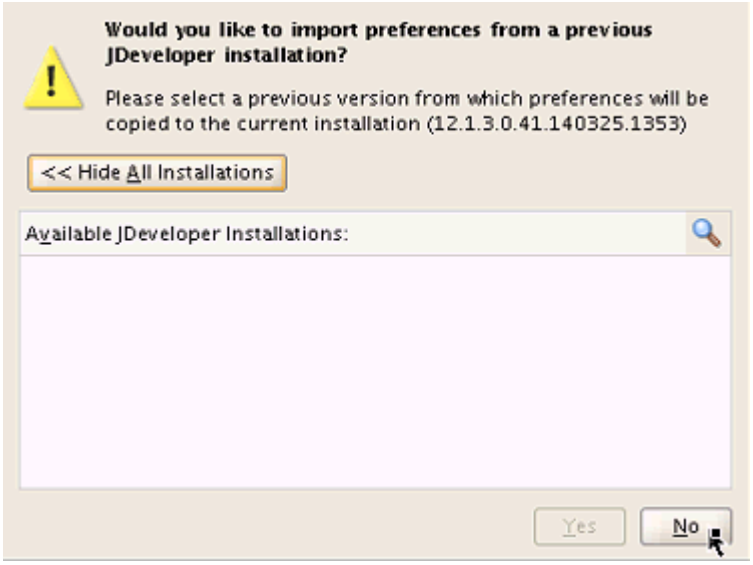
| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

As Oracle JDeveloper launches, you will get three prompts.

When prompted, select **Studio Developer** as your role and click **OK**.




When prompted, click **No** to import preferences from a previous JDeveloper installation.

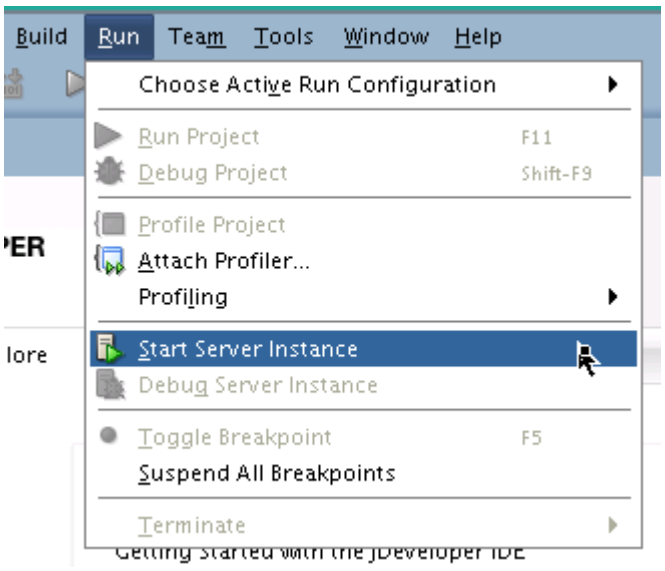



When prompted about **Oracle Usage Tracking**, check whether or not you want Oracle JDeveloper to send automated usage reports to Oracle and click **OK**.

JDeveloper has fully launched at this point.

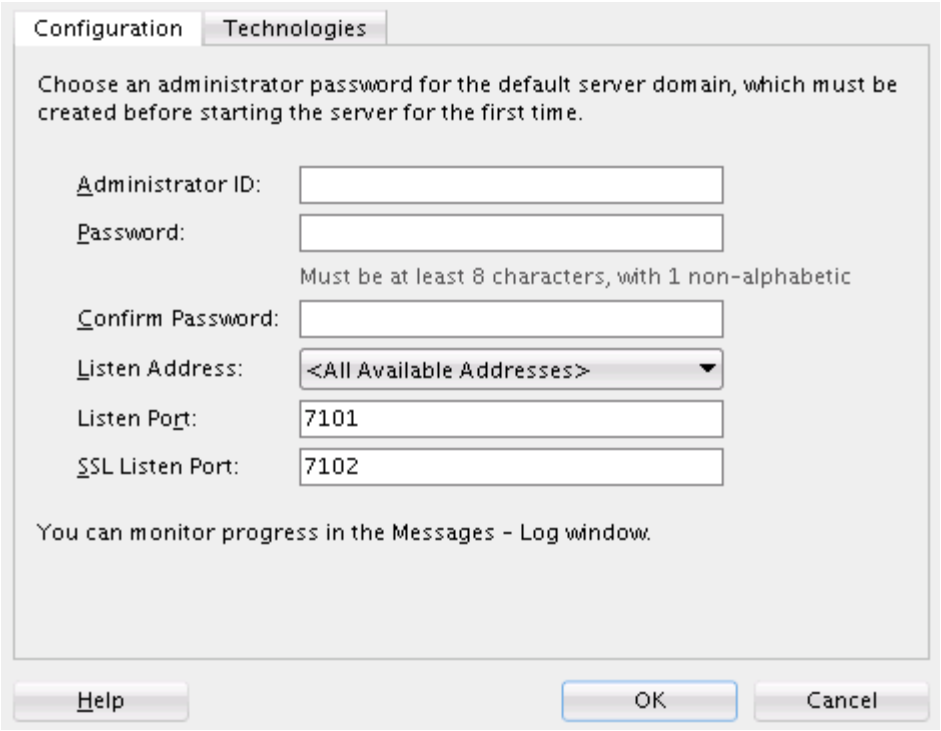
2. Launch the Integrated WebLogic Server by choosing **Run** from top menu bar. Select **Start Server Instance** from the drop-down menu.

***Figure 7-2 Starting the Integrated WebLogic Server***




3. The first time you launch the server instance, you will be prompted to enter a password for your default domain.

*Figure 7-3 Specifying a Password for Default Domain*




The **Administrator ID**, **Listen Address**, **Listen Port**, and **SSL Listen Port** should already have values. Review them and make any appropriate changes.

4. Launching the integrated server will take several minutes.

   You can track the server's launch in the **Messages** window pane. This window should automatically open at the bottom of the JDeveloper screen. If it is not there, you can open it by selecting **Window** from the top bar menu and **Log** from the drop-down menu. You can also activate it with the keyboard shortcut `Ctrl +Shift+L`.

   ---

   **Note:**

   If the creation of the Integrated WebLogic Server domain fails with the following error:

   ```
   Failed to query contents of table SERVICETABLE. - Schema
   'DEMODB' does not exist
   ```

   Make sure to shut down all running servers, even if they are not using Java DB, and try the domain creation again.

   ---

   ---

   **Note:**

   If your machine is connected through a VPN, Coherence may be confusing the local and VPN IP addresses. Change the Coherence cluster to multicast.

   ---

5. When you see the following messages appear in the log, the Integrated WebLogic Server has launched successfully.

```
[SOA Platform is running and accepting requests
[IntegratedWebLogicServer started.]
```

### 7.4.2 Verifying Your Domain

Your default domain is already configured with Oracle SOA Suite and Oracle Service Bus runtime components. To verify your domain installation:

1. Access the Enterprise Manager Fusion Middleware Control, which is located at a URL following this format:

   `http://hostname.domain:7101/em`

   **Note:**

   The default port for the Integrated WebLogic Server should always be `7101` unless you changed it during configuration.

   Log in using the username and password that you specified when launching the Integrated Weblogic Server.

   For more information on using Fusion Middleware Control, see Getting Started Using Oracle Enterprise Manager Fusion Middleware Control in *Administering Oracle Fusion Middleware*.

2. Alternatively, if you plan to develop projects using the Oracle Service Bus console, you can check to see if Oracle Service Bus is running.

   The Oracle Service Bus console is located at an URL with the following format:

   `http://hostname.domain:7101/servicebus`

   Log in using the username and password that you specified when creating your standalone domain.

   For more information on using the Oracle Service Bus console, see Getting Started with the Oracle Service Bus Console in *Developing Services with Oracle Service Bus*.

### 7.4.3 Disabling Secure Sockets Layer (SSL)

This is an optional task. SSL is enabled by default in the Integrated WebLogic Server. If you do not have stringent design time requirements, you can disable SSL as follows:

1. Go to the Administrator Console at `http://localhost:7101/console`
2. Log in with your credentials.
3. Select **Environments**, then **Servers**, then **Admin Server**.
4. Uncheck **SSL Listen Port Enabled**.
5. Restart the Integrated WebLogic Server.

## 7.5 Configuring a Standalone Domain

You can launch a standalone version of the Integrated WebLogic Server and domain.

Starting the Standalone Domain Configuration Wizard

Navigating the Configuration Wizard Screens

Launching the Application Server Connection Wizard

Navigating the Create Application Server Connection Wizard Screens

Verifying Your Connection

## 7.5.1 Starting the Standalone Domain Configuration Wizard

Before launching the configuration wizard, make sure no other servers are running on your system.

To start the configuration wizard to create a standalone domain:

1. Go to the `bin` directory.
2. Set the environment variable `QS_TEMPLATES` to either the SOA domain template or to both SOA and OSB domain template.
3. Launch the standalone domain configuration wizard.

If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/oracle_common/common/bin`<br>`QS_TEMPLATES="$ORACLE_HOME/soa/common/templates/wls/`<br>`oracle.soa_template.jar, $ORACLE_HOME/osb/common/templates/wls/`<br>`oracle.osb_template.jar"`<br>`export QS_TEMPLATES`<br>`./qs_config.sh` |
| Windows | `cd %ORACLE_HOME%\oracle_common\common\bin`<br>`set QS_TEMPLATES=%ORACLE_HOME%\soa\common\templates\wls`<br>`\oracle.soa_template.jar, %ORACLE_HOME%\osb\common\templates`<br>`\wls\oracle.osb_template.jar`<br>`qs_config.cmd` |

## 7.5.2 Navigating the Configuration Wizard Screens

Navigate through the following screens in the configuration wizard:

*Table 7-1 Quick Start WebLogic Server Configuration Screens*

| Screen | Description |
|---|---|
| Configuration | Specify a password for your default domain.<br>Edit the **Domain Location**. By default, the domain will be created at *ORACLE_HOME*/user_projects/domains/base_domain. To prevent confusion in the future, replace base_domain in the **Domain Location** path with standalone_domain.<br>Replace base_domain with standalone_domain in the **Application Location** path as well.<br>Review the port numbers.<br>Press **Create**. |
| Configuration Progress | This screen allows you to see the progress of the configuration. |
| End of Configuration | This screen appears when the installation is complete. Take note of the information on this screen.<br>You can leave the option to launch your new domain unchecked if you want to launch it manually from the domain location listed on this screen.<br>Click **Finish** to exit the wizard. |

If you chose not to launch the domain automatically after creation, you can launch your standalone manually by using the command line to navigate to the domain home and to launch the `startWebLogic.sh` or `startWebLogic.cmd` file.

Domain configuration will take several minutes. When you see the following message appear in the terminal, the WebLogic Server has launched and your standalone domain has been created successfully.

```
SOA Platform is running and accepting requests
```

Your standalone domain is already configured with Oracle SOA Suite runtime components.

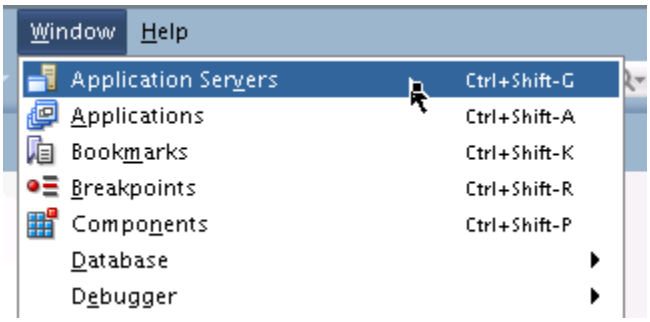
## 7.5.3 Launching the Application Server Connection Wizard

Launch Oracle JDeveloper with the appropriate command.

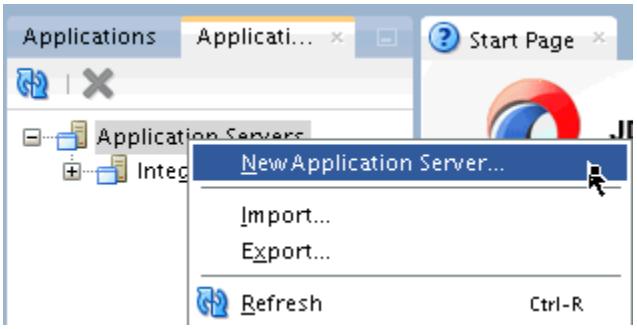
If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

Select **Window** from the top menu, and then choose **Application Server** from the drop-down menu. Alternatively, use the keyboard shortcut `Ctrl-Shift-G`. This will open the Application Server Navigator in the left-hand pane.




Right-click on **Application Server** in the Application Server Navigator. Select **New Application Server** from the drop-down menu to launch the **Create Application Server Connection** wizard.




## 7.5.4 Navigating the Create Application Server Connection Wizard Screens

The Create Application Server Connection wizard includes the following screens:

***Table 7-2 Application Server Connection Creation Screens***

| Screen | Description |
|---|---|
| Usage | Select **Standalone Server**.<br>Click **Next**. |
| Name and Type | Specify an intuitive **Connection Name** for your server.<br>Leave **WebLogic 12.x** selected as the **Connection Type**.<br>Click **Next**. |
| Authentication | Input the **Username** and **Password** you created during domain configuration.<br>Click **Next**. |
| Connections | Input the standalone domain's name. Then click **Next** without changing anything else on the screen. |

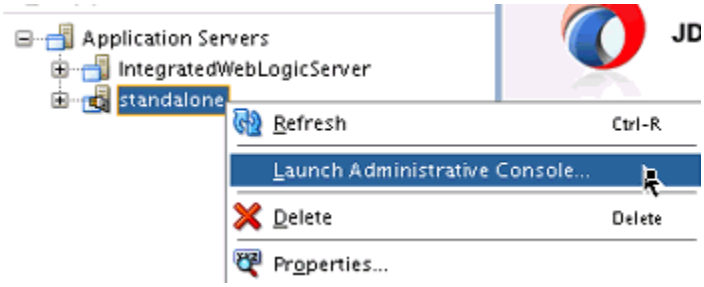
*Table 7-2 (Cont.) Application Server Connection Creation Screens*

| Screen | Description |
|---|---|
| Test | Click the **Test Connection** button at the top. If any of the tests fail, you should press **Back** to the **Connections** or **Authentication** screens to make sure you entered everything correctly.<br>If everything passes, click **Next**. |
| Finish | The **Finish** screen tells you how to launch your new connection, covered in the following task. Click **Finish**. |

### 7.5.5 Verifying Your Connection

Expand the connection node beside **Application Servers** in the Application Server Navigator. You should see your standalone domain listed by the **Connection Name** you specified on the **Name and Type** screen.

Right-click on your standalone domain's name and choose **Launch Administrative Console**.




Log into your administrative console. If you log in successfully, then you can begin creating applications.

## 7.6 Understanding Basic JDeveloper Functions

You should be familiar with basic Oracle JDeveloper functions to manage JDeveloper effectively.

You can learn more about using Oracle JDeveloper in Working with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*.

Stopping the Integrated WebLogic Server

Re-launching JDeveloper

### 7.6.1 Stopping the Integrated WebLogic Server

If you started the Integrated WebLogic Server from inside Oracle JDeveloper, you can simply close out of Oracle JDeveloper to end a running server.

If you do not want to close out of JDeveloper for any reason, you can also click the red stop button in the ribbon menu.

If you have launched an independent WebLogic Server, you should do the following:

| Environment | Run Command |
|---|---|
| UNIX | `cd DOMAIN_HOME/bin`<br>`./stopWebLogic.sh` |
| Windows | `CD DOMAIN_HOME\bin`<br>`stopWebLogic.cmd` |

### 7.6.2 Re-launching JDeveloper

If you have closed Oracle JDeveloper and need to reopen it, you can use the following commands:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

## 7.7 Managing Multiple Installations on the Same Machine

When you install multiple Quick Start distributions on the same machine, each distribution has its own JDeveloper that runs its own unique instance of Java DB. All Java DB instances on the same machine initialize on the same port. For these reasons, you cannot perform the following actions:

- You cannot simultaneously launch two Integrated WebLogic Servers from different distributions.
- You cannot access your Oracle SOA Suite runtime environment by launching the WebLogic Server from your Oracle Business Process Management Suite Quick Start Oracle home.
- You cannot access your Oracle Business Process Management Suite runtime environment by launching the WebLogic Server from your Oracle SOA Suite Quick Start Oracle home.

## 7.8 Switching Between Quick Start Distributions

If you want to switch between different servers using Java DB on the same machine, you need to take the following steps to ensure you are launching the desired development environment:

1. If you have not done so already, decide on separate user directory home locations for each of your JDeveloper distributions. The user home directory will contain subdirectories for your domain files and your user-generated application files.

   For example, you may want to install and use both an Oracle Business Process Management Suite JDeveloper and an Oracle SOA Suite JDeveloper on the same machine. You could designate the user home directory for your Oracle SOA Suite JDeveloper to be located at `C:/jdev12cworkarea/soa`, while your Oracle Business Process Management Suite user home directory could be located at `C:/jdev12cworkarea/bpm`.

2. Set the environment variable `JDEV_USER_DIR` to the location of the user directory home for the JDeveloper distribution that you want to use.

   For the example in the previous step, set `JDEV_USER_DIR=C:/jdev12cworkarea/soa` if you want to use the Oracle SOA Suite environment.

   **Note:**

   Redefining `JDEV_USER_DIR` changes the default save location for your application projects. If you already launched and used JDeveloper without defining `JDEV_USER_DIR`, you may have saved applications in the default application home. The default application home is located at the user's root directory under `JDeveloper/mywork`.

3. Go to the JDeveloper home of the distribution you want to use.

   For example, if you want to use your Oracle SOA Suite environment, go to your Oracle SOA Suite Oracle home and navigate to `/jdeveloper/jdev/bin`.

4. Launch the JDeveloper executable from there.

You must reset the `JDEV_USER_DIR` variable every time you switch between distributions using Java DB.

## 7.9 Next Steps

Once you have verified your installation, you can then perform any of the following tasks:

| Action | Resource |
|---|---|
| Configure your Quick Start installation to use an external Oracle database and standalone compact domain. | See Configuring a Compact Domain. |
| Deploy a sample application. | See Running a Sample Application. |

| Action | Resource |
| --- | --- |
| Make or test an application of your own. | See Working with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*. |
| Delete your installation. | If you have tested your installation out and are done, see Deinstalling Oracle Quick Start . |

# 8

# Configuring a Compact Domain

After configuring a compact domain for a Quick Start installation, you will have created an external Oracle Database.

Follow the steps in this section only if you want create applications with components that are incompatible with the Integrated WebLogic Server's Java DB. These components include Oracle Enterprise Scheduler, Oracle B2B, Oracle Healthcare, Oracle Business Activity Monitoring, and Oracle Managed File Transfer.


Orientation

Preparing to Configure a Compact Domain for a Quick Start Installation

Installing Required Schemas

Configuring a Compact Domain

Connecting JDeveloper to the Compact Domain

Next Steps


## 8.1 Orientation

This is where you are in the Quick Start installation and configuration roadmap.

| Step | Description |
|---|---|
| Plan your installation. | Use Chapter 1 to decide which distribution and configuration path suits your goals. |
| Download and install a Quick Start distribution | You downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite. |
| **Configure a compact domain.** | **You are configuring a default domain, a standalone domain, or compact domain for your developed applications.** |
| Develop or test an application. | You will develop or test an application. |

## 8.2 Preparing to Configure a Compact Domain for a Quick Start Installation

You will need to prepare your system for configuring a compact domain.

A compact domain is a developer domain consisting of a single Administration server and no managed servers. Configuring a compact domain will allow you to use an

Oracle Database so that you can install additional components incompatible with the Java DB included by default in the Quick Start installation.

Make sure that you have verified that your Quick Start installation works before moving on to the following tasks:

Closing Oracle JDeveloper, Extra Server Connections, or Java DB

Downloading and Installing a Supported Database

Configuring a 12*c* Database for Quick Start

## 8.2.1 Closing Oracle JDeveloper, Extra Server Connections, or Java DB

Close any instance of Oracle JDeveloper.

To make sure there are no other server connections or instances of Java DB running in the background, use the following command:

| Environment | Run Command |
|---|---|
| UNIX | `ps -ef \| grep java`<br><br>Then `kill -9` extra running servers or instances of Java DB. |
| Windows | Bring up the Task Manager and select the **Processes** tab. Kill any running instances of JDeveloper, Java DB, or running servers.<br>You can also use:<br>`wmic process where "name='java.exe'" get ProcessID, Commandline /format:list`<br><br>Then use `taskkill /f /pid <PID>` to end extra running servers or Java DB. |

## 8.2.2 Downloading and Installing a Supported Database

To download and install a supported database:

1. Refer to the Oracle Fusion Middleware Download, Installation, and Configuration Readme Files for the download location of a supported database for Oracle Fusion Middleware 12*c*.
2. Run the installer. The installation guide for your database of choice is linked on the same Oracle Technology Network page, under the **Documentation** tab next to **Downloads**.

   During installation, make note of your service name and port number. You will need this information for schema creation.

## 8.2.3 Configuring a 12*c* Database for Quick Start

If you are using a 12*c* multitenant database, you must configure it to use the AL32UTF8 character set.

Quick Start's Repository Creation Utility will not be able to connect to a container database (CDB). You can choose not to create a container database on the "Global Database Creation" screen during database creation.

If you do create container database, you can create a pluggable database (PDB) within the CDB. Then point the RCU to the PDB. See the 12*c Database Administrator's Guide* for how to configure a compatible PDB.

## 8.3 Installing Required Schemas

You will need to create the schemas required for a Quick Start compact domain.

Running Installers for Additional Components

Creating Schemas for Quick Start with the Repository Creation Utility

### 8.3.1 Running Installers for Additional Components

If you know you want to add Oracle Managed File Transfer, Oracle B2B, or Oracle SOA Suite for healthcare integration, you should download and run their installers before running the RCU for the first time. Refer to Installing Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer for Quick Start for brief walkthroughs of these installations.

You do not need to run separate installers to add Oracle Enterprise Scheduler or Oracle Business Activity Monitoring.

If you are not sure which additional products you want yet, you can add any component after creating your compact domain. However, deciding now will minimize the number of times you have to restart your server and run the domain configuration wizard or RCU.

---

**Note:**

In 12*c*, the Repository Creation Utility (RCU) is included in the Oracle SOA Suite install. Do not download or use a separate version.

---

If you have finished configuring a compact domain but want to add new schemas, see Updating a Compact Domain for how to update a compact domain.

### 8.3.2 Creating Schemas for Quick Start with the Repository Creation Utility

To create schemas with the Repository Creation Utility (RCU):

1. Launch the RCU packaged with your Quick Start installation to create schemas in your new database. Do not download or use any other version of RCU to configure a database with Quick Start.

   If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/oracle_common/bin`<br>`./rcu` |
| Windows | `cd %ORACLE_HOME\oracle_common\bin`<br>`rcu.bat` |

2. Navigate through the following screens. For more information about the options on a specific screen, click Help or see Understanding Repository Creation Utility Screens in *Creating Schemas with the Repository Creation Utility*.

***Table 8-1 RCU Schema Creation Screens***

| Screen | Description |
|---|---|
| Welcome | This screen provides an introduction to what RCU is and its purpose. Click **Next**. |
| Create Repository | Choose **Create Repository** and **System Load and Product Load Concurrently**.<br>If the second option doesn't appear for you, you do not have the necessary permissions or privileges to perform DBA activities. |
| Database Connection Details | Fill the **Host Name**, **Username**, and **Password** blanks with the credentials for your Oracle database. Your **Service Name** and **Port** number were created when you installed your database.<br>If you using a 12*c* multitenant database and are having connection issues, make sure you have configured your database properly.<br>Click **Next**. |
| Checking Prerequisites | This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click **OK** to continue. |

***Table 8-1 (Cont.) RCU Schema Creation Screens***

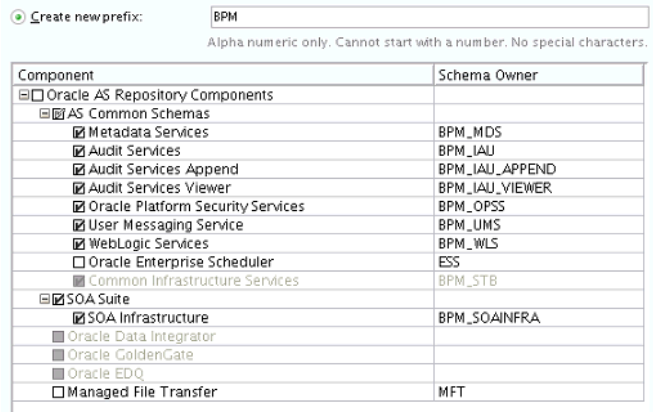
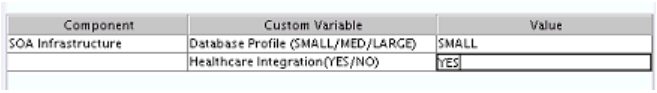
| Screen | Description |
|---|---|
| Select Components | Specify an intuitive prefix for your new schemas, such as **SOAQS** or **BPMQS**, so you can target them easily when you are configuring a domain.<br>Select **AS Common Schemes** and **SOA Suite** to select all of their dependencies.<br>  <br><br>If you are installing Oracle Managed File Transfer, select **Managed File Transfer** from the list. You will not see this option listed if you have not run the corresponding installer yet.<br>Click **Next**. |
| Schema Passwords | Select **Use same passwords for all schemas**. Then create a password you will remember. |
| Custom Variables | This screen will show up because you are installing SOA Infrastructure. See About the Custom Variables Required for the SOA Suite Schemas in *Installing and Configuring Oracle SOA Suite and Business Process Management* for descriptions of these variables.<br>If you are a healthcare provider and want the Healthcare Integration user interface, change the **Value** field for **Healthcare Integration** to **Yes**. If you do not set this value now, the Healthcare Integration user interface will not function properly. See Activating the Oracle SOA Suite for Healthcare Integration User Interface for more information.<br>  <br><br>Otherwise, accept the defaults and press **Next**. |
| Map Tablespaces | This screen displays default and temporary tablespaces for the components you want to create schemas for. You can review this information and click **Next**<br>Click **OK** through the next two confirmation dialogues. Then click **Next** again to progress to the next screen. |

*Table 8-1 (Cont.) RCU Schema Creation Screens*

| Screen | Description |
|---|---|
| Summary | This screen summarizes the component schemas that will be created. Take note of the **Database details** at the top of this screen.<br>Click **Create** to begin schema creation.<br>A progress dialog shows the progress of schema creation. Green checks will appear next to the names of successfully created schemas. |
| Completion Summary | This screen displays the log files created with the database schemas. You can open any of the log files to review information or to troubleshoot a creation issue.<br>If any operation failed, you can check the **Cleanup for failed components** box. Upon clicking **Close**, this option will drop failed schemas from your database.<br>When you click **Close**, schema creation is complete. |

If you encountered any problems during schema creation, verify the following:

- You are using the RCU included in your Quick Start installation.
- Your database server and listeners are running.
- If you are using a 12*c* database, you have configured your database properly.

You can also troubleshoot the issue using the log files generated on the **Completion Summary** screen. For more information, see Troubleshooting Repository Creation Utility in *Creating Schemas with the Repository Creation Utility*.

## 8.4 Configuring a Compact Domain

In a developer environment, you can create a compact domain using the Configuration Wizard.

Starting the Configuration Wizard

Selecting the Domain Type and Domain Home Location

Selecting Configuration Templates for Oracle Business Process Management Suite

Selecting the Application Home Location

Configuring the Administrator Account

Specifying the Domain Mode and JDK

Specifying the Datasource Configuration Type

Specifying JDBC Component Schema Information

Testing the JDBC Connections

Specifying the Path to the Keystore Certificate or Key

Use the Keystore screen to specify either the path to the trusted certificate for each keystore, or the path to each keystore's private key and other private key information.

Selecting Advanced Configuration

Configuring the Domain

Reviewing Your Domain Location

## 8.4.1 Starting the Configuration Wizard

To start the configuration wizard to create a compact domain:

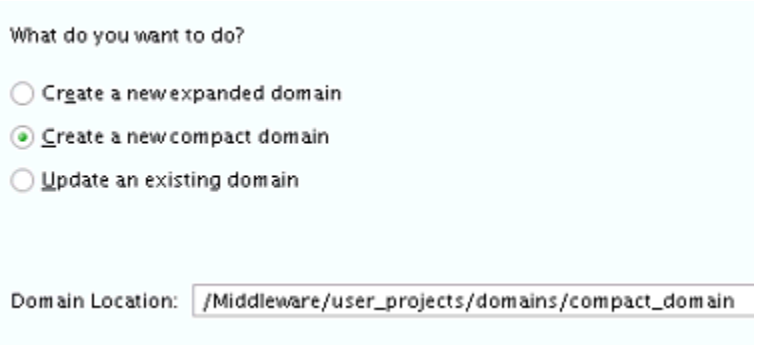
1. Go to the `bin` directory.
2. Set the environment variable `CONFIG_JVM_ARGS` to `-Dcom.oracle.cie.config.showProfile=true`. This enables the compact domain option in the configuration wizard.
3. Launch the configuration wizard.

If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Operating System | Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/oracle_common/common/bin`<br>`CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true`<br>`export CONFIG_JVM_ARGS`<br>`./config.sh` |
| Windows | `cd %ORACLE_HOME\oracle_common\common\bin`<br>`SET CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true`<br>`config.cmd` |

## 8.4.2 Selecting the Domain Type and Domain Home Location

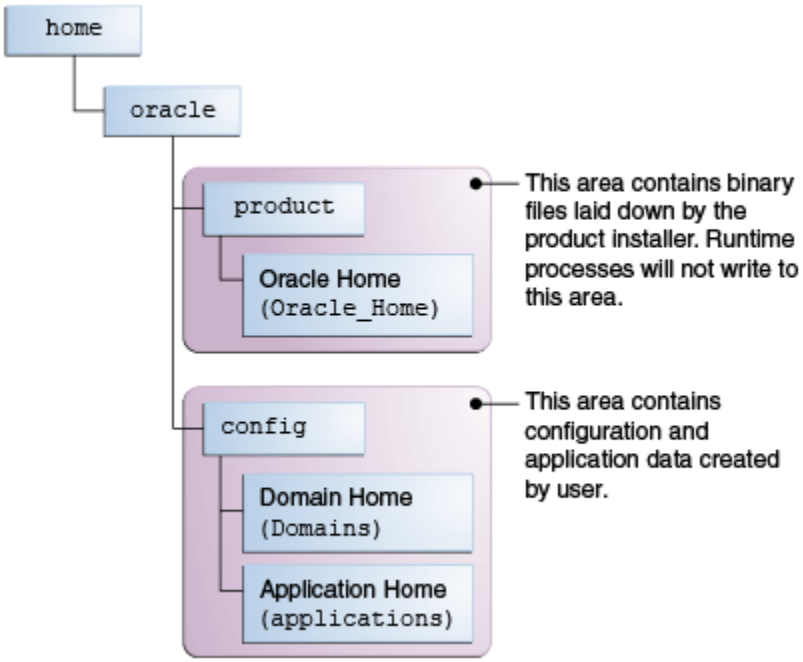
On the Configuration Type screen, select **Create a new compact domain**. If you do not see this option, you did not set the `CONFIG_JVM_ARGS` environment variable successfully.




In the **Domain Location** field, specify your Domain home directory. If you already launched the Integrated WebLogic Server and generated the default domain, you should create a new domain outside of base_domain.

You should create your Domain home outside the Oracle home directory. See the location of **Application Home** relative to **Oracle Home** in the following figure.

***Figure 8-1 Recommended Oracle Fusion Middleware Directory Structure***




This directory structure will help you avoid issues when you need to upgrade or reinstall your software. See What are the Key Oracle Fusion Middleware Directories? in *Understanding Oracle Fusion Middleware* for more information.

## 8.4.3 Selecting Configuration Templates for Oracle Business Process Management Suite

On the Templates screen, make sure **Create Domain Using Product Templates** is selected, then select the following template:

- Oracle BPM Suite - 12.2.1.1.0 [soa]

  Selecting this template automatically selects the following as dependencies:

  – Oracle SOA Suite

  – Oracle Enterprise Manager

  – Oracle WSM Policy Manager

  – Oracle JRF

  – WebLogic Coherence Cluster Extension

Optionally, you can select any of the following:

- Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]

---

**Note:**

For HIPAA documents, select both the **Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]** template and **Oracle B2B - 12.2.1.1.0 [soa]** template.

For HL7 documents, select the **Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]** template only.

- Oracle Business Activity Monitoring - 12.2.1.1.0 [soa]
- Oracle Enterprise Scheduler Service Basic - 12.2.1.1.0 [oracle_common]
- Oracle Enterprise Manager Plugin for ESS - 12.2.1.1.0 [em]
- Oracle B2B - 12.2.1.1.0 [soa]
- Oracle Managed File Transfer - 12.2.1.1.0 [mft]

If you have not run the separate installers for Oracle B2B, Oracle Healthcare Integration, or Oracle Managed File Transfer, you will not see the options to select those templates. See Adding Components to a Quick Start Installation for installation instructions for these components.

### 8.4.4 Selecting the Application Home Location

On the Application Location screen, select the location where you want to store your applications associated with your domain. This location is also known as the *Application home* directory.

Your Application home should be created at the same location you specified for your Domain home above.

### 8.4.5 Configuring the Administrator Account

On the Administrator Account screen, specify the user name and password for the default WebLogic Administrator account for the domain. You will use these credentials to connect to the domain's Administrator Server.

### 8.4.6 Specifying the Domain Mode and JDK

On the Domain Mode and JDK screen:

- In the Domain Mode field, select **Development**.
- In the JDK field, select **Oracle HotSpot JDK**.

### 8.4.7 Specifying the Datasource Configuration Type

On the Database Configuration Type screen, select **RCU Data** to activate the fields. The **RCU Data** option instructs the Configuration Wizard to connect to the database and Service Table (STB) schema to automatically retrieve schema information for the schemas needed to configure the domain.

**Note:**

If you choose to select **Manual Configuration** on this screen, you will have to manually fill in the parameters for your schema on the following screen.

After selecting **RCU Data**, fill in the following fields:

| Field | Description |
|---|---|
| DBMS/Service | Enter the database DBMS name, or service name if you selected a service type driver. If you are using a 12*c* multitenant database, make sure you use the service name for a configured pluggable database (PDB) and not the container. |
| Host Name | Enter the name of the server hosting the database. |
| Port | Enter the port number on which the database listens. |
| Schema Owner<br>Schema Password | Enter the username and password for connecting to the database's Service Table schema. This is the schema username and password that was specified for the Service Table component on the "Schema Passwords" screen in the RCU.<br>The default username is *prefix*_STB, where *prefix* is the custom prefix that you defined in RCU. |

Click **Get RCU Configuration** when you are finished specifying the database connection information. The following output in the Connection Result Log indicates that the operation succeeded:

```
Connecting to the database server...OK
Retrieving schema data from database server...OK
Binding local schema components with retrieved data...OK

Successfully Done.
```

**Tip:**

For more information about the **RCU Data** option, see Understanding the Service Table Schema in *Creating Schemas with the Repository Creation Utility*.

## 8.4.8 Specifying JDBC Component Schema Information

Verify that the values on the JDBC Component Schema screen are correct for all schemas. If you selected **RCU Data** on the previous screen, the schema table should already be populated appropriately.

## 8.4.9 Testing the JDBC Connections

Use the JDBC Component Schema Test screen to test the datasource connections you have just configured.

A green check mark in the Status column indicates a successful test. If you encounter any issues, see the error message in the Connection Result Log section of the screen, fix the problem, then try to test the connection again.

## 8.4.10 Specifying the Path to the Keystore Certificate or Key

Use the Keystore screen to specify either the path to the trusted certificate for each keystore, or the path to each keystore's private key and other private key information.

Use the screen to specify either the path to the trusted certificate for each keystore, or the path to each keystore's private key and other private key information.

When you click in the Trusted Certificate, Private Key, or Identity Certificate fields, a browse icon appears to the right of the field. Click this icon to browse to the appropriate file.

**Tip:**

See Keystore in *Creating WebLogic Domains Using the Configuration Wizard* for more information about other options on this screen.

## 8.4.11 Selecting Advanced Configuration

You do not need any advanced configuration for a compact domain. You can skip through the Advanced Configuration screen without selecting anything.

## 8.4.12 Configuring the Domain

The Configuration Summary screen shows the final directory structure and the components and extensions with which your compact domain will be configured. Review this information and click **Create**.

The configuration progress bar will appear on the Configuration Progress screen.

## 8.4.13 Reviewing Your Domain Location

Upon successful configuration, the Configuration Success screen shows the directory location of your domain and the URL for your administration console access. Take note of both and click **Close**.

When the configuration wizard is done, navigate to your compact domain's home and start the administrator server with the following command:

| Operating System | Command |
|---|---|
| UNIX | `cd DOMAIN_HOME/bin`<br>`./startWebLogic.sh` |
| Windows | `cd DOMAIN_HOME\bin`<br>`startWebLogic.cmd` |

If you want to use JDeveloper's Integrated WebLogic Server, on the same system in conjunction with your compact domain, add the flag `-noderby` to the end of the command. For example, the Linux launch command will look like the following:

```
./startWebLogic.sh noderby
```

The `-noderby` option will prevent the Derby Java Database from starting in the Java Virtual Machine. This will prevent any conflicts with the Integrated WebLogic Server, which needs to initialize the Derby Java Database to start up successfully.

You know that the administrator server is running when you see the following output:

```
Server state changed to RUNNING.
```

# 8.5 Connecting JDeveloper to the Compact Domain

After configuring a compact domain, you need to prepare JDeveloper to target the new compact domain for launching applications.

Launching the Application Server Connection Wizard

Reviewing Your Domain Location

Verifying Your Connection

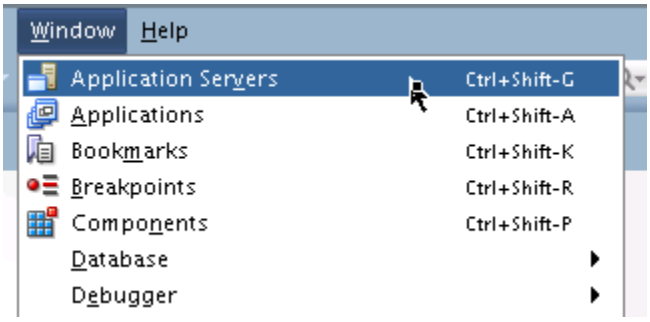
## 8.5.1 Launching the Application Server Connection Wizard

Launch Oracle JDeveloper with the appropriate command.

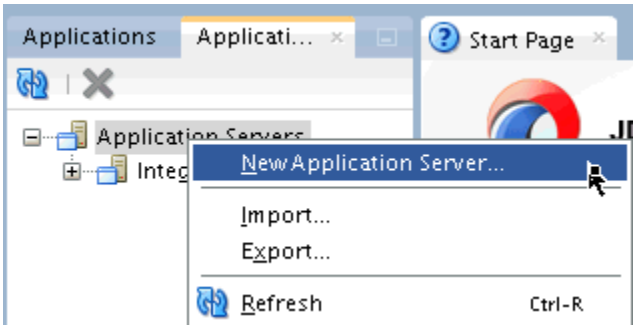
If you have set the `ORACLE_HOME` environment variable to your Oracle home, you can enter commands similar to the following examples:

| Environment | Run Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/jdeveloper/jdev/bin`<br>`./jdev` |
| Windows | `CD %ORACLE_HOME%\jdeveloper`<br>`jdeveloper.exe` |

Select **Window** from the top menu, and then choose **Application Server** from the drop-down menu. Alternatively, use the keyboard shortcut `Ctrl-Shift-G`. This will open the Application Server Navigator in the left-hand pane.




Right-click on **Application Server** in the Application Server Navigator. Select **New Application Server** from the drop-down menu to launch the **Create Application Server Connection** wizard.




## 8.5.2 Reviewing Your Domain Location

Upon successful configuration, the Configuration Success screen shows the directory location of your domain and the URL for your administration console access. Take note of both and click **Close**.

When the configuration wizard is done, navigate to your compact domain's home and start the administrator server with the following command:

| Operating System | Command |
|---|---|
| UNIX | `cd DOMAIN_HOME/bin`<br>`./startWebLogic.sh` |
| Windows | `cd DOMAIN_HOME\bin`<br>`startWebLogic.cmd` |

If you want to use JDeveloper's Integrated WebLogic Server, on the same system in conjunction with your compact domain, add the flag `-noderby` to the end of the command. For example, the Linux launch command will look like the following:

```
./startWebLogic.sh noderby
```

The `-noderby` option will prevent the Derby Java Database from starting in the Java Virtual Machine. This will prevent any conflicts with the Integrated WebLogic Server, which needs to initialize the Derby Java Database to start up successfully.

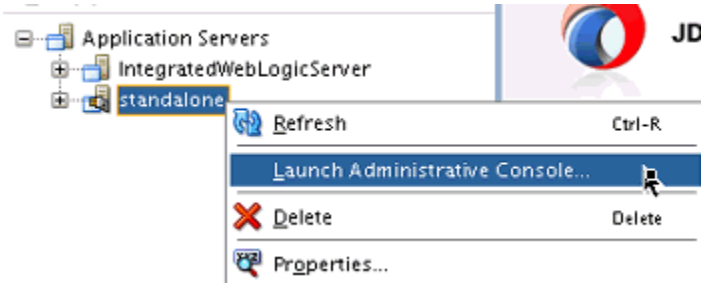
You know that the administrator server is running when you see the following output:

```
Server state changed to RUNNING.
```

## 8.5.3 Verifying Your Connection

Expand the connection node beside **Application Servers** in the Application Server Navigator. You should see your standalone domain listed by the **Connection Name** you specified on the **Name and Type** screen.

Right-click on your standalone domain's name and choose **Launch Administrative Console**.




Log into your administrative console. If you log in successfully, then you can begin creating applications.

## 8.6 Next Steps

Once you have verified your Quick start installation and compact domain connection, you can take any of the following actions:

| Action | Resource |
|---|---|
| Deploy a sample application for Oracle SOA Suite Quick Start. | See Running a Sample Application. |
| Make or test an application of your own. | See Getting Started with Developing Applications with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*. |
| Add Oracle Managed File Transfer, Oracle Stream Analytics, or Oracle B2B/Healthcare. | See Adding Components to a Quick Start Installation for instructions on adding components to a fully configured compact domain. |
| Delete your installation. | If you have tested your installation out and are done, see Deinstalling Oracle Quick Start . |

# Part IV

# Post-configuration Tasks for Oracle Quick Start

This part covers some steps you can take after installing a Quick Start distribution.

Adding Components to a Quick Start Installation

Running a Sample Application

Deinstalling Oracle Quick Start

# 9

# Adding Components to a Quick Start Installation

You can add Oracle Enterprise Scheduler, Oracle B2B, Oracle SOA Suite for healthcare integration, Oracle Business Activity Monitoring, and Oracle Managed File Transfer to your Quick Start installation. You can also obtain an Oracle Stream Analytics runtime environment.

Use this section to walk through the installation process for each component that you can add to a Quick Start installation, or to add components to a completely configured compact domain.


Orientation

About Adding Components to a Quick Start Installation

Installing Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer for Quick Start

Creating Schemas for Quick Start Components

Updating a Compact Domain

Understanding Oracle Stream Analytics Design Time

Next Steps


## 9.1 Orientation

This is where you are in the Quick Start installation and configuration roadmap.

| Step | Description |
|---|---|
| Plan your installation. | Use Chapter 1 to decide which distribution and configuration path suits your goals. |
| Download and install a Quick Start distribution | You downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite. |
| **Configure a compact domain.** | **You are configuring or reconfiguring a compact domain.** |
| Develop or test an application. | You will develop or test an application. |

## 9.2 About Adding Components to a Quick Start Installation

To add Oracle B2B, Oracle Healthcare, and Oracle Managed File Transfer to your Quick Start installation, you need to download their independent installers These

installers are discussed in Installing Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer for Quick Start.

Oracle Business Activity Monitoring and Oracle Enterprise Scheduler do not have separate installers. The compact domain can be configured for these components directly in the domain configuration wizard. Using the domain configuration wizard to update a compact domain is covered in Updating a Compact Domain.

**Tip:**

To minimize the number of times you have to invoke the Repository Creation Utility and the Fusion Middleware Configuration Wizard, run all installers for all of the components that you want to add before launching the RCU or the Configuration Wizard. Each installer will activate a set of product-specific schemas and provide a set of product-specific configuration templates.

You may also want a runtime environment that can run applications using Oracle Stream Analytics components. This process is reviewed in Understanding Oracle Stream Analytics Design Time.

## 9.3 Installing Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer for Quick Start

This section describes how to add Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer to your Quick Start distribution.

Installing Oracle B2B for Quick Start

Installing Oracle SOA Suite for Healthcare Integration for Quick Start

Installing Oracle Managed File Transfer for Quick Start

### 9.3.1 Installing Oracle B2B for Quick Start

This section covers how to install Oracle B2B for Quick Start. Make sure you understand the installation options for Oracle B2B, as described in About Oracle B2B.

Activating a Limited Oracle B2B Interface without a Full Installation

Installing Oracle B2B for Quick Start

#### 9.3.1.1 Activating a Limited Oracle B2B Interface without a Full Installation

To activate a limited Oracle B2B user interface without running the full B2B installer, set the following property in Oracle Enterprise Manager Fusion Middleware Control:

```
b2b.docPluginList=Custom
```

If you do not set this property, inbound documents will fail with an XEngine lookup error. You will be able to use Custom Documents with this interface.

For more information about using the MBean browser, see Getting Started Using the Fusion Middleware Control MBean Browsers in *Administering Oracle Fusion Middleware*.

#### 9.3.1.2 Installing Oracle B2B for Quick Start

Oracle B2B and Oracle SOA Suite for Healthcare Integration share the same installer. Obtain the installer zip file labeled `fmw_12.2.1.1.0_b2b_Disk1_1of1.zip`.

Using the command prompt, navigate to the directory where you downloaded the installer. Unzip the contents. You may have several .jar files, but you will only need to launch `fmw_12.2.1.1.0_b2bhealthcare_generic.jar`.

Launch the installation wizard with the appropriate command.

| Installer | Run Command |
|---|---|
| Generic Installer for UNIX | `%JAVA_HOME/bin/java -jar fmw_12.2.1.1.0_b2bhealthcare_generic.jar` |
| Generic Installer for Windows | Search for **cmd.exe** in the Start Menu. Right-click the **cmd.exe** and select **Run as Administrator**.<br>In the command prompt, use the Java executable from the JDK on your system. Your command may look like this:<br>`%JAVA_HOME%\bin\java -jar fmw_12.2.1.1.0_b2bhealthcare_generic.jar` |

Once you have launched the installer, the installation wizard displays the screens listed and described sequentially in Table 9-1.

***Table 9-1 Oracle B2B Install Screens***

| Screen | Description |
|---|---|
| Welcome | This screen introduces you to the product installer. |
| Installation Location | Use this screen to specify the location of your Quick Start's Oracle home. You are not creating a new Oracle home. |
| Installation Type | Select the **B2B** option. This will install the Oracle B2B user interface and XEngine |
| Prerequisite Checks | This screen verifies that your system meets the minimum necessary requirements. |
| Installation Summary | Use this screen to verify the installation options you selected. If you want to save these options to a response file, click **Save Response File** and provide the location and name of the response file. Response files can be used later in a silent installation situation. |
| Installation Progress | This screen allows you to see the progress of the installation. |
| Installation Completed | This screen appears when the installation is complete. Review the information on this screen. |

When you have exited the installation wizard, an template will now be a selectable option on the **Templates** screen during domain configuration.

## 9.3.2 Installing Oracle SOA Suite for Healthcare Integration for Quick Start

This section covers how to configure your Quick Start installation for Oracle SOA Suite for Healthcare Integration. Make sure you have understood the different

configuration options for Oracle SOA Suite for Healthcare Integration described in About Oracle SOA Suite for Healthcare Integration before proceeding.

Installing Oracle SOA Suite for Healthcare Integration for Quick Start

Activating the Oracle SOA Suite for Healthcare Integration User Interface

#### 9.3.2.1 Installing Oracle SOA Suite for Healthcare Integration for Quick Start

Oracle B2B and Oracle SOA Suite for Healthcare Integration share the same installer. Obtain the installer zip file labeled `fmw_12.2.1.1.0_b2b_Disk1_1of1.zip`.

Using the command prompt, navigate to the directory where you downloaded the installer. Unzip the contents. You may have several .jar files, but you will only need to launch `fmw_12.2.1.1.0_b2bhealthcare_generic.jar`.

Launch the installation wizard with the appropriate command.

| Installer | Run Command |
|---|---|
| Generic Installer for UNIX | `%JAVA_HOME/bin/java -jar fmw_12.2.1.1.0_b2bhealthcare_generic.jar` |
| Generic Installer for Windows | Search for **cmd.exe** in the Start Menu. Right-click the **cmd.exe** and select **Run as Administrator**.<br>In the command prompt, use the Java executable from the JDK on your system. Your command may look like this:<br>`%JAVA_HOME%\bin\java -jar fmw_12.2.1.1.0_b2bhealthcare_generic.jar` |

Once you have launched the installer, the installation wizard displays the screens listed and described sequentially in Table 9-2.

***Table 9-2 Oracle SOA Suite for Healthcare Install Screens***

| Screen | Description |
|---|---|
| Welcome | This screen introduces you to the product installer. |
| Installation Location | Use this screen to specify the location of your Quick Start's Oracle home. You are not creating a new Oracle home. |
| Installation Type | Select **B2B with Healthcare** to install the B2B user interface, the Healthcare user interface, XEngine, and Healthcare libraries. |
| Prerequisite Checks | This screen verifies that your system meets the minimum necessary requirements. |
| Installation Summary | Use this screen to verify the installation options you selected. If you want to save these options to a response file, click **Save Response File** and provide the location and name of the response file. Response files can be used later in a silent installation situation. |
| Installation Progress | This screen allows you to see the progress of the installation. |

*Table 9-2 (Cont.) Oracle SOA Suite for Healthcare Install Screens*

| Screen | Description |
|---|---|
| Installation Completed | This screen appears when the installation is complete. Review the information on this screen. |

When you exit the installation wizard, an Oracle SOA Suite for Healthcare Integration template will now be available on the **Templates** screen during domain configuration.

If you want to use the Oracle SOA Suite for Healthcare Integration user interface to exchange healthcare documents, you should review all of the post-installation steps required to activate the Healthcare user interface in Activating the Oracle SOA Suite for Healthcare Integration User Interface.

### 9.3.2.2 Activating the Oracle SOA Suite for Healthcare Integration User Interface

This section describes how to activate the Oracle SOA Suite for Healthcare Integration user interface to replace the default Oracle B2B interface. Make sure you understand the user interface options described in About Oracle SOA Suite for Healthcare Integration before proceeding.

You should have already run the Oracle SOA Suite for Healthcare Integration installer and chosen the **B2B with Healthcare** installation option. Now complete the following steps:

1. Run the RCU. On the **Custom Variables** screen, input **Yes** for the **Healthcare Integration** variable. This creates additional materialized views required by the Healthcare integration software.

   If you do not set this custom variable when creating the SOA schemas for your domain, the Healthcare Integration User Interface will not function properly.

   **Note:**

   If you already ran the RCU for a previous component and did not input `YES` for the Healthcare Integration custom variable, you can still set this variable by running the following SQL script on the database:

   *`ORACLE_HOME`*`/common/sql/soainfra/sql/oracle/b2b_mv.sql`

   For more information about the Healthcare Integration variable you set in RCU, see About the Custom Variables Required for the SOA Suite Schemas in *Installing and Configuring Oracle SOA Suite and Business Process Management*

2. Run the domain configuration wizard. On the **Templates** screen, select the **Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]** template. This changes the default message delivery mode from AQ to JMS, as Healthcare is not supported in AQ mode.

For more information on the Oracle SOA Suite for Healthcare Integration user interface, see Using the Oracle SOA Suite for Healthcare Integration User Interface in *Healthcare Integration User's Guide for Oracle SOA Suite*.

### 9.3.3 Installing Oracle Managed File Transfer for Quick Start

This section reviews the installation process for Oracle Managed File Transfer. You need to run this installer before you can configure a Quick Start compact domain with Oracle Managed File Transfer runtime components.

Obtain the installer zip file labeled `fmw_12.2.1.1.0_mft_Disk1_1of1.zip`.

Using the command prompt, navigate to the directory where you downloaded the installer. Unzip the contents. You may have several .jar files, but you will only need to launch `fmw_12.2.1.1.0_mft_generic.jar`

Launch the installation wizard with the appropriate command.

| Installer | Run Command |
|---|---|
| Generic Installer for UNIX | `%JAVA_HOME/bin/java -jar fmw_12.2.1.1.0_mft_generic.jar` |
| Generic Installer for Windows | Search for **cmd.exe** in the Start Menu. Right-click the **cmd.exe** and select **Run as Administrator**.<br>In the command prompt, use the Java executable from the JDK on your system. Your command may look like this:<br>`%JAVA_HOME%\bin\java -jar fmw_12.2.1.1.0_mft_generic.jar` |

Once you have launched the installer, the installation wizard displays the screens listed and described sequentially in Table 9-3.

***Table 9-3 Oracle Managed File Transfer Install Screens***

| Screen | Description |
|---|---|
| Welcome | This screen introduces you to the product installer. |
| Installation Location | Use this screen to specify the location of your Quick Start's Oracle home. You are not creating a new Oracle home. |
| Prerequisite Checks | This screen verifies that your system meets the minimum necessary requirements. |
| Installation Summary | Use this screen to verify the installation options you selected. If you want to save these options to a response file, click **Save Response File** and provide the location and name of the response file. Response files can be used later in a silent installation situation. |
| Installation Progress | This screen allows you to see the progress of the installation. |
| Installation Completed | This screen appears when the installation is complete. Review the information on this screen. |

When you have exited the installation wizard, an Oracle Managed File Transfer template will now be a selectable option on the **Templates** screen during domain configuration.

## 9.4 Creating Schemas for Quick Start Components

Once you have finished running the installers for the components that you want, run the RCU.

If you have not finished configuring a compact domain for the first time, you should return to Configuring a Compact Domain or Configuring a Compact Domain.

If you are adding components to an existing compact domain, see Updating a Compact Domain.

## 9.5 Updating a Compact Domain

This section describes the actions you can take to reconfigure your compact domain to add new components.

To add Oracle B2B, Healthcare, or Managed File Transfer, you must have run their separate installers as described in Installing Oracle B2B, Oracle SOA Suite for Healthcare Integration, or Oracle Managed File Transfer for Quick Start before proceeding to the following steps:

Launching the Domain Configuration Wizard

Selecting the Domain Type and Domain Home Location

Selecting the Configuration Templates

Specifying the Datasource Configuration Type

Verifying the Component Datasources

Testing the JDBC Connections

Selecting Advanced Configuration

Configuring the Domain

Reviewing Your Domain Location

### 9.5.1 Launching the Domain Configuration Wizard

Go to *ORACLE_HOME*/oracle_common/common/bin for your Quick Start distribution and launch the configuration wizard.

If you have set the ORACLE_HOME environment variable to your Oracle home, you can enter commands similar to the following examples:

| Operating System | Command |
|---|---|
| UNIX | `cd $ORACLE_HOME/oracle_common/common/bin`<br>`./config.sh` |

| Operating System | Command |
|---|---|
| Windows | `cd %ORACLE_HOME\oracle_common\common\bin`<br>`config.cmd` |

Then navigate through the following configuration screens.

## 9.5.2 Selecting the Domain Type and Domain Home Location

On the **Configuration Type** screen, select **Update an existing domain**.

In the **Domain Location** field, select the location of the compact domain that you want to update.

## 9.5.3 Selecting the Configuration Templates

On the **Templates** screen, make sure **Update Domain Using Product Templates** is selected. The templates that you have installed already will be greyed out.

Select the templates for the components you want to add to your installation:

- Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]

> **Note:**
>
> For HIPAA documents, you need to select both the **Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]** template and **Oracle B2B - 12.2.1.1.0 [soa]** template.
>
> For HL7 documents, you only need to select both the **Oracle SOA Suite for healthcare integration - 12.2.1.1.0 [soa]** template.

- Oracle B2B - 12.2.1.1.0 [soa]
- Oracle Managed File Transfer - 12.2.1.1.0 [mft]
- Oracle Business Activity Manager - 12.2.1.1.0 [soa]
- Oracle Enterprise Scheduler Service Basic - 12.2.1.1.0 [oracle_common]
- Oracle Enterprise Manager Plugin for ESS - 12.2.1.1.0 [em]

## 9.5.4 Specifying the Datasource Configuration Type

Select **RCU Data** to activate the fields on this screen. All of the fields should auto-populate with the values you specified when you first configured your domain.

Click **Get RCU Configuration**. The following output in the Connection Result Log indicates that the operation succeeded:

```
Connecting to the database server...OK
Retrieving schema data from database server...OK
Binding local schema components with retrieved data...OK

Successfully Done.
```

**Note:**

More information about the **RCU Data** option can be found in Understanding the Service Table Schema in *Creating Schemas with the Repository Creation Utility*.

More information about the other options on this screen can be found under Database Configuration Types in *Creating WebLogic Domains Using the Configuration Wizard*

### 9.5.5 Verifying the Component Datasources

Verify that the values on the **Component Datasource** screen are correct for all schemas. If you selected **RCU Data** on the previous screen, the schema table should already be populated appropriately.

### 9.5.6 Testing the JDBC Connections

Use the JDBC Component Schema Test screen to test the datasource connections you have just configured. A green check mark in the Status column indicates a successful test.

If you encounter any issues, see the error message in the Connection Result Log section of the screen, fix the problem, then try to test the connection again.

**Tip:**

More information about the other options on this screen can be found under JDBC Component Schema Test in *Creating WebLogic Domains Using the Configuration Wizard*

### 9.5.7 Selecting Advanced Configuration

You do not need any advanced configuration for a compact domain. You can skip through this screen without selecting anything.

### 9.5.8 Configuring the Domain

This screen shows you the final directory structure and the components and extensions with which your compact domain will be configured.

Review this information and click **Update**. The configuration progress bar will appear on the next screen.

### 9.5.9 Reviewing Your Domain Location

Upon successful configuration, the wizard will give you the directory location of your domain and the URL for your administration console access. Take note of both and click **Close**.

## 9.6 Understanding Oracle Stream Analytics Design Time

Oracle Stream Analytics design time is included as a JDeveloper extension when you install a Quick Start distribution.

However, Oracle Stream Analytics does not run on the Integrated WebLogic Server.

You must install a separate Oracle Stream Analytics Oracle home and launch the Oracle Stream Analytics-specific server from there to create a compatible runtime environment.

For more information on how to install Oracle Stream Analytics, see *Installing and Configuring Oracle Stream Analytics*. Then see Standalone-Server Domains in *Administering Oracle Stream Analytics* to configure an Oracle Stream Analytics domain.

## 9.7 Next Steps

Once you have verified your Quick Start installation and compact domain connection, you can take any of the following actions:

| Action | Resource |
|---|---|
| Deploy a sample application. | See Running a Sample Application. |
| Make or test an application of your own. | See Getting Started with Developing Applications with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*. |
| Delete your installation. | If you have tested your installation out and are done, see Deinstalling Oracle Quick Start . |

# 10

# Running a Sample Application

You can load and run a sample application for the Oracle SOA Suite Quick Start distribution using the Integrated WebLogic Server's default domain. You can also find sample applications for Oracle Process Management Suite and begin a project for Oracle Stream Analytics.


Creating an Oracle Business Process Management Suite Sample Application

Creating an Oracle Stream Analytics Project in JDeveloper

Next Steps


## 10.1 Creating an Oracle Business Process Management Suite Sample Application

You can find an Oracle Business Process Management Suite tutorial for building an end-to-end loan application at the following URL:

`https://java.net/projects/oraclebpmsuite12c/downloads/directory/Samples/Loan%20Application%20End%20to%20End`.

## 10.2 Creating an Oracle Stream Analytics Project in JDeveloper

Oracle JDeveloper, Oracle Stream Analytics, and Oracle Event Processing are now compatible. To build and run Oracle Stream Analytics projects in Oracle JDeveloper, see Create an Oracle Event Processing Project in *Getting Started with Oracle Stream Analytics*.

## 10.3 Next Steps

After you have successfully run a sample application, you can do any of the following actions:

| Action | Resource |
|---|---|
| Make or test an application of your own. | See Getting Started with Developing Applications with Oracle JDeveloper in *Developing Applications with Oracle JDeveloper*. |
| Deinstall your current Quick Start distribution. | See Deinstalling Oracle Quick Start . |
| Install a different Quick Start distribution. | See Introducing the Quick Start Distributions. |

# 11

# Deinstalling Oracle Quick Start

Follow the instructions in this section to remove Oracle Quick Start products from your system.


Performing Pre-Deinstallation Tasks

Deinstalling a Quick Start Distribution


## 11.1 Performing Pre-Deinstallation Tasks

Before deinstalling Oracle Fusion Middleware software components, you should stop all Oracle Fusion Middleware processes.

For more information about starting and stopping Oracle Fusion Middleware, refer to Starting and Stopping Oracle Fusion Middleware in *Administering Oracle Fusion Middleware*.

## 11.2 Deinstalling a Quick Start Distribution

When you run the deinstaller, it removes everything under the Oracle home (referred to in this guide as *ORACLE_HOME*) from which the deinstaller is started. Be sure that no system components are using the Oracle home you want to remove.


Starting the Deinstaller

Manually Removing the Oracle Home

Cleaning Up JDeveloper Artifacts


### 11.2.1 Starting the Deinstaller

To deinstall a Quick Start distribution, do the following:

1. Go to the following location in your *ORACLE_HOME*:
   - On a Windows system:

     *ORACLE_HOME*\oui\bin\
   - On Linux, UNIX, and Mac OS X systems:

     *ORACLE_HOME*/oui/bin/
2. Start the deinstaller by running the following command:
   - On a Windows system:

     ```
     install.exe -deinstall
     ```
   - On Linux, UNIX, Mac OS X systems:

```
./deinstall.sh
```

### 11.2.2 Manually Removing the Oracle Home

If you selected **No** on the warning screen during deinstallation, you must manually remove your *ORACLE_HOME* directory and all sub-directories. For example, if your *ORACLE_HOME* directory is `/home/Oracle/`, then on a Linux or UNIX operating system, enter the following commands:

```
cd /home/Oracle/
rm -rf
```

On a Windows operating system, if your *ORACLE_HOME* directory is `C:\Oracle\`, use a file manager window and navigate to the `C:\Oracle\` directory and delete the contents of the directory..

### 11.2.3 Cleaning Up JDeveloper Artifacts

Make sure you delete any remaining `jdeveloper` and `.jdeveloper` directories from your home directory.