

# Oracle® Fusion Middleware

## Installing Oracle SOA Suite and Business Process Management Suite Quick Start for Developers



14c (14.1.2.0.0)

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The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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Oracle Fusion Middleware Installing Oracle SOA Suite and Business Process Management Suite Quick Start for Developers, 14c (14.1.2.0.0)

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# 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

*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

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## Related Documents

Refer to the Oracle Fusion Middleware Library for additional information.

- For Oracle SOA Suite information, see Oracle SOA Suite Documentation.
- For Oracle Business Process Management information, see Oracle Business Process Management Documentation.

- For installation information, see Fusion Middleware Installation Documentation.
- For upgrade information, see Fusion Middleware Upgrade Documentation.
- For administration-related information, see Fusion Middleware Administration Documentation.
- For release-related information, see Fusion Middleware Release Notes.

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	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.

# 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. The result is a *compact domain*, which is a developer domain consisting of a single administration server and no managed servers.

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 About the 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

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

Step	Description
<b>Plan your installation.</b>	<b>Use this chapter to decide which distribution and configuration path suits your goals.</b>
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.

### 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 [About Quick Start](#).
2. Choose between the SOA Suite Quick Start or Business Process Management Suite Quick Start distribution. These are described in [About the Oracle SOA Suite Quick Start Distribution](#) and [About 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 [About Quick Start 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](#) in [About Domain Configurations](#).

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

## About 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 *About the 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:

- [About the Oracle SOA Suite Quick Start Distribution](#)
- [About the Oracle Business Process Management Suite Quick Start Distribution](#)

## About the Oracle SOA Suite 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, but can also be used to set up a domain outside of Oracle JDeveloper.

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

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. This means you

can run any JDeveloper application that does not use Oracle Enterprise Scheduler 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 or other SOA components, see [About Quick Start Components](#).

## About 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.

By default, the Oracle Business Process Management Suite Quick Start installation contains Oracle JDeveloper and an Integrated WebLogic Server, but can also be used to set up a domain outside of Oracle JDeveloper.

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 [About the Oracle SOA Suite 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 or other SOA components, see [About Quick Start Components](#).

## About Quick Start Components

Some Oracle SOA Suite components are not supported to run with the included Java DB database. These components include:

- Oracle Business Activity Monitoring
- Oracle B2B
- 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 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 standalone 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](#).

## 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.

## About 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 [About Quick Start 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 in JDeveloper	Standalone Domain	Compact Domain
<ul style="list-style-type: none"> <li>Generated by launching the Integrated WebLogic Server from JDeveloper</li> <li>Pre-configured with SOA Suite or Business Process Management Suite runtime components</li> <li>Works with a pre-configured Java DB</li> </ul>	<ul style="list-style-type: none"> <li>A standalone version of the Integrated WebLogic Server that runs independently of JDeveloper</li> <li>Pre-configured with SOA Suite or Business Process Management Suite runtime components</li> <li>Works with a pre-configured Java DB</li> <li>Must be explicitly targeted by user in JDeveloper</li> </ul>	<ul style="list-style-type: none"> <li>Generated by using software in the Quick Start Oracle home</li> <li>Configured by user</li> <li>Includes an administration server only, with SOA components such as soa-infra, Service Bus, and Business Activity Monitoring (BAM) all deployed to that server.</li> <li>Works with an Oracle database that you must install and then configure with RCU</li> <li>Must be explicitly targeted by user in JDeveloper</li> </ul>
<p>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.</p>	<p>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.</p>	<p>You should only use this domain option if you want to add SOA components that are incompatible with JavaDB. These components include Oracle Business Activity Monitoring, Oracle B2B, Oracle Enterprise Scheduler, and Oracle Managed File Transfer.</p>



# 2

## Preparing to Install Quick Start

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

### Verifying Certification, System, and Interoperability Requirements

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 that your environment meets certification requirements:**

Ensure that you install your product on a supported hardware and software configuration.

Oracle has tested and verified the performance of your product on all certified systems and environments. Whenever new certifications are released, they are added to the 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. 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:**

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

### About 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:

#### About 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 on *Technical Resources from Oracle*.

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

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. See About the 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.

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.

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, the 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, the 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, the 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 Overview
- Interval Partitioning



#### Note:

Partitioning functionality is available only if you purchase the Oracle Partitioning option in Oracle Database.

## About 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 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 may encounter problems when you try to perform tasks in the future. Oracle

Universal Installer validates that the Oracle home directory is empty; the install does not progress until you specify an empty directory. Oracle recommends that you locate your JDK installation in the `/home/oracle/products/jdk` directory.

Platform-specific distributions have a `.bin` (for Linux 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 for Oracle Fusion Middleware 14c (14.1.2.0.0).

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>

## Selecting an Installation User

The user who installs and configures your system must have the required permissions and privileges.

### About 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 directory 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. This user has 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.

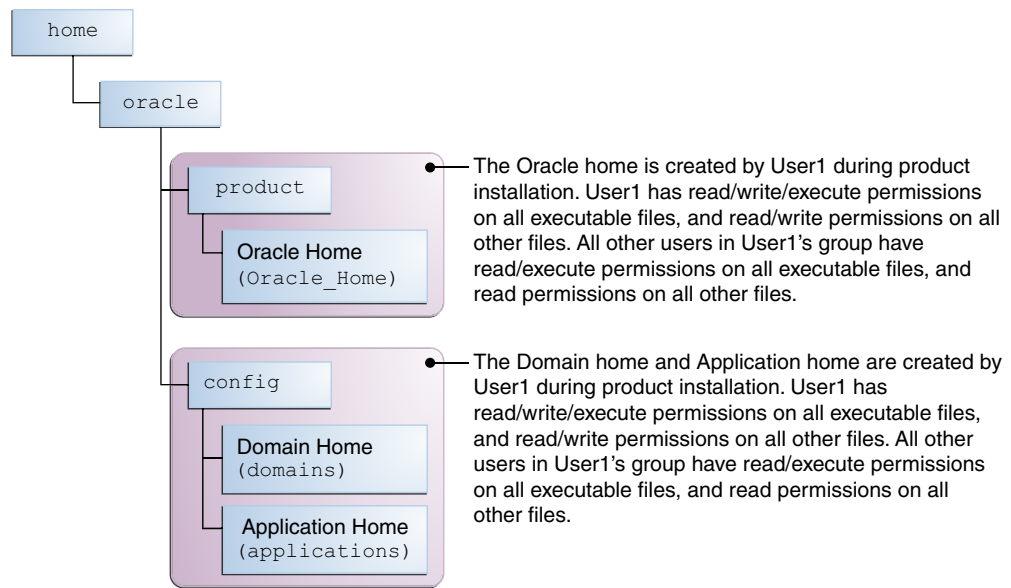
Consider the following examples:

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

**Figure 2-1** explains the file permissions where the same user installs the software and configures the domain.

To ensure 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 by using the Configuration Wizard.

**Figure 2-1 Directory Structure When you manage a product installation - a Single User Installs the Software and Configures the Domain**

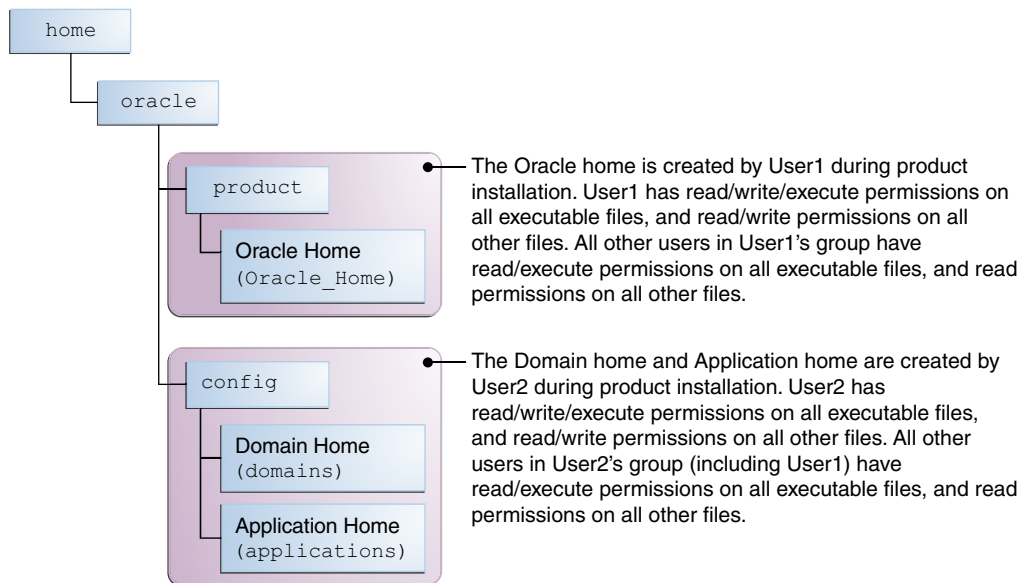


If the user who creates the domain is different than the user who installed the software, then both users must have the same privileges, as shown in the next example.

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

Figure 2-2 explains the file permissions where one user creates the Oracle home and another user configures the domain.

**Figure 2-2 Directory Structure when Different Users Install the Software and Configure the Domain**





**Note:**

Certain domain files do not have group permissions. For example, `cwallet.sso`.

Consider the following points before you run 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 the 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 a `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), use the same user ID that you used to install the product.  
When you manage a domain (for example, starting managed Servers), use the same user ID that you used to create the domain.
- 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](#).

## About Non-Default User Permissions on Linux or UNIX Operating Systems

Changing the default permission setting reduces the security of the installation and your system. Oracle does not recommend that you change the default permission settings.

If other users require access to a particular file or executable, use the Linux or UNIX `sudo` command or other similar commands to change the file permissions.

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

## Verifying That the Installation User Has Administrator Privileges on Windows Operating Systems

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

By default, users 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 icon, either from the Start menu or the Windows icon in the lower-left 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 are 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
```

## Setting JAVA\_HOME

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

Your path definition should look as follows:

- **For UNIX**

```
JAVA_HOME=$HOME/Java/jdk17.0.12  
export JAVA_HOME
```

- **For Windows**

Search for `cmd.exe` in the **Start** menu. Right-click `cmd.exe` and select **Run as Administrator**.

```
SET JAVA_HOME="C:\Program Files\Java\jdk17.0.12"
```

 **Note:**

- `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. Ensure that you point to the actual destination.

## Next Steps

After completing the installation preparation steps, you are ready to install a Quick Start distribution.

The rest of this guide describes 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 uninstall 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 <a href="#">Installing Oracle SOA Suite Quick Start for Developers</a> .
Begin installing Oracle Business Process Management Suite with Quick Start.	See <a href="#">Installing Oracle Business Process Management Suite Quick Start for Developers</a> .

---

# Part II

## Quick Start for Oracle SOA Suite

This part covers the steps to install Oracle SOA Suite using Quick Start.



# 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

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.
<b>Download and install a Quick Start distribution</b>	<b>You are downloading and installing Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.</b>
Configure a default or standalone domain	You will configure a default domain or standalone domain for your developed applications.
Develop or test an application	You will develop or test an application.

### Downloading the Oracle SOA Suite Quick Start Installer

To download the Oracle SOA Suite Quick Start installer:

1. Sign in to 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.

### 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 for UNIX and Window:

- **Generic Installer for UNIX**

```
JAVA_HOME/bin/java -jar fmw_14.1.2.0.0_soa_quickstart_generic.jar
```

- **Generic Installer for Windows**

```
JAVA_HOME\bin\java.exe -jar fmw_14.1.2.0.0_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_14.1.2.0.0_soa_quickstart_generic.jar`.

## 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.  For more about Oracle Fusion Middleware directory structure, see About the Directories for Installation and Configuration in <i>Planning an Installation of Oracle Fusion Middleware</i> .
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 <b>Save Response File</b> 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.  When the progress bar reaches 100% complete, click <b>Finish</b> to dismiss the installer, or click <b>Next</b> to see a summary.

**Table 3-1 (Cont.) Quick Start Install Screens**

Screen	Description
Installation Complete	<p>This screen appears when the installation is complete. Review the information on this screen.</p> <p>At the bottom of this screen, there is a checkbox to launch Oracle JDeveloper upon closing the installation wizard.</p> <p>Oracle recommends that you deselect this box.</p> <p>Click <b>Finish</b>.</p>

## Next Steps

Once you have verified your installation, you should configure a domain. See [About Domain Configurations](#) for detailed descriptions of your domain options.

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

Action	Resource
<p>Immediately launch the Integrated WebLogic Server to initiate a domain with Java DB.</p> <p>This option does not require any additional installations.</p>	<p>See <a href="#">Configuring an Integrated WebLogic Server Domain</a>.</p>
<p>Install and configure an Oracle database to work with your Quick Start installation.</p> <p>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, or Oracle B2B/Healthcare.</p>	<p>See <a href="#">Configuring a Compact Domain</a>.</p>

# 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

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 downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.
<b>Configure a default or standalone domain.</b>	<b>You are configuring a default domain or a standalone domain for your developed applications.</b>
Develop or test an application.	You will develop or test an application.

### About 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. 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. See <a href="#">Configuring JDeveloper's Default Domain</a> .
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. 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. See <a href="#">Configuring a Standalone Domain</a> .

Suggested Use Case	Method	Description
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. You should only choose this option if you know you want your domain to be compatible with Enterprise Scheduler, Managed File Transfer, B2B, Healthcare, or BAM components. See <a href="#">Configuring a Compact Domain</a> .

Any other method of creating a domain is not recommended.

## 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

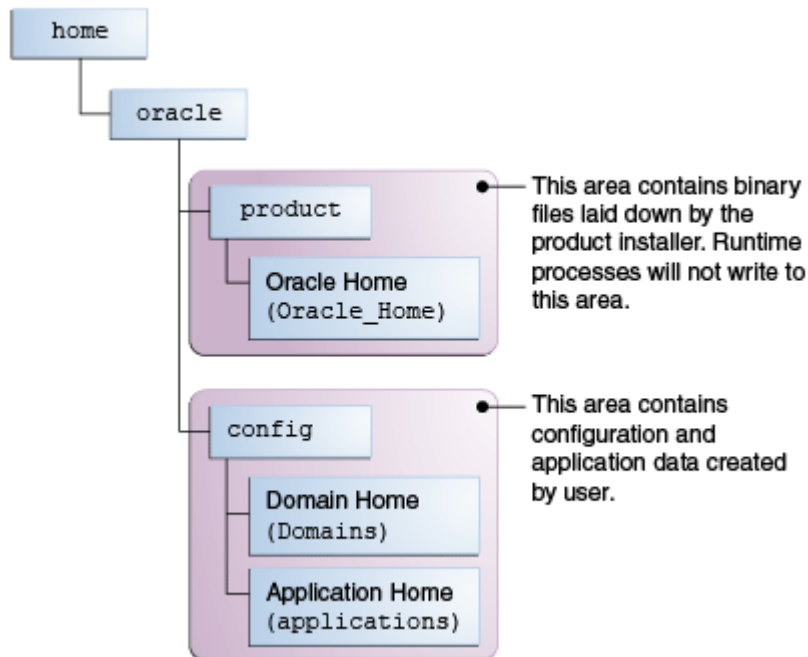
You can set the `JDEV_USER_DIR` environment variable to define the location of your user home directory. This should be a unique location for your distribution. The user home directory will contain subdirectories for your domain files and your user-generated application files.

 **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 `$HOME/.jdeveloper/system14.1.2.0.x.x.xxx/DefaultDomain`. The default application home will be created at `$HOME/jdeveloper/mywork`.

On a Windows host, the default domain home will be created at `%USERPROFILE%\AppData\Roaming\JDeveloper\system14.1.2.0.x.x.xxx \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 \system14.1.2.0.x.x.xxx`. The application home will be located in `JDEV_USER_DIR\mywork`.

## 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:

- **For UNIX**

```
setenv ORACLE_HOME $HOME/Oracle/Middleware/Oracle_Home
export ORACLE_HOME
```

- **For Windows**

```
SET ORACLE_HOME=C:\Oracle\Middleware\Oracle_Home
```

## 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"
```

## Adding Server Certificates to Support Secure Mode in JDev

When running Oracle WebLogic in secure mode, you must manually add your server certificates before connecting through the Create Application Server Connection wizard.

This process applies only when using secure production mode. If you do not manually add the server certificate, the server connection fails.

Before starting the Create Application Server Connection wizard, follow these steps to add a new server certificate in JDeveloper.

1. Open the **Tools** menu and select **Preferences**.
2. Select **Keystores** and add the keystore password.

```
Keystore Password = "DemoTrustKeyStorePassPhrase"
```

3. Provide the certificate location. The `cert.pem` certificate should be located in the following directory:

```
[jdk_path]/lib/security/cacerts
```

4. Provide the key alias that was created for the certificate.

```
Key Alias= KeyAlias
```

## Configuring JDeveloper's Default Domain

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

## Starting the Integrated WebLogic Server

To start the integrated WebLogic server:

1. Start JDeveloper.

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

- **For UNIX**

```
cd ORACLE_HOME/jdeveloper/jdev/bin ./jdev
```

- **For Windows**

```
cd ORACLE_HOME\jdeveloper jdev.exe
```

As Oracle JDeveloper starts, 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 started at this point.

2. Start the Integrated WebLogic Server by selecting **Run** from top menu bar, then **Start Server Instance**.
3. The first time you start the server instance, you will be prompted to enter a password for your 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. Starting 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 started successfully.



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

## 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.

Sign in using the username and password that you specified when starting 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*.

## 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. Connect to the WebLogic Remote Console. Open a browser and enter `http://hostname:port/rconsole` (or for HTTPS, `https://hostname:port/rconsole`).
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.

## Configuring a Standalone Domain

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

## Starting the Configuration Wizard

Before starting 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. Start 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:

- **For UNIX**

```
cd $ORACLE_HOME/oracle_common/common/bin
setenv QS_TEMPLATES "$ORACLE_HOME/soa/common/templates/wls/
oracle.soa_template.jar, $ORACLE_HOME/osb/common/templates/wls/
oracle.osb_template.jar"
export QS_TEMPLATES
./qs_config.sh
```

- **For Windows**

```
cd %ORACLE_HOME%\oracle_common\common\bin
set QS_TEMPLATES=%ORACLE_HOME%
\soa\common\templates\wls\oracle.soa_template.jar, %ORACLE_HOME%
\osb\common\templates\wls\oracle.osb_template.jar
qs_config.cmd
```

## Navigating the Configuration Wizard Screens

Navigate through the following screens in the Configuration Wizard:

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

Screen	Description
Configuration	<p>Specify a password for your default domain.</p> <p>Edit the <b>Domain Location</b>. By default, the domain will be created at <code>ORACLE_HOME/user_projects/domains/base_domain</code>. To prevent confusion in the future, replace <code>base_domain</code> in the <b>Domain Location</b> path with <code>standalone_domain</code>.</p> <p>Replace <code>base_domain</code> with <code>standalone_domain</code> in the <b>Application Location</b> path as well.</p> <p>Review the port numbers.</p> <p>Click <b>Create</b>.</p>
Configuration Progress	This screen allows you to see the progress of the configuration.

**Table 4-1 (Cont.) Quick Start WebLogic Server Configuration Wizard Screens**

Screen	Description
End of Configuration	<p>This screen appears when the installation is complete. Take note of the information on this screen.</p> <p>You can leave the option to start your new domain unchecked if you want to start it manually from the domain location listed on this screen.</p> <p>Click <b>Finish</b> to exit the wizard.</p>

## Starting the Administration Sever

If you chose not to start the domain automatically after creation, you can start your standalone manually.

If you have set the `DOMAIN_HOME` environment variable to your domain home location, you can enter the following commands to start the domain's Administration Server:

- **For UNIX**

```
cd $DOMAIN_HOME/bin
./startWebLogic.sh
```

- **For Windows**

```
cd %DOMAIN_HOME%\bin
startWebLogic.cmd
```

Domain configuration will take several minutes. When you see the following message appear in the terminal, the WebLogic Server has started 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.

## Starting the Application Server Connection Wizard

Start Oracle JDeveloper with the appropriate command.

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

- **For UNIX**

```
cd $ORACLE_HOME/jdeveloper/jdev/bin
./jdev
```

- **For Windows**

```
cd %ORACLE_HOME%\jdeveloper
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 start the **Create Application Server Connection** wizard.

## 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 <b>Standalone Server</b> . Click <b>Next</b> .
Name and Type	Specify an intuitive <b>Connection Name</b> for your server. Click <b>Next</b> .
Authentication	Input the <b>Username</b> and <b>Password</b> you created during domain configuration. Click <b>Next</b> .
Connections	Input the standalone domain's name. Then click <b>Next</b> without changing anything else on the screen.
Test	Click the <b>Test Connection</b> button at the top. If any of the tests fail, you should press <b>Back</b> to the <b>Connections</b> or <b>Authentication</b> screens to make sure you entered everything correctly.
Finish	If everything passes, click <b>Next</b> . The <b>Finish</b> screen tells you how to launch your new connection, covered in the following task. Click <b>Finish</b> .

### Note:

If you are running in secure mode, be sure that you have added your server certificate as described in [Adding Server Certificates to Support Secure Mode in JDev](#).

## 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 Remote Console**.

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

## About 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

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 set the `DOMAIN_HOME` environment variable to your Oracle home, you can enter the following commands to stop an independent WebLogic Server:

- **For UNIX**

```
cd $DOMAIN_HOME/bin
./stopWebLogic.sh
```

- **For windows**

```
cd %DOMAIN_HOME%\bin
stopWebLogic.cmd
```

## Restarting JDeveloper

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

- **For UNIX**

```
cd $ORACLE_HOME/jdeveloper/jdev/bin
./jdev
```

- **For Windows**

```
cd %ORACLE_HOME%\jdeveloper
jdev.exe
```

## 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 start two Integrated WebLogic Servers from different distributions.

- You cannot access your Oracle SOA Suite runtime environment by starting 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 starting the WebLogic Server from your Oracle SOA Suite Quick Start Oracle home.

## 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 starting 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 started 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. Start the JDeveloper executable from there.

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

## 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 <a href="#">Configuring a Compact Domain</a> .

<b>Action</b>	<b>Resource</b>
Make or test an application of your own.	See Working with Oracle JDeveloper in <i>Developing Applications with Oracle JDeveloper</i> .
Delete your installation.	See <a href="#">Uninstalling Oracle Quick Start</a> .

# 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 Business Activity Monitoring, Oracle B2B, Oracle Enterprise Scheduler, Oracle Managed File Transfer, and Oracle SOA Suite for Healthcare Integration.

### 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 downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.
<b>Configure a compact domain.</b>	<b>You are configuring a compact domain for your developed applications.</b>
Develop or test an application.	You will develop or test an application.

### 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

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:

- **For UNIX**

```
ps -ef | grep java
```



Then `kill -9` extra running servers or instances of Java DB.

- **For Windows**

Bring up the Task Manager and select the **Processes** tab. Terminate any running instances of JDeveloper, Java DB, or running servers.

You can also use:

```
wmic process where "name='java.exe'" get ProcessID, Commandline /  
format:list
```

Then use `taskkill /f /pid <PID>` to end extra running servers or Java DB.

## 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 12c.
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.

## Configuring a 12c Database for Quick Start

If you are using a 12c 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 *12c Database Administrator's Guide* for how to configure a compatible PDB.

## Installing Required Schemas

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

## 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 the RCU.

**Note:**

In 12c, 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.

## 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 the following commands:

- **For UNIX**

```
cd $ORACLE_HOME/oracle_common/bin
./rcu
```

- **For Windows**

```
cd %ORACLE_HOME%\oracle_common\bin
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 <b>Next</b> .
Create Repository	Choose <b>Create Repository</b> and <b>System Load and Product Load Concurrently</b> . 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 <b>Host Name</b> , <b>Username</b> , and <b>Password</b> blanks with the credentials for your Oracle database. Your <b>Service Name</b> and <b>Port</b> number were created when you installed your database. If you using a 12c multitenant database and are having connection issues, make sure you have configured your database properly. Click <b>Next</b> .
Checking Prerequisites	This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click <b>OK</b> to continue.

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

Screen	Description
Select Components	<p>Specify an intuitive prefix for your new schemas, such as <b>SOAQS</b> or <b>BPMQS</b>, so you can target them easily when you are configuring a domain.</p> <p>Select <b>AS Common Schemes</b> and <b>SOA Suite</b> to select all of their dependencies.</p> <p>If you are installing Oracle Managed File Transfer, select <b>Managed File Transfer</b> from the list. You will not see this option listed if you have not run the corresponding installer yet.</p> <p>Click <b>Next</b>.</p>
Schema Passwords	<p>Select <b>Use same passwords for all schemas</b>. Then create a password you will remember.</p>
Custom Variables	<p>This screen will show up because you are installing SOA Infrastructure. See About the Custom Variables Required for the SOA Suite Schemas in <i>Installing and Configuring Oracle SOA Suite and Business Process Management</i> for descriptions of these variables.</p> <p>If you are a healthcare provider and want the Healthcare Integration user interface, change the <b>Value</b> field for <b>Healthcare Integration</b> to <b>Yes</b>. If you do not set this value now, the Healthcare Integration user interface will not function properly. See <a href="#">Activating the Oracle SOA Suite for Healthcare Integration User Interface</a> for more information.</p> <p>Otherwise, accept the defaults and press <b>Next</b>.</p>
Map Tablespaces	<p>This screen displays default and temporary tablespaces for the components you want to create schemas for. You can review this information and click <b>Next</b></p> <p>Click <b>OK</b> through the next two confirmation dialogues. Then click <b>Next</b> again to progress to the next screen.</p>
Summary	<p>This screen summarizes the component schemas that will be created. Take note of the <b>Database details</b> at the top of this screen.</p> <p>Click <b>Create</b> to begin schema creation.</p> <p>A progress dialog shows the progress of schema creation. Green checks will appear next to the names of successfully created schemas.</p>
Completion Summary	<p>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.</p> <p>If any operation failed, you can check the <b>Cleanup for failed components</b> box. Upon clicking <b>Close</b>, this option will drop failed schemas from your database.</p> <p>When you click <b>Close</b>, schema creation is complete.</p>

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 12c 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*.

# Using the Configuration Wizard to Configure a Compact Domain

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

## 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 **Create a new 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 the following commands:

- **For UNIX**

```
cd $ORACLE_HOME/oracle_common/common/bin
setenv CONFIG_JVM_ARGS -Dcom.oracle.cie.config.showProfile=true
export CONFIG_JVM_ARGS
./config.sh
```

- **For Windows**

```
cd %ORACLE_HOME%\oracle_common\common\bin
SET CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true
config.cmd
```

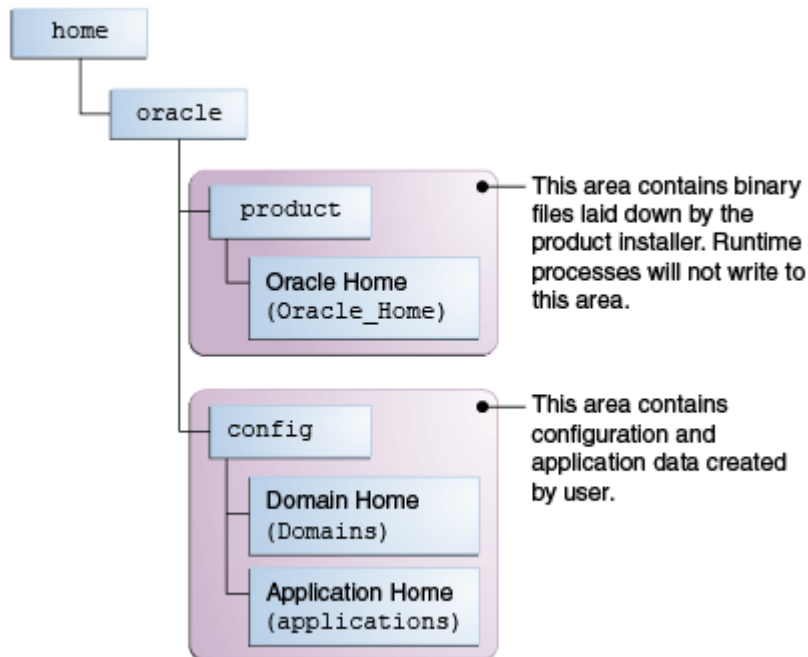
## Selecting the Domain Type and Domain Home Location

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*.

## 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:

 **Note:**

Use the SOA classic domain to extend the SOA domain to BPM. Extending a reference-configured SOA domain to BPM is not supported.

- Oracle SOA Suite - 14.1.2.0.0 [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 - 14.1.2.0.0 [osb]
- Oracle Enterprise Scheduler Service Basic - 14.1.2.0.0 [oracle\_common]
- Oracle Enterprise Manager Plugin for ESS - 14.1.2.0.0 [em]

Optionally, select the following to install additional components:

- Oracle Business Activity Monitoring - 14.1.2.0.0 [soa]
- Oracle B2B - 14.1.2.0.0 [soa]
- Oracle Managed File Transfer -14.1.2.0.0 [mft]

If you have not run the installers for Oracle B2B 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.



**Note:**

Oracle SOA Suite for healthcare integration - 14.1.2.0.0 [soa] template can be configured directly from template locations.

## 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.

## 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.

## 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**.

## 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 12c 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	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.  The default username is <code>prefix_STB</code> , where <code>prefix</code> is the custom prefix that you defined in RCU.
Schema Password	

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.
```

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

## 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.

## 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.

## 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.

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.

For more information about this screen, see Keystore in *Creating WebLogic Domains Using the Configuration Wizard*.

## 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.

## Completing the Configuration

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 screen shows the configuration progress bar.

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**.

## Starting the Administration Server

If you have set the `DOMAIN_HOME` environment variable to your domain home location, you can enter the following commands to start the domain's Administration Server:

- **For UNIX**

```
cd $DOMAIN_HOME/bin
./startWebLogic.sh
```

- **For Windows**

```
cd %DOMAIN_HOME%\bin
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 UNIX 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.
```

## 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.

## Starting the Application Server Connection Wizard

Start Oracle JDeveloper with the appropriate command.



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

- **For UNIX**

```
cd $ORACLE_HOME/jdeveloper/jdev/bin
./jdev
```

- **For Windows**

```
cd %ORACLE_HOME%\jdeveloper
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 start the **Create Application Server Connection** wizard.

## Starting the Administration Server

If you have set the `DOMAIN_HOME` environment variable to your domain home location, you can enter the following commands to start the domain's Administration Server:

- **For UNIX**

```
cd $DOMAIN_HOME/bin
./startWebLogic.sh
```

- **For Windows**

```
cd %DOMAIN_HOME%\bin
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 UNIX 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.
```

## 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 Remote Console**.

---

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

## Next Steps

Once you have verified your Quick start installation and compact domain connection, you can take 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 <i>Developing Applications with Oracle JDeveloper</i> .
Add Oracle Managed File Transfer or Oracle B2B/Healthcare.	See <a href="#">Adding Components to a Quick Start Installation</a> for instructions on adding components to a fully configured compact domain.
Delete your installation.	See <a href="#">Deinstalling Oracle Quick Start</a> .

# 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.

# 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

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.
<b>Download and install a Quick Start distribution</b>	<b>You are downloading and installing Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.</b>
Configure a default or standalone domain	You will configure a default domain or standalone domain for your developed applications.
Develop or test an application	You will develop or test an application.

### 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.

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.

### 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.

- **Generic Installer for Linux**

```
JAVA_HOME/bin/java -jar fmw_14.1.2.0.0_bpm_quickstart.jar
```

- **Generic Installer for Windows**

```
JAVA_HOME\bin\java.exe -jar fmw_14.1.2.0.0_bpm_quickstart.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_14.1.2.0.0_bpm_quickstart.jar`.

## 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.  For more about Oracle Fusion Middleware directory structure, see About the Directories for Installation and Configuration in <i>Planning an Installation of Oracle Fusion Middleware</i> .
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 <b>Save Response File</b> and provide the location and name of the response file. Response files can be used later in a silent installation situation.

**Table 6-1 (Cont.) Quick Start Install Screens**

Screen	Description
Installation Progress	This screen shows the installation progress. When the progress bar reaches 100% complete, click <b>Finish</b> to dismiss the installer, or click <b>Next</b> to see a summary.
Installation Complete	This screen appears when the installation is complete. Review the information on this screen. At the bottom of this screen, there is a checkbox to launch Oracle JDeveloper upon closing the installation wizard. Oracle recommends that you deselect this box. Click <b>Finish</b> .

## Next Steps

Once you have verified your installation, you should configure a domain. See [About Domain Configurations](#) for detailed descriptions of your domain options.

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

Action	Resource
Immediately launch the Integrated WebLogic Server to initiate a domain with Java DB. This option does not require any additional installations.	See <a href="#">Configuring an Integrated WebLogic Server Domain</a> .
Install and configure an Oracle database to work with your Quick Start installation. This option requires you to install an Oracle database but allows you to use more Oracle SOA Suite components.	See <a href="#">Configuring a Compact Domain</a> .

# 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

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 downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.
<b>Configure a default or standalone domain.</b>	<b>You are configuring a default domain or a standalone domain for your developed applications.</b>
Develop or test an application.	You will develop or test an application.

### About Quick Start Domains

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

Use the following table to decide which domain best suits 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. 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. See <a href="#">Configuring JDeveloper's Default Domain</a> .

Suggested Use Case	Method	Description
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. Oracle recommends you to choose this option, which is compatible with Enterprise Scheduler, Managed File Transfer, B2B, Healthcare, Human Workflow, or BAM components. See <a href="#">Configuring a Compact Domain</a> .

Any other method of creating a domain is not recommended.

## 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

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.



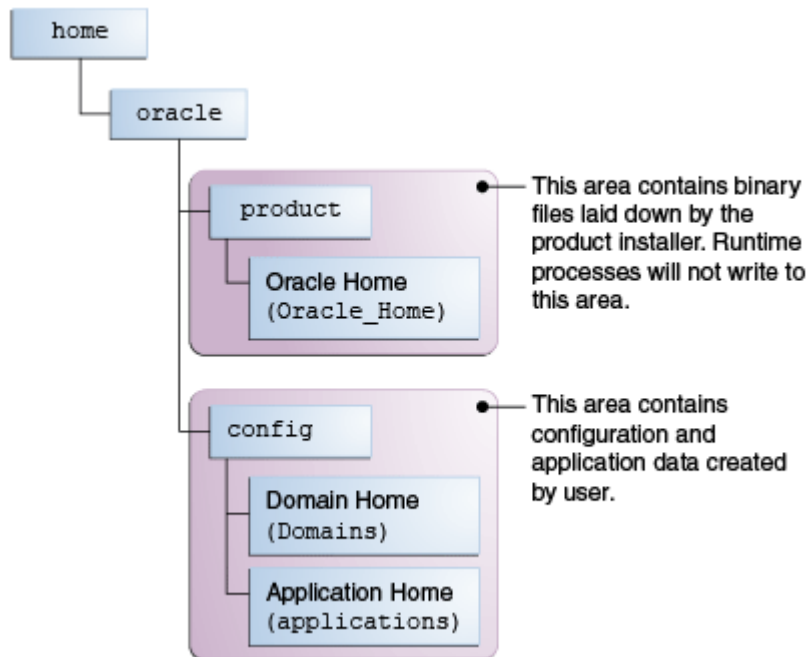
**Note:**

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 `$HOME/.jdeveloper/system14.1.2.0.x.x.xxx/DefaultDomain`. The default application home will be created at `$HOME/jdeveloper/mywork`.

On a Windows host, the default domain home will be created at `%USERPROFILE%\AppData\Roaming\JDeveloper\system14.1.2.0.x.x.xxx \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 \system14.1.2.0.x.x.xxx`. The application home will be located in `JDEV_USER_DIR\mywork`.

## 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:

- **For UNIX**

```
setenv ORACLE_HOME $HOME/Oracle/Middleware/Oracle_Home
export ORACLE_HOME
```

- **For Windows**

```
SET ORACLE_HOME=C:\Oracle\Middleware\Oracle_Home
```

## 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"
```

## Adding Server Certificates to Support Secure Mode in JDev

When running Oracle WebLogic in secure mode, you must manually add your server certificates before connecting through the Create Application Server Connection wizard.

This process applies only when using secure production mode. If you do not manually add the server certificate, the server connection fails.

Before starting the Create Application Server Connection wizard, follow these steps to add a new server certificate in JDeveloper.

1. Open the **Tools** menu and select **Preferences**.
2. Select **Keystores** and add the keystore password.

```
Keystore Password = "DemoTrustKeyStorePassPhrase"
```

3. Provide the certificate location. The `cert.pem` certificate should be located in the following directory:

```
[jdk_path]/lib/security/cacerts
```

4. Provide the key alias that was created for the certificate.

```
Key Alias= KeyAlias
```

## Configuring JDeveloper's Default Domain

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

## Starting the Integrated WebLogic Server

To start the integrated WebLogic server:

1. Start JDeveloper.

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

- **For UNIX**

```
cd ORACLE_HOME/jdeveloper/jdev/bin ./jdev
```

- **For Windows**

```
cd ORACLE_HOME\jdeveloper jdev.exe
```

As Oracle JDeveloper starts, 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 started at this point.

2. Start the Integrated WebLogic Server by selecting **Run** from top menu bar, then **Start Server Instance**.
3. The first time you start the server instance, you will be prompted to enter a password for your 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. Starting 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 started successfully.

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

## 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.

Sign in using the username and password that you specified when starting 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*.

## 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. Connect to the WebLogic Remote Console. Open a browser and enter *http://hostname:port/rconsole* (or for HTTPS, *https://hostname:port/rconsole*).
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.

## About 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

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 set the `DOMAIN_HOME` environment variable to your Oracle home, you can enter the following commands to stop an independent WebLogic Server:

- **For UNIX**

```
cd $DOMAIN_HOME/bin
./stopWebLogic.sh
```

- **For windows**

```
cd %DOMAIN_HOME%\bin
stopWebLogic.cmd
```

## Restarting JDeveloper

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

- **For UNIX**

```
cd $ORACLE_HOME/jdeveloper/jdev/bin
./jdev
```

- **For Windows**

```
cd %ORACLE_HOME%\jdeveloper
jdev.exe
```

## 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 start two Integrated WebLogic Servers from different distributions.
- You cannot access your Oracle SOA Suite runtime environment by starting 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 starting the WebLogic Server from your Oracle SOA Suite Quick Start Oracle home.

## 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 starting 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 started 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. Start the JDeveloper executable from there.

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

## 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 <a href="#">Configuring a Compact Domain</a> .
Make or test an application of your own.	See <i>Working with Oracle JDeveloper in Developing Applications with Oracle JDeveloper</i> .
Delete your installation.	See <a href="#">Uninstalling Oracle Quick Start</a> .

# 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 Business Activity Monitoring, Oracle B2B, Oracle Enterprise Scheduler, Oracle Managed File Transfer, and Oracle SOA Suite for Healthcare Integration.

### 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 downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.
<b>Configure a compact domain.</b>	<b>You are configuring a compact domain for your developed applications.</b>
Develop or test an application.	You will develop or test an application.

### 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

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:

- **For UNIX**

```
ps -ef | grep java
```

Then `kill -9` extra running servers or instances of Java DB.

- **For Windows**

Bring up the Task Manager and select the **Processes** tab. Terminate any running instances of JDeveloper, Java DB, or running servers.

You can also use:

```
wmic process where "name='java.exe'" get ProcessID, CommandLine /  
format:list
```

Then use `taskkill /f /pid <PID>` to end extra running servers or Java DB.

## 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 12c.
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.

## Configuring a 12c Database for Quick Start

If you are using a 12c 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 *12c Database Administrator's Guide* for how to configure a compatible PDB.

## Installing Required Schemas

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

## 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 the RCU.



**Note:**

In 12c, 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.

## 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 the following commands:

- **For UNIX**

```
cd $ORACLE_HOME/oracle_common/bin
./rcu
```

- **For Windows**

```
cd %ORACLE_HOME%\oracle_common\bin
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 <b>Next</b> .
Create Repository	Choose <b>Create Repository</b> and <b>System Load and Product Load Concurrently</b> . 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 <b>Host Name</b> , <b>Username</b> , and <b>Password</b> blanks with the credentials for your Oracle database. Your <b>Service Name</b> and <b>Port</b> number were created when you installed your database. If you using a 12c multitenant database and are having connection issues, make sure you have configured your database properly. Click <b>Next</b> .
Checking Prerequisites	This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click <b>OK</b> to continue.

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

Screen	Description
Select Components	<p>Specify an intuitive prefix for your new schemas, such as <b>SOAQS</b> or <b>BPMQS</b>, so you can target them easily when you are configuring a domain.</p> <p>Select <b>AS Common Schemes</b> and <b>SOA Suite</b> to select all of their dependencies.</p> <p>If you are installing Oracle Managed File Transfer, select <b>Managed File Transfer</b> from the list. You will not see this option listed if you have not run the corresponding installer yet.</p> <p>Click <b>Next</b>.</p>
Schema Passwords	<p>Select <b>Use same passwords for all schemas</b>. Then create a password you will remember.</p>
Custom Variables	<p>This screen will show up because you are installing SOA Infrastructure. See About the Custom Variables Required for the SOA Suite Schemas in <i>Installing and Configuring Oracle SOA Suite and Business Process Management</i> for descriptions of these variables.</p> <p>If you are a healthcare provider and want the Healthcare Integration user interface, change the <b>Value</b> field for <b>Healthcare Integration</b> to <b>Yes</b>. If you do not set this value now, the Healthcare Integration user interface will not function properly. See <a href="#">Activating the Oracle SOA Suite for Healthcare Integration User Interface</a> for more information.</p> <p>Otherwise, accept the defaults and press <b>Next</b>.</p>
Map Tablespaces	<p>This screen displays default and temporary tablespaces for the components you want to create schemas for. You can review this information and click <b>Next</b></p> <p>Click <b>OK</b> through the next two confirmation dialogues. Then click <b>Next</b> again to progress to the next screen.</p>
Summary	<p>This screen summarizes the component schemas that will be created. Take note of the <b>Database details</b> at the top of this screen.</p> <p>Click <b>Create</b> to begin schema creation.</p> <p>A progress dialog shows the progress of schema creation. Green checks will appear next to the names of successfully created schemas.</p>
Completion Summary	<p>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.</p> <p>If any operation failed, you can check the <b>Cleanup for failed components</b> box. Upon clicking <b>Close</b>, this option will drop failed schemas from your database.</p> <p>When you click <b>Close</b>, schema creation is complete.</p>

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 12c 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*.

# Using the Configuration Wizard to Configure a Compact Domain

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

## 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 **Create a new 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 the following commands:

- **For UNIX**

```
cd $ORACLE_HOME/oracle_common/common/bin
setenv CONFIG_JVM_ARGS -Dcom.oracle.cie.config.showProfile=true
export CONFIG_JVM_ARGS
./config.sh
```

- **For Windows**

```
cd %ORACLE_HOME%\oracle_common\common\bin
SET CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true
config.cmd
```

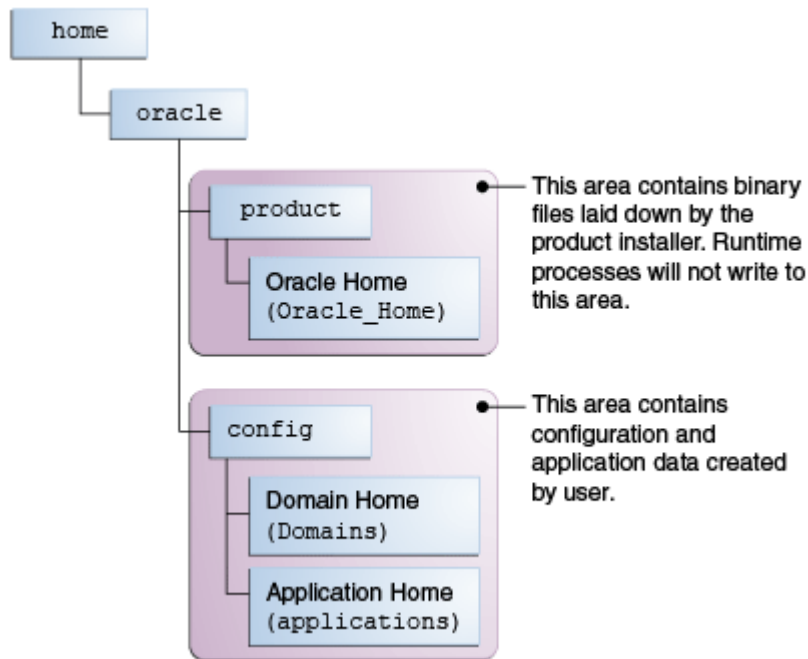
## Selecting the Domain Type and Domain Home Location

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*.

## Selecting Configuration Templates for Oracle Business Process Management Suite Quick Start

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

 **Note:**

Use the SOA classic domain to extend the SOA domain to BPM. Extending a reference-configured SOA domain to BPM is not supported.

- Oracle BPM Suite - 12.2.1.3.0 [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

To install Oracle Real-Time Integration Business Insight, select:

- Insight SOA Agent - 12.2.1.3.0 [soa]
- Insight Service Bus Agent - 12.2.1.3.0 [osb]
- Insight - 12.2.1.3.0 [soa]

Selecting this template automatically selects the following as a dependency:

- Oracle Business Activity Monitoring - 12.2.1.3.0 [soa]

Optionally, select the following to install additional components:

- Oracle SOA Suite for healthcare integration -12.2.1.3.0 [soa]

 **Note:**

For HIPAA documents, select both Oracle SOA Suite for healthcare integration - 12.2.1.3.0 [soa] and Oracle B2B - 12.2.1.3.0 [soa] .

For HL7 documents, select Oracle SOA Suite for healthcare integration - 12.2.1.3.0 [soa] only.

- Oracle Business Activity Monitoring - 12.2.1.3.0 [soa]
- Oracle B2B - 12.2.1.3.0 [soa]
- Oracle Managed File Transfer -12.2.1.3.0 [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.

## 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.

## 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.

## 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**.

## 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 12c 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	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.  The default username is <i>prefix_STB</i> , where <i>prefix</i> is the custom prefix that you defined in RCU.
Schema Password	

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.

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

## 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.

## 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.

## 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.

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.

For more information about this screen, see Keystore in *Creating WebLogic Domains Using the Configuration Wizard*.

## 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.

## Completing the Configuration

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 screen shows the configuration progress bar.

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**.

## Starting the Administration Server

If you have set the `DOMAIN_HOME` environment variable to your domain home location, you can enter the following commands to start the domain's Administration Server:

- **For UNIX**

```
cd $DOMAIN_HOME/bin
./startWebLogic.sh
```

- **For Windows**

```
cd %DOMAIN_HOME%\bin
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 UNIX 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.
```

## 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.

### Starting the Application Server Connection Wizard

Start Oracle JDeveloper with the appropriate command.

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

- **For UNIX**

```
cd $ORACLE_HOME/jdeveloper/jdev/bin
./jdev
```

- **For Windows**

```
cd %ORACLE_HOME%\jdeveloper
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 start the **Create Application Server Connection** wizard.

### Starting the Administration Server

If you have set the `DOMAIN_HOME` environment variable to your domain home location, you can enter the following commands to start the domain's Administration Server:

- **For UNIX**

```
cd $DOMAIN_HOME/bin
./startWebLogic.sh
```

- **For Windows**

```
cd %DOMAIN_HOME%\bin
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 UNIX 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.
```

## 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 Remote Console**.

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

## Next Steps

Once you have verified your Quick start installation and compact domain connection, you can take 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 <i>Developing Applications with Oracle JDeveloper</i> .
Add Oracle Managed File Transfer or Oracle B2B/Healthcare.	See <a href="#">Adding Components to a Quick Start Installation</a> for instructions on adding components to a fully configured compact domain.
Delete your installation.	See <a href="#">Deinstalling Oracle Quick Start</a> .

# Part IV

## Post-configuration Tasks for Oracle Quick Start

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

# 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.

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

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 downloaded and installed Quick Start for Oracle SOA Suite or Oracle Business Process Management Suite.
<b>Configure a compact domain.</b>	<b>You are configuring or reconfiguring a compact domain.</b>
Develop or test an application.	You will develop or test an application.

### 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 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.

# Installing Oracle B2B or Oracle Managed File Transfer for Quick Start

This section describes how to add Oracle B2B and Oracle Managed File Transfer to your Quick Start distribution.

## 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

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*.

## 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_12.2.1.3.0_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_12.2.1.4.0_b2bhealthcare.jar`.

Launch the installation wizard with the appropriate command:

- **Generic Installer for UNIX**

```
%JAVA_HOME/bin/java -jar fmw_12.2.1.4.0_b2bhealthcare.jar
```

- **Generic Installer for Windows**

Search for **cmd.exe** in the Start Menu. Right-click the **cmd.exe** and select **Run as Administrator**.

In the command prompt, use the Java executable from the JDK on your system. Your command may look like this:

```
%JAVA_HOME%\bin\java -jar fmw_12.2.1.4.0_b2bhealthcare.jar
```

After 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 <b>B2B</b> 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 <b>Save Response File</b> 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 B2B template will now be a selectable option on the **Templates** screen during domain configuration.

## 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_14.1.2.0.0_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_14.1.2.0.0_mft_generic.jar`.

Launch the installation wizard with the appropriate command:

- **Generic Installer for UNIX**

```
%JAVA_HOME/bin/java -jar fmw_14.1.2.0.0_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**.

In the command prompt, use the Java executable from the JDK on your system. Your command may look like this:

```
%JAVA_HOME%\bin\java -jar fmw_14.1.2.0.0_mft_generic.jar
```

After you have launched the installer, the installation wizard displays the screens listed and described sequentially in [Table 9-2](#).

**Table 9-2 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 <b>Save Response File</b> 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.

## 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](#).

If you are adding components to an existing compact domain, see [Updating a Compact Domain](#).

## 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 or Managed File Transfer, you must have run their separate installers as described in [Installing Oracle B2B or Oracle Managed File Transfer for Quick Start](#) before proceeding to the following steps:

## 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:

- **For UNIX**

```
cd $ORACLE_HOME/oracle_common/common/bin
./config.sh
```

- **For Windows**

```
cd %ORACLE_HOME%\oracle_common\common\bin  
config.cmd
```

Then navigate through the following configuration screens.

## 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.

## 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 - 14.1.2.0.0 [soa]
- Oracle B2B - 14.1.2.0.0 [soa]
- Oracle Managed File Transfer - 14.1.2.0.0 [mft]
- Oracle Business Activity Manager - 14.1.2.0.0 [soa]
- Oracle Enterprise Scheduler Service Basic - 14.1.2.0.0 [oracle\_common]
- Oracle Enterprise Manager Plugin for ESS - 14.1.2.0.0 [em]

## 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 About 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 Type in *Creating WebLogic Domains Using the Configuration Wizard*

## 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.

## 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.

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*

## Selecting Advanced Configuration

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

## 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.

## 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**.

## Next Steps

After verifying your Quick Start installation and compact domain connection, you can take 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 <i>Developing Applications with Oracle JDeveloper</i> .
Uninstall your current Quick Start distribution.	If you have tested your installation, see <a href="#">Uninstalling Oracle Quick Start</a> .
Install a different Quick Start distribution.	See <a href="#">Introducing the Quick Start Distributions</a> .



# 10

## Uninstalling Oracle Quick Start

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

### Performing Pre-Uninstallation Tasks

Before uninstalling 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*.

### Uninstalling a Quick Start Distribution

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

### Starting the Uninstaller

To uninstall 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 uninstaller by running the following command:
  - On a Windows system:  
`deinstall.cmd`
  - On Linux, UNIX, Mac OS X systems:  
`./deinstall.sh`

### Manually Removing the Oracle Home

If you selected **No** on the warning screen during uninstallation, 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..

## Cleaning Up JDeveloper Artifacts

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

# A

## Updating the JDK After Installing and Configuring an Oracle Fusion Middleware Product

Consider that you have an unsupported JDK version installed on your machine. When you install and configure an Oracle Fusion Middleware product, the utilities, such as Configuration Wizard (`config.sh|exe`), OPatch, or RCU point to a default JDK. The supported JDK version for this release is `jdk17.0.12` and it carries security enhancements and bug fixes. You can upgrade the existing JDK to a newer version, and can have the complete product stack point to the newer version of the JDK.

You can maintain multiple versions of JDK and switch to the required version on need basis.

### About Updating the JDK Location After Installing an Oracle Fusion Middleware Product

The binaries and other metadata and utility scripts in the Oracle home and Domain home, such as RCU or Configuration Wizard, use a JDK version that was used while installing the software and continue to refer to the same version of the JDK. The JDK path is stored in a variable called `JAVA_HOME` which is centrally located in `.globalEnv.properties` file inside the `ORACLE_HOME/oui` directory.

The utility scripts such as `config.sh|cmd`, `launch.sh`, or `opatch` reside in the `ORACLE_HOME`, and when you invoke them, they refer to the `JAVA_HOME` variable located in `.globalEnv.properties` file. To point these scripts and utilities to the newer version of JDK, you must update the value of the `JAVA_HOME` variable in the `.globalEnv.properties` file by following the directions listed in [Updating the JDK Location in an Existing Oracle Home](#).

To make the scripts and files in your Domain home directory point to the newer version of the JDK, you can follow one of the following approaches:

- Specify the path to the newer JDK on the Domain Mode and JDK screen while running the Configuration Wizard.

For example, consider that you installed Oracle Fusion Middleware Infrastructure with the JDK version `8u191`. So, while configuring the WebLogic domain with the Configuration Assistant, you can select the path to the newer JDK on the Domain Mode and JDK screen of the Configuration Wizard. Example: `/scratch/jdk/jdk17.0.12`.

- Manually locate the files that have references to the JDK using `grep` (Linux) or `findstr` (WINDOWS) commands and update each reference.

See [Updating the JDK Location in an Existing Oracle Home](#).

#### Note:

If you install the newer version of the JDK in the same location as the existing JDK by overwriting the files, then you don't need to take any action.

## Updating the JDK Location in an Existing Oracle Home

The `getProperty.sh|cmd` script displays the value of a variable, such as `JAVA_HOME`, from the `.globalEnv.properties` file. The `setProperty.sh|cmd` script is used to set the value of variables, such as `OLD_JAVA_HOME` or `JAVA_HOME` that contain the locations of old and new JDKs in the `.globalEnv.properties` file.

The `getProperty.sh|cmd` and `setProperty.sh|cmd` scripts are located in the following location:

(Linux) `ORACLE_HOME/oui/bin`

(Windows) `ORACLE_HOME\oui\bin`

Where, `ORACLE_HOME` is the directory that contains the products using the current version of the JDK, such as `jdk17.0.12`.

To update the JDK location in the `.globalEnv.properties` file:

1. Use the `getProperty.sh|cmd` script to display the path of the current JDK from the `JAVA_HOME` variable. For example:

(Linux) `ORACLE_HOME/oui/bin/getProperty.sh JAVA_HOME`

(Windows) `ORACLE_HOME\oui\bin\getProperty.cmd JAVA_HOME`

`echo JAVA_HOME`

Where `JAVA_HOME` is the variable in the `.globalEnv.properties` file that contains the location of the JDK.

2. Back up the path of the current JDK to another variable such as `OLD_JAVA_HOME` in the `.globalEnv.properties` file by entering the following commands:

(Linux) `ORACLE_HOME/oui/bin/setProperty.sh -name OLD_JAVA_HOME -value specify_the_path_of_current_JDK`

(Windows) `ORACLE_HOME\oui\bin\setProperty.cmd -name OLD_JAVA_HOME -value specify_the_path_of_current_JDK`

This command creates a new variable called `OLD_JAVA_HOME` in the `.globalEnv.properties` file, with a value that you have specified.

3. Set the new location of the JDK in the `JAVA_HOME` variable of the `.globalEnv.properties` file, by entering the following commands:

(Linux) `ORACLE_HOME/oui/bin/setProperty.sh -name JAVA_HOME -value specify_the_location_of_new_JDK`

(Windows) `ORACLE_HOME\oui\bin\setProperty.cmd -name JAVA_HOME -value specify_the_location_of_new_JDK`

After you run this command, the `JAVA_HOME` variable in the `.globalEnv.properties` file now contains the path to the new JDK, such as `jdk17.0.12`.

## Updating the JDK Location in an Existing Domain Home

You must search the references to the current JDK, for example `1.8.0_191` manually, and replace those instances with the location of the new JDK.

You can use the `grep` or `findstr` commands to search for the JDK-related references.

You'll likely be required to update the location of JDK in the following three files:

(Linux) `DOMAIN_HOME/bin/setNMJavaHome.sh`

(Windows) `DOMAIN_HOME\bin\setNMJavaHome.cmd`

(Linux) `DOMAIN_HOME/nodemanager/nodemanager.properties`

(Windows) `DOMAIN_HOME\nodemanager\nodemanager.properties`

(Linux) **Start** `bash` **and then run** `DOMAIN_HOME/bin>source setDomainEnv.sh`

(Windows) `DOMAIN_HOME\bin\setDomainEnv.cmd`