Oracle® Fusion Middleware

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

12*c* (12.1.3)

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



Oracle Fusion Middleware Installing SOA Suite and Business Process Management Suite Quick Start for Developers 12c (12.1.3)

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Preface

This guide 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 contains the following sections:

- Audience
- Documentation Accessibility
- Conventions

Audience

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

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

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Conventions

The following text conventions are used in this document:

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

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

Introducing the Quick Start Distributions

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

Please 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 "Planning the Oracle SOA Suite and 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.

This chapter contains the following sections:

- Using This Chapter to Plan Your Installation
- **Understanding Quick Start**
- Understanding the Oracle SOA Quick Start Distribution
- Understanding the Oracle Business Process Management Suite Quick Start Distribution
- Understanding How to Add More Components
- **Understanding Domain Configurations**
- **Next Steps**

1.1 Using This Chapter to Plan Your Installation

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

- Make sure that a Quick Start installation suits your needs. Its limitations are described in Section 1.2.
- Choose between the SOA Suite Quick Start or Business Process Management Suite Quick Start distribution. These are described in Section 1.3 and Section 1.4.
- 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 Section 1.5.
- Decide what type of domain you want to use during development. The three domain types available for Quick Start are described in Table 1–1 of Section 1.6.

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

1.2 Understanding Quick Start

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

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

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

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

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

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

1.3 Understanding the Oracle SOA Quick Start Distribution

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

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

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

- Oracle BPEL Process Manager
- Oracle Human Workflow
- **Oracle Business Rules**
- Oracle Mediator
- Oracle Service Bus
- Oracle Enterprise Scheduler
- SOA Spring Component Design Time
- Oracle Event Processing Design Time

The Integrated WebLogic Server is pre-configured with Java DB and the runtime software for the all of the components listed above except for Oracle Enterprise Scheduler and Oracle Event Processing. This means you can run any JDeveloper

application that does not use Oracle Enterprise Scheduler or Oracle Event Processing on the Integrated WebLogic Server immediately after you finish installing a Quick Start distribution.

If you want to configure your installation to use Oracle Enterprise Scheduler, Oracle Event Processing, or other SOA components, see Section 1.5.

1.4 Understanding the Oracle Business Process Management Suite Quick Start Distribution

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

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

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

- All Oracle SOA Suite components listed in Section 1.3
- Oracle Business Process Management Composer
- Oracle Business Process Management Workspace
- Oracle Case Management
- Oracle BPMN Process Manager

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

If you want to configure your installation to use Oracle Enterprise Scheduler, Oracle Event Processing, or other SOA components, see Section 1.5.

1.5 Understanding How to Add More Components

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

- Oracle Business Activity Monitoring
- Oracle B2B
- Oracle SOA Suite for healthcare integration
- Oracle Enterprise Scheduler
- Oracle Managed File Transfer
- **Oracle Event Processing**

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 listed component, 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.

The entire procedure for configuring a compact domain for components that use an Oracle database is covered in Chapter 3 for Oracle SOA Suite and Chapter 5 for Oracle Business Process Management Suite.

You should 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 Event Processing**
- **About Oracle B2B**
- About Oracle SOA Suite for healthcare integration
- About Oracle Managed File Transfer

1.5.1 About Oracle Event Processing

In 12c (12.1.3), you can build applications with Oracle Event Processing design time components in JDeveloper. But in order to test your applications in an environment with Oracle Event Processing runtime software, you must install a separate Oracle home for Oracle Event Processing and launch the Oracle Event Processing-specific server.

The installation process for Oracle Event Processing is covered in Installing and Configuring Oracle Event Processing.

Once you have launched the Oracle Event Processing server, you can target it and deploy applications to it from within JDeveloper.

1.5.2 About Oracle B2B

Oracle B2B is an e-commerce gateway that enables the secure and reliable exchange of business documents between an enterprise and its trading partners. See "Protocols Supported in B2B" in the *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 Section 6.2.1.1.

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 Section 6.2.1.2.

1.5.3 About Oracle SOA Suite for healthcare integration

Oracle SOA Suite for healthcare integration uses several features of Oracle SOA Suite to help you design, create, and manage applications that process healthcare data. Oracle SOA Suite for healthcare integration cannot be used with Oracle Business Process Management Suite.

For X12 HIPAA use cases, you can use the full Oracle B2B installation described in Section 1.5.2. However, if you are a healthcare provider using HL7 documents, you need to install the Oracle SOA Suite for Healthcare Integration software. This software consists of the Healthcare Integration JDeveloper adapter and the Healthcare Integration User Interface, which provides a customized, web-based console for designing, monitoring and managing HL7 documents.

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

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

The Oracle SOA Suite for healthcare integration user interface will not function properly if you do not do both tasks. These configurations are detailed further in Section 6.2.2.2.

1.5.4 About Oracle Managed File Transfer

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

1.6 Understanding Domain Configurations

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

The three possible domain types are described and compared in Table 1–1. Note that if you plan to install any of the Oracle SOA Suite components listed in Section 1.5, 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 Demain Control Comment Demain				
	Default Domain	Standalone Domain	Compact Domain	
Description	 Generated by launching Integrated WebLogic Server from JDeveloper Pre-configured with SOA Suite or Business Process Management Suite runtime components Works with a pre-configured Java DB 	 Generated by running software in the Quick Start Oracle home from the command line Pre-configured with SOA Suite or Business Process Management Suite runtime components Works with a pre-configured Java DB Must be explicitly targeted by user in JDeveloper 	 Generated by using software in the Quick Start Oracle home Configured by user Works with an Oracle database that you must install and then configure with RCU Must be explicitly targeted by user in JDeveloper 	
Recommended Use	This domain option is best for demos or evaluation purposes because the Integrated WebLogic Server will shut down every time you end a JDeveloper session. You will have to relaunch the server every time you wanted to access your domain.	This option is best for developers, especially for developers who want to use the Oracle Service Bus Design Time Console instead of JDeveloper. This domain type saves you from having to relaunch the server from JDeveloper every time you want to test your application.	You should only use this domain option if you want to add SOA components that are incompatible with JavaDB. These components include Enterprise Scheduler, Managed File Transfer, B2B, Heathcare, or Business Activity Monitoring.	
Configuration Roadmap	If you chose the SOA Suite Quick Start distribution, complete the installation instructions in Chapter 2. Then follow the directions in Section 2.5.1, "Configuring JDeveloper's default domain". If you chose the Business Process Management Suite Quick Start distribution, complete the installation instructions in Chapter 4. Then follow the directions in Section 4.5.1, "Configuring JDeveloper's default domain".	If you chose the SOA Suite Quick Start distribution, complete the installation instructions in Chapter 2. Then follow the directions for Section 2.5.2, "Configuring a Standalone Domain" in the same chapter. If you chose the Business Process Management Suite Quick Start distribution, complete the installation instructions in Chapter 4. Then follow the directions for Section 4.5.2, "Configuring a Standalone Domain" in the same chapter.	If you chose the SOA Suite Quick Start distribution, begin Chapter 2. At Section 2.5, take the provided link to Chapter 3 and complete all of the instructions there. If you chose the Business Process Management Suite Quick Start distribution, begin Chapter 4. At Section 4.5, take the provided link to Chapter 5 and complete all of the instructions there.	

1.7 Next Steps

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

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

Choose a distribution to begin using Quick Start:

Action	Resource
Begin installing Oracle SOA Suite with Quick Start.	See Part I, "Quick Start for Oracle SOA Suite".
Begin installing Oracle Business Process Management Suite with Quick Start.	See Part II, "Quick Start for Oracle Business Process Management Suite".

Part I

Quick Start for Oracle SOA Suite

This part covers the steps to install Oracle SOA Suite using Quick Start. You should have reviewed the information in Chapter 1 of this book before proceeding to the chapters contained in this part.

This part contains the following chapters:

- Chapter 2, "Installing Oracle SOA Suite Quick Start for Developers"
- Chapter 3, "Configuring a Compact Domain for Oracle SOA Suite Quick Start"

Chapter 2 details the installation process and guides you through choosing and setting up either the Integrated WebLogic Server's default domain or the standalone domain.

Chapter 3 explains how to configure a compact domain for your Quick Start installation so that you can install and use products that need an Oracle Database.

Installing Oracle SOA Suite Quick Start for Developers

This chapter will guide you through an Oracle SOA Suite Quick Start installation and introduce you to using the Integrated WebLogic Server's default domain or creating a standalone domain.

By the end of this chapter, you will be able to develop Oracle SOA Suite applications using Oracle JDeveloper and test those applications using the Integrated WebLogic Server and Java DB.

This chapter contains the following sections:

- Preparing to Use Quick Start
- Launching the Quick Start Installer
- Navigating the Quick Start Installation Screens
- Preparing to Launch the Integrated WebLogic Server
- Configuring a Domain
- **Knowing Basic JDeveloper Functions**
- Managing Multiple Installations on the Same Machine
- Next Steps

2.1 Preparing to Use Quick Start

This section will help you verify that Quick Start can run on your system.

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

- Task 1, "Verifying Your System"
- Task 2, "Downloading the Installers"
- Task 3, "Installing the JDK"
- Task 4, "Setting JAVA_HOME"

Task 1 Verifying Your System

Make sure that you are installing your product on supported hardware or software configuration. See the certification document for 12c (12.1.3) on the Oracle Fusion Middleware Supported System Configurations page.

- 2. Verify that your user account has the required privileges for installing Oracle Fusion Middleware. For more information, see "Selecting an Installation User" in Planning an Installation of Oracle Fusion Middleware.
- 3. Check the Oracle Fusion Middleware System Requirements and Specifications to see if your system meets the requirements for 12c (12.1.3).

Task 2 Downloading the Installers

Log into the host computer where you want to install Oracle SOA Suite.

Find and download the following files:

The SOA Suite Quick Start installer zip file, labeled fmw_12.1.3.0.0_soaqs_Disk1_ 10f1.zip. This is located on the Oracle Technology Network, under the Oracle SOA Suite Downloads.

You may find the installer, after accepting the OTN Free Developer License Agreement, at the following URL:

http://www.oracle.com/technetwork/middleware/soasuite/downloads/index.h

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

The latest supported Java Development Kit (JDK) for your operating system. As of its release, Oracle Fusion Middleware 12c (12.1.3) requires a minimum of JDK 7.0 Update 55 or later.

You can find the latest JDK at the following URL: http://www.oracle.com/technetwork/java/javase/downloads/index.html

You should always verify the recommended version number and download location with the "Downloading a Supported Java Development Kit (JDK)" in the Oracle Fusion Middleware 12c (12.1.3) Download, Installation, and Configuration Readme File.

Task 3 Installing the JDK

Install the JDK. The installation path must not contain any spaces.

You can find more information on installing a certified JDK under "Installing a Certified JDK" in *Planning an Installation of Oracle Fusion Middleware*.

Task 4 Setting JAVA HOME

Set the environment variable JAVA_HOME to point to the location of your JDK. Note that JAVA_HOME must be in all caps. Your path definition should be formatted something like the following:

Environment	Run Command
UNIX	JAVA_HOME=\$HOME/Java/jdk1.7.0_xx export JAVA_HOME
Windows	Search for cmd.exe in the Start menu. Right-click the cmd.exe and select Run as Administrator .
	<pre>SET JAVA_HOME="C:\Program Files\Java\jdk1.7.0_xx"</pre>

WARNING: Your JDK folder may not be named the same or located at the destination in the above example. Make sure you point to the actual destination.

2.2 Launching the Quick Start Installer

This section will help you launch the Quick Start installer.

After you have done all the items in Section 2.1, 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
- Using the command prompt, navigate to the directory where you unzipped the jar

Launch the installation wizard with the appropriate command.

Installer	Run Command
Generic Installer for UNIX	JAVA_HOME/bin/java -jar fmw_12.1.3.0.0_soa_quickstart.jar
Generic Installer for Windows	<pre>JAVA_HOME\bin\java.exe -jar fmw_12.1.3.0.0_soa_quickstart.jar</pre>

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.

The installation wizard should launch. If you have any problems getting the installer to run, double-check your system preparations, covered in Section 2.1.

> **Note:** Though you may have multiple jar files, you do not need to run the install command on all of them. You only need to run the above command on fmw_12.1.3.0.0_soa_quickstart.jar.

2.3 Navigating the Quick Start Installation Screens

This section will guide you through the Quick Start installation.

Once you have launched the Quick Start installer, the installation wizard displays the screens listed and described sequentially in Table 2–1.

Table 2–1 Oracle SOA Suite Quick Start Install Screens

Screen	Description
Welcome	This screen introduces you to the product installer.

Table 2-1 (Cont.) Oracle SOA Suite Quick Start Install Screens

Screen	Description		
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 information about Oracle Fusion Middleware directory structure, see "Selecting 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 Save Response File and provide the location and name of the response file. Response files can be used later in a silent installation situation.		
Installation Progress	This screen allows you to see the progress of the installation.		
Installation 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.		
	Next Steps: Start JDeveloper Oracle Fusion Middleware 12		
	This guide recommends that you uncheck this box.		
	Click Finish.		

For more information about the installation screens, see "A Oracle Universal Installer Installation Screens" in *Installing with Oracle Universal Installer*.

You should now see Section 2.5 to prepare your environment to launch the Integrated WebLogic Server. Then see Section 2.5 for the two supported methods to launch the Integrated WebLogic Server. You can find a tutorial for creating and launching an application in Section 7.1.

2.4 Preparing to Launch the Integrated WebLogic Server

This section explains how to prepare your environment before launching the Integrated WebLogic Server.

This section contains the following tasks:

- Setting the JDEV_USER_DIR Variable
- Setting ORACLE_HOME
- Checking entropy for Oracle Linux

2.4.1 Setting the JDEV_USER_DIR Variable

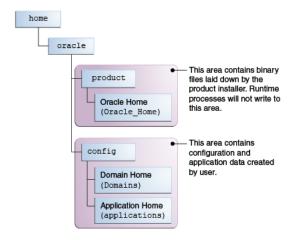
Set the JDEV_USER_DIR environment variable to define the location of your user home directory. This should be a unique location for your distribution. The user home

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. See Section 2.7 for more information.

Oracle recommends a directory structure similar to the one shown in Figure 2–1, where config shows the location of the user home directory.

Figure 2–1 Recommended Oracle Fusion Middleware Directory Structure



If you do not define JDEV USER DIR, your domain home and application home will be created at two different locations.

On an UNIX host, the default domain home will be created at \$HOME/.jdeveloper/system12.1.3.x.x.x.xxxx/DefaultDomain. The default application home will be created at \$HOME/jdeveloper/mywork.

On a Windows host, the default domain home will be created at %USERPROFILE%\AppData\Roaming\JDeveloper\system12.1.3.x.x.x.xxx\DefaultDo main. Your default application home will be created at C:\JDeveloper\mywork.

Once you have defined JDEV_USER_DIR, the domain home and application home will be co-located as subdirectories under the defined location. For example, on a UNIX system, the domain home will be located in JDEV USER DIR\system12.1.3.x.x.x.xxx. The application home will be located in JDEV_USER_DIR\mywork.

2.4.2 Setting ORACLE HOME

You can also set ORACLE_HOME. While this step is not necessary, it will simplify the process of navigating to the various directories when you are running installation and configuration commands.

The path definition should look something like this:

Environment	Run Command
UNIX	ORACLE_HOME=\$HOME/Oracle/Middleware/Oracle_Home export ORACLE_HOME

Environment	Run Command
Windows	SET ORACLE_HOME=C:\Oracle\Middleware\Oracle_Home

2.4.3 Checking entropy for Oracle Linux

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

To check for entropy, run the following command:

cat /proc/sys/kernel/random/entropy_avail

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

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

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

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

2.5 Configuring a Domain

This section will help you configure a domain that uses Java DB by launching the Integrated WebLogic Server.

Launching the Integrated WebLogic Server automatically generates a domain, designated as the default domain. However, you also have the option of launching the WebLogic server outside of JDeveloper and configuring a standalone domain.

The advantages and disadvantages of each method is detailed in the following table.

Method	Description	Next Steps
Configure the Integrated WebLogic Server's default domain in JDeveloper.	Launching the Integrated WebLogic Server from inside JDeveloper will create the default domain.	See Section 2.5.1.
	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.	
Configure a standalone domain.	You can create a standalone version of the Integrated WebLogic Server. The server and domain run independently of JDeveloper.	See Section 2.5.2
	This will you 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.	
Configure a compact domain.	You can configure your Quick Start installation to use an Oracle database with an external compact domain.	See Chapter 3.
	You should only choose this option if you know you want your domain to be compatible with Enterprise Scheduler, Managed File Transfer, B2B, Heathcare, or BAM components.	

Any other method of creating a domain is not recommended.

2.5.1 Configuring JDeveloper's default domain

This section explains how to configure JDeveloper's default domain by launching the Integrated WebLogic Server. Complete the following tasks:

- Task 1, "Launching the Integrated WebLogic Server"
- Task 2, "Verifying your domain"
- Task 3, "Disabling Secure Sockets Layer (SSL)"
- Task 4, "Considering Your Next Steps"

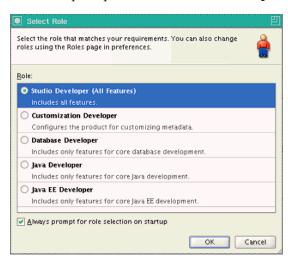
Task 1 Launching the Integrated WebLogic Server

Launch JDeveloper with the following command:

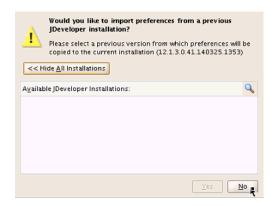
Environment	Run Command
UNIX	cd <i>\$ORACLE_HOME</i> /jdeveloper/jdev/bin ./jdev
Windows	CD %ORACLE_HOME%\jdeveloper jdeveloper.exe

As Oracle JDeveloper launches, you will get three prompts.

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



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

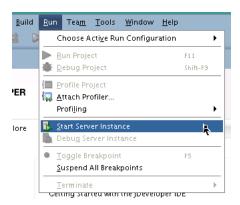


When prompted about Oracle Usage Tracking, check whether or not you want Oracle JDeveloper to send automated usage reports to Oracle and press **OK**.

JDeveloper has fully launched at this point.

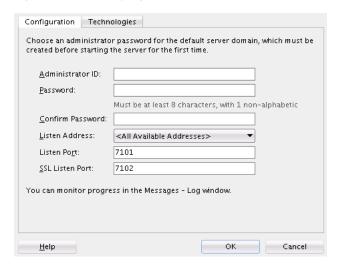
Launch the Integrated WebLogic Server by choosing **Run** from top menu bar. Select **Start Server Instance** from the drop-down menu, as seen in Figure 2–2.

Figure 2–2 Starting the Integrated WebLogic Server



3. The first time you launch the server instance, you will be prompted to enter a password for your default domain, as seen in Figure 2–3.

Figure 2–3 Specifying a Password for Default Domain



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

4. Launching the integrated server will take several minutes.

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

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

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

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

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

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

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

Task 2 Verifying your domain

Your default domain is already configured with Oracle SOA Suite and Oracle Service Bus runtime components. You should now verify your installation.

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

http://hostname.domain:7101/em

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

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

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

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

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

http://hostname.domain:7101/servicebus

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

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

Task 3 Disabling Secure Sockets Layer (SSL)

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

- 1. Go to the Administrator Console at http://localhost:7101/console
- Log in with your credentials.
- **3.** Navigate the menus with the following options: Environments -> Servers -> Admin Server.
- Uncheck SSL Listen Port Enabled.
- Restart the Integrated WebLogic Server.

Task 4 Considering Your Next Steps

Go to Section 2.8, "Next Steps" to see what steps you can take next.

2.5.2 Configuring a Standalone Domain

If using JDeveloper's Integrated WebLogic Server and default domain fulfills your needs, you can skip this section.

This section describes how to launch a standalone version of the Integrated WebLogic Server and domain. You will complete the following tasks:

- Task 1, "Launching the standalone domain configuration wizard"
- Task 2, "Navigating the domain configuration wizard"
- Task 3, "Launching the Application Server Connection Wizard"
- Task 4, "Navigating through the Create Application Server Connection wizard."
- Task 5, "Verifying Your Connection"

Task 1 Launching the standalone domain configuration wizard

Make sure no other servers are running on your system.

From the command prompt, use the appropriate commands to do the following:

- Navigate to ORACLE_HOME/soa/common/bin
- Set the QS_TEMPLATES environment variable to either the SOA domain template or to both SOA and OSB domain template.
- Launch the standalone domain configuration wizard.

If you have defined the ORACLE_HOME variable, the command sequence for this task should resemble one of the following:

Environment	Run Command
UNIX	cd \$ORACLE_HOME/soa/common/bin QS_TEMPLATES="\$ORACLE_HOME/soa/common/templates/wls/oracle.soa_ template_12.1.3.jar, \$ORACLE_ HOME/osb/common/templates/wls/oracle.osb_template_12.1.3.jar" export QS_TEMPLATES ./qs_config.sh
Windows	CD %ORACLE_HOME%\soa\common\bin set QS_TEMPLATES=%ORACLE_ HOME%\soa\common\templates\wls\oracle.soa_template_12.1.3.jar, %ORACLE_HOME%\osb\common\templates\wls\oracle.osb_template_ 12.1.3.jar qs_config.cmd

Task 2 Navigating the domain configuration wizard

Navigate through the following screens:

Table 2–2 Quick Start WebLogic Server Configuration Screens

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

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

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

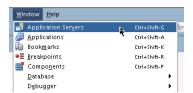
SOA Platform is running and accepting requests Your standalone domain is already configured with Oracle SOA Suite runtime components.

Task 3 Launching the Application Server Connection Wizard

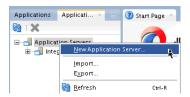
Launch Oracle JDeveloper with the appropriate command.

Environment	Run Command
UNIX	cd ORACLE_HOME/jdeveloper/jdev/bin ./jdev
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 launch the **Create Application** Server Connection wizard.



Task 4 Navigating through the Create Application Server Connection wizard.

The **Create Application Server Connection** wizard consists of the following screens:

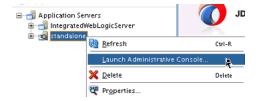
Table 2–3 Application Server Connection Creation Screens

Screen	Description
Usage	Select Standalone Server.
	Click Next.
Name and Type	Specify an intuitive Connection Name for your server.
	Leave WebLogic 12. x selected as the Connection Type .
	Click Next.
Authentication	Input the Username and Password you created during domain configuration.
	Click Next.
Connections	Input the standalone domain's name. Then click Next without changing anything else on the screen.
Test	Click the Test Connection button at the top. If any of the tests fail, you should press Back to the Connections or Authentication screens to make sure you inputted everything correctly.
	If everything passes, click Next .
Finish	The Finish screen tells you how to launch your new connection, covered in the following task. Click Finish .

Task 5 Verifying Your Connection

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

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



Log into your administrative console. If you log in successfully, then you can begin creating applications. See Section 2.8 for the next steps you can take.

2.6 Knowing Basic JDeveloper Functions

This section contains a few basic things you need to know in order to manage Oracle JDeveloper. This includes the following:

- Stopping the Integrated WebLogic Server
- Re-launching JDeveloper

You can learn more about using Oracle JDeveloper by referring to "Working with Oracle JDeveloper" in *Developing Applications with Oracle JDeveloper*.

2.6.1 Stopping the Integrated WebLogic Server

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

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



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

Environment	Run Command
UNIX	cd DOMAIN_HOME/bin ./stopWebLogic.sh
Windows	CD %DOMAIN_HOME%\bin stopWebLogic.cmd

2.6.2 Re-launching JDeveloper

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

Environment	Run Command
UNIX	cd ORACLE_HOME/jdeveloper/jdev/bin ./jdev
Windows	CD <i>%ORACLE_HOME</i> %\jdeveloper jdeveloper.exe

2.7 Managing Multiple Installations on the Same Machine

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

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

You cannot access your Oracle Business Process Management Suite runtime environment by launching the WebLogic Server from your Oracle SOA Suite Quick Start Oracle home.

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

- 1. If you have not done so already, decide on separate user directory home locations for each of your JDeveloper distributions. The user home directory will contain subdirectories for your domain files and your user-generated application files.
 - For example, you may want to install and use both an Oracle Business Process Management Suite JDeveloper and an Oracle SOA Suite JDeveloper on the same machine. You could designate the user home directory for your Oracle SOA Suite JDeveloper to be located at C:/jdev12cworkarea/soa, while your Oracle Business Process Management Suite user home directory could be located at C:/jdev12cworkarea/bpm.
- 2. Set the environment variable JDEV_USER_DIR to the location of the user directory home for the JDeveloper distribution that you want to use.

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

- **3.** Go to the JDeveloper home of the distribution you want to use.
 - For example, if you want to use your Oracle SOA Suite environment, go to your Oracle SOA Suite Oracle home and navigate to /jdeveloper/jdev/bin.
- Launch the JDeveloper executable from there.

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

2.8 Next Steps

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

Action	Resource
Configure your installation for Enterprise Scheduler, Managed File Transfer, B2B, Heathcare, or Business Activity Monitoring.	You will have to create an Oracle database and standalone compact domain in order to use these components. See Chapter 3 of this book for detailed instructions.
Deploy a sample application.	See Chapter 7 of this book.
Make or test an application of your own.	See "Working with Oracle JDeveloper" in <i>Developing</i> Applications with Oracle JDeveloper.

Action	Resource
Delete your installation.	If you have tested your installation out and are done, see Chapter 8 of this book.

Configuring a Compact Domain for Oracle SOA Suite Quick Start

This chapter will guide you through configuring a compact domain for a Oracle SOA Suite Quick Start installation. By the end of the configuration, you will have created an external Oracle Database and configured a compact domain.

You should have already run the Oracle SOA Suite Quick Start installer, as detailed in Chapter 2. You only need to proceed with this chapter if you want create applications with components that are incompatible with Java DB. These components include Oracle Enterprise Scheduler, Oracle B2B, Oracle Healthcare, Oracle Business Activity Monitoring, and Oracle Managed File Transfer.

This chapter contains the following sections:

- Preparing to Configure a Compact Domain for a Quick Start Installation
- **Installing Required Schemas**
- Configuring a Compact Domain
- Connecting JDeveloper to the Compact Domain
- **Next Steps**

3.1 Preparing to Configure a Compact Domain for a Quick Start Installation

This section will help you 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.

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

- Task 1, "Closing Oracle JDeveloper, Extra Server Connections, or Java DB"
- Task 2, "Downloading the Necessary Installers"

Task 1 Closing Oracle JDeveloper, Extra Server Connections, or Java DB

Close any instance of Oracle JDeveloper.

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

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

Task 2 Downloading the Necessary Installers

Refer to the Oracle Fusion Middleware Download, Installation, and Configuration Readme Files for the download locations of the following files:

- A certified Oracle database installer.
- The installer for Oracle Managed File Transfer
- The installer for B2B and Healthcare

Note: In Oracle® Fusion Middleware 12c (12.1.3), the Repository Creation Utility (RCU) is included in the Oracle SOA Suite install. You should not download or use a separate version.

3.2 Installing Required Schemas

This section will guide you through creating the Oracle Database schemas required for a Quick Start compact domain. You can use an existing database if you have one, but this guide assumes you want to create a new database.

You will be completing the following tasks:

- Task 1, "Installing a Supported Database"
- Task 2, "Running Installers for Additional Components"
- Task 3, "Using the Repository Creation Utility to Create Schemas"

Task 1 Installing a Supported Database

You should have identified and downloaded a supported database for Oracle Fusion Middleware 12*c* from the Oracle Technology Network:

http://www.oracle.com/technetwork/indexes/downloads/index.html.

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.

Tip: During installation, take note of your service name and port number. You will need this information for schema creation in the Repository Creation Utility (RCU).

IMPORTANT FOR 12c DATABASE USERS: If you are using a 12c multitenant database, you must configure it to use the AL32UTF8 character set.

The Quick Start RCU 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 create container database, you should also configure a pluggable database (PDB) and point the RCU to the PDB.

Task 2 Running Installers for Additional Components

If you know you want to add Managed File Transfer, B2B, or Healthcare to your Quick Start domain, you should run their installers now. You can refer to Section 6.2 for brief walkthroughs of these installations.

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

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

Task 3 Using the Repository Creation Utility to Create Schemas

Invoke 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 defined ORACLE_HOME and JAVA_HOME variables to point to your Oracle Home, you can use the following command to launch the RCU:

Environment	Run Command	
UNIX	<pre>cd ORACLE_HOME/oracle_common/bin ./rcu</pre>	
Windows	cd ORACLE_HOME\oracle_common\bin rcu.bat	

Navigate through the screens in Table 3-1. For more information about the options on a specific screen, click the screen's name or see "Understanding Repository Creation Utility Screens" in *Creating Schemas with the Repository Creation Utility*.

Table 3-1 RCU Schema Creation Screens

Screen	Description	
Welcome	This screen provides an introduction to what RCU is and its purpose. Click Next .	
Create Repository	Choose Create Repository and System Load and Product Load Concurrently.	
	If the second option doesn't appear for you, you do not have the necessary permissions or privileges to perform DBA activities.	

Table 3-1 (Cont.) RCU Schema Creation Screens

Screen Description		
Database Connection Details	Fill the Host Name , Username , and Password blanks with the credentials for your Oracle database. Your Service Name and Port number were created when you installed your database.	
	If you using a 12c multitenant database and are having connection issues, make sure you are not trying to connect to a container database (CDB). You should also make sure your database is configured to use the AL32UTF8 character set. See the 12c Database Administrator's Guide for how to configure a compatible PDB.	
	Click Next.	
Checking Prerequisites	This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click OK to continue.	
Select Components	Specify an intuitive prefix for your new schemas, such as SOAQS , so you can target them easily when you are configuring a domain.	
	Select AS Common Schemes and SOA Suite to select all of their dependencies.	

Create new prefix: BPM				
	Alpha numeric only. Cann	Alpha numeric only. Cannot start with a number. No special character		
Component		Schema Owner		
□□ Oracle AS Repositor	y Components			
■ B AS Common Sch	emas			
Metadata Ser	vices	BPM_MDS		
☑ Audit Service:	5	BPM_IAU		
☑ Audit Service:	s Append	BPM_IAU_APPEND		
☑ Audit Service:	s Viewer	BPM_IAU_VIEWER		
☑ Oracle Platform Security Services		BPM_OPSS		
☑ User Messaging Service		BPM_UMS		
☑ WebLogic Services		BPM_WLS		
☐ Oracle Enterp	orise Scheduler	ESS		
Common Infrastructure Services		BPM_STB		
■ SOA Suite				
☑ SOA Infrastru	cture	BPM_SOAINFRA		
Oracle Data Integrator				
■ Oracle GoldenGate				
■ Oracle EDQ				
☐ Managed File Tr	ansfer	MFT		

If you are installing MFT, select Managed File Transfer from the list. You will not see this option listed if you have not run the corresponding installer yet.

Click Next.

Checking Prerequisites

This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click **OK** to continue.

Schema Passwords

Select **Use same passwords for all schemas**. Then create a password you will remember.

(Cont.) RCU Schema Creation Screens Table 3–1

Screen Description **Custom Variables** This screen will show up because you are installing SOA Infrastructure. See "About the Custom Variables Required for the SOA Suite Schemas" in *Installing and Configuring Oracle SOA* Suite and Business Process Management for descriptions of these variables. If you are a healthcare provider and want the Healthcare Integration user interface, change the **Value** field for **Healthcare Integration** to **Yes**. If you do not set this value now, the Healthcare Integration user interface will not function properly. See Section 6.2.2.2 for more information. Database Profile (SMALL/MED/LARGE) Healthcare Integration(YES/NO) Otherwise, accept the defaults and press Next. This screen displays default and temporary tablespaces for the Map Tablespaces components you want to create schemas for. You can review this information and click Next Click **OK** through the next two confirmation dialogues. Then click **Next** again to progress to the next screen. Summary This screen summarizes the component schemas that will be created. Take note of the **Database details** at the top for the next step, Configuring a Compact Domain. Then click Create to begin schema creation. Completion Summary This screen displays the log files created with the database schemas. You can open any of the log files to review information or to troubleshoot a creation issue. If any operation failed, you can check the **Cleanup for failed** components box. Upon clicking Close, this option will drop failed schemas from your database. When you click **Close**, schema creation is complete.

If you encountered any problems during schema creation, first make sure you are using the RCU included in your Quick Start installation. You should also make sure that the database server is running. You can then 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.

3.3 Configuring a Compact Domain

This section provides instructions for creating a compact domain using the configuration wizard.

To launch the domain configuration wizard, complete the following tasks:

- Task 1, "Launching the Domain Configuration Wizard"
- Task 2, "Selecting the Domain Type and Domain Home Location"
- Task 3, "Selecting the Configuration Template"
- Task 4, "Selecting the Application Home Location"
- Task 5, "Configuring the Administrator Account"

- Task 6, "Specifying the Domain Mode and JDK"
- Task 7, "Specifying the Datasource Configuration Type"
- Task 8, "Specifying JDBC Component Schema Information"
- Task 9, "Testing the JDBC Connections"
- Task 10, "Selecting Advanced Configuration"
- Task 11, "Configuring the Domain"
- Task 12, "Reviewing Your Domain Location"

Task 1 Launching the Domain Configuration Wizard

Go to ORACLE_HOME/oracle_common/common/bin.

Set the environment variable CONFIG_JVM_ARGS to

-Dcom.oracle.cie.config.showProfile=true. This will activate the compact domain option in the configuration wizard.

Then launch the configuration wizard.

Example commands for this task are as follows:

UNIX	<pre>cd ORACLE_HOME/oracle_common/common/bin CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true export CONFIG_JVM_ARGS ./config.sh</pre>
Windows	<pre>cd ORACLE_HOME\oracle_common\common\bin SET CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true config.cmd</pre>

Then navigate through the following configuration screens.

Task 2 Selecting the Domain Type and Domain Home Location

On the Configuration Type screen, select Create a new compact domain. If you do not see this option, you did not set the environment variable in Task 1 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 Figure 3–1. This directory structure will help you avoid issues when you need to upgrade or re-install your software.

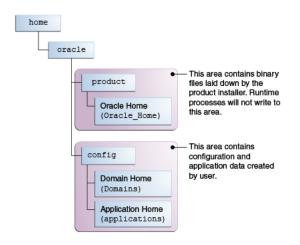


Figure 3–1 Recommended Oracle Fusion Middleware Directory Structure

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

Task 3 Selecting the Configuration Template

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

- Oracle SOA Suite 12.1.3.0[soa]
 - Selecting this template automatically selects the following as dependencies:
 - Oracle Enterprise Manager 12.1.3.0 [em]
 - Oracle WSM Policy Manager 12.1.3.0 [oracle_common]
 - Oracle JRF 12.1.3.0 [oracle_common]
 - WebLogic Coherence Cluster Extension 12 1.3.0 [wlserver]
- Oracle Service Bus 12.1.3.0 [osb]
 - Selecting this template automatically selects WebLogic Advanced Web Services for JAX-RPC Extension - 12.1.3.0 [oracle_common] as a dependency.
- Oracle Enterprise Scheduler Service Basic 12.1.3.0
- Oracle Enterprise Manager Plugin for ESS 12.1.3.0

Fei	nplate Categories: All Templates
٩v	ailable Templates
V	Basic WebLogic Server Domain - 12.1.3.0 [w/server] *
	Oracle SOA Suite for healthcare integration - 12.1.3.0 [soa]
	Oracle SOA Core Extension - 12.1.3.0 [soa]
	Oracle B2B = 12.1.3.0 [soa]
v	Oracle SOA Suite - 12.1.3.0 [soa]
	Oracle Managed File Transfer - 12.1.3.0 [mft]
	Oracle B2B Client - 12.1.3.0 [soa]
~	Oracle Service Bus - 12.1.3.0 [osb]
v	WebLogic Advanced Web Services for JAX-RPC Extension - 12.1.3.0 [oracle_common]
V	ODSI XQuery 2004 Components - 12.1.3.0 [oracle_common]
V	Oracle Enterprise Scheduler Service Basic - 12.1.3.0 [oracle_common]
	Oracle Business Activity Monitoring - 12.1.3.0 [soa]
4	Oracle Enterprise Scheduler Service Basic - 12.1.3.0 [oracle_common]
	Oracle Business Activity Monitoring - 12.1.3.0 [soa]
¥	Oracle Enterprise Manager Plugin for ESS - 12.1.3.0 [em]
•	Oracle Enterprise Manager - 12.1.3.0 [em]
	Oracle User Messaging Service Basic - 12.1.3.0 [oracle_common]
v	Oracle WSM Policy Manager - 12.1.3.0 [oracle_common]
	Oracle RAS Session Service - 12.1.3.0 [oracle_common]
	Oracle JRF SOAP/JMS Web Services - 12.1.3.0 [oracle_common]
4	Oracle JRF - 12.1.3.0 [oracle_common]
4	WebLogic Coherence Cluster Extension - 12.1.3.0 [w/server]
	WebLogic Advanced Web Services for JAX-WS Extension - 12.1.3.0 [oracle_common]
	WebLogic JAX-WS SOAP/JMS Extension - 12.1.3.0 [oracle_common]

Optionally, you can select the following:

Oracle SOA Suite for healthcare integration -12.1.3.0 [soa]

Notes for Healthcare Users: You need to select both the Oracle SOA Suite for healthcare integration - 12.1.3.0 [soa] template and Oracle **B2B - 12.1.3.0** [soa] template.

- Oracle Business Activity Monitoring 12.1.3.0 [soa]
- Oracle B2B 12.1.3.0 [soa]
- Oracle Managed File Transfer -12.1.3.0 [mft]

If you have not run the installers for Oracle B2B, Oracle Healthcare Integration, or Oracle Managed File Transfer, you will not see the options to select those templates. See Chapter 6.1 for installation instructions for these components.

Task 4 Selecting the Application Home Location

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

Your Application home should be created at the same location you specified for your Domain home in Task 2. See the location of Application Home relative to Oracle Home in Figure 3–1. This directory structure will help you avoid issues when you need to upgrade or re-install your software.

Task 5 Configuring the Administrator Account

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

Task 6 Specifying the Domain Mode and JDK

On the Domain Mode and JDK screen:

- Select **Development** in the Domain Mode field.
- Select the Oracle HotSpot JDK in the JDK field.

Task 7 Specifying the Datasource Configuration Type

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

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

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

Field	Description
DBMS/Service	Enter the database DBMS name, or service name if you selected a service type driver. If you are using a 12 <i>c</i> 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 Schema Password	Enter the username and password for connecting to the database's Service Table schema. This is the schema username and password that was specified for the Service Table component on the "Schema Passwords" screen in the RCU.
	The default username is <code>prefix_STB</code> , where <code>prefix</code> is the custom prefix that you defined in RCU.

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

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

Successfully Done.

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

Task 8 Specifying JDBC Component Schema Information

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

Task 9 Testing the JDBC Connections

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

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

Task 10 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.

Task 11 Configuring the Domain

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

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

Task 12 Reviewing Your Domain Location

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

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

UNIX	cd DOMAIN_HOME/bin ./startWebLogic.sh
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 Linux launch command will look like the following:

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

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

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

Server state changed to RUNNING.

3.4 Connecting JDeveloper to the Compact Domain

This section will help you prepare JDeveloper to target your compact domain for launching applications. You will do the following tasks:

- Task 1, "Launching the Application Server Connection Wizard"
- Task 2, "Navigating through the Create Application Server Connection wizard."
- Task 3, "Verifying Your Connection"

Task 1 Launching the Application Server Connection Wizard

Launch Oracle JDeveloper.

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



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



Task 2 Navigating through the Create Application Server Connection wizard.

Table 3–2 Application Server Connection Creation Screens

Screen	Description	
Usage	Make sure Standalone Server is selected.	
	Click Next.	
Name and Type	Specify an intuitive Connection Name for your server.	
	Leave WebLogic 12.x selected as the Connection Type .	
	Click Next.	
Authentication	Input the Username and Password you created during Task 5 of domain configuration.	
	Click Next.	
Connections	Input the compact domain's name if you specified something besides base_domain during Task 2 of domain configuration. If the compact domain is your base_domain, then you can click Next without changing anything on the screen.	
Test	Click the Test Connection button at the top. If any of the tests fail, you should press Back to the Connections or Authentication screens to make sure you inputted everything correctly.	
	If everything passes, click Next .	
Finish	The Finish screen tells you how to launch your new connection, covered in the following task. Click Finish .	

Task 3 Verifying Your Connection

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

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



Log into your administrative console. If you can log in successfully and see that your servers are running, then you can begin creating applications in JDeveloper.

Note: If you are curious about the options you see while connecting to the compact domain, see "Connecting and Working with Databases" and "How to Create a Connection to the Target Application Server" in Developing Applications with Oracle JDeveloper.

3.5 Next Steps

Once you have verified your Oracle SOA Suite installation and compact domain connection, you can take any of the following actions:

Action	Resource
Deploy a sample application.	See Chapter 7 of this book.
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, Oracle Event Processing, or Oracle B2B/Healthcare.	See Chapter 6 of this book for instructions on adding components to a fully configured compact domain.
Delete your installation.	If you have tested your installation out and are done, see Chapter 8 of this book.

Part II

Quick Start for Oracle Business Process Management Suite

This part covers the steps to install Oracle Business Process Management using Quick Start. You should have reviewed the information in Chapter 1 of this book before proceeding to the chapters contained in this part.

This part contains the following chapters:

- Chapter 4, "Installing Oracle Business Process Management Suite Quick Start for Developers"
- Chapter 5, "Configuring a Compact Domain for Oracle Business Process Management Suite Quick Start"

Chapter 4 details the installation process and guides you through choosing and setting up either the Integrated WebLogic Server's default domain or the standalone domain.

Chapter 5 explains how to configure a compact domain for your Quick Start installation so that you can install and use products that need an Oracle Database.

Installing Oracle Business Process Management Suite Quick Start for Developers

This chapter will guide you through an Oracle Business Process Management Suite Quick Start installation and introduce you to using the Integrated WebLogic Server's default domain or creating a standalone domain.

By the end of this chapter, you will be able to develop Oracle Business Process Management Suite applications using Oracle Business Process Management Studio (referred as Oracle Developer throughout this guide). You will also be able to test those applications using the Integrated WebLogic Server and Java DB.

This chapter contains the following sections:

- Preparing to Use Quick Start
- Launching the Quick Start Installer
- Navigating the Quick Start Installation Screens
- Preparing to Launch the Integrated WebLogic Server
- Configuring a Domain
- Knowing Basic JDeveloper Functions
- Managing Multiple Installations on the Same Machine
- **Next Steps**

4.1 Preparing to Use Quick Start

This section will help you verify that Quick Start can run on your system.

Before using Quick Start, you need to prepare your system for the installation by completing the following tasks:

- Task 1, "Verifying Your System"
- Task 2, "Downloading the Installers"
- Task 3, "Installing the JDK"
- Task 4, "Setting JAVA_HOME"

Task 1 Verifying Your System

Make sure that you are installing your product on supported hardware or software configuration. See the certification document for 12c (12.1.3) on the Oracle Fusion Middleware Supported System Configurations page.

- 2. Verify that your user account has the required privileges for installing Oracle Fusion Middleware. For more information, see "Selecting an Installation User" in Planning an Installation of Oracle Fusion Middleware.
- 3. Check the Oracle Fusion Middleware System Requirements and Specifications to see if your system meets the requirements for 12*c* (12.1.3).

Task 2 Downloading the Installers

Log into the host computer where you want to install Oracle Business Process Management Suite.

Refer to the Oracle Fusion Middleware Download, Installation, and Configuration Readme File to find and download the following files:

The Oracle Business Process Management Suite Quick Start installer zip file. This is located on the Oracle Software Delivery Cloud as part of the Oracle Fusion Middleware 12c Media Pack.

You can register an account and download software from the Oracle Software Delivery Cloud is located at the following URL: https://edelivery.oracle.com

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

The latest supported Java Development Kit (JDK) for your operating system. As of its release, Oracle Fusion Middleware 12c (12.1.3) requires a minimum of JDK 7.0 Update 55 or later.

You can find the latest JDK at the following URL: http://www.oracle.com/technetwork/java/javase/downloads/index.html

You should always verify the recommended version number and download location with the "Downloading a Supported Java Development Kit (JDK)" in the Oracle Fusion Middleware 12c (12.1.3) Download, Installation, and Configuration Readme File.

Task 3 Installing the JDK

Install the JDK. The installation path must not contain any spaces.

You can find more information on installing a certified JDK under "Installing a Certified JDK" in *Planning an Installation of Oracle Fusion Middleware*.

Task 4 Setting JAVA HOME

Set the environment variable JAVA_HOME to point to the location of your JDK. Note that JAVA_HOME must be in all caps. Your path definition should look something like the following:

Environment	Run Command
UNIX	JAVA_HOME=\$HOME/Java/jdk1.7.0_xx export JAVA_HOME
Windows	Search for cmd.exe in the Start menu. Right-click the cmd.exe and select Run as Administrator .
	SET JAVA_HOME="C:\Program Files\Java\jdk1.7.0_xx"

WARNING: Your JDK folder may not be named the same or located at the destination in the above example. Make sure you point to the actual destination.

4.2 Launching the Quick Start Installer

This section will help you launch the Quick Start installer.

After you have done all the items in Section 4.1, you can launch the Quick Start installer.

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

Installer	Run Command
Generic Installer for Linux	JAVA_HOME/bin/java -jar fmw_12.1.3.0.0_bpm_quickstart.jar
Generic Installer for Windows	<pre>JAVA_HOME\bin\java.exe -jar fmw_12.1.3.0.0_bpm_quickstart.jar</pre>

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.

The installation wizard should launch. If you have any problems getting the installer to run, double-check your system preparations, covered in Section 4.1.

> **Note:** Though you may have multiple jar files, you do not need to run the install command on all of them. You only need to run the above command on fmw 12.1.3.0.0 bpm quickstart.jar.

4.3 Navigating the Quick Start Installation Screens

This section will guide you through the Quick Start installation.

Once you have launched the Quick Start installer, the installation wizard displays the screens listed and described sequentially in Table 4–1.

Table 4–1 Oracle JDeveloper Install Screens

Screen	Description
Welcome	This screen introduces you to the product installer.

Table 4-1 (Cont.) Oracle JDeveloper Install Screens

Screen	Description	
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 information about Oracle Fusion Middleware directory structure, see "Selecting 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 Save Response File and provide the location and name of the response file. Response files can be used later in a silent installation situation.	
Installation Progress	This screen allows you to see the progress of the installation.	
Installation Completed	This screen appears when the installation is complete. Review the information on this screen.	
	At the bottom of this screen, there is a checkbox to launch Oracle JDeveloper upon closing the installation wizard.	
	Next Steps: Start Developer	
	This guide recommends that you uncheck this box. Click Finish .	

For more information about the installation screens, see "A Oracle Universal Installer Installation Screens" in *Installing with Oracle Universal Installer*.

See Section 4.4 to see how to prepare your environment for using JDeveloper. Then see Section 4.5 for the two supported methods of launching the Integrated WebLogic Server. You can find a tutorial for using the Integrated WebLogic Server to develop an application under Section 7.2.

4.4 Preparing to Launch the Integrated WebLogic Server

This section explains how to prepare your environment before launching the Integrated WebLogic Server.

This section contains the following tasks:

- Setting the JDEV_USER_DIR Variable
- Setting ORACLE_HOME
- Checking entropy for Oracle Linux

4.4.1 Setting the JDEV_USER_DIR Variable

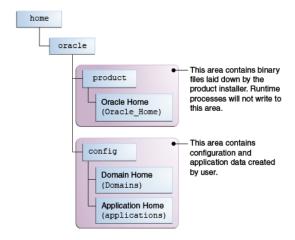
Set the JDEV_USER_DIR environment variable to define the location of your user home directory. This should be a unique location for your distribution. The user home

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. See Section 4.7 for more information.

Oracle recommends a directory structure similar to the one shown in Figure 4–1, where config shows the location of the user home directory.

Figure 4–1 Recommended Oracle Fusion Middleware Directory Structure



If you do not define JDEV USER DIR, your domain home and application home will be created at two different locations.

On an UNIX host, the default domain home will be created at \$HOME/.jdeveloper/system12.1.3.x.x.x.xxxx/DefaultDomain. The default application home will be created at \$HOME/jdeveloper/mywork.

On a Windows host, the default domain home will be created at %USERPROFILE%\AppData\Roaming\JDeveloper\system12.1.3.x.x.x.xxx\DefaultDo main. Your default application home will be created at C:\JDeveloper\mywork.

Once you have defined JDEV_USER_DIR, the domain home and application home will be co-located as subdirectories under the defined location. For example, on a UNIX system, the domain home will be located in JDEV USER DIR\system12.1.3.x.x.x.xxx. The application home will be located in JDEV_USER_DIR\mywork.

4.4.2 Setting ORACLE HOME

You can also set ORACLE_HOME. While this step is not necessary, it will simplify the process of navigating to the various directories when you are running installation and configuration commands.

The path definition should look something like this:

Environment	Run Command
UNIX	ORACLE_HOME=\$HOME/Oracle/Middleware/Oracle_Home export ORACLE_HOME

Environment	Run Command
Windows	SET ORACLE_HOME=C:\Oracle\Middleware\Oracle_Home

4.4.3 Checking entropy for Oracle Linux

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

To check for entropy, run the following command:

cat /proc/sys/kernel/random/entropy_avail

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

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

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

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

4.5 Configuring a Domain

This section will help you configure a domain that uses Java DB.

Launching the Integrated WebLogic Server automatically generates a domain, designated as the default domain. However, you also have the option of launching the WebLogic server outside of JDeveloper and configuring a standalone domain.

The advantages and disadvantages of each domain is detailed in the following table. You should choose the domain configuration that best suits your end goals.

Method	Description	Next Steps
Configure the Integrated WebLogic Server's default domain in JDeveloper.	Launching the Integrated WebLogic Server from inside JDeveloper will create the default domain.	See Section 4.5.1.
	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.	
Configure a standalone domain.	You can create a standalone version of the Integrated WebLogic Server. The server and domain run independently of JDeveloper.	See Section 4.5.2
	This will you 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.	
Configure a compact domain.	You can configure your Quick Start installation to use an Oracle database with an external compact domain.	See Chapter 5.
	You should only choose this option if you know you want your domain to be compatible with Enterprise Scheduler, Managed File Transfer, B2B, Heathcare, or BAM components.	

Any other method of configuring a domain is not recommended.

4.5.1 Configuring JDeveloper's default domain

This section explains how to configure JDeveloper's default domain by launching the Integrated WebLogic Server. You will complete the following tasks:

- Task 1, "Launching the Integrated WebLogic Server"
- Task 2, "Verifying your domain"
- Task 3, "Disabling Secure Sockets Layer (SSL)"
- Task 4, "Considering Your Next Steps"

Task 1 Launching the Integrated WebLogic Server

1. Launch JDeveloper with the following command:

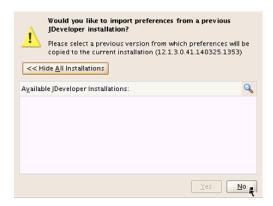
Environment	Run Command	
UNIX	cd <i>\$ORACLE_HOME</i> /jdeveloper/jdev/bin ./jdev	
Windows	CD %ORACLE_HOME%\jdeveloper jdeveloper.exe	

As JDeveloper launches, you will get three prompts.

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



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

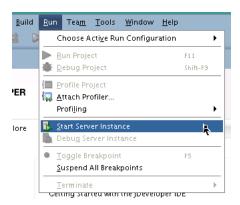


When prompted about Oracle Usage Tracking, check whether or not you want Oracle JDeveloper to send automated usage reports to Oracle and press **OK**.

JDeveloper has fully launched at this point.

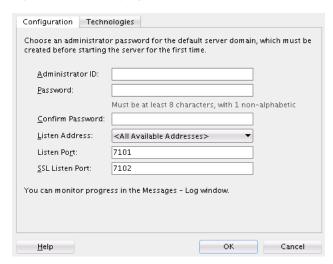
Launch the Integrated WebLogic Server by choosing **Run** from top menu bar. Select **Start Server Instance** from the drop-down menu, as seen in Figure 4–2.

Figure 4–2 Starting the Integrated WebLogic Server



3. The first time you launch the server instance, you will be prompted to enter a password for your default domain, as seen in Figure 4–3.

Figure 4–3 Specifying a Password for Default Domain



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

4. Launching the integrated server will take several minutes.

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

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

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

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

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

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

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

Task 2 Verifying your domain

Your default domain is already configured with Oracle SOA Suite and Oracle Business Process Management Suite runtime components. You should now verify your installation.

Access the Enterprise Manager Fusion Middleware Control, which is located at an 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.

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

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

Task 3 Disabling Secure Sockets Layer (SSL)

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

- 1. Go to the Administrator Console at http://localhost:7101/console
- Log in with your credentials.
- **3.** Navigate the menus with the following options: Environments -> Servers -> Admin Server.
- Uncheck **SSL Listen Port Enabled**.
- Restart the Integrated WebLogic Server.

Task 4 Considering Your Next Steps

Go to Section 4.8, "Next Steps" to see what steps you can take next.

4.5.2 Configuring a Standalone Domain

This section describes how to launch a standalone version of the Integrated WebLogic Server and domain. You will complete the following tasks:

- Task 1, "Launching the standalone domain configuration wizard"
- Task 2, "Navigating the domain configuration wizard"
- Task 3, "Launching the Application Server Connection Wizard"
- Task 4, "Navigating through the Create Application Server Connection wizard."
- Task 5, "Verifying Your Connection"

Task 1 Launching the standalone domain configuration wizard

Make sure no other servers are running on your system.

From the command prompt, use the appropriate commands to do the following:

- Navigate to ORACLE_HOME/soa/common/bin
- Set the QS_TEMPLATES environment variable to the BPM domain template.
- Launch the standalone domain configuration wizard.

If you have defined the ORACLE_HOME variable, the command sequence for this task should resemble one of the following:

Environment	Run Command
UNIX	<pre>cd \$ORACLE_HOME/soa/common/bin QS_TEMPLATES="\$ORACLE_HOME/soa/common/templates/wls/oracle.bpm_ template_12.1.3.jar" export QS_TEMPLATES ./qs_config.sh</pre>
Windows	CD %ORACLE_HOME%\soa\common\bin set QS_TEMPLATES=%ORACLE_ HOME%\soa\common\templates\wls\oracle.bpm_template_12.1.3.jar qs_config.cmd

Task 2 Navigating the domain configuration wizard

Navigate through the following screens:

Quick Start WebLogic Server Configuration Screens

Screen	Description
Configuration	Specify a password for your default domain.
	Edit the Domain Location . By default, the domain will be created at <i>ORACLE_HOME</i> /user_projects/domains/base_domain. To prevent confusion in the future, replace base_domain in the Domain Location path with standalone_domain.
	Replace base_domain with standalone_domain in the Application Location path as well.
	Review the port numbers.
	Press Create

Table 4–2 (Cont.) Quick Start WebLogic Server Configuration Screens

Screen	Description
Configuration Progress	This screen allows you to see the progress of the configuration.
End of Configuration	This screen appears when the installation is complete. Take note of the information on this screen.
	You can leave the option to launch your new domain unchecked if you want to launch it manually from the domain location listed on this screen.
	Click Finish to exit the wizard.

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

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

SOA Platform is running and accepting requests Your standalone domain is already configured with Oracle Business Process Management Suite and Oracle SOA Suite runtime components.

Task 3 Launching the Application Server Connection Wizard

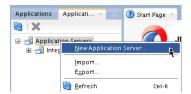
Launch Oracle JDeveloper with the appropriate command.

Environment	Run Command
UNIX	cd <i>\$ORACLE_HOME</i> /jdeveloper/jdev/bin ./jdev
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 launch the **Create Application Server Connection** wizard.



Task 4 Navigating through the Create Application Server Connection wizard.

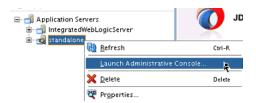
Table 4–3 Application Server Connection Creation Screens

Screen	Description
Usage	Make sure Standalone Server is selected.
	Click Next.
Name and Type	Specify an intuitive Connection Name for your server.
	Leave WebLogic 12.x selected as the Connection Type.
	Click Next.
Authentication	Input the Username and Password you created during of domain configuration.
	Click Next.
Connections	Input the standalone domain's name. Then click Next without changing anything else on the screen.
Test	Click the Test Connection button at the top. If any of the tests fail, you should press Back to the Connections or Authentication screens to make sure you inputted everything correctly.
	If everything passes, click Next .
Finish	The Finish screen tells you how to launch your new connection, covered in the following task. Click Finish .

Task 5 Verifying Your Connection

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

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



Log into your administrative console. If you log in successfully, then you can begin creating applications. See Section 4.8 for the next steps you can take.

4.6 Knowing Basic JDeveloper Functions

This section contains a few basic things you need to know to manage Oracle JDeveloper. This includes the following:

- Stopping the Integrated WebLogic Server
- Re-launching JDeveloper

You can learn more about using Oracle JDeveloper by referring to "Working with Oracle JDeveloper" in *Developing Applications with Oracle JDeveloper*.

4.6.1 Stopping the Integrated WebLogic Server

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

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



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

Environment	Run Command
UNIX	cd DOMAIN_HOME/bin ./stopWebLogic.sh
Windows	CD %DOMAIN_HOME%\bin stopWebLogic.cmd

4.6.2 Re-launching JDeveloper

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

Environment	Run Command
UNIX	cd ORACLE_HOME/jdeveloper/jdev/bin ./jdev
Windows	CD <i>%ORACLE_HOME%</i> \jdeveloper jdeveloper.exe

4.7 Managing Multiple Installations on the Same Machine

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

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

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

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.

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

In the example given in the previous step, set JDEV_USER_ DIR=C:/jdev12cworkarea/bpm if you want to use the Oracle Business Process Management Suite environment.

Note: Redefining JDEV_USER_DIR will also change the default save location for your application projects. If you already launched and used JDeveloper without defining JDEV_USER_DIR, you may have saved applications in the default application home. By default, the 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 Business Process Management Suite environment, go to your Oracle Business Process Management Suite Oracle home and navigate to /jdeveloper/jdev/bin.

Launch the JDeveloper executable from there.

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

4.8 Next Steps

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

Action	Resource
Configure your installation for Enterprise Scheduler, Managed File Transfer, B2B, or Business Activity Monitoring.	You will have to create an Oracle database and standalone compact domain in order to use these components. See Chapter 5 of this book for detailed instructions.
Make or test an application of your own.	See "Working with Oracle JDeveloper" in <i>Developing Applications with Oracle JDeveloper</i> .
Delete your installation.	If you have tested your installation out and are done, see Chapter 8 of this book.

Configuring a Compact Domain for Oracle Business Process Management Suite Quick Start

This chapter will guide you through configuring a compact domain for an Oracle Business Process Management installation. By the end of the configuration, you will have created an external Oracle Database and configured a compact domain.

You should have already run the Oracle Business Process Management Quick Start installer as detailed in Chapter 4. You only need to proceed with this chapter if you want to enable or install components that are incompatible with Java DB. These components include Oracle Enterprise Scheduler, Oracle B2B, Oracle Healthcare, Oracle Business Activity Monitoring, and Oracle Managed File Transfer.

This chapter contains the following sections:

- Preparing to Configure a Compact Domain for a Quick Start Installation
- **Installing Required Schemas**
- Configuring a Compact Domain
- Connecting JDeveloper to the Compact Domain
- Next Steps

5.1 Preparing to Configure a Compact Domain for a Quick Start Installation

This section will help you prepare your system for configuring a compact domain.

A compact domain is a developer domain consisting of a single Administration server. Creating and targeting 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.

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

- Task 1, "Closing Oracle JDeveloper, Extra Server Connections, or Java DB"
- Task 2, "Downloading the Necessary Installers"

Task 1 Closing Oracle JDeveloper, Extra Server Connections, or Java DB Close any instance of Oracle JDeveloper.

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

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

Task 2 Downloading the Necessary Installers

Refer to the Oracle Fusion Middleware Download, Installation, and Configuration Readme Files for the download locations of the following files:

- A certified Oracle database installer.
- The installer for Oracle Managed File Transfer
- The installer for Oracle B2B and Healthcare

Note: In Oracle® Fusion Middleware 12*c* (12.1.3), the Repository Creation Utility (RCU) is included in the Oracle SOA Suite install. You should not download or use a separate version.

5.2 Installing Required Schemas

This section will guide you through creating the Oracle Database schemas required for a Quick Start compact domain. You can use an existing database if you have one, but this guide assumes you want to create a new database.

You will be completing the following tasks:

- Task 1, "Installing a Supported Database"
- Task 2, "Running Installers for Additional Components"
- Task 3, "Using the Repository Creation Utility to Create Schemas"

Task 1 Installing a Supported Database

Reference the Oracle Fusion Middleware Supported System Configurations page to identify a certified database for Oracle Fusion Middleware 12c.

You should have identified and download a supported database for Oracle Fusion Middleware 12*c* from the Oracle Technology Network:

http://www.oracle.com/technetwork/indexes/downloads/index.html.

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.

Tip: During installation, take note of your service name and port number. You will need this information for schema creation in the Repository Creation Utility (RCU).

IMPORTANT FOR 12c DATABASE USERS: If you are using a 12c multitenant database, you must configure it to use the AL32UTF8 character set.

The Quick Start RCU 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 create container database, you should also configure a pluggable database (PDB) and point the RCU to the PDB.

Task 2 Running Installers for Additional Components

If you know you want to add Managed File Transfer, B2B, or Healthcare to your Quick Start domain, you should run their installers now. You can refer to Section 6.2 for brief walkthroughs of these installations.

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

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

Task 3 Using the Repository Creation Utility to Create Schemas

Invoke 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 defined ORACLE HOME and JAVA HOME variables to point to your Oracle Home, you can use the following command to launch the RCU:

Environment	Run Command
UNIX	cd ORACLE_HOME/oracle_common/bin ./rcu
Windows	cd ORACLE_HOME\oracle_common\bin rcu.bat

Navigate through the screens in Table 5–1. For more information about the options on a specific screen, click the screen's name or see "Understanding Repository Creation Utility Screens" in Creating Schemas with the Repository Creation Utility.

Table 5–1 RCU Schema Creation Screens

Screen	Description
Welcome	This screen provides an introduction to what RCU is and its purpose. Click Next .

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

Screen	Description
Create Repository	Choose Create Repository and System Load and Product Load Concurrently.
	If the second option doesn't appear for you, you do not have the necessary permissions or privileges to perform DBA activities.
Database Connection Details	Fill the Host Name , Username , and Password blanks with the credentials for your Oracle database. Your Service Name and Port number were created when you installed your database.
	If you using a 12c multitenant database and are having connection issues, make sure you are not trying to connect to a container database (CDB). You should also make sure your database is configured to use the AL32UTF8 character set. See the 12c Database Administrator's Guide for how to configure a compatible PDB.
	Click Next.
Checking Prerequisites	This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click OK to continue.
Select Components	Specify an intuitive prefix for your new schemas, such as BPM , so you can target them easily when you are configuring a domain.
	Select SOA Suite . This will automatically select all the schemas you need.

Create new prefix:	врм	
	Alpha numeric only. Cann	ot start with a number. No special character
Component		Schema Owner
□□ Oracle AS Repositor	y Components	
■ B'AS Common Sche	emas	
Metadata Ser	vices	BPM_MDS
☑ Audit Services	5	BPM_IAU
☑ Audit Services	Append	BPM_IAU_APPEND
☑ Audit Services	s Viewer	BPM_IAU_VIEWER
☑ Oracle Platfor	m Security Services	BPM_OPSS
☑ User Messagi	ng Service	BPM_UMS
WebLogic Ser	vices	BPM_WLS
☐ Oracle Enterp	rise Scheduler	ESS
■ Common Infra	astructure Services	BPM_STB
■ SOA Suite		
☑ SOA Infrastru	cture	BPM_SOAINFRA
Oracle Data Inte	grator	
Oracle GoldenGa	ate	
Oracle EDQ		
☐ Managed File Tra	ansfer	MFT

If you are installing Oracle Managed File Transfer, select Managed File Transfer from the list. You will not see this option listed if you have not run the corresponding installer yet. Click Next. This screen will pop up with a progress indicator bar. When the

prerequisites are checked off, click **OK** to continue.

Select **Use same passwords for all schemas**. Then create a password you will remember.

This screen will show up because you are installing SOA Infrastructure. See "About the Custom Variables Required for the SOA Suite Schemas" in *Installing and Configuring Oracle SOA* Suite and Business Process Management for descriptions of these variables.

Press Next.

Checking Prerequisites

Schema Passwords

Custom Variables

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

Screen	Description
Map Tablespaces	This screen displays default and temporary tablespaces for the components you want to create schemas for. You can review this information and click Next
	Click OK through the next two confirmation dialogues. Then click Next again to progress to the next screen.
Summary	This screen summarizes the component schemas that will be created. Take note of the Database details at the top. Then click Create to begin schema creation.
	A new dialogue box will pop up and show you the progress of schema creation. Green checks will appear next to the names of successfully created schemas.
Completion Summary	This screen displays the log files created with the database schemas. You can open any of the log files to review information or to troubleshoot a creation issue.
	If any operation failed, you can check the Cleanup for failed components box. Upon clicking Close , this option will drop failed schemas from your database.
_	When you click Close , schema creation is complete.

If you encountered any problems during schema creation, first make sure you are using the RCU included in your Quick Start installation. You should also make sure that the database server is running. You can then troubleshoot the issue using the log files generated on the Completion Summary screen.

For more information, see "Troubleshooting Repository Creation Utility" in Creating *Schemas with the Repository Creation Utility.*

5.3 Configuring a Compact Domain

This section provides instructions for creating a compact domain using the configuration wizard.

To launch the domain configuration wizard, complete the following tasks:

- Task 1, "Launching the Domain Configuration Wizard"
- Task 2, "Selecting the Domain Type and Domain Home Location"
- Task 3, "Selecting the Configuration Template"
- Task 4, "Selecting the Application Home Location"
- Task 5, "Configuring the Administrator Account"
- Task 6, "Specifying the Domain Mode and JDK"
- Task 7, "Specifying the Datasource Configuration Type"
- Task 8, "Specifying JDBC Component Schema Information"
- Task 9, "Testing the JDBC Connections"
- Task 10, "Selecting Advanced Configuration"
- Task 11, "Configuring the Domain"
- Task 12, "Reviewing Your Domain Location"

Task 1 Launching the Domain Configuration Wizard

Go to ORACLE_HOME/soa/common/bin.

In the command prompt, set the environment variable CONFIG_JVM_ARGS to -Dcom.oracle.cie.config.showProfile=true. This will activate the compact domain option in the configuration wizard. Then launch the configuration wizard.

The commands you would use for this task are as follows:

UNIX	<pre>cd ORACLE_HOME/soa/common/bin CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true export CONFIG_JVM_ARGS ./config.sh</pre>
Windows	<pre>cd ORACLE_HOME\soa\common\bin SET CONFIG_JVM_ARGS=-Dcom.oracle.cie.config.showProfile=true config.cmd</pre>

Then navigate through the following configuration screens.

Task 2 Selecting the Domain Type and Domain Home Location

On the Configuration Type screen, select Create a new compact domain. If you do not see this option, you did not set the environment variable in Task 1 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 Figure 5–1. This directory structure will help you avoid issues when you need to upgrade or re-install your software.

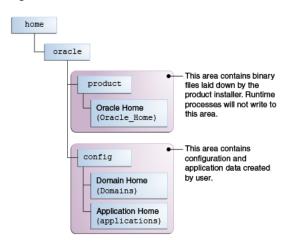


Figure 5–1 Recommended Oracle Fusion Middleware Directory Structure

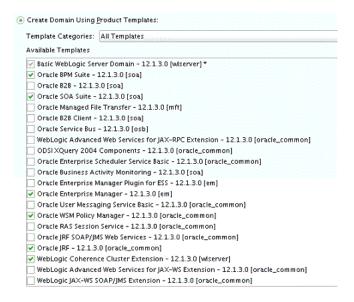
This directory structure will help you avoid issues when you need to upgrade or reinstall your software. See "What are the Key Oracle Fusion Middleware Directories?" in *Understanding Oracle Fusion Middleware* for more information.

Task 3 Selecting the Configuration Template

On the Templates screen, make sure Create Domain Using Product Templates is selected, then select Oracle BPM Suite - 12.1.3.0 [soa].

Selecting this template automatically selects the following as dependencies:

- Oracle SOA Suite 12.1.3.0[soa]
- Oracle Enterprise Manager 12.1.3.0 [em]
- Oracle WSM Policy Manager 12.1.3.0 [oracle_common]
- Oracle JRF 12.1.3.0 [oracle_common]
- WebLogic Coherence Cluster Extension 12 1.3.0 [wlserver]



Optionally, you can select any of the following:

Oracle Business Activity Monitoring - 12.1.3.0

- Oracle Enterprise Scheduler Service Basic 12.1.3.0
- Oracle Enterprise Manager Plugin for ESS 12.1.3.0
- Oracle B2B 12.1.3.0
- Oracle Managed File Transfer -12.1.3.0

Note for Healthcare Users:

The Healthcare Integration template and BPM Suite template are mutually exclusive. Do not include both of these templates in the same domain as this configuration is not supported by Oracle.

If you have not run the separate installers for Oracle B2B or Oracle Managed File Transfer, then you will not see the options to select those templates. See Chapter 6.1 for installation instructions for these components.

Task 4 Selecting the Application Home Location

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

Your Application home should be created at the same location you specified for your Domain home in Task 2. See the location of Application Home relative to Oracle Home in Figure 5–1. This directory structure will help you avoid issues when you need to upgrade or re-install your software.

Task 5 Configuring the Administrator Account

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

Task 6 Specifying the Domain Mode and JDK

On the **Domain Mode and JDK** screen:

- Select **Development** in the Domain Mode field.
- Select the Oracle HotSpot JDK in the JDK field.

Task 7 Specifying the Datasource Configuration Type

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

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

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

Field	Description
DBMS/Service	Enter the database DBMS name, or service name if you selected a service type driver. If you are using a 12 <i>c</i> 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 Schema Password	Enter the username and password for connecting to the database's Service Table schema. This is the schema username and password that was specified for the Service Table component on the "Schema Passwords" screen in the RCU.
	The default username is $prefix_STB$, where $prefix$ is the custom prefix that you defined in RCU.

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

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

Successfully Done.

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

Task 8 Specifying JDBC Component Schema Information

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

Task 9 Testing the JDBC Connections

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

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

Task 10 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.

Task 11 Configuring the Domain

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

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

Task 12 Reviewing Your Domain Location

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

Task 13 Start the Administrator Server

When the configuration wizard is done, start the administrator server with the following command:

UNIX	cd DOMAIN_HOME/bin ./startWebLogic.sh
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 Linux launch command will look like the following:

./startWebLogic.sh noderby

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

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

Server state changed to RUNNING.

5.4 Connecting JDeveloper to the Compact Domain

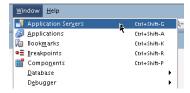
This section will help you prepare JDeveloper to target your compact domain for launching applications. You will do the following tasks:

- Task 1, "Launching the Application Server Connection Wizard"
- Task 2, "Navigating through the Create Application Server Connection wizard."
- Task 3, "Verifying Your Connection"

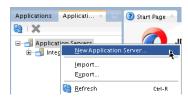
Task 1 Launching the Application Server Connection Wizard

Launch Oracle JDeveloper.

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



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



Task 2 Navigating through the Create Application Server Connection wizard.

Table 5–2 Application Server Connection Creation Screens

Screen	Description
Usage	Make sure Standalone Server is selected.
	Click Next.
Name and Type	Specify an intuitive Connection Name for your server.
	Leave WebLogic 12.x selected as the Connection Type .
	Click Next.
Authentication	Input the Username and Password you created during Task 5 of domain configuration.
	Click Next.
Connections	Input the compact domain's name if you specified something besides base_domain during Task 2 of domain configuration. If the compact domain is your base_domain, then you can click Next without changing anything on the screen.
Test	Click the Test Connection button at the top. If any of the tests fail, you should press Back to the Connections or Authentication screens to make sure you inputted everything correctly.
	If everything passes, click Next .
Finish	The Finish screen tells you how to launch your new connection, covered in the following task. Click Finish .

Task 3 Verifying Your Connection

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

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



Log into your administrative console. If you can log in successfully and see that your servers are running, then you can begin creating applications in JDeveloper.

Note: If you are curious about the options you see while connecting to the compact domain, see "Connecting and Working with Databases" and "How to Create a Connection to the Target Application Server" in *Developing Applications with Oracle JDeveloper.*

5.5 Next Steps

Once you have verified your Oracle Business Process Management Suite installation and compact domain connection, you can take any of the following actions:

Action	Resource
Deploy a sample application.	See Chapter 7 of this book.
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, Oracle Event Processing, or Oracle B2B/Healthcare.	See Chapter 6 of this book for instructions on adding components to a fully configured compact domain.
Delete your installation.	If you have tested your installation out and are done, see Chapter 8 of this book.

Part III

Post-Installation Tasks for Oracle Quick Start

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

Chapter 6 details the installation processes for SOA components you can add to a Quick Start distribution if you configure a compact domain.

Chapter 7 explains how build a quick sample application to test that your Quick Start installation is working. It also points to more sample applications and tutorials for SOA Suite, Business Process Management Suite, and more.

Chapter 8 explains how to deinstall a Quick Start distribution.

Part III contains the following chapters:

- Chapter 6, "Adding Components to a Quick Start Installation"
- Chapter 7, "Running a Sample Application"
- Chapter 8, "Deinstalling Oracle Quick Start"

Adding Components to a Quick Start Installation

This chapter reviews the processes for adding Oracle Enterprise Scheduler, Oracle B2B, Oracle Healthcare, Oracle Business Activity Monitoring, and Oracle Managed File Transfer to your Quick Start installation. It also describes how to obtain an Oracle Event Processing runtime environment.

You should use this chapter to walk through the installation process for each component that you can add to a Quick Start installation. You can also use this chapter to add components to a completely configured compact domain.

This chapter includes the following sections:

- About Adding Components to a Quick Start Installation
- Installing Oracle B2B, Oracle SOA Suite for healthcare integration, or Oracle Managed File Transfer for Quick Start
- **Updating a Compact Domain**
- Understanding Oracle Event Processing Design Time
- **Next Steps**

6.1 About Adding Components to a Quick Start Installation

Certain components do not work in a standard Quick Start installation because they require an Oracle database. Configuring your Quick Start installation to use an Oracle database is covered in Chapter 3 for Oracle SOA Suite or Chapter 5 for Oracle Business Process Management Suite.

To add B2B, Healthcare, or Managed File Transfer, you need to download the installers for Oracle B2B, Oracle Healthcare, and Oracle Managed File Transfer. These installers are discussed in Section 6.2. There are not separate Quick Start installers for these components, so you will download the same installers designed for a full Production installation of Oracle® Fusion Middleware.

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 Section 6.3.

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

You may also want a runtime environment that can run applications using Oracle Event Processing components. This process is reviewed in Section 6.4.

6.2 Installing Oracle B2B, Oracle SOA Suite for healthcare integration, or **Oracle Managed File Transfer for Quick Start**

This section assumes that you have already installed one of the Quick Start distributions described in Chapter 1 and want to add Oracle B2B, Oracle SOA Suite for healthcare integration, or Oracle Managed File Transfer to your distribution. For these components, you need to download and run installers before configuring a compact domain.

This section covers the following installation processes:

- Installing Oracle B2B for Quick Start
- Installing Oracle SOA Suite for healthcare integration for Quick Start
- Installing Oracle Managed File Transfer for Quick Start
- Using the RCU to Create Schemas or Set Custom Variables

6.2.1 Installing Oracle B2B for Quick Start

This section covers how to install Oracle B2B for Quick Start. Make sure you understand the installation options for Oracle B2B, as described in Section 1.5.2.

The section contains the following topics:

- Activating a Limited Oracle B2B Interface Without Configuring a Compact Domain
- Installing Oracle B2B for Quick Start

6.2.1.1 Activating a Limited Oracle B2B Interface Without Configuring a Compact Domain

To activate a limited Oracle B2B user interface without installing Oracle B2B in a compact domain, set the following Oracle B2B 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.

6.2.1.2 Installing Oracle B2B for Quick Start

Oracle B2B and Oracle SOA Suite for healthcare integration share the same installer. Obtain the installer zip file labeled fmw_12.1.3.0.0_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_12.1.3.0.0_b2bhealthcare.jar.

Launch the installation wizard with the appropriate command.

Installer	Run Command
Generic Installer for UNIX	%JAVA_HOME/bin/java -jar fmw_12.1.3.0.0_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_12.1.3.0.0_b2bhealthcare.jar

Once you have launched the installer, the installation wizard displays the screens listed and described sequentially in Table 6–1.

Table 6-1 Oracle B2B Install Screens

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

When you have exited the installation wizard, an Oracle B2B template will now be a selectable option during domain configuration.

6.2.2 Installing Oracle SOA Suite for healthcare integration for Quick Start

This section covers how to configure your Quick Start installation for Oracle SOA Suite for healthcare integration. Make sure you have understood the different configuration options for Oracle SOA Suite for healthcare integration described in Section 1.5.3 before proceeding.

Note for BPM Users:

Healthcare Integration cannot be used with Oracle Business Process Management Suite.

The section contains the following topics:

- Installing Oracle SOA Suite for healthcare integration for Quick Start
- Activating the Oracle SOA Suite for healthcare integration User Interface

6.2.2.1 Installing Oracle SOA Suite for healthcare integration for Quick Start

Oracle B2B and Oracle SOA Suite for healthcare integration share the same installer. Obtain the installer zip file labeled fmw_12.1.3.0.0_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_12.1.3.0.0_b2bhealthcare.jar.

Launch the installation wizard with the appropriate command.

Installer	Run Command
Generic Installer for UNIX	%JAVA_HOME/bin/java -jar fmw_12.1.3.0.0_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_12.1.3.0.0_b2bhealthcare.jar

Once you have launched the installer, the installation wizard displays the screens listed and described sequentially in Table 6–2.

Oracle SOA Suite for Healthcare Install Screens Table 6–2

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

When you exit the installation wizard, a Oracle SOA Suite for healthcare integration template will now be available during domain configuration.

If you want to use the Oracle SOA Suite for healthcare integration user interface to exchange healthcare documents, you should run the RCU as described in Section 6.2.4. You can also review all of the post-installation steps required to activate the Healthcare user interface in Section 6.2.2.2.

6.2.2.2 Activating the Oracle SOA Suite for healthcare integration User Interface

This section describes how to activate the Oracle SOA Suite for healthcare integration user interface to replace the default Oracle B2B interface. Make sure you understand the user interface options described in Section 1.5.3 before proceeding.

You should have already run the Oracle SOA Suite for healthcare integration installer and chosen the B2B with Healthcare installation option. If you have done so, complete the following steps:

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

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

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

> ORACLE HOME/common/sql/soainfra/sql/oracle/b2b_mv.sql

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

Run the domain configuration wizard. On the **Templates** screen, select the **Oracle SOA Suite for healthcare integration - 12.1.3.0 [soa]** template. This changes the default message delivery mode from AQ to JMS, as Healthcare is not supported in AQ mode.

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

6.2.3 Installing Oracle Managed File Transfer for Quick Start

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

Obtain the installer zip file labeled fmw_12.1.3.0.0_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_12.1.3.0.0_mft.jar

Launch the installation wizard with the appropriate command.

Installer	Run Command
Generic Installer for UNIX	%JAVA_HOME/bin/java -jar fmw_12.1.3.0.0_mft.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_12.1.3.0.0_mft.jar

Once you have launched the installer, the installation wizard displays the screens listed and described sequentially in Table 6–3.

Table 6–3 Oracle Managed File Transfer Install Screens

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

You now need to run the RCU to configure schemas for Oracle Managed File Transfer. See Section 6.2.4.

6.2.4 Using the RCU to Create Schemas or Set Custom Variables

This section describes how to use the RCU to create schemas for Oracle Managed File Transfer or to set the Oracle SOA Suite for healthcare integration variable for Oracle Healthcare.

Invoke the RCU packaged with your Quick Start installation. Do not download or use any other version of RCU to configure a database with Quick Start.

If you have defined the ORACLE_HOME variable to point to your Oracle Home, you can use the following command to launch the RCU:

Environment	Run Command
UNIX	cd ORACLE_HOME/oracle_common/bin ./rcu
Windows	cd ORACLE_HOME\oracle_common\bin rcu.bat

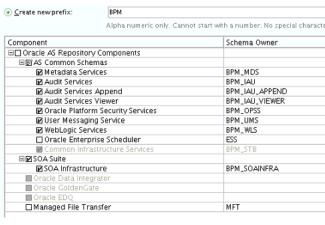
Navigate through the following screens. For more information about the options on a specific screen, click the screen's name or see "Understanding Repository Creation Utility Screens" in *Creating Schemas with the Repository Creation Utility*.

RCU Schema Creation Screens Table 6–4

Checking Prerequisites

Schema Passwords

Screen	Description
Welcome	This screen provides an introduction to what RCU is and its purpose. Click Next .
Create Repository	Choose Create Repository and System Load and Product Load Concurrently.
	If the second option doesn't appear for you, you do not have the necessary permissions or privileges to perform DBA activities.
Database Connection Details	Fill the Host Name , Username , and Password blanks with the credentials for your Oracle database. Your Service Name and Port number were created when you installed your database.
	Click Next.
Checking Prerequisites	This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click OK to continue.
Select Components	Specify an intuitive prefix for your new schemas, such as SOAQS , so you can target them easily when you are configuring a domain.
	Select AS Common Schemes and SOA Suite to select all of their dependencies.



Managed File Transfer from the list. You will not see this option listed if you have not run the corresponding installer yet. Click **Next**. This screen will pop up with a progress indicator bar. When the prerequisites are checked off, click **OK** to continue. Select **Use same passwords for all schemas**. Then create a password you will remember.

If you are installing Oracle Managed File Transfer, select

Table 6-4 (Cont.) RCU Schema Creation Screens

Screen	Description	
Custom Variables	This screen will show up because you are installing SOA Infrastructure.	
	If you are installing Oracle SOA Suite for healthcare integration, change the Value field for Healthcare Integration to Yes .	
	Component Custom Variable Valu	
	SOA Infrastructure Database Profile (SMALL/MED/LARGE) SMALL Healthcare Integration(YES/NO) YES	
	For more information about the variables on this page, see	
	"About the Custom Variables Required for the SOA Suite Schemas" in <i>Installing and Configuring Oracle SOA Suite and Business Process Management</i> .	
	Otherwise, keep the defaults and press Next.	
Map Tablespaces	This screen displays default and temporary tablespaces for the components you want to create schemas for. You can review this information and click Next	
	Click OK through the next two confirmation dialogues. Then click Next again to progress to the next screen.	
Summary	This screen summarizes the component schemas that will be created. Take note of the Database details at the top for domain configuration. Then click Create to begin schema creation.	
Completion Summary	This screen displays the log files created with the database schemas. You can open any of the log files to review information or to troubleshoot a creation issue.	
	If any operation failed, you can check the Cleanup for failed components box. Upon clicking Close , this option will drop failed schemas from your database.	
	When you click Close , schema creation is complete.	

If you encountered any problems during schema creation, first make sure you are using the RCU included in your SOA Suite Quick Start installation. You can then troubleshoot the issue using the log files generated on the Completion Summary screen.

Once your schemas are successfully created, you can run the domain configuration wizard.

6.3 Updating a Compact Domain

This section describes the actions you can take to reconfigure your compact domain for additional components. If you have not finished configuring a compact domain for the first time, you should return to Chapter 3 for Oracle SOA Suite and Chapter 5 for Oracle Business Process Management.

Otherwise, make sure you have run the appropriate installers for Oracle B2B, Healthcare, or Managed File Transfer before beginning this process.

Task 1 Launching the Domain Configuration Wizard

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

Example commands for this task are as follows:

UNIX	cd ORACLE_HOME/oracle_common/common/bin ./config.sh
Windows	<pre>cd ORACLE_HOME\oracle_common\common\bin config.cmd</pre>

Then navigate through the following configuration screens.

Task 2 Selecting the Domain Type and Domain Home Location

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

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

Task 3 Selecting the Configuration Template

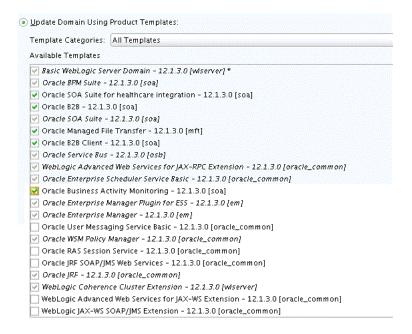
On the Templates screen, make sure Update Domain Using Product Templates is selected. The templates that you have installed already will be greyed out.

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

Oracle SOA Suite for healthcare integration - 12.1.3.0 [soa]

Note for Healthcare Users: You need to select both the Oracle SOA Suite for healthcare integration - 12.1.3.0 [soa] template and Oracle **B2B - 12.1.3.0** [soa] template.

- Oracle B2B 12.1.3.0 [soa]
- Oracle Managed File Transfer 12.1.3.0 [mft]
- Oracle Business Activity Manager 12.1.3.0 [soa]
- Oracle Enterprise Scheduler Service Basic 12.1.3.0 [oracle_common]
- Oracle Enterprise Manager Plugin for ESS 12.1.3.0 [em]



Task 4 Specifying the Datasource Configuration Type

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

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

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

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

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

Task 5 Verifying the Component Datasources

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

Task 6 Testing the JDBC Connections

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

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

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

Task 7 Selecting Advanced Configuration

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

Task 8 Configuring the Domain

This screen will show 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.

Task 9 Reviewing Your Domain Location

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

6.4 Understanding Oracle Event Processing Design Time

Starting in 12c (12.1.3), Oracle Event Processing Design time is included as a JDeveloper extension when you install a Quick Start distribution. However, Oracle Event Processing does not run on the Integrated WebLogic Server. You must install a separate Oracle Event Processing Oracle home and launch the Oracle Event Processing-specific server from there to create a compatible runtime environment.

For more information on how to install Oracle Event Processing, see *Installing Oracle* Event Processing. Then see "Standalone-Server Domains" in Administering Oracle Event *Processing* to configure an Oracle Event Processing domain.

6.5 Next Steps

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

Action	Resource
Deploy a sample application.	See Chapter 7 in this book.
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> .
Delete your installation.	If you have tested your installation out and are done, see Chapter 8 in this book.

Running a Sample Application

This chapter describes how to load and run a sample application for the Oracle SOA Suite Quick Start distribution using the Integrated WebLogic Server's default domain. It also tells you how to find sample applications for Oracle Process Management Suite and how to begin a project for Oracle Event Processing.

This chapter includes the following sections:

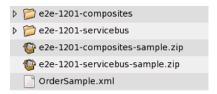
- Running the ProcessOrder Oracle SOA Suite Sample Application
- Creating an Oracle Business Process Management Suite Sample Application
- Creating an Oracle Event Processing Project in JDeveloper
- Next Steps

7.1 Running the ProcessOrder Oracle SOA Suite Sample Application

This section guides you through running a sample application using Oracle SOA Suite components in a SOA Quick Start default domain. You will use the Integrated WebLogic Server, SOA composites, and Oracle Service Bus projects to run an application that can process an order, including credit card validation.

Task 1 Download and unzip the application files.

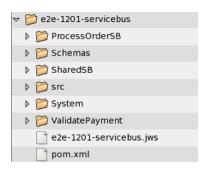
- **1.** Go to http://www.oracle.com/technetwork/middleware/soasuite/learnmore/soasuit esamplestutorials-2765831.html. Download e2e-1201-sample.zip.
- 2. Unzip e2e-1201-sample.zip into a folder outside of your Oracle home so that you can deinstall an Oracle IDeveloper installation without losing project files. The zip contains e2e-1201-composites-sample.zip, e2e-1201-servicebus-sample.zip, and SampleOrder.xml.
- Unzip e2e-1201-composites-sample.zip and e2e-1201-servicebus-sample.zip into the same directory. Your directory should now contain the OrderSample.xml and two subfolders: e2e-1201-composites and e2e-1201-servicebus.



The subfolder e2e-1201-composites contains the following directory structure:



The subfolder e2e-1201-servicebus contains the following directory structure:



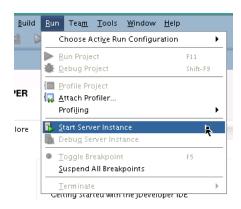
Task 2 Launch JDeveloper and the Integrated WebLogic Server.

Launch JDeveloper using the following command.

Environment	Run Command	
Linux	cd ORACLE_HOME/jdeveloper/jdev/bin ./jdev	
Windows	CD ORACLE_HOME\jdeveloper\jdev\bin jdeveloper.exe	

Launch the Integrated WebLogic Server by choosing Run from top menu bar. Select **Start Server Instance** from the drop-down menu, as seen in Figure 7–1.

Figure 7–1 Starting the Integrated WebLogic Server

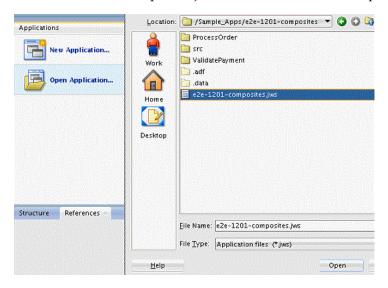


When you see the following messages appear in the log, the Integrated WebLogic Server has launched successfully.

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

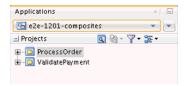
Task 3 Load the project files.

Load e2e-1201-composites.jws from folder e2e-1201-composites.

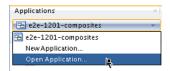


A dialogue box titled **Open Warning** will pop up and warn you that you will be converting the application files into Oracle JDeveloper 12.1.3.0.0 file format. Click **Yes** to migrate the files.

After the files have migrated successfully, the contents of e2e-1201-composites will be listed in the **Applications** pane.

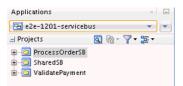


2. Click on the composite's name to trigger a drop-down menu with **Open** Application as an option.



Use that option to load e2e-1201-servicebus.jws from the subfolder e2e-1201-servicebus.

The contents of e2e-1201-servicebus.jws loads in the same **Applications** pane as e2e-1201-servicebus.

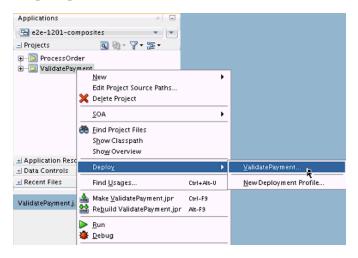


You can switch between the two applications using the same drop-down menu you used to access the **Open Application** option.

Task 4 Deploy ValidatePayment for the SOA composites.

This task involves several steps.

- 1. Switch to **e2e-1201-composites** using the **Applications** drop-down menu.
- Right-click on validatePayment in the content list and highlight Deploy from the pop-up menu. Then select validatePayment to launch the Deployment Action prompt.



- The **Deployment Action** prompt has five screens.
 - On the **Deployment Action** screen, **Deploy to Application Server** is automatically highlighted. Click Next.
 - On the **Deploy Configuration** screen, review the information on the screen. Leave Mark composite revision as default selected and click Next.
 - The **Select Server** screen lists available servers. Select the **IntegratedWebLogicServer** if it is not selected by default. Click **Next**.
 - The **SOA** Server page allows you to target a specific server if more than one is available. The **DefaultServer** is automatically selected. Click **Next**.
 - The **Summary** screen allows you to review the deployment options that you have selected. Click **Finish**.
- When you see the following text in the **Messages Log** pane at the bottom of the JDeveloper screen, the composite has deployed successfully:

```
Compilation of project 'ValidatePayment.jpr' finished.
Successful compilation: 0 errors, 0 warnings.
```

Task 5 Deploy ValidatePayment from the Service Bus project.

Use the **Applications** drop-down menu to switch to **e2e-1201-servicebus**.

Right-click on ValidatePayment in the content list and highlight Deploy from the pop-up menu. Then select e2e-1201-servicebus_ValidatePayment_ ServiceBusProjectProfile to launch the Deployment Action prompt.

The **Deployment Action** prompt has three screens.

- On the **Deployment Action** screen, **Deploy to Service Bus Server** is automatically highlighted. Click Next.
- On the **Select Server** screen, select **IntegratedWebLogicServer** if it is not selected by default. Click **Next**.

The **Summary** screen allows you to review the deployment options that you have selected. Click Finish.

Task 6 Deploy ProcessOrder from the SOA composites.

Select e2e-1201-composites from the application dropdown menu. Right-click on **ProcessOrder** and highlight **Deploy** from the pop-up menu. Then select **ProcessOrder...** to launch the **Deployment Action** prompt.

The **Deployment Action** prompt has five screens.

- On the **Deployment Action** screen, **Deploy to Application Server** is automatically highlighted. Click Next.
- On the **Deploy Configuration** screen, review the information on the screen. Leave Mark composite revision as default selected and click Next.
- The **Select Server** screen lists available servers. Select the **IntegratedWebLogicServer** if it is not selected by default. Click **Next**.
- The **SOA** Server page allows you to target a specific server if more than one is available. The **DefaultServer** is automatically selected. Click **Next**.
- The **Summary** screen allows you to review the deployment options that you have selected. Click Finish.

Task 7 Deploy ProcessOrderSB from the Service Bus project.

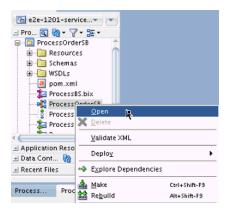
Select e2e-1201-servicebus from the application dropdown menu. Right-click on **ProcessOrderSB** and highlight **Deploy**.

The **Deployment Action** prompt has three screens.

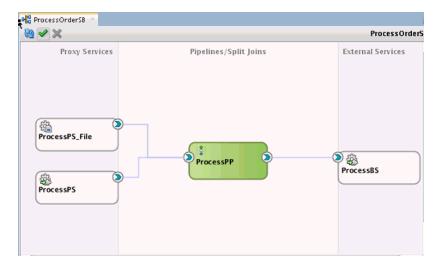
- On the **Deployment Action** screen, **Deploy to Service Bus Server** is automatically highlighted. Click **Next**.
- On the **Select Server** screen, select **IntegratedWebLogicServer** if it is not selected by default. Click **Next**.
- The **Summary** screen allows you to review the deployment options that you have selected. Click Finish.

Task 8 Open the Service Bus overview.

Uncollapse the **ProcessOrderSB** node under **e2e-1201-servicebus**. Right-click on **ProcessOrderSB** and select **Open**.



This will open the project overview in the main project canvas.



Right-click on the ProcessPS box in the Proxy Services swim lane and select Run. This will launch the **Proxy Service Testing** application in a web browser.



Task 9 Enter the sample payload.

Use the Browse button next to the Payload field and find SampleOrder.xml. Then click the **Execute** button at the top of the page.

A pop-up window will appear that says it is executing your application.

When the page refreshes, you should see all of the billing information filled out in the xml form. Scroll down to the **Response Document** heading and look to see if an **OrderNumber** was generated. If it has, your application executed successfully.

```
Response Document
  <env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/" xmlns:wsa="http://www.w3.org/2005/08/addressing">
             <env:Header>
                         <wsa:MessageID>um:f6283805-bf4b-11e3-bc62-00163e132335
                         <wsa:ReplyTo>
                                    <wsa:Address>
                                            http://www.w3.org/2005/08/addressing/anonymous
                                    </wsa:Address>
                                    <wsa:ReferenceParameters>
                                                <instra:tracking.ecid xmlns:instra="http://xmlns.oracle.com/sca/tracking/1.0">
                                                         d55163d8-346a-46dd-8cbf-14645d5f8bb4-00000b3f
                                                </instra:tracking.ecid>
                                               < instracking. Flow EventId \ xmlns: instra="http://xmlns.oracle.com/sca/tracking/1.0">72 < /instracking. Flow EventId> instracking. Flow EventId> instrac
                                                <instra:tracking.FlowId xmlns:instra="http://xmlns.oracle.com/sca/tracking/1.0">3</instra:tracking.FlowId>
                                               <instra:tracking.CorrelationFlowId xmlns:instra="http://xmlns.oracle.com/sca/tracking">http://xmlns.oracle.com/sca/tracking
                                                                                                                                   /1.0">0000KL2avPYFCCA_J_G7yf1JGnN8000007</instra:tracking.CorrelationFlowId>
                                    </wsa:ReferenceParameters>
                         <wsa:FaultTo>
                                   <wsa:Address>
                                            http://www.w3.org/2005/08/addressing/anonymous
                                   </wsa:Address>
                         </wsa:FaultTo>
             </env:Header>
             <env:Body>
                         <OrderAck xmlns="http://www.oracle.com/soasample">
                               <OrderNumber>20144811311212
             </env:Body>
   </env:Envelope>
```

You have completed this sample application. You can download the SOA 12c End-to-end (e2e) Tutorial to learn more about the new features in SOA 12c at http://www.oracle.com/technetwork/middleware/soasuite/learnmore/soasuitesa mplestutorials-2765831.html.

7.2 Creating an Oracle Business Process Management Suite Sample **Application**

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

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

7.3 Creating an Oracle Event Processing Project in JDeveloper

Beginning in 12c (12.1.3), Oracle JDeveloper and Oracle Event Processing are now compatible. To build and run Oracle Event Processing projects in Oracle JDeveloper, see "Create an Oracle Event Processing Project" in Getting Started with Oracle Event Processing.

7.4 Next Steps

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

Action	Resource
Make or test an application of your own.	See "Getting Started with Developing Applications with Oracle JDeveloper" in <i>Developing Applications with Oracle JDeveloper</i> .
Deinstall your current Quick Start distribution.	See Chapter 8 of this book.
Install a different Quick Start distribution.	See Chapter 1 of this book for other Quick Start distributions you can install.

Deinstalling Oracle Quick Start

This chapter describes how to remove Oracle Quick Start products from your system.

It contains the following sections:

- Performing Pre-Deinstallation Tasks
- Deinstalling a Quick Start Distribution

8.1 Performing Pre-Deinstallation Tasks

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

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

8.2 Deinstalling a Quick Start Distribution

This section contains information and instructions for removing a Quick Start distribution. When you run the deinstaller, it removes everything under the Oracle home (referred to in this guide as ORACLE_HOME) from which the deinstaller is started. Be sure that no system components are using the Oracle home you want to remove.

This section contains the following topics:

- Starting the Deinstaller
- Manually Removing the Oracle Home

8.2.1 Starting the Deinstaller

To deinstall a Quick Start distribution, do the following:

- Go to the following location in your ORACLE_HOME:
 - On your Windows system:

ORACLE_HOME\oui\bin\

On your Linux, UNIX, and Mac OS X systems:

ORACLE_HOME/oui/bin/

- **2.** Start the deinstaller by running the following command:
 - On your Windows system:

```
install.exe -deinstall
```

On your Linux, UNIX, Mac OS X systems:

```
./deinstall.sh
```

8.2.2 Manually Removing the Oracle Home

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

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

On a Windows operating system, if your ORACLE_HOME directory is C:\Oracle\ORACLE_ HOME, use a file manager window and navigate to the C:\Oracle\ directory, then right-click on the ORACLE_HOME folder and select **Delete**.

8.2.3 Cleaning Up JDeveloper Artifacts

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