Oracle[®] Fusion Middleware

Installing and Configuring Oracle B2B and Healthcare 12*c* (12.2.1) **E57275-02**

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Documentation for installers and system administrators that describes how to install and configure Oracle B2B and Healthcare.

Oracle Fusion Middleware Installing and Configuring Oracle B2B and Healthcare, 12c (12.2.1)

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Preface

This document describes how to install and configure Oracle B2B and Healthcare.

Audience

This document is intended for system administrators or application developers who are installing and configuring Oracle B2B and Healthcare. It is assumed that readers are familiar with web technologies and have a general understanding of Windows and UNIX platforms.

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Related Documents

For more information, see the following documents in the 12c (12.2.1) documentation set:

- Planning an Installation of Oracle Fusion Middleware
- Installing and Configuring the Oracle Fusion Middleware Infrastructure
- Healthcare Integration User's Guide for Oracle SOA Suite
- User's Guide for Oracle B2B
- High Availability Guide
- WLST Command Reference for SOA Suite

Conventions

The following text conventions are used in this document:

Convention	Meaning	
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.	
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.	
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.	

1

Understanding Oracle B2B and Healthcare Installation

This chapter describes the standard installation for Oracle B2B and Healthcare by explaining the standard topologies for this product.

Review the topics thoroughly to ensure that you do not encounter problems during or after installing the product or configuring the domain.

1.1 About Oracle B2B and Oracle SOA Suite for Healthcare Integration

Oracle B2B and Oracle SOA Suite for Healthcare Integration are two separate SOAcompatible products that enables document and data exchange. This section describes their uses and special installation considerations.

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 Oracle B2B* for a list of the industry-standard e-commerce protocols supported in Oracle B2B.

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. 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.

Oracle B2B and Oracle SOA Suite for Healthcare Integration use the same installer, but users can choose to install and configure the products separately or in combination, depending on their needs. The configuration options for these products are explained further in Understanding the Configuration Options for Oracle B2B and Healthcare.

1.1.1 Understanding the Configuration Options for Oracle B2B and Healthcare

In a regular Oracle SOA Quick Start installation, users can only exchange Custom Documents, which is a limited function of Oracle B2B. If this function fulfills your business needs, you do not need to install Oracle B2B. See Activating a Limited Oracle B2B Interface without a Full Installation for more information.

For more functionality to exchange business documents between enterprise and business partners not involved in healthcare, you should install the full Oracle B2B.

Businesses in healthcare can take advantage of Oracle SOA Suite for Healthcare Integration software to exchange sensitive medical data. Healthcare users have two configuration options:

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

This install guide explains how to configure Oracle B2B and Healthcare in the following ways:

• Oracle B2B in a WebLogic Domain

This option is for non-healthcare businesses. You select the B2B Install type and then select the B2B template while configuring to create a standard WebLogic domain.

• Healthcare in a WebLogic Domain

This option is for healthcare business using HL7 documents. You select the Healthcare Install type and then select the Healthcare template while configuring to create a standard WebLogic domain for Healthcare.

• HIPAA Compliant Healthcare

This option is for X12 HIPAA users. You select the B2B Install type during installation. During configuration, you select both Healthcare and B2B templates while configuring. After configuring the domain, you can still use the B2B user interface to exchange HIPAA (healthcare) documents. You can use this configuration option if you want to configure just B2B, but still take advantage of Healthcare without configuring the Healthcare libraries.

About the Oracle SOA Suite for Healthcare Integration Interface

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 tasks post-installation and during configuration:

- **1.** Use the RCU to set a custom variable before running the domain configuration wizard.
- **2.** Select an Oracle SOA Suite for Healthcare Integration-specific template during domain configuration.

The Oracle SOA Suite for Healthcare Integration user interface will not function properly if you do not do both tasks. These configurations are detailed further in About the Healthcare Integration Custom Variable.

1.2 Using the Standard Installation Topology as a Starting Point

The standard installation topology is a flexible topology that you can use in production environments.

The information in this guide helps you to create a standard installation topology for Oracle B2B and Healthcare. You can later extend the standard installation topology to create a secure and highly available production environment.

The standard installation topology represents a sample topology for this product. It is not the only topology this product supports. For more information, see Understanding the Standard Installation Topology in *Planning an Installation of Oracle Fusion Middleware*.

1.2.1 Understanding the Oracle B2B Standard Installation Topology

This topology represents a standard WebLogic Server domain that contains an Administration Server and a cluster containing two Managed Servers.

The following figure shows the standard installation topology for Oracle B2B.

APPH	OST			
WebLogic Domain				
Administration Server Enterprise Manager				
	Cluster (b2b	_cluster1)		
	Machine (b2b	_machinel)		
		Managed Server (b2b_server2)		
	Infrastructure	Infrastructure		
	SOA	SOA		
B2B B2B		B2B		
DBHOST				
Database with schemas				

See Table 1-1 for information on elements of this topology.

1.2.2 Understanding the Standard Installation Topology for Healthcare

The following figure shows the standard installation topology for Healthcare.

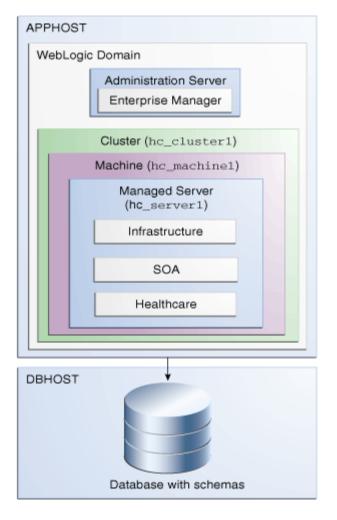


Figure 1-1 Standard Installation Topology for Healthcare

1.2.3 Understanding Elements in the Standard Installation Topology Illustration

The standard installation topology typically includes common elements. describes all elements of the topology illustration.

Element	Description and Links to Additional Documentation
APPHOST	A standard term used in Oracle documentation to refer to the machine that hosts the application tier.
DBHOST	A standard term used in Oracle documentation to refer to the machine that hosts the database.
WebLogic Domain	A logically related group of Java components (in this case, the Administration Server, Managed Servers, and other related software components). For more information, see What is an Oracle WebLogic Server Domain? in <i>Understanding Oracle Fusion Middleware</i> .

Table 1-1 Description of Elements in Standard Installation Topologies

Administration Server Enterprise Manager	The central control entity of a domain which maintains the configuration objects for that domain and distributes configuration changes to the Managed Servers. For more information, see What is the Administration Server? in <i>Understanding Oracle Fusion Middleware</i> . The Oracle Enterprise Manager Fusion Middleware Control is a primary tool used to manage a domain. For more information, see Oracle Enterprise Manager Fusion Middleware Control in <i>Understanding Oracle</i> <i>Fusion Middleware</i> .
Cluster	A collection of multiple WebLogic Server instances running simultaneously and working together. For more information, see Understanding Managed Servers and Managed Server Clusters in <i>Understanding</i> <i>Oracle Fusion Middleware</i> .
Machine	A logical representation of the computer that hosts one or more WebLogic Server instances (servers). Machines are also the logical glue between the Managed Servers and the Node Manager. You must associate Managed Servers with a machine to use Node Manager to start or stop them.
Managed Server	A host for your applications, application components, web services, and their associated resources. For more information, see Understanding Managed Servers and Managed Server Clusters in <i>Understanding</i> <i>Oracle Fusion Middleware</i> .
Infrastructure	 Collection of services that include the following: Metadata repository (MDS) Contains metadata for Oracle Fusion Middleware components, such as the Oracle Application Developer Framework. For more information, see What is the Metadata Repository? in Understanding Oracle Fusion Middleware. Oracle Application Developer Framework (Oracle ADF) Oracle Web Services Manager (OWSM)

Table 1-1 (Cont.) Description of Elements in Standard Installation Topologies

1.3 Understanding Secondary Topologies

Secondary topologies include configurations with components that require additional installation or configuration steps on top of the standard topology.

The main sections of this guide describe how to install and configure a standard installation topology. The secondary topologies contain several products that are not identified or included in the standard installation topologies.

For guidelines to install and configure secondary topologies, see Secondary Topologies for Oracle B2B.

To understand what secondary topologies are available, see the following sections:

1.4 Using This Document to Extend an Existing Domain

Steps in this document describe how to create a new domain. The assumption is that no other Oracle Fusion Middleware products are installed on your system. All instructions for installation and domain creation are based on this assumption.

If you already have other Oracle Fusion Middleware products installed on your system (for example, you already have Oracle Fusion Middleware Infrastructure installed with a domain that is up and running), you can use the same instructions to extend your existing domain. If you choose to do this, be sure to read Installing Multiple Products in the Same Domain in *Planning an Installation of Oracle Fusion Middleware* for important information.

If you are creating a new domain but your needs do not match the instructions in the procedure, be sure to make your selections accordingly and see supporting documentation for more details.

1.5 Using This Document in an Upgrade Scenario

If you are installing Oracle B2B and Healthcare as part of an upgrade procedure, follow the instructions in this book to install the software, but do not run the Configuration Wizard to create a WebLogic domain.

After you install the software, see *Upgrading Oracle WebCenter*.

2

Preparing to Install and Configure Oracle B2B and Healthcare

To prepare for your Oracle B2B and Healthcare installation, verify that your system meets the basic requirements. Then obtain the correct installation software.

2.1 Roadmap for Installing and Configuring the Standard Installation Topologies

This guide has all the steps required to install and configure standard installation topologies. The guide also refers to additional information that you can use if you want to create a modified version of this topology.

Table 2-1 shows the steps required to install and configure the topology.

Task	Description	Documentation
Verify your system environment	Before beginning the installation, verify that the minimum system and network requirements are met.	See Roadmap for Verifying Your System Environment.
Check for any mandatory patches that will be required before or after the installation	Review the Oracle Fusion Middleware Infrastructure release notes to see if there are any mandatory patches required for the software products you are installing.	See Install and Configure in <i>Release Notes for Oracle Fusion Middleware Infrastructure</i> .
Obtain the appropriate distributions	Both B2B and Healthcare require an existing Oracle Fusion Middleware Infrastructure installation and Oracle SOA Suite; B2B and Healthcare must be installed in the same Oracle home as Oracle Fusion Middleware Infrastructure and Oracle SOA Suite. You have a separate distribution for B2B and Healthcare, and the distribution is called fmw_12.2.1.0.0_b2b.jar.	See Understanding and Obtaining the Product Distributions.

Table 2-1 Standard Installation Roadmap

Task	Description	Documentation
Determine your installation directories	Verify that the installer can access or create the installer directories that it must access or create. Also, verify that the directories exist on systems that meet the minimum requirements.	See What are the Key Oracle Fusion Middleware Directories? in <i>Understanding Oracle Fusion Middleware</i> .
Install prerequisite software	Install Oracle Fusion Middleware Infrastructure to create the Oracle home directory. Then install Oracle SOA Suite into the same Oracle home.	See Installing and Configuring the Oracle Fusion Middleware Infrastructure to install Infrastructure. SeeInstalling and Configuring Oracle SOA Suite and Business Process Management to install Oracle SOA Suite.
Install the software	Run the Oracle Universal Installer to install Oracle B2B and Healthcare. Installing the software transfers the software to your system and creates the Oracle home directory.	See Installing the Oracle B2B and Healthcare Software.
Select a database profile and review any required custom variables.	Before you install required schemas in the database, review the information about any custom variables you will need to set for the Oracle B2B and Healthcare schemas.	See Understanding Database Requirements for an Oracle Fusion Middleware Installation.
Create the schemas	Run the Repository Creation Utility to create the schemas required for configuration.	See Creating the Database Schemas.
Create a WebLogic domain	Use the Configuration Wizard to create and configure the WebLogic domain.	See Configuring the Oracle B2B Domain for creating the standard topology for Oracle B2B and Healthcare.
Administer and prepare your domain for high availability	Discover additional tools and resources to administer your domain and configure your domain to be highly available.	See Next Steps After Configuring the Domain.

2.2 Roadmap for Verifying Your System Environment

You must read and understand the important information in this roadmap before you begin the installation and configuration process.

Table 2-2 identifies important tasks and checks to perform to ensure that your environment is properly prepared for installing and configuring the Oracle B2B and Healthcare.

Table 2-2 Roadmap for Verifying Your System Environment

Task	Description	Documentation
Verify certification and system requirements	Verify that your operating system is certified and properly configured for installation and configuration.	See Verifying Certification, System Requirements, and Interoperability.
Identify a proper installation user	Verify that the installation user has the proper permissions to install and configure the software.	See Selecting an Installation User.
Select the installation and configuration directories on your system	Verify that you can create the necessary directories for installation and configuration, according to the recommended directory structure.	See Understanding Directories for Installation and Configuration.
Install a certified JDK	The installation program for the distribution requires a certified JDK present on your system.	See Understanding JDK Requirements for an Oracle Fusion Middleware Installation.
Install and configure a database for mid-tier schemas	To configure your WebLogic domain, you must have access to a certified database that is properly configured for schemas required by Oracle B2B and Healthcare.	See Understanding Database Requirements for an Oracle Fusion Middleware Installation.

Table 2-2 (Cont.) Roadmap for Verifying Your System Environment

2.2.1 Verifying Certification, System Requirements, and Interoperability

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

1. Verifying your environment meets certification requirements

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

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

2. Using the system requirements document to verify certification

Oracle recommends that you use the *Oracle Fusion Middleware System Requirements and Specifications* document to verify that the certification requirements are met. For example, if the certification document indicates that your product is certified for installation on 64-Bit Oracle Linux 6.5, this document should be used to verify that your Oracle Linux 6.5 system has met the required minimum specifications, like disk space, available memory, specific platform packages and patches, and other operating system-specific items. System requirements may change in the future. Therefore, the system requirement documents are kept outside of the documentation libraries and are available on Oracle Technology Network.

3. Verifying interoperability among multiple products

The Oracle Fusion Middleware Understanding Interoperability and Compatibility document defines interoperability and compatibility, and describes how multiple Fusion Middleware products from the same release or mixed releases may be used with each other. You should read this document if you are planning to install multiple Fusion Middleware products on your system.

2.2.2 Selecting an Installation User

This section contains important information about the permissions and privileges of the user who is performing the installation and configuration on your system.

This section includes the following topics:

- Understanding User Permissions
- Understanding Non-Default User Permissions on UNIX Operating Systems
- Verifying the Installation User has Administrator Privileges on Windows Operating Systems

2.2.2.1 Understanding User Permissions

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

The user who installs a Fusion Middleware product has the following permissions on them:

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

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

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

Consider the following examples:

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

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

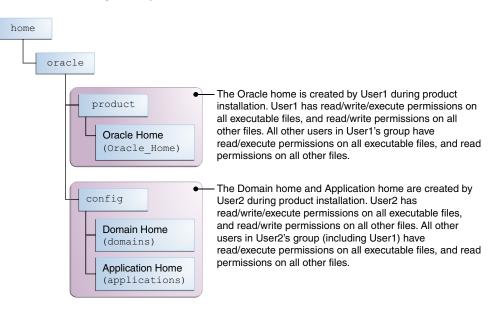
To ensure the proper permissions and privileges for all files, Oracle recommends that the same owner perform both tasks: install the Oracle Fusion Middleware product and configure the WebLogic Server domain using the Configuration Wizard.

home	
oracle	
Oracle Home (Oracle_Home)	— The Oracle home is created by User1 during product installation. User1 has read/write/execute permissions on all executable files, and read/write permissions on all other files. All other users in User1's group have read/execute permissions on all executable files, and read permissions on all other files.
Config Domain Home (domains) Application Home (applications)	— The Domain home and Application home are created by User1 during product installation. User1 has read/write/execute permissions on all executable files, and read/write permissions on all other files. All other users in User1's group have read/execute permissions on all executable files, and read permissions on all other files.

If domain creation must be performed by a different user than the one who installed the software, then both users should be from the same group to have the necessary permissions, as shown in the next example.

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

This example shows the permissions if the Oracle home is created by one user, but the domain is configured by another user.



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

Below are some additional considerations to make prior to running the installer:

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

umask 027

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

- On UNIX operating systems, do not run the installation program as the root user. The installer startup validation will fail and you will not be able to continue.
- When managing a product installation (for example, applying patches, or starting Managed Servers), you must use the same user ID as was used to perform the initial product installation.
- On Windows operating systems, the user performing the installation must have Administrator privileges. See Verifying the Installation User has Administrator Privileges on Windows Operating Systems for more information.

2.2.2.2 Understanding Non-Default User Permissions on UNIX Operating Systems

Changing default permissions settings reduces the security of the installation and possibly your system.

Oracle does not recommend changing default permissions settings. If other users require access to particular files or executables, consider using the UNIX sudo command (or other similar command) in lieu of changing file permissions.

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

2.2.2.3 Verifying the Installation User has Administrator Privileges on Windows Operating Systems

The user performing the installation on Windows operating systems must have Administrator privileges to update the Windows Registry.

By default, members of the Administrator's group log in to the system with regular privileges, but may request elevated permissions to perform administrative tasks.

To perform a task with elevated privileges:

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

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

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

3. Perform the desired task.

For example, to start the product installer:

For a jar file, enter:

java -jar distribution_name.jar

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

• On UNIX, enter:

./distribution_name.bin

• On Windows, enter:

distribution_name.exe

2.2.3 Understanding Directories for Installation and Configuration

During the installation and domain configuration process, you must plan on providing the locations for these directories: Oracle Home, Domain Home, and the Application Home.

This section has information that helps you decide where you want to create these directories.

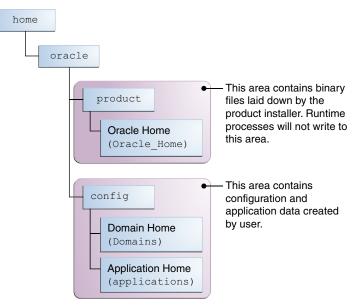
- Understanding the Recommended Directory Structure
- About the Oracle Home Directory
- About the Domain Home Directory
- About the Application Home Directory
- Methods for Installing Multiple Products in the Same Domain
- Preparing for Shared Storage

2.2.3.1 Understanding the Recommended Directory Structure

Oracle recommends specific locations for the Oracle Home, Domain Home, and Application Home.

Oracle recommends a directory structure similar to the one shown in Figure 2-1.





A base location (Oracle base) should be established on your system (for example, / home/oracle) and from there, two separate branches should be created. The

product directory should contain the product binary files and all of the Oracle home directories. The config directory should contain your domain and application data.

Oracle recommends that you do not keep your configuration data anywhere underneath the Oracle home; if you upgrade your product to another major release, you will be required to create a new Oracle home for binaries. You must also make sure that your configuration data exist in a location to which the binaries in the Oracle home have access.

The /home/oracle/product (for the Oracle home) and /home/oracle/config (for the application and configuration data) directories are used in examples throughout the documentation; be sure to replace these directories with the actual directories on your system.

2.2.3.2 About the Oracle Home Directory

When you install any Oracle Fusion Middleware product, you must enter an Oracle home directory.

This directory is a repository for common files that are used by multiple Fusion Middleware products installed on the same machine. For this reason, you can consider the Oracle home directory *central support directory* for all Oracle Fusion Middleware products installed on your system.

Files in the Oracle home directory are essential to ensuring that Fusion Middleware operates correctly on your system. They facilitate checking of cross-product dependencies during installation.

Fusion Middleware documentation refers to the Oracle home directory as *ORACLE_HOME*.

Oracle Home Considerations

Keep the following in mind when creating the Oracle home directory and installing Fusion Middleware products:

- Do not include spaces in the name of your Oracle home directory; the installer gives you an error message if your Oracle home directory path contains spaces.
- You can install only one instance of each Oracle Fusion Middleware product in a single Oracle home directory. If you need to maintain separate versions of a product on the same machine, each version must be in its own Oracle home directory.

Although you can have several different products in a single Oracle home, only one version of each product can be in the Oracle home.

Multiple Home Directories

Although in most situations, a single Oracle home directory is sufficient, it is possible to create more than one Oracle home directory. For example, you need to maintain multiple Oracle home directories in the following situations:

- You prefer to maintain separate development and production environments, with a separate product stack for each. With two directories, you can update your development environment without modifying the production environment until you are ready to do so.
- You want to maintain two different versions of a Fusion Middleware product at the same time. For example, you may want to install a new version of a product while

keeping your existing version intact. In this case, you must install each product version in its own Oracle home directory.

• You need to install multiple products that are not compatible with each other. See *Oracle Fusion Middleware Understanding Interoperability and Compatibility* for more information.

Note: If you create more than one Oracle home directory, you must provide non-overlapping port ranges during the configuration phase for each product.

2.2.3.3 About the Domain Home Directory

The Domain home is the directory where domains that you configure are created.

The default Domain home location is ORACLE_HOME/user_projects/domains/ domain_name. However, Oracle strongly recommends that you do not use this default location. Put your Domain home *outside* of the Oracle home directory, for example, in /home/oracle/config/domains. The config directory should contain domain and application data. Oracle recommends a separate domain directory so that new installs, patches, and other operations update the ORACLE_HOME only, *not* the domain configuration.

See Understanding the Recommended Directory Structure for more about the recommended directory structure and locating your Domain home.

Fusion Middleware documentation refers to the Domain home directory as *DOMAIN_HOME* and includes all folders up to and including the domain name. For example, if you name your domain exampledomain and locate your domain data in the /home/oracle/config/domains directory, the documentation would use *DOMAIN_HOME* to refer to /home/oracle/config/domains/exampledomain.

2.2.3.4 About the Application Home Directory

The Application home is the directory where applications for domains you configure are created.

The default Application home location is ORACLE_HOME/user_projects/ applications/domain_name. However, Oracle strongly recommends locating your Application home *outside* of the Oracle home directory; if you upgrade your product to another major release, you must create a new Oracle home for binaries.

See Understanding the Recommended Directory Structure for more about the recommended directory structure and locating your Application home.

Fusion Middleware documentation refers to the Application home directory as *APPLICATION_HOME* and includes all folders up to and including the domain name. For example, if you name your domain exampledomain and you locate your application data in the /home/oracle/config/applications directory, the documentation uses *APPLICATION_HOME* to refer to /home/oracle/config/ applications/exampledomain.

2.2.3.5 Methods for Installing Multiple Products in the Same Domain

There are two methods for installing and configuring multiple products in one domain.

• Install and configure Product A, including creating the schemas and starting all servers in the domain to verify a successful domain configuration.

This is the way all of product installation guides are organized. You can repeat this process for as many products as necessary. It allows you to validate one product at a time and add more products incrementally.

To install Product B, you stop the Administration Server to prevent any updates to the domain while you are adding the new product, then follow instructions in the install guide for Product B, including creating the necessary schemas, then extending the Product A domain to include Product B, then starting all of the servers again.

• Install but do *not* configure all of the necessary products, then create the schemas for all of the products, then configure the domain using all of the necessary product templates, then start all the servers.

This method of creating a multi-product domain may be slightly faster; however, the documentation does not provide specific instructions for this method of domain creation. You must refer to the necessary supporting documentation as appropriate.

2.2.3.6 Preparing for Shared Storage

Oracle Fusion Middleware enables you to configure multiple Oracle WebLogic Server domains from a single Oracle home. This allows you to install the Oracle home in a single location on a shared volume and reuse the Oracle home for multiple hosts installations.

If you plan to use shared storage in your environment, see Using Shared Storage in *Oracle Fusion Middleware High Availability Guide* for more information.

2.2.4 Understanding JDK Requirements for an Oracle Fusion Middleware Installation

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

Make sure that the JDK is installed *outside* of the Oracle home. If you install the JDK under the Oracle home, you will encounter problems when you try to perform tasks in the future. Oracle Universal Installer validates that the Oracle home directory is empty; the install will not progress until you specify an empty directory. Oracle recommends that you locate your JDK installation in the /uol/oracle/products/jdk directory. You can then use the java -jar command to run the installer JAR file.

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

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

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

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

2.2.5 Understanding Database Requirements for an Oracle Fusion Middleware Installation

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

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

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

Note:

For 12*c* (12.2.1), only a certified Oracle database can be used for the Oracle Fusion Middleware Infrastructure standard installation topology.

After your database is properly configured, you can create your product schemas:

- The Repository Creation Utility (RCU) is the tool used to create schemas in your database. This tool is available in the Oracle home for your Oracle Fusion Middleware product.
- Refer to *Creating Schemas with the Repository Creation Utility* for more information about the Repository Creation Utility.

2.2.5.1 About the Custom Variables Required for the SOA Suite Schemas

After you install the Oracle SOA Suite or Business Process Management software, you must create database schemas in order to configure your Oracle WebLogic domain.

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

Enter value for the followi	ng custom variables.	
Component	Custom Variable	Value
SOA Infrastructure	Database Profile (SMALL/MED/LARGE)	SMALL
	Healthcare Integration(YES/NO)	NO

These variables are explained further in the following sections.

2.2.5.1.1 About the Database Profile Custom Variable

The Database Profiles custom variable on the Repository Creation Utility (RCU) Custom Variables screen allows you to identify the predicted size or "profile" of the database on which you are installing the SOA Infrastructure schema. To estimate the size of the database required for your Oracle SOA Suite configuration, consider the information in Developing a Database Growth Management Strategy in *Administering Oracle SOA Suite and Oracle Business Process Management Suite*. If you enter **SMALL** or **MEDIUM** as the database profile, RCU performs no special actions when the schema is created. The **SMALL** and **MEDIUM** options should be entered for informational purposes only.

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

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

- Partitioning Concepts
- Interval Partitioning

2.2.5.1.2 About the Healthcare Integration Custom Variable

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

If you are not planning to use the Healthcare Integration User Interface for Oracle SOA Suite, then enter **NO** as the value for the Healthcare Integration Custom variable. If you are planning to use the Healthcare Integration User Interface for Oracle SOA Suite, select **YES**; otherwise, the Healthcare Integration User Interface will not function properly after it is installed and configured.

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

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

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

2.3 Understanding and Obtaining the Product Distributions

You create the initial Oracle B2B and Healthcare domain using the Oracle Fusion Middleware Infrastructure distribution. This one distribution contains both Oracle WebLogic Server software and Oracle JRF software.

Oracle JRF software consists of Oracle Web Services Manager, Oracle Application Development Framework (Oracle ADF), Oracle Enterprise Manager Fusion Middleware Control, the Repository Creation Utility (RCU), and other libraries and technologies required to support the Oracle Fusion Middleware products.

The distributions for Oracle Fusion Middleware Infrastructure and Oracle B2B and Healthcare are available as . jar files. You must have a certified JDK installed on your system to install and configure this distribution.

Note:

For more information about distributions, see Understanding and Obtaining Product Distributions in *Planning an Installation of Oracle Fusion Middleware*.

Installing the Oracle B2B and Healthcare Software

This chapter describes how to install the Oracle B2B and Healthcare software.

Before beginning the installation, ensure that you have verified your system environment (Roadmap for Verifying Your System Environment) and have installed Oracle Fusion Middleware Infrastructure (*Installing and Configuring the Oracle Fusion Middleware Infrastructure*).

3.1 Verifying the Installation Checklist

The installation process requires specific information from you.

Table 3-1 lists important items that you must know before, or decide during, Oracle B2B and Healthcare installation.

Information	Example Value	Description
JAVA_HOME	/home/Oracle/Java/ jdk1.8.0_60	Environment variable that points to the Java JDK home directory.
Database hostname	examplehost.exampledom ain	Name and domain of the host where the database is running.
Database port	1521	Port number that the database listens on. The default Oracle database listen port is 1521.
Database service name	orcl	Oracle databases require a unique service name. The default service name is orcl.
DBA username	SYS	Name of user with database administration privileges. The default DBA user on Oracle databases is SYS.
DBA password	ExamplePassword1	Password of the user with database administration privileges.

Table 3-1 Installation Checklist

Information	Example Value	Description
ORACLE_HOME	/home/Oracle/product/ ORACLE_HOME	Directory in which you will install your software.
		This directory will include Oracle Fusion Middleware Infrastructure and Oracle B2B and Healthcare, as needed.
WebLogic Server hostname	examplehost.exampledom ain.com	Host name for Oracle WebLogic Server and Oracle B2B and Healthcare consoles.
Console port	7001	Port for Oracle WebLogic Server and Oracle B2B and Healthcare consoles.
DOMAIN_HOME	/home/Oracle/config/ domains/b2b_domain	Location in which your domain data is stored.
APPLICATION_HOME	/home/Oracle/config/ applications/ b2b_domain	Location in which your application data is stored.
Administrator user name for your WebLogic domain	weblogic	Name of the user with Oracle WebLogic Server administration privileges. The default administrator user is weblogic.
Administrator user password	ExamplePassword1	Password of the user with Oracle WebLogic Server administration privileges.
FTP Port	7021	Port for embedded FTP server.
RCU utility	ORACLE_HOME/ oracle_common/bin	Path to the Repository Creation Utility (RCU).
RCU schema prefix	B2B	Prefix for names of database schemas used by Oracle B2B and Healthcare.
RCU schema password	ExamplePassword1	Password for the database schemas used by Oracle B2B and Healthcare.
Config utility	ORACLE_HOME/ oracle_common/ common/bin	Path to the configuration wizard for domain creation and configuration.

Table 3-1 (Cont.) Installation Checklist

Information	Example Value	Description
\$FTP_ROOT	\${ORACLE_HOME}/b2b/ ftp_root	Embedded FTP server root directory.

Table 3-1 (Cont.) Installation Checklist

3.2 Starting the Installation Program

You need to verify the JDK and required software before running the installation.

To start the installation program:

- 1. Log in to the target system.
- **2.** Verify that a certified JDK already exists on your system. The installer requires a certified JDK. See the appropriate certification document for 12*c* (12.2.1) on the *Oracle Fusion Middleware Supported System Configurations* page.
- 3. Verify that you have installed all prerequisite software.
- 4. Go to the directory where you downloaded the installation program.
- **5.** Launch the installation program by running the java executable from the JDK directory on your system, as shown in the examples below.

On UNIX operating systems: /home/Oracle/Java/jdk1.8.0_60/bin/java -jar fmw_12.2.1.0.0_b2b.jar

On Windows operating systems: C:\home\Oracle\Java\jdk1.8.0_60\bin \java -jar fmw_12.2.1.0.0_b2b.jar

Be sure to replace the JDK location in these examples with the actual JDK location on your system.

Note:

You can also launch the installer in silent mode to ensure that configuration options do not appear during the installation process. For more about silent or command line installation, see Using the Oracle Universal Installer in Silent Mode in *Installing Software with the Oracle Universal Installer*.

When the installation program appears, you are ready to begin the installation. See the next topic for a description of each installation program screen.

3.3 Navigating the Installation Screens

The installation program shows a series of screens; see the following table for the order in which they appear.

If you need additional help with an installation screen, click the screen name. You can also click **Help** on the installation screens for additional instructions.

Table 3-2 Oracle B2B and Healthcare Install Screens

Screen	Description
Installation Inventory Setup	On UNIX operating systems, this screen opens if this is the first time you are installing any Oracle product on this host. Specify the location where you want to create your central inventory. Make sure that the operating system group name selected on this screen has write permissions to the central inventory location.
	For more about the central inventory, see Understanding the Oracle Central Inventory in <i>Installing Software with the Oracle Universal Installer</i> .
	This screen does not appear on Windows operating systems.
Welcome	This screen introduces you to the product installer.
Auto Updates	Use this screen to search for the latest software updates, including important security updates, via your My Oracle Support account.
Installation Location	Use this screen to specify your Oracle home directory location. This Oracle home should already contain Oracle Fusion Middleware Infrastructure.
	You can click View to verify and ensure that you are installing Oracle B2B and Healthcare in the correct Oracle home.
	For more about Oracle Fusion Middleware directory structure, see Selecting Directories for Installation and Configuration in <i>Planning an Installation of Oracle Fusion Middleware</i> .
Installation Type	Select B2B if you are creating the B2B standard topology. Select B2B if you are creating a healthcare topology for HIPAA standards. Select Healthcare if you are creating a healthcare topology for HL7 documents.
Prerequisite Checks	Verifies that your system meets the minimum necessary requirements.
	To view the list of tasks that gets verified, select View Successful Tasks . To view log details, select View Log .
	If there are warning or error messages, see one of the documents in Roadmap for Verifying Your System Environment.

 Table 3-2
 (Cont.) Oracle B2B and Healthcare Install Screens

Screen	Description
Installation Summary	Use this screen to verify installation options you selected. If you want to save these options to a response file, click Save Response File and enter the response file location and name. You can use response files later if you perform a silent installation.
	All feature sets that are installed after installation is complete are listed here.
	For more about silent or command line installation, see Using the Oracle Universal Installer in Silent Mode in <i>Installing Software with the Oracle Universal Installer</i> .
	Click Install to begin the installation.
Installation Progress	Shows the installation progress.
	When the progress bar reaches 100% complete, click Finish to dismiss the installer or click Next to see a summary.
Installation Complete	Review the summary information on this screen, then click Finish to dismiss the installer.

Table 3-2 (Cont.) Oracle B2B and Healthcare Install Screens

3.4 Verifying the Installation

After you complete the installation, verify it by successfully completing a series of tasks.

- Reviewing the Installation Log Files
- Checking the Directory Structure
- Viewing the Contents of the Oracle Home

3.4.1 Reviewing the Installation Log Files

Review the contents of the installation log files to make sure that the installer didn't encounter any problems. By default, the installer writes logs files to the Oracle_Inventory_Location/logs (on UNIX operating systems) or Oracle_Inventory_Location/logs (on Windows operating systems) directory.

For a description of the log files and where to find them, see Installation Log Files in *Installing Software with the Oracle Universal Installer*.

3.4.2 Checking the Directory Structure

The contents of your installation vary based on the options you selected during the installation.

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

3.4.3 Viewing the Contents of the Oracle Home

You can also view the contents of the Oracle home using the viewInventory script. For more information, see Viewing the Contents of an Oracle Home in *Installing Software with the Oracle Universal Installer*.

Configuring the Oracle B2B Domain

After you create and configure the Oracle B2B and Healthcare domain, you will have created database schemas and configured a WebLogic domain, which you can also extend for high availability.

Before you begin the configuration, ensure that you completed installing Oracle B2B and Healthcare software in the same Oracle home as Oracle Fusion Middleware Infrastructure. For more information, see Installing the Oracle B2B and Healthcare Software.

4.1 Creating the Database Schemas

Before you can configure an Oracle B2B and Healthcare domain, you must install required schemas on a certified database for use with this release of Oracle Fusion Middleware.

Follow the instructions in this section to install the schemas:

- Installing and Configuring a Certified Database
- Starting the Repository Creation Utility (RCU)
- Navigating the RCU Screens to Create the Schemas

4.1.1 Installing and Configuring a Certified Database

You must verify that you installed and configured a certified database, and that the database is up and running.

For more information, see Installing a Database and Database Schemas in *Planning an Installation of Oracle Fusion Middleware*.

4.1.2 Starting the Repository Creation Utility (RCU)

Starting RCU requires that your JDK environment variable is set correctly.

To start the Repository Creation Utility (RCU):

- 1. Navigate to the ORACLE_HOME/oracle_common/bin directory on your system.
- 2. Ensure that the JAVA_HOME environment variable is set to the location of a certified JDK on your system. The location should be up to but not including the bin directory. For example, if your JDK is located in /home/Oracle/Java/:

On UNIX operating systems:

setenv JAVA_HOME /home/Oracle/Java/jdk1.8.0_60

On Windows operating systems:

set JAVA_HOME=C:\home\Oracle\Java\jdk1.8.0_60

Be sure to replace the JDK location in these examples with the actual JDK location on your system.

3. Start RCU:

On UNIX operating systems:

./rcu

On Microsoft Windows operating systems:

rcu.bat

4.1.3 Navigating the RCU Screens to Create the Schemas

The topics in this section describe tasks for creating schemas.

4.1.3.1 Introducing RCU

Click Next.

4.1.3.2 Selecting a Method of Schema Creation

If you have the necessary permission and privileges to perform DBA activities on your database, select **System Load and Product Load**. This procedure assumes that you have the necessary SYSDBA privileges.

If you do not have the necessary permission or privileges to perform DBA activities in the database, you must select **Prepare Scripts for System Load** on this screen. This option generates a SQL script that you can provide to your database administrator. See Understanding System Load and Product Load in *Creating Schemas with the Repository Creation Utility*.

4.1.3.3 Providing Database Connection Details

Provide the database connection details for RCU to connect to your database.

Click **Next** to proceed, then click **OK** on the dialog window to confirm that connection to the database was successful.

4.1.3.4 Specifying a Custom Prefix and Selecting Schemas for Oracle B2B and Healthcare

Select **Create new prefix**, specify a custom prefix, then select the **SOA Suite** schema. This action automatically selects the following schemas as dependencies:

- User Messaging Service
- Metadata Services
- Oracle Platform Security Services
- Audit Services
- Audit Services Append
- Audit Services Viewer
- WebLogic Services

The schema Common Infrastructure Services is also automatically created; this schema is grayed out; you cannot select or deselect it. This schema enables you to retrieve information from RCU during domain configuration. For more information, see "Understanding the Service Table Schema" in *Creating Schemas with the Repository Creation Utility*.

The custom prefix is used to logically group these schemas together for use in this domain only; you must create a unique set of schemas for each domain as schema sharing across domains is not supported.

Tip:

For more information about custom prefixes, see "Understanding Custom Prefixes" in *Creating Schemas with the Repository Creation Utility*.

For more information about how to organize your schemas in a multi-domain environment, see "Planning Your Schema Creation" in *Creating Schemas with the Repository Creation Utility*.

Specify a unique prefix for all schemas created in this session, so you can easily locate, reference, and manage the schemas later.

Create new prefix: B2B27 Alpha numeric only. Cannot start with a number. No special characters. Component Grace As Repository components BM AS Common Schemas	
Component Schema Owner	
□ Bacter AS Repository Components □ B AS Common Schemas	al
🖃 🗹 AS Common Schemas	
I Metadata Services B2B27_MDS	
☑ Audit Services B2B27_IAU	
☑ Audit Services Append B2B27_IAU_APPEND	
☑ Audit Services Viewer B2B27_IAU_VIEWER	
☑ Oracle Platform Security Services B2B27_OPSS	
☑ User Messaging Service B2B27_UMS	

B2B27_WLS

B2B27_STB

B2B27_SOAINFRA

ESS

Oracle Data Integrator
 Tip:
 You must make a note of the custom prefix you choose to enter here; you will need this later on during the domain creation process.

Click **Next** to proceed, then click **OK** on the dialog window confirming that prerequisite checking for schema creation was successful.

4.1.3.5 Specifying Schema Passwords

WebLogic Services

SOA Infrastructure

🗆 🗹 SOA Suite

□ Oracle Enterprise Scheduler

Common Infrastructure Services

Specify how you want to set the schema passwords on your database, then specify and confirm your passwords.

Tip:

You must make a note of the passwords you set on this screen; you will need them later on during the domain creation process.

4.1.3.6 Specifying Custom Variables

Specify the custom variables for the SOA Infrastructure schema. For the Oracle SOA Suite standard installation topology, accept both default values for the Database Profile (SMALL) and Healthcare Integration (NO).

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

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

Tip:

More information about the options on this screen can be found in Custom Variables in *Creating Schemas with the Repository Creation Utility*.

:

4.1.3.7 Completing Schema Creation

Navigate through the remainder of the RCU screens to complete schema creation. When you reach the Completion Summary screen, click **Close** to dismiss RCU.

4.2 Configuring the Oracle B2B Domain

This section provides instructions for creating a WebLogic domain using the Configuration Wizard. For more information on other methods to create domains, see Additional Tools for Creating, Extending, and Managing WebLogic Domains in *Creating WebLogic Domains Using the Configuration Wizard*.

Creating and configuring your domain involves the following:

- Starting the Configuration Wizard
- Navigating the Configuration Wizard Screens to Create the Domain

4.2.1 Starting the Configuration Wizard

To begin domain configuration, navigate to the ORACLE_HOME/oracle_common/ common/bin directory and start the WebLogic Server Configuration Wizard.

On UNIX operating systems:

./config.sh

On Microsoft Windows operating systems:

config.cmd

4.2.2 Navigating the Configuration Wizard Screens to Create the Domain

This section describes how to create and configure the domain for the topology.

Note:

You can use this procedure to extend an existing domain. If your needs don't match the instructions in the procedure, be sure to make your selections accordingly, or see the supporting documentation for more details.

Creating and configuring a domain includes the following tasks:

4.2.2.1 Selecting the Domain Type and Domain Home Location

This task requires you to select the Domain home directory location. The optimal place for this directory is outside the Oracle home directory.

Oracle recommends that you locate your Domain home in accordance with the directory structure in What are the Key Oracle Fusion Middleware Directories? in *Understanding Oracle Fusion Middleware*, where the Domain home is located outside the Oracle home directory. This directory structure helps avoid issues when you need to upgrade or reinstall software.

To specify the Domain type and Domain home directory:

- 1. On the Configuration Type screen, select **Create a new domain**.
- 2. In the Domain Location field, specify your Domain home directory.

For more about other options on this screen, see Configuration Type in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.2 Selecting the Configuration Templates for Oracle B2B

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

• Oracle B2B - 12.2.1 [soa]

Selecting this template automatically selects the following as dependencies:

- Oracle SOA Suite 12.2.1. [soa]
- Oracle Enterprise Manager 12.2.1 [em]
- Oracle WSM Policy Manager 12.2.1.0 [oracle_common]
- Oracle JRF 12.2.1 [oracle_common]
- WebLogic Coherence Cluster Extension 12 2.1[wlserver]

Tip:

More information about the options on this screen can be found in "Templates" in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.3 Selecting the Application Home Location

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

Oracle recommends that you locate your Application home in accordance with the directory structure in What are the Key Oracle Fusion Middleware Directories? in *Understanding Oracle Fusion Middleware*, where the Application home is located outside

the Oracle home directory. This directory structure helps avoid issues when you need to upgrade or re-install your software.

Tip:

For more about the Application home directory, see Choosing an Application Home in *Planning an Installation of Oracle Fusion Middleware*.

For more about options on this screen, see Application Location in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.4 Configuring the Administrator Account

On the Administrator Account screen, specify the user name and password for the default WebLogic Administrator account for the domain.

Oracle recommends that you make a note of the user name and password that you enter on this screen; you need these credentials later to boot and connect to the domain's Administration Server.

4.2.2.5 Specifying the Domain Mode and JDK

On the Domain Mode and JDK screen:

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

Tip:

For more about the options on this screen, see Domain Mode and JDK in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.6 Specifying the Database Configuration Type

Select **RCU Data** to activate fields on this screen. The **RCU Data** option instructs the Configuration Wizard to connect to the database and Service Table (STB) schema to automatically retrieve schema information for schemas needed to configure the domain.

Note:

If you select **Manual Configuration** on this screen, you must manually fill in parameters for your schema on the JDBC Component Schema 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.
Host Name	Enter the name of the server hosting the database.
Port	Enter the port number on which the database listens.

Field	Description
Schema Owner	Enter the username and password for connecting to the database's
Schema Password	Service Table schema. This is the schema username and password entered for the Service Table component on the "Schema Passwords" screen in RCU (see Specifying Schema Passwords).
	The default username is <i>prefix_STB</i> , where <i>prefix</i> is the custom prefix that you defined in RCU.

Specify AutoConfiguration Options Using:					
💿 RCU Data 🛛 🔿 Manual Configuration					
Enter the database connection details using the Repository Creation Utility service table (STB) schema credentials. The Wizard uses this connection to automatically configure the datasources required for components in this domain.					
Vendor: Oracle					
DBMS/Service: orcl.exampledomain.cv Host Name: examplehost.exampledomain. Port: 1521					
Schema Owner: DEV_STB Schema Password: ••••••					
<u>Cet RCU Configuration</u>					
Connection Result Log					
Connecting to the database serverOK Retrieving schema data from database serverOK Binding local schema components with retrieved dataOK					
Successfully Done.					

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

Connecting	r to	the	data	base s	serve	er()K		
Retrieving	scł	nema	data	from	data	abase	server0	OK	
Binding lo	cal	sche	ema c	ompone	ents	with	retrieved	data	OK

Successfully Done.

Tip:

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

For more information about other options on this screen, see Datasource Defaults in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.7 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.

For high availability environments, see the following sections in *High Availability Guide* for additional information on configuring data sources for Oracle RAC databases:

- Configuring GridLink Data Sources with Oracle RAC
- Configuring Multi Data Sources

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

4.2.2.8 Testing the JDBC Connections

Use the JDBC Component Schema Test screen to test the data source connections you 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.

By default, the schema password for each schema component is the password you specified while creating your schemas. If you want different passwords for different schema components, manually edit them by entering the password you want in the **Schema Password** column, against each row. After specifying the passwords, select the check box corresponding to the schemas that you changed the password in and test the connection again.

Tip:

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

4.2.2.9 Selecting Advanced Configuration

To complete domain configuration for the topology, select the following options on the Advanced Configuration screen:

Administration Server

Required to properly configure the listen address of the Administration Server.

Node Manager

Required to configure Node Manager.

• Managed Server, Clusters and Coherence

Required to configure the Oracle B2B Managed Server.

4.2.2.10 Configuring the Administration Server Listen Address

On the Administration Server screen, select the drop-down list next to **Listen Address** and select the IP address of the host where the Administration Server will reside. Do not use **All Local Addresses**.

Do not specify any server groups for the Administration Server.

4.2.2.11 Configuring Node Manager

Use the Node Manager screen to select the type of Node Manager you want to configure, along with the Node Manager credentials.

Select **Per Domain Default Location** as the Node Manager type, then specify Node Manager credentials.

Tip:

For more about options on this screen, see Node Manager in *Creating WebLogic Domains Using the Configuration Wizard*.

For more about Node Manager types, see Node Manager Overview in *Administering Node Manager for Oracle WebLogic Server*.

4.2.2.12 Configuring Managed Servers for Oracle B2B

On the Managed Servers screen, a new Managed Server named b2b_server_1 is created:

- In the Listen Address drop-down list, select the IP address of the host on which the Managed Server will reside or use the system name or DNS name that maps to a single IP address. Do not use "All Local Addresses."
- **2.** In the Server Groups drop-down list, select **SOA-MGD-SVRS**. This server group ensures that SOA and Oracle Web Services Manager (OWSM) services are targeted to the Managed Servers you are creating.

There is another server group called **SOA-MGD-SVRS-ONLY** that targets only SOA but not Oracle Web Services Manager (OWSM) to the server. This is typically used if you want to have Oracle Web Services Manager (OWSM) in a different server rather than with the SOA server.

Server groups target Fusion Middleware applications and services to one or more servers by mapping defined application service groups to each defined server group. A given application service group may be mapped to multiple server groups if needed. Any application services that are mapped to a given server group are automatically targeted to all servers that are assigned to that group. For more information, see "Application Service Groups, Server Groups, and Application Service Mappings" in *Domain Template Reference*.

3. Configuring a second Managed Server is one of the steps needed to configure the standard topology for high availability. If you are not creating a highly available environment, then this step is optional.

Click **Add** and repeat this process to create a second Managed Server named b2b_server2.

For more information about the high availability standard topology, see "Understanding the Fusion Middleware Standard HA Topology" in *High Availability Guide*.

For more information about the next steps to prepare for high availability after your domain is configured, see Preparing Your Environment for High Availability.

These server names and will be referenced throughout this document; if you choose different names be sure to replace them as needed.

🖶 Add 🛛 🖹 C	one X Delete			🔊 Dis <u>c</u> a	ard Changes	
Server Name	Listen Address	Listen Port	Enable SSL	SSL Listen Port	Server Groups	
b2b_server1	10.241.97.47 🗾	7003		Disabled	SOA-MGD 🚽	
b2b_server2	10.241.97.47 🗾	7004		Disabled	SOA-MGD 🔻	
					JRF-MAN-SVR JRF-WS-CORE-M. SOA-MGD-SVRS SOA-MGD-SVRS UMS-DRIVER-EM. UMS-DRIVER-EM. UMS-DRIVER-SM UMS-DRIVER-SM	-ONLY AIL-MGD-SVR FENSION-MGD-SVR PP-MGD-SVR

More information about the options on this screen can be found in "Managed Servers" in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.13 Configuring a Cluster for Oracle B2B

Use the Clusters screen to create a new cluster:

- 1. Click Add.
- 2. Specify b2b_cluster_1 in the Cluster Name field.
- **3.** Leave the Cluster Address field blank.

Repeat the preceding steps to create cpt_cluster_1, ibr_cluster_1, and wccui_cluster_1.

By default, server instances in a cluster communicate with one another using unicast. If you want to change your cluster communications to use multicast, see Considerations for Choosing Unicast or Multicast in *Administering Clusters for Oracle WebLogic Server*.

You can also create clusters using Fusion Middleware Control. In this case, you can configure cluster communication (unicast or multicast) when you create the new cluster. For more information, see "Create and configure clusters" in *Oracle WebLogic Server Administration Console Online Help*.

Tip:

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

4.2.2.14 Assigning Oracle B2B Managed Servers to the Cluster

Use the Assign Servers to Clusters screen to assign managed servers to the new cluster:

- 1. In the Clusters pane, select the cluster you want to assign the servers to; in this case, b2b_cluster_1.
- 2. In the Servers pane, assign b2b_server_1 to b2b_cluster_1 by doing one of the following:

- Click once on b2b_server_1 to select it, then click on the right arrow to move it beneath the selected cluster (b2b_cluster_1) in the Clusters pane.
- Double-click on b2b_server_1 to move it beneath the selected cluster (b2b_cluster_1) in the clusters pane.
- **3.** Repeat to assign b2b_server_2 to b2b_cluster_1.

Servers	Clusters
	b2b_cluster1
	📦 b2b_server1
	📦 b2b_server2

For more about options on this screen, see Assign Servers to Clusters in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.15 Configuring Coherence Clusters

Use the Coherence Clusters screen to configure the Coherence cluster that is automatically added to the domain. Leave the default port number 0 as the Coherence cluster listen port.

Note:

Setting the unicast listen port to 0 creates an offset for the Managed Server port numbers. The offset is 5000, meaning the maximum allowed value that you can assign to a Managed Server port number is 60535, instead of 65535.

See Table 5-2 for more information and next steps for configuring Coherence.

Note:

For Coherence licensing information, see Oracle Coherence in *Licensing Information*.

4.2.2.16 Creating a New Oracle B2B Machine

Use the Machines screen to create a new machine in the domain. A machine is required so that Node Manager can start and stop servers.

Tip:

If you plan to create a high availability environment and know the list of machines your target topology requires, you can follow the directions in this section to create all the machines at this time. For more information, see Optional Scale Out Procedure in *High Availability Guide*.

1. Select the Machine tab (for Windows) or the UNIX Machine tab (for UNIX), then click **Add** to create a new machine.

- 2. Specify b2b_machine_1 in the Name field.
- **3.** In the Node Manager Listen Address field, select the IP address of the machine in which the Managed Servers are being configured.

You must select a specific interface and not localhost. This allows Coherence cluster addresses to be dynamically calculated.

4. Verify the port in the Node Manager Listen Port field.

The port number 5556, shown in this example, may be referenced by other examples in the documentation. Replace this port number with your own port number as needed.

Note:

If you are extending an existing domain, you can assign servers to any existing machine. It is not necessary to create a new machine unless your situation requires it.

Machine Unix Machine		
📥 Add 🛛 🗶 Delete		🔊 Dis <u>c</u> ard Changes
Name	Node Manager Listen Address	Node Manager Listen Port
b2b_machine1	10.241.97.47	5556

Tip:

For more about the options on this screen, see Machines in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.17 Assigning Servers to Oracle B2B Machines

Use the Assign Servers to Machines screen to assign the Administration Server and Managed Servers to the new machine you just created:

- 1. In the Machines pane, select the machine you want to assign the servers to; in this case, b2b_machine_1.
- 2. In the Servers pane, assign AdminServer to b2b_machine_1 by doing one of the following:
 - Click once on AdminServer to select it, then click on the right arrow to move it beneath the selected machine (b2b_machine_1) in the Machines pane.
 - Double-click on AdminServer to move it beneath the selected machine (b2b_machine_1) in the Machines pane.
- **3.** Repeat the preceding steps to assign the remaining Managed Servers to their respective machines.

Servers	Machines
	🗁 Machine
	🖃 🍗 b2b_machine1
	💓 AdminServer
	📦 b2b_server1
	📦 b2b_server2

For more about options on this screen, see Assign Servers to Machines in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.18 Reviewing Your Configuration Specifications and Configuring the Domain

The Configuration Summary screen has detailed configuration information for the domain you are about to create. Review each item on the screen and verify that the information is correct.

To make any changes, go back to a screen by clicking the **Back** button or selecting the screen in the navigation pane.

Domain creation does not start until you click Create.

Tip:

For more about options on this screen, see Configuration Summary in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.19 Writing Down Your Domain Home and Administration Server URL

The Configuration Success screen shows the following items about the domain you just configured:

- Domain Location
- Administration Server URL

v	Oracle Weblogic Server Configuration Succeeded
	New Domain infra_domain Creation Successful
	Domain Location /home/Oracle/config/domains/infra_domain
	Admin Server URL http://11.222.333.444:7001/console

You must make a note of both items because you need them later; you need the domain location to access scripts that start Node Manager and Administration Server, and you need the URL to access the Administration Server.

Click Finish to dismiss the Configuration Wizard.

4.3 Starting the Servers

After configuration is complete, do the following to access the tools with which you can manage your domain:

Note:

For more information on additional tools you can use to manage your domain, see Overview of Oracle Fusion Middleware Administration Tools in *Administering Oracle Fusion Middleware*.

4.3.1 Starting the Node Manager

To start your per-domain Node Manager, go to the *DOMAIN_HOME*/bin directory.

On UNIX operating systems, start the Node Manager as shown below, using nohup and nm.out as an example output file:

```
nohup ./startNodeManager.sh > $LOG_DIR/nm.out&
```

In this command, LOG_DIR is the location of directory in which you want to store the log files.

On Windows operating systems, run:

startNodeManager.cmd

Note:

On Windows operating systems, Oracle recommends that you configure Node Manager to run as a startup service. This allows Node Manager to start up automatically each time the system is restarted.

For more information, see Running Node Manager as a Startup Service in *Administering Node Manager for Oracle WebLogic Server*.

For more information about additional Node Manager configuration options, see *Administering Node Manager for Oracle WebLogic Server*.

4.3.2 Starting the Administration Server

To start the Administration Server, go to the DOMAIN_HOME/bin directory.

On UNIX operating systems, run:

./startWebLogic.sh

On Windows operating systems, run:

startWebLogic.cmd

If you selected **Production Mode** on the Domain Mode and JDK screen in Specifying the Domain Mode and JDK, you see a prompt for the Administrator user login credentials as provided on the Administrator Account screen in Configuring the Administrator Account.

For more information about starting the Administration Server, see Starting and Stopping Administration Servers in *Administering Oracle Fusion Middleware*.

In production mode, a boot identity file can be created to bypass the need to provide a user name and password when starting the Administration Server. For more information, see Creating a Boot Identity File for an Administration Server in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

You can verify that the Administration Server is up and running by accessing the Administration Server Console. The URL is provided on the Configuration Success screen in Writing Down Your Domain Home and Administration Server URL.

Note:

Make sure that the database hosting your product schemas is up and running and accessible by the Administration Server.

http://administration_server_host:administration_server_port/console

The default Administration Server port number is 7001.

ORACLE WebLogic Server A	Administration Console 12c		
Change Center	🟦 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: s
View changes and restarts	Home		
Click the Lock & Edit button to modify, add or	Home Page		
delete items in this domain.	- Information and Resources Helpful Tools	General Information	
Release Configuration	Configure applications Configure GridLink for RAC Data Source	Common Administration Task Descriptions Read the documentation	
domain	Configure a Dynamic Cluster Recent Task Status Set your console preferences Oracle Enterprise Manager	 Ask a question on My Crade Support 	
Interoperability Diagnostics	- Domain Configurations		

For more information about how to use the Administration Console, see Getting Started Using Oracle WebLogic Server Administration Console in *Administering Oracle Fusion Middleware*.

4.3.3 Starting the Managed Servers

To start the Managed Servers:

1. Log in to Oracle Fusion Middleware Control:

http://administration_server_host:administration_server_port/em

The Administration Server host and port number were in the URL on the Configuration Success screen (Writing Down Your Domain Home and Administration Server URL). The default Administration Server port number is 7001.

The login credentials were provided on the Administrator Account screen (Configuring the Administrator Account).

2. The Enterprise Manager landing page lists the servers configured for this domain and displays their status (such as **Running** or **Shutdown**). For a newly configured domain, only the **AdminServer(admin)** will be running.

domain 🕡			-				
donani o		Change Center	(?)	▼ 💽 ▼ Loi	gged in as weblogic ҧ	Auto Refres	h Off
🔠 WebLogic Domain 🕚	v						
Servers		Administration Server					
2 Down		Name AdminServer					
1 🗤							
		Heat leadhast					
- op		Host localhost					
		Host localhost Listen Port 7001					
Clusters	Þ	Listen Port 7001	Contr	ol v 🖳			
	Þ	Listen Port 7001		ol ▼ Er Cluster	Machine	State	
Clusters	•	Listen Port 7001 Servers View • 🕞 Create 🕺 Delete			Machine machine_1	State Running	
Clusters	Þ	Listen Port 7001 Servers View v 🕞 Create 💥 Delete	Status				

- **3.** Select the first Managed Server.
- 4. Next to the WebLogic Server menu, select Start Up.



- 5. Repeat Steps 3 and 4 to start all managed servers.
- 6. On the main landing page, see that all the servers are up and running.

🔡 WebLogic Domain 🔻	r				Aug 26, 2015 10:58:56 AM PDT
Servers					
	Administration Serve	er			
3 Up	Name	AdminServer			
	Host	localhost			
	Listen Port	7002			
Clusters	Servers				
	View 💌 🎴 Create	X Delete Contr	ol v 🕎		
1 115	-	00 00000 0000			
1υ _Ρ	Name		Cluster	Machine	State
1 Up				Machine machine_1	State Bunning
Deployments	Name	Status			

4.4 Verifying the Configuration

To verify that the domain is configured properly, see Performing Additional Domain Configuration Tasks. You should familiarize yourself with the tasks that this section describes and perform them to verify that your domain is properly configured.

Configuring a Domain for Oracle SOA for Healthcare Integration

This chapter describes how to create and configure your Healthcare domain.

Before you begin the configuration process, ensure that you have completed installing the Oracle Healthcare software in the same Oracle home as Oracle Fusion Middleware Infrastructure and Oracle SOA Suite. For more information, see Installing the Oracle B2B and Healthcare Software.

By the end of this chapter, you would have created database schemas for Oracle Healthcare and configured an Oracle WebLogic domain for Healthcare with one cluster and one managed server on a single host.

5.1 Creating the Database Schemas

Before you can configure an Oracle B2B and Healthcare domain, you must install required schemas on a certified database for use with this release of Oracle Fusion Middleware.

Follow the instructions in this section to install the schemas:

- Installing and Configuring a Certified Database
- Starting the Repository Creation Utility (RCU)
- Navigating the RCU Screens to Create the Schemas

5.1.1 Installing and Configuring a Certified Database

You must verify that you installed and configured a certified database, and that the database is up and running.

For more information, see Installing a Database and Database Schemas in *Planning an Installation of Oracle Fusion Middleware*.

5.1.2 Starting the Repository Creation Utility (RCU)

Starting RCU requires that your JDK environment variable is set correctly.

To start the Repository Creation Utility (RCU):

- 1. Navigate to the ORACLE_HOME/oracle_common/bin directory on your system.
- 2. Ensure that the *JAVA_HOME* environment variable is set to the location of a certified JDK on your system. The location should be up to but not including the bin directory. For example, if your JDK is located in /home/Oracle/Java/:

On UNIX operating systems:

setenv JAVA_HOME /home/Oracle/Java/jdk1.8.0_60

On Windows operating systems:

set JAVA_HOME=C:\home\Oracle\Java\jdk1.8.0_60

Be sure to replace the JDK location in these examples with the actual JDK location on your system.

3. Start RCU:

On UNIX operating systems:

./rcu

On Microsoft Windows operating systems:

rcu.bat

5.1.3 Navigating the RCU Screens to Create the Schemas

The topics in this section describe tasks for creating schemas.

5.1.3.1 Introducing RCU

Click Next.

5.1.3.2 Selecting a Method of Schema Creation

If you have the necessary permission and privileges to perform DBA activities on your database, select **System Load and Product Load**. This procedure assumes that you have the necessary SYSDBA privileges.

If you do not have the necessary permission or privileges to perform DBA activities in the database, you must select **Prepare Scripts for System Load** on this screen. This option generates a SQL script that you can provide to your database administrator. See Understanding System Load and Product Load in *Creating Schemas with the Repository Creation Utility*.

5.1.3.3 Providing Database Connection Details

Provide the database connection details for RCU to connect to your database.

Click **Next** to proceed, then click **OK** on the dialog window to confirm that connection to the database was successful.

5.1.3.4 Specifying a Custom Prefix and Selecting Schemas for Oracle B2B and Healthcare

Select **Create new prefix**, specify a custom prefix, then select the **SOA Suite** schema. This action automatically selects the following schemas as dependencies:

- User Messaging Service
- Metadata Services
- Oracle Platform Security Services
- Audit Services
- Audit Services Append
- Audit Services Viewer

• WebLogic Services

The schema Common Infrastructure Services is also automatically created; this schema is grayed out; you cannot select or deselect it. This schema enables you to retrieve information from RCU during domain configuration. For more information, see "Understanding the Service Table Schema" in *Creating Schemas with the Repository Creation Utility.*

The custom prefix is used to logically group these schemas together for use in this domain only; you must create a unique set of schemas for each domain as schema sharing across domains is not supported.

Tip:

For more information about custom prefixes, see "Understanding Custom Prefixes" in *Creating Schemas with the Repository Creation Utility*.

For more information about how to organize your schemas in a multi-domain environment, see "Planning Your Schema Creation" in *Creating Schemas with the Repository Creation Utility*.

Specify a unique prefix for all schemas created in this session, so you can easily locate, reference, and manage the schemas later.

B2B27

Select existing prefix:

AFMW1213

Create new prefix:

Alpha numeric only. Cannot start with a number. No special characters.

Component	Schema Owner	
Contracte As Repository components		
🖃 🗹 AS Common Schemas		
🗹 Metadata Services	B2B27_MDS	
🗹 Audit Services	B2B27_IAU	
Audit Services Append	B2B27_IAU_APPEND	
Audit Services Viewer	B2B27_IAU_VIEWER	
Oracle Platform Security Services	B2B27_OPSS	
🗹 User Messaging Service	B2B27_UMS	
🗹 WebLogic Services	B2B27_WLS	
Oracle Enterprise Scheduler	ESS	
Common Infrastructure Services	B2B27_STB	
■ SOA Suite		
SOA Infrastructure	B2B27_SOAINFRA	
Oracle Data Integrator		•

Tip:

You must make a note of the custom prefix you choose to enter here; you will need this later on during the domain creation process.

Click **Next** to proceed, then click **OK** on the dialog window confirming that prerequisite checking for schema creation was successful.

5.1.3.5 Specifying Schema Passwords

Specify how you want to set the schema passwords on your database, then specify and confirm your passwords.

Tip:

You must make a note of the passwords you set on this screen; you will need them later on during the domain creation process.

5.1.3.6 Specifying Custom Variables

Specify the custom variables for the SOA Infrastructure schema. For the Oracle SOA Suite standard installation topology, accept both default values for the Database Profile (SMALL) and Healthcare Integration (NO).

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

g custom variables.					
Custom Variable	Value				
Database Profile (SMALL/MED/LARGE)	SMALL				
Healthcare Integration(YES/NO) NO					
	- Custom Variable Database Profile (SMALL/MED/LARGE)				

Tip:

More information about the options on this screen can be found in Custom Variables in *Creating Schemas with the Repository Creation Utility*.

:

5.1.3.7 Completing Schema Creation

Navigate through the remainder of the RCU screens to complete schema creation. When you reach the Completion Summary screen, click **Close** to dismiss RCU.

5.2 Configuring the Oracle B2B Domain

This section provides instructions for creating a WebLogic domain using the Configuration Wizard. For more information on other methods to create domains, see Additional Tools for Creating, Extending, and Managing WebLogic Domains in *Creating WebLogic Domains Using the Configuration Wizard*.

Creating and configuring your domain involves the following:

- Starting the Configuration Wizard
- Navigating the Configuration Wizard Screens to Create the Domain

5.2.1 Starting the Configuration Wizard

To begin domain configuration, navigate to the ORACLE_HOME/oracle_common/ common/bin directory and start the WebLogic Server Configuration Wizard.

On UNIX operating systems:

./config.sh

On Microsoft Windows operating systems:

config.cmd

5.2.2 Navigating the Configuration Wizard Screens to Create the Domain

This section describes how to create and configure the domain for the topology.

Note:

You can use this procedure to extend an existing domain. If your needs don't match the instructions in the procedure, be sure to make your selections accordingly, or see the supporting documentation for more details.

Creating and configuring a domain includes the following tasks:

5.2.2.1 Selecting the Domain Type and Domain Home Location

This task requires you to select the Domain home directory location. The optimal place for this directory is outside the Oracle home directory.

Oracle recommends that you locate your Domain home in accordance with the directory structure in What are the Key Oracle Fusion Middleware Directories? in *Understanding Oracle Fusion Middleware*, where the Domain home is located outside the Oracle home directory. This directory structure helps avoid issues when you need to upgrade or reinstall software.

To specify the Domain type and Domain home directory:

- **1.** On the Configuration Type screen, select **Create a new domain**.
- 2. In the Domain Location field, specify your Domain home directory.

For more about other options on this screen, see Configuration Type in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.2 Selecting the Configuration Templates for Oracle SOA Suite for Healthcare Integration

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

• Oracle SOA Suite for healthcare integration - 12.2.1 [soa]

Selecting this template automatically selects the following as dependencies:

- Oracle B2B 12.2.1 [soa]
- Oracle SOA Suite 12.2.1. [soa]
- Oracle Enterprise Manager 12.2.1 [em]
- Oracle WSM Policy Manager 12.2.1.0 [oracle_common]
- Oracle JRF 12.2.1 [oracle_common]
- WebLogic Coherence Cluster Extension 12 2.1 [wlserver]

More information about the options on this screen can be found in "Templates" in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.3 Selecting the Application Home Location

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

Oracle recommends that you locate your Application home in accordance with the directory structure in What are the Key Oracle Fusion Middleware Directories? in *Understanding Oracle Fusion Middleware*, where the Application home is located outside the Oracle home directory. This directory structure helps avoid issues when you need to upgrade or re-install your software.

Tip:

For more about the Application home directory, see Choosing an Application Home in *Planning an Installation of Oracle Fusion Middleware*.

For more about options on this screen, see Application Location in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.4 Configuring the Administrator Account

On the Administrator Account screen, specify the user name and password for the default WebLogic Administrator account for the domain.

Oracle recommends that you make a note of the user name and password that you enter on this screen; you need these credentials later to boot and connect to the domain's Administration Server.

5.2.2.5 Specifying the Domain Mode and JDK

On the Domain Mode and JDK screen:

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

Tip:

For more about the options on this screen, see Domain Mode and JDK in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.6 Specifying the Database Configuration Type

Select **RCU Data** to activate fields on this screen. The **RCU Data** option instructs the Configuration Wizard to connect to the database and Service Table (STB) schema to automatically retrieve schema information for schemas needed to configure the domain.

Note:

If you select **Manual Configuration** on this screen, you must manually fill in parameters for your schema on the JDBC Component Schema 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.
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 entered for the Service Table component on the "Schema Passwords" screen in RCU (see Specifying Schema Passwords). The default username is <i>prefix_STB</i> , where <i>prefix</i> is the custom prefix that you defined in RCU.

Specify AutoConfiguration Options Using:				
RCU Data Omenual Configuration				
Enter the database connection details using the Repository Creation Utility service table (STB) schema credentials. The Wizard uses this connection to automatically configure the datasources required for components in this domain.				
Vendor: Oracle Driver: *Oracle's Driver (Thin) for Service connections; V				
DBMS/Service: orcl.exampledomain.c) Host Name: examplehost.exampledomain. Port: 1521				
Schema Owner: DEV_STB Schema Password: ••••••				
<u>Cet RCU Configuration</u>				
Connection Result Log				
Connecting to the database serverOK Retrieving schema data from database serverOK Binding local schema components with retrieved dataOK				
Successfully Done.				

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

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

Successfully Done.

Tip:

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

For more information about other options on this screen, see Datasource Defaults in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.7 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.

Tip:

For high availability environments, see the following sections in *High Availability Guide* for additional information on configuring data sources for Oracle RAC databases:

- Configuring GridLink Data Sources with Oracle RAC
- Configuring Multi Data Sources

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

5.2.2.8 Testing the JDBC Connections

Use the JDBC Component Schema Test screen to test the data source connections you 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.

By default, the schema password for each schema component is the password you specified while creating your schemas. If you want different passwords for different schema components, manually edit them by entering the password you want in the **Schema Password** column, against each row. After specifying the passwords, select the check box corresponding to the schemas that you changed the password in and test the connection again.

Tip:

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

5.2.2.9 Selecting Advanced Configuration

To complete domain configuration for the topology, select the following options on the Advanced Configuration screen:

Administration Server

Required to properly configure the listen address of the Administration Server.

Node Manager

Required to configure Node Manager.

Managed Server, Clusters and Coherence
 Required to configure the Oracle B2B Managed Server.

5.2.2.10 Configuring the Administration Server Listen Address

On the Administration Server screen, select the drop-down list next to **Listen Address** and select the IP address of the host where the Administration Server will reside. Do not use **All Local Addresses**.

Do not specify any server groups for the Administration Server.

5.2.2.11 Configuring Node Manager

Use the Node Manager screen to select the type of Node Manager you want to configure, along with the Node Manager credentials.

Select **Per Domain Default Location** as the Node Manager type, then specify Node Manager credentials.

Tip:

For more about options on this screen, see Node Manager in *Creating WebLogic Domains Using the Configuration Wizard*.

For more about Node Manager types, see Node Manager Overview in *Administering Node Manager for Oracle WebLogic Server*.

5.2.2.12 Configuring Managed Servers for Oracle Healthcare

On the Managed Servers screen, a new Managed Server named b2b_server_1 is created:

- 1. In the Listen Address drop-down list, select the IP address of the host on which the Managed Server will reside or use the system name or DNS name that maps to a single IP address. Do not use "All Local Addresses."
- **2.** In the Server Groups drop-down list, select **SOA-MGD-SVRS**. This server group ensures that SOA and Oracle Web Services Manager (OWSM) services are targeted to the Managed Servers you are creating.

There is another server group called **SOA-MGD-SVRS-ONLY** that targets only SOA but not Oracle Web Services Manager (OWSM) to the server. This is typically used if you want to have Oracle Web Services Manager (OWSM) in a different server rather than with the SOA server.

Server groups target Fusion Middleware applications and services to one or more servers by mapping defined application service groups to each defined server group. A given application service group may be mapped to multiple server groups if needed. Any application services that are mapped to a given server group are automatically targeted to all servers that are assigned to that group. For more information, see "Application Service Groups, Server Groups, and Application Service Mappings" in *Domain Template Reference*.

3. Configuring a second Managed Server is one of the steps needed to configure the standard topology for high availability. If you are not creating a highly available environment, then this step is optional.

Click **Add** and repeat this process to create a second Managed Server named hc_server2.

For more information about the high availability standard topology, see "Understanding the Fusion Middleware Standard HA Topology" in *High Availability Guide*.

For more information about the next steps to prepare for high availability after your domain is configured, see Preparing Your Environment for High Availability.

These server names and will be referenced throughout this document; if you choose different names be sure to replace them as needed.

👍 Add 🛛 🕞 Clu	one 🔀 <u>D</u> elete			🔊 Dis <u>c</u> i	ard Changes 🪽		
Server Name	Listen Address	Listen Port	Enable SSL	SSL Listen Port	Server Groups		
hc_server1	10.241.97.47 🗾	7003		Disabled	SOA-MGD 🔻		
					UMS-DRIVER-SM	-ONLY AIL-MGD-SVR TENSION-MGD-SVR PP-MGD-SVR	1000000
					UMS-DRIVER-TW	ITTER-MGD-SVR	•

Tip:

More information about the options on this screen can be found in "Managed Servers" in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.13 Configuring a Cluster for Oracle Healthcare

Use the Clusters screen to create a new cluster:

- 1. Click Add.
- 2. Specify hc_cluster_1 in the Cluster Name field.
- 3. Leave the Cluster Address field blank.

By default, server instances in a cluster communicate with one another using unicast. If you want to change your cluster communications to use multicast, see "Considerations for Choosing Unicast or Multicast" in *Administering Clusters for Oracle WebLogic Server*.

You can also create clusters using Fusion Middleware Control. In this case, you can configure cluster communication (unicast or multicast) when you create the new cluster. For more information, see "Create and configure clusters" in *Oracle WebLogic Server Administration Console Online Help*.

Tip:

For more information about options on this screen, see "Clusters" in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.14 Assigning Oracle Healthcare Managed Servers to the Cluster

Use the Assign Servers to Clusters screen to assign managed servers to the new cluster:

- 1. In the Clusters pane, select the cluster you want to assign the servers to; in this case, hc_cluster_1.
- 2. In the Servers pane, assign hc_server_1 to hc_cluster_1 by doing one of the following:

- Click once on hc_server_1 to select it, then click on the right arrow to move it beneath the selected cluster (hc_cluster_1) in the Clusters pane.
- Double-click on hc_server_1 to move it beneath the selected cluster (hc_cluster_1) in the clusters pane.

Servers	Clusters	
	o hc_cluster1	
	📦 hc_server1	

For more about options on this screen, see"Assign Servers to Clusters" in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.15 Configuring Coherence Clusters

Use the Coherence Clusters screen to configure the Coherence cluster that is automatically added to the domain. Leave the default port number 0 as the Coherence cluster listen port.

Note:

Setting the unicast listen port to 0 creates an offset for the Managed Server port numbers. The offset is 5000, meaning the maximum allowed value that you can assign to a Managed Server port number is 60535, instead of 65535.

See Table 5-2 for more information and next steps for configuring Coherence.

Note:

For Coherence licensing information, see Oracle Coherence in *Licensing Information*.

5.2.2.16 Creating a New Oracle Healthcare Machine

Use the Machines screen to create a new machine in the domain. A machine is required so that Node Manager can start and stop servers.

- 1. Click Add to create a new machine.
- 2. Specify hc_machine_1 in the Name field.
- **3.** In the Node Manager Listen Address field, select the IP address of the machine in which the Managed Servers are being configured.

You must select a specific interface and not "localhost." This allows Coherence cluster addresses to be dynamically calculated.

4. Verify the port in the Node Manager Listen Port field.

The port number 5556, shown in this example, may be referenced by other examples in the documentation. Replace this port number with your own port number as needed.

Note:

If you are extending an existing domain, you can assign servers to any existing machine. It is not necessary to create a new machine unless your situation requires it.

Machine Unix Machine		1
🖶 Add 🛛 🔀 Delete		🔊 Dis <u>c</u> ard Changes
Name	Node Manager Listen Address	Node Manager Listen Port
hc_machine1	10.241.97.47	5556

Tip:

More information about the options on this screen can be found in "Machines" in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.17 Assigning Servers to Oracle Healthcare Machines

Use the Assign Servers to Machines screen to assign the Administration Server and Managed Servers to the new machine you just created:

- 1. In the Machines pane, select the machine you want to assign the servers to; in this case, hc_machine_1.
- 2. In the Servers pane, assign AdminServer to hc_machine_1 by doing one of the following:
 - Click once on AdminServer to select it, then click on the right arrow to move it beneath the selected machine (hc_machine_1) in the Machines pane.
 - Double-click on AdminServer to move it beneath the selected machine (hc_machine_1) in the Machines pane.

Servers	Machines
	Machine Inc_machine1 AdminServer Inc_server1

Tip:

For more about options on this screen, see "Assign Servers to Machines" in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.18 Reviewing Your Configuration Specifications and Configuring the Domain

The Configuration Summary screen has detailed configuration information for the domain you are about to create. Review each item on the screen and verify that the information is correct.

To make any changes, go back to a screen by clicking the **Back** button or selecting the screen in the navigation pane.

Domain creation does not start until you click Create.

Tip:

For more about options on this screen, see Configuration Summary in *Creating WebLogic Domains Using the Configuration Wizard*.

5.2.2.19 Writing Down Your Domain Home and Administration Server URL

The Configuration Success screen shows the following items about the domain you just configured:

- Domain Location
- Administration Server URL

V	Oracle Weblogic Server Configuration Succeeded
	New Domain infra_domain Creation Successful
	Domain Location /home/Oracle/config/domains/infra_domain
	Admin Server URL http://11.222.333.444:7001/console

You must make a note of both items because you need them later; you need the domain location to access scripts that start Node Manager and Administration Server, and you need the URL to access the Administration Server.

Click Finish to dismiss the Configuration Wizard.

5.3 Starting the Servers

After configuration is complete, do the following to access the tools with which you can manage your domain:

Note:

For more information on additional tools you can use to manage your domain, see Overview of Oracle Fusion Middleware Administration Tools in *Administering Oracle Fusion Middleware*.

5.3.1 Starting the Node Manager

To start your per-domain Node Manager, go to the DOMAIN_HOME/bin directory.

On UNIX operating systems, start the Node Manager as shown below, using nohup and nm.out as an example output file:

nohup ./startNodeManager.sh > \$LOG_DIR/nm.out&

In this command, LOG_DIR is the location of directory in which you want to store the log files.

On Windows operating systems, run:

startNodeManager.cmd

Note:

On Windows operating systems, Oracle recommends that you configure Node Manager to run as a startup service. This allows Node Manager to start up automatically each time the system is restarted.

For more information, see Running Node Manager as a Startup Service in *Administering Node Manager for Oracle WebLogic Server*.

For more information about additional Node Manager configuration options, see *Administering Node Manager for Oracle WebLogic Server*.

5.3.2 Starting the Administration Server

To start the Administration Server, go to the DOMAIN_HOME/bin directory.

On UNIX operating systems, run:

./startWebLogic.sh

On Windows operating systems, run:

startWebLogic.cmd

If you selected **Production Mode** on the Domain Mode and JDK screen in Specifying the Domain Mode and JDK, you see a prompt for the Administrator user login credentials as provided on the Administrator Account screen in Configuring the Administrator Account.

Tip:

For more information about starting the Administration Server, see Starting and Stopping Administration Servers in *Administering Oracle Fusion Middleware*.

In production mode, a boot identity file can be created to bypass the need to provide a user name and password when starting the Administration Server. For more information, see Creating a Boot Identity File for an Administration Server in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

You can verify that the Administration Server is up and running by accessing the Administration Server Console. The URL is provided on the Configuration Success screen in Writing Down Your Domain Home and Administration Server URL.

Note:

Make sure that the database hosting your product schemas is up and running and accessible by the Administration Server.

http://administration_server_host:administration_server_port/console

The default Administration Server port number is 7001.

	dministration Console 12c		
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: s
View changes and restarts	Home		
Click the Lock & Edit button to modify, add or delete items in this domain.	Home Page		
delete items in this domain.	- Information and Resources		
Lock & Edit	- Information and Resources		
Release Configuration	Helpful Tools	General Information	
Nelease Conliguration	 Configure applications 	 Common Administration Task Descriptions 	
Domain Structure	 Configure GridLink for RAC Data Source 	 Read the documentation 	
	 Configure a Dynamic Cluster 	 Ask a question on My Oracle Support 	
_domain	 Recent Task Status 		
Environment			
···Deployments	 Set your console preferences 		
Services	 Oracle Enterprise Manager 		
···Security Realms			
Interoperability Diagnostics	- Domain Configurations		

For more information about how to use the Administration Console, see Getting Started Using Oracle WebLogic Server Administration Console in *Administering Oracle Fusion Middleware*.

5.3.3 Starting the Managed Servers

To start the Managed Servers:

1. Log in to Oracle Fusion Middleware Control:

http://administration_server_host:administration_server_port/em

The Administration Server host and port number were in the URL on the Configuration Success screen (Writing Down Your Domain Home and Administration Server URL). The default Administration Server port number is 7001.

The login credentials were provided on the Administrator Account screen (Configuring the Administrator Account).

2. The Enterprise Manager landing page lists the servers configured for this domain and displays their status (such as **Running** or **Shutdown**). For a newly configured domain, only the **AdminServer(admin)** will be running.

domain 🕡			~					
donani o		Change Center	3 6	▼ 💽 ▼ Loi	gged in as weblogic ҧ	Auto Refres	h Off	2
🔠 WebLogic Domain 🕚	v							C
Servers		Administration Server						
2 Down		Name AdminServer						
1 🗤								
		Heat leadbast						
		Host localhost						
	_	Host localhost Listen Port 7001						
Clusters	Þ	Listen Port 7001	Contr	ol v 🔄				
	Þ	Listen Port 7001		ol ▼ Er Cluster	Machine	State		
Clusters	Þ	Listen Port 7001 Servers View 🔻 🛃 Create 🚿 Delete			Machine machine_1	State Running		
Clusters	Þ	Listen Port 7001 Servers View v 🕞 Create 💥 Delete	Status					

- **3.** Select the first Managed Server.
- 4. Next to the WebLogic Server menu, select Start Up.



- 5. Repeat Steps 3 and 4 to start all managed servers.
- 6. On the main landing page, see that all the servers are up and running.

🔡 WebLogic Domain 🔻							Aug 26, 2015 10:58:56 AM PD
Servers							
	Ad	ministration Server					
3 Up	•	Name	AdminServer				
		Host	localhost				
		Listen Port	7002				
Clusters	Sen	vers					
	▶ Vi	w 🔻 💁 Create	X Delete	Contro	a v Ey		
1 115		MARCO.					
1 up		Name		Status	Cluster	Machine	State
1 up		Name AdminServer(admin)		Status	Cluster	Machine machine_1	State Bunning
Deployments					Cluster cluster_1		

5.4 Verifying the Configuration

To verify that the domain is configured properly, see Performing Additional Domain Configuration Tasks. You should familiarize yourself with the tasks that this section describes and perform them to verify that your domain is properly configured.

6

Next Steps After Configuring the Domain

This chapter describes common tasks you might want to perform on a newly created product domain.

6.1 Performing Basic Administrative Tasks

 Table 6-1 lists common administration tasks you will likely want to perform on your new domain.

Task	Description	More Information
Getting familiar with Fusion Middleware administration tools	Get familiar with various tools that you can use to manage your environment.	See Overview of Oracle Fusion Middleware Administration Tools in <i>Administering Oracle Fusion</i> <i>Middleware</i> .
Starting and stopping products and servers	Learn how to start and stop Oracle Fusion Middleware, including the Administration Server, Managed Servers, and components.	See Starting and Stopping Oracle Fusion Middleware in <i>Administering</i> <i>Oracle Fusion Middleware</i> .
Configuring Secure Sockets Layer (SSL)	Learn how to set up secure communications between Oracle Fusion Middleware components using SSL.	See Configuring SSL in Oracle Fusion Middleware in <i>Administering</i> <i>Oracle Fusion Middleware</i> .
Monitoring Oracle Fusion Middleware	Learn how to keep track of the status of Oracle Fusion Middleware components.	See Monitoring Oracle Fusion Middleware in <i>Administering Oracle</i> <i>Fusion Middleware</i> .
Understanding Backup and Recovery Procedures	Learn recommended backup and recovery procedures for Oracle Fusion Middleware.	See Introducing Backup and Recovery in <i>Administering Oracle</i> <i>Fusion Middleware</i> .
Getting familiar with database purging	Get familiar with scheduling and running purge jobs that automatically remove older flow instances, adapter reports, and fault alerts data from the database.	See Managing Database Growth in Administering Oracle SOA Suite and Oracle Business Process Management Suite.

Table 6-1 Basic Administration Tasks for a New Domain

6.2 Performing Additional Domain Configuration Tasks

After you configure a domain, there are additional tasks to consider.

Table 6-2 lists additional tasks you will likely want to perform on your new domain.

Task	Description	More Information
Deploying Applications	Learn how to deploy your applications to Oracle Fusion Middleware.	See Deploying Applications in <i>Administering Oracle Fusion</i> <i>Middleware</i> .
Adding a Web Tier front-end to your domain	Oracle Web Tier hosts Web pages (static and dynamic), provides security and high performance along with built-in clustering, load	To install and configure Oracle HTTP Server in the WebLogic Server domain, see Installing and Configuring Oracle HTTP Server.
	balancing, and failover features. In particular, the Web Tier contains Oracle HTTP Server.	See also Installing Multiple Products in the Same Domain in <i>Planning an Installation of</i> <i>Oracle Fusion Middleware</i> for important information.
Tuning and configuring Coherence for your topology	The standard installation topology includes a Coherence cluster that contains storage-enabled Managed Coherence Servers. This configuration is a good	For more about Coherence clusters, see Configuring and Managing Coherence Clusters in Administering Clusters for Oracle WebLogic Server.
	starting point for using Coherence, but depending upon your specific	For information on tuning Coherence, see <i>Administering</i> <i>Oracle Coherence</i> .
	requirements, consider tuning and reconfiguring Coherence to improve performance in a production environment.	For information on storing HTTP session data in Coherence, see Using Coherence*Web with WebLogic Server in Administering HTTP Session Management with Oracle Coherence*Web.
		For more about creating and deploying Coherence applications, see <i>Developing</i> <i>Oracle Coherence Applications</i> <i>for Oracle WebLogic Server</i> .

 Table 6-2
 Additional Domain Configuration Tasks

6.3 Preparing Your Environment for High Availability

Scaling out for high availability requires additional steps.

Table 6-3 lists tasks to perform if you want to scale out your standard installation environment for high availability.

Table 6-3 Tasks Required to Prepare Your Environment for High Availability

Task	Description	More Information
Scaling out to multiple host computers	To enable high availability, it is important to provide failover capabilities to another host computer. That way, if one computer goes down, your environment can continue to serve consumers of your deployed applications.	See Scaling Out a Topology (Machine Scaleout) in <i>High</i> <i>Availability Guide</i> .
Configuring high availability for Web Tier components.	If you added a Web Tier front-end, you must configure it for high availability and the WebLogic Server software.	See Configuring High Availability for Web Tier Components in <i>High</i> <i>Availability Guide</i> .
Setting up a front-end load balancer	You can use a load balancer to distribute requests across servers more evenly.	See Server Load Balancing in a High Availability Environment and Configure Load Balancer in <i>High</i> <i>Availability Guide</i> .
Configuring Node Manager	Node Manager enables you to start, shut down, and restart the Administration Server and Managed Servers from a remote location. This document assumes you have configured a per-domain Node Manager. See Node Manager documentation for more on advanced Node Manager configuration options and features.	See Administering Node Manager for Oracle WebLogic Server.

 Table 6-3 (Cont.) Tasks Required to Prepare Your Environment for High Availability

Deinstalling Oracle B2B and Healthcare

This chapter describes how to deinstall or reinstall Oracle B2B and Healthcare.

You should always use the instructions in this section to remove the software. If you try to remove the software manually, you may encounter problems when you try to reinstall the software again at a later time. Following the procedures in this section ensures that the software is properly removed.

This section contains the following topics:

- Understanding Product Deinstallation
- Stopping Oracle Fusion Middleware
- Removing Your Database Schemas
- Deinstalling the Software
- Removing the Oracle Home Directory Manually
- Removing the Program Shortcuts on Windows Operating Systems
- Removing Your Domain and Application Data
- Reinstalling the Software

7.1 Understanding Product Deinstallation

The Oracle Fusion Middleware deinstaller removes the software from the Oracle home directory that it starts from.

Table 7-1 summarizes the deinstallation procedure and links to supporting documentation.

Task	Description	Documentation
Stop Oracle Fusion Middleware	All servers and processes in your domain should be stopped before running the deinstaller.	See Stopping Oracle Fusion Middleware.
Remove your database schemas	Run Repository Creation Utility to remove your database schemas.	See Removing Your Database Schemas.

Table 7-1 Roadmap for Product Deinstallation

Task	Description	Documentation
Remove the software	Run the product deinstaller to remove Oracle Fusion Middleware Infrastructure.	See Deinstalling the Software.
	Note that if your Oracle home contains multiple products, you must run the deinstaller multiple times, once for each product.	
Remove the Oracle home directory	The deinstaller does not remove all files and folders from the Oracle home directory. After the deinstaller is finished, you must manually remove the Oracle home to complete your product removal.	See Removing the Oracle Home Directory Manually.
Remove your domain and application data	The deinstaller does not remove data contained in your Domain home or Application home directories, even if they are located inside the Oracle home. You must remove these directories manually.	See Removing Your Domain and Application Data.

Table 7-1 (Cont.) Roadmap for Product Deinstallation

7.2 Stopping Oracle Fusion Middleware

Before running the deinstaller, Oracle recommends that you stop all servers and processes associated with the Oracle home you are going to remove.

For more information, see Stopping an Oracle Fusion Middleware Environment in *Administering Oracle Fusion Middleware*.

7.3 Removing Your Database Schemas

Before you remove the Oracle home, Oracle recommends that you run Repository Creation Utility to remove database schemas associated with this domain.

Each domain has its own set of schemas, uniquely identified by a custom prefix (see Understanding Custom Prefixes in *Creating Schemas with the Repository Creation Utility*). This set of schemas cannot be shared with any other domain (see Planning Your Schema Creation in *Creating Schemas with the Repository Creation Utility*).

If there are multiple sets of schemas on your database, be sure to identify the schema prefix associated with the domain you are removing.

For schema removal steps, see Dropping Schemas in *Creating Schemas with the Repository Creation Utility*.

7.4 Deinstalling the Software

Follow the instructions in this section to start the product deinstaller and remove the software.

- Starting the Deinstallation Program
- Selecting the Product to Deinstall
- Navigating the Deinstallation Screens

If you want to perform a silent (command-line) deinstallation, see Running the Oracle Universal Installer for Silent Deinstallation in *Installing Software with the Oracle Universal Installer*.

7.4.1 Starting the Deinstallation Program

To start the deinstaller:

• On Unix

Go to the ORACLE_HOME / oui / bin directory and enter the following command:

./deinstall.sh

• On Windows

Do one of the following:

- Use a file manager window to go to the ORACLE_HOME\oui\bin directory and double click on deinstall.cmd.
- From the command line, go to the ORACLE_HOME\oui\bin and enter the following command:

deinstall.cmd

- From the **Start** menu, select **All Programs**, then select **Oracle**, then select **OracleHome**, and then select **Uninstall Oracle Middleware**.

7.4.2 Selecting the Product to Deinstall

Because multiple products exist in the Oracle home, ensure that you are deinstalling the correct Oracle home.

After you run the deinstaller, the Distribution to Uninstall screen opens. From the drop-down list, select **Select What Variable for Deinstallation?** and click **Uninstall**. The deinstallation program shows the screens listed in Navigating the Deinstallation Screens.

Note:

You can deinstall Oracle Fusion Middleware Infrastructure after you deinstall Oracle B2B and Healthcare software by running the deinstallation wizard again. You will not encounter the Distribution to Deinstall screen if no other software depends on Oracle Fusion Middleware Infrastructure.

7.4.3 Navigating the Deinstallation Screens

The deinstallation program shows a series of screens in an order listed in Table 7-2.

If you need more help with a deinstallation screen, click the screen name or click **Help** on the screen.

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

 Table 7-2
 Deinstallation Screens and Descriptions

Screen	Description
Deinstallation Summary	This screen shows the Oracle home directory and its contents that will be deinstalled. Verify that this is the correct directory.
	If you want to save these options to a response file, click Save Response File and enter the response file location and name. You can use response file later during a silent deinstallation. For more on silent or command line deinstallation, see Running the Oracle Universal Installer for Silent Deinstallation in <i>Installing</i> <i>Software with the Oracle Universal Installer</i> .
	Click Deinstall to begin removing the software.
Deinstallation Progress	Shows the deinstallation progress.
Deinstallation Complete	This screen appears when the deinstallation is complete. Review the information on this screen, then click Finish to dismiss the deinstaller.

Table 7-2	(Cont.) Deinstallation Screens and Descriptions
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7.5 Removing the Oracle Home Directory Manually

After the deinstaller is finished, you must manually remove your Oracle home directory and any existing sub-directories that the deinstaller did not remove.

For example, if your Oracle home directory was /home/Oracle/product/ ORACLE_HOME on a UNIX operating system:

cd /home/Oracle/product
rm -rf ORACLE_HOME

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

7.6 Removing the Program Shortcuts on Windows Operating Systems

On Windows operating systems, you must also manually remove the program shortcuts; the deinstaller does not remove them for you.

Go to the C:\Program Data\Microsoft\Windows\Start Menu\Programs \Oracle\Oracle Home\Product directory. If you only have one product installed in your Oracle home, you can remove the Oracle Home directory. If you have multiple products installed in your Oracle home, you must remove all products before removing the Oracle Home.

7.7 Removing Your Domain and Application Data

To remove your domain and application data:

1. Manually remove your Domain home directory.

For example, if your Domain home directory was /home/Oracle/config/ domains/b2b_domain on a UNIX operating system:

```
cd /home/Oracle/config/domains rm -rf b2b_domain
```

On a Windows operating system, if your Domain home directory was C:\Oracle \Config\domains\b2b_domain, use a file manager window and navigate to the C:\Oracle\Config\domains directory, then right-click on the b2b_domain folder and select **Delete**.

2. Manually remove your Application home directory.

For example, if your Application home directory was /home/Oracle/config/ applications/b2b_domain on a UNIX operating system:

```
cd /home/Oracle/config/applications
rm -rf b2b_domain
```

On a Windows operating system, if your Application home directory was C: \Oracle\Config\applications\b2b_domain, use a file manager window and navigate to the C:\Oracle\Config\applications directory, then rightclick on the b2b_domain folder and select **Delete**.

3. Backup the domain_registry.xml file in your Oracle home, then edit the file and remove the line associated with the domain you are removing. For example, to remove the b2b_domain, find the following line and remove it:

<domain location="/home/Oracle/config/domains/b2b_domain"/>

Save and exit the file when you are finished.

7.8 Reinstalling the Software

You can reinstall your software into the same Oracle home as a previous installation only if you deinstalled the software by following the instructions in this section, including manually removing the Oracle home directory.

When you reinstall, you can then specify the same Oracle home as your previous installation.

Consider the following cases where the Oracle home is not empty:

• Installing in an existing Oracle home that contains the same feature sets.

The installer warns you that the Oracle home you specified during installation already contains the same software you are trying to install.

Your options are:

- Select a different installation type. In this case, only the feature sets that do not already exist in the Oracle home directory will be installed.
- Select a different Oracle home directory.
- Installing in an existing, non-empty Oracle home.

For example, suppose that you chose to create your Domain home or Application home somewhere inside your existing Oracle home. This data is not removed during the deinstallation process, so if you try to reinstall into the same Oracle home, the installer does not allow it. Your options are to:

- 1. Deinstall your software from the Oracle home (as this section describes) and then remove the Oracle home directory. After this is complete, you can reinstall and reuse the same Oracle home location. Any domain or application data that was in the Oracle home must be re-created.
- **2.** Select a different Oracle home directory.

A

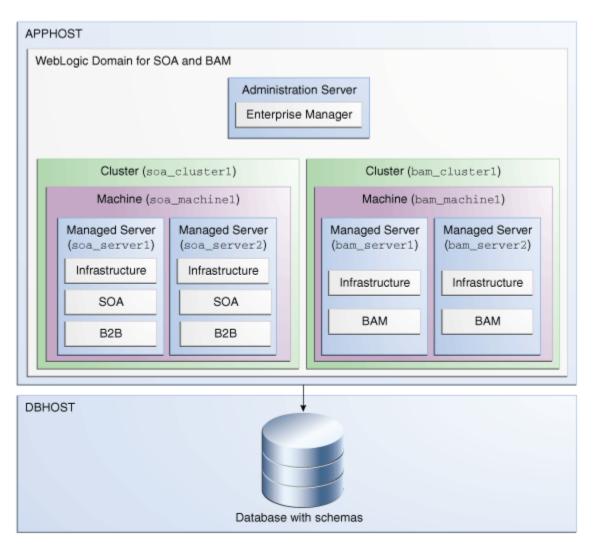
Secondary Topologies for Oracle B2B

This appendix provides alternate topologies for Oracle B2B.

A.1 Oracle SOA Suite, Oracle B2B, and Business Activity Monitoring (BAM) Topology

The topology in this section describes how to install Oracle Business Activity Monitoring in your Oracle B2B domain.

Use this topology to implement Oracle Business Activity Monitoring in your Oracle B2B domain. The Oracle Business Activity Monitoring software is targeted to its own cluster; this ensures that there is no resource contention between the Oracle B2B and Oracle Business Activity Monitoring software.



Roadmap for Installing and Configuring the Oracle SOA Suite, B2B, and Business Activity Monitoring Topology

The following table describes the roadmap needed to configure this topology on your system.

Table A-1Overview of the Installation and Configuration Steps for Oracle SOASuite, B2B, and Business Activity Monitoring

Task	Description	More Information	Special Instructions
Verify your system environment	Before beginning the installation, verify that the minimum system and network requirements are met.	See Roadmap for Verifying Your System Environment.	None.

Obtain the appropriate distribution	Oracle B2B requires an existing Oracle SOA Suite and Oracle Fusion Middleware Infrastructure installation. When you install Oracle SOA Suite, Business Activity Monitoring also gets automatically installed. You must install B2B in the same Oracle home as Oracle Fusion Middleware Infrastructure and Oracle SOA Suite.	See Understanding and Obtaining the Product Distributions.	You must obtain all distributions of Oracle Infrastructure, Oracle SOA Suite and Business Process Management, and Oracle B2B.
Determine your installation directories	Verify that the directories that will need to be created can be created or accessed by the installer, and exist on systems that meet the minimum requirements.	See "What are the Key Oracle Fusion Middleware Directories?" in Understanding Oracle Fusion Middleware.	None.
Install Oracle Fusion Middleware Infrastructure	Install Oracle Fusion Middleware Infrastructure to create the Oracle home directory for Oracle SOA Suite and B2B.	See Installing and Configuring the Oracle Fusion Middleware Infrastructure.	You do not need to configure Oracle Fusion Middleware Infrastructure.
Install Oracle SOA Suite	Install the Oracle SOA Suite software into the existing Oracle Infrastructure Oracle home.	See Installing and Configuring Oracle SOA Suite and Business Process Management.	You do not need to configure Oracle SOA Suite.
Install the Oracle B2B software	Install the Oracle B2B software into the existing Oracle Infrastructure and Oracle SOA Suite Oracle home.	See Installing the Oracle B2B and Healthcare Software.	Select B2B on the Installation Type screen.

Table A-1 (Cont.) Overview of the Installation and Configuration Steps for OracleSOA Suite, B2B, and Business Activity Monitoring

Create a WebLogic domain	Use the configuration wizard to create and configure the WebLogic domain. Ensure that you select the appropriate options on the configuration screens.	See Configuring the Oracle B2B Domain.	Follow the instructions provided for specific screens in Table A-2.
Start the servers	Once you complete the domain creation, start the administration and managed servers.	See Starting the Servers.	None.
Verify the configuration	Verify to ensure that the domain is configured properly.	See Verifying the Configuration.	None.
Next steps after installing and configuring Oracle B2B.	You can perform administrative as well as management tasks for the domain that you have just configured.	See Next Steps After Configuring the Domain.	None.

Table A-1 (Cont.) Overview of the Installation and Configuration Steps for OracleSOA Suite, B2B, and Business Activity Monitoring

Configuration Options to Select for Oracle SOA Suite, Oracle B2B, and Business Activity Monitoring

Almost all of the screens and options that you must select while configuring Oracle SOA Suite, Oracle B2B, and Business Activity Monitoring are identical to the ones provided in Configuring the Oracle B2B Domain. However, there are a couple of screens on which you must select different options, and Table A-2 lists the key screens and options. Ensure that you select the configuration options as provided in this section.

Screen	Description
Templates	This screen appears after you start the configuration wizard to create your domain.
	In addition to the templates listed in Selecting the Configuration Templates for Oracle B2B, select Business Activity Monitoring - 12.2.1 [soa]

 Table A-2
 Key Screens and Configuration Options for Oracle SOA Suite, Oracle

 B2B, and Business Activity Monitoring Topology

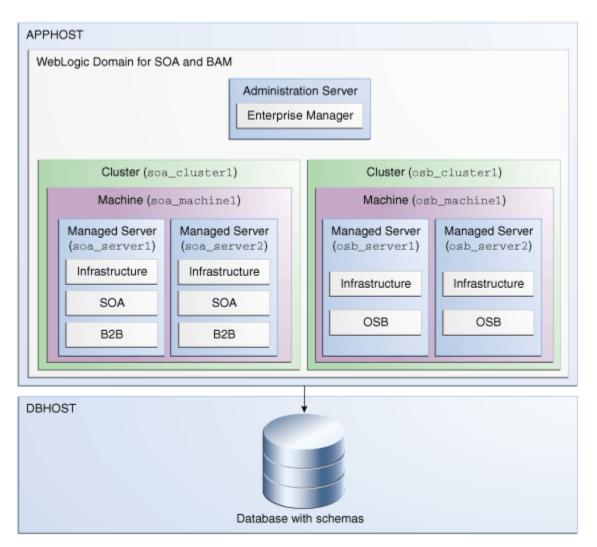
Managed Servers	On the Managed Servers screen, two managed servers, bam_server1 and soa_server1 , are
	created. Click Add and create two more managed servers, bam_server2 and soa_server2 .
	Ensure that in the Listen Address drop-down list, you select the IP address of the host on which the Managed Server will reside. Do not use "All Local Addresses."
	In the Server Groups drop-down list, ensure that soa_server1 and soa_server2 are targeted to SOA-MGD- SVRS and bam_server1 and bam_server2 to BAM 12-MGD-SVRS-ONLY .
Clusters	On the Clusters screen, create two clusters, soa_cluster1 and bam_cluster1 .
Assign Servers to Clusters	On this screen, assign the servers as given below:
	 bam_server1 and bam_server2 to bam_clu ster1
	• soa_server1 and soa_server2 to soa_cluste r1
Machines	On this screen, create two machines, bam_machine1 and soa_machine1
Assign Servers to Machine	On this screen, assign the servers as follows:AdminServer, bam_server1 and bam_serv er2 to bam_machine1.
	 soa_server1 and soa_server2 to soa_machi ne1.

Table A-2 (Cont.) Key Screens and Configuration Options for Oracle SOA Suite,Oracle B2B, and Business Activity Monitoring Topology

A.2 Understanding the Oracle SOA Suite, Oracle B2B, and Oracle Service Bus Topology

The topology in this section describes how to install Oracle Service Bus in your Oracle B2B domain.

Use this topology to implement Oracle Service Bus in your Oracle B2B domain. The Oracle Service Bus software is targeted to its own cluster; this ensures that there is no resource contention between the Oracle B2B and Oracle Service Bus software.



Roadmap for Installing and Configuring the Oracle SOA Suite, B2B, and Oracle Service Bus Topology

The following table describes the roadmap needed to configure this topology on your system.

Table A-3Overview of the Installation and Configuration Steps for Oracle SOASuite, B2B, and Oracle Service Bus Topology

Task	Description	More Information	Special Instructions
Verify your system environment	Before beginning the installation, verify that the minimum system and network requirements are met.	See Roadmap for Verifying Your System Environment.	None.

	Oracle Service Dus T		
Obtain the appropriate distribution	Oracle B2B requires and existing Oracle SOA Suite and Oracle Fusion Middleware Infrastructure installation. You must install B2B in the same Oracle home as Oracle Fusion Middleware Infrastructure, Oracle SOA Suite, and Oracle Service Bus.	See Understanding and Obtaining the Product Distributions.	You must obtain all distributions of Oracle Infrastructure, Oracle SOA Suite and Business Process Management, and Oracle Service Bus.
Determine your installation directories	Verify that the directories that will need to be created can be created or accessed by the installer, and exist on systems that meet the minimum requirements.	See "What are the Key Oracle Fusion Middleware Directories?" in <i>Understanding Oracle</i> <i>Fusion Middleware.</i>	None.
Install Oracle Fusion Middleware Infrastructure	Install Oracle Fusion Middleware Infrastructure to create the Oracle home directory for Oracle SOA Suite and B2B.	See Installing and Configuring the Oracle Fusion Middleware Infrastructure.	You do not need to configure Oracle Fusion Middleware Infrastructure.
Install Oracle SOA Suite	Install the Oracle SOA Suite software into the existing Oracle Infrastructure Oracle home.	See Installing and Configuring Oracle SOA Suite and Business Process Management.	You do not need to configure Oracle SOA Suite.
Install the Oracle Service Bus	Install the Oracle Service Bus software into the existing Oracle Infrastructure and Oracle SOA Suite home.	See Installing and Configuring Oracle Service Bus.	You do not need to configure Oracle Service Bus.
Install the Oracle B2B software	Install the Oracle B2B software into the existing Oracle Infrastructure and Oracle SOA Suite Oracle home.	See Installing the Oracle B2B and Healthcare Software.	Select B2B on the Installation Type screen.

Table A-3 (Cont.) Overview of the Installation and Configuration Steps for OracleSOA Suite, B2B, and Oracle Service Bus Topology

Create a WebLogic domain	Use the configuration wizard to create and configure the WebLogic domain. Ensure that you select the appropriate options on the configuration screens.	See Configuring the Oracle B2B Domain.	Follow the instructions provided for specific screens in Table A-4.
Start the servers	Once you complete the domain creation, start the administration and managed servers.	See Starting the Servers.	None.
Verify the configuration	Verify to ensure that the domain is configured properly.	See Verifying the Configuration.	None.
Next steps after installing and configuring Oracle B2B.	You can perform administrative as well as management tasks for the domain that you have just configured.	See Next Steps After Configuring the Domain.	None.

Table A-3 (Cont.) Overview of the Installation and Configuration Steps for OracleSOA Suite, B2B, and Oracle Service Bus Topology

Configuration Options to Select for Oracle SOA Suite, Oracle B2B, and Oracle Service Bus

Almost all of the screens and options that you must select while configuring Oracle SOA Suite, Oracle B2B, and Oracle Service Bus are identical to the ones provided in Configuring the Oracle B2B Domain. However, there are a couple of screens on which you must select different options, and Table A-2 lists the key screens and options. Ensure that you select the configuration options as provided in this section.

Table A-4Key Screens and Configuration Options for Oracle SOA Suite, OracleB2B, and Business Activity Monitoring Topology

Screen	Description
Templates	This screen appears after you start the configuration wizard to create your domain.
	In addition to the templates listed in Selecting the Configuration Templates for Oracle B2B, select Oracle Service Bus - 12.2.1 [soa]

Managed Servers	On the Managed Servers screen, two managed servers, osb_server1 and soa_server1 , are created. Click Add and create two more managed servers, osb_server2 and soa_server2 .
	Ensure that in the Listen Address drop-down list, you select the IP address of the host on which the Managed Server will reside. Do not use "All Local Addresses."
	In the Server Groups drop-down list, ensure that soa_server1 and soa_server2 are targeted to SOA-MGD- SVRS and osb_server1 and osb_server2 to O SB 12-MGD-SVRS-ONLY .
Clusters	On the Clusters screen, create two clusters, soa_cluster1 and osb_cluster1 .
Assign Servers to Clusters	 On this screen, assign the servers as given below: osb_server1 and osb_server2 to osb_cluste r1 soa_server1 and soa_server2 to soa_cluste r1
Machines	On this screen, create two machines, osb_machine1 and soa_machine1 .
Assign Servers to Machine	 On this screen, assign the servers as follows: AdminServer, osb_server1 and osb_server 2 to osb_machine1. soa_server1 and soa_server2 to soa_machine1.

Table A-4 (Cont.) Key Screens and Configuration Options for Oracle SOA Suite,Oracle B2B, and Business Activity Monitoring Topology