Oracle® Fusion Middleware

Creating WebLogic Domains Using the Configuration Wizard 12c (12.2.1.2)

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Documentation for administrators that describes how to use the Configuration Wizard to create, update, and extend WebLogic domains.



Oracle Fusion Middleware Creating WebLogic Domains Using the Configuration Wizard, 12c (12.2.1.2)

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Primary Authors: Geetha Savithriamma,

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Preface

This preface describes the document accessibility features and conventions used in this guide - Oracle Fusion Middleware Creating WebLogic Domains Using the Configuration Wizard.

Intended Audience

Documentation Accessibility

Related Documents

Conventions

Intended Audience

This guide is intended for Oracle Fusion Middleware administrators.

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Related Documents

You can access the documents referenced in this guide on Oracle Technology Network at http://www.oracle.com/technology:

- Oracle Fusion Middleware Installing and Configuring Oracle WebLogic Server and Coherence
- Oracle Fusion Middleware Administering Node Manager for Oracle WebLogic Server
- Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server
- Oracle Fusion Middleware Administering Server Startup and Shutdown for Oracle WebLogic Server

Oracle Fusion Middleware WLST Command Reference for WebLogic Server

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.		

Introduction

A WebLogic domain consists of several infrastructure components. You can create and extend a WebLogic domain by using the Configuration Wizard. Additional tools are also available to create, extend, and manage domains.

This chapter includes the following sections:

Introduction to WebLogic Domains

A WebLogic domain is the basic administrative unit of WebLogic Server. It consists of one or more WebLogic Server instances, and logically related resources and services that are managed collectively as one unit.

Overview of the Configuration Wizard

The Configuration Wizard helps create and update a WebLogic domain. The Configuration Wizard supports different GUI modes. When installing a standalone WebLogic Server, use the Quick Start Configuration Wizard to configure the WebLogic Server sample domains.

About Templates

In the context of the Configuration Wizard, the term *template* refers to a Java Archive (JAR) file, which contains the files and scripts required to create or extend a WebLogic domain. A WebLogic Server product installation includes a set of predefined domain and extension templates.

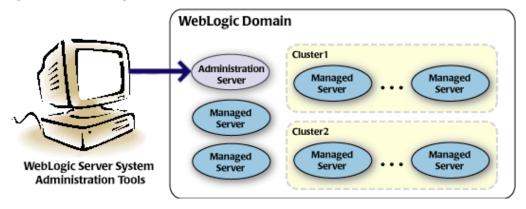
Additional Tools for Creating, Extending, and Managing WebLogic Domains

In addition to the Configuration Wizard, different tools are available to create, extend, and manage domains. You can also perform run-time configuration by using the consoles of the product components (for example, the WebLogic Server Administration Console).

1.1 Introduction to WebLogic Domains

A WebLogic domain is the basic administrative unit of WebLogic Server. It consists of one or more WebLogic Server instances, and logically related resources and services that are managed collectively as one unit.

Figure 1-1 WebLogic Domain Structure



As shown in Figure 1-1, the basic domain infrastructure consists of one Administration Server and optional Managed Servers and clusters. A WebLogic domain can also contain Coherence clusters.

The components of a WebLogic domain are described in Table 1-1.

Table 1-1 WebLogic Domain Infrastructure Components

Component	Description		
Administration Server	A domain includes one WebLogic Server instance that is configured as an Administration Server. All changes to configuration and deployment of applications are done through the Administration Server.		
	The Administration Server provides a central point for managing the domain and providing access to the WebLogic Server administration tools. These tools include:		
	 WebLogic Server Administration Console: Graphical user interface to the Administration Server. WebLogic Server Node Manager: A Java program that lets you start and stop server instances—both Administration Servers and Managed Servers— remotely, and to monitor and automatically restart them after an unexpected failure. 		
	Note that the Node Manager is installed on all the machines that host any server instance—both the Administration Server and Managed Servers. For more information about the WebLogic Server administration tools, see Summary of System Administration Tools and APIs in <i>Oracle Fusion Middleware Understanding Oracle WebLogic Server</i> .		
Managed Servers	All other WebLogic Server instances in a domain are called Managed Servers. Managed Servers host application components and resources, which are also deployed and managed as part of the domain. In a domain with only a single WebLogic Server instance, that single server works as both the Administration Server and the Managed Server.		

Table 1-1 (Cont.) WebLogic Domain Infrastructure Components

Component	Description		
Clusters	A domain may also include WebLogic Server clusters, which are groups of Managed Server instances that work together to provide scalability and high availability for applications. Clusters can improve performance and provide failover when a server instance becomes unavailable. The servers within a cluster can either run on the same machine or reside in different machines. To the client, a cluster appears as a single WebLogic Server instance.		
Coherence clusters	A domain may also include Coherence clusters. A Coherence cluster is a group of cluster nodes that share a group address, which allows the cluster nodes to communicate. For more information on Coherence clusters, see Clustering in Coherence in <i>Oracle Fusion Middleware Developing Applications with Oracle Coherence</i> .		
Managed Coherence servers	A domain may also include managed Coherence servers. A managed Coherence server is any WebLogic Managed Server that is assigned to a Coherence cluster. For more information on managed Coherence servers, see Configuring Managed Coherence Servers in <i>Oracle Fusion Middleware Administering Clusters for Oracle WebLogic Server</i> .		

All Managed Servers in a domain must run the same version of WebLogic Server. The Administration Server can run either the same version as the Managed Servers in the domain, or a later patch set.

In addition to infrastructure components, a domain defines the basic network configuration for the server instances that it contains. Specifically, a domain defines application deployments, supported application services (such as database and messaging services), security options, and physical host machines.

Domain configuration information is stored in the configuration directories under the domain directory.

Common WebLogic Domain Configurations

You might find it useful to configure multiple WebLogic Domains based on specific criteria, such as system administrator responsibilities, the logical classification of applications, the geographical locations of servers, or size. The following table outlines the most common domain configurations.

Table 1-2 Common WebLogic Domain Configurations

Configuration	Description
Domain with Managed Servers	In typical production environments, several Managed Servers can host applications, and an Administration Server performs management operations.
Domain with Managed Servers and clusters	In production environments that require increased performance, throughput, or availability for an application, several Managed Servers might be grouped in a cluster.
	In such a case, the WebLogic domain consists of one or more clusters with the applications they host, additional Managed Servers (if necessary), and an Administration Server to perform management operations.
Standalone server domain	In development or test environments, a single application server might be deployed independently without Managed Servers. In such a case, you can have a WebLogic domain consisting of a single Administration Server that also hosts the applications you want to test or develop.
	Although a single server domain is typically used for development and test environments, this domain type is fully supported for production use and may be appropriate for light-load applications.

In production environments, Oracle recommends that you deploy applications only on Managed Servers, and that you reserve the Administration Server for management tasks.

For more information about WebLogic domains, see Understanding Oracle WebLogic Server Domains in *Oracle Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server*.

1.2 Overview of the Configuration Wizard

The Configuration Wizard helps create and update a WebLogic domain. The Configuration Wizard supports different GUI modes. When installing a standalone WebLogic Server, use the Quick Start Configuration Wizard to configure the WebLogic Server sample domains.

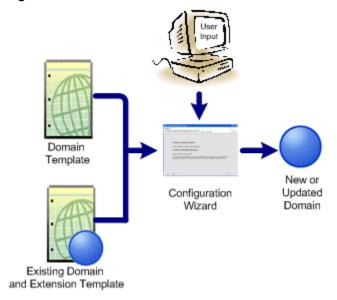
Before you can develop and run an application on a WebLogic domain, you must first create the WebLogic domain. The Configuration Wizard (illustrated in Figure 1-2), simplifies the process of creating and updating a domain.

If your domain includes Fusion Middleware products, you can use the Reconfiguration Wizard to reconfigure the Fusion Middleware applications in the domain when you upgrade to a new version of WebLogic Server and the applications. See Reconfiguring WebLogic Domains in *Oracle Fusion Middleware Upgrading Oracle WebLogic Server*.

To create or extend a WebLogic domain by using the Configuration Wizard, you simply select the product components (product templates) to be included in the domain (or choose a template that best meets your requirements), and provide basic configuration information. The Configuration Wizard then creates or updates the domain by adding the resources defined in the selected product templates.

For more information about templates, see About Templates.

Figure 1-2 Configuration Wizard



After you use the Configuration Wizard to create a WebLogic domain, you can start a WebLogic Server instance in the domain to develop, test, and deploy applications.

Note:

The Domain Template Builder tool simplifies the process of creating templates by guiding you through the process of creating custom domain and extension templates. You can select these templates to create and update domains either by using the Configuration Wizard or the WebLogic Scripting Tool (WLST). For information about the Domain Template Builder, see Introduction in *Oracle Fusion Middleware Creating Domain Templates Using the Domain Template Builder*. For information about creating domains using WLST, see Creating Domains Using WLST Offline in *Oracle Fusion Middleware Understanding the WebLogic Scripting Tool*.

Modes of Operation

The Configuration Wizard supports three modes of operation, namely Normal GUI mode, Quick Start mode, and Reconfiguration mode. You can use the Configuration Wizard only when there is no server running.

Quick Start Configuration Wizard

The Quick Start Configuration Wizard helps you configure the sample domains that you when you install a standalone WebLogic Server. You can also run the Quick Start Wizard manually to create the sample domains.

Output of the Configuration Wizard

A set of directories is automatically created when you create a WebLogic domain by using the Configuration Wizard. Each directory contains specific information about the domain that is created.

1.2.1 Modes of Operation

The Configuration Wizard supports three modes of operation, namely Normal GUI mode, Quick Start mode, and Reconfiguration mode. You can use the Configuration Wizard only when there is no server running.

- Normal GUI mode, which displays all of the applicable screens for configuring or extending your domain. See <u>Starting the Configuration Wizard</u>, for information about how to start the wizard in this mode.
- Quick Start mode, which displays a small subset of configuration screens from which you can specify the critical settings for the WebLogic Server samples domains. See Running the Quick Start Configuration Wizard.
- Reconfiguration mode, which is used to upgrade your WebLogic domain after
 installing a new WebLogic Server version and, if applicable, any installed Fusion
 Middleware applications to be compatible with a newly installed WebLogic Server
 version. For more information on this mode, see Reconfiguring a WebLogic
 Domain in Graphical Mode in Oracle Fusion Middleware Upgrading Oracle WebLogic
 Server.

Note:

For a scripted, silent-mode method, you can use WLST. For more information, see Using the WebLogic Scripting Tool in *Oracle Fusion Middleware Understanding the WebLogic Scripting Tool*.

1.2.2 Quick Start Configuration Wizard

The Quick Start Configuration Wizard helps you configure the sample domains that you when you install a standalone WebLogic Server. You can also run the Quick Start Wizard manually to create the sample domains.

When installing WebLogic Server (standalone), if you included the samples, an option is provided on the Installation Complete screen to run the Quick Start Configuration Wizard to configure the WebLogic Server sample domains. If you select this option, the Quick Start Configuration Wizard starts after the installer completes. In this mode, you are presented with one screen, Configuration, from which you specify the following critical settings for the samples domains:

- Administration Server username and password
- Domain parent directory
- Application parent directory
- Administration Server listen address and listen port
- SSL listen port
- Coherence listen port (if applicable)

The following Administration Server settings are enabled by default for the samples domains and cannot be changed:

- SSL
- Coherence
- Coherence storage

Note:

You can also run the Quick Start Wizard manually to create the sample domains. See Running the Quick Start Configuration Wizard.

1.2.3 Output of the Configuration Wizard

A set of directories is automatically created when you create a WebLogic domain by using the Configuration Wizard. Each directory contains specific information about the domain that is created.

Directory	Description		
autodeploy	This directory provides a location from which you can deploy applications quickly on a development server. When the WebLogic Server instance is running in development mode, it automatically deploys any applications or modules that you place in this directory.		
bin	This directory contains scripts to start and stop the Administration Server, and, optionally, Managed Servers.		

Directory	Description
config	This directory contains:
	 A domain-specific configuration file, config.xml, which specifies the name of the WebLogic domain and the configuration parameter settings for each server instance, cluster, resource, and service in the domain. Subdirectories that contain the configuration for various system modules: coherence, configCache, deployments, diagnostics, jdbc, jms, lib, nodemanager, security, and startup. These subdirectories contain configuration files that are incorporated, by reference, into the config.xml file. Note: Depending on your configuration, some
	subdirectories may not exist.
console-ext	This directory contains console extensions used by the Administration Server.
init-info	This directory contains files used by the Configuration Wizard to support creation and extension of the WebLogic domain.
lib	This directory contains the domain library. When the server starts, any jar files that you place in this directory are dynamically added to the end of the server classpath.
nodemanager	This directory contains Node Manager configuration files.
security	This directory contains common security files for all the servers in the domain.
servers	This directory contains a subdirectory for each server in the domain. These server subdirectories, in turn, contain subdirectories that hold directories and files specific to each server in a WebLogic domain, such as bin, cache, data, logs, security, and tmp.
user_staged_config	If the domain is configured to be user-staged, that is, the administrator is responsible for staging (copying) the configuration information to the Managed Servers, this directory provides an alternative to the config directory.

If the template used to create a WebLogic domain includes applications, the application files are located, by default, in <code>ORACLE_HOME/user_projects/applications/domain_name</code>, unless you specified another location.

Note:

Oracle recommends that you create your domains outside of the Oracle Home directory. This makes it easier for you to upgrade to a newer version of WebLogic Server without having to recreate your domains and applications.

For more information, see Domain Configuration Files in *Oracle Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server*

1.3 About Templates

In the context of the Configuration Wizard, the term *template* refers to a Java Archive (JAR) file, which contains the files and scripts required to create or extend a WebLogic domain. A WebLogic Server product installation includes a set of predefined domain and extension templates.

The types of templates that the Configuration Wizard uses to create or update WebLogic domains include:

Domain template: This type of template defines the full set of resources within a
WebLogic domain, including infrastructure components, applications, services,
security options, and general environment and operating system options. You can
create this type of template from an existing WebLogic domain by using the
Domain Template Builder tool or the pack command. Subsequently, you can
create a WebLogic domain based on the template by using the Configuration
Wizard.

The product distribution includes a base WebLogic domain template. A domain template defines the core set of resources within a domain, including

- An Administration Server and basic configuration information
- Infrastructure components
- General environment and operating system requirements.

The domain templates provided by Oracle do not include sample applications, although domain templates that were created using the pack command may contain sample applications if they were installed in the domain that was packed. You can use a domain template to create a basic WebLogic domain, which you can then extend with applications and services, or additional product components.

- Extension template: Whereas a domain template can create a self-sufficient WebLogic domain, you use an extension template to add functionality to an existing domain. In the Configuration Wizard, before selecting the extension template to use, you must select the WebLogic domain you want to extend.
- Reconfiguration template: Reconfiguration templates are provided by Oracle to make it easier for you to update a domain that contains Fusion Middleware products. These templates are automatically applied, and your Fusion Middleware applications are automatically updated, when you use the Reconfiguration Wizard as part of the process for upgrading to a new version of WebLogic Server and Fusion Middleware products. The Reconfiguration Wizard detects which Fusion Middleware products are installed, and, if a reconfiguration template is available for a given product, automatically applies it. For more information, see Reconfiguring WebLogic Domains in Oracle Fusion Middleware Upgrading Oracle WebLogic Server.
- Managed Server template: This type of template defines the subset of resources
 within a WebLogic domain that are required to create a Managed Server domain
 on a remote machine. You can create this type of template by using the pack
 command.

The WebLogic Server product installation includes the base WebLogic domain template and various extension templates that allow you to add component features

and samples to the base domain. For more information about these templates and how they relate to each other, see WebLogic Server Templates in *Oracle Fusion Middleware Domain Template Reference*.

1.4 Additional Tools for Creating, Extending, and Managing WebLogic Domains

In addition to the Configuration Wizard, different tools are available to create, extend, and manage domains. You can also perform run-time configuration by using the consoles of the product components (for example, the WebLogic Server Administration Console).

Table 1-3 Additional Tools for Creating, Extending, and Managing WebLogic Domains

To do this	Use the following tools		
Create a WebLogic domain or extend an existing	WebLogic Scripting Tool (WLST)		
domain	WLST is a command-line scripting interface that you can use to interact with and configure WebLogic Server instances and domains. When WLST is offline, it enables you to create a WebLogic domain or update an existing domain without connecting to a running WebLogic Server, supporting the same functionality as the Configuration Wizard.		
	For more information, see Using the WebLogic Scripting Tool in <i>Oracle Fusion Middleware Understanding the WebLogic Scripting Tool</i> . • unpack command		
	You can use this command to create a WebLogic domain from the command line, by using a template that is compatible with your current installation. You cannot use unpack to extend an existing domain.		
	For more information, see The Unpack Command in Oracle Fusion Middleware Creating Templates and Domains Using the Pack and Unpack Commands.		
Add applications and services, or modify existing	WebLogic Server Administration Console		
settings	 For more information, see Using the WebLogic Server Administration Console in <i>Oracle Fusion Middleware Understanding Oracle WebLogic Server</i>. Other system administration tools, such as WLST, JMX, and Ant. 		
	For more information, see Summary of System Administration Tools and APIs in <i>Oracle Fusion Middleware Understanding Oracle WebLogic Server</i> .		

Table 1-3 (Cont.) Additional Tools for Creating, Extending, and Managing WebLogic Domains

To do this	Use the following tools		
Manage and monitor the health and status of the domain	 WebLogic Diagnostics Framework (WLDF) For more information, see Using the Built-in Diagnostic System Modules in Oracle Fusion Middleware Configuring and Using the Diagnostics Framework for Oracle WebLogic Server. WebLogic Server Administration Console For more information, see About the WebLogic 		
	Server Administration Console in <i>Oracle Fusion Middleware Understanding Oracle WebLogic Server</i> . • WebLogic Server Node Manager		
	For more information, see Starting an Administration Server Using WLST and Node Manager in <i>Oracle Fusion Middleware Administering Server Startup and Shutdown for Oracle WebLogic Server</i> and Introduction in <i>Oracle Fusion Middleware Administering Node Manager for Oracle WebLogic Server</i> .		

Additional	Tools for	Creating.	Extending.	and Managing	WebLogic Domains
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Creating a WebLogic Domain

You can create a new WebLogic domain by using the Configuration Wizard in the graphical mode. Depending on your domain requirements and customizations, the Configuration Wizard takes you through a series of screens during the domain creation process.

This chapter includes the following sections:

Setting the CONFIG_JVM_ARGS Environment Variable

Before starting the Configuration Wizard, you must set a value for the CONFIG_JVM_ARGS environment variable. Setting the appropriate value for the variable enables you to specify the type of domain you want to create, whether expanded or compact.

Domain Creation Process

You can use the Configuration Wizard to create a WebLogic domain, by selecting either the product components to include in your domain or the template JAR files. If necessary, you can also customize the domain to suit your environment.

Domain Version Restrictions

You must be aware of the restrictions when you use a custom template to create a domain. This awareness will help you create or upgrade to the required version of the WebLogic domain.

Starting the Configuration Wizard

You can start the Configuration Wizard in the graphical mode either from the Windows **Start** menu or from the command line. The console for the machine on which the product installation resides must support Java-based GUIs.

Creating a WebLogic Domain in the Graphical Mode

Use the Configuration Wizard in graphical mode to create a WebLogic domain. The Configuration Wizard takes you through a series of screens that help you create a WebLogic Server domain. Additional screens appear depending on the components that you add for the domain, and other factors.

Starting the Administration Server

You can start the Administration Server after you finish creating the domain. You can start the server by using either the WebLogic Server Administration Console or the command line.

Running the Quick Start Configuration Wizard

The Quick Start Configuration Wizard helps you configure the sample domains and the Fusion Middleware product domains that use the Derby (JavaDB) database driver. You can run the wizard automatically

or manually depending on the domain type (sample or product) you want to configure.

2.1 Setting the CONFIG_JVM_ARGS Environment Variable

Before starting the Configuration Wizard, you must set a value for the CONFIG_JVM_ARGS environment variable. Setting the appropriate value for the variable enables you to specify the type of domain you want to create, whether expanded or compact.

Set the value to -Djava.security.egd=file:/dev/./urandom to reduce the time the Configuration Wizard takes to create or update a domain.

In addition, if you want to create a compact domain on either Windows or Linux, set – Dcom.oracle.cie.config.showProfile=true in CONFIG_JVM_ARGS.

This causes domain profile selections (compact and expanded) to be displayed on the Configuration Type screen of the Configuration Wizard. For more information on domain profiles, see Domain Topology Profiles in *Oracle Fusion Middleware Domain Template Reference*.

2.2 Domain Creation Process

You can use the Configuration Wizard to create a WebLogic domain, by selecting either the product components to include in your domain or the template JAR files. If necessary, you can also customize the domain to suit your environment.

Table 2-1 shows the sequence of screens that are presented by the Configuration Wizard. The screens that you see depend on your domain requirements and whether or not you need to customize your domain.

You may want to customize your domain in the following circumstances:

- To create a multi-server or clustered domain when using the default settings. All the predefined WebLogic Server templates (those delivered with WebLogic Server) create single-server domains.
- To use a database that is different from the default database in the domain or extension template. In this case, you must customize the JDBC settings to point to the appropriate database.
- To customize the listen port and the SSL port.
- To create a test environment by using a domain template that you received, and to modify the domain configuration to work in the test environment based on your requirements.

2.3 Domain Version Restrictions

You must be aware of the restrictions when you use a custom template to create a domain. This awareness will help you create or upgrade to the required version of the WebLogic domain.

You can use a custom template by using either WLST or the **Create Domain Using Custom Template** option on the **Templates** screen of the Configuration Wizard.

• The versions of the WebLogic Server templates that were used to create the custom domain and custom domain template must be the same version as the WebLogic Server installation in which the domain will be used. For example, if you created a WebLogic domain using the WebLogic Server Base Domain 10.3.6 template, and

then created a custom domain template from that domain, you cannot use the custom domain template to create a domain in a WebLogic Server 12.2.1 installation.

If you want to create a custom domain template that was created from a domain from a previous version of WebLogic Server, you must first upgrade that domain to the WebLogic Server version in which you want to use the domain. You can upgrade the domain using either WLST or the Fusion Middleware Reconfiguration Wizard as described in Reconfiguration Wizard Screens in Oracle Fusion Middleware *Upgrading Oracle WebLogic Server.*

For more information about domain version restrictions, see Domain Restrictions in Oracle Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server.

2.4 Starting the Configuration Wizard

You can start the Configuration Wizard in the graphical mode either from the Windows **Start** menu or from the command line. The console for the machine on which the product installation resides must support Java-based GUIs.

- To start the Configuration Wizard in graphical mode on a Windows platform, choose Start > All Programs > Oracle > Oracle Home > WebLogic Server version > Tools > Configuration Wizard.
- To start the Configuration Wizard in graphical mode from a Windows command prompt or on UNIX systems:
 - Log in to the system on which the product is installed.
 - Open an MS-DOS command prompt window (on Windows) or a command shell (on UNIX).
 - Go to the following directory:

On Windows: ORACLE_HOME/oracle_common/common/bin

On UNIX: ORACLE_HOME/oracle_common/common/bin

Replace ORACLE_HOME with the Oracle Home directory that was specified at installation.

Execute the following command:

On Windows: config.cmd On UNIX: sh config.sh

When you run the config.cmd or config.sh command, the following error message might be displayed to indicate that the default cache directory is not valid:

sys-package-mgr: can't create package cache dir

You can change the cache directory by including the - Dpython.cachedir=valid_directory option in the command line.

To create a log file of the Configuration Wizard session, include the - log=config.log -log_priority=debug parameter in the command. You can specify any file name for the log file, such as config_today.log. The log file is stored in the *logs* directory of the Oracle Home directory. Other valid values for log_priority are OFF, SEVERE, WARNING, INFO, CONFIG, FINE, FINER, FINEST, and ALL.

The Configuration Type screen is displayed.

2.5 Creating a WebLogic Domain in the Graphical Mode

Use the Configuration Wizard in graphical mode to create a WebLogic domain. The Configuration Wizard takes you through a series of screens that help you create a WebLogic Server domain. Additional screens appear depending on the components that you add for the domain, and other factors.

Start the Configuration Wizard as described in Starting the Configuration Wizard.

Note:

In situations where you cannot run the Configuration Wizard in GUI mode, Oracle recommends that you use a WLST script to create or extend a domain. For more information, see Creating and Using a Domain Template (Offline) in Oracle Fusion Middleware Understanding the WebLogic Scripting Tool.

If your installation includes Fusion Middleware products, refer to Configuring Fusion Middleware Domains, for instructions. Fusion Middleware product configuration includes additional Configuration Wizard screens that are not included in the workflow in this chapter.

The Configuration Wizard displays a sequence of screens, in the order listed in Configuring Screens for Creating a New WebLogic Domain. For more information on each screen, refer to the related section in Configuration Wizard Screens, or click the link in the **Screen** column.

Table 2-1 Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Type - No Profiles	When CONFIG_JVM_ARGS is not set to display domain profile options	Select Create a new domain . In the Domain Location box, enter the path to the new domain, or click Browse to create the domain directory. Click Next to continue.

Table 2-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Type - Profiles	When CONFIG_JVM_ARGS is set to - Dcom.oracle.cie.config.showProfile	Select Create a new expanded domain or Create a new compact domain as appropriate.
	=true	In the Domain Location box, enter the path to the new domain, or click Browse to create the domain directory.
		Click Next to continue.
Templates	Always	Select the appropriate option:
		 Select Create Domain Using Product Templates, and then select the check box for each product to include in the domain.
		 Select Create Domain Using Custom Template, and then click Browse to locate the domain template on your local drive or network.
		Click Next to continue.
Application Location	Only if one or more of the selected templates define an application.	Specify the directory in which the domain's applications are to be stored.
		Click Next to continue.
Administrator Account	Always	Specify the username and password for the domain's administrator account.
		Click Next to continue.
Domain Mode and JDK	Always	Select the startup mode to use.
		Select the JDK to use in the domain or click Browse to navigate to the JDK you want to use.
		Click Next to continue.
Database Configuration Type	Only if the domain includes components that require JDBC data sources, GridLink data sources, or Oracle RAC multi data sources	See Configuring Data Sources, for information about the relevant screens.
Database Scripts	Only if the selected products or template includes a set of SQL files organized by database type	Select the data sources for which you want to run the database scripts.
		Select the database version.
		Click Run Scripts.
		After running all necessary scripts, click Next to continue.

Table 2-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action	
Advanced Configuration	Always	Select the check box for each category (if any) for which you want to perform advanced configuration tasks	
		The available check boxes depend on the resources that are configured in the selected products or template.	
		Click Next to continue.	
		See Advanced Configuration, for the sequence of screens that are displayed if you select all available options.	
Configuration Summary	Always	Review the configuration for your domain by selecting a Summary View, and then selecting individual items in the list for that view.	
		If the domain is configured as you want it, click Create to create the domain.	
		If you need to make changes to the configuration, click Previous to return to the appropriate screen for the settings you want to change.	
Configuration Progress	Always	Shows the progress of the domain creation.	
		When the process completes, click Next .	
Configuration Success	Always	Review the domain creation results.	
-	•	Click Finish to exit the Configuration Wizard.	

Configuring Data Sources

The data source configuration screens are displayed in the Configuration Wizard only if the domain includes components that require JDBC data sources or Oracle RAC multi data sources.

Advanced Configuration

You can use the Advanced Configuration screen to select all categories for which you want to perform advanced configurations. For each category that you select, you can perform the advanced configurations in the appropriate configuration screen.

2.5.1 Configuring Data Sources

The data source configuration screens are displayed in the Configuration Wizard only if the domain includes components that require JDBC data sources or Oracle RAC multi data sources.

Table 2-2 lists the sequences of data source screens. For more information on each screen, refer to the related section in Configuration Wizard Screens, or click the link in the **Screen** column.

After configuring the screens described in this section, return to Table 2-1.

Table 2-2 Data Source Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action	
JDBC Data Sources	Only if the domain includes components that require JDBC data sources	Select a data source to configure, and then do one of the following: Configure the fields for the data source Select the Convert to GridLink option Select the Convert to RAC multidata source option Click Next to continue.	
GridLink Oracle RAC Data Sources	Only if the domain includes components that require JDBC data sources, and you selected the Convert to GridLink option for at least one data source on the Configure JDBC Data Source screen	Configure the fields for the Gridlinl RAC data source, including the Service Name, Service Instance, ONS Host, wallet file, and wallet password. Click Next to continue.	
Oracle RAC Multi Data Sources	Only if the domain includes components that require JDBC data sources, and you selected the Convert to RAC multi data source option for at least one data source on the Configure JDBC Data Source screen	Configure the fields for the Oracle RAC multi data source, including the Oracle RAC host name, instance name, and port. Click Next to continue.	
JDBC Data Sources Test	Only if the domain includes components that require JDBC data sources	Select the data sources to test, and click Test Connection . Wait for the connection test(s) to complete. Note: In order to test connections, the database to which you are trying to connect must be running. If you do not want to test connections at this time, deselect all data sources. Click Next to continue.	

2.5.2 Advanced Configuration

You can use the Advanced Configuration screen to select all categories for which you want to perform advanced configurations. For each category that you select, you can perform the advanced configurations in the appropriate configuration screen.

This section describes the sequence of screens that is displayed if you select the options listed on Advanced Configuration screen.

Table 2-3 Advanced Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action Change the settings for the Administration Server as needed. Click Next to continue.	
Administration Server	Only if you have selected Administration Server on the Advanced Configuration screen		
Node Manager	Only if you have selected Node Manager on the Advanced Configuration screen	Select the Node Manager Type . Enter the username and password for accessing the Node Manager. Click Next to continue.	
Managed Servers	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen	Add, delete, clone, or reconfigure Managed Servers as needed. Click Next to continue.	
Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen	Add, delete, or reconfigure clusters as needed. Click Next to continue.	
Server Templates	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen	Add templates to or delete templates from the domain you are configuring. Click Next to continue.	
Assign Servers to Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen, and your domain includes at least one cluster	Add servers to or remove servers from the clusters in your domain. Click Next to continue.	
HTTP Proxy Applications	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen, and your domain includes at least one cluster, and at least one Managed Server that is not assigned to a cluster	For each cluster, specify whether or not you want to create an HTTP proxy application for the cluster. If you select the Create HTTP Proxy check box for a cluster, select the proxy server to use for that cluster. Click Next to continue.	
Coherence Clusters	Only if you have selected Managed Servers , Clusters , and Coherence on the Advanced Configuration screen, and Coherence is installed with WebLogic Server	Accept the default cluster name or type a new name for the Coherence cluster. Enter the port number to use as the Coherence cluster listen port. Click Next to continue.	
Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen	Select the Machine tab (Windows) or Unix Machine tab (UNIX). Add machines as needed. Configure the settings for each machine. Click Next to continue.	

Table 2-3 (Cont.) Advanced Configuration Screens

Screen	When Does This Screen Appear?	Assign the Administration Server and Managed Servers to the appropriate machines. Click Next to continue.	
Assign Servers to Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen, and there is at least one machine configured in the domain		
Virtual Targets	Only if you have selected Topology on the Advanced Configuration screen.	Add, configure, and delete virtual targets that you want to use to run WebLogic Server in a multitenant mode.	
		For an overview of multitenancy in Oracle WebLogic Server, see Oracle WebLogic Server Multitenant in Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant.	
		For a definition of virtual targets, see Virtual Targets in <i>Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant</i> .	
		Click Next to continue.	
Partitions	Only if you have selected Topology on the Advanced Configuration screen.	Add the required number of partitions. Later, you will assign virtual targets to each partition that you define.	
		For more information, see the following resources in <i>Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant</i>	
		Click Next to continue.	
Assign Virtual Targets to Partitions	Only if you have defined virtual targets and partitions for the domain being configured	Associate a virtual target to a partition. A partition can have zero or more virtual targets. Click Next to continue.	

Table 2-3 (Cont.) Advanced Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action	
Deployments Targeting	Only if you have selected Deployments and Services on the Advanced Configuration screen, and a selected product or template contains J2EE applications or libraries	applications or libraries.	
		Note: While creating a Restricte d JRF domain by using the config.cmd or config.sh comman d, you must target the Enterprise Manager (EM) related libraries to the cluster to access the Enterprise Manager (Console.	
Services Targeting	Only if you have selected Deployments and Services on the Advanced Configuration screen	Click Next to continue. Select the target server or cluster. Select the check box for each service you want to target to it. Click Next to continue.	
File Stores	Only if you have selected File Store on the Advanced Configuration screen	Change the settings for each JMS file store as needed, and select the synchronous write policy for each file store. Click Next to continue.	

2.6 Starting the Administration Server

You can start the Administration Server after you finish creating the domain. You can start the server by using either the WebLogic Server Administration Console or the command line.

For more information on the various methods you can use to start the Administration Server, see Starting and Stopping Servers in *Oracle Fusion Middleware Administering Server Startup and Shutdown for Oracle WebLogic Server*.

2.7 Running the Quick Start Configuration Wizard

The Quick Start Configuration Wizard helps you configure the sample domains and the Fusion Middleware product domains that use the Derby (JavaDB) database driver. You can run the wizard automatically or manually depending on the domain type (sample or product) you want to configure.

- To configure the various sample domains, such as MedRec and the Examples Server, in your WebLogic Server installation, run the wizard by selecting the Automatically Launch Quick Start Configuration Wizard option on the Installation Complete screen of the WebLogic Server installer.
- To configure Fusion Middleware product domains, run the wizard manually as described in this section. Schema JARs that are provided with the product will be used to populate a <code>domain_home/common/db</code> directory.

Note:

The Quick Start Configuration Wizard supports only the Derby (JavaDB) database driver. If you are using another database, you cannot use the Quick Start Configuration Wizard to create your domain.

Prior to manually running the Configuration Wizard in Quick Start mode, you must set the CONFIG_JVM_ARGS environment variable to specify the full path and JAR file name for each template that you want to use for the domain. For the location and filename of templates provided by Oracle for WebLogic Server and other Fusion Middleware products, see the following resources in *Oracle Fusion Middleware Domain Template Reference*.

- WebLogic Server Templates
- Fusion Middleware Product Templates

Windows

To set CONFIG_JVM_ARGS on a Windows system:

```
set CONFIG_JVM_ARGS="-DuserTemplates=template1, template2, template3, ..., templaten"
```

The following example uses the WebLogic Server base domain template and the Web Services JAX-WS template to create the domain:

set CONFIG_JVM_ARGS="-DuserTemplates=C:/Oracle/Middleware/wlserver/common/ templates/wls.jar,C:/Oracle/Middleware/wlserver/common/templates/ wls/wls_webservice_jaxws.jar" To run the Configuration Wizard in Quick Start mode on Windows systems, enter the following commands, where *ORACLE_HOME* is your Oracle home directory:

```
cd ORACLE_HOME/oracle_common/common/bin
config.cmd -target=config-oneclick
```

UNIX

To set CONFIG_JVM_ARGS on a UNIX or Linux system:

```
\label{local_export_config_JVM_ARGS="-DuserTemplates=template1, template2, template3, ..., templaten"
```

The following example uses the WebLogic Server base domain template and the Web Services JAX-WS template to create the domain:

```
export CONFIG_JVM_ARGS="-DuserTemplates=/Oracle/Middleware/wlserver/common/
templates/wls.jar,/Oracle/Middleware/wlserver/common/templates/
wls/wls_webservice_jaxws.jar"
```

To run the Configuration Wizard in Quick Start mode on UNIX systems, enter the following commands, where *ORACLE_HOME* is your Oracle home directory:

```
cd ORACLE_HOME/oracle_common/common/bin
config.sh -target=config-oneclick
```

Table 2-4 shows the sequence of screens that are presented by the Quick Start Configuration Wizard:

Table 2-4 Quick Start Configuration Screens

No.	Screen	When Does This Screen Appear?	Perform the Following Action
1	Configuration	Always	Complete all fields and selections, and then click Create .
2	Configuration Progress	Always	Shows the progress of the domain creation.
			When the process completes, click Next .
3	Configuration Success	Always	Review the domain creation results.
			Click Finish to exit the Configuration Wizard.

Using Quick Start to Create the WebLogic Sample Domains

The Quick Start Wizard helps you create the WebLogic sample domains during the installation process. You can also run the wizard at a later time by running it from the command line.

2.7.1 Using Quick Start to Create the WebLogic Sample Domains

The Quick Start Wizard helps you create the WebLogic sample domains during the installation process. You can also run the wizard at a later time by running it from the command line.

If you are running the wizard from the command line, you must create the sample domains one at a time. This requires you to run the Quick Start Wizard three times to create all three domains.

Refer to Table 2-5 for the templates that you must include in the CONFIG_JVM_ARGS variable to create each domain. For example, to create the WebLogic Server Examples domain, enter the following commands, substituting your WebLogic Server home directory for WL_HOME:

```
set CONFIG_JVM_ARGS="-DuserTemplates=WL_HOME/common/
templates/wls.jar,WL_HOME/common/templates/wls/wls_default.jar,
WL_HOME/common/templates/wls/wls_examples_jaxws.jar"

cd ORACLE_HOME/oracle_common/common/bin
config.sh -target=config-oneclick
```

Table 2-5 Templates Required for WebLogic Sample Domains

To create this domain	Include these templates
MedRec (Avitek Medical Records Sample Domain)	WL_HOME/common/templates/wls/wls.jar WL_HOME/common/templates/wls/medrec.jar
MedRec Spring (Avitek Medical Records Sample Domain for Spring)	WL_HOME/common/templates/wls/wls.jar WL_HOME/common/templates/wls/ medrec_spring.jar
WebLogic Server Examples	WL_HOME/common/templates/wls/wls.jar WL_HOME/common/templates/wls/ wls_examples.jar

Running the	Quick Start	Configuration	Wizard
-------------	--------------------	---------------	--------

Updating WebLogic Domains

The update process enables you to add product component functionality or additional applications and services to an existing WebLogic domain. You can update a domain by using the Configuration Wizard.

Note:

To update a WebLogic domain that includes other Fusion Middleware products in addition to WebLogic Server, see Updating a WebLogic Domain That Includes Fusion Middleware Products.

For example, if you created a base WebLogic domain and you want to add Advanced Web Services for JAX-WS, you can select the **WebLogic Advanced Web Services for JAX-WS Extension** template on the Templates screen. You can also use the Configuration Wizard to change your domain configuration without adding additional applications. For example, you may want to add additional Managed Servers and clusters, or you may want to change service targeting or migratable target settings.

Note:

You can only update a domain that was created by the same WebLogic Server installation from which you run the Configuration Wizard. That is, the domain you are updating must be registered in the domain-registry.xml file of your WebLogic Server installation. You cannot update a domain that was created by another WebLogic Server installation.

Prior to updating a domain that was created with an earlier release of WebLogic Server, you must use the Reconfiguration Wizard to reconfigure the domain. Doing so updates the domain to be compatible with the current WebLogic Server release, and registers the domain in your current WebLogic Server installation. For more information, see Reconfiguring WebLogic Domains in *Oracle Fusion Middleware Upgrading Oracle WebLogic Server*.

The Configuration Wizard simplifies the task of updating an existing WebLogic domain by using extension templates. Oracle provides various sample extension templates, as well as extension templates for various Fusion Middleware products. You can also create your own extension templates using WLST or the unpack command.

For information about extension templates provided by Oracle, see Types of Templates in *Oracle Fusion Middleware Domain Template Reference*.

This chapter includes the following sections:

Before You Begin

Set the value of the environment variable CONFIG_JVM_ARGS to reduce the time it takes for the Configuration Wizard to create or update a domain.

Domain Update Process

You can update a domain by adding additional product components to the domain or by specifying an extension template JAR file.

Updating a WebLogic Domain in Graphical Mode

Use the Configuration Wizard in graphical mode to update a WebLogic Domain. The Configuration Wizard takes you through a series of screens that help you update a WebLogic Server domain.

Updating Startup Scripts on Remote Servers

When you update a WebLogic domain in which the Managed Servers are distributed (by using the pack and unpack commands) to remote machines, the startup scripts on the remote machines are not updated automatically. You must update them manually.

3.1 Before You Begin

Set the value of the environment variable CONFIG_JVM_ARGS to reduce the time it takes for the Configuration Wizard to create or update a domain.

Prior to running the Configuration Wizard to update a domain on a UNIX or Linux operating system, if you have not already done so, set the CONFIG_JVM_ARGS environment variable to the following value:

-Djava.security.egd=file:/dev/./urandom

3.2 Domain Update Process

You can update a domain by adding additional product components to the domain or by specifying an extension template JAR file.

To update a WebLogic domain, select the domain to update and, if you want to add additional products to the domain, select one or more additional product components on the Templates screen. Alternatively, you can update an existing domain by specifying an extension template JAR file that includes additional applications and services, or defines additional components (such as Managed Servers and clusters). You can also customize the JDBC connections and change the JMS file store. The Configuration Wizard uses your input to update the configuration files, such as config.xml, and all other generated components in the domain directory, as required.

3.3 Updating a WebLogic Domain in Graphical Mode

Use the Configuration Wizard in graphical mode to update a WebLogic Domain. The Configuration Wizard takes you through a series of screens that help you update a WebLogic Server domain.

To update a new WebLogic Domain by using the Configuration Wizard in graphical mode, start the Configuration Wizard as described in Starting the Configuration Wizard.

Note:

In situations where you cannot run the Configuration Wizard in GUI mode, Oracle recommends that you use a WLST script to create or update a domain. For more information, see Creating and Using a Domain Template (Offline) in Oracle Fusion Middleware Understanding the WebLogic Scripting Tool.

If your installation includes Fusion Middleware products, refer to Configuring Fusion Middleware Domains, for instructions. Fusion Middleware product configuration includes additional Configuration Wizard screens that are not included in the workflow in this chapter.

The Configuration Wizard displays a sequence of screens, in the order listed in Configuring Screens for Updating an Existing WebLogic Domain. For more information on each screen, refer to the related section in Configuration Wizard Screens, or click the link in the **Screen** column.

Configuration Screens for Extending an Existing WebLogic Domain Table 3-1

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Type	Always	Select Update an Existing Domain . Select the domain directory from the Existing Domain Directory drop-down list, or click Browse to navigate to and select the domain directory. Click Next to continue.
Templates	Always	 Select Update Domain Using Product Templates, and then select the check box for each product to add to the domain. Select Update Domain Using Custom Template, and then click Browse to locate the template on your local drive or network. Click Next to continue. Note: When updating a domain using a custom template, you must comply with domain version
Application Location	Only if one or more of the selected	restrictions as described in Domain Version Restrictions. Specify the directory in which the
	templates define an application.	domain's applications are to be stored. Click Next to continue.
Data Source Configuration	Only if the selected products or template includes components that require JDBC data sources or Oracle RAC multi data sources	See Configuring Data Sources, for information about these screens.

Table 3-1 (Cont.) Configuration Screens for Extending an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action	
Advanced Configuration	Always	Select the check box for each category (if any) for which you want to perform advanced configuration tasks The available check boxes depend on the resources that are configured in the selected products or template. Note: When extending a domain, you cannot change the Administration Server and Node Manager configurations. Therefore, these options are not available. Click Next to continue.	
Managed Servers	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen	Add, delete, or reconfigure Managed Servers as needed. Click Next to continue.	
Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen	Add, delete, or reconfigure clusters as needed. Click Next to continue.	
Assign Servers to Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and your domain includes at least one cluster	Add servers to or remove servers from the clusters in your domain. Click Next to continue.	
HTTP Proxy Applications	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and your domain includes at least one cluster, and at least one Managed Server that is not assigned to a cluster	For each cluster, specify whether or not you want to create an HTTP proxy application for the cluster. If you select the Create HTTP Proxy check box for a cluster, select the proxy server to use for that cluster. a Click Next to continue.	
Coherence Clusters	Only if you have selected Managed Servers , Clusters , and Coherence on the Advanced Configuration screen, and Coherence is installed with WebLogic Server	Accept the default cluster name or type a new name for the Coherence cluster. Enter the port number to use as the Coherence cluster listen port. Click Next to continue.	
Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen.	Add, delete, or reconfigure machines as needed. Click Next to continue.	

Table 3-1 (Cont.) Configuration Screens for Extending an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Assign Servers to Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and there is at least on machine configured in the domain	Assign the Administration Server and Managed Servers to the appropriate machines. Click Next to continue.
Virtual Targets	Only if you have selected Topology on the Advanced Configuration screen.	Add, configure, and delete virtual targets that you want to use to run WebLogic Server in a multitenant mode.
		For an overview of multitenancy in Oracle WebLogic Server, see Oracle WebLogic Server Multitenant in Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant.
		For a definition of virtual targets, see Virtual Targets in <i>Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant</i> .
		Click Next to continue.
Partitions	Only if you have selected Topology on the Advanced Configuration screen.	Add the required number of partitions. Later, you will assign virtual targets to each partition that you define.
		For more information, see the following resources in <i>Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant</i> • Configuring Virtual Targets: Overview
		 Configuring Domain Partitions: Overview
		Click Next to continue.
Assign Virtual Targets to Partitions	Only if you have defined virtual targets and partitions for the domain being configured	Associate a virtual target to a partition. A partition can have zero or more virtual targets.
		Click Next to continue.

Table 3-1 (Cont.) Configuration Screens for Extending an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Deployments Targeting	Only if you have selected Deployments and Services on the Select Advanced Configuration screen, and a selected product or template contains J2EE applications or libraries	Select the target server or cluster on which you want to deploy applications or libraries. Select the check box for each application or library you want to deploy on the selected target.
		Note: While creating a Restricted JRF domain by using the config.cmd or config.sh command, you must target the Enterprise Manager (EM) related libraries to the cluster to access the Enterprise Manager Console.
Services Targeting	Only if you have selected Deployments and Services on the Select Advanced Configuration screen	Select the target server or cluster. Select the check box for each service you want to target to it. Click Next to continue.
File Store	Only if you have selected File Store on the Select Advanced Configuration screen	Change the settings for each JMS file store as needed, and select the synchronous write policy for each file store. Click Next to continue.

Table 3-1 (Cont.) Configuration Screens for Extending an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Summary	Always	Review the configuration for your domain by selecting a Summary View, and then selecting individual items in the list for that view.
		If the domain is configured as you want it, click Update to extend the domain.
		If you need to make changes to the configuration, click Previous to return to the appropriate screen for the settings you want to change.
Configuration Progress	Always	Shows the progress of the domain creation.
		When the process completes, click Next .
Configuration Success	Always	Click Finish to exit the Configuration Wizard.

3.4 Updating Startup Scripts on Remote Servers

When you update a WebLogic domain in which the Managed Servers are distributed (by using the pack and unpack commands) to remote machines, the startup scripts on the remote machines are not updated automatically. You must update them manually.

To ensure that startup scripts on the remote machines are updated:

- 1. Delete the Managed Server directories on the remote machines.
- 2. Create a Managed Server template from the updated domain by using the pack command with the -managed=true option.
- **3.** Create Managed Servers on the remote machines by using the unpack command to unpack the Managed Server template.

For more information about the pack and unpack commands, see Overview of the Pack and Unpack Commands in *Oracle Fusion Middleware Creating Templates and Domains Using the Pack and Unpack Commands*.

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Configuring Fusion Middleware Domains

The Configuration Wizard helps you install and configure the WebLogic Server in which other Fusion Middleware products are also installed in the same Oracle home.

This chapter includes the following sections:

Creating a WebLogic Domain for Fusion Middleware Products

Use the Configuration Wizard in graphical mode to create a WebLogic domain for Fusion Middleware products. The Configuration Wizard takes you through a series of screens that help you create a WebLogic Server domain. Additional screens appear depending on the components that you add for the domain, and other factors.

Updating a WebLogic Domain That Includes Fusion Middleware Products

Use the Configuration Wizard in graphical mode to update a WebLogic Domain with Fusion Middleware products. The Configuration Wizard takes you through a series of screens that help you update the domain.

4.1 Creating a WebLogic Domain for Fusion Middleware Products

Use the Configuration Wizard in graphical mode to create a WebLogic domain for Fusion Middleware products. The Configuration Wizard takes you through a series of screens that help you create a WebLogic Server domain. Additional screens appear depending on the components that you add for the domain, and other factors.

To create a new WebLogic domain which includes Fusion Middleware products installed with WebLogic Server, start the Configuration Wizard as described in Starting the Configuration Wizard.

Note:

In situations where you cannot run the Configuration Wizard in GUI mode, Oracle recommends that you use a WLST script to create or extend a domain. For more information, see Creating and Using a Domain Template (Offline) in Oracle Fusion Middleware Understanding the WebLogic Scripting Tool.

The Configuration Wizard displays a sequence of screens, in the order listed in Configuring Screens for Creating a New WebLogic Domain. For more information on each screen, refer to the related section in Configuration Wizard Screens, or click the link in the **Screen** column.

Table 4-1 Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Type - No Profiles	When CONFIG_JVM_ARGS is not set to display domain profile options	Select Create a new domain . In the Domain Location box, enter the path to the new domain, or click Browse to create the domain directory. Click Next to continue.
Configuration Type - Profiles	When CONFIG_JVM_ARGS is set to - Dcom.oracle.cie.config.showProfile =true	Select Create a new expanded domain or Create a new compact domain as appropriate. In the Domain Location box, enter the path to the new domain, or click Browse to create the domain directory. Click Next to continue.
Templates	Always	 Select Create Domain Using Product Templates, and then select the check box for each product to include in the domain. Select Create Domain Using Custom Template, and then click Browse to locate the template on your local drive or network. Click Next to continue.
Application Location	Only if one or more of the selected templates define an application.	Specify the directory in which the domain's applications are to be stored. Click Next to continue.
Administrator Account	Always	Specify the username and password for the domain's administrator account. Click Next to continue.
Domain Mode and JDK	Always	Select the startup mode to use. Select the JDK to use in the domain or click Browse to navigate to the JDK you want to use. Click Next to continue.
Database Configuration Type	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas	Select whether you want to use RCU parameters for schema configuration, or you want to manually configure the schemas. If you elect to use RCU parameters, complete the fields on the screen and click Get RCU Configuration . Click Next to continue.

Table 4-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Schema configuration	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas	See Configuring Schemas, for information about these screens.
Data source configuration	Only if the domain includes components that require JDBC data sources or Oracle RAC multi data sources	See Configuring Data Sources, for information about these screens.
Credentials	Only when a selected template requires user provided credentials.	Specify the username and password for each security store/key. Click Next to continue.
Keystore	Only when a selected template requires user provided key pairs or certificates.	Select the security store/key to configure. In the top table, enter the path for the trusted certificate to use. In the bottom table, enter the path for the private key and the password for the private key. Repeat for each store/key. When done, click Next to continue.
Java Keystore Info	Only when a selected template requires importing key pairs or certificates from a .jks file.	Select the Java keystore (JKS) file location, keystore password, target keystore password and other details to configure the JAVA keystore for importing into the target keystore. Define additional certificates and keys, if required. Click Next to continue.
Advanced Configuration	Always	Select the check box for each category (if any) for which you want to perform advanced configuration tasks The available check boxes depend on the resources that are configured in the selected products or template. Click Next to continue.
Administration Server	Only if you have selected Administration Server on the Select Advanced Configuration screen	Change the settings for the Administration Server as needed. Click Next to continue.
Node Manager	Only if you have selected Node Manager on the Select Advanced Configuration screen	Select the Node Manager Type . Enter the username and password for accessing the Node Manager. Click Next to continue.

Table 4-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Managed Servers	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen	Add, delete, clone, or reconfigure Managed Servers as needed. Click Next to continue.
Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen	Add, delete, or reconfigure clusters as needed. Click Next to continue.
Assign Servers to Clusters	Only if you have selected Managed Servers , Clusters , and Coherence on the Select Advanced Configuration screen, and your domain includes at least one cluster	Add servers to or remove servers from the clusters in your domain. Click Next to continue.
HTTP Proxy Applications	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and your domain includes at least one cluster, and at least one Managed Server that is not assigned to a cluster	For each cluster, specify whether or not you want to create an HTTP proxy application for the cluster. If you select the Create HTTP Proxy check box for a cluster, select the proxy server to use for that cluster. a Click Next to continue.
Coherence Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen, and Coherence is installed with WebLogic Server	Accept the default cluster name or type a new name for the Coherence cluster. Enter the port number to use as the Coherence cluster listen port. Click Next to continue.
Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Advanced Configuration screen	Select the Machine tab (Windows) or Unix Machine tab (UNIX). Add machines as needed. Configure the settings for each machine. Click Next to continue.
Assign Servers to Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and there is at least one machine configured in the domain	Assign the Administration Server and Managed Servers to the appropriate machines. Click Next to continue.

Table 4-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Virtual Targets	Only if you have selected Topology on the Advanced Configuration screen.	Add, configure, and delete virtual targets that you want to use to run WebLogic Server in a multitenant mode.
		For an overview of multitenancy in Oracle WebLogic Server, see Oracle WebLogic Server Multitenant in Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant.
		For a definition of virtual targets, see Virtual Targets in <i>Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant</i> .
		Click Next to continue.
Partitions	Only if you have selected Topology on the Advanced Configuration screen.	Add the required number of partitions. Later, you will assign virtual targets to each partition that you define.
		For more information, see the following resources in <i>Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant</i> • Configuring Virtual Targets: Overview • Configuring Domain Partitions:
		Overview
		Click Next to continue.
Assign Virtual Targets to Partitions	Only if you have defined virtual targets and partitions for the domain being configured	Associate a virtual target to a partition. A partition can have zero or more virtual targets.
		Click Next to continue.
Domain Frontend Host	Only if you have selected Domain Frontend Host Capture on the Advanced Configuration screen	Enable or disable the frontend host and, if enabled, specify or update the configuration for the frontend host. Click Next to continue.
System Components	Only if a system component, such as OHS or OID, is installed.	Click Add to add system components to the domain. Configure each system component. Click Next to continue.
OHS Server	Only if OHS is installed.	Select an OHS server to configure. Specify the settings for that server. Repeat for each server. Click Next to continue.

Table 4-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
ODI Server Configuration	Only if ODI is installed.	Select the ODI server to configure.
		Specify the settings for that server.
		Repeat for each server.
		Click Next to continue.
ODI Server Configuration	Only if ODI is installed.	Select an ODI server to configure.
		Specify the settings for that server.
		Repeat for each server.
		Click Next to continue.
Assign System Components to Machines	Only if a system component, such as OHS or OID, is installed.	Assign the system component servers to the appropriate machines.
		Click Next to continue.

Table 4-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Deployments Targeting	Only if you have selected Deployments and Services on the Select Advanced Configuration screen, and a selected product or template contains J2EE applications or libraries	Select the target server or cluster on which you want to deploy applications or libraries. Select the check box for each application or library you want to deploy on the selected target.
		Note: While creating a Restricte d JRF domain by using the config .cmd or config .sh comman d, you must target the Enterpri se Manager (EM) related libraries to the cluster to access the Enterpri se Manager Console.
		Click Next to continue.
Services Targeting	Only if you have selected Deployments and Services on the Select Advanced Configuration screen	Select the target server or cluster. Select the check box for each service you want to target to it. Click Next to continue.
JMS File Stores	Only if you have selected JMS File Store on the Select Advanced Configuration screen	Change the settings for each JMS file store as needed, and select the synchronous write policy for each file store. Click Next to continue.

Table 4-1 (Cont.) Configuration Screens for Creating a New WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Summary	Always	Review the configuration for your domain by selecting a Summary View, and then selecting individual items in the list for that view.
		If the domain is configured as you want it, click Create to create the domain.
		If you need to make changes to the configuration, click Previous to return to the appropriate screen for the settings you want to change.
Configuration Progress	Always	Shows the progress of the domain creation.
		When the process completes, click Next .
Configuration Success	Always	Review the domain creation results. Click Finish to exit the Configuration Wizard.

Configuring Schemas

The schema configuration screens appear in the Configuration Wizard only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas.

Configuring Data Sources

The data source configuration screens appear in the Configuration Wizard only if the domain includes components that require JDBC data sources or Oracle RAC multi data sources.

4.1.1 Configuring Schemas

The schema configuration screens appear in the Configuration Wizard only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas.

Table 4-2 lists the sequences of schema-related screens. For more information on each screen, refer to the related section in Configuration Wizard Screens, or click the link in the **Screen** column.

After configuring the screens in this section, return to row 9 in Table 4-2.

Table 4-2 Schema Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action
Database Configuration Type	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas	Enter connection information for connecting to the database server from which service table information is to be retrieved. Click Next to continue.

Table 4-2 (Cont.) Schema Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action
JDBC Component Schema	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas There are two versions of this screen, depending on whether or not the selected templates contain multi data source definitions or GridLink data source definitions.	Configure the schema owner and password for each component schema listed on this screen. Changes to any of the fields on this screen are applied to all selected component schemas in the table. For example, if all of your schemas reside on the same database, select all of the schemas in the table, then specify the appropriate database values for the schemas (DBMS/Service, Host Name, and Port). If, for example, you have a different password for each schema, then you must select each schema individually and specify the password for the selected schema only. Click Next to continue.
GridLink Oracle RAC Component Schema	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas, and you selected the Convert to GridLink option	Configure the schema owner and password for each component schema listed on this screen. Changes to any of the fields on this screen are applied to all selected component schemas in the table. For example, if all of your schemas reside on the same database, select all of the schemas in the table, then specify the appropriate database values for the schemas (including Service Name, Service Instance, ONS Host, wallet file, and wallet password). If, for example, you have a different password for each schema, then you must select each schema individually and specify the password for the selected schema only. Click Next to continue.

Table 4-2 (Cont.) Schema Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action
Oracle RAC Multi Data Source Component Schema	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas, and you selected the Convert to RAC multidata source option	Configure the schema owner and password for each component schema listed on this screen. Changes to any of the fields on this screen are applied to all selected component schemas in the table. For example, if all of your schemas reside on the same database, select all of the schemas in the table, then specify the appropriate database values for the schemas (Service Name, Host Name, Instance Name, and Port).
		If, for example, you have a different password for each schema, then you must select each schema individually and specify the password for the selected schema only. Click Next to continue.
JDBC Component Schema Test	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schema	Test the configurations that you specified for the data sources in the previous screen. Click Next to continue.

After configuring the screens described in this section, return to Table 4-1.

4.1.2 Configuring Data Sources

The data source configuration screens appear in the Configuration Wizard only if the domain includes components that require JDBC data sources or Oracle RAC multi data sources.

Table 4-3 lists the sequences of schema-related screens. For more information on each screen, refer to the related section in Configuration Wizard Screens, or click the link in the **Screen** column.

Table 4-3 Data Source Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action
JDBC Data Sources	Only if the domain includes components that require JDBC data sources	 Select a data source to configure, and then do one of the following: Configure the fields for the data source Select the Configure selected data sources as RAC multi data sources option Click Next to continue.

Table 4-3 (Cont.) Data Source Configuration Screens

Screen	When Does This Screen Appear?	Perform the Following Action
GridLink Oracle RAC Data Sources	Only if the domain includes components that require JDBC data sources, and you selected the Convert to GridLink option for at least on data source on the Configure JDBC Data Source screen	Configure the fields for the Gridlink RAC data source, including the Service Name, Service Instance, ONS Host, wallet file, and wallet password. Click Next to continue.
Oracle RAC Multi Data Sources	Only if the domain includes components that require JDBC data sources, and you selected the Convert to RAC multi data source option for at least on data source on the Configure JDBC Data Source screen	Configure the fields for the Oracle RAC multi data source, including the Oracle RAC host name, instance name, and port. Click Next to continue.
JDBC Data Sources Test	Only if the domain includes components that require JDBC data sources	Select the data sources to test, and click Test Connection . Wait for the connection test(s) to complete.
		Note: In order to test connections, the database to which you are trying to connect must be running.
		If you do not want to test connections at this time, deselect all data sources.
		Click Next to continue.
Database Scripts	Only if the selected products or template includes a set of SQL files organized by database type	Select the data sources for which you want to run the database scripts.
		Select the database version.
		Click Run Scripts.
		After running all necessary scripts, click Next to continue.

4.2 Updating a WebLogic Domain That Includes Fusion Middleware Products

Use the Configuration Wizard in graphical mode to update a WebLogic Domain with Fusion Middleware products. The Configuration Wizard takes you through a series of screens that help you update the domain.

To update a WebLogic domain that includes Fusion Middleware products, start the Configuration Wizard as described in Starting the Configuration Wizard.

Note:

In situations where you cannot run the Configuration Wizard in GUI mode, Oracle recommends that you use a WLST script to create or extend a domain. For more information, see Creating and Using a Domain Template (Offline) in Oracle Fusion Middleware Understanding the WebLogic Scripting Tool.

The Configuration Wizard displays a sequence of screens, in the order listed in Configuring Screens for Updating an Existing WebLogic Domain. For more information on each screen, refer to the related section in Configuration Wizard Screens, or click the link in the Screen column.

Table 4-4 Configuration Screens for Updating an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Type	Always	Select Update an Existing Domain . Select the domain directory from the Existing Domain Directory drop-down list, or click Browse to navigate to and select the domain directory. Click Next to continue.
Templates	Always	Do one of the following: • Select Update Domain Using Product Templates, and then select the check box for each product to add to the domain. • Select Update Domain Using Custom Template, and then click Browse to locate the template on your local drive or network. Click Next to continue.
Application Location	Only if one or more of the selected templates define an application.	Specify the directory in which the domain's applications are to be stored. Click Next to continue.
Database Configuration Type	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas	Select whether you want to use RCU parameters for schema configuration, or you want to manually configure the schemas. If you elect to use RCU parameters, complete the fields on the screen and click Get Defaults . Click Next to continue.
Schema configuration	Only if the selected products or template includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas	See Configuring Schemas, for information about these screens.
Data Source Configuration	Only if the selected products or template includes components that require JDBC data sources or Oracle RAC multi data sources	See Configuring Data Sources, for information about these screens.
Credentials	Only when a selected template requires user provided credentials.	Specify the username and password for each security store/key. Click Next to continue.

Table 4-4 (Cont.) Configuration Screens for Updating an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Keystore	Only when a selected template requires user provided key pairs or	Select the security store/key to configure.
	certificates.	In the top table, enter the path for the trusted certificate to use.
		In the bottom table, enter the path for private key and the password for the private key.
		Repeat for each store/key.
		When done, click Next to continue.
Java Keystore Info	Only when a selected template requires importing key pairs or certificates from a .jks file.	Select the Java keystore (JKS) file location, keystore password, target keystore password and other details to configure the JAVA keystore for importing into the WebLogic domain. Define additional certificates and keys, if required.
		Click Next to continue.
Advanced Configuration	Always	Select the check box for each category (if any) for which you want to perform advanced configuration tasks
		The available check boxes depend on the resources that are configured in the selected products or template.
		Note: When extending a domain, the you cannot change the Administration Server and Node Manager configurations. Therefore, these options are not available.
		Click Next to continue.
Managed Servers	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen	Add, delete, or reconfigure Managed Servers as needed. Click Next to continue.
		A 11 11 c C 1 c
Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen	Add, delete, or reconfigure clusters as needed. Click Next to continue.
Assign Servers to Clusters	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and your domain includes at least one cluster	Add servers to or remove servers from the clusters in your domain. Click Next to continue.

Table 4-4 (Cont.) Configuration Screens for Updating an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
HTTP Proxy Applications	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and your domain includes at least one cluster, and at least one Managed Server that is not assigned to a cluster	For each cluster, specify whether or not you want to create an HTTP proxy application for the cluster. If you select the Create HTTP Proxy check box for a cluster, select the proxy server to use for that cluster. a Click Next to continue.
Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen.	Add, delete, or reconfigure machines as needed. Click Next to continue.
Domain Frontend Host	Only if you selected Domain Frontend Host Capture on the Advanced Configuration screen	Enable or disable the frontend host and, if enabled, specify or update the configuration for the frontend host. Click Next to continue.
Assign Servers to Machines	Only if you have selected Managed Servers, Clusters, and Coherence on the Select Advanced Configuration screen, and there is at least on machine configured in the domain	Assign the Administration Server and Managed Servers to the appropriate machines. Click Next to continue.
System Components	Only if a system component, such as OHS, is installed.	Click Add to add system components to the domain. Configure each system component. Click Next to continue.
OHS Server	Only if OHS is installed.	Select a system component to configure. Specify the settings for that component. Click Next to continue.
ODI Server Configuration	Only if ODI is installed.	Select the ODI server to configure. Specify the settings for that server. Repeat for each server. Click Next to continue.
Assign System Components to Machines	Only if a system component, such as OHS, is installed.	Assign the system component servers to the appropriate machines. Click Next to continue.

Table 4-4 (Cont.) Configuration Screens for Updating an Existing WebLogic Domain

Screen	When Does This Screen Appear?	Perform the Following Action
Deployments Targeting	Only if you have selected Deployments and Services on the Select Optional Configuration screen, and a selected product or template contains J2EE applications or libraries	Select the target server or cluster on which you want to deploy applications or libraries. Select the check box for each application or library you want to deploy on the selected target. Click Next to continue.
Services Targeting	Only if you have selected Deployments and Services on the Select Optional Configuration screen	Select the target server or cluster. Select the check box for each service you want to target to it. Click Next to continue.
Files Stores	Only if you have selected JMS File Store on the Select Optional Configuration screen	Change the settings for each JMS file store as needed, and select the synchronous write policy for each file store. Click Next to continue.
Configuration Summary	Always	Review the configuration for your domain by selecting a Summary View, and then selecting individual items in the list for that view. If the domain is configured as you want it, click Update to extend the
		domain. If you need to make changes to the configuration, click Previous to return to the appropriate screen for the settings you want to change.
Configuration Progress	Always	Shows the progress of the domain creation. When the process completes, click
Configuration Success	Always	Next. Click Finish to exit the Configuration Wizard.

Jpdating a WebLogic Domain That Includes Fusion Mi	ddleware Products
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Configuration Wizard Screens

The Configuration Wizard helps you create and update a WebLogic domain. During the process, it takes you through a sequence of screens depending on your domain requirements and your customization needs.

This chapter includes the following sections:

Configuration Type

When creating a new domain, you can select the domain profile type depending on whether or not you have set the *CONFIG_JVM_ARGS* environment variable. If the variable is set, you can create an expanded or a compact domain. If the variable is not set, the profile options are not available.

Configuration

The Configuration screen helps you configure the WebLogic Server sample domains. This screen appears only if you run the Quick Start Configuration Wizard at the end of the WebLogic Server installation process or if you run the wizard from the command line.

Templates

You can use this screen to create or extend a domain that is configured automatically to support selected products, or to create or extend a domain based on an existing domain or application template.

Application Location

In this screen, you must specify the full path to the directory in which you want to store the applications that are associated with the domain.

Administrator Account

Use this screen to define the default WebLogic Administrator account for the domain. This account is used to boot and connect to the domain's Administration Server.

Domain Mode and JDK

You have the option to specify whether you want to run WebLogic in the Production mode or in the Development mode. You can then specify the JDK for the domain.

Database Configuration Type

This screen and the subsequent schema configuration screens are displayed only for WebLogic Server installations that include the Fusion Middleware infrastructure components.

JDBC Component Schema

For some Fusion Middleware components, the JDBC data sources may be defined as part of the component's database schema. These data sources are loaded during installation of the component by using the Repository Creation Utility (RCU).

GridLink Oracle RAC Component Schema

Use this screen to configure the component schemas that are included in your WebLogic domain as GridLink RAC data sources. A GridLink data source is a single data source that represents a service that responds to Fast Application Notification (FAN) events.

Oracle RAC Multi Data Source Component Schema

In this screen, you can configure the component schemas that are included in the WebLogic domain as Oracle RAC multi data sources.

JDBC Component Schema Test

Use this screen to test the configurations that you specified for the data sources in the Oracle RAC Multi Data Source Component Schema screen.

IDBC Data Sources

A JDBC data source contains a pool of database connections that are created when the data source instance is created — when it is deployed or targeted, or at server startup.

GridLink Oracle RAC Data Sources

A GridLink data source is a single data source that represents a service that responds to the Fast Application Notification (FAN) events. Use this screen to configure the data sources that are included in the WebLogic domain, as GridLink Oracle RAC data sources.

Oracle RAC Multi Data Sources

Use this screen to configure the data sources that are included in the domain as Oracle RAC data sources.

JDBC Data Sources Test

You can use this screen to test the data source connections that you configured in the JDBC Data Sources and the Oracle RAC Multi Data Sources screens.

Database Scripts

A domain template may contain a set of SQL files organized by database type. If the domain template contains SQL files, you can use the Database Scripts screen to run these files while creating a WebLogic domain.

Credentials

You can use this screen to provide credentials for each key in the WebLogic domain. If you have included the Oracle RAS Session Service template in the domain, the default key and the RAS store, oracle.rdbms.ras, are listed.

Keystore

You can use this screen to specify the path to the trusted certificate for each keystore and the path to each keystore's private key, its password, and the path to the Identity Certificate of the private key.

Java Keystore Info

You can use this screen to import key pairs and certificates from an existing Java Keystore (.jks) file into Oracle Platform Security Services (for WebLogic). A Java Keystore contains authorization certificates and key pairs that are used for authentication and encryption purposes.

Advanced Configuration

You can use this screen to perform advanced configurations for the categories you select from the available list. You can select all the categories, if required.

Administration Server

The Administration Server is the central point from which you manage your domain. You can use this screen to configure or change the Administration Server settings.

Node Manager

You can use this screen to select the Node Manager configurations applicable for the domain. You can also skip this step to create the Node Manager manually at a later point.

Managed Servers

You can use this screen to add, delete, or clone Managed Servers, and assign a user-expandable server group (if available) to a Managed Server. You can also change the settings for an existing Managed Server.

Clusters

A cluster is a group of WebLogic Server instances that work together to provide scalability and high-availability for applications. Use this screen to add or delete clusters, or to change the settings for an existing cluster.

Server Templates

You can use the Server Templates screen to define one or more server templates for the domain. A server template contains common, non-default settings and attributes that you can apply to a set of server instances, which then inherit the template configuration.

Dynamic Servers

This screen lists each of the clusters that you have created in the current configuration session. You can designate one or more of these clusters to be a dynamic cluster.

Assign Servers to Clusters

You can use this screen to assign Managed Servers to clusters. Only Managed Servers are displayed in the **Server** list box. The Administration Server is not listed because it cannot be assigned to a cluster.

HTTP Proxy Applications

An HTTP proxy application acts as an intermediary for HTTP requests. Use this screen to create an HTTP proxy application for each cluster, and specify the Managed Server on which the proxy application must be deployed.

Coherence Clusters

This screen is displayed only if you have included Coherence in the WebLogic Server installation. It lists the Coherence clusters that are automatically added to the domain.

Machines

In a WebLogic domain, the machine definitions identify physical units of hardware and are associated with the WebLogic Server instances or

system components (such as OHS servers) that they host. Use this screen to add or delete machines, or to modify the settings for an existing machine.

Assign Servers to Machines

You can use this screen to assign the WebLogic Server instances to each of the machines you defined in the Machines screen of the Configuration Wizard.

Virtual Targets

Virtual targets define the locations where a partition or resource group runs. You can use this screen to add or delete Virtual Targets for use in a WebLogic Server Multitenant (MT) environment.

Partitions

A domain partition is a portion of a WebLogic Server domain that is dedicated to running application instances and related resources. You can use this screen to add partitions in a WebLogic domain.

Assign Virtual Targets to Partitions

You can assign one or more existing virtual targets to a domain partition. You can use a virtual target with only one partition.

Domain Frontend Host

When creating a new domain, you can use this screen to enable the frontend host, specify both the plain and secure URLs for the frontend host, and select the default frontend host URL.

System Components

You can use this screen to add or delete system components such as for Oracle HTTP Server (OHS) and Oracle Data Integrator (ODI).

OHS Server

You can use this screen to configure the Oracle HTTP Server (OHS) in the WebLogic domain. Prior to configuring OHS, you must add OHS as a system component by using the **System Component** screen.

ODI Server Configuration

You can use this screen to configure the co-located ODI agents in the WebLogic domain. Prior to configuring ODI, you must add ODI as a system component by using the **System Component** screen.

Assign System Components to Machines

After you configure the system components such as OHS and ODI, you can use this screen to assign these components to the machines that you have defined in the Machines screen.

Deployments Targeting

Applications associated with the product for which you are configuring the domain are targeted automatically to the Managed Server that is created for that product, or to the cluster to which that Managed Server is assigned. In this screen, you can target applications to additional servers and clusters.

Services Targeting

Services that are associated with the product for which you are configuring the domain are targeted automatically to the Managed Server created for that product, or to the cluster to which that Managed Server is assigned. In this screen, you can target services to additional servers and clusters.

File Stores

A JMS file store is a disk-based file in which persistent messages can be saved. You can use this screen to modify the JMS file stores that are configured in the WebLogic domain.

Configuration Summary

This screen provides a summary of the configuration settings for the WebLogic domain. Review the details before you proceed.

Configuration Progress

If you are creating a domain, this screen shows the progress of the domain creation. If you are updating (extending) a domain, this screen shows the progress of the domain update.

Configuration Success

Depending on whether you run the full Configuration Wizard or the Quick Start Configuration Wizard, the appropriate configuration success message appears on this screen.

5.1 Configuration Type

When creating a new domain, you can select the domain profile type depending on whether or not you have set the CONFIG_JVM_ARGS environment variable. If the variable is set, you can create an expanded or a compact domain. If the variable is not set, the profile options are not available.

There are two versions of this screen:

Configuration Type - No Profiles

Configuration Type - Profiles

5.1.1 Configuration Type - No Profiles

This screen helps you create a domain or update an existing domain.

Option/Field	Description
Create a new domain	Select this option if you want to create a new domain. Typically, the new domain will be based on the WebLogic Server Basic Domain, which includes an Administration Server and the default security realm myrealm. You may, however, choose to use your own domain template to create the domain; your domain template must contain at least an Administration Server.
Update an existing domain	Select this option if you already have a WebLogic domain, and you want to add resources to that domain.
	Note: You can only update domains that were created or reconfigured using the WebLogic Server installation from which you ran the Configuration Wizard. You cannot update domains that were created using other installations of WebLogic Server. If you specify a domain that was not created with the current installation, an error is displayed when you click Next .

Option/Field	Description
Domain Location	If you selected a Create option, enter the full path for the domain or use the Browse button to navigate to the directory in which your domains are located. If you do so, you must enter a unique directory name for the new domain at the end of the path.
	Note: Oracle recommends that you create your domain directories outside of the Oracle home directory.
	If you selected the Update option, use the Browse button to navigate to the domain that you want to update. If multiple domains exit in this installation, this field contains a drop-down list of the domains, and you can select the domain that you want to update.

5.1.2 Configuration Type - Profiles

From this screen, you can select whether to create a domain (expanded or compact) or update an existing domain. When creating a domain, the selection you make is permanent and cannot be changed later. The default is an expanded domain. Compact domains, if defined in a product template, are typically used only for development environments with limited hardware resources, but may also be used for some Fusion Middleware product domains such as OHS domains.

Note:

If you are creating a domain that will *not* include Fusion Middleware components installed with WebLogic Server, always create an expanded domain. Compact domain profiles are defined only for some Fusion Middleware components.

Compact domains are not available for all WebLogic domains that include Fusion Middleware components. If these domain types are defined in the templates you are using to create the domain, your selection determines the server groups that are available for your Managed Servers and the applications and services that are mapped to those server groups. When you are creating your domain, some of the templates you select may have expanded and compact profiles defined, while others may not.

For more information on domain profiles and server groups, see Domain Profile Types in Oracle Fusion Middleware Domain Template Reference

Option/Field	Description
Create new expanded domain	Select this option for production environments to create a new expanded domain which includes clusters and Managed Servers. Typically, the new domain will be based on the WebLogic Server Basic Domain, which includes an Administration Server and the default security realm myrealm. You may, however, choose to use your own domain template to create the domain; your domain template must contain at least an Administration Server.
	You can add as many clusters and Managed Servers to an expanded domain as needed.
Create new compact domain	Select this option if you want to create a new compact domain. Compact domains contain only a single server instance (the Administration Server) and cannot be expanded to include clusters and Managed Servers.
	Some Fusion Middleware templates define a compact domain topology profile. If used to create a compact domain, some or all of the application service groups defined in the template are targeted to the Administration Server.
Update existing domain	Select this option if you already have a WebLogic domain, and you want to add resources to that domain.
	Note: You can only update domains that were created or reconfigured using the WebLogic Server installation from which you ran the Configuration Wizard. You cannot update domains that were created using other installations of WebLogic Server. If you specify a domain that was not created with the current installation, an error is displayed when you click Next.
Domain Location	If you selected a Create option, enter the full path for the domain, or use the Browse button to navigate to the directory in which your domains are located. If you do so, you must enter a unique directory name for the new domain at the end of the path.
	Note: Oracle recommends that you create your domain directories outside of the Oracle home directory.
	If you selected the Update option, use the Browse button to navigate to the domain that you want to update. If multiple domains exit in this installation, this field contains a drop-down list of the domains, and you can select the domain that you want to update.

5.2 Configuration

The Configuration screen helps you configure the WebLogic Server sample domains. This screen appears only if you run the Quick Start Configuration Wizard at the end of the WebLogic Server installation process or if you run the wizard from the command line.

. Configure the following fields for the sample domains.

Field	Description
Name	The login username for the WebLogic Administrator account. The username must <i>not</i> contain commas, tabs, or any of the following characters: < > # & ? () { }
Password	The password for the WebLogic Administrator account. The password must be at least eight characters, and must contain at least one numeric character or at least one of the following characters: ! " # \$ % & ' () * + , / : ; < = > ? @ [\] ^ _ ` { } ~ The password that is set here is also used for any JDBC data sources that are defined in the templates you specified when you started the Quick Start Configuration Wizard.
Confirm Password	Enter the same user password. An error is displayed if the two entries do not match.
Advanced Configuration	Specify the following advanced configuration options for the new domain.
Domain location	This field is displayed only if you are creating a single domain. Enter the full path for the domain (for example, C: \domains\newdomain). You can also use the Browse button to navigate to the directory in which your domains are located (for example, C:\domains). If you do so, you must enter a unique directory name for the new domain at the end of the path.
Domain parent location	This field is displayed only if you are configuring the three WebLogic Server sample domains at the end of the WebLogic Server installation. Enter the full path for the parent domain to use for the WebLogic Server sample domains. For example, if you enter C:\domains, the following domain directories are created: C:\domains\medrec, C:\domains\medrec-spring, and C:\domains\wl_server. You can also use the Browse button to navigate to the directory to use as the parent directory.
Application location	This field is displayed only if you are creating a single domain. Enter the full path to the directory in which you want to store the applications that are associated with the domain (for example, C:\applications\newdomain). You can also use the Browse button to navigate to the directory in which your applications are located (for example, C:\applications). If you do so, you must enter a unique directory name for the new domain's application location at the end of the path.

Field	Description
Application parent location	This field is displayed only if you are configuring the three WebLogic Server sample domains at the end of the WebLogic Server installation.
	Enter the full path for the parent application directory to use for the domains. For example, if you enter C: \applications, the following application directories are created: C:\applications\medrec, C:\applications \medrec-spring, and C:\applications\wl_server.
	Note: This directory determines the location of the WebLogic server examples, which will be installed in <i>application_parent_directory</i> /wl_server/examples/src/examples. The default location is user_projects/applications/wl_server/examples/src/examples.
	You can also use the Browse button to navigate to the directory to use as the parent directory.
Administration Server Listen Address	From the drop-down list, select a value for the listen address.
	For more information, see Specifying the Listen Address.
Administration Server Listen Port	Enter a valid value for the listen port to be used for regular, nonsecure requests (through protocols such as HTTP and T3). The default value is 7001 for the Administration Server. The valid listen port range is from 1 to 65535.
	For more information, see Specifying the Listen Port.
SSL Listen Port	Enter a valid value to be used for secure requests (through protocols such as HTTPS and T3S). The default value is 7002. If you leave this field blank, the default value is used. The valid listen port range is from 1 to 65535.
	By default, a server instance uses demonstration certificates to authenticate requests from a secure port. In a production environment, you must configure SSL to use certificates from a certificate authority.
	For more information, see SSL: An Introduction in Oracle Fusion Middleware Administering Security for Oracle WebLogic Server
	•
Coherence Listen Port	Specify the listen port to use on the Administration Server for Coherence.

5.3 Templates

You can use this screen to create or extend a domain that is configured automatically to support selected products, or to create or extend a domain based on an existing domain or application template.

Each template in the displayed list is associated with a single product template (a JAR file) which configures the required domain resources for the product. If the selected template has dependencies on other templates, the dependency templates are automatically selected or included in the domain.

Note:

Positioning the cursor over a template displays a description of the template, its location, and the name of the template JAR file.

See Template Dependencies in Oracle Fusion Middleware Domain Template Reference for more information.

Option	Description
Create Domain Using Product Templates	This option is available only when you create a new domain.
	By default, the Basic WebLogic Server Domain option is selected and cannot be cleared.
	Select the check boxes that correspond to the other products that you want to include in the domain. If you select a product that is dependent on resources provided by another product or products in the list, those products are also selected automatically. If you select a product that is incompatible with another selected product, an error is displayed.
	When you click Next , if any of the selected templates require resources provided by another product that is not selected, a warning dialog box is displayed. Return to the Templates screen to select the dependency product before proceeding.
Update Domain Using Product Templates	This option is available only if you selected Update an existing domain on the initial screen.
	Select the check boxes for the products to add to your WebLogic domain. The products already included in your domain are indicated by grayed-out check boxes. You cannot deselect these.
	When you click Next , if any of the selected templates require resources provided by another product that is not selected, a warning dialog box is displayed. Return to the Templates screen to select the dependency product before proceeding.
	Note: When extending a domain, you are not required to select additional products before proceeding. For example, you do not have to select any products if you only want to add servers or clusters to your domain, or change service targeting.
Template Categories	You can filter the displayed list of templates by selecting one or more of the listed categories. At least one category must be selected.

Option	Description
Create Domain Using Custom Template	Select this option if you want to create a domain by using an existing custom domain template. Enter the full path to the template JAR file in the Template location field, or click Browse to navigate to the directory containing the required template. The template you select must define at least an Administration Server.
	When you click Next , if the selected template requires resources provided by another template, a warning dialog box is displayed. You must create the domain using the required template first. After doing so, extend the domain using the template you initially selected.
Update Domain Using Custom Template	This option is available only if you selected Extend and Existing Domain on the initial screen.
	Select this option if you want to extend your domain using an existing custom extension template. Specify the path to the extension template JAR file in the Template location field or click Browse to navigate to the directory containing the extension template.
	You can use this option only in the following situations:
	 The template JAR you select is a domain template. The template JAR you select is an extension template that is being added to a domain that already includes all dependency templates required by the extension template.
	When you click Next , if the selected template requires resources provided by another template that is not already included in the domain, a configuration error is displayed. You must first create or extend the domain using the required template. After doing so, extend the domain using the template you initially selected.

5.4 Application Location

In this screen, you must specify the full path to the directory in which you want to store the applications that are associated with the domain.

You can use the **Browse** button to navigate to a top-level directory, and then type in the remainder of the application path.

As with domain directories, Oracle recommends that you store your applications in an application directory outside of your Oracle home directory.

5.5 Administrator Account

Use this screen to define the default WebLogic Administrator account for the domain. This account is used to boot and connect to the domain's Administration Server.

Specify the following details to create the account:

Field	Description
Name	The login username for the WebLogic Administrator account.
	The username must <i>not</i> contain commas, tabs, or any of the following characters:
	< > # & ? () { }
User password	The password for the WebLogic Administrator account. The password must be at least eight characters, and must contain at least one numeric character or at least one of the following characters:
	! " # \$ % & ' () * + , / : ; < = > ? @ [\] ^ _ ` { } ~
Confirm user password	Enter the same user password. An error is displayed if the two entries do not match.

5.6 Domain Mode and JDK

You have the option to specify whether you want to run WebLogic in the Production mode or in the Development mode. You can then specify the JDK for the domain.

Domain Mode

In the Domain mode section of the screen, specify the following:

Option	Description
Development	In this mode, the security configuration is relatively relaxed. Username and password are required to deploy applications.
Production	In this mode, the security configuration is relatively stringent, requiring a username and password to deploy applications and to start the Administration Server. Before putting a domain into production, familiarize yourself with procedures for securing a production environment.
	For more information, see Ensuring the Security of Your Production Environment in <i>Oracle Fusion Middleware Securing a Production Environment for Oracle WebLogic Server</i> .

The following table provides more details on the differences between development mode and production mode:

Table 5-1 Differences Between Development and Production Modes

Feature	Development Mode	Production Mode
SSL	You can use the demonstration digital certificates and the demonstration keystores provided by the WebLogic Server security services. With these certificates, you can design your application to work within environments secured by SSL.	You must not use the demonstration digital certificates and the demonstration keystores. If you do so, a warning message is displayed.
	For more information, see Overview of Configuring SSL in WebLogic Server in Oracle Fusion Middleware Administering Security for Oracle WebLogic Server.	
Deploying applications	WebLogic Server instances can deploy and update applications that reside in the <i>domain_name</i> /autodeploy directory automatically.	The auto-deployment feature is disabled. You must use the WebLogic Server Administration Console, the weblogic.deployer
	Oracle recommends that you use this method only in a single-server development environment.	tool, or the WebLogic Scripting Tool.
	For more information, see Deploying Applications and Modules with weblogic.deployer in Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server.	
Log file rotation	By default, when you start the WebLogic Server instance, the server automatically renames	The server rotates the local log file after the size of the file reaches 5000 kilobytes.
	(rotates) its local server log file as SERVER-NAME.log.n. For the remainder of the server session, messages accumulate in the log file until the file grows to a size of 500 kilobytes.	When the server is configured for production mode, by default, all versions of the log files are kept. Administrators may want to customize the number of log files that are retained.
	For more information, see Rotate Log Files in the Oracle Fusion Middleware Oracle WebLogic Server Administration Console Online Help.	The default value of the Limit number of retained files setting in Logging Configuration is false. The server creates new log files
	The default value of the Limit number of retained files setting in Logging Configuration is true. This limits the number of log files that the server instance creates to store old messages.	indefinitely, and you must clean up those files as needed.
boot.properties	A boot.properties file is created, which allows you to boot the server without specifying a username and password.	A boot.properties file is not created.

JDK

Use the JDK section to select the JDK for the domain. Select only a JDK that is supported on the platform you are using. For a list of the JDKs that are supported for a specific platform, see Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network.

Option	Description
JDK	Lists the JDK that was used when you installed WebLogic Server. The default JDK is Oracle Hotspot SDK <i>version</i> , but you may have installed and used another JDK during installation.
Other JDK	Select this option to use a JDK other than the one that you used when you installed WebLogic Server. Use the Browse button to navigate to the directory where the JDK resides.
	If you select the JDK that you used when you installed WebLogic Server, the Configuration Wizard creates server startup scripts to invoke that JDK. If you select a JDK that you did not use when you installed WebLogic Server, the Configuration Wizard does not configure the startup scripts; you must change the startup scripts manually.
	For more information about startup scripts, see Setting Java Parameters for Starting WebLogic Server in <i>Oracle Fusion Middleware Tuning Performance of Oracle WebLogic Server</i> .

5.7 Database Configuration Type

This screen and the subsequent schema configuration screens are displayed only for WebLogic Server installations that include the Fusion Middleware infrastructure components.

You can use this screen to specify the information for connecting to the database to retrieve schema information that will be used to populate the schema fields on subsequent component schema screens (JDBC Component Schema, GridLink Oracle RAC Component Schema, or Oracle RAC Multi Data Source Component Schema). You also have the option to skip this step and manually configure each component schema on the component schema screen.

Select one of the following options.

Field	Description
RCU Data	Select this option if you want to connect to the database to retrieve schema information for all schemas that are defined in the templates you selected on the Templates screen. If you select this option, the fields on this screen are activated. Fill in each field, using the connection information that you specified for the Service Table component in the Repository Creation Utility (RCU). When done, click Get RCU Configuration to retrieve the schema information.
	For information about Service Tables, see Understanding Service Tables in <i>Oracle Fusion Middleware Administering Oracle Fusion Middleware</i> .
	After successfully retrieving the schema information, click Next to continue.
	Note: The only JDBC connections that are supported are the Oracle service type JDBC connections that are supported by RCU.
Manual Configuration	If you select this option, you must manually configure the settings for each schema. Note that some of the fields in the schema table on the component schema screen are populated with the default Java database values, for example, Host Name is set to dbhost.example for all schemas.
	After selecting this option, click Next to continue.

Complete the following fields for the **RCU Data** option, and then click **Get RCU Configuration**.

For more information, see Database Connection Details in *Oracle Fusion Middleware Creating Schemas with the Repository Creation Utility*.

Field	Description
Vendor	Select the database vendor.
Driver	Select the JDBC driver that is configured for the database. The list includes common JDBC drivers for the selected database vendor.
DBMS/Service	Enter the database DBMS name or, if you selected a service type driver, the service name.
Host Name	Enter the name of the server hosting the database.
Port	Enter the port number to be used to connect to the server that hosts the database.

Field	Description
Schema Password database's service table schema. This is username and password that was spe Service Table component on the "Sche screen of the Repository Creation Util default username is prefix_STB, where prefix that you defined in RCU. The specify must be unique for the domain	Enter the username and password for connecting to the database's service table schema. This is the schema username and password that was specified for the Service Table component on the "Schema Passwords" screen of the Repository Creation Utility (RCU). The default username is <i>prefix_STB</i> , where prefix is the prefix that you defined in RCU. The schema you specify must be unique for the domain (not being used by any other domains).
	See Schema Passwords in <i>Oracle Fusion Middleware Creating Schemas with the Repository Creation Utility</i> for more information.
	Note: When you click Get RCU Configuration, the schema passwords that were specified when you created the schemas via RCU are retrieved. If schema passwords were changed from the original passwords that were set via RCU, you must manually enter the new passwords in the Schema Password field or column on the JDBC Component Schema, GridLink Oracle RAC Component Schema, or Oracle RAC Multi Data Source Component Schema screens.

5.8 JDBC Component Schema

For some Fusion Middleware components, the JDBC data sources may be defined as part of the component's database schema. These data sources are loaded during installation of the component by using the Repository Creation Utility (RCU).

When you create a WebLogic domain for such components by using the Configuration Wizard, you can configure the JDBC component schema settings, such as database driver, schema owner, password, and so on.

- If you selected the RCU Data option on the Database Configuration Type screen, the schema table has already been populated appropriately and you can click Next to continue.
 - If, however, schema passwords were changed from the original passwords that were set via RCU, you must manually enter the new password(s) in the Schema Password field or column.
- If you selected the Configure Using Embedded Database option, any schema components that have a corresponding dev-database entry in database.xml will not be displayed on this screen.
- If you selected the Manual Configuration option on the Database Configuration Type screen, you must configure the schemas listed in this table manually before continuing.

The JDBC component schemas associated with the products for which you are creating the domain are listed in the lower half of the screen.

Select the schemas for which you want to specify data source settings by selecting the check box adjacent to each schema name.

Note:

When you select multiple component schemas, the text "Varies among component schemas" might be displayed in certain fields, indicating that the current values of those fields are different across the selected component schemas. If you change the values in such fields, the new values are applied uniformly across the selected component schemas.

The default values of component schema parameters such as vendor, driver, host name, and port number depend on the values that are specified in the application templates.

Field	Description
Vendor	Select the database vendor.
Driver	Select the JDBC driver to use to connect to the database. The list includes common JDBC drivers for the selected database vendor.
DBMS/Service	Enter a 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 to be used to connect to the server that hosts the database.
Schema Owner	Enter the username for connecting to the database.
Schema Password	Enter the password for this username.

The values that you specify are displayed in the appropriate columns in the schema list, for the selected schemas.

To convert one or more schemas to GridLink RAC schemas, select the check boxes for those schemas, and select the **Convert to GridLink** option. Click **Next** when done. When you click **Next**, the GridLink Oracle RAC Component Schema screen is displayed.

For more information, see Using GridLink Data Sources in *Oracle Fusion Middleware Administering JDBC Data Sources for Oracle WebLogic Server*

To convert one or more of the schemas to Oracle RAC multi data source schemas, select the check boxes adjacent to the name of the those schemas, and select the **Convert to RAC multi data source** option. Click **Next** when done. When you click **Next**, the Oracle RAC Multi Data Source Component Schema screen is displayed.

For more information, see Using WebLogic Server with Oracle RAC in *Oracle Fusion Middleware Administering JDBC Data Sources for Oracle WebLogic Server*.

5.9 GridLink Oracle RAC Component Schema

Use this screen to configure the component schemas that are included in your WebLogic domain as GridLink RAC data sources. A GridLink data source is a single data source that represents a service that responds to Fast Application Notification (FAN) events.

For more information on GridLink RAC data sources, see Using GridLink Data Sources in *Oracle Fusion Middleware Administering JDBC Data Sources for Oracle WebLogic Server*.

The component schemas that you opted to configure as GridLink RAC data sources in the JDBC Component Schema screen of the wizard are listed in the lower half of the screen.

- If you selected the RCU Data option on the Database Configuration Type screen, the schema table has already been populated appropriately and you can click Next to continue.
 - If, however, schema passwords were changed from the original passwords that were set via RCU, you must manually enter the new password(s) in the **Schema Password** field or column.
- If you selected the **Manual Configuration** option on the Database Configuration Type screen, you must configure the schemas listed in this table manually before continuing.

In the schema list in the lower half of the screen, select the schemas to configure as GridLink RAC data sources by selecting the check box adjacent to each schema name.

Note:

When you select multiple data source schemas, the text "Varies among component schemas" might be displayed in certain fields, indicating that the current values of those fields are different across the selected schemas. If you go ahead and change the values in such fields, the new values are applied uniformly across the selected schemas.

Field	Description
Driver	Select the appropriate driver. Some or all of the following drivers are listed:
	 Oracle Driver (Thin) for GridLink Connections
	This is the GridLink Type 4 non-XA driver.
	Oracle Driver (Thin XA) for GridLink Connections
	This is the GridLink Type 4 XA driver.
Service Name	Enter a database Oracle RAC service name.
Schema Owner	Enter the username for connecting to the database.
Schema Password	Enter the password for this username.
Enable FAN	When selected, the data source will register for and process FAN notifications.
Enable SSL	When selected, SSL is enabled, and you must specify a wallet file, wallet password, and at least one Oracle Notification Service (ONS) host/port.
Wallet File	If SSL is enabled, specify the full path to the wallet file that contains the credentials for ONS/SSL. A wallet file is an Oracle credential file that stores keys and certificates.

Field	Description
Wallet Password	Specify the password for the wallet file. The password will be encrypted in the module configuration file.
Service Listener	Enter the name of the GridLink database Service Listener. You must configure the Service Listener for at least one database instance.
Port	This is the listen port for the database service listener. It defaults to 1521 and typically does not need to be changed.
Protocol	Click in this field and select the protocol to use for communication between WebLogic Server and the database service listener.
ONS Host	Specify the Oracle Notification Service (ONS) host name. If SSL is enabled, you must specify at least one ONS host and port.
Port	Specify the listen port to use on the ONS host.

The values that you specify are displayed in the appropriate columns in the schema list, for the selected schemas.

To add another row to the **Service Listener** table, click anywhere in the table, and then click **Add**.

To add another row to the **ONS Host** table, click anywhere in the table, and then click **Add**.

To delete a row from the **Service Listener** table, click anywhere in the row, and then click **Delete**.

To delete a row from the **ONS Host** table, click anywhere in the row, and then click **Delete**.

5.10 Oracle RAC Multi Data Source Component Schema

In this screen, you can configure the component schemas that are included in the WebLogic domain as Oracle RAC multi data sources.

Use this screen to configure the component schemas that are included in the WebLogic domain as Oracle RAC multi data sources.

For more information, see Using WebLogic Server with Oracle RAC in *Oracle Fusion Middleware Administering JDBC Data Sources for Oracle WebLogic Server*.

The component schemas that you opted to configure as Oracle RAC multi data sources in the JDBC Component Schema screen of the wizard are listed in the lower half of the screen.

 If you selected the RCU Data option on the Database Configuration Type screen, the schema table has already been populated appropriately and you can click Next to continue.

If, however, schema passwords were changed from the original passwords that were set via RCU, you must manually enter the new password(s) in the **Schema Password** field or column.

If you selected the Manual Configuration option on the Database Configuration Type screen, you must configure the schemas listed in this table manually before continuing.

In the schema list in the lower half of the screen, select the schemas to configure as Oracle RAC multi data sources by selecting the check box adjacent to each schema

Note:

When you select multiple data source schemas, the text "Varies among component schemas" might be displayed in certain fields, indicating that the current values of those fields are different across the selected schemas. If you go ahead and change the values in such fields, the new values are applied uniformly across the selected schemas.

Description
Select the JDBC driver to use to connect to the database.
Enter a database Oracle RAC service name.
Enter the username for connecting to the database.
Enter the password for the specified username.
Enter the name of the server hosting the Oracle RAC database instances.
Enter the name of each Oracle database instance.
Enter the port number to use to connect to the server that hosts the database.

Note:

You must specify the host name, instance name, and port number of at least one database instance.

To add another database instance for the currently selected schemas, click Add Host.

To delete a database instance, click anywhere in that row in the Host Name table, and then click Delete.

The values that you specify for the schema are displayed in the appropriate columns in the schema list, for the selected schemas.

5.11 JDBC Component Schema Test

Use this screen to test the configurations that you specified for the data sources in the Oracle RAC Multi Data Source Component Schema screen.

Note the following before you begin to test the configurations for the data sources:

If the JDBC driver JAR file for a data source is not in the classpath, you cannot select the data source for testing.

• If you are updating a domain, all data sources that exist in the original domain are not selected by default. Only new data sources are selected and tested by default.

Select the check boxes adjacent to the names of the schemas to test, and then click **Test Selected Connections**.

The wizard tests the configuration for each schema by attempting to connect to a URL that is constructed by using the driver, host, port, and other information that you specified while configuring the schema.

The result of the test is indicated in the **Status** column. Details are displayed in the **Connection Result Log** section.

5.12 JDBC Data Sources

A JDBC data source contains a pool of database connections that are created when the data source instance is created — when it is deployed or targeted, or at server startup.

Applications look up a data source on the JNDI tree, and then request a connection. When the applications no longer need the connections, they return the connections to the connection pool in the data source.

Use this screen to configure the JDBC data sources defined in your domain source.

The JDBC data sources associated with the products for which you are creating the domain are listed in the lower half of the screen.

Select the data source(s) for which you want to specify settings by selecting the check box adjacent to each data source name. The values that you specify are displayed in the appropriate columns in the data source list, for the selected data source.

Note:

When you select multiple data sources, the text "Varies among component schemas" might be displayed in certain fields, indicating that the current values of those fields are different across the selected data sources. If you change the values in such fields, the new values are applied uniformly across the selected data sources.

The default values of data source parameters such as vendor, driver, host name, and port number depend on the values that are specified in the application templates.

Field	Description
Vendor	Select the database vendor.
Driver	Select the JDBC driver to use to connect to the database. The list includes common JDBC drivers for the selected database vendor.

Field	Description
DBMS/Service	Enter a DBMS SID or service name. The value that you enter depends on the driver that you selected.
	If the name of the Oracle driver that you selected contains the words "for Instance connections," you must enter the SID.
	If the name of the Oracle driver contains the words "for Service connections," you must enter the service name.
	For information about configuring a DataDirect driver, see the DataDirect documentation.
Host Name	Enter the name of the server hosting the database.
Port Name	Enter the port number to be used to connect to the server.
Username	Enter the username for connecting to the database.
Password	Enter the password for the specified username.

To convert one or more data sources to GridLink RAC data sources, select the check boxes for the data sources, and select the Convert to GridLink option. Click Next when done. When you click Next, the GridLink Oracle RAC Data Sources screen is displayed.

For more information, see Using GridLink Data Sources in Oracle Fusion Middleware Administering IDBC Data Sources for Oracle WebLogic Server

To convert one or more of the data sources to Oracle RAC multi data sources, select the check box adjacent to the name of the required data source, and select the Convert to RAC multi data source option. When you click Next, the Oracle RAC Multi Data Sources screen is displayed.

For more information, see Using WebLogic Server with Oracle RAC in Oracle Fusion Middleware Administering JDBC Data Sources for Oracle WebLogic Server.

5.13 GridLink Oracle RAC Data Sources

A GridLink data source is a single data source that represents a service that responds to the Fast Application Notification (FAN) events. Use this screen to configure the data sources that are included in the WebLogic domain, as GridLink Oracle RAC data sources.

For more information, see Using GridLink Data Sources in Oracle Fusion Middleware Administering JDBC Data Sources for Oracle WebLogic Server

The data sources that you opted to configure as GridLink RAC data sources in the JDBC Data Sources screen of the wizard are listed in the lower half of the screen.

In the data source list in the lower half of the screen, select the data sources to configure as GridLink RAC data sources by selecting the check box adjacent to each data source name.

Note:

When you select multiple data sources, the text "Varies among data sources" might be displayed in certain fields, indicating that the current values of those fields are different across the selected data sources. If you go ahead and change the values in such fields, the new values are applied uniformly across the selected data sources.

Field	Description
Driver	 Some or all of the following drivers are listed: Check this list periodically, may be new ones Oracle Driver (Thin) for GridLink Connections This is the GridLink Type 4 non-XA driver. Oracle Driver (Thin XA) for GridLink Connections This is the GridLink Type 4 XA driver.
Service Name	Enter a database Oracle RAC service name.
Username	Enter the username for connecting to the database.
Password	Enter the password for the specified username.
Enable FAN	When selected, the data source will register for and process FAN notifications.
Enable SSL	When selected, SSL is enabled, and you must specify a wallet file, wallet password, and at least one Oracle Notification Service (ONS) host/port.
Wallet File	If SSL is enabled, specify the full path to the wallet file that contains the credentials for ONS/SSL. A wallet file is an Oracle credential file that stores keys and certificates.
Wallet Password	Specify the password for the wallet file. The password will be encrypted in the module configuration file.
Service Listener	Enter the name of the GridLink database Service Listener. You must configure the Service Listener for at least one database instance.
Port	This is the listen port for the database service listener. It defaults to 1521 and typically does not need to be changed.
Protocol	Click in this field and select the protocol to use for communication between WebLogic Server and the database service listener.
ONS Host	Specify the Oracle Notification Service (ONS) host name. If SSL is enabled, you must specify at least one ONS host and port.
Port	Specify the listen port to use on the ONS host.

The values that you specify are displayed in the appropriate columns in the data source list, for the selected schemas.

To add another row to the **Service Listener** table, click anywhere in the table, and then click **Add**.

To add another row to the **ONS Host** table, click anywhere in the table, and then click **Add**.

To delete a row from the **Service Listener** table, click anywhere in the row, and then click **Delete**.

To delete a row from the **ONS Host** table, click anywhere in the row, and then click **Delete**.

5.14 Oracle RAC Multi Data Sources

Use this screen to configure the data sources that are included in the domain as Oracle RAC data sources.

The data sources that you opted to configure as Oracle RAC data sources on the JDBC Data Sources screen are listed in the lower half of the screen.

Select the data source(s) for which you want to specify settings by selecting the check box adjacent to each data source name.

For information about Oracle RAC data sources, see Using WebLogic Server with Oracle RAC in *Oracle Fusion Middleware Administering JDBC Data Sources for Oracle WebLogic Server*.

Note:

When you select multiple data sources, the text "Varies among data sources" might be displayed in certain fields, indicating that the current values of those fields are different across the selected data sources. If you change the values in such fields, the new values are applied uniformly across the selected data sources.

Field/Column	Description
Driver	Select the JDBC driver to use to connect to the database.
Service Name	Enter an Oracle RAC database service name.
Username	Enter the username for connecting to the database.
Password	Enter the password for the specified user account.
Host Name	Enter the name of the server hosting the Oracle RAC database instances.
Instance Name	Enter the name of each Oracle database instance.
Port	Enter the port numbers to be used to connect to the server that hosts the database.

To add a new database instance, click **Add**, and then specify the host name, instance name and port number.

5.15 JDBC Data Sources Test

You can use this screen to test the data source connections that you configured in the **JDBC Data Sources** and the **Oracle RAC Multi Data Sources** screens.

Note:

To test the database connections, the database to which you are connecting must be running. If you do not want to test the connections at this time, do not select any data sources. Click **Next** to continue.

Select the check box for each data source you want to test, and then click **Test Connections**.

The wizard tests the configuration for each selected data source by attempting to connect to a URL that is constructed by using the driver, host, port, and other information that you specified while configuring the data source.

The result of the test is indicated in the **Status** column. Details are displayed in the **Connection Result Log** section.

5.16 Database Scripts

A domain template may contain a set of SQL files organized by database type. If the domain template contains SQL files, you can use the Database Scripts screen to run these files while creating a WebLogic domain.

The database content for each of the data sources defined in a WebLogic domain is set up by using pre-existing SQL or database loading files.

Note:

No databases are defined in the WebLogic Server Base Domain (wls.jar) template. If you selected only the WebLogic Server Base Domain template as the basis for the WebLogic domain, the Configure JDBC Data Sources and the Run Database Scripts screens are not displayed.

- 1. In the JDBC Data Sources section, select the data source for which you want to run the scripts. The scripts that can be executed are displayed in the SQL Files section.
- **2.** Select the database version from the **DB Version** drop-down list.
- Click Run Scripts.

All the scripts displayed in the SQL Files section for the selected data source are executed, and the results are displayed in the Results section. To capture test output in a log file, select the **Enable Logging** check box and specify the full path for the log file in the **Log File** field.

- **4.** Repeat steps 1 through 3 for each data source for which you want to execute SQL scripts.
- Click Next once you have executed all scripts.

5.17 Credentials

You can use this screen to provide credentials for each key in the WebLogic domain. If you have included the Oracle RAS Session Service template in the domain, the default key and the RAS store, oracle.rdbms.ras, are listed.

For more information on credentials, see Understanding Identities, Policies, Credentials, Keys, Certificates, and Auditing in *Application Security Guide*.

Column	Description
Key Name	This column displays the name of each key in the domain.
Username Password	On each row, enter the username and password to use for each key.
Store Name	This column displays the credential store that is associated with each key.

5.18 Keystore

You can use this screen to specify the path to the trusted certificate for each keystore and the path to each keystore's private key, its password, and the path to the Identity Certificate of the private key.

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

Option/Field	Description
Store Key Name	From this drop-down list, select the store/key that you want to configure.
Trusted Certificate table	The Trusted Certificate table contains the following two columns.
Alias	A read-only field that displays the alias for the trusted certificate as defined in the product template.
Trusted Certificate	Enter the full path and file name for the trusted certificate to use for the selected store/key, or click the icon on the far right of the row to navigate to and select the trusted certificate file.
Private Key table	The Private Key table contains the following four columns.
Alias	A read-only field that displays the alias for the private key as defined in the product template.
Private Key	Enter the full path and file name for the private key file to use for the selected store/key, or click the icon to the right of the field to navigate to and select the private key file.
Password	Enter the password to use for the private key.

Option/Field	Description
Identity Certificate	Enter the full path and file name for the identity certificate to associate with the private key, or click the icon to the right of the field to navigate to and select the identity certificate file.

5.19 Java Keystore Info

You can use this screen to import key pairs and certificates from an existing Java Keystore (.jks) file into Oracle Platform Security Services (for WebLogic). A Java Keystore contains authorization certificates and key pairs that are used for authentication and encryption purposes.

For more information about securing applications with Oracle Platform Security Services (OPSS), see Introduction to Oracle Platform Security Services in *Oracle Fusion Middleware Securing Applications with Oracle Platform Security Services*.

Option/Field	Description
Target Keystore Name	From the drop-down list, select the name of the target keystore (available in the OPSS Keystore Service) that you want to configure.
JKS File Location	Specify the location of the .jks file from which you want to import the key pairs and certificates into the target keystore.
Keystore Password	Specify the password that is required to import the .jks file. This is the password that is defined at the time of creating the .jks file. An error appears if the password does not match.
Permission Protected	The target keystore that you select can be either password protected or permission protected. If you enable permission protected, the access to the target keystore is determined by Java code-based policy grants. In this case, the password you define for the target keystore is ignored.
Target Keystore Password	Specify the password for the target keystore. The target keystore is created with this password.
Alias Name	Each key pair and certificate that is stored in the target keystore is referred by a unique alias. If you want to include additional keys and certificates from the .jks file, specify the appropriate alias name. An error appears if the alias name is not available in the keystore.

Option/Field	Description
Password	Each alias that is stored in the target keystore has a unique password. Specify the appropriate password. An error appears if the password is not valid for the alias name that you select.
	Note: A password is required only if you are importing key pairs; it is optional for certificates.

5.20 Advanced Configuration

You can use this screen to perform advanced configurations for the categories you select from the available list. You can select all the categories, if required.

If you do not select any items on this screen, the Configuration Summary screen is displayed next.

Note:

The categories that are listed on this screen depend on the resources defined in the templates you have selected for the domain.

The Administration Server option is not available when you are extending a domain.

Option	Description
Administration Server	Select this option to modify Administration Server settings such as server name, listen address, listen port, and SSL settings.
	See Administration Server.
Node Manager	Select this option to change the Node Manager type, Node Manager username and password, and Node Manager location. See Node Manager.

Option	Description
Topology	Select this option to
	 Add Managed Servers, clusters, or machines to the domain
	 Delete an existing Managed Server, cluster, or machine
	 Add Managed Servers to an existing cluster Modify the settings for an existing Managed Server, cluster, or machine
	 Configure the default Coherence cluster Configure Virtual Targets and Partitions for Oracle WebLogic Server Multitenant (MT)
	See Managed Servers, through Assign Servers to Machines.
Domain Frontend Host Capture	Select this option to configure the domain-wide frontend host HTTP and HTTPS URLs, and whether HTTP or HTTPS is the default.
	See Domain Frontend Host.
System Components	Select this option to configure and target system components, such as Oracle HTTP Server (OHS) or Oracle Data Integration (ODI).
	See System Components, through Assign System Components to Machines.
Deployments and Services	Select this option to customize how application deployments and services are targeted to servers and clusters.
	See Deployments Targeting, and Services Targeting.
JMS File Store	Select this option to change the settings for your JMS file stores. You can change the name, directory, and synchronous write policy for each file store. See File Stores.
	See the stores.

5.21 Administration Server

The Administration Server is the central point from which you manage your domain. You can use this screen to configure or change the Administration Server settings.

You can access the Administration Server by using the URL <code>protocol://listen-address:listen-port</code>. This is the network channel for the Administration Server. Note that the network channel for each Administration Server must be unique. The <code>protocol</code> can be any of the following: t3, t3s, http, https.

You can configure or change the following Administration Server settings:

Field/Option	Description
Server Name	The default name is AdminServer. Valid server names are a string of characters (alphabetic and numeric).
	Each server instance in a production environment must have a unique name, regardless of the domain or cluster in which it resides, and regardless of whether it is an Administration Server or a Managed Server. The name of the Administration Server must be unique among all component names within the WebLogic domain.
	This value is specified only for identification purposes. It is not used as part of the URL for applications that are deployed on the server. The server name is displayed in the WebLogic Server Administration Console. If you use WebLogic Server command-line utilities or APIs, you must specify this name to identify the server.
Listen address	From the drop-down list, select a value for the listen address.
	For more information, see Specifying the Listen Address.
Listen port	Enter a valid value for the listen port to be used for regular, nonsecure requests (through protocols such as HTTP and T3). The default value is 7001 for the Administration Server. The valid listen port range is from 1 to 65535.
	For more information, see Specifying the Listen Port.
Enable SSL	Select this check box to enable the SSL listen port. By default, SSL is disabled for all new servers.
SSL listen port	This field is enabled only if you selected the SSL enabled check box.
	Enter a valid value to be used for secure requests (through protocols such as HTTPS and T3S). The default value is 7002. If you leave this field blank, the default value is used. The valid listen port range is from 1 to 65535.
	By default, a server instance uses demonstration certificates to authenticate requests from a secure port. In a production environment, you must configure SSL to use certificates from a certificate authority.
	For more information, see SSL: An Introduction in Oracle Fusion Middleware Administering Security for Oracle WebLogic Server.

Field/Option	Description
Server Groups	This drop-down list is displayed only if at least one selected template defines a user-expandable server group.
	You have the option to assign a user-expandable server group to the Administration Server, causing all application service groups that are defined for that server group to be assigned to the Administration Server.
	For more information on server groups, see configgroups.xml and startup-plan.xml in <i>Oracle Fusion Middleware Domain Template Reference</i> .

Specifying the Listen Address Specifying the Listen Port

5.21.1 Specifying the Listen Address

This section provides guidelines for specifying the listen address for the Administration Server. These guidelines also apply to all Managed Servers.

If you select **localhost** as the listen address for a server instance, remote processes cannot connect to that server instance. Only processes on the machine that hosts the server instance can connect to the server instance. If the server instance must be accessible as localhost (for example, if you create administrative scripts that connect to localhost), and it must also be accessible by remote processes, select **All Local Addresses**. The server instance determines the address of the machine and listens on it.

The following table describes the behavior of each listen address type.

Туре	Description
All Local Addresses or a DNS name	On multi-homed Windows machines, a server instance binds to all available IP addresses.

Туре	Description
An IP address or a DNS name	When using an IP address or DNS name
	 To connect to the server instance, processes can specify either the IP address or the corresponding DNS name
	 Processes that specify localhost fail to connect
	 You must update existing processes that use localhost to connect to the server instance
	 For connections that specify the IP address for the listen address and a secured port for the listen port, host name verification must be disabled.
	Note: To resolve a DNS name to an IP address, WebLogic Server must be able to contact an appropriate DNS server or obtain the IP address mapping locally. Therefore, if you specify a DNS name for the listen address, you must either leave a port open long enough for the WebLogic Server instance to connect to a DNS server and cache its mapping or you must specify the IP address mapping in a local file. If you specify an IP address for the listen address, and a client request then specifies a DNS name, WebLogic Server attempts to resolve the DNS name. If it cannot access DNS name mapping, the request fails.
localhost	When using localhost
	 Processes must specify localhost to connect to the server instance
	 Only processes that reside on the machine that hosts the server instance (local processes) can connect to the server instance.

5.21.2 Specifying the Listen Port

Note the following guidelines when specifying the listen port for the Administration Server. These guidelines also apply to Managed Servers.

- Although you can specify any valid port number, if you specify port 80, you can omit the port number from the HTTP request used to access resources over HTTP. For example, if you define port 80 as the listen port, you can use the URL http:// hostname/myfile.html instead of http://hostname:portnumber/ myfile.html.
- On some operating systems, port 80 can be accessed only by processes run under a privileged user or group ID. In this case, you can assign the server instance to a UNIX machine on which a post-bind UID or GID is defined.

5.22 Node Manager

You can use this screen to select the Node Manager configurations applicable for the domain. You can also skip this step to create the Node Manager manually at a later point.

When you start the Node Manager for a domain, it looks for the nodemanager.properties file in the Node Manager home directory.

Option/Field	Description
Node Manager Type	Select one of the following Node Manager types.
Per Domain Default Location	If you select this option, the Node Manager home is predefined within the domain as <code><domain_name>/</domain_name></code> nodemanager and you cannot edit the Node Manager home. The Node Manager for each domain can have a different configuration, as determined by the files in this directory.
Per Domain Custom Location	Select this option if you want the Node Manager configuration files to be created in a specific location for this domain. Specify the directory in the Node Manager Home field, or click Browse to navigate to the location. The specified directory must be empty. The nodemanager.properties and nodemanager.domains files will be created in this directory.
Manual Node Manager Setup	If you select this option, creation of the Node Manager configuration for the domain is skipped, and you must manually create and update the Node Manager configuration for the domain.
	You should also select this option if you do not want to use Node Manager in the domain.
	Note: When creating standalone domains for OHS and ODI, do not select this option. A per domain Node Manager configuration is required for system component standalone domains.
	For more information about Node Manager configuration, see <i>Oracle Fusion Middleware Administering Node Manager for Oracle WebLogic Server</i> .
Username Password Confirm Password	The username and password that is used to start the specified Node Manager.
Node Manager Home	If you selected the Per Domain Custom Location option, click Browse and navigate to the directory location of the Node Manager that you want to use.

5.23 Managed Servers

You can use this screen to add, delete, or clone Managed Servers, and assign a userexpandable server group (if available) to a Managed Server. You can also change the settings for an existing Managed Server.

You can create Managed Servers on remote machines by using the pack and unpack commands.

For more information, see Creating and Starting a Managed Server on a Remote Machine in Oracle Fusion Middleware Creating Templates and Domains Using the Pack and Unpack Commands.

Column	Description
Server Name	Valid server names are a string of characters (alphabetic and numeric). The name must be unique in the domain.
	For more information about server naming conventions, see Server Name Restrictions in <i>Oracle Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server</i> .
Listen Address	From the drop-down list, select a value for the listen address. See Specifying the Listen Address for information about the available values.
Listen port	Enter a valid value for the listen port to be used for regular, nonsecure requests (through protocols such as HTTP and T3). The default value is the next available listen port. The valid listen port range is from 1 to 65535.
	For more information, see Specifying the Listen Port.
Enable SSL	Select this check box to enable the SSL listen port. By default, SSL is disabled for all new servers.
SSL listen port	This field is enabled only if you selected the SSL enabled check box for the server.
	Enter a valid value to be used for secure requests (through protocols such as HTTPS and T3S). The valid listen port range is from 1 to 65535.
Server Groups	If any of the templates you selected to create or update your domain contain a user-expandable server group definition, the Server Groups column is displayed. For each Managed Server, select the check box for each server group you want to assign to the server. Only server groups that are defined as user-selectable are displayed in the list. Typically, you should accept the defaults for Fusion Middleware product servers.
	Note: If you clone a Managed Server, the server group assignments are identical to the original server. Cloning is recommended for creating additional Fusion Middleware product servers.
	The selected server group determines the applications and services that are mapped to a given Managed Server. For example, if you select the WSMPM_MAN_SVR group for a server, all applications and services that are mapped to that server group in the config-groups.xml file for the domain are automatically targeted to the server.
	For more information on server groups, see configgroups.xml and startup-plan.xml and the template sections for the templates that you included in the domain in <i>Oracle Fusion Middleware Domain Template Reference</i> .

To add a server, click **Add** and configure the settings for the new server. The default name for a new server is new_ManagedServer_n, where n starts at 1 and increments for each new server you add.

To clone a server, click in the row for the server you want to clone, and then click **Clone**. The default name for the new clone is <code>original_server_name_clonen</code>, where <code>n</code> starts at 1 and increments for each new server that you clone from that server. When you create a Managed Server that is a clone of an existing Managed Server, all applications and libraries that are targeted to the source server are also deployed to the clone. The cloned server is also assigned to all server groups to which the source server is assigned (if any). In addition, any of the following services that are targeted to the source server are automatically targeted to the clone:

- connectionFactory
- queueConnectionFactory
- topicConnection
- Queue
- Topic
- activationSpec
- Data source
- URLProvider
- workManager
- busMember
- customService
- resourceAdapter

To delete a server, select the server and click **Delete**. You can delete only one server at a time.

5.24 Clusters

A cluster is a group of WebLogic Server instances that work together to provide scalability and high-availability for applications. Use this screen to add or delete clusters, or to change the settings for an existing cluster.

By creating clusters, you can group Managed Servers such that they operate as a single unit for hosting applications and resources.

Column	Description
Cluster Name	Specify a valid name. The name of the cluster must be unique among all component names within the WebLogic domain.

Column	Description
Cluster Address	Specify the addresses for identifying the Managed Servers in the cluster. A cluster address can be one of the following:
	 Comma-separated list of IP addresses or DNS names and ports (for example: dns_name:port, dns_name:port) DNS name that maps to multiple IP addresses
	 localhost, DNS name, or IP address if the listen address of all Managed Servers is listening to the same address with unique port numbers
Frontend Host	Enter the IP address, plain port (HTTP), and
Frontend HTTP Port	secure port (HTTPS) of the frontend host for the cluster, which may be a hardware load
Frontend HTTPS Port	balancer, an Oracle HTTP Server (OHS)
	instance, or frontend host that has already been defined in the WebLogic Server configuration.
	You can leave these fields empty, in which case the domain-wide frontend host values that are specified on the Domain Frontend Host screen are used for the cluster. If you enter these values for the cluster, they override the values, if any, that are specified on the Domain Frontend Host screen.
Dynamic Server Groups	If you are configuring the cluster as a dynamic cluster to scale out a high availability topology, associate the cluster with a dynamic server group. Select a group from the drop-down list that contains the dynamic server groups available for a domain depending on the template you have associated in the Templates screen.
	You can associate a cluster with only one dynamic server group.
	For more information on dynamic clusters, see Using Dynamic Clusters in <i>Oracle Fusion Middleware High Availability Guide</i> .
	If you do not want associate a dynamic server group, select Unspecified from the dropdown list.

To delete a cluster, select the server and click **Delete**. When you delete a cluster, you do not delete the servers assigned to it; the servers are merely removed from the cluster and can then be added to another cluster. You can delete only one cluster at a time.

To add a cluster, click **Add** and configure the settings for the new server. The default name for a new cluster is new_Cluster_n, where n starts at 1 and increments for each new cluster you add. To change the default, type the desired name in the Name column.

For more information about clusters, see Setting Up WebLogic Clusters in *Oracle Fusion Middleware Administering Clusters for Oracle WebLogic Server*.

5.25 Server Templates

You can use the Server Templates screen to define one or more server templates for the domain. A server template contains common, non-default settings and attributes that you can apply to a set of server instances, which then inherit the template configuration.

For more information, see Server Templates in *Oracle Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server*.

Server templates can be used to create dynamic clusters. Dynamic clusters consist of server instances that can be dynamically scaled up to meet the resource needs of your application. For more information, see Dynamic Clusters in *Oracle Fusion Middleware Administering Clusters for Oracle WebLogic Server*.

Column	Description
Name	The list of server templates will be populated either based on the dynamic server group that you have associated with the cluster in the Clusters screen or the templates that already exist in the domain. You can modify or define new server templates, if required.
Listen Port	The default TCP port that the server uses to listen for regular (non-SSL) incoming connections.
	Administrators must have the right privileges before binding to a port or else this operation will not be successful and it will render the console un-reachable.
	If this port is disabled, the SSL port must be enabled. Additional ports can be configured using network channels. The cluster (multicast) port is configured separately.
SSL Listen Port	The port that the server uses to listen for secure (SSL) incoming connections.
Cluster	You have to associate each server template with the appropriate cluster that you have created in the Clusters screen. From the drop-down menu, select the cluster to which a server template belongs. The dynamic server instances that are generated from the cluster is based on the selected server template.
	For more information on dynamic clusters, see Using Dynamic Clusters in <i>Oracle Fusion Middleware High Availability Guide</i> .

5.26 Dynamic Servers

This screen lists each of the clusters that you have created in the current configuration session. You can designate one or more of these clusters to be a dynamic cluster.

For each cluster in the table, use the **Dynamic Cluster** check box to indicate that the cluster will be a dynamic cluster.

When you indicate that a cluster will be a dynamic cluster, you can then define specific properties for each cluster that control how WebLogic Server will create the dynamic servers.

For more information, see Dynamic Clusters in Oracle Fusion Middleware Administering Clusters for Oracle WebLogic Server.

Column	Description
Cluster Name	By default, the names of the clusters that you created in the Clusters screen are listed here. You can change the name, if required.
Server Name Prefix	The server name prefix to use when creating the dynamic server names. By default, the prefix of the dynamic server group that you associate with the cluster in the Clusters screen is used.
	Note: Applicable only if you designate the cluster as a dynamic cluster.
Server Template	The drop-down list displays only those server templates that you have associated with the selected cluster, in the Server Templates screen. Associate each cluster with the appropriate server template.
	Note: Applicable only if you designate the cluster as a dynamic cluster.
Maximum Dynamic Server Count	The maximum number of server instances allowed to be created.
	This value should be set to the number of servers expected to be in the cluster. The specified number of servers are dynamically added to the configuration at runtime.
	Note: Applicable only if you designate the cluster as a dynamic cluster.

Column	Description
Machine Name Match Expression	The machine name expression to use when selecting machine names.
	Note: Applicable only if you designate the cluster as a dynamic cluster.
Calculated Machine Names	Specifies whether machine names are calculated.
	Note: Applicable only if you designate the cluster as a dynamic cluster.
Calculated Listen Ports	Specifies whether listen ports for the server are calculated.
	Note: Applicable only if you designate the cluster as a dynamic cluster.
Dynamic Cluster	Select this check box to indicate that the selected cluster is a dynamic cluster.
	For more information on dynamic clusters, see Using Dynamic Clusters in <i>Oracle Fusion Middleware High Availability Guide</i> .

For more information about using calculated server names, listen ports, or machine names, see Calculating Server-Specific Attributes in *Oracle Fusion Middleware Administering Clusters for Oracle WebLogic Server*.

5.27 Assign Servers to Clusters

You can use this screen to assign Managed Servers to clusters. Only Managed Servers are displayed in the **Server** list box. The Administration Server is not listed because it cannot be assigned to a cluster.

To assign one or more servers to a cluster:

- **1.** In the **Clusters** list box, select the cluster to which you want to assign a Managed Server.
- **2.** Assign Managed Servers to the selected cluster in one of the following ways:
 - Double-click the name of the Managed Server in the **Servers** list box.
 - Select the Managed Server and click the right arrow.

Shift+click to select multiple Managed Servers; then, click the right arrow.

The name of the Managed Server is removed from the Servers list box and added below the name of the target cluster in the **Clusters** list box.

- **3.** Repeat steps 1 and 2 for each Managed Server to assign to a cluster.
- **4.** Review the cluster assignments.

If necessary, you can remove a Managed Server from a cluster in one of the following ways:

- Double-click the name of the Managed Server in the **Clusters** list box.
- Select the Managed Server and click the left arrow.

The name of the Managed Server is removed from the **Clusters** list box and restored to the Servers list box.

5.28 HTTP Proxy Applications

An HTTP proxy application acts as an intermediary for HTTP requests. Use this screen to create an HTTP proxy application for each cluster, and specify the Managed Server on which the proxy application must be deployed.

This screen is displayed only if both of the following statements are true:

- At least one Managed Server is assigned to a cluster.
- At least one Managed Server is not assigned to any cluster.

Column	Description
Cluster Name	This column lists each cluster in the domain.
Create HTTP Proxy	Select this check box for each cluster on which you want to deploy the HTTP proxy application.
Proxy Server	This drop-down list contains all Managed Servers that are not assigned to a cluster. Select the Managed Server on which to deploy the proxy application.
	A proxy application named OracleProxy4_clustername_servername is created and deployed on the Managed Server.

5.29 Coherence Clusters

This screen is displayed only if you have included Coherence in the WebLogic Server installation. It lists the Coherence clusters that are automatically added to the domain.

Specify the following details for the Coherence cluster:

Column	Description
Name	Accept the default cluster name or type a new name for the Coherence cluster.
	When updating a domain, if you have added additional Coherence clusters to the domain via WLST or the WebLogic Server Administration Console, they are also listed here.
Unicast Listen Port	Enter the port number to use as the Coherence cluster unicast listen port.

When including a Coherence cluster in a domain, note the following:

- All Managed Servers and clusters that you configure in the domain during future Configuration Wizard sessions are automatically added to the Coherence cluster.
- Servers and clusters that already exist in the domain before you add a Coherence cluster to the domain are not automatically assigned to the Coherence cluster. If desired, you can manually assign them to the Coherence cluster via a WLST script or the WebLogic Server Administration Console.
- When creating a domain via the Configuration Wizard, if the domain contains only
 an Administration Server and no Managed Servers, the Administration Server is
 automatically assigned to the Coherence cluster. If, however, at least one Managed
 Server is added to the domain during domain creation, the Administration Server
 is not assigned to the Coherence cluster.
- If there are multiple Coherence clusters in the domain (for example, you added a
 second Coherence cluster via WLST or the WebLogic Server Administration
 Console), any servers or clusters that you subsequently add to the domain via the
 Configuration Wizard are automatically assigned to the first Coherence cluster that
 is listed on the Coherence Clusters screen.

5.30 Machines

In a WebLogic domain, the machine definitions identify physical units of hardware and are associated with the WebLogic Server instances or system components (such as OHS servers) that they host. Use this screen to add or delete machines, or to modify the settings for an existing machine.

Each machine has the following configuration settings.

Select the **Machine** tab (for Windows) or the **UNIX Machine** tab (for UNIX).

Column	Description
Name	Enter a valid machine name. The machine name is used to identify the machine within the WebLogic domain; it does not have to match the network name for the machine. The name must be unique among all component names within the domain.
Enable Post Bind GID	(UNIX machines only) Select this check box to enable a server running on this machine to bind to a UNIX group ID (GID) after it finishes all privileged startup actions. By default, this check box is not selected.

Column	Description
Post Bind GID	(UNIX machines only) Enter the UNIX group ID (GID) under which a server on this machine will run after it finishes all privileged startup actions. Otherwise, the server continues to run under the group from which it was started. For this setting to take effect, you must select the Enable Post Bind GID check box.
Enable Post Bind UID	(UNIX machines only) Select this check box to enable a server running on this machine to bind to a UNIX user ID (UID) after it finishes all privileged startup actions. By default, this check box is not selected.
Post Bind UID	(UNIX machines only) Enter the UNIX user ID (UID) under which a server on this machine will run after it finishes all privileged startup actions. Otherwise, the server continues to run under the account from which it was started. For this setting to take effect, you must select the Enable Post Bind UID check box.
Node Manager Listen Address	Select a value from the drop-down list for the listen address used by Node Manager to listen for connection requests. By default, the IP addresses defined for the local system and localhost are shown in the drop-down list. The default value is localhost.
	If you specify an IP address for a machine that hosts the Administration Server and you need to access the WebLogic Server Node Manager, you must disable host name verification.
	For more information, see Using Host Name Verification in <i>Oracle Fusion Middleware Administering Security for Oracle WebLogic Server</i> .
Node Manager Listen Port	Enter a valid value for the listen port used by Node Manager to listen for connection requests.
	The valid Node Manager listen port range is from 1 to 65535. The default value is 5556.

You might want to create machine definitions in situations such as the following:

- The Administration Server uses the machine definition, with the Node Manager application, to start remote servers.
- WebLogic Server or other system components such as OHS use configured machine names when determining the server in a cluster that is best able to handle certain tasks, such as HTTP session replication. Those tasks are then delegated to the identified server.

Note:

You must configure machines for each product installation that runs a Node Manager process. The machine configuration must include values for the listen address and port number parameters.

Click **Add** to add a new machine. The default name for a new machine is new_[Unix]Machine_n, where n starts at 1 and increments by 1 for each machine that you add.

Click **Delete** to delete an existing machine.

5.31 Assign Servers to Machines

You can use this screen to assign the WebLogic Server instances to each of the machines you defined in the **Machines** screen of the Configuration Wizard.

To assign a WebLogic Server instance to a machine you have defined:

- **1.** In the **Machine** list box, select the Windows or UNIX machine to which you want to assign a WebLogic Server instance.
- **2.** Assign a WebLogic Server instance to the selected machine in one of the following ways:
 - Double-click the WebLogic Server instance in the **Server** list box.
 - Select the appropriate WebLogic Server instance in the Server list box and click the right arrow.
 - Shift+click to select multiple servers in the Server list box; then, click the right arrow.

The name of the WebLogic Server instance is removed from the **Server** list box and added, below the name of the target machine, in the **Machine** list box.

- **3.** Repeat steps 1 and 2 for each WebLogic Server instance to assign to a machine.
- **4.** Review the machine assignments.

If necessary, you can remove a WebLogic Server instance from a machine in one of the following ways:

- Double-click the name of the appropriate WebLogic Server instance in the **Machine** list box.
- Select the appropriate WebLogic Server instance in the **Machine** list box and click the left arrow.

The name of the WebLogic Server instance is removed from the **Machine** list box and restored to the **Server** list box.

5.32 Virtual Targets

Virtual targets define the locations where a partition or resource group runs. You can use this screen to add or delete Virtual Targets for use in a WebLogic Server Multitenant (MT) environment.

Virtual Targets also provide instructions on how to route traffic, including addresses, protocol settings, and targeting. Request routing is determined by the host name and optional URI.

For more information, see the following resources in *Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant*:

Virtual Targets

• Configuring Virtual Targets: Overview

Column	Description
Name	Enter the name you want to use for the virtual target.
Target	From the drop-down list, select a Managed Server or cluster that you are creating in this domain.
Host Names	Enter the list of host names to which this virtual target will serve requests. The host names that you specify must have domain name system (DNS) entries that resolve to the correct servers, or to a load balancer:
	If you are not using Oracle Traffic Director to balance the connection load for a partition, then specify the actual host name of the WebLogic Server cluster or Managed Server.
	If you are using Oracle Traffic Director to load balance connections for a partition, then you access applications through Oracle Traffic Director. The host names that you specify for a virtual target must resolve to the location of the Oracle Traffic Director Administration Server.
	If you do not specify a host name, then it is the equivalent of using a wild card for the host name to match all incoming requests.
	The host name used by a client to access the resource group must exactly match one of the host names specified in the virtual target.
	You can specify multiple host names for the virtual target. You might find it convenient to specify both the simple and the fully qualified host name to ensure a match.
URI Prefix	Enter an optional URI prefix to which this virtual target will serve requests.
	For example, if you enter www.example.com as the host name and MyApp as the URI prefix, then this virtual target serves requests to www.example.com/MyApp, but not to www.example.com or www.example.com/foo.
	To extend this example, assume that your application root is /app. The resulting URL for the application would be www.example.com/MyApp/app.
Explicit Port	Enter the explicit port for this virtual target.
Port Offset	Enter the port offset of the port for this virtual target.

5.33 Partitions

A domain partition is a portion of a WebLogic Server domain that is dedicated to running application instances and related resources. You can use this screen to add partitions in a WebLogic domain.

For each partition you want to add, click **Add** and enter the name you want to use for the partition. The partition name must be unique within the domain.

For more information, see Configuring Domain Partitions in *Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant*.

5.34 Assign Virtual Targets to Partitions

You can assign one or more existing virtual targets to a domain partition. You can use a virtual target with only one partition.

To assign Virtual Targets to a partition:

- 1. In the **Partitions** list box, select the partition to which you want to assign a Virtual Target.
- **2.** Assign virtual targets to the selected partition in one of the following ways:
 - Double-click the target in the **Virtual Targets** list box.
 - Select the appropriate target in the **Virtual Targets** list box and click the right arrow.
 - Shift+click to select multiple targets in the **Virtual Targets** list box; then, click the right arrow.

The name of the virtual target is removed from the **Virtual Targets** list box and added, below the name of the target partition, in the **Partitions** list box.

- **3.** Repeat steps 1 and 2 for each virtual target you want to assign to a machine.
- **4.** Review the partition assignments.

If necessary, you can remove a virtual target from a partition in one of the following ways:

- Double-click the name of the appropriate virtual target instance in the Partitions list box.
- Select the appropriate virtual target in the **Partitions** list box and click the left arrow.

The name of the virtual target is removed from the **Partitions** list box and restored to the **Virtual Targets** list box.

5.35 Domain Frontend Host

When creating a new domain, you can use this screen to enable the frontend host, specify both the plain and secure URLs for the frontend host, and select the default frontend host URL.

This screen is displayed only if you have selected the **Domain Frontend Host Capture** option on the Advanced Configuration screen.

If there are one or more OHS instances configured in the domain, the Plain and SSL fields are automatically populated with the appropriate values from the first OHS instance in the domain. Otherwise, you must configure the values. The settings are then saved to a service table.

When updating a domain, the values are populated based on the values in the service table (if any). If the service table values are null and there are no OHS instances configured, the **Configure Domain Frontend Host** check box is deselected

(unchecked) by default. In this case, you must select the check box and configure the host to enable the domain frontend host.

Field or Option	Description
Configure Domain Frontend Host	If selected, the domain-wide frontend host is enabled. To disable and delete the frontend host configuration, deselect this check box. A notification will appear to indicate that the configuration is being deleted from the service table.
Plain	If not automatically populated, enter the plain URL for the frontend host, for example, http://www.myhost.com:8180. You can also update the existing value if needed.
SSL	If not automatically populated, enter the SSL URL for the frontend host. You can also update the existing value if needed.
	Note: If you are using the plain URL for the frontend host, you must still specify a default SSL URL. If you have only set up a plain connection to the Frontend Host, you can use the same URL for both plain and SSL. Otherwise, they must be different.
Default	Select the appropriate radio button to make either the Plain or SSL URL the default URL for the frontend host.

5.36 System Components

You can use this screen to add or delete system components such as for Oracle HTTP Server (OHS) and Oracle Data Integrator (ODI).

Field	Description
System Component	Enter a unique name to identify the system component.
Component type	Enter the appropriate component type, such as OHS or ODI.
Restart interval seconds	Specify the number of seconds to wait before attempting a restart if an application is not responding.
Restart interval delay	Specify the number of seconds to wait between restart attempts.

Click **Add** to add a new system component. The default name for a new component is new_SystemComponent*n*, where *n* starts at 1 and increments by 1 for each OHS or ODI instance that you add.

To delete an existing system component, click in the table row for the component and click **Delete**.

5.37 OHS Server

You can use this screen to configure the Oracle HTTP Server (OHS) in the WebLogic domain. Prior to configuring OHS, you must add OHS as a system component by using the **System Component** screen.

Specify the following details to configure the OHS servers:

Field	Description
System Component	From this drop-down list, select the system component to configure.
Admin Host	The listen address to use for the selected OHS server for communication with Node Manager. The address should only allow loopback communication within the host (for example, 127.0.0.1).
Admin Port	The listen port to use for the selected OHS server for communication with Node Manager on this system. The port must be unique.
Listen Address	Enter the listen address to use on this system component.
	For more information about listen addresses, see Specifying the Listen Address.
Listen Port	Enter the listen port to use on this system component.
	For more information about listen ports, see Specifying the Listen Port.
SSL Listen Port	This field is available only if SSL is enabled on the specified WebLogic Server Administration Server.
	Enter a valid value to be used for secure requests on this server instance. The valid listen port range is from 1 to 65535.
	By default, a server instance uses demonstration certificates to authenticate requests from a secure port. In a production environment, you must configure SSL to use certificates from a certificate authority.
	For more information, see SSL: An Introduction in Oracle Fusion Middleware Administering Security for Oracle WebLogic Server.
Server Name	The server URL and listen port for the currently selected OHS server. When adding new servers, this field defaults to the server on which you are running the Configuration Wizard and the port value in the Listen Port field.

5.38 ODI Server Configuration

You can use this screen to configure the co-located ODI agents in the WebLogic domain. Prior to configuring ODI, you must add ODI as a system component by using the **System Component** screen.

For more information on standalone and co-located ODI agents, see Understanding Oracle Data Integrator Agents in Oracle Fusion Middleware Installing and Configuring Oracle Data Integrator.

Field	Description
System Component	From this drop-down list, select the ODI agent to configure.
Server Listen Address	From this drop-down list, select the appropriate server listen address for the selected ODI agent. Do not use localhost .
Server Listen Port	Enter the listen port to use for the ODI agent.
Supervisor Username	Enter the ODI username that has Supervisor privileges.
Supervisor Password	Enter the password for the Supervisor user password.
Preferred Datasource	From this drop-down list, select the data source to use for the selected ODI agent.

5.39 Assign System Components to Machines

After you configure the system components such as OHS and ODI, you can use this screen to assign these components to the machines that you have defined in the Machines screen.

To assign system components to machines:

- 1. In the Machine list box, select the Windows or UNIX machine to which you want to assign a system component.
- **2.** Assign system components to the selected machine in one of the following ways:
 - Double-click the instance in the **System Components** list box.
 - Select the appropriate instance in the **System Components** list box and click the right arrow.
 - Shift+click to select multiple instances in the System Components list box; then, click the right arrow.

The name of the system component is removed from the **System Components** list box and added, below the name of the target machine, in the **Machine** list box.

- **3.** Repeat steps 1 and 2 for each instance to assign to a machine.
- **4.** Review the machine assignments.

If necessary, you can remove an instance from a machine in one of the following ways:

- Double-click the name of the appropriate instance in the **Machine** list box.
- Select the appropriate instance in the **Machine** list box and click the left arrow.

The name of the instance is removed from the Machine list box and restored to the **System Components** list box.

5.40 Deployments Targeting

Applications associated with the product for which you are configuring the domain are targeted automatically to the Managed Server that is created for that product, or to the cluster to which that Managed Server is assigned. In this screen, you can target applications to additional servers and clusters.

To target an application deployment to a cluster or server:

1. In the Target list box, select the cluster or server on which you want to deploy applications.

The name of the selected target is displayed as the title of the list box on the right.

2. In the *target_name* list box, select the check boxes corresponding to the applications to deploy on the selected target.

The applications displayed here vary, depending on the products that you selected in the Select Domain Source screen, earlier in the wizard.

Note:

When you select a Managed Server in the Target list box, some of the check boxes in the *target_name* list box might be disabled, indicating applications that are already targeted at the cluster that contains the selected Managed Server.

After you select applications, the names of the targeted clusters and servers are displayed in the Target column in the *target_name* list box.

- **3.** Repeat steps 1 and 2 for the other clusters and servers, as required.
- **4.** After making the required selections, click **Next**.

When you extend a domain, if you delete a Managed Server or cluster to which applications are currently targeted, the Configuration Wizard automatically retargets those applications as follows:

- If the applications were originally targeted solely to the Managed Server or cluster that you are now deleting (that is, after you delete the Managed Server or cluster, the applications would become untargeted in the modified domain), then the Configuration Wizard automatically retargets the applications to all *eligible* targets.
 - An eligible target is any cluster or Managed Server that is not defined in the configuration groups specification (config-groups.xml file) of an included template. Servers or clusters that are specified in config-groups.xml are essentially owned by the template and, therefore, are not eligible for automatic targeting.
- If the applications were originally targeted to multiple targets (including Managed Servers, clusters, and the Administration Server), and one of the targeted Managed Servers or clusters is deleted, then, in the extended domain, the Configuration Wizard leaves the remaining target associations intact and does not attempt to retarget the applications.

5.41 Services Targeting

Services that are associated with the product for which you are configuring the domain are targeted automatically to the Managed Server created for that product, or to the cluster to which that Managed Server is assigned. In this screen, you can target services to additional servers and clusters.

To target services to Managed Servers or clusters:

1. In the Target list box, select the cluster or server on which you want to deploy services.

The name of the selected target is displayed as the title of the list box on the right.

2. In the *target_name* list box, select the check boxes corresponding to the services to deploy on the selected target.

The services displayed here vary, depending on the products that you selected in the Select Domain Source screen earlier in the wizard.

Note:

When you select a Managed Server in the Target list box, some of the check boxes in the target_name list box might be disabled, indicating services that are already targeted at the cluster that contains the selected Managed Server.

After you select services, the names of the targeted clusters and servers are displayed in the **Target** column in the *target_name* list box.

- **3.** Repeat steps 1 and 2 for the other clusters and servers, as required.
- **4.** After making the required selections, click **Next**.

When you extend a domain, if you delete a Managed Server or cluster to which services are currently targeted, the Configuration Wizard automatically retargets those services as follows:

- If the services were originally targeted solely to the Managed Server or cluster that you are now deleting (that is, after you delete the Managed Server or cluster, the services would become untargeted in the modified domain), then the Configuration Wizard automatically retargets the services to all *eligible* targets.
 - An eligible target is any cluster or Managed Server that is not defined in the configuration groups specification (config-groups.xml file) of an included template. Servers or clusters that are specified in config-groups.xml are essentially owned by the template and, therefore, are not eligible for automatic targeting.
- If the services were originally targeted to multiple targets (including Managed Servers, clusters, and the Administration Server), and one of the targeted Managed Servers or clusters is deleted, then, in the extended domain, the Configuration Wizard leaves the remaining target associations intact and does not attempt to retarget the services.

5.42 File Stores

A JMS file store is a disk-based file in which persistent messages can be saved. You can use this screen to modify the JMS file stores that are configured in the WebLogic domain.

Specify the following details to modify the JMS file stores:

Column	Description
Name	Enter a valid name for the JMS file store. The name must be a string of characters. The name of the JMS file store must be unique among all component names within the domain.
Directory	Enter the path of the directory (in your system) in which the JMS file store resides.
Synchronous write policy	From the drop-down list, select one of the following synchronous write policies to determine how the file store writes data to the disk. If the JMS file store is used exclusively for paging non-persistent messages to the disk, the synchronous write policy is ignored.
Cache-Flush	WebLogic Server enables the default file write behavior of the operating system and storage device, which typically includes caching and scheduling file writes, but forces a flush of the cache to disk before completing a transaction. For more information, see Cache-Flush Policy in <i>Oracle Fusion Middleware Administering the WebLogic Persistent Store</i> .
Direct Write	Write operations are performed directly to the disk. This policy is supported on Solaris and Windows. If this policy is active on an unsupported platform, the file store switches automatically to the cache-flush policy. For more information, see Direct-Write Policy in <i>Oracle Fusion Middleware Administering the WebLogic Persistent Store</i> .
Direct-Write-With-Cache	For most scenarios, Oracle recommends using the Direct-Write-With-Cache policy. When this policy is selected, WebLogic Server writes synchronously to a primary set of files in the location defined by the Directory attribute of the file store configuration using a native I/O wlfileio driver. For more information, see Direct-Write-With-Cache Policy in <i>Oracle Fusion Middleware Administering the WebLogic Persistent Store</i> .

Column	Description
Disabled	Transactions are complete as soon as the writes are cached in memory. When this policy is active, completion of transactions does not depend on waiting for writes to reach the disk. This setting affects performance, scalability, and reliability.
	For more information, see Disabled Policy in <i>Oracle Fusion Middleware Administering the WebLogic Persistent Store</i> .

5.43 Configuration Summary

This screen provides a summary of the configuration settings for the WebLogic domain. Review the details before you proceed.

In the Domain Summary pane, select an item to display details about that item in the **Details** pane on the right.

You can limit the items that are displayed in the **Domain Summary** pane by selecting a filter option from the **Summary View** drop-down list.

If you need to change the configuration, click **Back** to return to the appropriate screen.

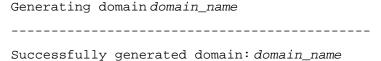
When done, click Create to create the domain.

5.44 Configuration Progress

If you are creating a domain, this screen shows the progress of the domain creation. If you are updating (extending) a domain, this screen shows the progress of the domain update.

If you are creating a domain using templates that were selected in the Templates screen, detailed messages are displayed as the domain is being created.

If you are configuring the WebLogic Server samples domains at the end of WebLogic Server installation, the following messages are displayed for each domain:



When the domain creation process completes, click Next or Finish to continue. Note that in some situations, the **Finish** button is not available and you must click **Next**.

5.45 Configuration Success

Depending on whether you run the full Configuration Wizard or the Quick Start Configuration Wizard, the appropriate configuration success message appears on this screen.

Single Domain

The message "New Domain domain_name Created" is displayed, and the domain location is provided along with the Administration Server URL to use for the domain.

On Windows systems, if you want to start the Administration Server after closing the Configuration Wizard, select the Start Admin Server check box. This check box is not available on UNIX systems.

Multiple Domains (Quick Start Configuration Wizard Only)

The following configuration details are displayed:

Field	Description
Domain Name	The name of the new domains.
Domain Location	The path for each domain.
Status	The status of each domain creation, Successful or Failed. If Failed, a message is displayed to indicate the failure reason.
Admin URL	The Administration Server URL.

If you used the Quick Start Wizard to create the WebLogic Server samples domains, a **Start Domain** check box is available on Windows to start any of the domains. To start a domain, select this check box, and then select the domain to start from the dropdown list.