

# Oracle® Fusion Middleware

## Creating WebLogic Domains Using the Configuration Wizard



14c (14.1.2.0.0)  
F69992-01  
December 2024

ORACLE®

Oracle Fusion Middleware Creating WebLogic Domains Using the Configuration Wizard, 14c (14.1.2.0.0)

F69992-01

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# Preface

This document describes creating, extending, and managing WebLogic domain by using the Configuration Wizard.

- [Audience](#)
- [Documentation Accessibility](#)
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## Audience

This guide is intended for Oracle Fusion Middleware administrators.

## Documentation Accessibility

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## Related Documents

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

- *Installing and Configuring Oracle WebLogic Server and Coherence*
- *Administering Node Manager for Oracle WebLogic Server*

- 
- *Deploying Applications to Oracle WebLogic Server*
  - *Administering Server Startup and Shutdown for Oracle WebLogic Server*
  - *WLST Command Reference for WebLogic Server*

## Conventions

The following text conventions are used in this document:

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

# 1

## 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:

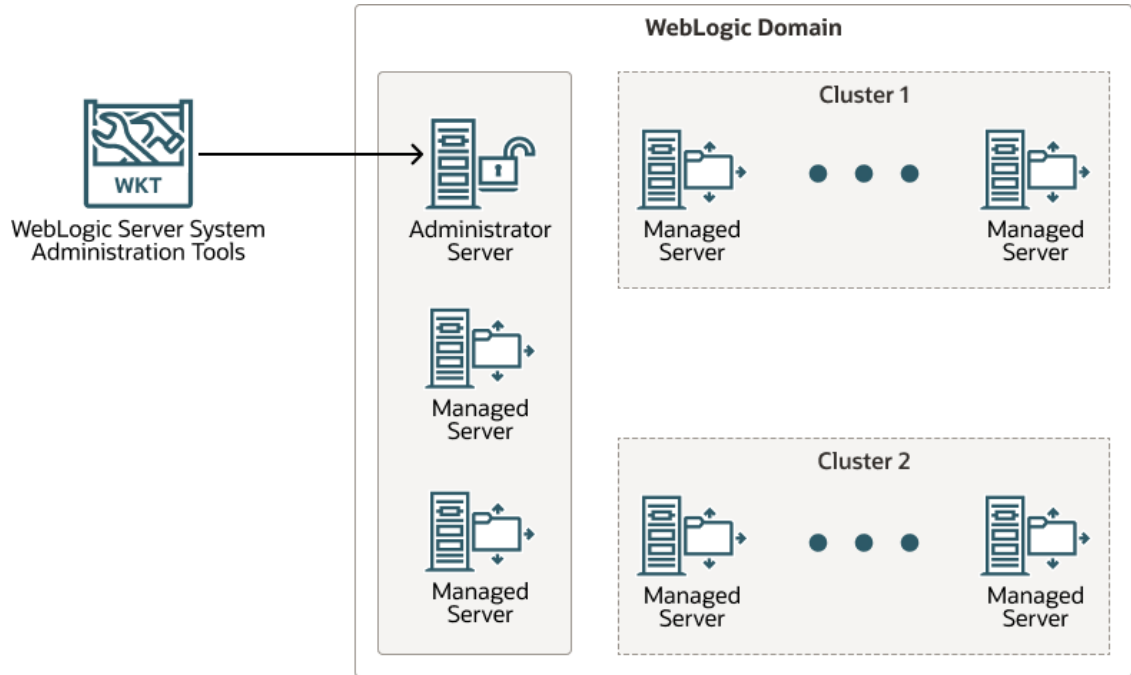
- [Introduction to WebLogic Domains](#)  
A WebLogic domain is the basic administrative unit of WebLogic Server. It consists of one or more WebLogic Server instances, and logically related resources and services that are managed collectively as one unit.
- [Overview of the Configuration Wizard](#)  
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. This file 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 runtime configuration by using the consoles of the product components (for example, the WebLogic Remote Console).

## 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	<p>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.</p> <p>The Administration Server provides a central point for managing the domain and providing access to the WebLogic Server administration tools. These tools include:</p> <ul style="list-style-type: none"> <li>• WebLogic Remote Console: Graphical user interface for the Administration Server.</li> <li>• 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.</li> </ul> <p>The Node Manager is installed on all the machines that host any server instance—both the Administration Server and Managed Servers.</p> <p>For more information about the WebLogic Server administration tools, see <i>Summary of System Administration Tools and APIs</i> in <i>Understanding Oracle WebLogic Server</i>.</p>
Managed Servers	<p>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.</p>

**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 support, 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 can 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 about Coherence clusters, see Introduction to Coherence Clusters in <i>Developing Applications with Oracle Coherence</i> .
Managed Coherence servers	A domain can also include managed Coherence servers. A managed Coherence server is any WebLogic Managed Server that is assigned to a Coherence cluster. For more information about managed Coherence servers, see Configuring Managed Coherence Servers in <i>Administering Clusters for Oracle WebLogic Server</i> .

**Note:**

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 in 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 may 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.

**Table 1-2 (Cont.) Common WebLogic Domain Configurations**

Configuration	Description
Standalone server domain	<p>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 that you want to test or develop.</p> <p>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.</p>

 **Note:**

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 *Understanding Domain Configuration for Oracle WebLogic Server*.

## 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.

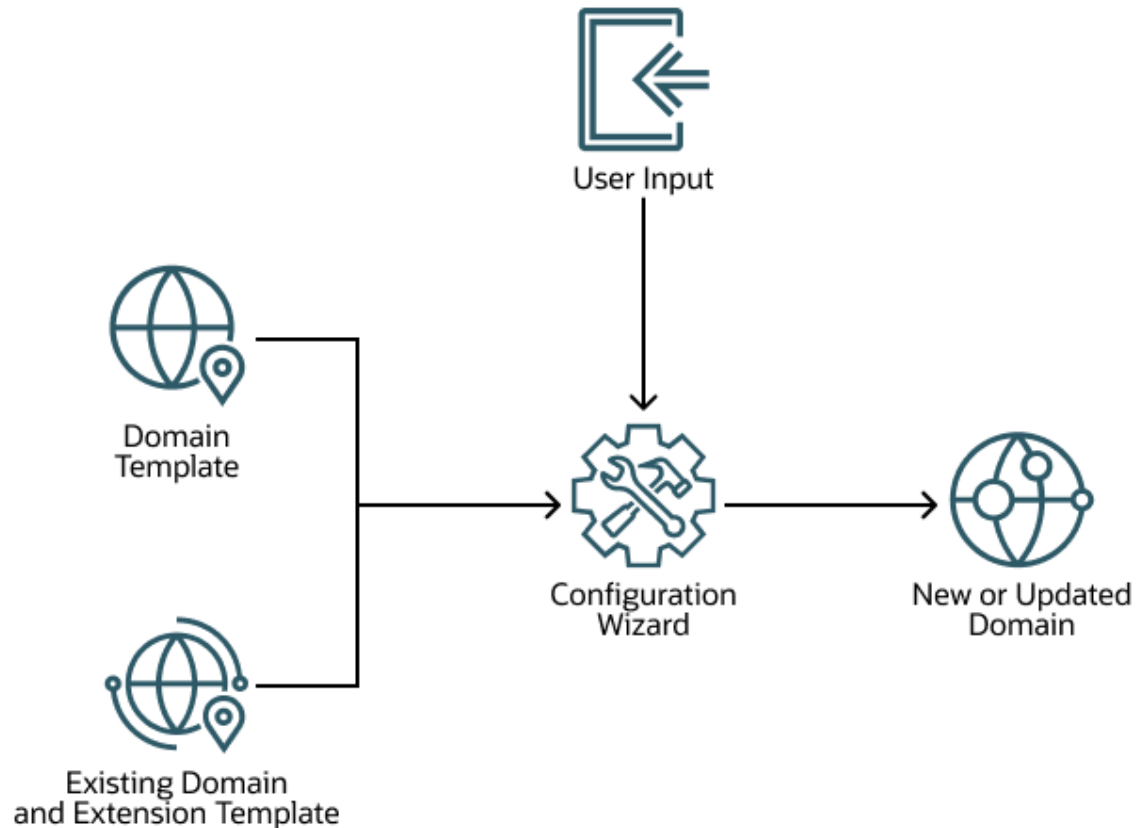
 **Note:**

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 *Upgrading Oracle WebLogic Server*.

To create or extend a WebLogic domain by using the Configuration Wizard, 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 *Creating Domain Templates Using the Domain Template Builder*. For information about creating domains using WLST, see Creating Domains Using WLST Offline in *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 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.

## 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 the applicable screens for configuring or extending a domain. For information about how to start the wizard in this mode, see [Starting the Configuration Wizard](#).
- Quick Start mode, which displays a small subset of configuration screens from which you can specify the critical settings for the WebLogic Server sample domains. For information about this mode, see [Running the Quick Start Configuration Wizard](#).
- Reconfiguration mode, which is used to upgrade your WebLogic domain after you install a new WebLogic Server version and, if applicable, any installed Fusion Middleware applications that are compatible with the newly installed WebLogic Server version. For more information about this mode, see [Reconfiguring a WebLogic Domain in Graphical Mode in \*Upgrading Oracle WebLogic Server\*](#).



### Note:

For a scripted, silent-mode method, you can use WLST. See [Using the WebLogic Scripting Tool in \*Understanding the WebLogic Scripting Tool\*](#).

## Quick Start Configuration Wizard

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

When you install WebLogic Server (standalone), and if you include the samples, the Installation Complete screen provides an option 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 the [Configuration](#) screen, from which you specify the following critical settings for the sample 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. For information on running the wizard manually, see [Running the Quick Start Configuration Wizard](#).

## 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 the 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.
config	This directory contains: <ul style="list-style-type: none"> <li>• A domain-specific configuration file, <code>config.xml</code>, which specifies the name of the WebLogic domain and the configuration parameter settings for each server instance, cluster, resource, and service in the domain.</li> <li>• Subdirectories that contain the configuration for various system modules: <code>coherence</code>, <code>configCache</code>, <code>deployments</code>, <code>diagnostics</code>, <code>jdbc</code>, <code>jms</code>, <code>lib</code>, <code>nodemanager</code>, <code>security</code>, and <code>startup</code>. These subdirectories contain configuration files that are incorporated, by reference, into the <code>config.xml</code> file.</li> </ul> <p><b>Note:</b> Depending on your configuration, some subdirectories may not exist.</p>
console-ext	This directory contains console extensions that are used by the Administration Server.
init-info	This directory contains files that are 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 <code>jar</code> 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 <code>bin</code> , <code>cache</code> , <code>data</code> , <code>logs</code> , <code>security</code> , and <code>tmp</code> .
user_staged_config	This directory provides an alternative to the <code>config</code> directory 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.

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

 **Note:**

Oracle recommends that you create your domains outside of the Oracle Home directory. This option 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 about the XML document that is located in the domain's configuration directory, see Domain Configuration Files in *Understanding Domain Configuration for Oracle WebLogic Server*.

## About Templates

In the context of the Configuration Wizard, the term *template* refers to a Java Archive (JAR) file. This file 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. This set includes 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. After you create the template, 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 by 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:** As 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 you select the extension template to use, you must select the WebLogic domain that you want to extend.
- **Reconfiguration template:** Reconfiguration templates are provided by Oracle to make it easier for you to upgrade 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 to upgrade 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, it automatically applies that template. For information on the Reconfiguration Wizard, see Reconfiguring WebLogic Domains in *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 *Domain Template Reference*.

## 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 runtime configuration by using the consoles of the product components (for example, the WebLogic Remote Console).

[Table 1-3](#) describes the various tools you can use to create, extend, and manage domains, and the situations in which you can use each tool. The left column lists the task you must perform and the right column describes the WebLogic Server tools you can use to accomplish the task.

**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 domain	<ul style="list-style-type: none"> <li>• WebLogic Scripting Tool (WLST). 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. See Using the WebLogic Scripting Tool in <i>Understanding the WebLogic Scripting Tool</i>.</li> <li>• <code>unpack</code> 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 the <code>unpack</code> command to extend an existing domain. See The Unpack Command in <i>Creating Templates and Domains Using the Pack and Unpack Commands</i>.</li> </ul>
Add applications and services, or modify existing settings	<ul style="list-style-type: none"> <li>• WebLogic Remote Console. See Using the WebLogic Remote Console in <i>Understanding Oracle WebLogic Server</i>.</li> <li>• Other system administration tools, such as WLST, JMX, and Ant. See Summary of System Administration Tools and APIs in <i>Understanding Oracle WebLogic Server</i>.</li> </ul>



**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	<ul style="list-style-type: none"><li data-bbox="818 312 1325 436">• WebLogic Diagnostics Framework (WLDF). See <i>Using the Built-in Diagnostic System Modules in Configuring and Using the Diagnostics Framework for Oracle WebLogic Server</i>.</li><li data-bbox="818 443 1341 533">• WebLogic Remote Console. See <i>Using the WebLogic Remote Console in Understanding Oracle WebLogic Server</i>.</li><li data-bbox="818 539 1458 718">• WebLogic Server Node Manager. See <i>Starting an Administration Server Using WLST and Node Manager in Administering Server Startup and Shutdown for Oracle WebLogic Server</i> and <i>Node Manager Overview in Administering Node Manager for Oracle WebLogic Server</i>.</li></ul>

# 2

## Creating a WebLogic Domain

You can create a new WebLogic domain by using the Configuration Wizard in 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 you start the Configuration Wizard, 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 by selecting the template JAR files. If necessary, you can also customize the domain to suit your environment.
- [Domain Version Restrictions](#)  
When you create a domain by using a custom template, either by using WLST or the **Create Domain Using Custom Template** option on the Templates screen of the Configuration Wizard, you have to keep a few restrictions in mind.
- [Starting the Configuration Wizard](#)  
You can start the Configuration Wizard in 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 Graphical Mode](#)  
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 on other factors.
- [Starting the Administration Server](#)  
You can start the Administration Server after you create the domain.
- [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.

## Setting the CONFIG\_JVM\_ARGS Environment Variable

Before you start the Configuration Wizard, 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, include the following value for the `CONFIG_JVM_ARGS` environment variable: -

```
Dcom.oracle.cie.config.showProfile=true
```

This setting causes domain profile selections (compact and expanded) to appear on the [Configuration Type](#) screen of the Configuration Wizard. For more information about domain profiles, see Domain Topology Profiles in *Domain Template Reference*.

## 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 by selecting the template JAR files. If necessary, you can also customize the domain to suit your environment.

[Table 2-1](#) shows the sequence of the Configuration Wizard screens. The screens that you see depend on your domain requirements and whether 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.

## Domain Version Restrictions

When you create a domain by using a custom template, either by using WLST or the **Create Domain Using Custom Template** option on the Templates screen of the Configuration Wizard, you have to keep a few restrictions in mind.

The restrictions include the following:

- 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 is used.
- 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 by using either WLST or the Fusion Middleware Reconfiguration Wizard. For more information about the Reconfiguration Wizard screen, click **Help** on the relevant screen.

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

## Starting the Configuration Wizard

You can start the Configuration Wizard in 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:
  1. Log in to the system on which the product is installed.
  2. Open an MS-DOS command prompt window (on Windows) or a command shell (on UNIX).
  3. 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 during installation.
  4. Execute the following command:  
On Windows: `config.cmd`  
On UNIX: `sh config.sh`

 **Note:**

When you run the `config.cmd` or `config.sh` command, the following error message appears if 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 appears.

## Creating a WebLogic Domain in Graphical Mode

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 on other factors.

To create a new WebLogic Domain, start the Configuration Wizard as described in [Starting the Configuration Wizard](#).

 **Note:**

In situations where you cannot run the Configuration Wizard in the GUI mode, Oracle recommends that you use a WLST script to create or extend a domain. See [Creating and Using a Domain Template \(Offline\)](#) in *Understanding the WebLogic Scripting Tool*.

If your installation includes Fusion Middleware products, see [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
<a href="#">Configuration Type - No Profiles</a>	When <code>CONFIG_JVM_ARGS</code> is not set to display domain profile options	Select <b>Create a new domain</b> . In the <b>Domain Location</b> box, enter the path to the new domain, or click <b>Browse</b> to create the domain directory. Click <b>Next</b> .
<a href="#">Configuration Type - Profiles</a>	When <code>CONFIG_JVM_ARGS</code> is set to <code>-Dcom.oracle.cie.config.showProfile=true</code>	Select <b>Create a new expanded domain</b> or <b>Create a new compact domain</b> as appropriate. In the <b>Domain Location</b> box, enter the path to the new domain, or click <b>Browse</b> to create the domain directory. Click <b>Next</b> .
<a href="#">Templates</a>	Always	Select the appropriate option: <ul style="list-style-type: none"> <li>• Select <b>Create Domain Using Product Templates</b>, and then select the check box for each product to include in the domain.</li> <li>• Select <b>Create Domain Using Custom Template</b>, and then click <b>Browse</b> to locate the domain template on your local drive or network.</li> </ul> Click <b>Next</b> .

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">High Availability Options</a>	Only if the templates that you have selected in the Templates screen are configured for high availability.	You can configure the following HA options: <ul style="list-style-type: none"> <li>• Select <b>Enable Automatic Service Migration</b> to automatically migrate services from an unhealthy hosting server to a healthy active server. You can choose high-availability database leasing or non-database consensus leasing for migration. See <i>Leasing and Service Migration in Administering Clusters for Oracle WebLogic Server</i>.</li> <li>• Select the persistence type for Java Transaction API (JTA). You can choose to persist transaction logs (Tlogs) in a database or in a file-based store. See <i>Using the Default Persistent Store in Administering Server Environments for Oracle WebLogic Server</i>.</li> <li>• Select the persistence type for JMS servers. You can use either a file store or a JDBC store. See <i>JMS and JTA High Availability in High Availability Guide</i>.</li> </ul>
<a href="#">Application Location</a>	Only if one or more of the selected templates define an application	Click <b>Next</b> . Specify the directory in which the domain applications are to be stored.
<a href="#">Administrator Account</a>	Always	Click <b>Next</b> . Specify the username and password for the administrator account of the domain. Click <b>Next</b> .

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Domain Mode and JDK</a>	Always	<p>Select the domain mode to use: <b>Development</b> or <b>Production</b>. When <b>Production</b> is selected, secured production mode is enabled by default. Turn on <b>Disable Secure Mode</b> if you want to use the less secure default settings of Production mode. See <i>Understand How Domain Mode Affects the Default Security Configuration in Securing a Production Environment for Oracle WebLogic Server</i>.</p> <p>Enter an <b>Admin Port</b>. When secured production mode is enabled, all administrative traffic must flow through this port. The administration port is 9002 by default.</p> <p>Select the JDK to use in the domain or click <b>Browse</b> to navigate to the JDK you want to use.</p> <p>Click <b>Next</b>.</p>
<a href="#">Database Configuration Type</a>	Only if the domain includes components that require JDBC data sources, GridLink data sources, or Oracle RAC multi-data sources	See <a href="#">Configuring Data Sources</a> , for information about the relevant screens.
<a href="#">Database Scripts</a>	Only if the selected products or template includes a set of SQL files organized by database type	<p>Select the data sources for which you want to run the database scripts.</p> <p>Select the database version.</p> <p>Click <b>Run Scripts</b>.</p> <p>After you run the necessary scripts, click <b>Next</b>.</p>
<a href="#">Advanced Configuration</a>	Always	<p>Select the check box for each category (if any) for which you want to perform advanced configuration tasks.</p> <p>The available check boxes depend on the resources that are configured in the selected products or template.</p> <p>Click <b>Next</b>.</p> <p>See <a href="#">Advanced Configuration</a>, for the sequence of screens that appear if you select all available options.</p>
<a href="#">Configuration Summary</a>	Always	<p>Review the configuration for your domain by selecting a Summary View, and then selecting individual items in the list for that view.</p> <p>If the domain is configured as you want it, click <b>Create</b> to create the domain.</p> <p>To modify the configuration, click <b>Previous</b> to return to the appropriate screen for the settings you want to change.</p>

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Configuration Progress</a>	Always	Shows the progress of the domain creation. When the process completes, click <b>Next</b> .
<a href="#">Configuration Success</a>	Always	Review the domain creation results. Click <b>Finish</b> to exit the Configuration Wizard.

- [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.
- [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.

## 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 2-2](#) lists the sequence of data source screens that are displayed in the Configuration Wizard. For more information on each screen, refer to the related section in [Configuration Wizard Screens](#), or click the link in the **Screen** column.

After you configure 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
<a href="#">JDBC Data Sources</a>	Only if the domain includes components that require JDBC data sources	Select a data source to configure, and then do one of the following: <ul style="list-style-type: none"> <li>• Configure the fields for the data source.</li> <li>• Select the <b>Convert to GridLink</b> option.</li> <li>• Select the <b>Convert to RAC multi-data source</b> option.</li> </ul> Click <b>Next</b> to continue.
<a href="#">GridLink Oracle RAC Data Sources</a>	Only if the domain includes components that require JDBC data sources, and you have selected the <b>Convert to GridLink</b> option for at least one 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 <b>Next</b> to continue.



**Table 2-2 (Cont.) Data Source Configuration Screens**

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Oracle RAC Multi Data Sources</a>	Only if the domain includes components that require JDBC data sources, and you selected the <b>Convert to RAC multi-data source</b> 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 <b>Next</b> to continue.
<a href="#">JDBC Data Sources Test</a>	Only if the domain includes components that require JDBC data sources	Select the data sources to test, and click <b>Test Connection</b> . Wait for one or more connection tests to complete. <b>Note:</b> 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, deselect all data sources. Click <b>Next</b> to continue.

## 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 appear 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
<a href="#">Administration Server</a>	Only if you have selected <b>Administration Server</b> on the Advanced Configuration screen	Change the settings for the Administration Server as needed. Click <b>Next</b> .
<a href="#">Node Manager</a>	Only if you have selected <b>Node Manager</b> on the Advanced Configuration screen	Select the <b>Node Manager Type</b> . Enter the username and password for accessing the Node Manager. Click <b>Next</b> .
<a href="#">Managed Servers</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Advanced Configuration screen	Add, delete, clone, or reconfigure Managed Servers as needed. Click <b>Next</b> .
<a href="#">Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Advanced Configuration screen	Add, delete, or reconfigure clusters as needed. Click <b>Next</b> .
<a href="#">Server Templates</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Advanced Configuration screen	Add templates to or delete templates from the domain that you are configuring. Click <b>Next</b> .

**Table 2-3 (Cont.) Advanced Configuration Screens**

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Assign Servers to Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .
<a href="#">HTTP Proxy Applications</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Create HTTP Proxy</b> check box for a cluster, select the proxy server to use for that cluster. Click <b>Next</b> .
<a href="#">Coherence Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .
<a href="#">Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Advanced Configuration screen	Select the <b>Machine</b> tab (Windows) or <b>Unix Machine</b> tab (UNIX). Add machines as needed. Configure the settings for each machine. Click <b>Next</b> .
<a href="#">Assign Servers to Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the 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 <b>Next</b> .
<a href="#">Deployments Targeting</a>	Only if you have selected <b>Deployments and Services</b> on the 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 that you want to deploy on the selected target. <b>Note:</b> While creating a Restricted JRF domain by using the <code>config.cmd</code> or <code>config.sh</code> command, you must target the Enterprise Manager (EM) related libraries to the cluster to access the Enterprise Manager Console. Click <b>Next</b> .
<a href="#">Services Targeting</a>	Only if you have selected <b>Deployments and Services</b> on the Advanced Configuration screen	Select the target server or cluster. Select the check box for each service that you want to target. Click <b>Next</b> .
<a href="#">File Stores</a>	Only if you have selected <b>File Store</b> 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 <b>Next</b> .

## Starting the Administration Server

You can start the Administration Server after you create the domain.

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

## 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) that you want to configure, as described below:

- 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 is used to populate a `domain_home/common/db` 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.

Before you run the Configuration Wizard manually in the 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 *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/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:

```
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/wls.jar,/Oracle/Middleware/wlserver/common/templates/
wls/wls_websservice_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 the Quick Start Configuration Wizard screens:

**Table 2-4 Quick Start Configuration Screens**

No.	Screen	When Does This Screen Appear?	Perform the Following Action
1	<a href="#">Configuration</a>	Always	Complete all fields and selections, and then click <b>Create</b> .
2	<a href="#">Configuration Progress</a>	Always	Shows the progress of the domain creation. When the process completes, click <b>Next</b> .
3	<a href="#">Configuration Success</a>	Always	Review the domain creation results. Click <b>Finish</b> 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 from the command line.

## 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 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 process 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/wls.jar,WL_HOME/common/templates/wls/wls_default.jar,
WL_HOME/common/templates/wls/wls_examples.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)	<i>WL_HOME</i> /common/templates/wls/wls.jar <i>WL_HOME</i> /common/templates/wls/medrec.jar
MedRec Spring (Avitek Medical Records Sample Domain for Spring)	<i>WL_HOME</i> /common/templates/wls/wls.jar <i>WL_HOME</i> /common/templates/wls/medrec_spring.jar
WebLogic Server Examples	<i>WL_HOME</i> /common/templates/wls/wls.jar <i>WL_HOME</i> /common/templates/wls/wls_examples.jar

# 3

## Updating WebLogic Domains

The update process enables you to add a 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 have 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 the migratable target settings.

 **Note:**

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

Before you update 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. See *Reconfiguring WebLogic Domains in [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 by using WLST or the `unpack` command.

For information about extension templates provided by Oracle, see *Types of Templates in [Domain Template Reference](#)*.

This chapter includes the following sections:

- [Before You Begin](#)  
Set the value of the `CONFIG_JVM_ARGS` environment variable 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](#)  
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.

## Before You Begin

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

Before you 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
```

## 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.

## Updating a WebLogic Domain in Graphical Mode

The Configuration Wizard takes you through a series of screens that help you update a WebLogic Server domain.

To begin the update process, start the Configuration Wizard as described in [Starting the Configuration Wizard](#).

 **Note:**

In situations where you cannot run the Configuration Wizard in the GUI mode, Oracle recommends that you use a WLST script to create or update a domain. See [Creating and Using a Domain Template \(Offline\)](#) in *Understanding the WebLogic Scripting Tool*.

If your installation includes Fusion Middleware products, see [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.

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Configuration Type</a>	Always	<p>Select <b>Update an Existing Domain</b>.            Select the domain directory from the <b>Existing Domain Directory</b> drop-down list, or click <b>Browse</b> to navigate to and select the domain directory.            Click <b>Next</b>.</p>
<a href="#">Templates</a>	Always	<p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• Select <b>Update Domain Using Product Templates</b>, and then select the check box for each product to add to the domain.</li> <li>• Select <b>Update Domain Using Custom Template</b>, and then click <b>Browse</b> to locate the template on your local drive or network.</li> </ul> <p>Click <b>Next</b>.  <b>Note:</b> When you update a domain by using a custom template, you must comply with the domain version restrictions as described in <a href="#">Domain Version Restrictions</a>.</p>



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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">High Availability Options</a>	Only if the templates that you have selected in the Templates screen are configured for high availability.	At the time of updating a domain, this screen appears only if new templates are introduced and you have not configured the HA options for those templates. For example, if the new templates that you use to update the domain contain the “Automatic Service Migration (ASM)” parameter, and you have not defined the ASM parameter in the existing, the screen appears.  Select the applicable HA options for the domain you are updating.  Click <b>Next</b> .
<a href="#">Application Location</a>	Only if one or more of the selected templates define an application	Specify the directory in which the domain applications have to be stored.  Click <b>Next</b> .
Data Source Configuration	Only if the selected products or template includes components that require JDBC data sources or Oracle RAC multi-data sources	See <a href="#">Configuring Data Sources</a> for information about these screens.
<a href="#">Advanced Configuration</a>	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.  <b>Note:</b> When extending a domain, you cannot change the Administration Server and Node Manager configurations. Therefore, these options are not available.  Click <b>Next</b> .
<a href="#">Managed Servers</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, or reconfigure Managed Servers as needed.  Click <b>Next</b> .
<a href="#">Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, or reconfigure clusters as needed.  Click <b>Next</b> .
<a href="#">Assign Servers to Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">HTTP Proxy Applications</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Create HTTP Proxy</b> check box for a cluster, select the proxy server to use for that cluster. Click <b>Next</b> .
<a href="#">Coherence Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .
<a href="#">Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, or reconfigure machines as needed. Click <b>Next</b> .
<a href="#">Assign Servers to Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .
<a href="#">Deployments Targeting</a>	Only if you have selected <b>Deployments and Services</b> 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. <b>Note:</b> While creating a Restricted JRF domain by using the <code>config.cmd</code> or <code>config.sh</code> command, you must target the Enterprise Manager (EM) related libraries to the cluster to access the Enterprise Manager Console. Click <b>Next</b> .
<a href="#">Services Targeting</a>	Only if you have selected <b>Deployments and Services</b> 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 <b>Next</b> .
<a href="#">File Store</a>	Only if you have selected <b>File Store</b> 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 <b>Next</b> .

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Configuration Summary</a>	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 <b>Update</b> to extend the domain.  To modify the configurations, click <b>Previous</b> to return to the appropriate screen for the settings you want to change.
<a href="#">Configuration Progress</a>	Always	Shows the progress of the domain creation.  When the process completes, click <b>Next</b> .
<a href="#">Configuration Success</a>	Always	Click <b>Finish</b> to exit the Configuration Wizard.

## 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 *Creating Templates and Domains Using the Pack and Unpack Commands*.

# 4

## 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](#)  
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 on other factors.
- [Updating a WebLogic Domain That Includes Fusion Middleware Products](#)  
The Configuration Wizard takes you through a series of screens that help you update the domain.

### Creating 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 on other factors.

To create a new WebLogic domain that 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. See [Creating and Using a Domain Template \(Offline\)](#) in *Understanding the WebLogic Scripting Tool*.

The Configuration Wizard screens appear in a sequence, 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
<a href="#">Configuration Type - No Profiles</a>	When <code>CONFIG_JVM_ARGS</code> is not set to display domain profile options	Select <b>Create a new domain</b> . In the <b>Domain Location</b> box, enter the path to the new domain, or click <b>Browse</b> to create the domain directory. Click <b>Next</b> .

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

Screen	When Does This Screen Appear?	Perform the Following Action
Configuration Type - Profiles	When <code>CONFIG_JVM_ARGS</code> is set to <code>-Dcom.oracle.cie.config.showProfile=true</code>	<p>Select <b>Create a new expanded domain</b> or <b>Create a new compact domain</b> as appropriate.</p> <p>In the <b>Domain Location</b> box, enter the path to the new domain, or click <b>Browse</b> to create the domain directory.</p> <p>Click <b>Next</b>.</p>
Templates	Always	<p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• Select <b>Create Domain Using Product Templates</b>, and then select the check box for each product to include in the domain.</li> <li>• Select <b>Create Domain Using Custom Template</b>, and then click <b>Browse</b> to locate the template on your local drive or network.</li> </ul> <p>Click <b>Next</b>.</p>
High Availability Options	Only if the templates that you have selected in the Templates screen are configured for high availability.	<p>You can configure the following HA options:</p> <ul style="list-style-type: none"> <li>• Select <b>Enable Automatic Service Migration</b> to automatically migrate services from an unhealthy hosting server to a healthy active server. You can choose high-availability database leasing or non-database consensus leasing for migration. See <i>Leasing and Service Migration in Administering Clusters for Oracle WebLogic Server</i>.</li> <li>• Select the persistence type for Java Transaction API (JTA). You can choose to persist transaction logs (Tlogs) in a database or in a file-based store. See <i>Using the Default Persistent Store in Administering Server Environments for Oracle WebLogic Server</i>.</li> <li>• Select the persistence type for JMS servers. You can use either a file store or a JDBC store. See <i>JMS and JTA High Availability in High Availability Guide</i>.</li> </ul> <p>Click <b>Next</b>.</p>
Application Location	Only if one or more of the selected templates define an application	<p>Specify the directory in which the domain applications have to be stored.</p> <p>Click <b>Next</b>.</p>
Administrator Account	Always	<p>Specify the username and password for the administrator account of the domain.</p> <p>Click <b>Next</b>.</p>

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Domain Mode and JDK</a>	Always	<p>Select the domain mode to use: <b>Development</b> or <b>Production</b>. When <b>Production</b> is selected, secured production mode is enabled by default. Turn on <b>Disable Secure Mode</b> if you want to use the less secure default settings of Production mode. See <i>Understand How Domain Mode Affects the Default Security Configuration in Securing a Production Environment for Oracle WebLogic Server</i>.</p> <p>Enter an <b>Admin Port</b>. When secured production mode is enabled, all administrative traffic must flow through this port. The administration port is 9002 by default.</p> <p>Select the JDK to use in the domain or click <b>Browse</b> to navigate to the JDK you want to use.</p> <p>Click <b>Next</b>.</p>
<a href="#">Database Configuration Type</a>	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas	<p>Select whether you want to use RCU parameters for schema configuration, or you want to configure the schemas manually.</p> <p>If you elect to use RCU parameters, complete the fields on the screen and click <b>Get RCU Configuration</b>.</p> <p>Click <b>Next</b>.</p>
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 <a href="#">Configuring Schemas</a> 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 <a href="#">Configuring Data Sources</a> for information about these screens.
<a href="#">Credentials</a>	Only when a selected template requires user provided credentials	<p>Specify the username and password for each security store or key.</p> <p>Click <b>Next</b>.</p>
<a href="#">Keystore</a>	Only when a selected template requires user provided key pairs or certificates	<p>Select the security store/key to configure.</p> <p>In the top table, enter the path for the trusted certificate to use.</p> <p>In the bottom table, enter the path for the private key and the password for the private key.</p> <p>Repeat for each store or key.</p> <p>When done, click <b>Next</b>.</p>

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


Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Java Keystore Info</a>	Only when a selected template requires importing key pairs or certificates from a <code>.jks</code> 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 necessary. Click <b>Next</b> .
<a href="#">Advanced Configuration</a>	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 <b>Next</b> .
<a href="#">Administration Server</a>	Only if you have selected <b>Administration Server</b> on the Select Advanced Configuration screen	Change the settings for the Administration Server as needed. Click <b>Next</b> .
<a href="#">Node Manager</a>	Only if you have selected <b>Node Manager</b> on the Select Advanced Configuration screen	Select the <b>Node Manager Type</b> . Enter the username and password for accessing the Node Manager. Click <b>Next</b> .
<a href="#">Managed Servers</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, clone, or reconfigure Managed Servers as needed. Click <b>Next</b> .
<a href="#">Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, or reconfigure clusters as needed. Click <b>Next</b> .
<a href="#">Assign Servers to Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .
<a href="#">HTTP Proxy Applications</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 you want to create an HTTP proxy application for the cluster. If you select the <b>Create HTTP Proxy</b> check box for a cluster, select the proxy server to use for that cluster. Click <b>Next</b> .
<a href="#">Coherence Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Advanced Configuration screen	Select the <b>Machine</b> tab (Windows) or <b>Unix Machine</b> tab (UNIX). Add machines as needed. Configure the settings for each machine. Click <b>Next</b> .
<a href="#">Assign Servers to Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .
<a href="#">Domain Frontend Host</a>	Only if you have selected <b>Domain Frontend Host Capture</b> on the Advanced Configuration screen	Enable or disable the frontend host and, if enabled, specify or update the configuration for the frontend host. Click <b>Next</b> .
<a href="#">System Components</a>	Only if a system component, such as OHS or OID, is installed	Click <b>Add</b> to add system components to the domain. Configure each system component. Click <b>Next</b> .
<a href="#">OHS Server</a>	Only if OHS is installed	Select an OHS server to configure. Specify the settings for that server. Repeat for each server. Click <b>Next</b> .
<a href="#">ODI Server Configuration</a>	Only if ODI is installed	Select the ODI server to configure. Specify the settings for that server. Repeat for each server. Click <b>Next</b> .
<a href="#">Assign System Components to Machines</a>	Only if a system component, such as OHS or OID, is installed	Assign the system component servers to the appropriate machines. Click <b>Next</b> .



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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Deployments Targeting</a>	Only if you have selected <b>Deployments and Services</b> on the Select Advanced Configuration screen, and a selected product or template contains J2EE applications or libraries	<p>Select the target server or cluster on which you want to deploy applications or libraries.</p> <p>Select the check box for each application or library you want to deploy on the selected target.</p>
		<div style="border: 1px solid #0070C0; padding: 10px; background-color: #E6F2FF;"> <p> <b>Note:</b></p> <p>When you create a restricted JRF domain by using the <code>config.cmd</code> or <code>config.sh</code> command, you must target the Enterprise Manager (EM) related libraries to the cluster to access the Enterprise Manager Console.</p> </div>
<a href="#">Services Targeting</a>	Only if you have selected <b>Deployments and Services</b> on the Select Advanced Configuration screen	<p>Click <b>Next</b>.</p> <p>Select the target server or cluster.</p> <p>Select the check box for each service you want to target to it.</p> <p>Click <b>Next</b>.</p>
<a href="#">File Stores</a>	Only if you have selected <b>File Store</b> on the Select Advanced Configuration screen	<p>Change the settings for each JMS file store as needed, and select the synchronous write policy for each file store.</p> <p>Click <b>Next</b>.</p>

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Configuration Summary</a>	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 <b>Create</b> to create the domain. To modify the configurations, click <b>Previous</b> to return to the appropriate screen for the settings you want to change.
<a href="#">Configuration Progress</a>	Always	Shows the progress of the domain creation. When the process completes, click <b>Next</b> .
<a href="#">Configuration Success</a>	Always	Review the domain creation results. Click <b>Finish</b> 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.

## 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.

**Table 4-2 Schema Configuration Screens**

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Database Configuration Type</a>	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 to connect to the database server from which service table information is to be retrieved. Click <b>Next</b> to continue.

**Table 4-2 (Cont.) Schema Configuration Screens**

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">JDBC Component Schema</a>	<p>Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas</p> <p>There are two versions of this screen, depending on whether the selected templates contain multi-data source definitions or GridLink data source definitions</p>	<p>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.</p> <p>For example, if all your schemas reside on the same database, select all the schemas in the table, then specify the appropriate database values for the schemas (DBMS/Service, Host Name, and Port).</p> <p>If, for example, you have a different password for each schema, you must select each schema individually and specify the password for the selected schema.</p> <p>Click <b>Next</b> to continue.</p>
<a href="#">GridLink Oracle RAC Component Schema</a>	<p>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 <b>Convert to GridLink</b> option</p>	<p>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.</p> <p>For example, if all your schemas reside on the same database, select all 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).</p> <p>If, for example, you have a different password for each schema, you must select each schema individually and specify the password for the selected schema.</p> <p>Click <b>Next</b> to continue.</p>

**Table 4-2 (Cont.) Schema Configuration Screens**

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Oracle RAC Multi Data Source Component Schema</a>	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 <b>Convert to RAC multi-data source</b> option	<p>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.</p> <p>For example, if all your schemas reside on the same database, select all the schemas in the table, then specify the appropriate database values for the schemas (Service Name, Host Name, Instance Name, and Port).</p> <p>If, for example, you have a different password for each schema, you must select each schema individually and specify the password for the selected schema.</p> <p>Click <b>Next</b> to continue.</p>
<a href="#">JDBC Component Schema Test</a>	Only if the domain includes components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schema	<p>Test the configurations that you specified for the data sources in the previous screen.</p> <p>Click <b>Next</b> to continue.</p>

After you configure the screens described in this section, return to [Table 4-1](#) to continue with the sequence.

## 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
<a href="#">JDBC Data Sources</a>	Only if the domain includes components that require JDBC data sources	<p>Select a data source to configure, and then do one of the following:</p> <ul style="list-style-type: none"> <li>Configure the fields for the data source</li> <li>Select the <b>Configure selected data sources as RAC multi-data sources</b> option</li> </ul> <p>Click <b>Next</b> to continue.</p>

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">GridLink Oracle RAC Data Sources</a>	Only if the domain includes components that require JDBC data sources, and you selected the <b>Convert to GridLink</b> option for at least one 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 <b>Next</b> to continue.
<a href="#">Oracle RAC Multi Data Sources</a>	Only if the domain includes components that require JDBC data sources, and you selected the <b>Convert to RAC multi-data source</b> 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 <b>Next</b> to continue.
<a href="#">JDBC Data Sources Test</a>	Only if the domain includes components that require JDBC data sources	Select the data sources to test, and click <b>Test Connection</b> . Wait for one or more connection tests to complete. <b>Note:</b> 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, deselect all data sources. Click <b>Next</b> to continue.
<a href="#">Database Scripts</a>	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 <b>Run Scripts</b> . After you run the necessary scripts, click <b>Next</b> to continue.

## Updating a WebLogic Domain That Includes Fusion Middleware Products

The Configuration Wizard takes you through a series of screens that help you update the domain.

To update the domain, 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. See *Creating and Using a Domain Template (Offline)* in *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
<a href="#">Configuration Type</a>	Always	Select <b>Update an Existing Domain</b> . Select the domain directory from the <b>Existing Domain Directory</b> drop-down list, or click <b>Browse</b> to navigate to and select the domain directory. Click <b>Next</b> to continue.
<a href="#">Templates</a>	Always	Do one of the following: <ul style="list-style-type: none"> <li>• Select <b>Update Domain Using Product Templates</b>, and then select the check box for each product to add to the domain.</li> <li>• Select <b>Update Domain Using Custom Template</b>, and then click <b>Browse</b> to locate the template on your local drive or network.</li> </ul> Click <b>Next</b> to continue.
<a href="#">High Availability Options</a>	Only if the templates that you have selected in the Templates screen are configured for high availability.	At the time of updating a domain, this screen appears only if new templates are introduced and you have not configured the HA options for those templates. For example, if the new templates that you use to update the domain contain the “Automatic Service Migration (ASM)” parameter, and you have not defined the ASM parameter in the existing, the screen appears. Select the applicable HA options for the domain you are updating. Click <b>Next</b> .
<a href="#">Application Location</a>	Only if one or more of the selected templates define an application	Specify the directory in which the domain applications have to be stored. Click <b>Next</b> to continue.
<a href="#">Database Configuration Type</a>	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 configure the schemas manually. If you elect to use RCU parameters, complete the fields on the screen and click <b>Get Defaults</b> . Click <b>Next</b> .
<a href="#">Schema Configuration</a>	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 <a href="#">Configuring Schemas</a> for information about these screens.

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

Screen	When Does This Screen Appear?	Perform the Following Action
Data Source Configuration	Only if the selected products or template includes components that require JDBC data sources or Oracle RAC multi-data sources	See <a href="#">Configuring Data Sources</a> for information about these screens.
<a href="#">Credentials</a>	Only when a selected template requires user provided credentials.	Specify the username and password for each security store or key. Click <b>Next</b> .
<a href="#">Keystore</a>	Only when a selected template requires user provided key pairs or certificates.	Select the security store or key to configure.  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 or key. When done, click <b>Next</b> .
<a href="#">Java Keystore Info</a>	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 necessary. Click <b>Next</b> .
<a href="#">Advanced Configuration</a>	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. <b>Note:</b> When you extend a domain, you cannot change the Administration Server and Node Manager configurations. Therefore, these options are not available. Click <b>Next</b> .
<a href="#">Managed Servers</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, or reconfigure Managed Servers as needed. Click <b>Next</b> .
<a href="#">Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, or reconfigure clusters as needed. Click <b>Next</b> .
<a href="#">Assign Servers to Clusters</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .

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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">HTTP Proxy Applications</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 you want to create an HTTP proxy application for the cluster. If you select the <b>Create HTTP Proxy</b> check box for a cluster, select the proxy server to use for that cluster. Click <b>Next</b> to continue.
<a href="#">Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> on the Select Advanced Configuration screen	Add, delete, or reconfigure machines as needed. Click <b>Next</b> .
<a href="#">Domain Frontend Host</a>	Only if you selected <b>Domain Frontend Host Capture</b> on the Advanced Configuration screen	Enable or disable the frontend host and, if enabled, specify or update the configuration for the frontend host. Click <b>Next</b> .
<a href="#">Assign Servers to Machines</a>	Only if you have selected <b>Managed Servers, Clusters, and Coherence</b> 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 <b>Next</b> .
<a href="#">System Components</a>	Only if a system component, such as OHS, is installed	Click <b>Add</b> to add system components to the domain. Configure each system component. Click <b>Next</b> .
<a href="#">OHS Server</a>	Only if OHS is installed	Select a system component to configure. Specify the settings for that component. Click <b>Next</b> .
<a href="#">ODI Server Configuration</a>	Only if ODI is installed	Select the ODI server to configure. Specify the settings for that server. Repeat for each server. Click <b>Next</b> .
<a href="#">Assign System Components to Machines</a>	Only if a system component, such as OHS, is installed	Assign the system component servers to the appropriate machines. Click <b>Next</b> .
<a href="#">Deployments Targeting</a>	Only if you have selected <b>Deployments and Services</b> 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 <b>Next</b> .
<a href="#">Services Targeting</a>	Only if you have selected <b>Deployments and Services</b> 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 <b>Next</b> .



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

Screen	When Does This Screen Appear?	Perform the Following Action
<a href="#">Files Stores</a>	Only if you have selected <b>JMS File Store</b> 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 <b>Next</b> .
<a href="#">Configuration Summary</a>	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 <b>Update</b> to extend the domain. To modify the configurations, click <b>Previous</b> to return to the appropriate screen for the settings you want to change.
<a href="#">Configuration Progress</a>	Always	Shows the progress of the domain creation. When the process completes, click <b>Next</b> .
<a href="#">Configuration Success</a>	Always	Click <b>Finish</b> to exit the Configuration Wizard.

# 5

## 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](#)  
The `CONFIG_JVM_ARGS` environment variable enables you to pass additional arbitrary command line arguments to the `java` command that initiates the Configuration Wizard. To enable the selection of the profile type, use `CONFIG_JVM_ARGS` to set the System Property `com.oracle.cie.config.showProfile`. For example, `CONFIG_JVM_ARGS="-Dcom.oracle.cie.config.showProfile=true"`.
- [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](#)  
Use the Templates screen to create or extend a domain that is configured automatically to support selected products. You can also use this screen to create or extend a domain based on an existing domain or application template.
- [High Availability Options](#)  
You can configure service migration and persistence settings for high availability. High availability ensures the availability of a system or a device whenever required.
- [Application Location](#)  
Use the Application Location screen to specify the full path to the directory in which you want to store the applications that are associated with the domain.
- [Administrator Account](#)  
Use the Administrator Account screen to define the default WebLogic Administrator account for the domain. This account is used to boot and connect to the Administration Server of the domain.
- [Domain Mode and JDK](#)  
Use the Domain Mode and JDK screen to set the domain mode: Development, Production, or Secured Production. You can also choose which ports are enabled. You can then specify the JDK for the domain.
- [Database Configuration Type](#)  
The Database Configuration Type screen and the subsequent schema configuration screens appear 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 the GridLink Oracle RAC Component Schema 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](#)  
Use the Oracle RAC Multi Data Source Component Schema screen to configure the component schemas that are included in the WebLogic domain as Oracle RAC multi-data sources.
- [JDBC Component Schema Test](#)  
Use the JDBC Component Schema Test screen to test all the JDBC component schema configurations that you specified for the data sources in the **JDBC Component Schema** screen.
- [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.
- [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 the Oracle RAC Multi Data Sources screen to configure the data sources that are included in the domain as Oracle RAC data sources.
- [JDBC Data Sources Test](#)  
Use the JDBC Data Sources Test 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, 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](#)  
Use the Keystore 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](#)  
Use the Java Keystore Info 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](#)  
Use the Advanced Configuration screen to perform advanced configurations for the categories you select from the available list. You can select all the categories, if necessary.
- [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**  
Use the Node Manager screen to select the Node Manager configurations that are applicable for the domain. You can also skip this step to create the Node Manager manually at a later point.
- **Managed Servers**  
Use the Managed Servers 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**  
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**  
The Dynamic Servers 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**  
Use the Assign Servers to Clusters screen to assign Managed Servers to clusters. Only Managed Servers appear 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 the HTTP Proxy Applications 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**  
The Coherence Clusters screen appears 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 the Machines screen to add or delete machines, or to modify the settings for an existing machine.
- **Assign Servers to Machines**  
Use the Assign Servers to Machines screen to assign the WebLogic Server instances to each of the machines that you defined in the **Machines** screen of the Configuration Wizard.
- **Domain Frontend Host**  
When creating a new domain, use the Domain Frontend Host 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**  
Use the System Components 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. Before you configure OHS, you must add OHS as a system component by using the **System Component** screen.
- [ODI Server Configuration](#)  
Use the ODI Server Configuration screen to configure the collocated ODI agents in the WebLogic domain. Before you configure ODI, 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, use the Assign System Components to Machines 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 configure 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 the Deployments Targeting screen, you can target applications to additional servers and clusters.
- [Services Targeting](#)  
Services that are associated with the product for which you configure 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 the Services Targeting 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. Use the File Stores screen to modify the JMS file stores that are configured in the WebLogic domain.
- [Configuration Summary](#)  
The Configuration Summary 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, the Configuration Progress 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.

## Configuration Type

The `CONFIG_JVM_ARGS` environment variable enables you to pass additional arbitrary command line arguments to the java command that initiates the Configuration Wizard. To enable the selection of the profile type, use `CONFIG_JVM_ARGS` to set the System Property `com.oracle.cie.config.showProfile`. For example, `CONFIG_JVM_ARGS="-Dcom.oracle.cie.config.showProfile=true"`.

There are two versions of this screen:

- [Configuration Type - No Profiles](#)
- [Configuration Type - Profiles](#)

## Configuration Type - No Profiles

This Configuration Type - No Profiles 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 is based on the WebLogic Server Basic Domain, which includes an Administration Server and the default security realm <code>myrealm</code> . 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. <b>Note:</b> 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 appears when you click <b>Next</b> .
Domain Location	If you select the <b>Create</b> option, enter the full path for the domain or use the <b>Browse</b> 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. <b>Note:</b> Oracle recommends that you create your domain directories outside of the Oracle home directory. If you selected the <b>Update</b> option, use the <b>Browse</b> button to navigate to the domain that you want to update. If multiple domains exist in this installation, this field contains a drop-down list of the domains, and you can select the domain that you want to update.

## Configuration Type - Profiles

In the Configuration Type - Profiles screen, you select whether to create a domain (expanded or compact) or update an existing domain. When you create a domain, the selection you make is permanent. 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. Compact domains may also be used for some Fusion Middleware product domains such as OHS domains.



### Note:

If you create a domain that does *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 that 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 create your domain, some of the templates you select may have expanded and compact profiles defined, while others may not.

For more information about domain profiles and server groups, see Domain Profile Types in *Domain Template Reference*.

Option/Field	Description
Create new expanded domain	<p>Select this option for production environments to create a new expanded domain, which includes clusters and Managed Servers. Typically, the new domain is based on the WebLogic Server Basic Domain, which includes an Administration Server and the default security realm <code>myrealm</code>. You may, however, choose to use your own domain template to create the domain; your domain template must contain at least an Administration Server.</p> <p>You can add as many clusters and Managed Servers to an expanded domain as needed.</p>
Create new compact domain	<p>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.</p> <p>Some Fusion Middleware templates define a compact domain topology profile. If used to create a compact domain, some or all the application service groups defined in the template are targeted to the Administration Server.</p>
Update existing domain	<p>Select this option if you already have a WebLogic domain, and you want to add resources to that domain.</p> <p><b>Note:</b> 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 appears when you click <b>Next</b>.</p>
Domain Location	<p>If you select the <b>Create</b> option, enter the full path for the domain, or use the <b>Browse</b> 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.</p> <p><b>Note:</b> Oracle recommends that you create your domain directories outside of the Oracle home directory.</p> <p>If you select the <b>Update</b> option, use the <b>Browse</b> button to navigate to the domain that you want to update. If multiple domains exist in this installation, this field contains a drop-down list of the domains. You can then select the domain that you want to update.</p>

## 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	<p>The login username for the WebLogic Administrator account.</p> <p>The username must <i>not</i> contain commas, tabs, or any of the following characters:</p> <p>&lt; &gt; #   &amp; ? ( ) { }</p>

Field	Description
Password	<p>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:</p> <p>! " # \$ % &amp; ' ( ) * + , - . / : ; &lt; = &gt; ? @ [ \ ] ^ _ ` {   } ~</p> <p>The password that is set here is also used for any JDBC data sources that are defined in the templates that you specified when you started the Quick Start Configuration Wizard.</p>
Confirm Password	Enter the same user password. An error appears if the two entries do not match.
Advanced Configuration	Specify the following advanced configuration options for the new domain.
Domain location	<p>This field appears only if you create a single domain.</p> <p>Enter the full path for the domain (for example, C:\domains\newdomain). You can also use the <b>Browse</b> 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.</p>
Domain parent location	<p>This field appears only if you configure the three WebLogic Server sample domains at the end of the WebLogic Server installation.</p> <p>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.</p> <p>You can also use the <b>Browse</b> button to navigate to the directory to use as the parent directory.</p>
Application location	<p>This field appears only if you create a single domain.</p> <p>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 <b>Browse</b> 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 application location at the end of the path.</p>
Application parent location	<p>This field appears only if you configure the three WebLogic Server sample domains at the end of the WebLogic Server installation.</p> <p>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.</p> <p><b>Note:</b> This directory determines the location of the WebLogic server examples, which are installed in <i>application_parent_directory/wl_server/examples/src/examples</i>. The default location is <i>user_projects/applications/wl_server/examples/src/examples</i>.</p> <p>You can also use the <b>Browse</b> button to navigate to the directory to use as the parent directory.</p>
Administration Server Listen Address	<p>From the drop-down list, select a value for the listen address.</p> <p>See <a href="#">Specifying the Listen Address</a>.</p>
Administration Server Listen Port	<p>Enter a valid value for the listen port to be used for regular, non-secure 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.</p> <p>If the secured production mode domain is configured, the administration port by default is 9001.</p> <p>See <a href="#">Specifying the Listen Port</a>.</p>



Field	Description
Enable Listen Port	Select this check box to enable the regular (non-SSL) listen port. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .
Listen Port	Enter a valid value for the listen port to be used for regular, non-secure 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. See <a href="#">Specifying the Listen Port</a> .
Enable SSL Listen Port	Select this check box to enable the SSL listen port. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .
SSL Listen Port	This field is enabled only if you selected the <b>Enable SSL Listen Port</b> 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. See <a href="#">SSL: An Introduction</a> in <i>Administering Security for Oracle WebLogic Server</i> .
Coherence Listen Port	Specify the listen port to use on the Administration Server for Coherence.

## Templates

Use the Templates screen to create or extend a domain that is configured automatically to support selected products. You can also use this screen 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 *Domain Template Reference*.

Option	Description
Create Domain Using Product Templates	<p>This option is available only when you create a new domain. By default, the <b>Basic WebLogic Server Domain</b> option is selected and cannot be cleared.</p> <p>Select the check boxes that correspond to the other products that you want to include in the domain. If you select a product that depends 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 appears.</p> <p>When you click <b>Next</b>, if any of the selected templates require resources provided by another product that is not selected, a warning dialog box appears. Return to the Templates screen to select the dependency product before you proceed.</p>
Filter Template	<p>You can filter the displayed list of templates based on the product home (example <i>em</i>), name of the product (example <i>WebLogic</i>), or the version of templates (example <i>14.1.2.0</i>). The text that you type is case-sensitive.</p> <p>If you do not specify a filter text, you can see the names of all templates in the available template list.</p>
Include all selected templates	<p>Select this option if you want to include all the selected templates to be part of the filtered list of templates.</p>
	<p> <b>Note:</b></p> <p>This option is applicable only if you are creating a new domain.</p>
Include all previously applied templates	<p>Select this option if you want to include all the previously applied templates to be part of the filtered list of templates.</p>
	<p> <b>Note:</b></p> <p>This option is applicable only when you extend a domain. You can view all the previously applied templates.</p>

Option	Description
Update Domain Using Product Templates	<p>This option is available only if you select <b>Update an existing domain</b> on the initial screen.</p> <p>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 checkboxes.</p> <p>When you click <b>Next</b>, if any of the selected templates require resources provided by another product that is not selected, a warning dialog box appears. Return to the Templates screen to select the dependency product before you proceed.</p>
Create Domain Using Custom Template	<p>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 <b>Template location</b> field, or click <b>Browse</b> to navigate to the directory containing the required template. The template you select must define at least an Administration Server.</p> <p>When you click <b>Next</b>, if the selected template requires resources provided by another template, a warning dialog box appears. You must create the domain by using the required template first. After doing so, extend the domain by using the template that you initially selected.</p>
Update Domain Using Custom Template	<p>This option is available only if you select <b>Extend an Existing Domain</b> on the initial screen.</p> <p>Select this option if you want to extend your domain by using an existing custom extension template. Specify the path to the extension template JAR file in the <b>Template location</b> field or click <b>Browse</b> to navigate to the directory containing the extension template.</p> <p>You can use this option only in the following situations:</p> <ul style="list-style-type: none"><li>• The template JAR you select is a domain template.</li><li>• 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.</li></ul> <p>When you click <b>Next</b>, if the selected template requires resources provided by another template that is not already included in the domain, a configuration error message appears. You must first create or extend the domain by using the required template. After doing so, extend the domain by using the template that you initially selected.</p>

 **Note:**

When extending a domain, you are not required to select additional products before you proceed. 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.

## High Availability Options

You can configure service migration and persistence settings for high availability. High availability ensures the availability of a system or a device whenever required.

This screen appears only if the templates that you have selected in the Templates screen are configured for high availability.

Specify the following details to configure high availability:

Field	Description
Enable Automatic Service Migration	<p>This option is available only if the domain contains a cluster that belongs to at least one server group for which the <code>asm-configurable</code> parameter is set to 'True'. This setting applies to all managed servers in the cluster.</p> <p>If selected, pinned services migrate automatically to a healthy Managed Server for failover.</p> <p>If you select this option, you must also select the basis for automatic migration:</p> <ul style="list-style-type: none"> <li>• <b>Database Basis:</b> This version of leasing requires a high-availability database to store leasing information. Managed Servers use a table on a valid JDBC System Resource for leasing. If you have a high availability database, such as Oracle RAC, to manage leasing information, configure the database for server migration. See High-availability Database Leasing in <i>Administering Clusters for Oracle WebLogic Server</i>.</li> <li>• <b>Consensus Basis:</b> This version of leasing stores the leasing information in-memory within a cluster member. You use Node Manager to control Managed Servers in the cluster.</li> </ul>
JTA Transaction Log Persistence	<p>JTA Transaction Log (TLOG) contains information about committed transactions that may not have been completed. You can store TLOGs in the default persistent store or a JDBC TLOG store.</p> <p><b>Default Persistence Store:</b> The default store is a file-based store that maintains its data in a group of files in a server instance (in this location: <code>data\store\default</code>).</p> <p><b>JDBC TLog Store:</b> You can configure a JDBC TLOG store to persist transaction logs to a database.</p>
JMS Server Persistence	<p>A persistent <b>JMS store</b> is a physical repository for storing persistent message data and durable subscribers. It can be either a disk-based <b>file store</b> or a JDBC-accessible database. A <b>JMS file store</b> can also be used for the paging of messages to disk when memory has been exhausted.</p> <ul style="list-style-type: none"> <li>• <b>JMS File Store:</b> Select this option to configure each eligible JMS server to use JMS File stores as its persistence store.</li> <li>• <b>JMS JDBC Store:</b> Select this option to configure each eligible JMS server to use JDBC stores for all its JMS servers.</li> </ul>

## Application Location

Use the Application Location screen to 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.

## Administrator Account

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

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. If the two entries do not match, an error message appears.

## Domain Mode and JDK

Use the Domain Mode and JDK screen to set the domain mode: Development, Production, or Secured Production. You can also choose which ports are enabled. 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 you put a domain into production, familiarize yourself with procedures for securing a production environment. See <i>Understand How Domain Mode Affects the Default Security Configuration in Securing a Production Environment for Oracle WebLogic Server</i> . Turn on <b>Disable Secure Mode</b> to implement production mode without the stricter settings of secured production mode. See <i>Ensuring the Security of Your Production Environment in Securing a Production Environment for Oracle WebLogic Server</i> .

For more information about the difference between domain modes, see *Understand How Domain Mode Affects the Default Security Configuration in Securing a Production Environment for Oracle WebLogic Server*.

### Enable or Disable Default Ports for Your Domain

Use the Enable or Disable Default Ports for Your Domain section to determine which ports to enable. When you specified the domain mode, certain ports were enabled automatically. However, you can change the automatic selection and choose which ports to enable or disable to better suit your environment.

You must enable at least one of these options: **Enable Listen Ports (non-SSL Ports)** or **Enable SSL Listen Ports**.

Option	Description
Enable Listen Ports (non-SSL Ports)	When enabled, servers can listen for requests on regular (non-SSL) ports.
Enable SSL Listen Ports	When enabled, servers can listen for requests on SSL ports. <b>Note:</b> When this option is enabled, you must configure certificates for SSL on all servers.
Enable Administration Port (SSL Port)	When enabled, all administration traffic goes through a dedicated port. <b>Note:</b> When this option is enabled, you must configure certificates for SSL on all servers.

### 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. 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 <i>version</i> , but you may have installed and used another JDK during installation.
Other JDK Location	Select this option to use a JDK other than the one that you used when you installed WebLogic Server. Use the <b>Browse</b> 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>Tuning Performance of Oracle WebLogic Server</i> .

## Database Configuration Type

The Database Configuration Type screen and the subsequent schema configuration screens appear only for WebLogic Server installations that include the Fusion Middleware infrastructure components.

You can use this screen to specify the information to connect to the database to retrieve schema information that is 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 can also skip this step and manually configure each component schema on the component schema screen.

Select one of the following options.

Field	Description
RCU Data	<p>Select this option if you want to connect to the database to retrieve schema information for all schemas that are defined in the templates that you selected on the <a href="#">Templates</a> screen. If you select this option, the fields on this screen are activated. Fill in each field, by using the connection information that you specified for the Service Table component in the Repository Creation Utility (RCU). When done, click <b>Get RCU Configuration</b> to retrieve the schema information.</p> <p>For information about Service Tables, see Understanding Service Tables in <i>Administering Oracle Fusion Middleware</i>.</p> <p>After you successfully retrieve the schema information, click <b>Next</b> to continue.</p> <p><b>Note:</b> The only JDBC connections that RCU supports are the Oracle service type JDBC connections.</p>
Manual Configuration	<p>If you select this option, you must manually configure the settings for each schema. 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 <code>dbhost.example</code> for all schemas.</p> <p>After you select this option, click <b>Next</b>.</p>

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

See Database Connection Details in *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.
Schema Owner	Enter the username and password to connect to the database's service table schema.
Schema Password	<p>Use 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 <code>prefix_STB</code>, where <code>prefix</code> 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).</p> <p>See Schema Passwords in <i>Creating Schemas with the Repository Creation Utility</i>.</p> <p><b>Note:</b> When you click <b>Get RCU Configuration</b>, 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 <b>Schema Password</b> field or column on the following screens:</p> <ul style="list-style-type: none"> <li>• JDBC Component Schema</li> <li>• GridLink Oracle RAC Component Schema</li> <li>• Oracle RAC Multi Data Source Component Schema</li> </ul>

## 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 select the **RCU Data** option on the [Database Configuration Type](#) screen, the schema table is already populated appropriately and you can click **Next** to continue.  
If, however, schema passwords were changed from the original passwords that were set using RCU, you must manually enter the new passwords in the **Schema Password** field or column.
- If you have selected the **Configure Using Embedded Database** option, any schema components that have a corresponding `dev-database` entry in `database.xml` do not appear 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 you continue.

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 next to each schema name.

### Note:

When you select multiple component schemas, the text `Varies among component schemas` might appear 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 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 appear 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 appears.

See Using GridLink Data Sources in *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 next to the name of 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 appears.

See Using WebLogic Server with Oracle RAC in *Administering JDBC Data Sources for Oracle WebLogic Server*.

## GridLink Oracle RAC Component Schema

Use the GridLink Oracle RAC Component Schema 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 about GridLink RAC data sources, see Using GridLink Data Sources in *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 using RCU, you must manually enter the new passwords 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 you continue.

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 next to each schema name.

### Note:

When you select multiple data source schemas, the text `Varies among component schemas` might appear 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 the following drivers are listed: <ul style="list-style-type: none"> <li>Oracle Driver (Thin) for GridLink Connections. This is the GridLink Type 4 non-XA driver.</li> <li>Oracle Driver (Thin XA) for GridLink Connections. This is the GridLink Type 4 XA driver.</li> </ul>
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 registers for and processes 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 is 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 port is the listen port for the database service listener. It defaults to 1521 and is not 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 appear 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**.

## Oracle RAC Multi Data Source Component Schema

Use the Oracle RAC Multi Data Source Component Schema screen to configure the component schemas that are included in the WebLogic domain as Oracle RAC multi-data sources.

See Using WebLogic Server with Oracle RAC in *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 using RCU, you must manually enter the new passwords 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 next to each schema name.

 **Note:**

When you select multiple data source schemas, the text `Varies among component schemas` might appear 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 JDBC driver to connect to the database.
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.
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 number to connect to the server that hosts the database.

 **Note:**

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 appear in the appropriate columns in the schema list, for the selected schemas.

## JDBC Component Schema Test

Use the JDBC Component Schema Test screen to test all the JDBC component schema configurations that you specified for the data sources in the **JDBC 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 next 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 appear in the **Connection Result Log** section.

## 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 the JDBC Data Sources 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 one or more data sources for which you want to specify settings by selecting the check box next to each data source name. The values that you specify appear 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 appear 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 connect to the database. The list includes common JDBC drivers for the selected database vendor.
DBMS/Service	<p>Enter a DBMS SID or service name. The value that you enter depends on the driver that you selected.</p> <p>If the name of the Oracle driver that you selected contains the words <i>for Instance connections</i>, you must enter the SID.</p> <p>If the name of the Oracle driver contains the words <i>for Service connections</i>, you must enter the service name.</p> <p>For information about configuring a DataDirect driver, see the DataDirect documentation.</p>
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 appears.

See Using GridLink Data Sources in *Administering JDBC 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 next 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 appears.

See Using WebLogic Server with Oracle RAC in *Administering JDBC Data Sources for Oracle WebLogic Server*.

## 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 about GridLink data sources, see Using GridLink Data Sources in *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 next to each data source name.

 **Note:**

When you select multiple data sources, the text `Varies among data sources` might appear 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 the following drivers are listed: Check this list periodically, may be new ones <ul style="list-style-type: none"> <li>Oracle Driver (Thin) for GridLink Connections. This is the GridLink Type 4 non-XA driver.</li> <li>Oracle Driver (Thin XA) for GridLink Connections. This is the GridLink Type 4 XA driver.</li> </ul>
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 registers for and processes 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 is 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 is usually not 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 appear 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**.

## Oracle RAC Multi Data Sources

Use the Oracle RAC Multi Data Sources 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 one or more data sources for which you want to specify settings by selecting the check box next to each data source name.

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

 **Note:**

When you select multiple data sources, the text `Varies among data sources` might appear 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 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.

## JDBC Data Sources Test

Use the JDBC Data Sources Test 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, 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 appear in the **Connection Result Log** section.

## Database Scripts

A domain template may contain a set of SQL files organized by database type. If the domain template contains SQL files, 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 preexisting 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 appear in the SQL Files section.
2. Select the database version from the **DB Version** drop-down list.
3. Click **Run Scripts**.  
All the scripts that appear in the SQL Files section for the selected data source are executed, and the results appear 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.
5. Click **Next** once you have executed all scripts.

## 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.



## Keystore

Use the Keystore 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 or key that you want to configure.
Trusted Certificate table	The Trusted Certificate table contains the following fields: <ul style="list-style-type: none"> <li>• <b>Alias:</b> A read-only field that displays the alias for the trusted certificate as defined in the product template.</li> <li>• <b>Trusted Certificate:</b> Enter the full path and file name for the trusted certificate to use for the selected store or key, or click the icon on the far right of the row to navigate to and select the trusted certificate file.</li> </ul>
Private Key table	The Private Key table contains the following fields: <ul style="list-style-type: none"> <li>• <b>Alias:</b> A read-only field that displays the alias for the private key as defined in the product template.</li> <li>• <b>Private Key:</b> Enter the full path and file name for the private key file to use for the selected store or key, or click the icon to the right of the field to navigate to and select the private key file.</li> <li>• <b>Password:</b> Enter the password to use for the private key.</li> <li>• <b>Identity Certificate:</b> 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.</li> </ul>

## Java Keystore Info

Use the Java Keystore Info 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 *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.

Option/Field	Description
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 <code>.jks</code> file, specify the appropriate alias name. An error appears if the alias name is not available in the keystore.
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. <b>Note:</b> A password is required only if you import key pairs; it is optional for certificates.

## Advanced Configuration

Use the Advanced Configuration screen to perform advanced configurations for the categories you select from the available list. You can select all the categories, if necessary.

If you do not select any items on this screen, the Configuration Summary screen appears.



### Note:

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

The **Administration Server** option is not available when you extend 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 <a href="#">Administration Server</a> .
Node Manager	Select this option to change the Node Manager type, Node Manager username and password, and Node Manager location. See <a href="#">Node Manager</a> .
Topology	Select this option to perform the following tasks: <ul style="list-style-type: none"> <li>• Add Managed Servers, clusters, or machines to the domain</li> <li>• Delete an existing Managed Server, cluster, or machine</li> <li>• Add Managed Servers to an existing cluster</li> <li>• Modify the settings for an existing Managed Server, cluster, or machine</li> <li>• Configure the default Coherence cluster</li> </ul> See <a href="#">Managed Servers</a> , through <a href="#">Assign Servers to Machines</a> .
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 <a href="#">Domain Frontend Host</a> .
System Components	Select this option to configure and target system components, such as Oracle HTTP Server (OHS) or Oracle Data Integration (ODI). See <a href="#">System Components</a> , through <a href="#">Assign System Components to Machines</a> .

Option	Description
Deployments and Services	Select this option to customize how application deployments and services are targeted to servers and clusters. See <a href="#">Deployments Targeting</a> , and <a href="#">Services Targeting</a> .
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 <a href="#">File Stores</a> .

## 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 `protocol://listen-address:listen-port`. This is the network channel for the Administration Server. The network channel for each Administration Server must be unique. The `protocol` 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 WebLogic Remote 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. See <a href="#">Specifying the Listen Address</a> .
Enable Listen Port	Select this check box to enable the regular (non-SSL) listen port. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .
Listen Port	Enter a valid value for the listen port to be used for regular, non-secure 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. See <a href="#">Specifying the Listen Port</a> .
Enable SSL Listen Port	Select this check box to enable the SSL listen port. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .

Field/Option	Description
SSL listen port	<p>This field is enabled only if you selected the <b>Enable SSL Listen Port</b> check box.</p> <p>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.</p> <p>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.</p> <p>See SSL: An Introduction in <i>Administering Security for Oracle WebLogic Server</i>.</p>
Administration Port	<p>Enter a valid value for the administration port to be used for administration traffic between the Administration Server and Managed Servers. The default value is 9002.</p>
Server Groups	<p>This drop-down list appears only if at least one selected template defines a user-expandable server group.</p> <p>You can 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.</p>

- [Specifying the Listen Address](#)
- [Specifying the Listen Port](#)

## 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.

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

Type	Description
An IP address or a DNS name	<p>When using an IP address or DNS name, note the following:</p> <ul style="list-style-type: none"> <li>To connect to the server instance, processes can specify either the IP address or the corresponding DNS name.</li> <li>Processes that specify localhost fail to connect.</li> <li>You must update existing processes that use localhost to connect to the server instance.</li> <li>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.</li> </ul> <p><b>Note:</b> 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.</p>
localhost	<p>When using localhost, note the following:</p> <ul style="list-style-type: none"> <li>Processes must specify localhost to connect to the server instance.</li> <li>Only processes that reside on the machine that hosts the server instance (local processes) can connect to the server instance.</li> </ul>

## 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 that 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.

## Node Manager

Use the Node Manager screen to select the Node Manager configurations that are 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>&lt;domain_name&gt;/nodemanager</code> 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.

Option/Field	Description
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 <b>Node Manager Home</b> field, or click <b>Browse</b> to navigate to the location. The specified directory must be empty. The <code>nodemanager.properties</code> and <code>nodemanager.domains</code> files are 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 can also select this option if you do not want to use Node Manager in the domain. <b>Note:</b> When you create 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 Node Manager Overview in <i>Administering Node Manager for Oracle WebLogic Server</i> .
Username	The username and password that is used to start the specified Node Manager.
Password	
Confirm Password	
Node Manager Home	
	If you selected the <b>Per Domain Custom Location</b> option, click <b>Browse</b> and navigate to the directory location of the Node Manager that you want to use.

## Managed Servers

Use the Managed Servers 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.

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

See *Creating and Starting a Managed Server on a Remote Machine* in *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 <code>olink:DOMCF-GUID-AB0C82F6-39F2-4CF7-9187-6685050ABDC3</code> in <i>Understanding Domain Configuration for Oracle WebLogic Server</i> .
Listen Address	From the drop-down list, select a value for the listen address. See <a href="#">Specifying the Listen Address</a> .
Enable Listen Port	Select this check box to enable the regular (non-SSL) listen port. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .
Listen Port	Enter a valid value for the listen port to be used for regular, non-secure requests (through protocols such as HTTP and T3). The default value is the next available listen port, starting from 7003. The valid listen port range is from 1 to 65535. See <a href="#">Specifying the Listen Port</a> .
Enable SSL Port	Select this check box to enable the SSL listen port. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .

Column	Description
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. By default, the SSL listen port for each new server automatically increments by 1, starting from 8003.
Administration Port	Enter a valid value for the administration port to be used for administration traffic between the Managed Server and the Administration server. By default, the administration port for each new server automatically increments by 1, starting from 9003, to ensure that each server has a unique administration port.
Server Groups	If any of the templates that you selected to create or update your domain contain a user-expandable server group definition, the <b>Server Groups</b> column is displayed. For each Managed Server, select the check box for each server group that you want to assign to the server. Only server groups that are defined as user-selectable appear in the list. Typically, you can accept the defaults for Fusion Middleware product servers. <b>Note:</b> 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 <code>config-groups.xml</code> file for the domain are automatically targeted to the server. See <code>config-groups.xml</code> and <code>startup-plan.xml</code> and the template sections for the templates that you included in the domain in <i>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.

If secured production mode is configured, you need to ensure that all the newly added managed servers have unique admin ports.

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 `original_server_name_clonen`, where `n` 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.

## 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.
Cluster Address	Specify the addresses for identifying the Managed Servers in the cluster. A cluster address can be one of the following: <ul style="list-style-type: none"> <li>• Comma-separated list of IP addresses or DNS names and ports (for example: dns_name:port, dns_name:port)</li> <li>• DNS name that maps to multiple IP addresses</li> <li>• localhost, DNS name, or IP address if the listen address of all Managed Servers is listening to the same address with unique port numbers</li> </ul>
Frontend Host	Enter the IP address, plain port (HTTP), and secure port (HTTPS) of the frontend host for the cluster, which can be one of the following: <ul style="list-style-type: none"> <li>• a hardware load balancer</li> <li>• an Oracle HTTP Server (OHS) instance</li> <li>• a frontend host that has already been defined in the WebLogic Server configuration</li> </ul> <p>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 this screen. See <a href="#">Domain Frontend Host</a></p>
Frontend HTTP Port	
Frontend HTTPS Port	

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 *Administering Clusters for Oracle WebLogic Server*.

## Server Templates

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.

See Server Templates in *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. See Dynamic Clusters in *Administering Clusters for Oracle WebLogic Server*.

Column	Description
Name	The list of server templates will include all server templates that are defined in the <code>config-groups.xml</code> file and the server templates that exist in the domain. You can modify or define new server templates, if required.
Enable Listen Port	Select this check box to enable the regular (non-SSL) listen port for servers defined by the template. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .
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, else this operation fails and renders the console unreachable. If this port is disabled, the SSL port must be enabled. Additional ports can be configured by using network channels. The cluster (multicast) port is configured separately.
Enable SSL Port	Select this check box to enable the SSL listen port for servers defined by the template. If the box is not checked, SSL is not configured and the SSL Listen Port is ignored. <b>Note:</b> At least one of these options must be enabled: <b>Enable Listen Ports</b> or <b>Enable SSL Listen Ports</b> .
SSL Listen Port	The port that the server uses to listen for secure (SSL) incoming connections.
Administration Port	The administration port to be used for administration traffic between the Managed Server and the Administration server. The default value is 9002.

## Dynamic Servers

The Dynamic Servers 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.

To designate a dynamic cluster, select a server template for the cluster, or select one or more dynamic server groups.

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

See Dynamic Clusters in *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. <b>Note:</b> Applicable only if you designate the cluster as a dynamic cluster.

Column	Description
Server Template	To define a cluster as a dynamic cluster, associate the cluster with a server template. The drop-down displays all server templates in the domain. The cluster element for the selected server template will be set to match the cluster to which it is assigned.  If you select <code>Unspecified</code> , you cannot select a dynamic server group for the cluster. The cluster will then be defined as a static cluster.
Maximum Dynamic Server Count	The maximum number of server instances allowed to be created.  This value can 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.  <b>Note:</b> Applicable only if you designate the cluster as a dynamic cluster.
Machine Name Match Expression	The machine name expression to use when you select machine names.  <b>Note:</b> Applicable only if you designate the cluster as a dynamic cluster.
Calculated Machine Names	Specifies whether machine names are calculated.  <b>Note:</b> Applicable only if you designate the cluster as a dynamic cluster.
Calculated Listen Ports	Specifies whether listen ports for the server are calculated.  <b>Note:</b> Applicable only if you designate the cluster as a dynamic cluster.
Dynamic Server Groups	If you have associated the cluster with a server template, you can also select a dynamic server group for the cluster. The drop-down list includes all the dynamic server groups defined in the domain depending on the template that you have associated in the Templates screen. You can associate a cluster with one or more dynamic server groups.  For more information on dynamic clusters, see Using Dynamic Clusters in the <i>High Availability Guide</i> .

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

## Assign Servers to Clusters

Use the Assign Servers to Clusters screen to assign Managed Servers to clusters. Only Managed Servers appear 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.

## HTTP Proxy Applications

An HTTP proxy application acts as an intermediary for HTTP requests. Use the HTTP Proxy Applications 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 appears only if 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. For example, a proxy application named <code>OracleProxy4_clustername_servername</code> is created and deployed on the Managed Server.

## Coherence Clusters

The Coherence Clusters screen appears 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 by using WLST or the WebLogic Remote Console, they are also listed here.
Unicast Listen Port	Enter the port number to use as the Coherence cluster unicast listen port. For more information on the Coherence cluster unicast listen port, see <i>Configure Coherence Cluster Member Unicast Settings</i> in <i>Administering Clusters for Oracle WebLogic Server</i> .

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 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 by using a WLST script or the WebLogic Remote Console.

- When you create a domain by using 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 by using WLST or the WebLogic Remote Console), any servers or clusters that you subsequently add to the domain by using the Configuration Wizard are automatically assigned to the first Coherence cluster that is listed on the Coherence Clusters screen.

## 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 the Machines 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.
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 <b>Enable Post Bind GID</b> 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 <b>Enable Post Bind UID</b> 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 have to access the WebLogic Server Node Manager, you must disable host name verification.  See Using Host Name Verification in <i>Administering Security for Oracle WebLogic Server</i> .

Column	Description
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.

## Assign Servers to Machines

Use the Assign Servers to Machines screen to assign the WebLogic Server instances to each of the machines that you defined in the **Machines** screen of the Configuration Wizard.

To assign a WebLogic Server instance to a machine that 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.

## Domain Frontend Host

When creating a new domain, use the Domain Frontend Host 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 appears 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 you update 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 appears 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, <code>http://www.myhost.com:8180</code> . If necessary, you can also update the existing value.
SSL	If not automatically populated, enter the SSL URL for the frontend host. If necessary, you can also update the existing value.  <b>Note:</b> 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.

## System Components

Use the System Components 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	If an application is not responding, specify the number of seconds to wait before you attempt a restart.

Field	Description
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_SystemComponentn`, 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**.

## OHS Server

You can use this screen to configure the Oracle HTTP Server (OHS) in the WebLogic domain. Before you configure 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 must allow only 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 <a href="#">Specifying the Listen Address</a> .
Listen Port	Enter the listen port to use on this system component. For more information about listen ports, see <a href="#">Specifying the Listen Port</a> .
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. See <i>SSL: An Introduction in Administering Security for Oracle WebLogic Server</i> .
Server Name	The server URL and listen port for the currently selected OHS server. When you add new servers, this field defaults to the server on which you run the Configuration Wizard and the port value in the Listen Port field.

## ODI Server Configuration

Use the ODI Server Configuration screen to configure the collocated ODI agents in the WebLogic domain. Before you configure ODI, 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 *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 <b>localhost</b> .
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.

## Assign System Components to Machines

After you configure the system components such as OHS and ODI, use the Assign System Components to Machines 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.

## Deployments Targeting

Applications associated with the product for which you configure 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 the Deployments Targeting 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 appear 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 you make 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, after you delete the Managed Server or cluster, the applications will become untargeted in the modified domain. 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 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.

## Services Targeting

Services that are associated with the product for which you configure 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 the Services Targeting 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 appear 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 you make 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 will become untargeted in the modified domain. 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 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.

## File Stores

A JMS file store is a disk-based file in which persistent messages can be saved. Use the File Stores 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. See Cache-Flush Policy in <i>Administering the WebLogic Persistent Store</i> .

Column	Description
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. See Direct-Write Policy in <i>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 wfileio driver. See Direct-Write-With-Cache Policy in <i>Administering the WebLogic Persistent Store</i> .
Disabled	Transactions are complete when 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. See Disabled Policy in <i>Administering the WebLogic Persistent Store</i> .

## Configuration Summary

The Configuration Summary 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 appear in the **Domain Summary** pane by selecting a filter option from the **Summary View** drop-down list.

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

When done, click **Create** to create the domain.

## Configuration Progress

If you are creating a domain, the Configuration Progress 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 create a domain by using templates that were selected in the [Templates](#) screen, detailed messages appear as the domain is being created.

If you configure the WebLogic Server samples domains at the end of WebLogic Server installation, the following messages appear for each domain:

```
Generating domain domain_name
```

```
-----
```

```
Successfully generated domain: domain_name
```

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

## 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` appears, 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 you close 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 appear:

Field	Description
Domain Name	The name of the new domain.
Domain Location	The path for each domain.
Status	The status of each domain creation, whether successful or failed. If the process fails, a message appears to indicate the reason of the failure.
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 drop-down list.