Oracle® Fusion Middleware Installing and Configuring Oracle WebLogic Server and Coherence





Oracle Fusion Middleware Installing and Configuring Oracle WebLogic Server and Coherence, 12c (12.2.1.3.0)

E95567-05

Copyright © 2013, 2021, Oracle and/or its affiliates.

Primary Author: Oracle Corporation

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or "commercial computer software documentation" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

_		-		
П	re	+-	10	0
	. –	''	11.	_

Audience	vi
Documentation Accessibility	vi
Related Documents	vi
Conventions	vii
Diversity and Inclusion	vii
Planning the Oracle WebLogic Server Installation	
Using this Document	1-1
Using the Standard Installation Topology as a Starting Point	1-2
Using this Document in an Upgrade Scenario	1-2
Using this Document to Extend a Domain	1-2
Using Installation Documents for Development Environments	1-2
About the WebLogic Server and Coherence Standard Installation Topology	1-3
WebLogic Server and Coherence Standard Installation Topology Elements	1-4
About Using the Standard Installation Topology for WebLogic Server MT	1-4
Running the Installer in Silent Mode	1-5
Roadmap for Installing and Configuring the Installation Topology	1-5
Roadmap for Installing and Configuring the WebLogic Server MT Topology	1-6
Roadmap for Verifying Your System Environment	1-6
Obtaining the Oracle WebLogic Server and Coherence Distribution	1-7
Obtaining the Oracle WebLogic Server MT Distribution	1-7
Installing the Oracle WebLogic Server and Coherence Software	9
Starting the Installation Program	2-1
Navigating the Installation Screens	2-2
About the Coherence Installation Type	2-4



3 Installing Oracle WebLogic Server and Coherence for WebLogic Server MT Starting WebLogic Server MT Installation 3-1 Navigating WebLogic Server MT Installation Screens 3-1 Creating and Configuring the WebLogic Domain 4 4-1 Configuring the WebLogic Domain Starting the Configuration Wizard 4-1 Navigating Configuration Wizard Screens to Configure the Domain 4-2 Selecting the Domain Type and Domain Home Location 4-3 **Selecting Configuration Templates** 4-3 Configuring the Administrator Account 4-4 Specifying the Domain Mode and JDK 4-4 Selecting Advanced Configuration 4-4 Configuring the Administration Server Listen Address 4-5 Configuring Node Manager 4-5 Configuring Managed Servers 4-5 Configure a Cluster 4-6 **Defining Server Templates** 4-6 Configuring Dynamic Servers 4-6 Assigning Managed Servers to the Cluster 4-7 **Configuring Coherence Clusters** 4-7 Creating a New Machine 4-8 Assigning Servers to Machines 4-8 Virtual Targets 4-9 **Partitions** 4-9 Reviewing Your Configuration Specifications and Configuring the Domain 4-9 Writing Down Your Domain Home and Administration Server URL 4-10 Starting the Servers 4-10 4-10 Starting the Node Manager Starting the Administration Server 4-11 Starting Managed Servers 4-11 Verifying the Configuration 4-12 5 Creating a WebLogic Domain for WebLogic Server MT Configuring the WebLogic Domain 5-1 Starting the Configuration Wizard 5-1

Navigating Configuration Wizard Screens to Configure the Domain Selecting the Domain Type and Domain Home Location



5-2

5-3

	Selecting Configuration Templates for a WebLogic Server MT Domain	5-3
	Configuring the Administrator Account	5-4
	Specifying the Domain Mode and JDK	5-5
	Selecting Advanced Configuration	5-5
	Configuring the Administration Server Listen Address	5-5
	Configuring Node Manager	5-6
	Configuring Managed Servers	5-6
	Configure a Cluster	5-6
	Defining Server Templates	5-7
	Configuring Dynamic Servers	5-7
	Assigning Managed Servers to the Cluster	5-7
	Configuring Coherence Clusters	5-8
	Creating a New Machine	5-8
	Assigning Servers to Machines	5-9
	Virtual Targets	5-9
	Partitions	5-10
	Reviewing Your Configuration Specifications and Configuring the Domain	5-10
	Writing Down Your Domain Home and Administration Server URL	5-10
	Starting the Servers	5-10
	Starting the Node Manager	5-11
	Starting the Administration Server	5-11
	Starting Managed Servers	5-12
	Verifying the Configuration	5-12
ŝ	Next Steps After Configuring the WebLogic Server Domain	
	Performing Basic Administrative Tasks	6-1
	Performing Additional Domain Configuration Tasks	6-2
	Performing Domain Configuration Tasks for WebLogic Server MT	6-3
	Adding Oracle Traffic Director as a WebLogic Server MT Front End	6-4
	Configuring Oracle Traffic Director in WebLogic Server MT	6-4
	Preparing Your Environment for High Availability	6-4
7	Uninstalling Oracle WebLogic Server and Coherence	
ı		
	About Product Uninstallation	7-1
	Stopping Oracle Fusion Middleware	7-2
	Uninstall the Software	7-2
	Start the Uninstallation Program	7-3
	Navigating through Uninstallation Screens	7-3
	Removing Oracle Home Directory Manually	7-3



Removing Program Shortcuts on Windows Operating Systems	7-4
Removing Your Domain and Application Data	7-4
Reinstalling Your Software	7-5
Scenario: Installing in an Existing Oracle Home that Contains the Same Feature Sets	7-5
Scenario: Installing in an Existing, Non-Empty Oracle Home	7-5
About the Oracle WebLogic Server and Coherence Distribution	
Installing WebLogic Server for Developers	
Files Included with WebLogic Server Development	B-1
Downloading the Installers	B-2
WebLogic Server for Developers Installation Prerequisites	B-3
Installing WebLogic Server for Developers	B-3
Installing from the ORACLE_HOME Directory	B-3
Installing from a Directory Other Than ORACLE_HOME	B-4
Creating a Development Domain	B-4
Starting and Accessing the Domain	B-4
Upgrading a Development Installation	B-5
Patching a Development Installation	B-6
Removing the WebLogic Server for Developers Installation	B-6
Updating the JDK After Installing and Configuring an Oracle Fusion Middleware Product	n
About Updating the JDK Location After Installing an Oracle Fusion Middleware Product	C-1
Updating the JDK Location in an Existing Oracle Home	C-2
Updating the JDK Location in an Existing Domain Home	C-3



Preface

This document describes how to install and configure Oracle WebLogic Server and Coherence.

- Audience
- Documentation Accessibility
- Related Documents
- Conventions
- · Diversity and Inclusion

Audience

This document is intended for system administrators or application developers who are installing WebLogic Server. It is assumed that readers are familiar with Web technologies and have a general understanding of Windows and UNIX platforms.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

Refer to the Oracle Fusion Middleware Library for additional information.

- Plan the Upgrade in Oracle Fusion Middleware Upgrading Oracle WebLogic Server.
 - If you are upgrading your Oracle WebLogic Server installation from an earlier version (for example from a 10.x release in 11g to a 12c release), this document explains how to upgrade the entire WebLogic Server environment, including applications, the WebLogic domains in which they are deployed, and any application data associated with the domain. This may include external resources, such as database servers, firewalls, load balancers, and LDAP servers.
- Understanding the Oracle Fusion Middleware Infrastructure Distribution



Oracle WebLogic Server is also available as part of the Oracle Fusion Middleware Infrastructure distribution. See this guide to install Oracle WebLogic Server with Infrastructure capabilities.

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

Conventions

The following text conventions are used in this document:

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

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.



1

Planning the Oracle WebLogic Server Installation

This section prepares you to install Oracle WebLogic Server and Coherence. Review this section thoroughly to ensure that you do not encounter any problems during or after installation and domain configuration.

Using this Document

There are certain scenarios that you want to use this guide for, and other sources of information.

- About the WebLogic Server and Coherence Standard Installation Topology
 The standard installation topology has a standard WebLogic Server domain.
- Running the Installer in Silent Mode
 You can install using the -silent flag on the command line when you start the installer.
- Roadmap for Installing and Configuring the Installation Topology
 This document has all the procedures you need to install and configure WebLogic Server.
 Within the procedures, this document refers to additional information you can use if you want to create a modified version of this topology.
- Roadmap for Installing and Configuring the WebLogic Server MT Topology
 Follow this roadmap to install and configure the WebLogic Server MT distribution.
- Roadmap for Verifying Your System Environment
 This topic has important information that you must read and understand before you begin installation and configuration steps. It identifies important tasks and checks that verify your environment is properly prepared to install and configure Oracle Fusion Middleware
- Obtaining the Oracle WebLogic Server and Coherence Distribution
 You download the software from the Oracle Technology Network (OTN).
- Obtaining the Oracle WebLogic Server MT Distribution
 You download the distribution from the Oracle Technology Network (OTN)

Using this Document

There are certain scenarios that you want to use this guide for, and other sources of information.

This section contains the following topics:

WebLogic Server and Coherence.

- Using the Standard Installation Topology as a Starting Point
 This guide helps you create the standard installation topology for Oracle WebLogic
 Server and Coherence. You can extend this topology to make it highly available and
 secure so that it is suitable for a production system.
- Using this Document in an Upgrade Scenario
 If you are installing Oracle WebLogic Server and Coherence as part of an upgrade procedure, follow procedures in this guide to install the software, but do *not* run the Configuration Wizard to create a WebLogic domain.

- Using this Document to Extend a Domain
 Procedures in this document describe how to create a new domain; you can use the same procedures to extend an existing domain.
- Using Installation Documents for Development Environments
 This guide describes how to use the Oracle WebLogic Server and Coherence distribution to install and configure a runtime, production environment for Oracle WebLogic Server. Oracle also has Oracle WebLogic Server development-only and supplemental installers.

Using the Standard Installation Topology as a Starting Point

This guide helps you create the standard installation topology for Oracle WebLogic Server and Coherence. You can extend this topology to make it highly available and secure so that it is suitable for a production system.

The standard installation topology represents a *sample* topology for this product; it is not the only topology that Oracle supports. See Understanding the Standard Installation Topology in *Planning an Installation of Oracle Fusion Middleware*.

Using this Document in an Upgrade Scenario

If you are installing Oracle WebLogic Server and Coherence as part of an upgrade procedure, follow procedures in this guide to install the software, but do *not* run the Configuration Wizard to create a WebLogic domain.

After you install the software, go to Overview of the Upgrade Process in *Upgrading Oracle WebLogic Server*.

Using this Document to Extend a Domain

Procedures in this document describe how to create a new domain; you can use the same procedures to extend an existing domain.

If you do this, be sure to read Installing Multiple Products in the Same Domain in *Planning an Installation of Oracle Fusion Middleware* for important information.

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

Using Installation Documents for Development Environments

This guide describes how to use the Oracle WebLogic Server and Coherence distribution to install and configure a runtime, *production* environment for Oracle WebLogic Server. Oracle also has Oracle WebLogic Server *development-only* and supplemental installers.

• The *quick installer* is a a lightweight installer that contains all the necessary artifacts to develop and test Java applications. The quick installer is run directly from the command line. Installations performed with the quick installer can be patched using the standard Oracle patching tool, OPatch.

This version of Oracle WebLogic Server and the quick installer requires JDK 1.8.0_191 or later. Ensure that you have the proper JDK version installed and ready for use before starting.



The quick installer file name is fmw_12.2.1.3.0_wls_quick.jar

• The *supplemental quick installer* is a lightweight installer that contains all the necessary artifacts to develop and test sample Java applications on Oracle WebLogic Server.

The optional supplemental quick installer has components such as the sample applications, and Administration Console additional language help files.

```
The supplemental quick installer file name is fmw_12.2.1.3.0_wls_supplemental_quick.jar
```

To set up a development environment, see:

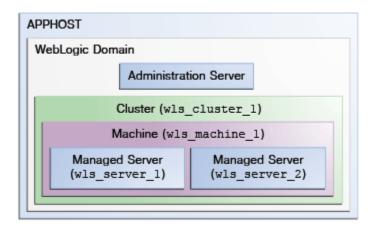
- Obtaining the Oracle WebLogic Server and Coherence Distribution to find the development installers. Word documents in the development kit include instructions to install and configure the development environment.
- Overview of WebLogic Server Application Development in Developing Applications for Oracle WebLogic Server for a complete list of what to keep in mind when you set up a development environment for Oracle WebLogic Server.
- See Installing the Oracle JDeveloper Software in *Oracle Fusion Middleware Installing JDeveloper* to install Oracle JDeveloper, an integrated development environment (IDE) for building applications using the latest Java, XML, Web services, and SQL standards.

About the WebLogic Server and Coherence Standard Installation Topology

The standard installation topology has a standard WebLogic Server domain.

The following figure shows the standard installation topology for Oracle WebLogic Server and Coherence:

Figure 1-1 Oracle WebLogic Server and Coherence Topology



This topology has a standard WebLogic Server domain that contains two Managed Servers in a cluster and an Administration Server, all configured on one host.

See these topics:

• WebLogic Server and Coherence Standard Installation Topology Elements This section describes the standard installation topology elements.



About Using the Standard Installation Topology for WebLogic Server MT
You can use the WebLogic Server standard installation topology as a basic
environment for WebLogic Server MT. However, when you create the topology for
WebLogic Server MT, note the following differences:

WebLogic Server and Coherence Standard Installation Topology Elements

This section describes the standard installation topology elements.

See Roadmap for Installing and Configuring the Installation Topology for a roadmap that describes steps to create this topology.

Table 1-1 Oracle WebLogic Server and Coherence Standard Installation Topology Elements

Element	Description and Links to Additional Documentation
APPHOST	Standard term in Oracle documentation for the machine that hosts the application tier.
WebLogic Domain	Logically related group of Java components. In this case, the Administration Server, Managed Servers, and other related software components.
	See What is an Oracle WebLogic Server Domain? in <i>Understanding Oracle Fusion Middleware</i> .
Administration Server	Domain central control entity. Maintains domain configuration objects and distributes configuration changes to Managed Servers.
	See What is the Administration Server in <i>Understanding Oracle Fusion Middleware</i> .
Cluster	A collection of multiple WebLogic Server instances running simultaneously and working together.
	See Understanding Managed Servers and Managed Server Clusters in Understanding Oracle Fusion Middleware.
Machine	Logical representation of the computer that hosts one or more WebLogic Server instances (servers). Machines are also the logical glue between Managed Servers and Node Manager; to start or stop a Managed Server with Node Manager, the Managed Server must be associated with a machine.
Managed Server	Host for your applications, application components, Web services, and their associated resources.
	See Understanding Managed Servers and Managed Server Clusters in Understanding Oracle Fusion Middleware.

About Using the Standard Installation Topology for WebLogic Server MT

You can use the WebLogic Server standard installation topology as a basic environment for WebLogic Server MT. However, when you create the topology for WebLogic Server MT, note the following differences:

• For WebLogic MT, you must use the Oracle Fusion Middleware Infrastructure distribution instead of the WebLogic Server and Coherence distribution.



 When you configure a WebLogic MT domain, Oracle recommends that you select the Oracle Enterprise Manager Restricted JRF template instead of the Oracle JRF template.

Running the Installer in Silent Mode

You can install using the -silent flag on the command line when you start the installer.

See the following topics in *Installing Software with the Oracle Universal Installer* for details on silent mode and the steps to run it.

- Understanding Silent Installation
- Understanding Response Files
- Running the Oracle Universal Installer in Silent Mode
- Running the Oracle Universal Installer for Silent Deinstallation

Roadmap for Installing and Configuring the Installation Topology

This document has all the procedures you need to install and configure WebLogic Server. Within the procedures, this document refers to additional information you can use if you want to create a modified version of this topology.

The following table shows steps required to install and configure Oracle WebLogic Server:

Table 1-2 Oracle WebLogic Server and Coherence Installation Procedure

Task	Description	Documentation
Verify your system environment	Before starting the installation, verify that your system meets minimum system and network requirements.	Roadmap for Verifying Your System Environment
Obtain the appropriate distribution	To create the topology this section describes, obtain the Oracle WebLogic Server and Coherence distribution.	Obtaining the Oracle WebLogic Server and Coherence Distribution.
Determine your installation directories	Verify that the installer can create or access installer directories that it needs to create. Also, verify that the directories exist on systems that meet the minimum requirements.	What are the Key Oracle Fusion Middleware Directories? in Understanding Oracle Fusion Middleware.
Install the software	Run the installation program to install the software.	Installing the Oracle WebLogic Server and Coherence Software
Create a WebLogic domain	Use the Configuration Wizard to create a WebLogic domain.	Creating and Configuring the WebLogic Domain
Perform post-installation tasks	Start to manage components in the domain or continue to modify your environment for high availability.	Next Steps After Configuring the WebLogic Server Domain



Roadmap for Installing and Configuring the WebLogic Server MT Topology

Follow this roadmap to install and configure the WebLogic Server MT distribution.

This guide has all the procedures you need to install and configure WebLogic Server. Within the procedures, this guide refers to additional information you can use if you want to create a modified version of this topology.

The following table shows steps required to install and configure WebLogic Server MT:

Table 1-3 WebLogic Server MT Installation Steps

Task	Description	Documentation
Verify your system environment	Before starting the installation, verify that your system meets minimum system and network requirements.	Roadmap for Verifying Your System Environment
Obtain the appropriate distribution	To create the topology this section describes, obtain the WebLogic Server MT distribution.	Obtaining the Oracle WebLogic Server MT Distribution.
Determine your installation directories	Verify that the installer can create or access installer directories that it needs to create. Also, verify that the directories exist on systems that meet the minimum requirements.	What are the Key Oracle Fusion Middleware Directories? in Understanding Oracle Fusion Middleware.
Install the software	Run the installation program to install the software.	Installing Oracle WebLogic Server and Coherence for WebLogic Server MT
Create a WebLogic domain	Use the Configuration Wizard to create a WebLogic domain.	Creating a WebLogic Domain for WebLogic Server MT
Perform post-installation tasks	Start to manage components in the domain or continue to modify your environment for high availability.	Next Steps After Configuring the WebLogic Server Domain

Roadmap for Verifying Your System Environment

This topic has important information that you must read and understand before you begin installation and configuration steps. It identifies important tasks and checks that verify your environment is properly prepared to install and configure Oracle Fusion Middleware WebLogic Server and Coherence.

Table 1-4 Roadmap to Verify Your System Environment

Task	Description	Documentation
Verify certification and system requirements.	Verify that your operating system is certified and properly configured for WebLogic Server and Coherence installation and configuration.	



Table 1-4 (Cont.) Roadmap to Verify Your System Environment

Task	Description	Documentation
Identify a proper installation user.	Verify that the installation user has the proper permissions to install and configure the software.	See Selecting an Installation User in Planning an Installation of Oracle Fusion Middleware.
Select the installation and configuration directories on your system.	Verify that you can create the necessary directories for installation and configuration, according to the recommended directory structure.	See Selecting Directories for Installation and Configuration in Planning an Installation of Oracle Fusion Middleware.
Install a certified JDK.	The installation program for the distribution requires that your system have a certified JDK.	See Installing a JDK in <i>Planning an Installation of Oracle Fusion Middleware</i> .

Obtaining the Oracle WebLogic Server and Coherence Distribution

You download the software from the Oracle Technology Network (OTN).

For complete information about how to obtain Oracle Fusion Middleware software, see Understanding and Obtaining Product Distributions in *Planning an Installation of Oracle Fusion Middleware*.

To download Oracle WebLogic Server and Coherence software for development or evaluation, go to the following location on OTN:

http://www.oracle.com/technetwork/middleware/fusion-middleware/downloads/index.html

To obtain Oracle WebLogic Server and Coherence, go to OTN and follow these steps:

- 1. Find fmw_12.2.1.3.0_wls_Disk1_lof1.zip and download it to your system.
- 2. Extract the contents of this .zip file onto your system. The extracted file fmw_12.2.1.3.0_wls.jar runs the product installer and installs the software onto your system (Installing the Oracle WebLogic Server and Coherence Software).

About the Oracle WebLogic Server and Coherence Distribution describes products and feature sets in this distribution.

For more about obtaining Oracle Fusion Middleware products, see *Oracle Fusion Middleware Download*, *Installation*, *and Configuration Readme Files* on OTN.

Obtaining the Oracle WebLogic Server MT Distribution

You download the distribution from the Oracle Technology Network (OTN)

For complete information about how to obtain Oracle Fusion Middleware software, see Understanding and Obtaining Product Distributions in *Planning an Installation of Oracle Fusion Middleware*.

To download software for development or evaluation, go to the following OTN location:



http://www.oracle.com/technetwork/middleware/fusion-middleware/downloads/index.html

To obtain WebLogic Server MT, go to OTN and follow these steps:

- 1. Find fmw_12.2.1.3.0_infrastructure_Disk1_lof1.zip and download it to your system.
- 2. Extract the .zip file contents onto your system. The extracted file fmw_12.2.1.3.0_infrastructure.jar runs the product installer and installs the software onto your system (Installing the Oracle WebLogic Server and Coherence Software).

About the Oracle WebLogic Server and Coherence Distribution describes products and feature sets in this distribution.

For more about locating and downloading Oracle Fusion Middleware products, see *Oracle Fusion Middleware Download, Installation, and Configuration Readme Files* on OTN.



Installing the Oracle WebLogic Server and Coherence Software

This section describes how to start the Oracle WebLogic Server and Coherence installation program in graphical mode and the sequence of screens during the installation process. This section includes the following topics:

- Starting the Installation Program
 You launch the installation program from the JDK directory on your system.
- Navigating the Installation Screens
 The installation program shows a series of screens.
- About the Coherence Installation Type
 For the WebLogic Server and Coherence standard installation topology, select the
 WebLogic Server installation type. When you select this installation type and use
 instructions in this guide, the standard installation topology includes a Coherence cluster
 that contains storage-enabled Managed Coherence Servers.

Starting the Installation Program

You launch the installation program from the JDK directory on your system.

To start the installation program:

- 1. Sign in to the target system.
- Verify that a certified JDK already exists on your system; the installer requires a certified JDK. See Oracle Fusion Middleware Systems Requirements and Specifications. To download the JDK, see Understanding JDK Requirements for an Oracle Fusion Middleware Installation.
- 3. Go to the directory where you downloaded the installation program.
- 4. Launch the installation program by running java -jar from the JDK directory on your system. See the following examples:

On UNIX operating systems:

```
/home/Oracle/jdk/jdk1.8.0_131/bin/java -jar fmw_12.2.1.3.0_wls_generic.jar
```

On Windows operating systems:

```
C:\Program Files\Java\jdk1.8.0_131\bin\java -jar fmw_12.2.1.3.0_wls_generic.jar
```

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

When the installation program opens, you are ready to begin the installation. Navigating the Installation Screens describes each screen.

Navigating the Installation Screens

The installation program shows a series of screens.

The following table describes installation program screens in the order in which they appear.



Tip:

If you need more help with any installation screen, click the screen name.

Table 2-1 Oracle WebLogic Server and Coherence Installation Screens

Screen	Description
Installation Inventory Setup	On UNIX operating systems, this screen opens if this is the first time you are installing any Oracle product on this host. Specify the location where you want to create your central inventory. Make sure that the operating system group name selected on this screen has write permissions to the central inventory location.
	See Understanding the Oracle Central Inventory in Installing Software with the Oracle Universal Installer.
	This screen does not appear on Windows operating systems.
Auto Updates	If you enable Auto Updates, the installer checks for new versions of this software.
	Keep the default setting Skip Auto Updates if you do not want your system to check for software updates at this time.
	Click Select patches from directory to navigate to a local directory if you downloaded patch files.
	Select Search My Oracle Support for Updates to automatically download software updates if you have a My Oracle Support account. You must enter Oracle Support credentials then click Search. To configure a proxy server for the installer to access My Oracle Support, click Proxy Settings. Click Test Connection to test the connection.
Welcome	This screen introduces you to the product installer.
Installation Location	Use this screen to specify your Oracle home directory location.
	For more on the directory structure, see Selecting Directories for Installation and Configuration in Planning an Installation of Oracle Fusion Middleware.



Table 2-1 (Cont.) Oracle WebLogic Server and Coherence Installation Screens

Screen	Description
Installation Type	To create the standard installation topology for WebLogic Server and Coherence, select WebLogic Server .



The Coherence gets installed with the Weblogic Server Installation and there is no option to deselect it under WebLogic Server.



The topology in this document does not include server examples; Oracle strongly recommends that you do not install the examples into a production environment.

See About the Coherence Installation Type for more on the **Coherence** installation type.

See About the Oracle WebLogic Server and Coherence Distribution for more on Oracle WebLogic Server installation types.

Verifies that your system meets the minimum

necessary requirements. If you see a warning or error message, see one of the documents in Roadmap for

Verifying Your System Environment.

Use this screen to verify the installation options you chose. Optional: To save these options to a response

file, click **Save Response File** and enter the location and file name. You can use response files later for

silent installations.

For more on silent or command line installation, see Running the Oracle Universal Installer in Silent Mode in *Installing Software with the Oracle Universal*

Installer.

Installation Progress Shows the installation progress.

Prerequisite Checks

Installation Summary



Table 2-1 (Cont.) Oracle WebLogic Server and Coherence Installation Screens

Screen	Description
Installation Complete	Opens when installation is complete. The next step is launching the Configuration Wizard to create a WebLogic domain. There are two ways to do this:
	 Select Automatically Launch the Configuration Wizard. After you click Finish, the Configuration Wizard starts and you configure a domain. To do this, see Navigating Configuration Wizard Screens to Configure the Domain. Do not select Automatically Launch the Configuration Wizard on this screen. After you
	click Finish , you must manually start the Configuration Wizard to configure a domain. To do this, see Starting the Configuration Wizard.
	If you chose the Complete with Examples installation type, you see an option to start the Quick Start Configuration Wizard, which you use to create sample domains. See Quick Start Configuration Wizard in <i>Creating WebLogic Domains Using the Configuration Wizard</i> .

About the Coherence Installation Type

For the WebLogic Server and Coherence standard installation topology, select the **WebLogic Server** installation type. When you select this installation type and use instructions in this guide, the standard installation topology includes a Coherence cluster that contains storage-enabled Managed Coherence Servers.

The **Coherence Installation** installation type is for users who want to deploy and manage Coherence applications using the WebLogic Management Framework. See the following:

- Deploying Coherence Applications in Administering Oracle Coherence.
- What is the WebLogic Management Framework? in Understanding Oracle Fusion Middleware.



Installing Oracle WebLogic Server and Coherence for WebLogic Server MT

This section describes how to start the installation program in graphical mode and the sequence of screens during the installation process.

This section includes the following topics:

- Starting WebLogic Server MT Installation
 You launch the installation program from the JDK directory on your system.
- Navigating WebLogic Server MT Installation Screens
 The installation program includes a series of screens.

Starting WebLogic Server MT Installation

You launch the installation program from the JDK directory on your system.

To start the installation program, perform the following steps:

- **1.** Sign in to the target system.
- 2. Verify that a certified JDK already exists on your system. The installer requires a certified JDK. See the appropriate certification document for 12c (12.2.1.3.0) on the *Oracle Fusion Middleware Supported System Configurations* page.
- 3. Go to the directory where you downloaded the installation program.
- 4. Launch the installation program by running <code>java -jar</code> from the JDK directory on your system. See the following examples:

On UNIX operating systems:

```
/home/Oracle/jdk/jdk1.8.0\_131/bin/java -jar fmw\_12.2.1.3.0\_wls.jar
```

On Windows operating systems:

```
C:\Program Files\Java\jdk1.8.0_131\bin\java -jar fmw_12.2.1.3.0_wls.jar
```

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

When the installation program opens, you are ready to begin the installation. Navigating the Installation Screens describes each screens.

Navigating WebLogic Server MT Installation Screens

The installation program includes a series of screens.

The following table describes installation program screens in the order in which they appear.



Tip:

If you need more help with any installation screen, click the screen name.

Table 3-1 Oracle WebLogic Server MT Installation Screens

Screen	Description
Installation Inventory Setup	On UNIX operating systems, this screen opens if this is the first time you are installing any Oracle product on this host. Specify the location where you want to create your central inventory. Make sure that the operating system group name selected on this screen has write permissions to the central inventory location.
	See Understanding the Oracle Central Inventory in <i>Installing Software with the Oracle Universal Installer</i> .
	This screen does not appear on Windows operating systems.
Auto Updates	If you enable Auto Updates, your system periodically checks for new versions of this software. If your system finds a new version, the software prompts you for your permission to upgrade your installation.
	Keep the default setting Skip Auto Updates if you do not want your system to check for software updates at this time.
	Select Select patches from directory to navigate to a local directory if you downloaded patch files.
	Select Search My Oracle Support for Updates to automatically download software updates if you have a My Oracle Support account. You must enter Oracle Support credentials then click Search. To configure a proxy server for the installer to access My Oracle Support, click Proxy Settings. Click Test Connection to test the connection.
Welcome	This screen introduces you to the product installer.
Installation Location	Use this screen to specify your Oracle home directory location.
	For more on the directory structure, see Selecting Directories for Installation and Configuration in <i>Planning an Installation of Oracle Fusion Middleware</i> .



Table 3-1 (Cont.) Oracle WebLogic Server MT Installation Screens

Screen	Description
Installation Type	To create the standard installation topology for WebLogic Server and Coherence, select WebLogic Server .
	NOTE: The topology in this document does not include server examples; Oracle strongly recommends that you do not install the examples into a production environment.
	See About the Coherence Installation Type for more on the Coherence installation type.
	See About the Oracle WebLogic Server and Coherence Distribution for more on Oracle WebLogic Server installation types.
Prerequisite Checks	Verifies that your system meets the minimum necessary requirements. If you see a warning or error message, see one of the documents in Roadmap for Verifying Your System Environment.
Installation Summary	Use this screen to verify the installation options you chose. Optional: To save these options to a response file, click Save Response File and enter the location and file name. You can use response files later for silent installations.
	For more on silent or command line installation, see Using the Oracle Universal Installer in Silent Mode in <i>Installing Software with the Oracle Universal Installer</i> .
Installation Progress	Shows the installation progress.
Installation Complete	Opens when installation is complete. The next step is launching the Configuration Wizard to create a WebLogic domain. There are two ways to do this:
	 Select Automatically Launch the Configuration Wizard. After you click Finish, the Configuration Wizard starts and you configure a domain. To do this, see Navigating Configuration Wizard Screens to Configure the Domain.
	 Do not select Automatically Launch the Configuration Wizard on this screen. After you click Finish, you must manually start the Configuration Wizard to configure a domain. To do this, see Starting the Configuration Wizard.
	If you chose the Complete with Examples installation type, you see an option to start the Quick Start Configuration Wizard, which you use to create sample domains. See Quick Start Configuration Wizard in <i>Creating WebLogic Domains Using the Configuration Wizard</i> .



4

Creating and Configuring the WebLogic Domain

This section describes how to create and configure the WebLogic Server domain after you successfully install WebLogic Server and Coherence software.

This section includes the following topics:

- Configuring the WebLogic Domain
 Use the steps in this topic to create a WebLogic domain using the Configuration Wizard.
- Starting the Servers

 After you finish configuration, Oracle recommends that you take the following steps to access tools that you use to manage your domain
- Verifying the Configuration
 This section explains how to verify that your domain is configured properly.

Configuring the WebLogic Domain

Use the steps in this topic to create a WebLogic domain using the Configuration Wizard.

For other methods to create a domain, see Additional Tools for Creating, Extending, and Managing WebLogic Domains in *Creating WebLogic Domains Using the Configuration Wizard*.

This section includes the following topics:

- Starting the Configuration Wizard

 To begin domain configuration, navigate to the ORACLE_HOME/oracle_common/common/bin directory and start the Configuration Wizard.
- Navigating Configuration Wizard Screens to Configure the Domain
 Follow the sequence of topics in this section to configure the domain with the
 Configuration Wizard. You can also use this procedure to extend an existing domain.

Starting the Configuration Wizard

To begin domain configuration, navigate to the <code>ORACLE_HOME/oracle_common/common/bin</code> directory and start the Configuration Wizard.

On UNIX operating systems:

./config.sh

On Microsoft Windows operating systems:

.\config.cmd

Navigating Configuration Wizard Screens to Configure the Domain

Follow the sequence of topics in this section to configure the domain with the Configuration Wizard. You can also use this procedure to extend an existing domain.

If your settings don't match those in the procedure, change your selections accordingly or see supporting documentation for additional details.

To configure multiple products in a single domain, see Installing Multiple Products in the Same Domain in *Planning an Installation of Oracle Fusion Middleware*.

 Selecting the Domain Type and Domain Home Location You specify a Domain type and Domain home directory.

Selecting Configuration Templates

You select specific templates so that Managed Servers in the cluster will be managed Coherence servers, and the cluster will be a managed Coherence cluster. This is a starting point to set up your Coherence environment.

Configuring the Administrator Account

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

Specifying the Domain Mode and JDK

There are differences between production mode and development mode.

Selecting Advanced Configuration

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

Configuring the Administration Server Listen Address

Use the Administration Server screen to select the IP address of the host.

Configuring Node Manager

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

Configuring Managed Servers

Use the Managed Servers screen to create two new Managed Servers.

Configure a Cluster

You configure a cluster to group Managed Servers.

Defining Server Templates

If you are creating dynamic clusters for a high availability setup, use the Server Templates screen to define one or more server templates for domain.

Configuring Dynamic Servers

If you are creating dynamic clusters for a high availability setup, use the Dynamic Servers screen to configure the dynamic servers.

Assigning Managed Servers to the Cluster

To assign wls_server_1 and wls_server_2 to the new cluster wls_cluster_1, use the Assign Servers to Clusters screen.

Configuring Coherence Clusters

Use the Coherence Clusters screen to configure the Coherence cluster that is automatically added to the domain. Leave the default port number 7574 as the Coherence cluster listen port.



Creating a New Machine

To create a new machine in the domain, use the Machines screen. Node Manager requires a machine to be able to start and stop servers.

Assigning Servers to Machines

You assign both Managed Servers to a machine.

Virtual Targets

If you have a WebLogic Server Multitenant (MT) environment, you use the Virtual Targets screen to add or delete virtual targets. For this installation (not a WebLogic Server MT environment), you do not enter any values; just select **Next**.

Partitions

The Partitions screen is used to configure partitions for virtual targets in WebLogic Server Multitenant (MT) environments. Select **Next** without selecting any options.

- Reviewing Your Configuration Specifications and Configuring the Domain
 The Configuration Summary screen has detailed configuration information for the domain
 you are about to create. Review this screen to verify that the information is correct.
- Writing Down Your Domain Home and Administration Server URL
 The Configuration Success screen shows two important items about the domain you just configured.

Selecting the Domain Type and Domain Home Location

You specify a Domain type and Domain home directory.

To specify the Domain type and Domain home directory:

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

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



Tip:

For more on the Domain home directory, see Choosing a Domain Home in *Planning an Installation of Oracle Fusion Middleware*.

For more about reinstalling the software, see Reinstalling Your Software.

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

Selecting Configuration Templates

You select specific templates so that Managed Servers in the cluster will be managed Coherence servers, and the cluster will be a managed Coherence cluster. This is a starting point to set up your Coherence environment.

On the Templates screen select the following templates for configuration:



- Basic WebLogic Server Domain (selected by default)
- WebLogic Coherence Cluster Extension



Tip:

See Templates in Creating WebLogic Domains Using the Configuration Wizard for details about options on this screen.

Configuring the Administrator Account

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

This account is used to boot and connect to the domain's Administration Server.



Tip:

You must make a note of the user name and password you choose to enter here; you will need this in order to be able to start and access the Administration Server.

Specifying the Domain Mode and JDK

There are differences between production mode and development mode.

On the Domain Mode and JDK screen:

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

Select **Production Mode** to give your environment a higher degree of security. You need to enter a user name and password to deploy applications and to start the Administration Server.



Tip:

For details about options on this screen, including differences between development mode and production mode, see Domain Mode and JDK in Creating WebLogic Domains Using the Configuration Wizard.

Selecting Advanced Configuration

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

Administration Server

Required to properly configure the Administration Server listen address.

- Node Manager
- Topology

Required to configure the Managed Servers and cluster, and for configuring the machine and targeting Managed Servers to the machine.



Tip:

To configure dynamic clusters, see Creating Dynamic Clusters in *Administering Clusters for Oracle WebLogic Server*.

Configuring the Administration Server Listen Address

Use the Administration Server screen to select the IP address of the host.

Select the drop-down list next to **Listen Address** and select the IP address of the host where the Administration Server will reside, or use the system name or DNS name that maps to a single IP address. Do *not* use All Local Addresses.

Do not specify any server groups for the Administration Server.

Configuring Node Manager

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

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



Hp:

See Node Manager in *Creating WebLogic Domains Using the Configuration Wizard* for details about options on this screen.

See Node Manager Overview in *Administering Node Manager for Oracle WebLogic Server* for details about the types of Node Manager.

Configuring Managed Servers

Use the Managed Servers screen to create two new Managed Servers.

- 1. Click the **Add** button to create a new Managed Server.
- **2.** Specify wls_server_1 in the Server name column.
- 3. In the Listen Address drop-down list, select the IP address of the host that the Managed Server will reside on. Do not use All Local Addresses.
- 4. Repeat this process to create a second Managed Server named wls_server_2.

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



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

The rest of this document uses the wls_server_1 and wls_server_2 server names; if you choose different names, be sure to substitute wls_server_1 and wls_server_2 with your server names.



Tip:

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

Configure a Cluster

You configure a cluster to group Managed Servers.

To create a new cluster:

- 1. Click the Add button.
- 2. Enter wls_cluster_1 in the Cluster Name field.
- 3. Leave the cluster Address field blank.

By default, server instances in a cluster use unicast to communicate with each other. To change your cluster communications to use multicast, see Considerations for Choosing Unicast or Multicast in *Administering Clusters for Oracle WebLogic Server*.



Tip:

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

Defining Server Templates

If you are creating dynamic clusters for a high availability setup, use the Server Templates screen to define one or more server templates for domain.

To continue configuring the domain, click **Next**.

For steps to create a dynamic cluster for a high availability setup, see Using Dynamic Clusters in *High Availability Guide*.

Configuring Dynamic Servers

If you are creating dynamic clusters for a high availability setup, use the Dynamic Servers screen to configure the dynamic servers.

If you are *not* configuring a dynamic cluster, click **Next** to continue configuring the domain.





When you create dynamic clusters, keep in mind that after you assign the **Machine Name Match Expression**, you do not need to create machines for your dynamic cluster.

To create a dynamic cluster for a high availability setup, see Using Dynamic Clusters in *High Availability Guide*.

Assigning Managed Servers to the Cluster

To assign wls_server_1 and wls_server_2 to the new cluster wls_cluster_1, use the Assign Servers to Clusters screen.

- 1. In the Clusters pane, select the cluster that you want to assign the servers to; in this case, wls_cluster_1.
- 2. In the Servers pane, take one of the following steps to assign wls_server_1 to wls cluster 1:
 - Click once on wls_server_1 to select it, then click on the right arrow to move it beneath the selected cluster (wls_cluster_1) in the Clusters pane.
 - Double-click on wls_server_1 to move it beneath the selected cluster (wls_cluster_1) in the clusters pane.
- **3.** Repeat to assign wls_server_2 to wls_cluster_1.



Tip:

See Assign Servers to Clusters in *Creating WebLogic Domains Using the Configuration Wizard* for details on options in this screen.

Configuring Coherence Clusters

Use the Coherence Clusters screen to configure the Coherence cluster that is automatically added to the domain. Leave the default port number 7574 as the Coherence cluster listen port.



Setting the unicast listen port to 7574 creates an offset for the Managed Server port numbers. The offset is 5000, meaning the maximum allowed value that can be assigned to a Managed Server port number is 60535, instead of 65535.

See Performing Additional Configuration Tasks for next steps for configuring Coherence. For Coherence licensing information, see Oracle Coherence Oracle Coherence in *Oracle Fusion Middleware Licensing Information*.

Creating a New Machine

To create a new machine in the domain, use the Machines screen. Node Manager requires a machine to be able to start and stop servers.



Tip:

If you plan to create a high availability environment and know the list of machines that your target topology requires, you can follow the steps in this topic to create all machines at this time. See Optional Scale Out Procedure in *High Availability Guide*.

To create a new machine in the domain:

- 1. Click the **Add** button to create a new machine.
- 2. Specify wls_machine_1 in the Name field.
- In the Node Manager Listen Address field, select the IP address of the machine where you are configuring Managed Servers.

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

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

Other examples in the documentation may refer to the port number 5556. Replace this port number with your own port number as needed.



Note:

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



Tip:

See Machines in *Creating WebLogic Domains Using the Configuration Wizard* for more about this screen.

If you plan to create a high availability environment and know the list of machines required for your target topology, you can create all machines at this time. See Optional Scale Out Procedure in *High Availability Guide*.

Assigning Servers to Machines

You assign both Managed Servers to a machine.

To assign the Administration Server and Managed Servers to the new machine you just created:

- 1. In the Machines pane, select the machine you want to assign the servers to; in this case, wls_machine_1.
- 2. In the Servers pane, assign AdminServer to wls_machine_1 by doing one of the following:
 - Click once on AdminServer to select it, then click on the right arrow to move it beneath the selected machine (wls_machine_1) in the Machines pane.
 - Double-click on AdminServer to move it beneath the selected machine (wls_machine_1) in the Machines pane.
- 3. Repeat to assign both wls_server_1 and wls_server_2 to wls_machine_1.



Tip:

See Assign Servers to Machines in Creating WebLogic Domains Using the Configuration Wizard.

Virtual Targets

If you have a WebLogic Server Multitenant (MT) environment, you use the Virtual Targets screen to add or delete virtual targets. For this installation (not a WebLogic Server MT environment), you do not enter any values; just select **Next**.

For details about this screen, see Virtual Targets in *Creating WebLogic Domains Using the Configuration Wizard*.

Partitions

The Partitions screen is used to configure partitions for virtual targets in WebLogic Server Multitenant (MT) environments. Select **Next** without selecting any options.

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

Reviewing Your Configuration Specifications and Configuring the Domain

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

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

Domain creation does not start until you click **Create**.



Tip:

See Configuration Summary in *Creating WebLogic Domains Using the Configuration Wizard* for more on options in this screen.



Writing Down Your Domain Home and Administration Server URL

The Configuration Success screen shows two important items about the domain you just configured.

The Configuration Success screen shows:

- Domain Location
- Administration Server URL

You must make a note of both items; you need them to start the servers and access the Administration Server.

Click Finish to dismiss the Configuration Wizard.

Starting the Servers

After you finish configuration, Oracle recommends that you take the following steps to access tools that you use to manage your domain

- Starting the Node Manager

 To start your per-domain Node Manager, go to the DOMAIN_HOME/bin directory.
- Starting the Administration Server
 To start the Administration Server, go the DOMAIN_HOME/bin directory.
- Starting Managed Servers
 To start Managed Servers, go the DOMAIN_HOME/bin directory and run the command:

Starting the Node Manager

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

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

nohup ./startNodeManager.sh > nm.out&

On Windows operating systems, run:

startNodeManager.cmd



If you use Windows, Oracle recommends that you install Node Manager to run as a startup service. This allows Node Manager to start up automatically each time the system is restarted. (Node Manager is not required to start servers, Oracle recommends it over other methods.)

See Running Node Manager as a Startup Service in *Administering Node Manager for Oracle WebLogic Server*.



Starting the Administration Server

To start the Administration Server, go the <code>DOMAIN_HOME/bin</code> directory.

On UNIX operating systems:

./startWebLogic.sh

On Windows operating systems:

startWebLogic.cmd

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



Tip:

For more about starting the Administration Server, see Starting and Stopping Servers in Administering Server Startup and Shutdown for Oracle WebLogic Server.

In production mode, you can create a boot identity file to bypass the need to provide a user name and password when starting the Administration Server. See Creating a Boot Identity File for an Administration Server in Administering Server Startup and Shutdown for Oracle WebLogic Server.

Starting Managed Servers

To start Managed Servers, go the DOMAIN HOME/bin directory and run the command:

On UNIX operating systems:

./startManagedWebLogic.sh managed_server_name admin_server_url

On Windows operating systems:

startManagedWebLogic.cmd managed_server_name admin_server_url

Replace managed server name with the names of Managed Server you want to start. For this topology, Managed Server names are wls_server_1 and wls_server_2 (defined on the Managed Server screen in Configuring Managed Servers). You must run this command twice, once for each Managed Server.

Replace admin_server_ur1 with the Administration Server's full URL, as shown in the Configuration Success screen in Reviewing Your Configuration Specifications and Configuring the Domain.

The following examples show commands to start wls_server_1 and wls_server_2 on a UNIX operating system:

```
./startManagedWebLogic.sh wls_server_1 t3:\\examplehost.exampledomain.com:7001 &
./startManagedWebLogic.sh wls_server_2 t3:\\examplehost.exampledomain.com:7001 &
```





Tip:

For more on starting Managed Servers, see Starting and Stopping Servers in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

Verifying the Configuration

This section explains how to verify that your domain is configured properly.

To verify configuration, see Performing Basic Administrative Tasks. Oracle recommends that you familiarize yourself with the tasks that this section describes and perform them to verify that your domain is properly configured.



5

Creating a WebLogic Domain for WebLogic Server MT

This section explains how to configure a domain for use with WebLogic Server MT.

This section includes the following topics:

- Configuring the WebLogic Domain
 Use the steps in this topic to create a WebLogic domain using the Configuration Wizard.
- Starting the Servers
 After you finish configuration, Oracle recommends that you take the following steps to access tools that you use to manage your domain
- Verifying the Configuration
 This section explains how to verify that your domain is configured properly.

Configuring the WebLogic Domain

Use the steps in this topic to create a WebLogic domain using the Configuration Wizard.

For other methods to create a domain, see Additional Tools for Creating, Extending, and Managing WebLogic Domains in *Creating WebLogic Domains Using the Configuration Wizard*.

This section includes the following topics:

- Starting the Configuration Wizard

 To begin domain configuration, navigate to the ORACLE_HOME/oracle_common/common/bin directory and start the Configuration Wizard.
- Navigating Configuration Wizard Screens to Configure the Domain
 Follow the sequence of topics in this section to configure the domain with the
 Configuration Wizard. You can also use this procedure to extend an existing domain.

Starting the Configuration Wizard

To begin domain configuration, navigate to the $\mathit{ORACLE_HOME/oracle_common/common/bin}$ directory and start the Configuration Wizard.

On UNIX operating systems:

./config.sh

On Microsoft Windows operating systems:

.\config.cmd

Navigating Configuration Wizard Screens to Configure the Domain

Follow the sequence of topics in this section to configure the domain with the Configuration Wizard. You can also use this procedure to extend an existing domain.

If your settings don't match those in the procedure, change your selections accordingly or see supporting documentation for additional details.

To configure multiple products in a single domain, see Installing Multiple Products in the Same Domain in *Planning an Installation of Oracle Fusion Middleware*.

- Selecting the Domain Type and Domain Home Location You specify a Domain type and Domain home directory.
- Selecting Configuration Templates for a WebLogic Server MT Domain
 On the Templates screen, you select specific templates for a WebLogic Server MT domain.
- Configuring the Administrator Account
 On the Administrator Account screen, specify the user name and password for the default WebLogic Administrator account for the domain.
- Specifying the Domain Mode and JDK
 There are differences between production mode and development mode.
- Selecting Advanced Configuration
 To complete domain configuration for the topology, select these options on the Advanced Configuration screen:
- Configuring the Administration Server Listen Address
 On the Administration Server screen, select the drop-down list next to Listen Address and select the IP address on the host where the Administration Server will reside.
- Configuring Node Manager

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

Configuring Managed Servers
 Use the Managed Servers screen to create two new Managed Servers.

Configure a Cluster

You configure a cluster to group Managed Servers.

Defining Server Templates

If you are creating dynamic clusters for a high availability setup, use the Server Templates screen to define one or more server templates for domain.

Configuring Dynamic Servers

If you are creating dynamic clusters for a high availability setup, use the Dynamic Servers screen to configure the dynamic servers.

Assigning Managed Servers to the Cluster

To assign wls_server_1 and wls_server_2 to the new cluster wls_cluster_1, use the Assign Servers to Clusters screen.

Configuring Coherence Clusters

Use the Coherence Clusters screen to configure the Coherence cluster that is automatically added to the domain. Leave the default port number 7574 as the Coherence cluster listen port.



Creating a New Machine

To create a new machine in the domain, use the Machines screen. Node Manager requires a machine to be able to start and stop servers.

Assigning Servers to Machines

You assign both Managed Servers to a machine.

Virtual Targets

If you have a WebLogic Server Multitenant (MT) environment, you use the Virtual Targets screen to add or delete virtual targets. .

Use the Partitions screen to configure partitions for virtual targets in WebLogic Server Multitenant (MT) environments. Select Next when you finish configuring options.

- Reviewing Your Configuration Specifications and Configuring the Domain The Configuration Summary screen has detailed configuration information for the domain you are about to create. Review this screen to verify that the information is correct.
- Writing Down Your Domain Home and Administration Server URL The Configuration Success screen shows two important items about the domain you just configured.

Selecting the Domain Type and Domain Home Location

You specify a Domain type and Domain home directory.

To specify the Domain type and Domain home directory:

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

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



Tip:

For more on the Domain home directory, see Choosing a Domain Home in *Planning* an Installation of Oracle Fusion Middleware.

For more about reinstalling the software, see Reinstalling Your Software.

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

Selecting Configuration Templates for a WebLogic Server MT Domain

On the Templates screen, you select specific templates for a WebLogic Server MT domain.

WebLogic Server Multitenant feature is deprecated in WebLogic Server 12.2.1.4.0 and will be removed in the next release.

Select the following templates for a WebLogic Server MT domain:



- Basic WebLogic Server Domain (selected by default)
- Oracle Enterprise Manager-Restricted JRF Oracle recommends that you select this template for a WebLogic Server MT installation, instead of the Oracle JRF template. Selecting this template selects the Oracle Restricted JRF template automatically.
- Oracle Restricted JRF (Selected by default when you select the Oracle Enterprise Manager-Restricted JRF template.)



To know about the applyJRF commands for Oracle Restricted Template, see applyJRF.

WebLogic Coherence Cluster Extension

(Selected by default.) This template makes Managed Servers in the cluster managed Coherence servers, and makes the cluster a managed Coherence cluster. This is a starting point to set up a Coherence environment. To check the next steps, see Next Steps After Configuring the WebLogic Server Domain.

Note:

This topic describes how to apply templates for WLS MT using the Configuration Wizard. However, if you use WLST to create managed servers (configured or dynamic), the JRF template does *not* apply automatically. When you use the Fusion Middleware Console to monitor the domain, monitoring does not work for the servers without the JRF template. See Configuring WebLogic Server MT: The Big Picture in *Oracle Fusion Middleware Using WebLogic Server MT*.



Tip:

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

Configuring the Administrator Account

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

This account is used to boot and connect to the domain's Administration Server.





Tip

You must make a note of the user name and password you choose to enter here; you will need this in order to be able to start and access the Administration Server.

Specifying the Domain Mode and JDK

There are differences between production mode and development mode.

On the Domain Mode and JDK screen:

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

Select **Production Mode** to give your environment a higher degree of security. You need to enter a user name and password to deploy applications and to start the Administration Server.



Tip:

For details about options on this screen, including differences between development mode and production mode, see Domain Mode and JDK in *Creating WebLogic Domains Using the Configuration Wizard*.

Selecting Advanced Configuration

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

- Administration Server
 - Required to properly configure the Administration Server listen address.
- Node Manager
- Topology

Required to configure the Managed Servers and cluster, and for configuring the machine and targeting Managed Servers to the machine.



Tin

To configure dynamic clusters, see Creating Dynamic Clusters in *Administering Clusters for Oracle WebLogic Server*.

Configuring the Administration Server Listen Address

On the Administration Server screen, select the drop-down list next to **Listen Address** and select the IP address on the host where the Administration Server will reside.

Do not use All Local Addresses.

Configuring Node Manager

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

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



Tip:

See Node Manager in *Creating WebLogic Domains Using the Configuration Wizard* for details about options on this screen.

See Node Manager Overview in *Administering Node Manager for Oracle WebLogic Server* for details about the types of Node Manager.

Configuring Managed Servers

Use the Managed Servers screen to create two new Managed Servers.

- 1. Click the **Add** button to create a new Managed Server.
- 2. Specify wls_server_1 in the Server name column.
- 3. In the Listen Address drop-down list, select the IP address of the host that the Managed Server will reside on. Do not use All Local Addresses.
- 4. Repeat this process to create a second Managed Server named wls_server_2.

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

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

The rest of this document uses the wls_server_1 and wls_server_2 server names; if you choose different names, be sure to substitute wls_server_1 and wls_server_2 with your server names.



Tip:

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

Configure a Cluster

You configure a cluster to group Managed Servers.

To create a new cluster:

Click the Add button.

- 2. Enter wls_cluster_1 in the Cluster Name field.
- 3. Leave the cluster Address field blank.

By default, server instances in a cluster use unicast to communicate with each other. To change your cluster communications to use multicast, see Considerations for Choosing Unicast or Multicast in *Administering Clusters for Oracle WebLogic Server*.



Tip:

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

Defining Server Templates

If you are creating dynamic clusters for a high availability setup, use the Server Templates screen to define one or more server templates for domain.

To continue configuring the domain, click Next.

For steps to create a dynamic cluster for a high availability setup, see Scaling Out with Dynamic Clusters in the *High Availability Guide*.

Configuring Dynamic Servers

If you are creating dynamic clusters for a high availability setup, use the Dynamic Servers screen to configure the dynamic servers.

To continue configuring the domain, click **Next**.

For steps to create a dynamic cluster for a high availability setup, see Scaling Out with Dynamic Clusters in the *High Availability Guide*.

Assigning Managed Servers to the Cluster

To assign wls_server_1 and wls_server_2 to the new cluster wls_cluster_1, use the Assign Servers to Clusters screen.

- 1. In the Clusters pane, select the cluster that you want to assign the servers to; in this case, wls_cluster_1.
- 2. In the Servers pane, take one of the following steps to assign wls_server_1 to wls_cluster_1:
 - Click once on wls_server_1 to select it, then click on the right arrow to move it beneath the selected cluster (wls_cluster_1) in the Clusters pane.
 - Double-click on wls_server_1 to move it beneath the selected cluster (wls_cluster_1) in the clusters pane.
- 3. Repeat to assign wls_server_2 to wls_cluster_1.





See Assign Servers to Clusters in Creating WebLogic Domains Using the Configuration Wizard for details on options in this screen.

Configuring Coherence Clusters

Use the Coherence Clusters screen to configure the Coherence cluster that is automatically added to the domain. Leave the default port number 7574 as the Coherence cluster listen port.



Note:

Setting the unicast listen port to 7574 creates an offset for the Managed Server port numbers. The offset is 5000, meaning the maximum allowed value that can be assigned to a Managed Server port number is 60535, instead of 65535.

See Performing Additional Configuration Tasks for next steps for configuring Coherence. For Coherence licensing information, see Oracle Coherence Oracle Coherence in Oracle Fusion Middleware Licensing Information.

Creating a New Machine

To create a new machine in the domain, use the Machines screen. Node Manager requires a machine to be able to start and stop servers.



Tip:

If you plan to create a high availability environment and know the list of machines that your target topology requires, you can follow the steps in this topic to create all machines at this time. See Optional Scale Out Procedure in High Availability Guide.

To create a new machine in the domain:

- Click the Add button to create a new machine.
- 2. Specify wls_machine_1 in the Name field.
- 3. In the Node Manager Listen Address field, select the IP address of the machine where you are configuring Managed Servers.
 - You must select a specific interface and not localhost. This allows Coherence cluster addresses to be dynamically calculated.
- 4. Verify the port in the Node Manager Listen Port field.
 - Other examples in the documentation may refer to the port number 5556. Replace this port number with your own port number as needed.



Note:

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



Tip:

See Machines in *Creating WebLogic Domains Using the Configuration Wizard* for more about this screen.

If you plan to create a high availability environment and know the list of machines required for your target topology, you can create all machines at this time. See Optional Scale Out Procedure in *High Availability Guide*.

Assigning Servers to Machines

You assign both Managed Servers to a machine.

To assign the Administration Server and Managed Servers to the new machine you just created:

- 1. In the Machines pane, select the machine you want to assign the servers to; in this case, wls_machine_1.
- 2. In the Servers pane, assign AdminServer to wls_machine_1 by doing one of the following:
 - Click once on AdminServer to select it, then click on the right arrow to move it beneath the selected machine (wls_machine_1) in the Machines pane.
 - Double-click on AdminServer to move it beneath the selected machine (wls_machine_1) in the Machines pane.
- 3. Repeat to assign both wls_server_1 and wls_server_2 to wls_machine_1.



Tip:

See Assign Servers to Machines in *Creating WebLogic Domains Using the Configuration Wizard*.

Virtual Targets

If you have a WebLogic Server Multitenant (MT) environment, you use the Virtual Targets screen to add or delete virtual targets. .

See Assign Virtual Targets to Partitions in *Creating WebLogic Domains Using the Configuration Wizard*.

Partitions

Use the Partitions screen to configure partitions for virtual targets in WebLogic Server Multitenant (MT) environments. Select **Next** when you finish configuring options.

See Partitions in Creating WebLogic Domains Using the Configuration Wizard.

Reviewing Your Configuration Specifications and Configuring the Domain

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

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

Domain creation does not start until you click Create.



Tip:

See Configuration Summary in *Creating WebLogic Domains Using the Configuration Wizard* for more on options in this screen.

Writing Down Your Domain Home and Administration Server URL

The Configuration Success screen shows two important items about the domain you just configured.

The Configuration Success screen shows:

- Domain Location
- Administration Server URL

You must make a note of both items; you need them to start the servers and access the Administration Server.

Click Finish to dismiss the Configuration Wizard.

Starting the Servers

After you finish configuration, Oracle recommends that you take the following steps to access tools that you use to manage your domain

- Starting the Node Manager
 - To start your per-domain Node Manager, go to the <code>DOMAIN_HOME/bin</code> directory.
- Starting the Administration Server
 - To start the Administration Server, go the <code>DOMAIN_HOME/bin</code> directory.
- Starting Managed Servers
 - To start Managed Servers, go the ${\it DOMAIN_HOME/bin}$ directory and run the command:



Starting the Node Manager

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

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

nohup ./startNodeManager.sh > nm.out&

On Windows operating systems, run:

startNodeManager.cmd



If you use Windows, Oracle recommends that you install Node Manager to run as a startup service. This allows Node Manager to start up automatically each time the system is restarted. (Node Manager is not required to start servers, Oracle recommends it over other methods.)

See Running Node Manager as a Startup Service in Administering Node Manager for Oracle WebLogic Server.

Starting the Administration Server

To start the Administration Server, go the <code>DOMAIN_HOME/bin</code> directory.

On UNIX operating systems:

./startWebLogic.sh

On Windows operating systems:

startWebLogic.cmd

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



Tip:

For more about starting the Administration Server, see Starting and Stopping Servers in Administering Server Startup and Shutdown for Oracle WebLogic Server.

In production mode, you can create a boot identity file to bypass the need to provide a user name and password when starting the Administration Server. See Creating a Boot Identity File for an Administration Server in Administering Server Startup and Shutdown for Oracle WebLogic Server.



Starting Managed Servers

To start Managed Servers, go the <code>DOMAIN_HOME/bin</code> directory and run the command:

On UNIX operating systems:

./startManagedWebLogic.sh managed_server_name admin_server_url

On Windows operating systems:

startManagedWebLogic.cmd managed_server_name admin_server_url

Replace <code>managed_server_name</code> with the names of Managed Server you want to start. For this topology, Managed Server names are <code>wls_server_1</code> and <code>wls_server_2</code> (defined on the Managed Server screen in Configuring Managed Servers). You must run this command twice, once for each Managed Server.

Replace $admin_server_ur1$ with the Administration Server's full URL, as shown in the Configuration Success screen in Reviewing Your Configuration Specifications and Configuring the Domain.

The following examples show commands to start wls_server_1 and wls_server_2 on a UNIX operating system:

```
./startManagedWebLogic.sh wls_server_1 t3:\\examplehost.exampledomain.com:7001 & ./startManagedWebLogic.sh wls_server_2 t3:\\examplehost.exampledomain.com:7001 &
```



Tip:

For more on starting Managed Servers, see Starting and Stopping Servers in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

Verifying the Configuration

This section explains how to verify that your domain is configured properly.

To verify configuration, see Performing Basic Administrative Tasks. Oracle recommends that you familiarize yourself with the tasks that this section describes and perform them to verify that your domain is properly configured.



6

Next Steps After Configuring the WebLogic Server Domain

This section describes common tasks you might want to perform on the newly created WebLogic Server domain.

This section includes the following topics:

- Performing Basic Administrative Tasks
 Review the administrative tasks you will likely want to perform on a new domain.
- Performing Additional Domain Configuration Tasks
 Review additional configuration tasks you will likely want to perform on a new domain.
- Performing Domain Configuration Tasks for WebLogic Server MT
 There are additional tasks you probably want to perform on your newly created domain.
- Preparing Your Environment for High Availability
 Scaling out for high availability requires additional steps.

Performing Basic Administrative Tasks

Review the administrative tasks you will likely want to perform on a new domain.

Table 6-1 Basic Administration Tasks for a New Domain

Task	Description	More Information
Getting familiar with Fusion Middleware administration tools	Get familiar with various tools that you can use to manage your environment.	See Overview of Oracle Fusion Middleware Administration Tools in Administering Oracle Fusion Middleware.
Starting and stopping products and servers	Learn how to start and stop Oracle Fusion Middleware, including the Administration Server, Managed Servers, and components.	See Starting and Stopping Oracle Fusion Middleware in Administering Oracle Fusion Middleware.
Configuring Secure Sockets Layer (SSL)	Learn how to set up secure communications between Oracle Fusion Middleware components using SSL.	See Configuring SSL in Oracle Fusion Middleware in Administering Oracle Fusion Middleware.
Monitoring Oracle Fusion Middleware	Learn how to keep track of the status of Oracle Fusion Middleware components.	See Monitoring Oracle Fusion Middleware in Administering Oracle Fusion Middleware.
Understanding Backup and Recovery Procedures	Learn the recommended backup and recovery procedures for Oracle Fusion Middleware.	See Introduction to Backup and Recovery in Administering Oracle Fusion Middleware.

Performing Additional Domain Configuration Tasks

Review additional configuration tasks you will likely want to perform on a new domain.

Table 6-2 Additional Domain Configuration Tasks

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



Performing Domain Configuration Tasks for WebLogic Server MT

There are additional tasks you probably want to perform on your newly created domain.

Table 6-3 Additional Domain Configuration Tasks

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

- Adding Oracle Traffic Director as a WebLogic Server MT Front End
 If you are configuring WebLogic Server MT, install and configure Oracle Traffic Director in
 the Web tier. Oracle Traffic Director (OTD) is a software load balancer for load balancing
 HTTP/S and TCP traffic to servers in the back-end.
- Configuring Oracle Traffic Director in WebLogic Server MT
 After you install Oracle Traffic Director as the front end to an Oracle WebLogic Server MT domain, you want to connect the two elements.



Adding Oracle Traffic Director as a WebLogic Server MT Front End

If you are configuring WebLogic Server MT, install and configure Oracle Traffic Director in the Web tier. Oracle Traffic Director (OTD) is a software load balancer for load balancing HTTP/S and TCP traffic to servers in the back-end.

To add OTD as a front end to a WebLogic Server MT domain, see Oracle Traffic Director Installation Guide

Configuring Oracle Traffic Director in WebLogic Server MT

After you install Oracle Traffic Director as the front end to an Oracle WebLogic Server MT domain, you want to connect the two elements.

To configure Oracle Traffic Director in a WebLogic Server MT domain, see Configuring Oracle Traffic Director in Oracle Fusion Middleware Using WebLogic Server MT.

Preparing Your Environment for High Availability

Scaling out for high availability requires additional steps.

Table 6-4 provides a list of tasks to perform if you want to scale out your standard installation environment for high availability.

Table 6-4 Tasks Required to Prepare Your Environment for High Availability

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



7

Uninstalling Oracle WebLogic Server and Coherence

This section describes how to uninstall and reinstall Oracle WebLogic Server and Coherence. Oracle recommends that you always use the instructions in this section to remove the software. If you try to remove the software manually, you may encounter problems when you try to reinstall the software again at a later time. Following the procedures in this section ensures that the software is properly removed.

This section includes the following topics:

About Product Uninstallation

The deinstaller removes the software from the Oracle home directory that you start it in.

Stopping Oracle Fusion Middleware

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

Uninstall the Software

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

Removing Oracle Home Directory Manually

After deinstalling the software, you must manually remove your Oracle home directory and any existing subdirectories that the deinstaller did not remove.

Removing Program Shortcuts on Windows Operating Systems

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

Removing Your Domain and Application Data

After deinstalling the software, you must remove the domain and application data if you don't plan to use it or if you don't plan to reconfigure a domain for a new WebLogic Server installation..

Reinstalling Your Software

You can reinstall your software into the same Oracle home as a previous installation *only* if you uninstalled the software by following uninstallation instructions, including manually removing the Oracle home directory.

About Product Uninstallation

The deinstaller removes the software from the Oracle home directory that you start it in.

The deinstaller removes only components that the installation program installed; the deinstaller does *not* remove:

- All files and directories in the Oracle home.
- The JDK or any user-created data, such as WebLogic domains or custom application data.

The following table summarizes the procedure and has links to supporting documents.

Table 7-1 Roadmap for Uninstalling Oracle Fusion Middleware Infrastructure

Task	Description and Documentation	Documentatio n
Stop Oracle Fusion Middeware.	Oracle recommends that you stop all servers and processes in your domain before you run the deinstaller	See Stopping Oracle Fusion Middleware.
Remove the software.	Run the product deinstaller to remove Oracle WebLogic Server and Coherence.	See Uninstall the Software.
Remove the Oracle home directory.	The deinstaller does not remove all files and folders from the Oracle home directory. After the deinstaller finishes, you must manually remove the Oracle home to complete your product removal.	See Removing Oracle Home Directory Manually.
Remove program shortcuts (Windows operating systems)	The deinstaller does not remove the program shortcuts on your Windows operating system.	See Removing Program Shortcuts on Windows Operating Systems
Remove your domain and application data.	The deinstaller does not remove data contained in your Domain home or Application home directories, even if they are located inside the Oracle home. You must remove these directories manually.	See Removing Your Domain and Application Data.

Stopping Oracle Fusion Middleware

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

See Starting and Stopping Servers in Administering Server Startup and Shutdown for Oracle WebLogic Server.

Uninstall the Software

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

To run a silent (command-line) uninstallation, see Running the Oracle Universal Installer for Silent Deinstallation in *Installing Software with the Oracle Universal Installer*.

- Start the Uninstallation Program
 How you uninstall a program depends on your operating system: Windows or UNIX.
- Navigating through Uninstallation Screens
 The uninstallation program shows a series of screens, in the order that the following table lists.



Start the Uninstallation Program

How you uninstall a program depends on your operating system: Windows or UNIX.

On UNIX operating systems, go to the <code>ORACLE_HOME/oui/bin</code> directory and enter the command <code>./deinstall.sh</code>

On Windows operating systems, choose one of the following options to start uninstallation:

- From the command line, go to the ORACLE_HOME\oui\bin and enter deinstall.cmd.
- From the **Start** menu, select **All Programs**, select **Oracle**, select **OracleHome**, then select **Uninstall Oracle Middleware**.
- Use a file manager window to go to the ORACLE_HOME\oui\bin directory and double click
 on deinstall.cmd

Navigating through Uninstallation Screens

The uninstallation program shows a series of screens, in the order that the following table lists.

If you need additional help with the uninstallation screen, click **Help**.

Table 7-2 Uninstallation Screens and Descriptions

Screen	Description
Welcome	Introduces you to the product deinstaller.
Deinstallation Summary	Shows the Oracle home directory and its contents to deinstall. Verify that this is the correct directory.
	Click Deinstall to begin removing the software.
Deinstallation Progress	Shows the deinstallation progress.
Deinstallation Complete	Opens when the deinstallation is complete. Review this screen then click Finish to dismiss the deinstaller.

Removing Oracle Home Directory Manually

After deinstalling the software, you must manually remove your Oracle home directory and any existing subdirectories that the deinstaller did not remove.

For example, if your Oracle home directory is /home/Oracle/products/Oracle_Home on a UNIX operating system:

```
cd /home/Oracle/products
rm -rf Oracle_Home
```

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



Removing Program Shortcuts on Windows Operating Systems

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

Go to the C:\Program Data\Microsoft\Windows\Start

Menu\Programs\Oracle\Oracle Home\Product directory. If you only have one product installed in your Oracle home, you can remove the Oracle Home directory. If you have multiple products installed in your Oracle home, you must remove all products before removing the Oracle Home.

Removing Your Domain and Application Data

After deinstalling the software, you must remove the domain and application data if you don't plan to use it or if you don't plan to reconfigure a domain for a new WebLogic Server installation..

To remove your domain and application data:

1. Manually remove your Domain home directory.

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

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

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

2. Manually remove your Application home directory.

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

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

On a Windows operating system, if your Application home directory was $C:\Oracle\Config\applications\infra_domain$, use a file manager window and navigate to the $C:\Oracle\Config\applications$ directory, then right-click on the infra domain folder and select **Delete**.

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

```
<domain location=/home/Oracle/config/domains/infra_domain/>
```

Save and exit the file when you are finished.



Reinstalling Your Software

You can reinstall your software into the same Oracle home as a previous installation *only* if you uninstalled the software by following uninstallation instructions, including manually removing the Oracle home directory.

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

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

- Scenario: Installing in an Existing Oracle Home that Contains the Same Feature Sets
 The installer warns you that the Oracle home you specified during installation already
 contains the software you're trying to install now.
- Scenario: Installing in an Existing, Non-Empty Oracle Home
 You chose to create your Domain home or Application home somewhere inside your
 existing Oracle home. The uninstallation process does not remove this data, so if you try
 to reinstall into the same Oracle home, the installer does not allow it.

Scenario: Installing in an Existing Oracle Home that Contains the Same Feature Sets

The installer warns you that the Oracle home you specified during installation already contains the software you're trying to install now.

Your options:

- Select a different installation type. In this case, only feature sets that do not already exist in the Oracle home directory get installed.
- Select a different Oracle home directory.

Scenario: Installing in an Existing, Non-Empty Oracle Home

You chose to create your Domain home or Application home somewhere inside your existing Oracle home. The uninstallation process does not remove this data, so if you try to reinstall into the same Oracle home, the installer does not allow it.

Your options:

- Uninstall your software from the Oracle home then remove the Oracle home directory.
 You can then reinstall and reuse the same Oracle home location, using the instructions in Uninstalling Oracle WebLogic Server and Coherence. You must re-create any domain or application data that was in the Oracle home.
- Select a different Oracle home directory.



A

About the Oracle WebLogic Server and Coherence Distribution

The Oracle WebLogic Server and Coherence distribution includes a variety of products and feature sets.



Oracle WebLogic Server is also available with the Oracle Fusion Middleware Infrastructure distribution. See Understanding the Infrastructure Standard Installation Topology in *Installing and Configuring the Oracle Fusion Middleware Infrastructure*.

Table A-1 Oracle Fusion Middleware WebLogic Server and Coherence Products and Feature Sets

Installation Type	Installed Items	Description
WebLogic Server	WebLogic Server	A scalable, enterprise-ready Java Platform, Enterprise Edition (Java EE) application server. The WebLogic Server infrastructure supports the deployment of many types of distributed applications and is an ideal foundation for building applications based on service-oriented architecture (SOA).
WebLogic Server	Coherence	Coherence provides replicated and distributed (partitioned) data management and caching services on top of a reliable, highly scalable peer-to-peer clustering protocol. Coherence has no single points of failure; it automatically and transparently fails over and redistributes its clustered data management services when a server becomes inoperative or is disconnected from the network. When a new server is added, or when a failed server is restarted, it automatically joins the cluster and Coherence fails back services to it, transparently redistributing the cluster load. Coherence includes network-level fault tolerance features and transparent soft re-start capability to enable servers to self-heal.
		See About Oracle Coherence in <i>Oracle Fusion Middleware Installing Oracle Coherence</i> .
WebLogic Server	WebLogic Server Clients	Thin-client JARs required for connecting to a WebLogic Server instance. Includes the JARs for the web services, JMS, Store and Forward, WebLogic RMI, JMS .NET, and JMX clients.
WebLogic Server	Administration Console	A web application hosted by the Administration Server that is used for managing and monitoring an active domain.



Table A-1 (Cont.) Oracle Fusion Middleware WebLogic Server and Coherence Products and Feature Sets

Installation Type	Installed Items	Description
WebLogic Server	CIE WLS Config	Provides files used by the Oracle Fusion Middleware Configuration Wizard.
WebLogic Server	Third-Party JDBC Drivers	Other JDBC drivers bundled with WebLogic Server that can be used to connect a WebLogic Server environment to an external database.
		For details about this feature set, see Using JDBC Drivers with WebLogic Server in <i>Administering JDBC Data Sources</i> for Oracle WebLogic Server.
WebLogic Server	Third-Party Jackson	Third party open source software for processing JavaScript Object Notation (JSON) data formats.
WebLogic Server	Third-Party Jersey	Third party open source software representing the official implementation of the Representational State Transfer (REST) architecture.
		See About RESTful Web Service Development in Developing and Securing RESTful Web Services for Oracle WebLogic Server.
WebLogic Server	Third-Party Maven Apache	Maven is a build management tool that is central to project build tasks such as compilation, packaging, and artifact management.
		See Introduction to Continuous Integration in <i>Developing Applications Using Continuous Integration</i> .
WebLogic Server	OPatch	The OPatch utility is a tool that allows the application and rollback of interim patches to Oracle products
Coherence	WebLogic Server	A scalable, enterprise-ready Java Platform, Enterprise Edition (Java EE) application server. The WebLogic Server infrastructure supports the deployment of many types of distributed applications and is an ideal foundation for building applications based on service-oriented architecture.
Coherence	Coherence	See earlier description in this table. See About Oracle Coherence in <i>Oracle Fusion Middleware Installing Oracle</i> <i>Coherence</i> for details on Coherence.
Coherence	Administration Console	A web application hosted by the Administration Server that is used for managing and monitoring an active domain.
Coherence	CIE WLS Config	Provides files used by the Oracle Fusion Middleware Configuration Wizard.
Coherence	Third-Party JDBC Drivers	Other JDBC drivers bundled with WebLogic Server that can be used to connect a WebLogic Server environment to an external database.
		See Using JDBC Drivers with WebLogic Server in Administering JDBC Data Sources for Oracle WebLogic Server.
Coherence	Third-Party Jackson	Third party open source software for processing JavaScript Object Notation (JSON) data formats.



Table A-1 (Cont.) Oracle Fusion Middleware WebLogic Server and Coherence Products and Feature Sets

Installation Type	Installed Items	Description
Coherence	Third-Party Jersey	Third party open source software representing the official implementation of the Representational State Transfer (REST) architecture.
		See About RESTful Web Service Development in Developing and Securing RESTful Web Services for Oracle WebLogic Server.
Coherence	Third-Party Maven Apache	Maven is a build management tool that is central to project build tasks such as compilation, packaging, and artifact management.
		See Introduction to Continuous Integration in <i>Developing Applications Using Continuous Integration</i> .
Coherence	OPatch	The OPatch utility is a tool that allows the application and rollback of interim patches to Oracle products
Complete Installation with Examples	WebLogic Server	A scalable, enterprise-ready Java Platform, Enterprise Edition (Java EE) application server. The WebLogic Server infrastructure supports the deployment of many types of distributed applications and is an ideal foundation for building applications based on service-oriented architecture (SOA).
Complete	Coherence	See earlier description in this table.
Installation with Examples		See About Oracle Coherence in <i>Oracle Fusion Middleware Installing Oracle Coherence</i> .
Complete Installation with Examples	WebLogic Server Clients	Thin-client JARs required for connecting to a WebLogic Server instance. Includes the JARs for the web services, JMS, Store and Forward, WebLogic RMI, JMS .NET, and JMX clients.
Complete Installation with Examples	Administration Console	A web application hosted by the Administration Server that is used for managing and monitoring an active domain.
Complete Installation with Examples	CIE WLS Config	Provides files used by the Oracle Fusion Middleware Configuration Wizard.
Complete Installation with Examples	Third-Party JDBC Drivers	Other JDBC drivers bundled with WebLogic Server that can be used to connect a WebLogic Server environment to an external database.
		For details about this feature set, see Using JDBC Drivers with WebLogic Server in <i>Administering JDBC Data Sources</i> for Oracle WebLogic Server.
Complete Installation with Examples	Apache Derby	Oracle's distribution of the open source Apache Derby Java database, also called Java DB. Derby is a pure Java relational database management system (RDBMS) provided with Oracle WebLogic Server to allow you to run code examples with a functional database server. Derby is for demonstration (that is, non-production) use only
Complete Installation with Examples	Third-Party Jackson	Third party open source software for processing JavaScript Object Notation (JSON) data formats.



Table A-1 (Cont.) Oracle Fusion Middleware WebLogic Server and Coherence Products and Feature Sets

Installation Type	Installed Items	Description
Complete Installation with Examples	Third-Party Jersey	Third party open source software representing the official implementation of the Representational State Transfer (REST) architecture.
		See About RESTful Web Service Development in <i>Oracle Fusion Middleware Developing and Securing RESTful Web Services for Oracle WebLogic Server.</i>
Complete Installation with Examples	Third-Party Maven Apache	Maven is a build management tool that is central to project build tasks such as compilation, packaging, and artifact management.
		See About RESTful Web Service Development in Developing and Securing RESTful Web Services for Oracle WebLogic Server.
Complete Installation with	WebLogic Server Examples	Server Examples are example applications that demonstrate key features of WebLogic Server.
Examples		See Sample Application and Code Examples in Understanding Oracle WebLogic Server.
Complete Installation with Examples	Coherence Examples	Coherence Examples demonstrate how to use the features of Coherence in all supported languages (Java, .NET, and C++). The examples are organized collections of code that show how to use one or more features, and provide a single common way (per language) to build and run all examples. Source code for the examples is included.
		Note: Both Server Examples and Coherence Examples are only installed if you select the Fusion Middleware Infrastructure with Examples install type.
Complete Installation with Examples	OPatch	The OPatch utility is a tool that allows the application and rollback of interim patches to Oracle products.



B

Installing WebLogic Server for Developers

The WebLogic Server development release includes all the necessary files to develop and test applications on WebLogic Server, but uses less disk space than a complete WebLogic Server installation. The development installation is intended only for development. It is supported on Windows, Linux and Mac OS X systems.

This section includes the following topics:

Files Included with WebLogic Server Development
 The development installation has two JAR files.

Downloading the Installers

This section details how to download the installers from the Oracle Technology Network.

WebLogic Server for Developers Installation Prerequisites
 The Developers installation has disk space and JDK requirements.

Installing WebLogic Server for Developers

The WebLogic Server for Developers installation uses Oracle Universal Installer to run a silent operation. No input is needed.

• Creating a Development Domain

You create a development domain in the same way you normally do for WebLogic Server using either the Configuration Wizard or WebLogic Scripting Tool (WLST).

Starting and Accessing the Domain

You start your domain before accessing the Administration Console.

• Upgrading a Development Installation

To upgrade a development installation, you must download and install the new distribution to a new location. After installing the new distribution, use the Fusion Middleware Reconfiguration Wizard or WLST to associate an existing domain with the new installation.

Patching a Development Installation

You use the Oracle Patching tool (OPatch) to apply patches to a WebLogic Server development installation.

Removing the WebLogic Server for Developers Installation
 Use the Oracle Universal Installer (OUI) deinstallation tool to remove a WebLogic Server for Developers installation.

Files Included with WebLogic Server Development

The development installation has two JAR files.

- Base development installer—Contains required WebLogic Server components:
 - Essential development files, such as Core Application Server and Coherence
 - WebLogic Server Administration Console
 - WebLogic client JAR files
 - TopLink



- Jackson (open-source Java JSON processor)
- Jersey (open-source RESTful Web Services framework)
- Maven (open-source repository manager)
- OPatch
- OUI installation and deinstallation files

The base installer does not include:

- Native JNI libraries for unsupported platforms
- Oracle Configuration Manager (OCM)
- Web services clients
- Server samples
- Coherence examples
- WebLogic Server Administration Console Language help files
- Derby evaluation database
- Supplement development installer—this JAR file adds the following optional WebLogic Server components to an existing base development installation:
 - Server examples
 - Derby evaluation database
 - WebLogic Server Administration Console Language help files
 - Coherence examples
 - Web services clients



For up-to-date information and known issues for WebLogic Server for Developers base and supplemental installers, see README files available for each development installer on the Oracle download site.

Downloading the Installers

This section details how to download the installers from the Oracle Technology Network.

To download the files:

- Create theoracle_home directory in which to install WebLogic Server for Developers.
- 2. Navigate to http://download.oracle.com. WebLogic Server for Developers JAR files are available only on Oracle Technology Network.
- 3. Navigate to the WebLogic Server 12c (12.2.1.3.0) download page.
- 4. Accept the license agreement.
- 5. Navigate to the page that lists all WebLogic Server for Developers distributions.



6. Right click on the link for each file you want to download and save the file to the directory you created in Step 1.

WebLogic Server for Developers Installation Prerequisites

The Developers installation has disk space and JDK requirements.

The WebLogic Server for Developers installation requires:

- A minimum of 800MB of disk space
- JDK 1.8.0_191 or later

Before you run the installer:

Set JAVA_HOME in the shell window you are using to run the installation.

Operating System	Example Commands
Linux	export JAVA_HOME=/myhome/JDK 1.8.0_191
Mac	export JAVA_HOME= /Library/Java/ JavaVirtualMachines/1.8.0.jdk/Contents/Home export USER_MEM_ARGS="-Xmx1024m"
Windows	set JAVA_HOME=C:\Program Files\java\JDK 1.8.0_191

- For Mac environments, Oracle recommends that you set the Xmx memory argument
- Create the ORACLE_HOME directory prior to starting the installation. This directory must exist and must be empty before running the basic installer.

Installing WebLogic Server for Developers

The WebLogic Server for Developers installation uses Oracle Universal Installer to run a silent operation. No input is needed.

You must install the WebLogic Server for Developers base installation first. After it installs, if you want components included in the supplemental installer, run the WebLogic Server for Developers supplemental installation using the same steps.

Topics in this section include the following:

- Installing from the ORACLE_HOME Directory
 Follow these steps to run the installer from the ORACLE_HOME directory.
- Installing from a Directory Other Than ORACLE_HOME
 Follow these steps to run the installer from a directory other than ORACLE_HOME directory

Installing from the ORACLE_HOME Directory

Follow these steps to run the installer from the ORACLE HOME directory.

- 1. Change to the ORACLE_HOME directory you created.
- 2. Enter the following command to start the installation, where *path* is the directory location that you downloaded the installation JAR file to:

java -jar path/installer_jar_filename



For example, if you stored the JAR file in /myhome/downloads:

```
java -jar /myhome/downloads/installer_jar_filename
```

3. When installation completes, see Creating a Development Domain.

Installing from a Directory Other Than ORACLE_HOME

Follow these steps to run the installer from a directory *other than* ORACLE_HOME directory

- 1. Change to the directory that contains the installer JAR file.
- 2. Enter the following command to start the installation, setting the ORACLE_HOME parameter to the ORACLE_HOME directory you created.

```
java -jar installer_jar_filename ORACLE_HOME=path_to_MW_HOME
```

For example, if ORACLE HOME is /myhome/wls1221:

```
java -jar installer_jar_filename ORACLE_HOME=/myhome/wls1221
```

3. When installation completes, see Creating a Development Domain.

Creating a Development Domain

You create a development domain in the same way you normally do for WebLogic Server using either the Configuration Wizard or WebLogic Scripting Tool (WLST).

Oracle recommends that you create the domain *outside* the ORACLE_HOME directory.

To create a domain using the Configuration Wizard:

1. Change to the oracle_common/common/bin directory in your ORACLE_HOME:

```
cd ORACLE_HOME/oracle_common/common/bin
```

2. Start the Configuration Wizard:

Environment	Command
UNIX or Mac	./config.sh
Windows	config.cmd

For detailed information about Configuration Wizard screens, click **Help** or see Overview of the Configuration Wizard in *Creating WebLogic Domains Using the Configuration Wizard*.

To create a domain using WLST, see Create WebLogic Domains Using WLST Offline in *Understanding the WebLogic Scripting Tool*.

Starting and Accessing the Domain

You start your domain before accessing the Administration Console.

To start your WebLogic domain and access the Administration Console:



- Change to the domain directory.
- 2. Enter the following command:

Environment	Command
UNIX or Mac	./startWebLogic.sh
Windows	startWebLogic.cmd

3. When the domain is in a RUNNING state, open a Web browser and enter the domain's URL. Use the Administration Port value you entered when creating the domain. For example:

http://localhost:7001/console/

4. Log in to the Administration Console using the Administrator user name and password you entered when you created the domain.

For more about starting and stopping WebLogic Server, see Starting and Stopping Servers in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

For more about the WebLogic Server Administration Console, see Start the Console in *Oracle WebLogic Server Administration Console Online Help*.

Upgrading a Development Installation

To upgrade a development installation, you must download and install the new distribution to a new location. After installing the new distribution, use the Fusion Middleware Reconfiguration Wizard or WLST to associate an existing domain with the new installation.

To upgrade a domain by using the Reconfiguration Wizard:

Change to the oracle_common/common/bin directory in the new ORACLE_HOME:
 cd ORACLE_HOME/oracle_common/common/bin

2. Start the Reconfiguration Wizard:

Environment	Command
UNIX or Mac	./reconfig.sh
Windows	reconfig.cmd

For more details on the Reconfiguration Wizard, click Help or see Introduction in Online Help.

To upgrade a domain using WLST, see Reconfiguring a WebLogic Domain Using WebLogic Scripting Tool in *Upgrading Oracle WebLogic Server*.



Patching a Development Installation

You use the Oracle Patching tool (OPatch) to apply patches to a WebLogic Server development installation.

For information about upgrading WebLogic Server, see About Rolling Updates in *Upgrading Oracle WebLogic Server*.

For information about using OPatch, see Patching with OPatch.

Removing the WebLogic Server for Developers Installation

Use the Oracle Universal Installer (OUI) deinstallation tool to remove a WebLogic Server for Developers installation.

To remove a WebLogic Server for Developers installation:

1. Go to the oui/bin directory:

cd ORACLE_HOME/oui/bin

2. Run the deinstaller:

Environment	Command
UNIX or Mac	./deinstall.sh
Windows	deinstall.cmd

- Click Next.
- 4. Click **Deinstall**. Wait for deinstallation to complete.
- 5. Click Finish
- **6.** Navigate up three directory levels:

Remove the ORACLE_HOME directory:

Environment	Command
UNIX or Mac	rm -r ORACLE_HOME
Windows	rmdir ORACLE_HOME

For example:

rm - r / myhome/wls1221

For more about deinstallation, see Uninstalling Oracle WebLogic Server and Coherence.



C

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

Consider that you have a JDK version jdk1.8.0_121 installed on your machine. When you install and configure an Oracle Fusion Middleware product, the utilities, such as Configuration Wizard (config.sh|exe), OPatch, or RCU point to a default JDK, for example, jdk1.8.0_121. After some time, Oracle releases a new version of the JDK, say jdk1.8.0_131 that carries security enhancements and bug fixes. From 12c (12.2.1.3.0) onwards, you can upgrade the existing JDK to a newer version, and can have the complete product stack point to the newer version of the JDK.

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

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

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

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

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

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

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

For example, consider that you installed Oracle Fusion Middleware Infrastructure with the JDK version 8u121. So while configuring the WebLogic domain with the Configuration Assistant, you can select the path to the newer JDK on the Domain Mode and JDK screen of the Configuration Wizard. Example: /scratch/jdk/jdkl.8.0_131.

 Manually locate the files that have references to the JDK using grep (UNIX) or findstr (Windows) commands and update each reference. See Updating the JDK Location in an Existing Domain Home.



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

- Updating the JDK Location in an Existing Oracle Home
 The getProperty.sh|cmd script displays the value of a variable, such as
 JAVA_HOME, from the .globalEnv.properties file. The setProperty.sh|cmd script
 is used to set the value of variables, such as OLD_JAVA_HOME or JAVA_HOME
 that contain the locations of old and new JDKs in the .globalEnv.properties file.
- Updating the JDK Location in an Existing Domain Home
 You must search the references to the current JDK, for example jdk1.8.0_121
 manually, and replace those instances with the location of the new JDK.

Updating the JDK Location in an Existing Oracle Home

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

The $getProperty.sh \mid cmd$ and $setProperty.sh \mid cmd$ scripts are located in the following location:

(UNIX) ORACLE_HOME/oui/bin (Windows) ORACLE_HOME\oui\bin

Where, *ORACLE_HOME* is the directory that contains the products using the current version of the JDK, such as jdk1.8.0 121.

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

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

(UNIX) ORACLE_HOME/oui/bin/getProperty.sh JAVA_HOME
(Windows) ORACLE_HOME\oui\bin\getProperty.cmd JAVA_HOME
echo JAVA_HOME

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

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

(UNIX) ORACLE_HOME/oui/bin/setProperty.sh -name OLD_JAVA_HOME -value specify_the_path_of_current_JDK (Windows) ORACLE_HOME\oui\bin\setProperty.cmd -name OLD_JAVA_HOME -value specify_the_path_of_current_JDK

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



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

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

After you run this command, the JAVA_HOME variable in the .globalEnv.properties file now contains the path to the new JDK, such as jdk1.8.0_131.

Updating the JDK Location in an Existing Domain Home

You must search the references to the current JDK, for example jdk1.8.0_121 manually, and replace those instances with the location of the new JDK.

You can use the <code>grep</code> (UNIX) or <code>findstr</code> (Windows) commands to search for the jdk-related references.

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

```
(UNIX) DOMAIN_HOME/bin/setNMJavaHome.sh (Windows) DOMAIN_HOME\bin\setNMJavaHome.cmd
```

(UNIX) DOMAIN_HOME/nodemanager/nodemanager.properties (Windows) DOMAIN_HOME\nodemanager\nodemanager.properties

```
(UNIX) DOMAIN_HOME/bin/setDomainEnv.sh (Windows) DOMAIN_HOME\bin\setDomainEnv.cmd
```

