Oracle® Fusion Middleware
Installing and Configuring Oracle WebCenter Content
12c (12.2.1.1)
E73052-03

November 2016
Documentation for installers and system administrators that describes how to install, configure, and deinstall Oracle WebCenter Content.
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 installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. 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 Xeon 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, Opteron, the AMD logo, and the AMD Opteron 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

Preface ............................................................................................................................................................ v
Audience ...................................................................................................................................................... vii
Documentation Accessibility ..................................................................................................................... vii
Related Documents ................................................................................................................................... vii
Conventions ................................................................................................................................................ viii

1 About the Oracle WebCenter Content Installation
   1.1 Using the Standard Installation Topology as a Starting Point ................................................... 1-1
      1.1.1 About the WebCenter Content Standard Installation Topology ....................................... 1-2
      1.1.2 About Elements in the Standard Installation Topology Illustration ............................... 1-3
      1.1.3 About Installing Oracle User Messaging Service ............................................................... 1-4
      1.1.4 About Oracle WebCenter Content Scale Up ....................................................................... 1-5
   1.2 Using This Document to Extend an Existing Domain ................................................................. 1-5
   1.3 Using This Document in an Upgrade Scenario ............................................................................ 1-5

2 Preparing to Install and Configure Oracle WebCenter Content
   2.1 Mandatory Steps for Installing WebCenter Content on Windows Operating Systems .......... 2-1
      2.1.1 Disabling the 8.3 File Naming Convention on a Windows Operating System ................. 2-2
      2.1.2 Downloading Visual C++ Libraries .................................................................................... 2-2
   2.2 Roadmap for Installing and Configuring the Standard Installation Topologies ................... 2-2
   2.3 Roadmap for Verifying Your System Environment ................................................................. 2-4
      2.3.1 Verifying Certification, System, and Interoperability Requirements ............................... 2-5
      2.3.2 Selecting an Installation User .............................................................................................. 2-5
      2.3.3 Understanding Directories for Installation and Configuration ............................... 2-9
      2.3.4 Understanding JDK Requirements for an Oracle Fusion Middleware Installation .......... 2-12
      2.3.5 Understanding Database Requirements for an Oracle Fusion Middleware Installation 2-13
   2.4 Obtaining the Product Distribution ........................................................................................... 2-13
   2.5 About Product Distributions ....................................................................................................... 2-14

3 Installing the Oracle WebCenter Content Software
   3.1 Verifying the Installation Checklist ......................................................................................... 3-1
Preface

This document describes how to install and configure Oracle WebCenter Content.

Audience

This guide is intended for system administrators or application developers who are installing and configuring Oracle WebCenter Content. 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.

- For Oracle Data Integrator information, see Oracle WebCenter Content 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:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><code>monospace</code></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
About the Oracle WebCenter Content Installation

The standard installation for Oracle WebCenter Content described in this guide creates the standard topology, which represents a sample starting topology for this product.

**Using the Standard Installation Topology as a Starting Point**

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

**Using This Document to Extend an Existing Domain**

The procedures in this guide describe how to create a new domain. The assumption is that no other Oracle Fusion Middleware products are installed on your system.

**Using This Document in an Upgrade Scenario**

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

1.1 Using the Standard Installation Topology as a Starting Point

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

The information in this guide helps you to create a standard installation topology for Oracle WebCenter Content. If appropriate and required, you can later extend the standard installation topology to create a secure and highly available production environment (see Next Steps After Configuring the Domain).

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

**About the WebCenter Content Standard Installation Topology**

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

**About Elements in the Standard Installation Topology Illustration**

The standard installation topology typically includes common elements.

**About Installing Oracle User Messaging Service**

Oracle User Messaging Service (UMS) is a software technology that enables two-way communication between users and deployed applications.
About Oracle WebCenter Content Scale Up
Oracle WebCenter Content supports only one Inbound Refinery Managed Server per node per domain, and one WebCenter Content Managed Server per node, per domain.

1.1.1 About the WebCenter Content Standard Installation Topology

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

The following figure shows the standard installation topology for WebCenter Content.
See Table 1-1 for information on elements of this topology.
1.1.2 About Elements in the Standard Installation Topology Illustration

The standard installation topology typically includes common elements.

The following table describes all elements of the topology illustration:

<table>
<thead>
<tr>
<th>Element</th>
<th>Description and Links to Related Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPHOST</td>
<td>A standard term used in Oracle documentation to refer to the machine that hosts the application tier.</td>
</tr>
</tbody>
</table>
Table 1-1  (Cont.) Description of Elements in Standard Installation Topologies

<table>
<thead>
<tr>
<th>Element</th>
<th>Description and Links to Related Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBHOST</td>
<td>A standard term used in Oracle documentation to refer to the machine that hosts the database.</td>
</tr>
<tr>
<td>WebLogic Domain</td>
<td>A logically related group of Java components (in this case, the Administration Server, Managed Servers, and other related software components). For more information, see What Is an Oracle WebLogic Server Domain? in Understanding Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Administration Server</td>
<td>Central control entity of a WebLogic domain. It maintains configuration objects for that domain and distributes configuration changes to Managed Servers. For more information, see What Is the Administration Server? in Understanding Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Enterprise Manager</td>
<td>The Oracle Enterprise Manager Fusion Middleware Control is a primary tool used to manage a domain. For more information, see Oracle Enterprise Manager Fusion Middleware Control in Understanding Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Cluster</td>
<td>A collection of multiple WebLogic Server instances running simultaneously and working together. For more information, see Overview of Managed Servers and Managed Server Clusters in Understanding Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Machine</td>
<td>A logical representation of the computer that hosts one or more WebLogic Server instances (servers). Machines are also the logical glue between the Managed Servers and the Node Manager. In order to start or stop the Managed Servers using the Node Manager, associate the Managed Servers with a machine.</td>
</tr>
<tr>
<td>Managed Server</td>
<td>A host for your applications, application components, web services, and their associated resources. For more information, see Overview of Managed Servers and Managed Server Clusters in Understanding Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>A collection of services that include the following: • Metadata repository (MDS) Contains metadata for Oracle Fusion Middleware components, such as the Oracle Application Developer Framework. For more information, see What Is the Metadata Repository? in Understanding Oracle Fusion Middleware. • Oracle Application Developer Framework (Oracle ADF) • Oracle Web Services Manager (OWSM)</td>
</tr>
</tbody>
</table>

1.1.3 About Installing Oracle User Messaging Service

Oracle User Messaging Service (UMS) is a software technology that enables two-way communication between users and deployed applications.
For more information, see Introduction to Oracle User Messaging Service in *Administering Oracle User Messaging Service*.

UMS is included in the Oracle Fusion Middleware Infrastructure distribution. It installs as part of the Oracle Fusion Middleware Infrastructure standard installation topology, as described in About Installing Oracle User Messaging Service (UMS) in *Installing and Configuring the Oracle Fusion Middleware Infrastructure*.

UMS runtime components consist of an Oracle Fusion Middleware Configuration Wizard template and an Oracle Fusion Middleware schema, which is installed into a supported database by using the Repository Creation Utility (RCU).

For development, you can install and use Oracle JDeveloper 12c to develop applications that can take advantage of UMS features. For more information, see Introducing Oracle JDeveloper in *Installing Oracle JDeveloper*.

### 1.1.4 About Oracle WebCenter Content Scale Up

Oracle WebCenter Content supports only one Inbound Refinery Managed Server per node per domain, and one WebCenter Content Managed Server per node, per domain.

You cannot scale up Inbound Refinery or WebCenter Content. To add Managed Servers in a cluster, see Scaling Out a Topology (Machine Scale Out) in the *Oracle Fusion Middleware High Availability Guide* to add a Managed Server to a new node.

### 1.2 Using This Document to Extend an Existing Domain

The procedures in this guide describe how to create a new domain. The assumption is that no other Oracle Fusion Middleware products are installed on your system.

If you have installed and configured other Oracle Fusion Middleware products on your system (for example, Fusion Middleware Infrastructure, with a domain that is up and running), use the same instructions to extend your existing domain. If you choose to extend an existing domain, read *Installing Multiple Products in the Same Domain* for detailed information.

### 1.3 Using This Document in an Upgrade Scenario

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

After you install the software, see Understanding the Oracle WebCenter Upgrade to 12c in *Upgrading Oracle WebCenter*. 
Preparing to Install and Configure Oracle WebCenter Content

To prepare for your Oracle WebCenter Content installation, verify that your system meets the basic requirements, then obtain the correct installation software.

Mandatory Steps for Installing WebCenter Content on Windows Operating Systems
There are two procedures you must run before you install Oracle WebCenter Content.

Roadmap for Installing and Configuring the Standard Installation Topologies
Installing and configuration standard installation topology requires certain steps.

Roadmap for Verifying Your System Environment
Before you begin the installation and configuration process, you must verify your system environment.

Obtaining the Product Distribution
You can obtain the Oracle Fusion Middleware Infrastructure and Oracle WebCenter Content distribution on the Oracle Technology Network (OTN).

About Product Distributions
You create the initial Oracle WebCenter Content domain using the Oracle Fusion Middleware Infrastructure distribution, which contains both Oracle WebLogic Server software and Oracle Java Required Files (JRF) software.

2.1 Mandatory Steps for Installing WebCenter Content on Windows Operating Systems
There are two procedures you must run before you install Oracle WebCenter Content.

Disabling the 8.3 File Naming Convention on a Windows Operating System
Before you install Oracle WebCenter Content on a Windows Operating System, you must disable the 8.3 file naming convention (maximum 8-character file name and 3-character extension).

Downloading Visual C++ Libraries
WebCenter Content and Inbound Refinery require the Visual C++ libraries included in Microsoft’s Visual C++ Redistributable Package.
2.1.1 Disabling the 8.3 File Naming Convention on a Windows Operating System

Before you install Oracle WebCenter Content on a Windows Operating System, you must disable the 8.3 file naming convention (maximum 8-character file name and 3-character extension).

If the WebCenter Content weblayout directory is on a file system with 8.3 semantics, the legacy 16-bit 8.3 file names conflict with revision labels, causing file loss.

To disable the 8.3 file naming convention on a Windows Operating System:

1. Open the Windows Registry Editor (regedit), and go to the following key:

\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\FileSystem

2. Set the value of the NtfsDisable8dot3NameCreation key to 1.

3. Restart the Windows Operating System to make the change take effect.

2.1.2 Downloading Visual C++ Libraries

WebCenter Content and Inbound Refinery require the Visual C++ libraries included in Microsoft’s Visual C++ Redistributable Package.

You must download two packages (Microsoft Visual C++ 2005 SP1 and Microsoft Visual C++ 2008 SP1) that contain the libraries.

To download the packages:

1. Go to the Microsoft Download Center at http://www.microsoft.com/downloads

2. Search for Microsoft Visual C++ 2005 SP1 Redistributable Package (x64).

3. Download the vcredist_x64.exe file.

4. Search for Microsoft Visual C++ 2008 SP1 Redistributable Package (x64)

5. Download the vcredist_x64.exe file.

---

Note: For a list of platforms that support PDF Searchable Document Output Format, go to the Oracle Fusion Middleware Supported System Configurations page. In the table, on the row Oracle Fusion Middleware 12c certifications, select the System Requirements and Supported Platforms for WebLogic Server 12c (12.2.1.1) (.xls) file.

---

2.2 Roadmap for Installing and Configuring the Standard Installation Topologies

Installing and configuration standard installation topology requires certain steps.

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

The following table shows the steps required to install and configure the topology.
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verify your system environment</td>
<td>Before beginning the installation, verify that the minimum system and network requirements are met.</td>
<td>See Roadmap for Verifying Your System Environment.</td>
</tr>
<tr>
<td>Check for any mandatory patches that will be required before or after the installation</td>
<td>Review the Oracle Fusion Middleware Infrastructure release notes to see if there are any mandatory patches required for the software products you are installing.</td>
<td>See Install and Configure in Release Notes for Oracle Fusion Middleware Infrastructure.</td>
</tr>
<tr>
<td>Obtain the appropriate distributions</td>
<td>Install Oracle Fusion Middleware Infrastructure to create the Oracle Home for Oracle WebCenter Content</td>
<td>See About Product Distributions.</td>
</tr>
<tr>
<td>Determine your installation directories</td>
<td>Verify that the installer can access or create the installer directories that it must access or create. Also, verify that the directories exist on systems that meet the minimum requirements.</td>
<td>See What are the Key Oracle Fusion Middleware Directories? in Understanding Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Install prerequisite software</td>
<td>Install Oracle Fusion Middleware Infrastructure to create the Oracle home directory.</td>
<td>For Oracle Fusion Middleware Infrastructure, see Installing and Configuring the Oracle Fusion Middleware Infrastructure. You only need to perform the installation for Infrastructure. You do not need to configure a domain for Infrastructure.</td>
</tr>
<tr>
<td>Install the software</td>
<td>Run the Oracle Universal Installer to install Oracle WebCenter Content. Installing the software transfers the software to your system and creates the Oracle home directory.</td>
<td>See Installing the Oracle WebCenter Content Software.</td>
</tr>
<tr>
<td>Select a database profile and review any required custom variables.</td>
<td>Before you install required schemas in the database, review the information about any custom variables you will need to set for the Oracle WebCenter Content schemas.</td>
<td>See Understanding Database Requirements for an Oracle Fusion Middleware Installation.</td>
</tr>
<tr>
<td>Create the schemas</td>
<td>Run the Repository Creation Utility to create the schemas required for configuration.</td>
<td>See Creating the Database Schemas.</td>
</tr>
<tr>
<td>Create a WebLogic domain</td>
<td>Use the Configuration Wizard to create and configure the WebLogic domain.</td>
<td>See Configuring the Domain if you are creating the topology for Oracle WebCenter Content.</td>
</tr>
</tbody>
</table>
Table 2-1  (Cont.) Standard Installation Roadmap

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administer and prepare your domain for high availability</td>
<td>Discover additional tools and resources to administer your domain and configure your domain to be highly available.</td>
<td>See Next Steps After Configuring the Domain.</td>
</tr>
</tbody>
</table>

2.3 Roadmap for Verifying Your System Environment

Before you begin the installation and configuration process, you must verify your system environment.

The following table identifies important tasks and checks to perform to ensure that your environment is properly prepared for installing and configuring Oracle WebCenter Content.

Table 2-2  Roadmap for Verifying Your System Environment

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

Verifying Certification, System, and Interoperability Requirements

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

Selecting an Installation User

The user who performs installation and configuration on your system requires sufficient permissions and privileges.

Understanding Directories for Installation and Configuration

During the installation and domain configuration process, you must plan on providing the locations for these directories: Oracle home, Domain home, and the Application home.
Understanding JDK Requirements for an Oracle Fusion Middleware Installation

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

Understanding Database Requirements for an Oracle Fusion Middleware Installation

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

2.3.1 Verifying Certification, System, and Interoperability Requirements

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

1. Verifying your environment meets certification requirements

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

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

2. Using the system requirements document to verify certification

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

3. Verifying interoperability among multiple products

See Oracle Fusion Middleware 12c Interoperability and Compatibility in Understanding Interoperability and Compatibility to learn how to install and run multiple Fusion Middleware products from the same release or mixed releases with each other.

2.3.2 Selecting an Installation User

The user who performs installation and configuration on your system requires sufficient permissions and privileges.

Understanding User Permissions

The user who installs a Fusion Middleware product owns the files and has certain permissions on the files.
Understanding Non-Default User Permissions on UNIX Operating Systems
Changing the default permissions setting reduces the security of the installation and possibly your system. Oracle does not recommend changing default permission settings.

Verifying the Installation User has Administrator Privileges on Windows Operating Systems
To update the Windows Registry, you must have Administrator privileges.

2.3.2.1 Understanding User Permissions

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

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

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

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

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

Consider the following examples:

- **Example 1: A Single User Installs the Software and Configures the Domain**
  This example shows the permissions if the same user installs the software and configures the domain.

  To ensure the proper permissions and privileges for all files, Oracle recommends that the same owner perform both tasks: install the Oracle Fusion Middleware product and configure the WebLogic Server domain using the Configuration Wizard.
The Oracle home is created by User1 during product installation. User1 has read/write/execute permissions on all executable files, and read/write permissions on all other files. All other users in User1's group have read/execute permissions on all executable files, and read permissions on all other files.

The Domain home and Application home are created by User1 during product installation. User1 has read/write/execute permissions on all executable files, and read/write permissions on all other files. All other users in User1's group have read/execute permissions on all executable files, and read permissions on all other files.

If the user who creates the domain is different than the user who installed the software, then both users must have the same privileges, as shown in the next example.

- **Example 2: The Oracle Home and Domain are Created by Different Users**
  This example shows the permissions where one user creates the Oracle home and another user configures the domain.

  The Oracle home is created by User1 during product installation. User1 has read/write/execute permissions on all executable files, and read/write permissions on all other files. All other users in User1's group (including User1) have read/execute permissions on all executable files, and read permissions on all other files.

  The Domain home and Application home are created by User2 during product installation. User2 has read/write/execute permissions on all executable files, and read/write permissions on all other files. All other users in User2's group (including User1) have read/execute permissions on all executable files, and read permissions on all other files.

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

Consider the following items before running the installer:

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

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

- On UNIX operating systems, do not run the installation program as the root user. If you run the installer as a root user, the startup validation may fail and you cannot continue the installation.

- When you manage a product installation (for example, applying patches or starting managed Servers), use the same user ID that you used to install the product.

- On Windows operating systems, you must have Administrative privileges to install the product. See Verifying the Installation User has Administrator Privileges on Windows Operating Systems for more information.

**2.3.2.2 Understanding Non-Default User Permissions on UNIX Operating Systems**

Changing the default permissions setting reduces the security of the installation and possibly your system. Oracle does not recommend changing default permission settings.

If other users require access to particular files or executable, consider using the UNIX sudo command (or other similar command) in lieu of changing file permissions.

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

**2.3.2.3 Verifying the Installation User has Administrator Privileges on Windows Operating Systems**

To update the Windows Registry, you must have Administrator privileges.

By default, members with the Administrator privilege sign in to the system with regular privileges, but can request elevated permissions to perform administrative tasks.

To perform a task with elevated privileges:

1. Find the Command Prompt item, either from the Start menu or the Windows icon in the lower-left hand corner.

2. Right-click Command Prompt and select Run as administrator.

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

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

3. Perform the desired task.

   For example, to start the product installer:

   For a jar file, enter:

   ```
   java -jar distribution_name.jar
   ```

   For an executable (.exe, .bin, or .sh file), enter:
2.3.3 Understanding Directories for Installation and Configuration

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

Understanding the Recommended Directory Structure
Oracle recommends specific locations for the Oracle Home, Domain Home, and Application Home.

About the Oracle Home Directory
When you install any Oracle Fusion Middleware product, you must use an Oracle home directory.

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

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

Installing Multiple Products in the Same Domain
There are two methods for installing and configuring multiple products in one domain.

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

2.3.3.1 Understanding the Recommended Directory Structure
Oracle recommends specific locations for the Oracle Home, Domain Home, and Application Home.

Oracle recommends a directory structure similar to the one shown in Figure 2-1.
A base location (Oracle base) should be established on your system (for example, /home/oracle) and from there, two separate branches should be created. The product directory should contain the product binary files and all of the Oracle home directories. The config directory should contain your domain and application data.

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

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

### 2.3.3.2 About the Oracle Home Directory

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

This directory is a repository for common files that are used by multiple Fusion Middleware products installed on the same machine. These files are essential to ensuring that Fusion Middleware operates correctly on your system. They facilitate checking of cross-product dependencies during installation. For this reason, you can consider the Oracle home directory a central support directory for all Oracle Fusion Middleware products installed on your system.

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

### Oracle Home Considerations

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

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

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

**Multiple Home Directories**

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

• You prefer to maintain separate development and production environments, with a separate product stack for each. With two directories, you can update your development environment without modifying the production environment until you are ready to do so.

• You want to maintain two different versions of a Fusion Middleware product at the same time. For example, you may want to install a new version of a product while keeping your existing version intact. In this case, you must install each product version in its own Oracle home directory.

• You need to install multiple products that are not compatible with each other. See Oracle Fusion Middleware 12c (12.2.1.1) Interoperability and Compatibility in Understanding Interoperability and Compatibility for more information.

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

### 2.3.3.3 About the Domain Home Directory

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

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

See [Understanding the Recommended Directory Structure](#) for more about the recommended directory structure and locating your Domain home.

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

### 2.3.3.4 About the Application Home Directory

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

The default Application home location is `ORACLE_HOME/user_projects/applications/domain_name`. However, Oracle strongly recommends locating
your Application home outside of the Oracle home directory; if you upgrade your product to another major release, you must create a new Oracle home for binaries. See Understanding the Recommended Directory Structure for more about the recommended directory structure and locating your Application home.

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

2.3.3.5 Installing Multiple Products in the Same Domain

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

- **Method 1.**
  
  Install and configure Product A, including creating the schemas and starting all servers in the domain to verify a successful domain configuration.

  This is the method used in all installation guides in the Fusion Middleware library. You can repeat this process for as many products as necessary. It allows you to validate one product at a time and add more products incrementally.

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

- **Method 2.**

  Install all of the necessary products, then create the schemas for all of the products. After creating the schemas, configure the domain using all of the necessary product templates, then start all the servers.

  This method of creating a multi-product domain may be slightly faster; however, the installation guides in the Fusion Middleware library do not provide specific instructions for this method of domain creation. You will need to refer to the supporting documentation as appropriate.

2.3.3.6 Preparing for Shared Storage

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

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

2.3.4 Understanding JDK Requirements for an Oracle Fusion Middleware Installation

Most Fusion Middleware products are in .jar file format. These distributions do not include a JDK. To run a .jar distribution installer, you must have a certified JDK already installed on your system.
Make sure that the JDK is installed outside of the Oracle home. If you install the JDK under the Oracle home, you will encounter problems when you try to perform tasks in the future. Oracle Universal Installer validates that the Oracle home directory is empty; the install will not progress until you specify an empty directory. Oracle recommends that you locate your JDK installation in the /home/oracle/products/jdk directory.

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

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

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


2.3.5 Understanding Database Requirements for an Oracle Fusion Middleware Installation

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

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

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

After your database is properly configured, you use the Repository Creation Utility (RCU) to create product schemas in your database. This tool is available in the Oracle home for your Oracle Fusion Middleware product. For more information about the RCU, see Understanding Repository Creation Utility in Creating Schemas with the Repository Creation Utility.

2.4 Obtaining the Product Distribution

You can obtain the Oracle Fusion Middleware Infrastructure and Oracle WebCenter Content distribution on the Oracle Technology Network (OTN).

To prepare to install Oracle Fusion Middleware Infrastructure and Oracle WebCenter Content:

1. Enter java -version on the command line to verify that a certified JDK is installed on your system. For 12c (12.2.1.1), the certified JDK is 1.8.0_77 and later.

   For more information, see Understanding JDK Requirements for an Oracle Fusion Middleware Installation.

2. Locate and download the Oracle Fusion Middleware Infrastructure and Oracle WebCenter Content software.

   See Obtaining Product Distributions in Planning an Installation of Oracle Fusion Middleware.
2.5 About Product Distributions

You create the initial Oracle WebCenter Content domain using the Oracle Fusion Middleware Infrastructure distribution, which contains both Oracle WebLogic Server software and Oracle Java Required Files (JRF) software.

Oracle JRF software consists of:

- Oracle Web Services Manager
- Oracle Application Development Framework (Oracle ADF)
- Oracle Enterprise Manager Fusion Middleware Control
- Repository Creation Utility (RCU)
- Other libraries and technologies required to support Oracle Fusion Middleware products

Installing Oracle Fusion Middleware Infrastructure is a prerequisite to installing Oracle WebCenter Content.
Follow the steps in this section to install the Oracle WebCenter Content software.

Before beginning the installation, ensure that you have verified the prerequisites and completed all steps covered in Preparing to Install and Configure Oracle WebCenter Content.

**Verifying the Installation Checklist**

The installation process requires specific information.

**Starting the Installation Program**

Before running the installation program, you must verify the JDK and prerequisite software is installed.

**Navigating the Installation Screens**

The installer shows a series of screens where you verify or enter information.

**Verifying the Installation**

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

### 3.1 Verifying the Installation Checklist

The installation process requires specific information.

Table 3-1 lists important items that you must know before, or decide during, Oracle WebCenter Content installation.

<table>
<thead>
<tr>
<th>Information</th>
<th>Example Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAVA_HOME</td>
<td>/home/Oracle/Java/jdk1.8.0_77</td>
<td>Environment variable that points to the Java JDK home directory.</td>
</tr>
<tr>
<td>Database host</td>
<td>examplehost.exampledomain</td>
<td>Name and domain of the host where the database is running.</td>
</tr>
<tr>
<td>Database port</td>
<td>1521</td>
<td>Port number that the database listens on. The default Oracle database listen port is 1521.</td>
</tr>
<tr>
<td>Information</td>
<td>Example Value</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Database service name</td>
<td>orcl</td>
<td>Oracle databases require a unique service name. The default service name is orcl.</td>
</tr>
<tr>
<td>DBA username</td>
<td>SYS</td>
<td>Name of user with database administration privileges. The default DBA user on Oracle databases is SYS.</td>
</tr>
<tr>
<td>DBA password</td>
<td>myDBApw957</td>
<td>Password of the user with database administration privileges.</td>
</tr>
<tr>
<td>ORACLE_HOME</td>
<td>/home/Oracle/product/ ORACLE_HOME</td>
<td>Directory in which you will install your software. This directory will include Oracle Fusion Middleware Infrastructure and Oracle WebCenter Content, as needed.</td>
</tr>
<tr>
<td>WebLogic Server hostname</td>
<td>examplehost.exampledomain.com</td>
<td>Host name for Oracle WebLogic Server and Oracle WebCenter Content consoles.</td>
</tr>
<tr>
<td>Console port</td>
<td>7001</td>
<td>Port for Oracle WebLogic Server and Oracle WebCenter Content consoles.</td>
</tr>
<tr>
<td>DOMAIN_HOME</td>
<td>/home/Oracle/config/domains/wcc_domain</td>
<td>Location in which your domain data is stored.</td>
</tr>
<tr>
<td>APPLICATION_HOME</td>
<td>/home/Oracle/config/applications/wcc_domain</td>
<td>Location in which your application data is stored.</td>
</tr>
<tr>
<td>Administrator user name for your WebLogic domain</td>
<td>weblogic</td>
<td>Name of the user with Oracle WebLogic Server administration privileges. The default administrator user is weblogic.</td>
</tr>
<tr>
<td>Administrator user password</td>
<td>myADMpw902</td>
<td>Password of the user with Oracle WebLogic Server administration privileges.</td>
</tr>
<tr>
<td>RCU</td>
<td>ORACLE_HOME/oracle_common/bin</td>
<td>Path to the Repository Creation Utility (RCU).</td>
</tr>
</tbody>
</table>
Table 3-1 (Cont.) Installation Checklist

<table>
<thead>
<tr>
<th>Information</th>
<th>Example Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCU schema prefix</td>
<td>SHORT PRODUCT NAME</td>
<td>Prefix for names of database schemas used by Oracle WebCenter Content.</td>
</tr>
<tr>
<td>RCU schema password</td>
<td>myRCUpw674</td>
<td>Password for the database schemas used by Oracle WebCenter Content.</td>
</tr>
<tr>
<td>Configuration utility</td>
<td>ORACLE_HOME/</td>
<td>Path to the Configuration Wizard for domain creation and configuration.</td>
</tr>
<tr>
<td></td>
<td>oracle_common/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>common/bin</td>
<td></td>
</tr>
</tbody>
</table>

3.2 Starting the Installation Program

Before running the installation program, you must verify the JDK and prerequisite software is installed.

To start the installation program:

1. Sign in to the host system.

2. If you have not already done so, verify that a certified JDK is installed on your system: enter `java -version` on the command line. For 12c (12.2.1.1), the certified JDK is 1.8.0_77 and later.

   For more information, see Understanding JDK Requirements for an Oracle Fusion Middleware Installation.

3. Verify that you have installed all prerequisite software, such as Oracle Fusion Middleware Infrastructure.

4. Go to the directory where you downloaded the installation program.

5. Start the installation program by running the `java` executable from the JDK directory. For example:

   - (UNIX) `/home/OracleJava/jdk1.8.0_77/bin/java -jar fmw_12.2.1.1.0_wccontent_generic.jar`
   - (Windows) `C:\home\Oracle\Java\jdk1.8.0_77\bin\java -jar fmw_12.2.1.1.0_wccontent_generic.jar`

   **Note:**
   You can also start the installer in silent mode using a saved response file instead of launching the installer screens. For more about silent or command line installation, see Using the Oracle Universal Installer in Silent Mode in Installing Software with the Oracle Universal Installer.

When the installation program appears, you are ready to begin the installation.
3.3 Navigating the Installation Screens

The installer shows a series of screens where you verify or enter information. The following table lists the order in which installer screens appear. If you need additional help with an installation screen, click Help.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Inventory</td>
<td>On UNIX operating systems, this screen opens if this is the first time you are installing any Oracle product on this host. Specify the location where you want to create your central inventory. Make sure that the operating system group name selected on this screen has write permissions to the central inventory location. For more about the central inventory, see About the Oracle Central Inventory in Installing Software with the Oracle Universal Installer. This screen does not appear on Windows operating systems.</td>
</tr>
<tr>
<td>Welcome</td>
<td>On this screen, review the information to make sure that you have met all the prerequisites, then click Next.</td>
</tr>
<tr>
<td>Auto Updates</td>
<td>On this screen, select to skip automatic updates, select patches, or search for the latest software updates, including important security updates, through your My Oracle Support account.</td>
</tr>
<tr>
<td>Installation Location</td>
<td>Use this screen to specify your Oracle home directory location. You can click View to verify and ensure that you are installing Oracle WebCenter Content in the correct Oracle home.</td>
</tr>
<tr>
<td>Installation Type</td>
<td>This screen verifies that your system meets the minimum necessary requirements. To view the list of tasks that gets verified, select View Successful Tasks. To view log details, select View Log. If any prerequisite check fails, then an error message appears at the bottom of the screen. Fix the error and click Rerun to try again. To ignore the error or the warning message and continue with the installation, click Skip (not recommended).</td>
</tr>
<tr>
<td>Installation Summary</td>
<td>Use this screen to verify installation options you selected. If you want to save these options to a response file, click Save Response File and enter the response file location and name. The response file collects and stores all the information that you have entered, and enables you to perform a silent installation (from the command line) at a later time. Click Install to begin the installation.</td>
</tr>
<tr>
<td>Installation Progress</td>
<td>This screen shows the installation progress. When the progress bar reaches 100% complete, click Finish to dismiss the installer, or click Next to see a summary.</td>
</tr>
</tbody>
</table>
### 3.4 Verifying the Installation

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

**Reviewing the Installation Log Files**
Review the contents of the installation log files to make sure that the installer did not encounter any problems.

**Checking the Directory Structure**
The contents of your installation vary based on the options you selected during the installation.

**Viewing the Contents of the Oracle Home**
You can view the contents of the Oracle home using the `viewInventory` script.

### 3.4.1 Reviewing the Installation Log Files

Review the contents of the installation log files to make sure that the installer did not encounter any problems.

By default, the installer writes logs files to the `Oracle_Inventory_Location/logs` (on UNIX operating systems) or `Oracle_Inventory_Location\logs` (on Windows operating systems) directory.

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

### 3.4.2 Checking the Directory Structure

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

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

### 3.4.3 Viewing the Contents of the Oracle Home

You can view the contents of the Oracle home using the `viewInventory` script.

For more information, see Viewing the Contents of an Oracle Home in *Installing Software with the Oracle Universal Installer*.
Configuring the WebCenter Content Domain

After you have installed WebCenter Content, you can configure the domain, which you can also extend for high availability.

The configuration steps presented here assume that you have completed the installation steps covered in:

- Preparing to Install and Configure Oracle WebCenter Content
- Installing the Oracle WebCenter Content Software

Refer to the following sections to create the database schemas, configure a WebLogic domain, and verify the configuration:

Creating the Database Schemas
Before you can configure an Oracle WebCenter Content domain, you must install required schemas on a certified database for use with this release of Oracle Fusion Middleware.

Configuring the Domain
Use the Configuration Wizard to create and configure a domain.

Starting the Servers
After configuration is complete, start Node Manager, then the WebLogic Administration Server and Managed Servers.

Verifying the Configuration
After completing all configuration steps, you can perform additional steps to verify that your domain is properly configured.

Configuring Inbound Refinery Settings (Single Node)
After you start the Inbound Refinery Managed Servers, configure the settings on the post-installation configuration screen. In most cases, you can accept the default settings.

Configuring WebCenter Content Settings
You must complete the WebCenter Content configuration on the post-installation configuration page in Content Server.

4.1 Creating the Database Schemas
Before you can configure an Oracle WebCenter Content domain, you must install required schemas on a certified database for use with this release of Oracle Fusion Middleware.

Installing and Configuring a Certified Database
Before creating the database schemas, you must install and configure a certified database, and verify that the database is up and running.
Starting the Repository Creation Utility
Start the Repository Creation Utility (RCU) after verifying that a certified JDK is installed on your system.

Navigating the Repository Creation Utility Screens to Create the Schemas
Enter required information in the RCU screens to create the database schemas.

4.1.1 Installing and Configuring a Certified Database
Before creating the database schemas, you must install and configure a certified database, and verify that the database is up and running.

For more information, see Understanding Database Requirements for an Oracle Fusion Middleware Installation.

4.1.2 Starting the Repository Creation Utility
Start the Repository Creation Utility (RCU) after verifying that a certified JDK is installed on your system.

To start the RCU:

1. Verify that a certified JDK already exists on your system by running `java -version` from the command line. For 12c (12.2.1.1), the certified JDK is 1.8.0_77 and later.

For more information, see Understanding JDK Requirements for an Oracle Fusion Middleware Installation.

2. Ensure that the `JAVA_HOME` environment variable is set to the location of the certified JDK. For example:
   - (UNIX) `setenv JAVA_HOME/home/Oracle/Java/jdk1.8.0_77`
   - (Windows) `set JAVA_HOME=C:\home\Oracle\Java\jdk1.8.0_77`

3. Go to the `/oracle_common/bin` directory:
   - (UNIX) `ORACLE_HOME/oracle_common/bin`
   - (Windows) `ORACLE_HOME\oracle_common\bin`

4. Enter the following command:
   - (UNIX) `./rcu`
   - (Windows) `rcu.bat`

4.1.3 Navigating the Repository Creation Utility Screens to Create the Schemas
Enter required information in the RCU screens to create the database schemas.

Introducing the RCU
The Welcome screen is the first screen that appears when you start the RCU.

Selecting a Method of Schema Creation
Use the Create Repository screen to select a method to create and load component schemas into the database.
Providing Database Connection Details
On the Database Connection Details screen, provide the database connection details for the RCU to connect to your database.

Specifying a Custom Prefix and Selecting Schemas
You must enter a custom prefix to group schemas together, then select schemas you need.

Specifying Schema Passwords
On the Schema Passwords screen, specify how you want to set the schema passwords on your database, then enter and confirm your passwords.

Completing Schema Creation
Navigate through the remaining RCU screens to complete schema creation.

4.1.3.1 Introducing the RCU
The Welcome screen is the first screen that appears when you start the RCU.
Click Next.

4.1.3.2 Selecting a Method of Schema Creation
Use the Create Repository screen to select a method to create and load component schemas into the database.

On the Create Repository screen:

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

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

- If the DBA has already run the SQL script for System Load, select Perform Product Load.

4.1.3.3 Providing Database Connection Details
On the Database Connection Details screen, provide the database connection details for the RCU to connect to your database.

Note:
If you are unsure of the service name for your database, you can obtain it from the SERVICE_NAMES parameter in the initialization parameter file of the database. If the initialization parameter file does not contain the SERVICE_NAMES parameter, then the service name is the same as the global database name, which is specified in the DB_NAME and DB_DOMAIN parameters.

For example:
Database Type: Oracle Database  
Name: examplehost.exampledomain.com  
Port: 1521  
Service Name: Orcl.exampledomain.com  
User Name: sys  
Password: ******  
Role: SYSDBA

Click Next to proceed, then click OK in the dialog window that confirms a successful database connections.

4.1.3.4 Specifying a Custom Prefix and Selecting Schemas

You must enter a custom prefix to group schemas together, then select schemas you need.

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

• Oracle WebCenter Content Server — Complete
• Oracle WebCenter Enterprise Capture
• Oracle WebCenter Content Server — Search Only

The following schemas are selected by default:

• Metadata Services
• Oracle Platform Security Services
• Audit Services
• Audit Services Append
• Audit Services Viewer

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

Note: If you install WebCenter Content only and select the Oracle WebCenter Content Server — Complete schema (but no other schemas), you must select the Metadata Services schema. You must select the Metadata Services because WebCenter Content User Interface requires it.

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

The custom prefix logically groups these schemas together for use in this domain only; you must create a unique set of schemas for each domain because schema sharing across domains is not supported.
For more information about custom prefixes, see Understanding Custom Prefixes in Creating Schemas with the Repository Creation Utility.

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

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

4.1.3.5 Specifying Schema Passwords
On the Schema Passwords screen, specify how you want to set the schema passwords on your database, then enter and confirm your passwords.

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

4.1.3.6 Completing Schema Creation
Navigate through the remaining RCU screens to complete schema creation.

On the Map Tablespaces screen, the Encrypt Tablespace check box appears only if you enabled TDE (Transparent Data Encryption) in the database (Oracle or Oracle EBR) when you start the RCU. Select the Encrypt Tablespace check box if you want to encrypt all new tablespaces that the RCU will create.

When you reach the Completion Summary screen, click Close to dismiss the RCU.

4.2 Configuring the Domain
Use the Configuration Wizard to create and configure a domain.

For information on other methods to create domains, see Additional Tools for Creating, Extending, and Managing WebLogic Domains in Creating WebLogic Domains Using the Configuration Wizard.

4.2.1 Starting the Configuration Wizard
Start the Configuration Wizard to begin configuring a domain.

To start the Configuration Wizard:

1. Go to the /oracle_common/common/bin directory:
   (UNIX) ORACLE_HOME/oracle_common/common/bin
   (Windows) ORACLE_HOME\oracle_common\common\bin

   where ORACLE_HOME is your 12c (12.2.1.1) Oracle home.
2. Enter the following command:

(UNIX) ./config.sh
(Windows) config.cmd

4.2.2 Navigating the Configuration Wizard Screens to Create and Configure the Domain

Enter required information in the Configuration Wizard screens to create and configure the domain for the topology.

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

Selecting the Domain Type and Domain Home Location
Use the Configuration Type screen to select a Domain home directory location, optimally outside the Oracle home directory.

Selecting Configuration Templates for Oracle WebCenter Content

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

Configuring the Administrator Account
Use the Administrator Account screen to specify the user name and password for the default WebLogic Administrator account for the domain.

Specifying the Domain Mode and JDK
Use the Domain Mode and JDK screen to specify the domain mode and Java Development Kit (JDK).

Specifying JDBC Data Sources
Use this screen to specify JDBC Data Sources.

Testing the JDBC Data Source
Use this screen to test the data source connections you configured in the previous screens.

Specifying the Database Configuration Type
Use the Database Configuration type screen to specify details about the database and database schema.

Specifying JDBC Component Schema Information
Use the JDBC Component Schema Information screen to verify or specify details about the database schemas.

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

Entering Credentials
Use this screen to set credentials for each key in the domain.
Selecting Advanced Configuration
Use the Advanced Configuration screen to complete the domain configuration.

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 for Oracle WebCenter Content
You create and configure new Managed Servers on the Managed Servers Screen.

Configuring a Cluster for WebCenter Content
Use the Clusters screen to create a new cluster.

Assigning WebCenter Content Managed Servers to the Cluster
Use the Assign Servers to Clusters screen to assign Managed Servers to the new cluster.

Configuring Coherence Clusters
Use the Coherence Clusters screen to configure the Coherence cluster.

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

Assigning Servers to WebCenter Content Machines
Use the Assign Servers to Machines screen to assign the Administration Server and Managed Servers to the new machine you just created.

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 shows detailed configuration information for the domain you are about to create.

Writing Down Your Domain Home and Administration Server URL
The Configuration Success screen shows information about the domain you just configured.

4.2.2.1 Selecting the Domain Type and Domain Home Location
Use the Configuration Type screen to select a Domain home directory location, optimally outside the Oracle home directory.

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

To specify the Domain type and Domain home directory:

1. On the Configuration Type screen, select **Create a new domain**.

2. In the **Domain Location** field, specify your Domain home directory.

   **Tip:** For more information about this screen, see Configuration Type in *Creating WebLogic Domains Using the Configuration Wizard*.

### 4.2.2.2 Selecting Configuration Templates for Oracle WebCenter Content

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

- **Oracle Universal Content Management - Inbound Refinery - 12.2.1.1.0 [wccontent]**

- **Oracle Universal Content Management - Content Server - 12.2.1.1.0 [wccontent]**
  
  Selecting this template automatically selects the following as dependencies:
  
  - **Oracle Enterprise Manager - 12.2.1.1.0 [em]**
  - **Oracle JRF - 12.2.1.1.0 [oracle_common]**
  - **WebLogic Coherence Cluster Extension - 12.2.1.1.0 [wlserver]**

- **Oracle WebCenter Enterprise Capture - 12.2.1.1.0 [wccapture]**

- **Oracle WebCenter Content - Web UI - 12.2.1.1.0 [wccontent]**

   **Tip:**

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

### 4.2.2.3 Selecting the Application Home Location

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

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

**Tip:**

For more about the Application home directory, see *About the Application Home Directory*.

For more information about this screen, see Application Location in *Creating WebLogic Domains Using the Configuration Wizard*.
4.2.2.4 Configuring the Administrator Account
Use the Administrator Account screen to specify the user name and password for the default WebLogic Administrator account for the domain.

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

4.2.2.5 Specifying the Domain Mode and JDK
Use the Domain Mode and JDK screen to specify the domain mode and Java Development Kit (JDK).

On the Domain Mode and JDK screen:

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

Tip:
For more information about this screen, see Domain Mode and JDK in Creating WebLogic Domains Using the Configuration Wizard.

4.2.2.6 Specifying JDBC Data Sources
Use this screen to specify JDBC Data Sources.

If you use a DB2 database, you must check system requirements before you select a DB2 driver. See the document Oracle Fusion Middleware System Requirements and Specifications.

1. Select the default Data Source, mds-WCCUIIMDSREPO.
2. Enter values for DBMS/Service, Host Name, Port and Password and Username.
3. Click Next.

4.2.2.7 Testing the JDBC Data Source
Use this screen to test the data source connections you configured in the previous screens.

Note: To test database connections, the database you are connecting to must be running. If you don’t want to test the connections at this time, do not select any data sources and click Next to continue.

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

To test the data source:

1. Select the check box next to the data source you want to test.
2. Select Test Selected Connections.
3. If the test is successful, then click **Next**. If it fails, click **Back**, correct the details and retest it.

### 4.2.2.8 Specifying the Database Configuration Type

Use the Database Configuration type screen to specify details about the database and database schema.

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

**Note:**

If you select **Manual Configuration** on this screen, you must manually fill in parameters for your schema on the next screen.

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

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBMS/Service</td>
<td>Enter the database DBMS name, or service name if you selected a service type driver. Example: orcl.exampledomain.com</td>
</tr>
<tr>
<td>Host Name</td>
<td>Enter the name of the server hosting the database. Example: examplehost.exampledomain.com</td>
</tr>
<tr>
<td>Port</td>
<td>Enter the port number on which the database listens. Example: 1521</td>
</tr>
<tr>
<td>Schema Owner</td>
<td>Enter the username and password for connecting to the database's Service Table schema. This is the schema username and password entered for the Service Table component on the Schema Passwords screen in the RCU (see Specifying Schema Passwords). The default username is <code>prefix_STB</code>, where <code>prefix</code> is the custom prefix that you defined in the RCU.</td>
</tr>
<tr>
<td>Schema Password</td>
<td></td>
</tr>
</tbody>
</table>

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

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

Successfully Done.
Tip:
For more information about the schema installed when the RCU is run, see Understanding the Service Table Schema in *Creating Schemas with the Repository Creation Utility*.

For more information about this screen, see Database Configuration Type in *Creating WebLogic Domains Using the Configuration Wizard*.

### 4.2.2.9 Specifying JDBC Component Schema Information

Use the JDBC Component Schema screen to verify or specify details about the database schemas.

Verify that the values populated on the JDBC Component Schema screen are correct for all schemas.

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

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

For more information about this screen, see JDBC Component Schema in *Creating WebLogic Domains Using the Configuration Wizard*.

### 4.2.2.10 Testing the JDBC Connections

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

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

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

Tip:
For more information about this screen, see JDBC Component Schema Test in *Creating WebLogic Domains Using the Configuration Wizard*.

### 4.2.2.11 Entering Credentials

Use this screen to set credentials for each key in the domain.

The Store Name column shows the credential store associated with each key.

(Optional) You can click **Add** to enter additional key credentials.

1. Enter the User Name to use for the key.
2. Enter the Password to use for the key.
3. Select Next.

4.2.2.12 Selecting Advanced Configuration

Use the Advanced Configuration screen to complete the domain configuration. On the Advanced Configuration screen, select:

- **Administration Server**
  Required to properly configure the listen address of the Administration Server.
- **Node Manager**
  Required to configure Node Manager.
- **Topology**
  Required to configure the WebCenter Content Managed Server.

Optionally, select other available options as required for your desired installation environment. The steps in this guide describe a standard installation topology, but you may choose to follow a different path. If your installation requirements extend to additional options outside the scope of this guide, you may be presented with additional screens to configure those options. For information about all Configuration Wizard screens, see Configuration Wizard Screens in *Creating WebLogic Domains Using the Configuration Wizard*.

4.2.2.13 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.

---

**Note:** Use Mozilla Firefox to access Internet Protocol Version 6 (IPv6) URLs. You must enter the Global IPv6 address to create a domain and access URLs. (You should not use the local IPv6 address.)

4.2.2.14 Configuring Node Manager

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

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

**Tip:**
For more information about this screen, see Node Manager in *Creating WebLogic Domains Using the Configuration Wizard*.

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

4.2.2.15 Configuring Managed Servers for Oracle WebCenter Content

You create and configure new Managed Servers on the Managed Servers Screen.
You create two Managed Servers for each component, with the exception of Inbound Refinery.

1. In the Listen Address drop-down list, select the IP address of the host on that the Managed Servers will reside on or use the system name or DNS name that maps to a single IP address. Do not use "All Local Addresses."

2. Select Enable SSL to enable an SSL (https) connection for WebCenter Content and WebCenter Content User Interface. Revise the SSL Listen Port value as needed.

3. Leave the Server Groups settings as they appear; the Configuration Wizard assigns the correct server group automatically. A server group ensures that the correct services target Managed Servers you are creating. Server groups target Fusion Middleware applications and services to one or more servers by mapping defined application service groups to each defined server group. You can map a given application service group to multiple server groups if needed. Any application services that map to a certain server group are automatically targeted to all servers assigned to that group. For more information, see Application Service Groups, Server Groups, and Application Service Mappings in Domain Template Reference.

4. Click Add and repeat this process to create a second Managed Server for each component except for Inbound Refinery. For example, cpt_server_2. You must configure a second Managed Server to configure the standard topology for high availability. If you are not creating a highly available environment, then this step is optional.

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

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

Examples and procedures in the rest of this document refer to these server names; if you choose different names be sure to replace them as needed.

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

4.2.2.16 Configuring a Cluster for WebCenter Content
Use the Clusters screen to create a new cluster.

On the Clusters screen:
1. Click Add.

2. Specify `wcc_cluster_1` in the Cluster Name field.

3. Leave the Cluster Address field blank.

Repeat the preceding steps to create three more clusters: `cpt_cluster_1`, `ibr_cluster_1`, and `wccui_cluster_1`.

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

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

**Tip:**

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

### 4.2.2.17 Assigning WebCenter Content Managed Servers to the Cluster

Use the Assign Servers to Clusters screen to assign Managed Servers to the new cluster.

On the Assign Servers to Clusters screen:

1. In the Clusters pane, select the cluster to which you want to assign the Managed Servers; in this case, `wcc_cluster_1`.

2. In the Servers pane, assign `wcc_server_1` to `wcc_cluster_1` by doing one of the following:
   - Click once on `wcc_server_1` to select it, then click the right arrow to move it beneath the selected cluster (`wcc_cluster_1`) in the Clusters pane.
   - Double-click on `wcc_server_1` to move it beneath the selected cluster (`wcc_cluster_1`) in the Clusters pane.

3. Repeat to assign `wcc_server_2` to `wcc_cluster_1`.

The following image shows a generic example of the Clusters pane after Managed Servers are assigned to clusters.
4.2.2.18 Configuring Coherence Clusters

Use the Coherence Clusters screen to configure the Coherence cluster. Leave the default port number as the Coherence cluster listen port. After configuration, the Coherence cluster is automatically added to the domain.

**Note:**

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

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

**Note:**

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

4.2.2.19 Creating a New WebCenter Content Machine

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

**Tip:**

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

To create a new WebCenter Content machine so that Node Manager can start and stop servers:
1. Select the Machine tab (for Windows) or the UNIX Machine tab (for UNIX), then click **Add** to create a new machine.

2. In the Name field, specify a machine name, such as *wcc_machine_1*.

3. In the Node Manager Listen Address field, select the IP address of the machine in which the Managed Servers are being configured.

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

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

5. Repeat these steps to add more machines, if required.

---

**Note:**

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

---

**Tip:**

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

---

### 4.2.2.20 Assigning Servers to WebCenter Content Machines

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

On the Assign Servers to Machines screen:

1. In the Machines pane, select the machine to which you want to assign the servers, such as *wcc_machine_1*.

2. In the Servers pane, assign *AdminServer* to the selected machine by doing one of the following:

   - Click once on *AdminServer* to select it, then click the right arrow to move it beneath the selected machine in the Machines pane.
   
   - Double-click on *AdminServer* to move it beneath the selected machine in the Machines pane.

3. Repeat these steps to assign all Managed Servers to their respective machines.

The following figure shows a generic example of the Machines pane after Managed Servers for a product are assigned to machines.
4.2.2.21 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.

Tip: For more information about this screen, see Virtual Targets in Creating WebLogic Domains Using the Configuration Wizard.

4.2.2.22 Partitions

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

Tip: For more information about this screen, see Partitions in Creating WebLogic Domains Using the Configuration Wizard.

4.2.2.23 Reviewing Your Configuration Specifications and Configuring the Domain

The Configuration Summary screen shows detailed configuration information for the domain you are about to create.

Review each item on the screen and verify that the information is correct. To make any changes, go back to a screen by clicking the Back button or selecting the screen in the navigation pane. Domain creation does not start until you click Create.

Tip:

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

4.2.2.24 Writing Down Your Domain Home and Administration Server URL

The Configuration Success screen shows information about the domain you just configured.

Make a note of the following items because you need them later:

- Domain Location
• Administration Server URL

You need the domain location to access scripts that start Node Manager and Administration Server, and you need the URL to access the Administration Server.

Click Finish to dismiss the Configuration Wizard.

4.3 Starting the Servers

After configuration is complete, start Node Manager, then the WebLogic Administration Server and Managed Servers.

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

Starting Node Manager

Starting the Administration Server

Starting the Managed Servers

Oracle WebCenter Content Managed Server Locations (URLs)

After you start the Managed Servers, use this topic to refer to Oracle WebCenter Content Managed Server locations.

4.3.1 Starting Node Manager

To start the per-domain Node Manager:

1. Go to the \texttt{DOMAIN_HOME/bin} directory.

2. Enter the following command:

   • (UNIX) Using nohup and \texttt{nm.out} as an example output file:
     \begin{verbatim}
     nohup ./startNodeManager.sh > LOG_DIR/nm.out
     \end{verbatim}

     where \texttt{LOG_DIR} is the location of directory in which you want to store the log files.

   • (Windows) \texttt{startNodeManager.cmd}

Note:

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

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

4.3.2 Starting the Administration Server

To start the Administration Server:
1. Go to the `DOMAIN_HOME/bin` directory.

2. Enter the following command:
   - (UNIX) 
     ./startWebLogic.sh
   - (Windows) 
     startWebLogic.cmd

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

**Tip:**

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

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

You can verify that the Administration Server is up and running by accessing the Administration Server Console. The URL is provided on the End of Configuration screen (http://administration_server_host:administration_server_port/console). The default Administration Server port number is 7001.

**Note:**

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

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

### 4.3.3 Starting the Managed Servers

To start the Managed Servers:

1. Log in to Oracle Fusion Middleware Control:

   http://administration_server_host:administration_server_port/em

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

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

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


4. Repeat Steps 3 and 4 to start all Managed Servers.

5. On the main landing page, verify that all the Managed Servers are up and running.

### 4.3.4 Oracle WebCenter Content Managed Server Locations (URLs)

After you start the Managed Servers, use this topic to refer to Oracle WebCenter Content Managed Server locations.

<table>
<thead>
<tr>
<th>Server</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebCenter Content</td>
<td><a href="http://hostname:wcc-server-port/cs">http://hostname:wcc-server-port/cs</a></td>
</tr>
<tr>
<td></td>
<td>Example: <a href="http://host1:16200/cs">http://host1:16200/cs</a></td>
</tr>
<tr>
<td>WebCenter Content User Interface</td>
<td><a href="http://hostname:wccui-server-port/wcc">http://hostname:wccui-server-port/wcc</a></td>
</tr>
<tr>
<td></td>
<td>Example: <a href="http://host1:16225/wcc">http://host1:16225/wcc</a></td>
</tr>
<tr>
<td>Inbound Refinery</td>
<td><a href="http://hostname:ibr-server-port/ibr">http://hostname:ibr-server-port/ibr</a></td>
</tr>
<tr>
<td></td>
<td>Example: <a href="http://host1:16250/ibr">http://host1:16250/ibr</a></td>
</tr>
<tr>
<td>Capture</td>
<td><a href="http://hostname:cpt-server-port/">http://hostname:cpt-server-port/</a></td>
</tr>
<tr>
<td></td>
<td>Example: <a href="http://host1:7004/cpt">http://host1:7004/cpt</a></td>
</tr>
</tbody>
</table>

### 4.4 Verifying the Configuration

After completing all configuration steps, you can perform additional steps to verify that your domain is properly configured.

To verify that the domain is configured properly, see Performing Additional Domain Configuration Tasks.

### 4.5 Configuring Inbound Refinery Settings (Single Node)

After you start the Inbound Refinery Managed Servers, configure the settings on the post-installation configuration screen. In most cases, you can accept the default settings.

To configure the settings:

1. Access the Inbound Refinery post-installation configuration screen at the following URL:

   http://managedServerHost:managedServerPort/ibr/

2. Review the settings. See Inbound Refinery Configuration Page for a description of each field.

3. Click Submit.

4. Restart the Inbound Refinery Managed Server, using the WebLogic Server Administration Console.
4.5.1 Inbound Refinery Configuration Page

Use descriptions of Inbound Refinery configuration page fields as you complete configuration steps in Configuring Inbound Refinery Settings (Single Node).

The following table describes Inbound Refinery configuration page fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbound Refinery Instance Folder</td>
<td>Absolute path to the Oracle instance directory of Inbound Refinery. Default is DomainHome/ucm/. The default Oracle instance directory for Inbound Refinery is ORACLE_HOME/user_projects/domains/DomainHome/ucm/ibr. The top-level folder in the folder hierarchy for the Content Server instance is ibr. The path to the Oracle instance directory is the value of the IntradocDir variable for the Inbound Refinery instance. Oracle recommends that you make this directory path unique to this Managed Server, or node. For installations that you will probably upgrade, Oracle strongly recommends that you change the location of the Oracle instance directory to a directory outside any Oracle WebLogic Server domain directories or installation directories.</td>
</tr>
<tr>
<td>Native File Repository Location</td>
<td>Directory that stores conversion jobs during their processing. After a job converts and Content Server picks it up, it is removed from this directory. You do not need to change this path.</td>
</tr>
<tr>
<td>Weblayout Folder</td>
<td>URL for the Inbound Refinery web interface. You do not need to change this path.</td>
</tr>
<tr>
<td>Register Start Menu Actions</td>
<td>Whether or not to register Start Menu actions.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Server Socket Port</td>
<td>Number of the port to call top-level services. To set up a provider from Inbound Refinery back to Content Server, you can leave the default <strong>Server Socket Port</strong> value 5555 or change it to an unused port number. Changing this field value also changes the IntradocServerPort entry in <code>ORACLE_HOME/user_projects/domains/DomainHome/ucm/ibr/config/config.cfg</code>.</td>
</tr>
</tbody>
</table>

**Note:** You must set Server Socket Port correctly to use Inbound Refinery.

**Note:** The default port number for Node Manager and Inbound Refinery is 5555. If both run on the same server, you must configure a different port number for Node Manager or Inbound Refinery.
### Field

**Incoming Socket Connection Address Security Filter**

Restricts Inbound Refinery access to a computer or computers with a specified IP address or addresses.

To enable access from Content Server, enter a value for this field. For example:

```
127.0.0.1|0:0:0:0:0:0:0:1|
your.server.IP.address
```

This value should be the Content Server instance IP address of the or instances that will send jobs to Inbound Refinery, not the IP address of Inbound Refinery. (In a test or demo environment, these IP addresses could be the same.)

This field accepts wildcards such as 10.*.*.*. You can change this value by setting `SocketHostAddressSecurityFilter` in `DomainHome/ucm/ibr/config/config.cfg` and restarting Inbound Refinery.

---

### Web Server HTTP/HTTPS Address

The name of the web server. (HttpServerAddress property).

### WebAddress Is HTTPS

Whether or not the URL for the web server starts with HTTPS, for a server that has SSL enabled.

### Inbound Refinery URL Prefix

Relative URL for the Inbound Refinery instance.

### Server Instance Name

Inbound Refinery instance name.

### Server Instance Label

Instance name shown for Inbound Refinery.

### Service Instance Description

Inbound Refinery Instance description

---

#### 4.6 Configuring WebCenter Content Settings

You must complete the WebCenter Content configuration on the post-installation configuration page in Content Server.

WebCenter Content shows the configuration page when you first log in to Managed Server at `http://managedServerHost:managedServerPort/cs`

---

**Note:** To use Inbound Refinery, you must set the Incoming Socket Connection Address Security Filter value correctly.

---

**Note:** The domain administrator must be the first user to log into the WebCenter Content Managed Server so that they can complete configuration. For more information, see *Administering Oracle WebCenter Content*
To complete WebCenter Content configuration:

1. Start the Administration Server. See Starting the Administration Server.

2. Start the WebCenter Content Managed Server. See Starting the Managed Servers.


4. Enter or edit any configuration values you want to change.

   You can select a full-text search engine in the FullText Search Option field. Leave the field blank to set up the system as metadata only.

5. Enter a value in Incoming Socket Connection Address Security Filter to enable access from Inbound Refinery. For example:

   127.0.0.1|your.server.IP.address|0:0:0:0:0:0:0:1|

   This field accepts wildcards such as 10.*.*.* You can change this value later by setting SocketHostAddressSecurityFilter in DomainHome/ucm/cs/config/config.cfg and restarting WebCenter Content Managed Server.

   For Oracle WSM security, the SocketHostAddressSecurityFilter value must be set as follows:

   SocketHostAddressSecurityFilter=*.*.*.*|0:0:0:0:0:0:0:1

6. Verify that the Server Socket Port setting is 4444. The Managed Server configuration file stores this value as IntradocServerPort=4444

7. Click Submit.

8. Restart the WebCenter Content Managed Server. See Starting the Managed Servers

   WebCenter Content Configuration Page
   You enter or verify values in the WebCenter Content configuration page fields to complete WebCenter Content configuration.

4.6.1 WebCenter Content Configuration Page

   You enter or verify values in the WebCenter Content configuration page fields to complete WebCenter Content configuration.

   You can use descriptions of these fields while completing steps in Configuring WebCenter Content Settings
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Server Instance Folder</td>
<td>Absolute path to the Oracle instance directory of WebCenter Content. Default is DomainHome/ucm/ The default Oracle instance directory for Inbound Refinery is ORACLE_HOME/user_projects/domains/DomainHome/ucm/cs The top-level folder in the folder hierarchy for the Content Server instance is cs. The path to the Oracle instance directory is the value of the IntradocDir variable for the WebCenter Content instance. Oracle recommends that you make this directory path unique to this Managed Server, or node. For installations that you will probably upgrade, Oracle strongly recommends that you change the location of the Oracle instance directory to a directory outside any Oracle WebLogic Server domain directories or installation directories.</td>
</tr>
<tr>
<td>Native File Repository Location</td>
<td>Path to the vault directory for storing native content checked into WebCenter Content.</td>
</tr>
<tr>
<td>Weblayout Folder</td>
<td>Path to the weblayout directory for storing web-viewable renditions of native and alternate files.</td>
</tr>
<tr>
<td>Register Start Menu Actions</td>
<td>Whether or not to register Start Menu actions.</td>
</tr>
<tr>
<td>Is New Content Server Instance</td>
<td>Whether or not the WebCenter Content instance is new.</td>
</tr>
<tr>
<td>Server Socket Port</td>
<td>Number of the port to call top-level services. Default: 5555 To set up a provider from Inbound Refinery back to Content Server, you can leave the default Changing this field value also changes the IntradocServerPort entry in DOMAIN_HOME/ucm/ibr/config/config.cfg</td>
</tr>
<tr>
<td>Incoming Socket Connection Address Security Filter</td>
<td>Restricts WebCenter Content access to a computer or computers with a specified IP address or addresses. The default value of this field is the local host’s IP address, such as 127.0.0.1. You can specify multiple IP addresses, separated by pipes (</td>
</tr>
<tr>
<td>Web Server HTTP/HTTPS Address</td>
<td>Name of the web server. (HttpServerAddress property).</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>WebAddress Is HTTPS</td>
<td>Whether or not the URL for the web server starts with HTTPS, for a server that has SSL enabled.</td>
</tr>
<tr>
<td>Inbound Refinery URL Prefix</td>
<td>Relative URL for the Inbound Refinery instance.</td>
</tr>
<tr>
<td>Server Instance Name</td>
<td>Inbound Refinery instance name.</td>
</tr>
<tr>
<td>Server Instance Label</td>
<td>Instance name shown for Inbound Refinery.</td>
</tr>
<tr>
<td>Service Instance Description</td>
<td>Inbound Refinery Instance description.</td>
</tr>
<tr>
<td>Is Auto Number Enabled</td>
<td>Whether or not automatic numbering of WebCenter Content instances is enabled.</td>
</tr>
<tr>
<td>Auto Number Prefix</td>
<td>Unique prefix for an WebCenter Content instance number, to avoid conflicts among multiple WebCenter Content instances (Auto Number Prefix system property).</td>
</tr>
<tr>
<td>FullText Search Option</td>
<td>Search engine for full-text search:</td>
</tr>
<tr>
<td></td>
<td><strong>None</strong>: The Oracle Content Server instance uses DATABASE.METADATA as the search engine.</td>
</tr>
<tr>
<td></td>
<td><strong>Internal</strong>: If using Oracle Database, the WebCenter Content instance uses OracleTextSearch with the system database. If using Microsoft SQL Server, it will use DATABASE.FULLTEXT.</td>
</tr>
<tr>
<td></td>
<td><strong>External</strong>: The Oracle Content Server instance uses OracleTextSearch with an external provider to an Oracle Database (not the system database). If you select this option, you must enter the Data Source name in the External DataSource field.</td>
</tr>
<tr>
<td>External DataSource</td>
<td>Name of the Data Source, which you must create in Oracle WebLogic Server and target to the Managed Server, using an OCSSEARCH schema created with Repository Creation Utility (RCU).</td>
</tr>
</tbody>
</table>
After configuring a product domain, there are additional tasks that you may want to perform.

**Performing Basic Administrative Tasks**
After you configure your new domain, there are administration tasks that Oracle recommends you perform on the domain.

**Performing Additional Domain Configuration Tasks**
Review additional configuration tasks you will likely want to perform on a new domain.

**Preparing Your Environment for High Availability**
Scaling out for high availability requires additional steps.

**Configuring WebCenter Content User Interface on Additional Nodes**
If you install WebCenter Content User Interface on one node, its configuration is complete. However, if you scale out WebCenter Content User Interface to a second node (in a high availability or enterprise deployment topology, for example), you must complete additional configuration steps.

**Setting the WebCenter Content User Interface Server Socket Port**
If you are scaling out WebCenter Content User Interface you must change the server socket port.

**Configuring WebCenter Content User Interface Settings**
You set WebCenter Content User Interface connection and configuration settings with WLST or Fusion Middleware Control.

### 5.1 Performing Basic Administrative Tasks
After you configure your new domain, there are administration tasks that Oracle recommends you perform on the domain.

The following table lists common administration tasks to perform on your new domain.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting familiar with Fusion Middleware administration tools</td>
<td>Get familiar with various tools that you can use to manage your environment.</td>
<td>See Overview of Oracle Fusion Middleware Administration Tools in <em>Administering Oracle Fusion Middleware</em>.</td>
</tr>
</tbody>
</table>
### Table 5-1  (Cont.) Basic Administration Tasks for a New Domain

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting and stopping products and</td>
<td>Learn how to start and stop Oracle Fusion Middleware, including the Administration Server, Managed Servers, and components.</td>
<td>See Starting and Stopping Oracle Fusion Middleware in Administering Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>servers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Configuring Secure Sockets Layer</td>
<td>Learn how to set up secure communications between Oracle Fusion Middleware components using SSL.</td>
<td>See Configuring SSL in Oracle Fusion Middleware in Administering Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>(SSL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring Oracle Fusion Middleware</td>
<td>Learn how to keep track of the status of Oracle Fusion Middleware components.</td>
<td>See Monitoring Oracle Fusion Middleware in Administering Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Procedures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5.2 Performing Additional Domain Configuration Tasks

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

### Table 5-2  Additional Domain Configuration Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deploying Applications</td>
<td>Learn how to deploy your applications to Oracle Fusion Middleware.</td>
<td>See Deploying Applications in Administering Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Adding a Web Tier front-end to your</td>
<td>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.</td>
<td>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. See also Installing Multiple Products in the Same Domain for important information.</td>
</tr>
<tr>
<td>domain</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5-2  (Cont.) Additional Domain Configuration Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuning and configuring Coherence for your topology</td>
<td>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.</td>
<td>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<em>Web with WebLogic Server in Administering HTTP Session Management with Oracle Coherence</em>Web. For more about creating and deploying Coherence applications, see Getting Started in Developing Oracle Coherence Applications for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>

5.3 Preparing Your Environment for High Availability

Scaling out for high availability requires additional steps. Table 5-3 provides a list of tasks to perform if you want to scale out your standard installation environment for high availability.

Table 5-3  Tasks Required to Prepare Your Environment for High Availability

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaling out to multiple host computers</td>
<td>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.</td>
<td>See Scaling Out a Topology (Machine Scale Out) in the High Availability Guide.</td>
</tr>
<tr>
<td>Configuring high availability for your Web Tier components.</td>
<td>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.</td>
<td>See Configuring High Availability for Web Tier Components in High Availability Guide.</td>
</tr>
<tr>
<td>Setting up a front-end load balancer</td>
<td>A load balancer can be used to distribute requests across servers more evenly.</td>
<td>See Server Load Balancing in a High Availability Environment and Configuring Load Balancer Virtual Server Names and Ports in High Availability Guide.</td>
</tr>
</tbody>
</table>
Table 5-3  (Cont.) Tasks Required to Prepare Your Environment for High Availability

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuring Node Manager</td>
<td>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.</td>
<td>See Advanced Node Manager Configuration in Administering Node Manager for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>

5.4 Configuring WebCenter Content User Interface on Additional Nodes

If you install WebCenter Content User Interface on one node, its configuration is complete. However, if you scale out WebCenter Content User Interface to a second node (in a high availability or enterprise deployment topology, for example), you must complete additional configuration steps.

To run WebCenter Content User Interface on additional nodes, you must:

- Enable WebCenter Content User Interface components.
- Set the server socket port to 4444.

To enable WebCenter Content User Interface components:

1. Log in to WebCenter Content as a WebCenter Content administrator.
2. From the Administration tray or menu, choose Admin Server, then Component Manager.
3. On the Component Manager page, select all three components under WebCenter Content UI Components:
   - AutoSuggestConfig
   - DynamicConverter
   - FrameworkFolders
4. Click Update then click OK to confirm that you want to enable the components.
5. Restart WebCenter Content. See Starting and Stopping Managed Servers in Administering Oracle Fusion Middleware.

Continue to the topic Setting the WebCenter Content User Interface Server Socket Port.

5.5 Setting the WebCenter Content User Interface Server Socket Port

If you are scaling out WebCenter Content User Interface you must change the server socket port.

To change the server socket port:

1. Open WCC_DOMAIN/ucm/cs/config/config.cfg
2. Set IntradocServerPort to 4444.

IntradocServerPort=4444

5.6 Configuring WebCenter Content User Interface Settings

You set WebCenter Content User Interface connection and configuration settings with WLST or Fusion Middleware Control.

Setting Connection Attributes with WLST
You can use displayRIDCConnection and updateRIDCConnection WLST commands to read and update connection properties.

Setting Connection Attributes with Fusion Middleware Control
Instead of using WLST, you can set connection attributes for WebCenter Content User Interface Managed Server with the Fusion Middleware Control System MBean Browser.

Setting Configuration Attributes with WLST
You can use WLST commands displayWccAdfConfig and updateWccAdfConfig to read and update WebCenter Content User Interface configuration parameters.

Setting Configuration Attributes with Fusion Middleware Control
Instead of using WLST, you can set configuration (WccAdfConfiguration) attributes for WebCenter Content User Interface Managed Server with the Fusion Middleware Control System MBean Browser.

5.6.1 Setting Connection Attributes with WLST

You can use displayRIDCConnection and updateRIDCConnection WLST commands to read and update connection properties.

For example, to update the RIDC connection to the WebCenter Content User Interface Managed Server:

1. Run WLST from ORACLE_HOME/oracle_common/common/bin/wlst.sh.
2. Enter wls:/offline> connect() and enter your username and password at the prompt.
3. Enter the Managed Server URL, for example, t3://localhost:16225
4. Update the RIDC connection to the WebCenter Content User Interface Managed Server. For example:

   wls:/mydomain/serverConfig>updateRIDCConnection('Oracle WebCenter Content - Web UI','WccAdfServerConnection',connUrl='idc://contentserver_host:intradoc_port',credUsername='ucm_admin_user')

5. Restart the Managed Server.
5.6.2 Setting Connection Attributes with Fusion Middleware Control

Instead of using WLST, you can set connection attributes for WebCenter Content User Interface Managed Server with the Fusion Middleware Control System MBean Browser.

To set connection attributes through Fusion Middleware Control:

1. Log in to Fusion Middleware Control for the WebCenter Content User Interface Managed Server.
2. In the navigation tree on the left, expand WebLogic Domain, then the WebCenter Content User Interface domain folder, then the cluster name, and then click Managed Server name.
3. From the WebLogic Domain drop-down menu at the top of the Managed Server page, choose System MBean Browser.
4. In the System MBean Browser navigation tree, navigate to the WccAdfServerConnection MBean. To do this, expand Application Defined MBeans —> oracle.adf.share.connections —> Server: WCCADF_server1 —> Application: Oracle WebCenter Content – Web UI. Expand the Mbean ADFConnections then the folder WccConnection.
   - Instead of opening up the folder, you can enter the connection name WccAdfServerConnection in the MBean filtered search.
5. Click the MBean WccAdfServerConnection.
6. In the Attributes tab, select PropConnectionURL. Enter a URL to set up the RIDC connection. Click Apply (top right)
   If you leave the PropConnectionSocketTimeout attribute blank, the default (60 seconds) becomes the RIDC Connection Socket Timeout value. This value can create problems if you download large files that are being converted to TIFF or PDF documents with annotations burned in. You can set the attribute to a larger value if you have large files.
8. On the Operations tab, click save. Then click Invoke.
9. Restart the WebCenter Content User Interface Managed Server.

5.6.3 Setting Configuration Attributes with WLST

You can use WLST commands displayWccAdfConfig and updateWccAdfConfig to read and update WebCenter Content User Interface configuration parameters.

For example, to use updateWccAdfConfig to update the application’s URL:

1. Run WLST from ORACLE_HOME/oracle_common/common/bin/wlst.sh.
2. Enter wls:/offline> connect() and enter your username and password at the prompt.
3. Enter the Managed Server URL, for example, t3://localhost:16225

4. Update the WebCenter Content User Interface Managed Server. For example:

   wls:/mydomain/serverConfig>updateWccAdfConfig('Oracle WebCenter Content – Web UI',applicationUrl='idc://contentserver_host:intradoc_port')

5. Restart the WebCenter Content User Interface Managed Server.

### 5.6.4 Setting Configuration Attributes with Fusion Middleware Control

Instead of using WLST, you can set configuration (WccAdfConfiguration) attributes for WebCenter Content User Interface Managed Server with the Fusion Middleware Control System MBean Browser.

For example, to set the WebCenter Content User Interface application URL:

1. Log in to Fusion Middleware Control for the WebCenter Content User Interface Managed Server.

2. In the navigation tree on the left, expand WebLogic Domain, then the WebCenter Content User Interface domain folder, then the cluster name, and then click Managed Server name.

3. From the WebLogic Domain drop-down menu at the top of the Managed Server page, choose System MBean Browser.

4. In the System MBean Browser navigation tree, navigate to the WccAdfConfiguration MBean. To do this, expand Application Defined MBeans — oracle.adf.share.config — Server: WCCADF_server1 — Application: Oracle WebCenter Content – Web UI. Expand the folder ADFConfig, the Mbean ADFConfig, then the folder ADFConfig.

   • Instead of opening up a series of folders to reach the MBean, you can enter the connection name WccAdfConfiguration in the MBean filtered search.

5. Click the MBean WccAdfConfiguration.

6. In the Attributes tab, select ApplicationUrl. In the Value field, enter the base application URL. For example: https://wcc.example.com:16225. Click Apply (top right)


8. On the Operations tab, click save then Invoke.

9. Restart the WebCenter Content User Interface Managed Server.
Deinstalling or Reinstalling Oracle WebCenter Content

Follow the instructions in this section to deinstall or reinstall Oracle WebCenter Content.

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.

About Product Deinstallation
The Oracle Fusion Middleware deinstaller removes the software from the Oracle home directory.

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

Removing Your Database Schemas
Before you remove the Oracle home, Oracle recommends that you run the Repository Creation Utility (RCU) to remove database schemas associated with this domain.

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

Removing the 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 the Program Shortcuts on Windows Operating Systems
On Windows operating systems, you must also manually remove the program shortcuts; the deinstaller does not remove them for you.

Removing the Domain and Application Data
After deinstalling the software, you must remove the domain and application data.

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

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

The following table summarizes the deinstallation tasks.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop Oracle Fusion Middleware</td>
<td>All servers and processes in your domain should be stopped before running the deinstaller.</td>
<td>See Stopping Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Remove your database schemas</td>
<td>Run Repository Creation Utility to remove your database schemas.</td>
<td>See Removing Your Database Schemas.</td>
</tr>
<tr>
<td>Remove the software</td>
<td>Run the product deinstaller to remove Oracle Fusion Middleware Infrastructure. Note that if your Oracle home contains multiple products, you must run the deinstaller multiple times, once for each product.</td>
<td>See Deinstalling the Software.</td>
</tr>
<tr>
<td>Remove the Oracle home directory</td>
<td>The deinstaller does not remove all files and folders from the Oracle home directory. After the deinstaller is finished, you must manually remove the Oracle home to complete your product removal.</td>
<td>See Removing the Oracle Home Directory Manually.</td>
</tr>
<tr>
<td>Remove your domain and application data</td>
<td>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.</td>
<td>See Removing the Domain and Application Data.</td>
</tr>
</tbody>
</table>

### 6.2 Stopping Oracle Fusion Middleware

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

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

### 6.3 Removing Your Database Schemas

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

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

If there are multiple sets of schemas on your database, be sure to identify the schema prefix associated with the domain you are removing.
For schema removal steps, see Dropping Schemas in Creating Schemas with the Repository Creation Utility.

6.4 Deinstalling the Software

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

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

Starting the Deinstallation Program

Selecting the Product to Deinstall

Navigating the Deinstallation Screens

6.4.1 Starting the Deinstallation Program

To start the deinstaller:

- **On UNIX**
  
  On the command line, enter the following commands:
  
  ```
  cd $ORACLE_HOME/oui/bin
  ./deinstall.sh
  ```

- **On Windows**
  
  Do one of the following:
  
  - Use a file manager window to navigate to the `ORACLE_HOME\oui\bin` directory and double-click on `deinstall.cmd`.
  
  - Open a command prompt and enter the following commands:
    
    ```
    cd %ORACLE_HOME%\oui\bin
    deinstall.cmd
    ```
  
  - From the Start menu, select All Programs, then Oracle, then OracleHome, and then Uninstall Oracle Software.

6.4.2 Selecting the Product to Deinstall

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

After you run the deinstaller, the Distribution to Uninstall screen opens. From the drop-down list, select **WebCenter Content 12.2.1.1.0** and click **Uninstall**. The deinstallation program shows the screens listed in Navigating the Deinstallation Screens.
**Note:**

You can deinstall Oracle Fusion Middleware Infrastructure after you deinstall Oracle WebCenter Content software by running the deinstallation wizard again. Before doing so, make sure there are no other products using the Infrastructure; those products will no longer function once the Infrastructure is removed. You will not encounter the Distribution to Uninstall screen if no other software depends on Oracle Fusion Middleware Infrastructure. For deinstallation instructions, see Deinstalling Oracle Fusion Middleware Infrastructure in *Installing and Configuring the Oracle Fusion Middleware Infrastructure*.

### 6.4.3 Navigating the Deinstallation Screens

The deinstaller shows a series of screens to confirm the deinstallation of the software.

If you need help on screen listed in Table 6-2, click Help on the screen.

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

### 6.5 Removing the 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/product/ORACLE_HOME` on a UNIX operating system, enter the following commands:

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

On a Windows operating system, if your Oracle home directory is `C:\Oracle\Product\ORACLE_HOME`, use a file manager window and navigate to the `C:\Oracle\Product` directory, then right-click on the `ORACLE_HOME` folder and select Delete.
6.6 Removing the Program Shortcuts on Windows Operating Systems

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

To remove the program shortcuts on Windows:

1. Go to the \ProgramData\Microsoft\Windows\Start Menu\Programs \Oracle\ORACLE_HOME\Product directory.

2. If you only have one product installed in your Oracle home, delete the ORACLE_HOME directory. If you have multiple products installed in your Oracle home, delete all products before deleting the ORACLE_HOME directory.

6.7 Removing the Domain and Application Data

After deinstalling the software, you must remove the domain and application data.

To remove the domain and application data:

1. Manually remove your Domain home directory. For example:

   On a UNIX operating system, if your Domain home directory is /home/Oracle/config/domains/wcc_domain, enter the following command:

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

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

2. Manually remove your Application home directory. For example:

   On a UNIX operating system, if your Application home directory is /home/Oracle/config/applications/wcc_domain, enter the following commands:

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

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

3. Back up 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 wcc_domain, find the following line and remove it:

   ```
   <domain location="/home/Oracle/config/domains/wcc_domain"/>
   ```

   Save and exit the file when you are finished.

6.8 Reinstalling the Software

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

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

- Installing in an existing Oracle home that contains the same feature sets.
  The installer warns you that the Oracle home you specified during installation already contains the same software you are trying to install.

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

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

2. Select a different Oracle home directory.
Configuring the Content Server for Desktop

You need to make sure the CoreWebdav system component is enabled, before the client can use the WebCenter Content Desktop with the Content Server.

Additionally, you must enable the following components:

- DesktopIntegrationSuite
- DesktopTag
- FolderStructureArchive
- FrameworkFolders

You can also enable the EmailMetadata, which maps the e-mail message fields to the e-mail metadata fields.

**Note:** When you enable the FrameworkFolders component (Folders feature), verify that the Folders_g component (Contribution Folders feature) is disabled; CoreWebdav will not work correctly with both enabled.

To configure the Content Server for Desktop:

1. Login to WebCenter Content as an administrator.

2. In the Content Server Administration menu, select **Admin Server** then select **Component Manager**.

3. On the Component Manager page, select **Folders** to display the Folders category of components.

4. Select the following components:
   - FrameworkFolders
   - DesktopIntegrationSuite
   - DesktopTag
   - (Optional) EmailMetadata

5. Click **Update** then click **OK** to confirm your selections.

6. In the Component Manager page, click **advanced component manager**.

7. In the Disabled Components box on the Advanced Component Manager page, select FolderStructureArchive, and click **Enable**.
8. If Folders_g is in the Enabled Components box, select this component and click the Disable.

9. Make sure that the CoreWebdav component is enabled:
   - Under Category Filters on the Advanced Component Manager page, select Show System Components.
   - If CoreWebdav is not in the Enabled Components box, select CoreWebdav in the Disabled Components box and click Enable.

10. Restart the Content Server, as Starting and Stopping Managed Servers describes.

See the remaining topics in this section for more on configuration tasks.

**About Installing and Configuring the Desktop on a Client Workstation**

WebCenter Content for desktop has a set of embedded applications that help users integrate desktop experiences with Content Server, Oracle Content Database, or other WebDAV-based content repositories.

**Opening Files from Microsoft Office 2010 Over a Non-SSL Connection**

By default, Microsoft Office 2010 will not open files over WebDAV using basic authentication over a non-SSL connection.

**Configuring the Records Management in Content Server**

If you are licensed to configure the Records Management in a WebCenter Content Managed Server, you can configure either standalone Records Management or the Oracle URM Adapter in Content Server after the WebCenter Content Records Managed Server is configured.

**About Configuring Oracle iPlanet Web Server as a Web Tier and Configuring Shared Folders**

You can configure the Oracle iPlanet Web Server as a web tier for WebCenter Content. If you are using a cluster of WebCenter Content Managed Servers, you need to configure a shared file system for the WebCenter Content cluster.

**About Installing and Configuring AXF for BPM and AXF for BPEL**

The Application Extensions Framework (AXF) for BPM and AXF for BPEL are installed automatically with imaging.

---

**A.1 About Installing and Configuring the Desktop on a Client Workstation**

WebCenter Content for desktop has a set of embedded applications that help users integrate desktop experiences with Content Server, Oracle Content Database, or other WebDAV-based content repositories.

These applications provide convenient access to content repositories directly from Microsoft Windows Explorer, Microsoft Office applications, and supported e-mail clients (Microsoft Outlook and Lotus Notes). To install Desktop on a client workstation, see Setting Up the Desktop Client Software on Your Computer.

**A.2 Opening Files from Microsoft Office 2010 Over a Non-SSL Connection**

By default, Microsoft Office 2010 will not open files over WebDAV using basic authentication over a non-SSL connection.

You can create the following registry entry and set its value to 2:
A.3 Configuring the Records Management in Content Server

If you are licensed to configure the Records Management in a WebCenter Content Managed Server, you can configure either standalone Records Management or the Oracle URM Adapter in Content Server after the WebCenter Content Records Managed Server is configured.

- The ContentFolios component is required for access to the Records Management web interface. This component is enabled automatically when you configure Records Management in the Content Server.
- Do not disable the ContentFolios component.

If you don’t want to use Records Management in the Content Server, you can remove the configuration user interface by disabling the RMFeatureConfig component. Before you disable the Records Management and restart the Content Server, you need to delete the Report template files that Records Management installs. You cannot delete them after Records Management is disabled.

To configure Records Management in the Content Server:

1. From the Administration menu, choose Configure Records Settings to go to the Records Management Setup checklist, then click Configure Installation.

2. On the Enabled Features page, select a Records Management option and click Submit.
   - None
   - Standalone
   - Adapter

3. Restart the WebCenter Content Managed Server. See Starting and Stopping Managed Servers.

   After you restart the WebCenter Content, Records Management Setup checklist appears.

4. If you selected Adapter, click Register Source on the Enabled Features page then enter values for the fields on the Register Source page:
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider Name</td>
<td>Outgoing provider used to connect to the Records Managed Server. You can choose from the list of current outgoing providers, or you can click Add and create one. The provider dialog box shows an abbreviated list of provider fields. You can also add providers from the regular Providers page. To view information about an existing provider, click Info in the Action column.</td>
</tr>
<tr>
<td>Source Name</td>
<td>Name of the external source to be added to the Records Managed Server. The source name is required and cannot contain spaces.</td>
</tr>
<tr>
<td>Source Table Name</td>
<td>Prefix to use for creating database tables. The default value is the source name.</td>
</tr>
<tr>
<td>Source Display Name</td>
<td>Caption to use for showing the source name. Default value is the source name.</td>
</tr>
</tbody>
</table>

5. Click Register.

Before the source is registered, the following tests are run:

- Validate the provider and test the connection to the Records Managed Server.
- Validate the specified source values

Compare the retention schedules of the adapter and the Records Managed Server to determine if any items in the adapter are missing in the Records server. Before you can register the source, you must resolve any differences on the Import Retention Schedule page.

The retention schedule needs to be synchronized between the adapter and server. By default, all of the items that need to be resolved will be imported into the Records server. You will also have the option of deleting any of the items instead of importing them into the server. Before any items are imported or deleted, backups of retention schedules are made on both the adapter and the Records server, and the backups are checked in to Content Server.

6. After the source is successfully registered, click OK on the confirmation page.

After the source is registered, the Retention Schedule and Upload Content task will run in the background.

7. Configure the adapter in the Configuration Wizard:
### Table A-1  Adapter Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| Configure Custom Fields | Page where you enter custom fields on the external source. When you add or edit custom fields, you map them to existing document metadata fields defined in Content Server. You can use the same name for each field as defined in Content Serve, or you can rename the field. When the content is uploaded to the Records server as external content items, these fields map to their external field names. You can configure the following custom fields:  
  - Add or edit an external custom field  
  - Configure the disposition actions or scheduled events  
  - View the external source information |
| Configure Scheduled Times | Page where you enter when the scheduled tasks run. You can specify the interval at which the tasks are run (in hours, days, or weeks) and the time of day. |

8. From the Records menu, select Configure then Enabled Features.

On the Enabled Features page, you can change the selection of features and dispositions. For the adapter, the features you select cannot be more than the features selected on the Records server.

**Note:** If you have changed any features or dispositions, restart the WebCenter Content.

---

### A.4 About Configuring Oracle iPlanet Web Server as a Web Tier and Configuring Shared Folders

You can configure the Oracle iPlanet Web Server as a web tier for WebCenter Content. If you are using a cluster of WebCenter Content Managed Servers, you need to configure a shared file system for the WebCenter Content cluster.

### A.5 About Installing and Configuring AXF for BPM and AXF for BPEL

The Application Extensions Framework (AXF) for BPM and AXF for BPEL are installed automatically with imaging.

Before you can configure AXF for BPM or AXF for BPEL in a WebLogic Server domain with imaging, you need to create an AXF schema with the Repository Creation Utility. You can select AXF for BPM, for the Imaging Managed Server when the domain is created or extended. AXF for BPEL is deployed as part of the Imaging application.
Inbound Refinery Standalone Topology

The most common installation topology for Inbound Refinery is a standalone instance of one Inbound Refinery Managed Server on its own host. There are no other components in the domain.

The following figure shows a typical installation topology for Inbound Refinery. This topology consists of an Administration Server and one Oracle WebLogic Server domain on a single host. The cluster has one Inbound Refinery Managed Server.

---

**Note:** Inbound Refinery in a standalone topology does not need a database connection or database installation. However, you must still run RCU and select certain options.

**Roadmap for Installing and Configuring the Inbound Refinery Standalone Topology**

**B.1 Roadmap for Installing and Configuring the Inbound Refinery Standalone Topology**

This roadmap has the steps required to install and configure a standalone instance of Inbound Refinery.

Complete each roadmap task in the order that the following table describes.
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verify your system environment</td>
<td>Before beginning the installation, verify that the minimum system and network requirements are met.</td>
<td>See Roadmap for Verifying Your System Environment.</td>
</tr>
<tr>
<td>Check for any mandatory patches that will be required before or after the installation</td>
<td>Review the Oracle Fusion Middleware Infrastructure release notes to see if there are any mandatory patches required for Inbound Refinery.</td>
<td>See Install and Configure in Release Notes for Oracle Fusion Middleware Infrastructure.</td>
</tr>
<tr>
<td>Obtain the appropriate distributions</td>
<td>Install Oracle Fusion Middleware Infrastructure to create the Oracle Home for Oracle WebCenter Content</td>
<td>See About Product Distributions.</td>
</tr>
<tr>
<td>Determine your installation directories</td>
<td>Verify that the installer can access or create the installer directories that it must access or create. Also, verify that the directories exist on systems that meet the minimum requirements.</td>
<td>See What are the Key Oracle Fusion Middleware Directories? in Understanding Oracle Fusion Middleware.</td>
</tr>
<tr>
<td>Install prerequisite software</td>
<td>Install Oracle Fusion Middleware Infrastructure to create the Oracle home directory for Inbound Refinery.</td>
<td>For Oracle Fusion Middleware Infrastructure, see Installing the Infrastructure Software. You only need to perform the installation for Infrastructure. You do not need to configure a domain for Infrastructure.</td>
</tr>
<tr>
<td>Install the software</td>
<td>Run the Oracle Universal Installer to install Inbound Refinery. Installing the software transfers the software to your system and creates the Oracle home directory.</td>
<td>See Installing the Oracle WebCenter Content Software. Return to this roadmap for instructions on RCU.</td>
</tr>
</tbody>
</table>
| Create the schemas                            | Run the Repository Creation Utility to create the schemas required for configuration. Note: Configuration Requires requires that you run RCU. However, the Inbound Refinery standalone installation does not require a database connection. | 1. Navigate to the ORACLE_HOME/oracle_common/bin directory on your system.  
2. Run RCU. On UNIX systems, enter ./rcu. On Microsoft Windows, run rcu.bat  
4. Click Next.  
5. Enter database connection details.  
6. Select Oracle Platform Security Services, which selects other required schemas such as Audit Services. |
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a WebLogic domain</td>
<td>Use the Configuration Wizard to create and configure the WebLogic domain. Note that the domain will have a cluster that has only <em>one</em> Managed Server.</td>
<td>See <a href="#">Configuring the Domain</a> if you are creating the topology for Oracle WebCenter Content.</td>
</tr>
</tbody>
</table>