

**Oracle® WebCenter Content**

Quick Installation Guide

11g Release 1 (11.1.1)

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Primary Author: Bonnie Vaughan

Contributing Authors: Sean Cearley, Sarah Howland, Kevin Hwang, Karen Johnson, Bruce Silver, Jean Wilson, Martin Wykes

Contributors: Sathesh Amilineni, Tim Bass, Pete Chapman, Sandra Christiansen, Eric Cloney, Rupesh Das, Carl Foster, Sudhanshu Garg, Marsha Hancock, MaryJo Hoepner, Mei Hong, David Jones, Vasant Kumar, Peter LaQuerre, Liju Nair, John Neely, Alejandro Paredes, Ty Paywa, Andy Peet, Sancho Pinto, Phillip Ratliff, Indira Smith, Gene Sutay, Vani Srivastava, Matt Wall, Lisa Zitek-Jones

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# Preface

This quick installation guide provides instructions for installing and configuring Oracle WebCenter Content on a single host, using default values for most of the configuration. It also provides instructions for uninstalling Oracle WebCenter Content.

## Audience

This guide is intended for users who are installing Oracle WebCenter Content for the first time in development mode for a test or demo system.

## 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

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## Related Documents

For additional information, see the following documents:

- *Oracle Fusion Middleware Administering Oracle WebCenter Content*
- *Oracle Fusion Middleware Administrator's Guide*
- *Oracle Fusion Middleware Concepts*
- *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter Content*
- *Oracle Fusion Middleware High Availability Guide*
- *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*
- *Oracle Fusion Middleware Installation Planning Guide*
- *Oracle Fusion Middleware Managing Oracle WebCenter Content*
- *Oracle Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server*

- *Oracle Fusion Middleware Patching Guide*
- *Oracle Fusion Middleware Repository Creation Utility User's Guide*
- *Oracle Fusion Middleware Third-Party Application Server Guide*
- *Oracle WebCenter Administrator's Guide for Application Adapters.*
- *Oracle WebCenter Content Installation Guide*

## Conventions

In this document, the term *UNIX operating system* or *UNIX system* refers to a category of operating systems that includes Linux operating systems. Most UNIX command examples in this document are for use with the Bourne shell. You should use the equivalent commands for the shell you are using.

The following table describes the text conventions that this document uses.

<b>Convention</b>	<b>Meaning</b>
<b>boldface</b>	Boldface type indicates a graphical user interface element associated with an action or a term defined in the text or glossary.
<i>italic</i>	Italic type indicates a book title, emphasis, or a placeholder variable for which you can supply a value.
<code>monospace</code>	Monospace type indicates a command within a paragraph, a URL, code in an example, text that appears on the screen, or text that you enter.



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# Installing and Configuring Oracle WebCenter Content

This quick installation guide describes how to install and configure Oracle WebCenter Content on Oracle WebLogic Server for a demo, test, or proof of concept (POC) system. Most of the configuration uses default values.

This guide covers these topics:

- [Section 1.1, "Installation Overview"](#)
- [Section 1.2, "Installing Oracle WebCenter Content"](#)
- [Section 1.3, "Configuring Oracle WebCenter Content"](#)
- [Section 1.4, "Completing the WebCenter Content Configuration"](#)
- [Section 1.5, "Completing the Inbound Refinery Configuration"](#)
- [Section 1.6, "Completing the Imaging Configuration"](#)
- [Section 1.7, "Completing the Oracle IRM Configuration"](#)
- [Section 1.8, "Completing the Records Configuration"](#)
- [Section 1.9, "Verifying the Oracle WebCenter Content Configuration"](#)
- [Section 1.10, "Uninstalling Oracle WebCenter Content"](#)
- [Section 1.11, "Additional Resources"](#)

## 1.1 Installation Overview

Oracle WebCenter Content, an Oracle Fusion Middleware component, is an integrated suite of products designed for managing content. This guide contains instructions for installing and configuring Oracle WebCenter Content products as applications in an Oracle WebLogic Server domain on a single host. These instructions are for users who are installing Oracle WebCenter Content for the first time to become familiar with the products in Oracle WebCenter Content, show what they can do, perform basic testing, or prepare a proof of concept (POC).

For information about installing a production system, see the *Oracle WebCenter Content Installation Guide*.

For an example of an enterprise deployment based on Oracle best practices, high-availability configurations, and security technologies, see the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter Content*.

For information about installing and configuring Oracle WebCenter Content on an IBM WebSphere Application Server, see "Managing Oracle WebCenter Content on IBM WebSphere Application Servers" in the *Oracle Fusion Middleware Third-Party Application Server Guide*.

For information about installing Oracle WebCenter Content on multiple machines, reassociating the identity store with an external LDAP directory, clustering, and other optional configurations, see the *Oracle WebCenter Content Installation Guide*.

### 1.1.1 Oracle WebCenter Content Applications

Oracle WebCenter Content includes these applications:

- **Oracle WebCenter Content (WebCenter Content)**
- **Oracle WebCenter Content: Inbound Refinery**
- **Oracle WebCenter Content: Imaging**
- **Oracle WebCenter Content: AXF for BPM**
- **Oracle Information Rights Management (Oracle IRM)**
- **Oracle WebCenter Content: Records**

### 1.1.2 Installation Roadmap

The installation of Oracle WebCenter Content is a two-step process:

1. You run the Oracle Fusion Middleware 11g WebCenter Content Installer to perform a base installation of the Oracle WebCenter Content products.
2. You run Fusion Middleware Configuration Wizard to deploy one or more of the Oracle WebCenter Content products as applications to an Oracle WebLogic Server domain.

[Table 1–1](#) lists the sections in the guide that provide information about the preinstallation, installation, and postinstallation tasks.

**Table 1–1 Installation Roadmap**

Tasks	Descriptions
Preinstallation tasks	<a href="#">Reviewing System Requirements and Certification</a> <a href="#">Preparing to Install</a> <a href="#">Installing Oracle WebLogic Server and Creating the Middleware Home</a> <a href="#">Creating Oracle WebCenter Content Schemas with the Repository Creation Utility</a>
Installation tasks	<a href="#">Installing Oracle WebCenter Content</a> <a href="#">Configuring Oracle WebCenter Content</a>
Postinstallation tasks	<a href="#">Completing the WebCenter Content Configuration</a> <a href="#">Completing the Inbound Refinery Configuration</a> <a href="#">Completing the Imaging Configuration</a> <a href="#">Completing the Oracle IRM Configuration</a> <a href="#">Completing the Records Configuration</a> <a href="#">Verifying the Oracle WebCenter Content Configuration</a>

### 1.1.2.1 Installation Modules

Oracle WebCenter Content requires a Middleware home and an application server on your system. If your system does not already have Oracle WebLogic Server, you can install it in a new Middleware home directory, as described in [Section 1.2.1.8, "Installing Oracle WebLogic Server and Creating the Middleware Home."](#)

If the application server you want to use is an IBM WebSphere Application Server, see "Managing Oracle WebCenter Content on IBM WebSphere Application Servers" in the *Oracle Fusion Middleware Third-Party Application Server Guide*.

A Middleware home is a container for the Oracle WebLogic Server home, and, optionally, one Oracle Common home and one or more Oracle homes, with a directory structure like this:

```
/middleware_home
  coherence_3.7
  jdk160_29
  jrockit_160_29_D1.2.0-10
  logs
  modules
  wls_server_10.3
  oracle_common
  utils
  WCC_ORACLE_HOME
  user_projects
```

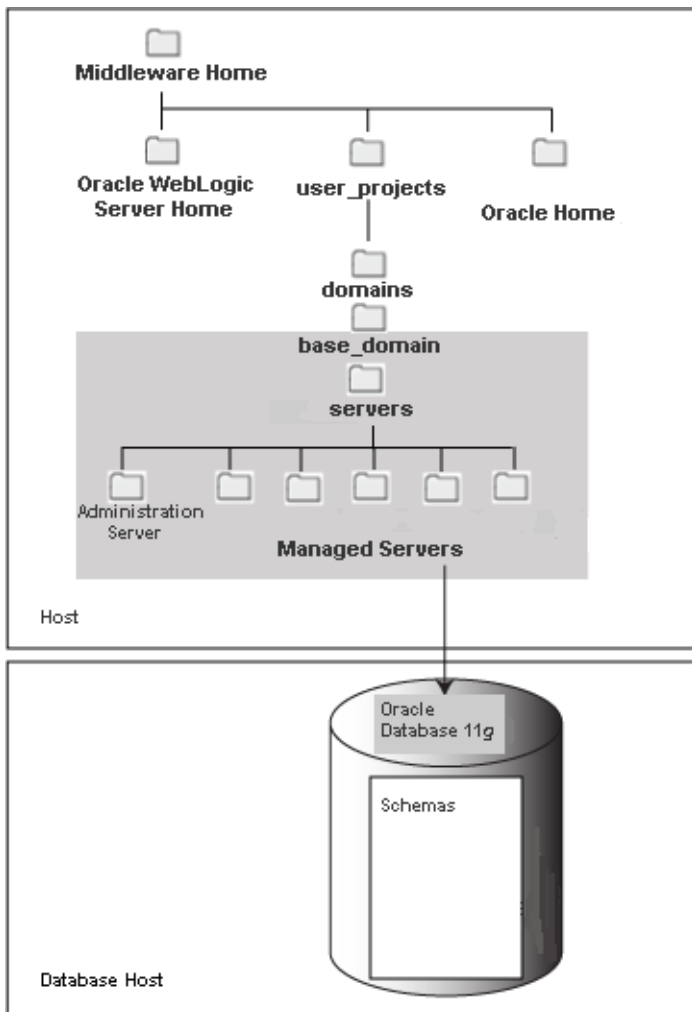
### 1.1.2.2 Software Downloads for Oracle WebCenter Content Installation

You can also download the software you need for Oracle WebCenter Content installation from either of these websites:

- Oracle Software Delivery Cloud at <http://edelivery.oracle.com/>
- Oracle Fusion Middleware Software Downloads page on Oracle Technology Network (OTN) at <http://www.oracle.com/technetwork/middleware/fusion-middleware/downloads/index.html>

## 1.1.3 Topology Summary

[Figure 1–1](#) illustrates the topology that installation and configuration of these products will create on your system.

**Figure 1–1 Installation Topology**

## 1.2 Installing Oracle WebCenter Content

Oracle WebCenter Content requires a Middleware home and an application server on your system. If your system does not already have Oracle WebLogic Server, you can install it in a new Middleware home directory, as described in [Section 1.2.1.8, "Installing Oracle WebLogic Server and Creating the Middleware Home."](#) For more information about the structure and contents of a Middleware home, see "Understanding Oracle Fusion Middleware Concepts" in the *Oracle Fusion Middleware Administrator's Guide*.

The WebCenter Content Oracle home contains the binary and library files necessary for Oracle WebCenter Content. `WCC_ORACLE_HOME` represents the WebCenter Content Oracle home in path names.

When you install Oracle WebCenter Content, you perform a base installation of the following products in a WebCenter Content Oracle home directory (represented by `WCC_ORACLE_HOME` in path names) under the Middleware home directory on your system:

- Oracle WebCenter Content (WebCenter Content, which includes Oracle WebCenter Content Server)
- Oracle WebCenter Content: Inbound Refinery
- Oracle WebCenter Content: Imaging (which includes AXF for BPEL)
- Oracle WebCenter Content: AXF for BPM
- Oracle Information Rights Management (Oracle IRM)
- Oracle WebCenter Content: Records

You can install Oracle WebCenter Content before or after you create schemas for the Oracle WebCenter Content applications, as described in [Section 1.2.1.7, "Creating Oracle WebCenter Content Schemas with the Repository Creation Utility."](#) After installation and schema creation, you can deploy one or more of these products to an Oracle WebLogic Server domain, as applications.

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**Note:** For document conversions on a Solaris SPARC platform, Imaging requires the GNU Compiler Collection (GCC) package 3.4.2 or later in the `/usr/local/packages` directory.

Install this package on the Solaris operating system that will run Imaging. You can download GCC from the Sunfreeware website at

<http://www.sunfreeware.com>

You also need to set the `LD_LIBRARY_PATH` environment variable to `/usr/local/packages/gcc-3.4.2/lib` before starting the Imaging Managed Server. If you are using a later version of GCC, set that version instead of 3.4.2.

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## 1.2.1 Preparing to Install

The following tasks need to be done on your system before you install and configure Oracle WebCenter Content. Some of the tasks are required only on a Windows operating system or on a Dynamic Host Configuration Protocol (DHCP) host.

- [Reviewing System Requirements and Certification](#)
- [Disabling the 8.3 File Naming Convention on a Windows Operating System](#)
- [Enabling Unicode Support](#)
- [Creating a Symbolic Link to the `chmod` Command on a Solaris System](#)
- [Providing the Location of the Inventory Directory on a UNIX System](#)
- [Installing and Configuring a Supported Database](#)
- [Creating Oracle WebCenter Content Schemas with the Repository Creation Utility](#)
- [Installing Oracle WebLogic Server and Creating the Middleware Home](#)

### 1.2.1.1 Reviewing System Requirements and Certification

Before performing any installation, you should read the system requirements and certification documents to ensure that your environment meets the minimum installation requirements for the products you are installing. Both of these documents are available on Oracle Technology Network (OTN), through these pages:

- Oracle Fusion Middleware System Requirements and Specifications page at <http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-requirements-100147.html>

The "Oracle Fusion Middleware System Requirements and Specifications" document for 11g Release 1 (11.1.1) contains information related to hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches.

- Oracle Fusion Middleware Supported System Configurations page at <http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

The System Requirements and Supported Platforms for Oracle WebCenter Content 11gR1 document contains information related to supported installation types, platforms, operating systems, databases, JDKs, and third-party products.

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**Notes:**

- For the 32-bit version of the product, the system on which you are installing must be a supported 32-bit system. Installing a 32-bit version of the product on a 64-bit system is not supported.
  - For a 64-bit Linux operating system, you should use the 32-bit Java Runtime Environment (JRE) on a client machine for the Imaging Advanced Viewer.
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### 1.2.1.2 Disabling the 8.3 File Naming Convention on a Windows Operating System

Before you install Oracle WebCenter Content on a Windows Operating System, you need to 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 will conflict with revision labels and cause 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 for the change to take effect.

### 1.2.1.3 Enabling Unicode Support

Your operating system configuration can influence the behavior of characters supported by Oracle WebCenter Content.

On a UNIX operating system, Oracle highly recommends that you enable Unicode support by setting the `LANG` and `LC_ALL` environment variables to a locale with the UTF-8 character set. This enables the operating system to process any character in Unicode. Web technologies are based on Unicode.

You can verify that the `LANG` and `LC_ALL` environment variables are set by typing the following two commands on a UNIX operating system:

- `echo $LANG`
- `echo $LC_ALL`

If the operating system is configured to use a non-UTF-8 encoding, Oracle WebCenter Content components may function in an unexpected way. For example, a non-ASCII file name can make the file inaccessible and cause an error. Oracle does not support problems caused by operating system constraints.

### 1.2.1.4 Creating a Symbolic Link to the `chmod` Command on a Solaris System

Before installing Oracle WebCenter Content on a Solaris operating system, you need to create a symbolic link to the `chmod` command.

#### To create a symbolic link to the `chmod` command:

1. Log in as the `root` user.
2. Execute the following command as `root`:
 

```
ln -s /usr/bin/chmod /usr/local/bin/chmod
```
3. Log out, and then log back in with a different user name to start the installation.
 

Running the installer as the `root` user is not supported.

### 1.2.1.5 Providing the Location of the Inventory Directory on a UNIX System

If you are installing on a UNIX operating system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will be asked to provide the location of the inventory directory. This is where the installer will set up subdirectories and maintain inventory data for each Oracle product that is installed on the machine.

#### To provide the location of the inventory directory on a UNIX system:

1. On the Specify Inventory Directory screen, specify the location of the inventory directory.

This screen appears only on a UNIX operating system, for the first installation by Oracle Universal Installer. The installer will use the inventory directory to keep track of all Oracle products installed on the machine.

2. Take the action requested in the Inventory Location Confirmation dialog box.

This dialog box asks you to run the following script as the `root` user:

```
inventory_directory/createCentralInventory.sh
```

If you do not have `root` access on the machine but want to continue with the installation, select **Continue installation with local inventory**.

### 1.2.1.6 Installing and Configuring a Supported Database

The configuration of Oracle WebCenter Content requires the availability of a supported database. The database must be up, and a database instance must be running before you create schemas for the Oracle WebCenter Content applications with Repository Creation Utility (RCU) and before you configure any of the applications. The database does not have to be on the same machine where you are installing Oracle WebCenter Content.

The database must be compatible with RCU. This guide describes using RCU with Oracle Database. For more information, see [Section 1.2.1.7, "Creating Oracle WebCenter Content Schemas with the Repository Creation Utility."](#) For information about using Microsoft SQL Server or IBM DB2 with RCU, see the *Oracle WebCenter Content Installation Guide*.

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**Note:** RCU is available only on a Linux or Windows operating system. You can use either the Linux-based RCU or Windows-based RCU to create schemas in any supported database.

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The overall performance of a Content Server system is dependent on the speed at which files that are checked into the server can be stored and retrieved. Using a database to store the files that are stored in the server requires that the database can execute both read and write commands at speeds similar to a file system. Oracle Secure Files meets this standard. For databases other than Oracle Database, consult your database provider to ensure that the database can achieve your storage and retrieval requirements.

For information about supported databases, see the "System Requirements and Supported Platforms" document for your product on the Oracle Fusion Middleware Supported System Configurations page on Oracle Technology Network at

<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

For more information about Oracle Database, see the Oracle Documentation page on Oracle Technology Network at

<http://www.oracle.com/technetwork/indexes/documentation/index.html#database>

After you have installed a database, make sure that it is configured correctly by referring to the "Repository Creation Utility Requirements" section in the "System Requirements and Specification" document on Oracle Technology Network at

<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-requirements-100147.html>

After the Oracle WebCenter Content schemas are created, make sure the database index is up to date. Add new indexes when necessary.



### 1.2.1.7 Creating Oracle WebCenter Content Schemas with the Repository Creation Utility

Oracle WebCenter Content requires that an application schema exists in the database before configuration of an application that requires a schema. You must run the Repository Creation Utility (RCU) to create application schemas in the database, which must be up and running before you start RCU. You can create schemas for the following applications before or after you install Oracle WebLogic Server or Oracle WebCenter Content:

- Oracle WebCenter Content (WebCenter Content, which includes Oracle WebCenter Content Server)
- Oracle WebCenter Content: Imaging
- Oracle Information Rights Management (Oracle IRM)
- Oracle WebCenter Content: Records

You can download a ZIP file containing the Repository Creation Utility from either of these websites:

- Oracle Software Delivery Cloud at <http://edelivery.oracle.com/>
- Oracle Fusion Middleware 11g Software Downloads page (WebCenter Content link) on Oracle Technology Network (OTN) at <http://www.oracle.com/technetwork/indexes/downloads/index.html>

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**Note:** On a Windows operating system, do not unzip the RCU ZIP file to a directory with a name that contains spaces.

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After downloading the ZIP file, you can extract the contents to a directory of your choice.

#### To create schemas for Oracle WebCenter Content applications:

1. Unzip the ZIP file containing the Repository Creation Utility to a location, *media\_loc*, and then start RCU:
  - **UNIX path:** *media\_loc/rcu/bin/rcu*
  - **Windows path:** *media\_loc\rcu\bin\rcu.bat*
2. Welcome screen  
Click **Next**.
3. Create Repository screen  
Select **Create**.  
Click **Next**.
4. Database Connection Details screen  
**Database Type:** You can keep the default, `Oracle Database`, selected.  
For information about using Microsoft SQL Server or IBM DB2 with RCU, see the *Oracle WebCenter Content Installation Guide*.

For connecting to an Oracle Database instance, provide the following information:

- **Host Name:** Specify the name of the machine on which your database resides, in the format `host.example.com`.

For Oracle Real Application Cluster (RAC) databases, specify the Virtual IP name or one of the node names.

- **Port:** Specify the database listen port number. The default port number for an Oracle Database instance is 1521.
- **Service Name:** Specify the service name for the database. Typically, the service name is the same as the global database name.

If you do not know the service name for your database, you can obtain it from the `SERVICE_NAMES` parameter in the database's initialization parameter file. If this 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. Another way to find the service name is to log in to the database as `SYS` and run the following command:

```
show parameter service_name
```

For Oracle RAC databases, specify the service name of one of the nodes in this field; for example, `sales.example.com`.

- **Username:** Specify the user name of the database administrator.  
Specify the name of an Oracle Database user with DBA or SYSDBA privileges. The default user name with SYSDBA privileges is `SYS`.
- **Password:** Specify the password for your database user.
- **Role:** Select a database user role from the list. `SYS` requires the `SYSDBA` role.

Click **Next**. The Checking Global Prerequisites dialog box appears. If you have any prerequisite errors, the Database Connection Details screen displays details about the errors. Fix any errors, then click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the dialog box and go to the next screen.

#### 5. Select Components screen

Near the top of the screen, select **Create a new Prefix**, and specify a prefix, or leave the default prefix, `DEV`.

For Oracle Database, the prefix can contain from 1 to 12 alphanumeric characters (0-9, a-z, or A-Z).

Expand **WebCenter Content** (for Oracle WebCenter Content applications) in the **Component** column, and select one or more of the following applications:

- **Oracle Information Rights Management**
- **Oracle WebCenter Content Server - Complete**  
(for WebCenter Content)
- **Oracle WebCenter Content Server - Search Only**
- **Oracle WebCenter Content: Records**
- **Oracle WebCenter Content: Imaging**

**To create a schema for WebCenter Content:**

- Select **Oracle WebCenter Content Server - Complete**.

**To create a schema for Imaging:**

- If you select **Oracle WebCenter Content: Imaging**, you should also select **Oracle WebCenter Content Server - Complete** to use WebCenter Content as the Imaging repository.
- For Oracle Web Services Manager (Oracle WSM) Policy Manager, or for using Imaging with Oracle SOA Suite, expand **AS Common Schemas** and select **Metadata Services**. If you are using Microsoft SQL Server for the back-end database, you need to configure MDS as described in Step 4 before you select **Metadata Services** on this screen.

**To create a schema for AXF for BPM:**

- If you are going to use AXF for BPM with Imaging, you need schemas for the following components:
  - \* **WebCenter Content > Oracle WebCenter Content Server - Complete**
  - \* **WebCenter Content > Oracle WebCenter Content: Imaging**
  - \* **AS Common Schemas > Metadata Services**
  - \* **SOA and BPM Infrastructure > SOA Infrastructure**
  - \* **SOA and BPM Infrastructure > User Messaging Service** (automatically created with the **SOA Infrastructure** schema)
  - \* **Identity Management > Oracle Internet Directory** (automatically created)

Your database must contain a schema for an application before you configure it.

---

**Note:** Record each schema owner name from this screen because you will need it later, in the format *schemaprefix\_schemasuffix*, to configure the corresponding application.

For example, if you used the default prefix, `DEV_`, you would supply the following owner name for the Records schema in Oracle Database:

```
DEV_URMSERVER
```

---

Click **Next**. The Checking Component Prerequisites dialog box appears.

If you have any prerequisite errors, the Select Components screen displays details about the errors. Fix any errors, then click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the dialog box and go to the next screen.

**6. Schema Passwords screen**

For a development system, you can select **Use same passwords for all schemas**, near the top of the screen. Enter your password two times, in the **Password** and **Confirm Password** field.

Or you can enter a different password for each application listed in the **Component** column. Enter the password for each application twice, in the **Schema Password** and **Confirm Password** columns.

---

---

**Note:** Record all schema passwords from this screen because you will need them later to configure your applications.

---

---

Click **Next**.

7. Map Tablespaces screen

Click **Next**. The Confirmation dialog box appears. Click **OK** to create tablespaces. The Validating and Creating Tablespaces dialog box appears.

If you have any validation errors, the Map Tablespaces screen displays details about the errors. You can track errors in log files, such as `irm.log` and `rcu.log`. This screen displays the log locations. Fix any errors, then click **Next** again. After the tablespaces are created with no errors, click **OK** to dismiss the dialog box.

8. Summary screen

Click **Create**. The CREATE dialog box opens.

If you have any schema creation errors, the Summary screen displays details about the errors. Fix any errors, then click **Next** again.

After RCU creates the schema or schemas with no errors, click **OK** to dismiss the dialog box.

9. Completion Summary screen

This screen shows the locations of the RCU log file and component (application) log files.

Click **Close**.

---

---

**Note:** The user account created for a schema has a default expiration date of six months after creation. The database administrator should change the expiration of the user account to a later date. To view the expiration date for an account, use the SQL statement `SELECT * FROM all_users` or `SELECT * FROM dba_users`.

---

---

For more information about RCU, see the *Oracle Fusion Middleware Repository Creation Utility User's Guide*.

### 1.2.1.8 Installing Oracle WebLogic Server and Creating the Middleware Home

Oracle WebCenter Content requires a Middleware home directory and an application server installed on your system. If your system does not already have Oracle WebLogic Server, you can install it in a new Middleware home directory, before or after installation of the database and creation of the schemas.

**To install Oracle WebLogic Server in a Middleware home:**

1. Download Oracle WebLogic Server 11gR1 (10.3.5 or 10.3.6) for your platform from either of these websites:
  - Oracle Software Delivery Cloud at <http://edelivery.oracle.com/>
  - Oracle WebLogic Server Downloads page on Oracle Technology Network (OTN) at <http://www.oracle.com/technetwork/middleware/weblogic/downloads/index.html>

The 32-bit executable files from which you can install Oracle WebLogic Server are bundled with the appropriate JDK version. If you use the 64-bit installer, you will need to invoke the installer with a supported JDK for your platform. This JDK must be installed on your system before you install Oracle WebLogic Server. The JDK must be installed in a directory without spaces in the directory path (not underneath the `\Program Files` directory in a Windows operating system). For a list of supported JDKs for your operating system, see the "Oracle Fusion Middleware Supported System Configurations" document, described in [Section 1.2.1.1, "Reviewing System Requirements and Certification."](#)

2. Copy the installer file to a directory in your local system, go to that directory, and run the installer locally, after considering these notes:

- **Invoke Using UNIX BINs**

Before running the installer on a UNIX operating system that is running XWindows, you need to set your system's `DISPLAY` environment variable to a valid X Server to redirect the display to a system with suitable graphic capabilities.

In the following commands, `wls103n` can be either `wls1035` or `wls1036`.

To run the installer on a 32-bit Linux operating system, use this command:

```
./wls103n_linux32.bin
```

To run the installer on a 64-bit Linux operating system, use this command:

```
./wls103n_linux64.bin
```

- **Invoke Using UNIX JARs**

Before running the installer on a UNIX operating system that is running XWindows, you need to set your system's `DISPLAY` environment variable to a valid X Server to redirect the display to a system with suitable graphic capabilities.

If you installed a JDK for your system, set the `JAVA_HOME` environment variable to the installation location.

In the following commands, `wls103n` can be either `wls1035` or `wls1036`.

To run the installer on a 64-bit UNIX operating system, use either of these commands, in which `JAVA_HOME` is the location of the JDK:

```
JAVA_HOME/bin/java -jar wls103n_generic.jar
```

```
JAVA_HOME/bin/java -d64 -jar wls103n_generic.jar
```

If you are installing Oracle WebLogic Server on a 64-bit system and using a 32/64-bit hybrid JDK (such as the HP JDK for HP-UX or SUN JDK for Solaris SPARC), you need to use the `-d64` flag when you run the installer.

To validate that your `JAVA_HOME` environment variable refers to a 64-bit JDK when you use a 32/64-bit hybrid JDK, run either of the following commands, in which `JAVA_HOME` is the value of the environment variable:

```
JAVA_HOME/bin/java -version
```

```
JAVA_HOME/bin/java -d64 -version
```

- **Invoke Using a Windows System**

In the following commands, `wls103n` can be either `wls1035` or `wls1036`.

To run the installer on a 32-bit Windows operating system, use this command:

```
wls103n_win32.exe
```

To run the installer on a 64-bit Windows operating system, use this command:

```
JAVA_HOME\bin\java -jar wls103n_generic.jar
```

3. Welcome screen

Click **Next**.

4. Choose Middleware Home Directory screen

Select **Create a new Middleware Home**.

Specify a location for your new Middleware home directory, which `MW_HOME` represents in path names. If this directory already exists on your system, the directory must be empty. If it does not already exist, then the installer creates it.

---

---

**Note:** Record this location because you will need to provide it during the installation of Oracle WebCenter Content.

---

---

The default Middleware home is in the user's home directory, `user_home/Oracle/Middleware` on a UNIX operating system or `user_home\Oracle\Middleware` on a Windows operating system. For more information, see "Middleware Home and WebLogic Server Home Directories" in the *Oracle Fusion Middleware Installation Planning Guide*.

Click **Next**.

5. Register for Security Updates screen

Select whether or not to receive the latest product and security updates. If you choose not to receive anything, you need to verify your selection.

Click **Next**.

6. Choose Install Type screen

Select **Typical**, and click **Next**.

If you are prompted for a JDK location on a 64-bit system, specify a JDK:

- a. Browse to the JDK location.
- b. Select the directory that contains the bin directory.
- c. Click **Next**.

## 7. Choose Product Installation Directories screen

Specify a location for your Oracle WebLogic Server home directory, which *WL\_HOME* represents in path names in this document. The default location for *WL\_HOME* follows:

- **UNIX path:** *MW\_HOME/wlserver\_10.3*
- **Windows path:** *MW\_HOME\wlserver\_10.3*

For more information about home directories, see "Middleware Home and WebLogic Server Home Directories" in the *Oracle Fusion Middleware Installation Planning Guide*.

You can also specify a JDK. To specify a JDK for a 64-bit operating system, you must select **Custom** and the installed 64-bit JDK.

Click **Next**.

## 8. Choose Shortcut Location (Windows operating system only)

If you are installing on a Windows operating system, you need to specify a location for creating a shortcut to Oracle products.

Click **Next**.

## 9. Installation Summary screen

Verify the information on this screen. If you want to change anything, click **Previous** to go back.

Click **Next** to install Oracle WebLogic Server.

## 10. Installation Progress screen

No action is required on this screen.

## 11. Installation Complete screen

Deselect **Run Quickstart**.

Click **Done**.

For more information about installing Oracle WebLogic Server, see the *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*.

## 1.2.2 Installing Oracle WebCenter Content

You can install Oracle WebCenter Content in a WebCenter Content Oracle home directory in a Middleware home. After you start the Oracle Fusion Middleware 11g WebCenter Content Installer, you can use its screens to update software, specify information about your environment, check that your system meets prerequisites, monitor the progress of the installation, and save the installation configuration.

---

---

**Note:** If you plan to use Oracle SOA Suite with Imaging, such as for AXF for BPM or AXF for BPEL, you need to install and configure Oracle SOA Suite first. For information about installing and configuring Oracle SOA Suite, see the *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite and Oracle Business Process Management Suite*.

---

---

### 1.2.2.1 Starting the Installer

Start the Oracle Fusion Middleware 11g WebCenter Content Installer from Disk 1 of the Oracle WebCenter Content media, as follows:

- **UNIX command:**

```
wcc_media_loc/Disk1/runInstaller -jreLoc jre_location
```

If you do not specify the JRE location, the installer either prompts you for the location or returns an error. If you get an error, retry the command with the JRE location included.

- **Windows command:**

```
wcc_installer_loc/Disk1/setup.exe -jreLoc jre_location
```

If you double-click `setup.exe`, the installer either prompts you for the JRE location or returns an error. If you get an error, enter the command with the JRE location included. If you are prompted for the JRE location, enter the path, and then click **Enter** to start the Oracle WebCenter Content installation.

The installer requires the location of a Java Runtime Environment (JRE) on your system. A JRE was installed with Oracle Fusion Middleware. [Table 1–2](#) shows the default JRE locations for 32-bit systems. On a 64-bit system, you will need to invoke the installer with a supported JDK for your platform.

**Table 1–2 Default JRE Locations for 32-Bit Systems**

Operating System	Production Environment	Development Environment
UNIX	<code>MW_HOME/jrockit_160_nn_string/jre</code>	<code>MW_HOME/jdk160_nn/jre</code>
Windows	<code>MW_HOME\jrockit_160_nn_string\jre</code>	<code>MW_HOME\jdk160_nn\jre</code>

In the table, *nn* represents a JRE version number.

You can either use the `-jreLoc` option or allow the installer to prompt for the directory containing the `bin/java` directory.

---

**Note:** Starting the installer as the user `root` is not supported.

---

### 1.2.2.2 Following the Installation Instructions

The following procedure and the installation screens provide instructions for installing Oracle WebCenter Content.

**To install Oracle WebCenter Content:**

1. Welcome screen

Click **Next**.

2. Install Software Updates screen

Specify any software updates to install before you install Oracle WebCenter Content.

To get updates from My Oracle Support (formerly *OracleMetaLink*), you can select **Search My Oracle Support for Updates**, specify a user name and password, and then click **Search for Updates**. Before you search, you can click **Proxy Settings** to change the settings for the proxy server and **Test Connection** to test the credentials.



To get updates that you have saved to your computer, you can select **Search Local Directory for Updates**, specify a directory, and then click **Search for Updates**.

If you do not want to update any software, select **Skip Software Updates**, and then click **Next** to continue the installation.

### 3. Prerequisite Checks screen

If the installer displays an error message in the bottom section of the screen, fix the error, and then click **Retry** to start the prerequisite checking again for all applications. Repeat this until the prerequisite checks complete with no errors.

If you want to stop the installation process while you fix a prerequisite error, click **Abort**.

If you want to continue the installation without fixing an error, click **Continue**.

After the prerequisite checking is complete with no errors, click **Next** to continue the installation.

### 4. Specify Installation Location screen

**Oracle Middleware Home:** Select the Middleware home directory (*MW\_HOME*), which was created during the installation of Oracle WebLogic Server.

The default Middleware home is *user\_home/Oracle/Middleware* on a UNIX operating system or *user\_home\Oracle\Middleware* on a Windows operating system.

**Oracle Home Directory:** Specify the directory where you want to install Oracle WebCenter Content.

- If you specify a directory that already exists, it must be empty.
- If you specify a new directory, the installer creates it inside the Middleware home directory.

The installation directory becomes the WebCenter Content Oracle home, represented by *WCC\_ORACLE\_HOME* in path names. Runtime components cannot write to this directory. The default WebCenter Content Oracle home is *MW\_HOME/Oracle\_ECM1* on a UNIX operating system or *MW\_HOME\Oracle\_ECM1* on a Windows operating system.

---

**Note:** This document refers to this directory as the WebCenter Content Oracle home (*WCC\_ORACLE\_HOME*) to avoid confusion with the Oracle home directories of other Java components of Oracle Fusion Middleware.

For more information, see "Oracle Home and Oracle Common Home Directories" in the *Oracle Fusion Middleware Installation Planning Guide*.

---

Click **Next** to continue.

### 5. Application Server.

Leave the default, **WebLogic Server**, selected.

### 6. Installation Summary screen

Click **Save** to save the response file, and then click **Install** to start the installation.

7. Installation Progress screen  
Monitor the progress of your installation.  
After the progress reaches 100%, click **Next** to go to the last screen.
8. Installation Completed screen  
Click **Save** to save the installation configuration, and then click **Finish**.

### 1.2.3 Verifying the Installation

After you complete the installation, you can verify it by checking the log file and the directory structure.

#### 1.2.3.1 Viewing the Installation Log File

The location of the installation log file depends on your operating system:

- **UNIX location:** `USER_HOME/oraInventory/logs/installdate_time`
- **Windows location:** `USER_HOME\oraInventory\logs\installdate_time`

#### 1.2.3.2 Checking the Directory Structure

After installation, you can verify that the directory structure is like the topology that [Figure 1-1](#) shows.

## 1.3 Configuring Oracle WebCenter Content

After you have successfully run the installer and created application schemas, you can deploy and configure the following Oracle WebCenter Content products as applications:

- **Oracle WebCenter Content: AXF for BPM**
- **Oracle WebCenter Content: Imaging Viewer Cache**
- **Oracle WebCenter Content**
- **Oracle WebCenter Content: Imaging**
- **Oracle WebCenter Content: Inbound Refinery**
- **Oracle Information Rights Management**
- **Oracle WebCenter Content: Records**

---

---

**Note:** The Imaging product deployment provides for up to 10 GB of disk space to be used to stage simultaneous document uploads through the user interface. This limit exists to provide an upper limit to thwart malicious server attacks.

---

---

To configure one or more of these applications, you can create an Oracle WebLogic Server domain, which includes a Managed Server for each deployed application and one Administration Server. Each of these servers is an Oracle WebLogic Server instance.

---



---

**Note:** Each of these applications needs to run in its own Managed Server or its own cluster of Managed Servers. You cannot deploy Content Server, Inbound Refinery, Imaging, Oracle IRM, or Records to a Managed Server or cluster that already has another application deployed.

---



---

### 1.3.1 Preparing to Configure Oracle WebCenter Content

Before you start the Administration Server or a Managed Server, you need to perform some additional configuration and post-installation configuration tasks. This section includes descriptions of the following configuration tasks.

- [Creating an Oracle WebLogic Server Domain](#)
- [Increasing the Java VM Heap Size for Managed Servers](#)
- [Setting Up Fonts on a UNIX System](#)
- [Installing Libraries and Setting Environment Variables for Outside In Technology](#)

---



---

**Note:** Oracle WebCenter Content 11g does not support running WebCenter Content, Inbound Refinery, or Records as a service on a Windows operating system.

---



---

### 1.3.2 Creating an Oracle WebLogic Server Domain

You can create a domain to include a Managed Server for one or more applications (one Managed Server each) and then extend the domain with Managed Servers for one or more other applications. For Imaging to take advantage of Business Process Management (BPM) and Oracle BPEL Process Manager within an existing domain, the domain must be extended with **Oracle BPM Suite - 11.1.1.0**. The following procedure is for creating an Oracle WebLogic Server domain. For information about extending a domain, see "Extending an Existing Domain" in the *Oracle WebCenter Content Installation Guide*.

**To create an Oracle WebLogic Server domain:**

1. Start Fusion Middleware Configuration wizard with the `config` script:

- **UNIX path:** `WCC_ORACLE_HOME/common/bin/config.sh`
- **Windows path:** `WCC_ORACLE_HOME\common\bin\config.cmd`

`WCC_ORACLE_HOME` represents the WebCenter Content Oracle home directory, where Oracle WebCenter Content is installed. The default WebCenter Content Oracle home is `MW_HOME/Oracle_ECM1` on a UNIX operating system or `MW_HOME\Oracle_ECM1` on a Windows operating system.

2. Welcome screen

Select **Create a new WebLogic domain**.

3. Select Domain Source screen

Select **Generate a domain configured automatically to support the following products**, and then select one or more of these products:

- **Oracle WebCenter Content: AXF for BPM**
- **Oracle Imaging and Process Management**  
(for Oracle WebCenter Content: Imaging)
- **Oracle Universal Records Management**  
(for Oracle WebCenter Content: Records)
- **Oracle Universal Content Management - Inbound Refinery**  
(for Oracle WebCenter Content: Inbound Refinery)
- **Oracle Universal Content Management - Content Server**  
(for Oracle WebCenter Content)
- **Oracle Information Rights Management**

When you select **Oracle WebCenter Content: Imaging**, you also need to select **Oracle WebCenter Content - Content Server** if WebCenter Content is not already configured in the domain.

Imaging includes AXF for BPEL.

**For AXF for BPM:**

If you are going to use AXF for BPM with Imaging, you need to select the following product templates (some of these are automatically selected):

- **Oracle BPM Suite**
- **Oracle SOA Suite**
- **Oracle WebCenter Content: AXF for BPM**
- **Oracle WebCenter Content: Imaging Viewer Cache**
- **Oracle WebCenter Content: Imaging**
- **Oracle Universal Content Management - Content Server**
- **Oracle Enterprise Manager**
- **Oracle WSM Policy Manager**
- **Oracle JRF**

When you select **Oracle WebCenter Content: Imaging** on the Select Domain Source screen, **Oracle WebCenter Content: Imaging Viewer Cache** is automatically selected.

When you select any Oracle WebCenter Content application on the Select Domain Source screen, **Oracle Enterprise Manager** and **Oracle JRF** are automatically selected. If you deselect any of these items that are automatically selected, the Oracle WebCenter Content application will also be deselected.

Click **Next** to continue.

#### 4. Specify Domain Name and Location screen

Enter the name of the domain you want to create in the **Domain name** field. The default location for the domain follows (*MW\_HOME* represents the Middleware home directory):

- **UNIX path:** *MW\_HOME*/user\_projects/domains
- **Windows path:** *MW\_HOME*\user\_projects\domains

You can specify a different location in the **Domain location** field.

---

**Note:** Record the domain name and location from this screen because you will need them later to start the Administration Server.

---

In the **Application location** field, you can specify a location for any applications you are deploying. The default location follows:

- **UNIX path:** *MW\_HOME*/user\_projects/applications
- **Windows path:** *MW\_HOME*\user\_projects\applications

Click **Next**.

#### 5. Configure Administrator User Name and Password screen

The **User name** field has the default administrator user name, *weblogic*, which you can change to another administrator user name.

In the **User password** field, enter the password for the administrator user.

---

**Note:** Record the administrator user name and password from this screen because you will need them later to start the Managed Servers and to access the domain through the Oracle WebLogic Server Administration Console or Oracle Enterprise Manager Fusion Middleware Control.

---

Click **Next**.

#### 6. Configure Server Start Mode and JDK screen

Under WebLogic Domain Startup Mode, leave **Development Mode** selected.

Under JDK Selection, leave **Available JDKs** and the default JDK selected, which is **Sun SDK 1.6.0\_29** for development mode or, on a 64-bit system, the JDK you installed.

Click **Next**.

#### 7. Configure JDBC Component Schemas screen

Configure each component schema by selecting a schema checkbox and then completing the following fields:

- **Component Schema:** Select a component schema row.
- **Vendor:** Leave *Oracle* selected.
- **Driver:** Leave the default driver selected.
- **Schema Owner:** Enter the user name of the application schema owner, specified during schema creation with Repository Creation Utility (RCU).

- **Schema Password:** Enter the schema password.
- **DBMS/Service:** Enter the name of the database instance if Oracle's Driver (Thin) for Instance connections is selected in the **Driver** field, or enter the service name (global database name) if Oracle's Driver (Thin) for Service connections is selected in the **Driver** field.

Specify the database that contains the application schema or schemas.

For Oracle RAC databases, specify the service name of one of the nodes in this field. For example: `sales.example.com`.

- **Host Name:** Specify the name of the machine on which your database resides, in the format `host.example.com`.

For Oracle RAC databases, specify the Virtual IP name or one of the node names as the host name.

- **Listen Port:** Leave the default number, which is 1521 for Oracle Database, or specify the listen port for your database if it is different.

Click **Next**.

**8. Test Component Schema screen**

Verify that the connections to your data sources are successful, and click **Next**.

**9. Select Optional Configuration screen**

Select **Administration Server** if you want to configure SSL for the Administration Server.

For information about the other optional configuration screens, see "Configuring Oracle WebCenter Content" in the *Oracle WebCenter Content Installation Guide*.

Click **Next**.

**10. Configure the Administration Server screen**

If you want to change the configuration of SSL for the Administration Server, you can select **SSL enabled**. When you select **SSL enabled**, the SSL port is set to 7002 by default in the **SSL Listen Port** field. If **SSL enabled** is selected, you can change the SSL listen port value.

---

**Note:** If SSL is enabled, before you use Oracle WebLogic Scripting tool (WLST) to connect to the Administration Server, you must either append the following parameters to the JVM\_ARGS section of the `wlst.sh` file or set them in the CONFIG\_JVM\_ARGS environment variable:

```
-Dweblogic.security.SSL.ignoreHostnameVerification=true
-Dweblogic.security.TrustKeyStore=KeyStoreName
```

*KeyStoreName* is the name of the keystore in use (DemoTrust for the built-in demonstration certificate). The `wlst.sh` file is in the `bin` subdirectory of the `common` directory in the WebCenter Content Oracle home directory.

---

For information about configuring SSL for a production environment, see "SSL Configuration in Oracle Fusion Middleware" in the *Oracle Fusion Middleware Administrator's Guide*.

For information about configuring SSL for Oracle IRM in a development environment, see [Section 1.7.3, "Configuring SSL for a Development Environment."](#)

Click **Next**.

#### 11. Configuration Summary screen

Check your configuration and make any corrections or updates by following the instructions on the screen. When the configuration is satisfactory, click **Create**.

#### 12. Creating Domain screen

When the domain is successfully created, click **Done**.

The following operations should have completed successfully:

- Creation of an Oracle WebLogic Server domain, with an Administration Server
- Creation of a Managed Server for each application that you selected on the Select Domain Source screen
- Deployment of each application to its Managed Server

An application is not active until its Managed Server is started. For more information, see [Section 1.9.2, "Starting Managed Servers."](#)

### 1.3.3 Increasing the Java VM Heap Size for Managed Servers

You need to increase the size of the heap allocated for the Java Virtual Machine (VM) on which each Managed Server runs to at least 1 gigabyte. If you do not increase the Java VM heap size, then Oracle support and development will not accept any escalation of runtime issues, especially out-of-memory issues.

For a Managed Server using the Sun JDK on a Windows operating system, you need to set the size of the heap allocated for the Java VM to 512 MB rather than 1 GB so that programs configured to use all available space will not fail at initialization. Address space must be reserved for permanent objects, and the `MaxPermSize` setting for each Managed Server reduces the space available for the rest of the heap.

There are two common ways to adjust the runtime memory parameters for a Managed Server:

- [Setting Startup Parameters for Managed Servers with the Administration Console](#)
- [Setting the USER\\_MEM\\_ARGS Environment Variable in the Startup Script for a Managed Server](#)

This method is required if the managed server process will be run directly from the command line or from Node Manager. For more information about running Managed Servers from the command line, see [Section 1.9.2, "Starting Managed Servers."](#) For more information about running Managed Servers from Node Manager, see [Section 1.9.4, "Using Node Manager with Oracle WebCenter Content."](#)

#### 1.3.3.1 Setting Startup Parameters for Managed Servers with the Administration Console

You can set server startup parameters with the Oracle WebLogic Server Administration Console. This is the preferred approach for setting startup parameters because it ensures that the parameters are correctly pushed to each server, and it avoids problems that might occur during manual editing of server startup scripts. To increase the Java VM heap size, you set the value of the `-Xmx` parameter.

**To set server startup parameters for Managed Servers with the Administration Console:**

1. Log in to the Oracle WebLogic Server Administration Console at this URL:

`http://adminServerHost:adminServerPort/console`

For *adminServerHost*, specify the name of the computer that hosts the Administration Server for your domain. For *adminServerPort*, specify the listen port number for the Administration Server. The default number is 7001. For example:

`http://myhost.example.com:7001/console`

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

2. Click **Environment** under Domain Structure, on the left.
3. Click **Servers** on the Summary of Environment page.
4. Set the memory parameters for each Managed Server:
  - a. Click the name of a Managed Server in the Servers table.
  - b. On the **Configuration** tab, in the second row of tabs, click **Server Start**.
  - c. In the **Arguments** box, paste a string that specifies the memory parameters.

[Table 1–3](#) shows parameters to specify for Sun and JRockit Java VMs on UNIX and Windows operating systems. Other Java VMs may have different values.

**Table 1–3 Java VM Memory Parameters**

Java VM	Operating System	Parameters
Sun	UNIX	-Xms256m -Xmx1024m -XX:CompileThreshold=8000 -XX:PermSize=128m -XX:MaxPermSize=512m
Sun	Windows	-Xms256m -Xmx1024m -XX:CompileThreshold=8000 -XX:PermSize=128m -XX:MaxPermSize=512m
JRockit	UNIX	-Xms256m -Xmx1024m -XnoOpt
JRockit	Windows	-Xms256m -Xmx1024m -XnoOpt

- d. Save the configuration changes.
5. Restart any running Managed Servers, as described in [Section 1.9.3, "Restarting a Managed Server."](#)

**1.3.3.2 Setting the USER\_MEM\_ARGS Environment Variable in the Startup Script for a Managed Server**

You can set server startup parameter for a Managed Server by setting the USER\_MEM\_ARGS environment variable in its startup script. To increase the Java VM heap size, you set the value of the -Xmx parameter.



### To set the USER\_MEM\_ARGS Environment Variable in the Startup Script for a Managed Server:

- UNIX shell script (.sh)

```
export USER_MEM_ARGS="-Xms256m -Xmx1024m -XX:CompileThreshold=8000
-XX:PermSize=128m -XX:MaxPermSize=512m"
```

- UNIX C shell script (.csh)

```
setenv USER_MEM_ARGS "-Xms256m -Xmx1024m -XX:CompileThreshold=8000
-XX:PermSize=128m -XX:MaxPermSize=512m"
```

- Windows command script (.cmd)

```
set USER_MEM_ARGS="-Xms256m -Xmx1024m -XX:CompileThreshold=8000
-XX:PermSize=128m -XX:MaxPermSize=512m"
```

---

**Note:** Table 1-3 shows parameters to specify for Sun and JRockit Java VMs on UNIX and Windows operating systems. Other Java VMs may have different values.

---

## 1.3.4 Setting Up Fonts on a UNIX System

On a UNIX operating system, you need to make sure TrueType fonts are set up for Imaging, Inbound Refinery, and Content Server Dynamic Converter. If you are using a language other than English, you also need to set up fonts for national language support.

### 1.3.4.1 Setting Up TrueType Fonts on a UNIX System

For Imaging, Inbound Refinery, and Content Server Dynamic Converter to work correctly on a UNIX operating system, you need to set up TrueType fonts on the machine where Imaging, Inbound Refinery, or the Dynamic Converter is running. If these fonts are not available on your system, you need to install them. Then you can configure Inbound Refinery with the path to the font directory, as follows. For information about configuring the path to the font directory for Imaging once the fonts are installed, see Section 1.6.3, "Configuring the GDFontPath MBean for a UNIX Operating System."

Some standard font locations on different UNIX platforms follow:

- Solaris SPARC: /usr/openwin/lib/X11/fonts/TrueType

---

**Note:** For document conversions on a Solaris SPARC platform, Imaging requires the GNU Compiler Collection (GCC) package 3.4.2 or later in the /usr/local/packages directory.

Install this package on the Solaris operating system that will run Imaging. You can download GCC from the Sunfreeware website at

<http://www.sunfreeware.com>

You also need to set the LD\_LIBRARY\_PATH environment variable to /usr/local/packages/gcc-3.4.2/lib before starting the Imaging Managed Server. If you are using a later version of GCC, set that version instead of 3.4.2.

---

- AIX: /usr/lpp/X11/lib/X11/fonts/TrueType

- HP-UX Itanium: `/usr/lib/X11/fonts/TrueType`
- Linux: `/usr/lib/X11/fonts/TrueType`

**To set the path to the font directory in Inbound Refinery:**

1. Log in to Inbound Refinery.
2. Select **Conversion Settings**, then **Third-Party Application Settings**, and then **General OutsideIn Filter Options**.
3. Click **Options**.
4. Enter the path to the TrueType fonts in the **Path to fonts** field.

For example:

```
/usr/share/x11/fonts/FTP
```

5. Click **Update**.

**1.3.4.2 Installing Fonts for National Language Support on a UNIX System**

For languages other than English, the following installation steps need to be done on a UNIX operating system before you start a Managed Server:

- Copy `MW_HOME/oracle_common/jdk/jre/lib/fonts` to the `jre/lib/fonts` directory in the Sun JDK installation directory for the Middleware home.
- Copy `MW_HOME/oracle_common/jdk/jre/lib/fonts` to the `jre/lib/fonts` directory in the Oracle JRockit JDK directory for the Middleware home.

**1.3.5 Installing Libraries and Setting Environment Variables for Outside In Technology**

Content Server, Inbound Refinery, Imaging, and the Imaging Advanced Viewer for clients use Outside In Technology (OIT), which requires certain libraries that are not part of Oracle WebCenter Content. Before a Content Server, Inbound Refinery, or Imaging Managed Server is started, you need to install the libraries for your platform. For a UNIX platform, you also need to set an environment variable to reference the libraries in the library path for the user who will start the Managed Server.

**1.3.5.1 Installing Libraries for Outside In Technology on UNIX Platforms**

Before you start a Content Server, Inbound Refinery, or Imaging Managed Server, the libraries required for your platform need to be available on your system.

Many of the required libraries are normally installed on the machine, including the C, math, X11, dynamic loader, and pthreads libraries, among others. The `libgcc_s` and `libstdc++` libraries are part of the GNU Compiler Collection (GCC) package.

OIT requires the following libraries for the specified UNIX platform. The libraries in bold are part of the GCC package 3.4.2 or later.

Solaris SPARC 32-bit or 64-bit requires GCC package 3.4.2 or later, which you can download from the Sunfreeware website at

<http://www.sunfreeware.com>

HP-UX Itanium requires GCC package 3.3.6, which you can download through the following website:

<http://gcc.gnu.org>

If a `libgcc_s` or `libstdc++` library is required for your platform, install the GCC package in the `/usr/local/packages/gcc-3.4.2/lib` directory in a Solaris SPARC system or the `/usr/local/packages/gcc-3.3.6/lib` directory in an HPUX ia64 system, on the machine where Imaging or WebCenter Content will run. If you are using a later version of GCC, specify that version instead of 3.4.2 or 3.3.6.

OIT requires the following libraries for the specified UNIX platform. The libraries in **bold** are part of the GCC package.

- Solaris SPARC 32-bit or 64-bit

```
/usr/platform/SUNW,Ultra-60/lib/libc_psr.so.1
libICE.so.6
libSM.so.6
libX11.so.4
libXext.so.0
libXm.so.4
libXt.so.4
libc.so.1
libdl.so.1
libgcc_s.so.1
libgen.so.1
libm.so.1
libmp.so.2
libnsl.so.1
libpthread.so.1
libsocket.so.1
libstdc++.so.6
libthread.so.1
```

- HPUX ia64

```
libCsup.so.1
libICE.so.1
libSM.so.1
libX11.so.1
libXext.so.1
libXm.so.1
libXp.so.1
libXt.so.1
libc.so.1
libdl.so.1
libgcc_s_hpux64.so.0
libm.so.1
libpthread.so.1
libstd_v2.so.1
libstdc++.so.5
libuca.so.1
libunwind.so.1
```

- AIX 32-bit

```
/usr/lib/libC.a(ansi_32.o)
/usr/lib/libC.a(shr.o)
/usr/lib/libC.a(shr2.o)
/usr/lib/libC.a(shr3.o)
/usr/lib/libICE.a(shr.o)
/usr/lib/libIM.a(shr.o)
/usr/lib/libSM.a(shr.o)
/usr/lib/libX11.a(shr4.o)
/usr/lib/libXext.a(shr.o)
```

```

/usr/lib/libXi.a (shr.o)
/usr/lib/libXm.a (shr_32.o)
/usr/lib/libXt.a (shr4.o)
/usr/lib/libc.a (shr.o)
/usr/lib/libcrypt.a (shr.o)
/usr/lib/libgaimisc.a (shr.o)
/usr/lib/libgair4.a (shr.o)
/usr/lib/libi18n.a (shr.o)
/usr/lib/libiconv.a (shr4.o)
/usr/lib/libodm.a (shr.o)
/usr/lib/libpthreads.a (shr.o)
/usr/lib/libpthreads.a (shr_comm.o)
/usr/lib/libpthreads.a (shr_xpg5.o)
/usr/lib/libpthreads_compat.a (shr.o)

```

- **HPUX PA/RISC 32-bit**

```

/lib/libCsup.2
/lib/libCsup_v2.2
/lib/libX11.3
/lib/libXm.4
/lib/libXt.3
/lib/libc.2
/lib/libcl.2
/lib/libm.2
/lib/libstd.2
/lib/libstd_v2.2
/lib/libstream.2
/usr/lib/libCsup.2
/usr/lib/libCsup_v2.2
/usr/lib/libX11.3
/usr/lib/libXm.4
/usr/lib/libXt.3
/usr/lib/libc.2
/usr/lib/libcl.2
/usr/lib/libdld.2
/usr/lib/libisamstub.1
/usr/lib/libm.2
/usr/lib/libstd.2
/usr/lib/libstd_v2.2
/usr/lib/libstream.2
/view/x_r6hp700_1111/vobs/swdev/pvt/r6hp700_1111/X11R6/lib/libICE.2
/view/x_r6hp700_1111/vobs/swdev/pvt/r6hp700_1111/X11R6/lib/libSM.2
/view/x_r6hp700_1111/vobs/swdev/pvt/r6hp700_1111/X11R6/lib/libX11.3
/view/x_r6hp700_1111/vobs/swdev/pvt/r6hp700_1111/X11R6/lib/libXext.3
/view/x_r6hp700_1111/vobs/swdev/pvt/r6hp700_1111/X11R6/lib/libXp.2
/view/x_r6hp700_1111/vobs/swdev/pvt/r6hp700_1111/X11R6/lib/libXt.3

```

- **SUSE Linux**

For an SUSE Linux operating system, the file `/usr/lib/libstdc++.so.5` is required. You can find this file in the `compat-libstdc++` or `libstdc++33` package.

- **Linux variants**

For Linux variants, the file `/lib/libz.so.1` is required.

### 1.3.5.2 Setting Library Paths in Environment Variables on UNIX Platforms

Before Inbound Refinery or WebCenter Content Dynamic Converter uses Outside In Technology for document and image conversions, the following environment variables must be set in the or Imaging or WebCenter Content Managed Server on the specified UNIX platforms:

- Environment variables for library paths for Imaging

- Solaris SPARC:

```
LD_LIBRARY_PATH=/usr/local/packages/gcc-3.4.2/lib
```

If you are using a later version of GCC, specify that version instead of 3.4.2.

- AIX:

```
LIBPATH=DomainHome/oracle/imaging/imaging-server
```

- HP-UX Itanium:

```
LD_PRELOAD=/usr/lib/hpux64/libpthread.so.1
```

```
LD_LIBRARY_PATH=DomainHome/oracle/imaging/imaging-server
```

- Environment variables for library paths for WebCenter Content with Dynamic Converter and Inbound Refinery

- Solaris SPARC:

```
LD_LIBRARY_PATH=/usr/local/packages/gcc-3.4.2/lib
```

If you are using a later version of GCC, specify that version instead of 3.4.2.

Add the following line to the Inbound Refinery `intradoc.cfg` file at `DomainHome/ucm/ibr/bin`:

```
ContentAccessExtraLibDir=/usr/local/packages/gcc-3.4.2/lib
```

Then restart Inbound Refinery, as described in [Section 1.9.3, "Restarting a Managed Server."](#)

- HP-UX Itanium:

```
export LD_LIBRARY_
```

```
PATH=/opt/hp-gcc/3.3.6/lib:/opt/hp-gcc/3.3.6/lib/hpux64:$LD_LIBRARY_PATH
```

The Dynamic Converter on HP-UX Itanium needs the 3.3.6 version of the GCC libraries installed before the WebCenter Content server is started.

- DISPLAY environment variable

On a UNIX operating system running XWindows, when redirecting the display to a system with suitable graphic capabilities, export DISPLAY to a valid X Server before starting the Imaging or Inbound Refinery Managed Server or the WebCenter Content Dynamic Converter.

### 1.3.5.3 Downloading Visual C++ Libraries for a Windows Operating System

Outside In Technology requires the Visual C++ libraries included in the Visual C++ Redistributable Package for a Windows operating system. Three versions of this package (x86, x64, and IA64) are available from the Microsoft Download Center at

<http://www.microsoft.com/downloads>

Search for and download the version of the package that corresponds to the version of your Windows operating system:

- `vcredist_x86.exe`
- `vcredist_x64.exe`
- `vcredist_IA64.exe`

The required version of each of these downloads is the Microsoft Visual C++ 2005 SP1 Redistributable Package. The redistributable module that Outside In requires is `msvcr80.dll`.

## 1.4 Completing the WebCenter Content Configuration

You can Complete the WebCenter Content configuration on the postinstallation configuration page in Oracle WebCenter Content Server (Content Server). Before you can use Inbound Refinery with WebCenter Content, you need to configure it for document and image conversion to work with Content Server.

The first user to log in to Oracle WebCenter Content Server must be the administrator of the Oracle WebLogic Server domain, to complete the configuration of Content Server. For more information, see [Section 1.9, "Verifying the Oracle WebCenter Content Configuration,"](#) and "Overview of System Administration Tasks," "Understanding Security and User Access," and "Managing System Processes" in *Oracle Fusion Middleware Administering Oracle WebCenter Content*.

WebCenter Content displays the Content Server Configuration page when you first log in to Content Server at

`http://managedServerHost:managedServerPort/cs`

When you configure WebCenter Content on the same machine and in the same Oracle WebLogic Server domain as Imaging, the postinstallation configuration of WebCenter Content is done automatically. If you follow the default configuration for the installation of WebCenter Content and Imaging, both applications are installed on the same machine. In this environment, Imaging provides a configuration file to WebCenter Content that sets up WebCenter Content for use by Imaging.

If the WebCenter Content instance is intended to be used as a full WebCenter Content Managed Server in addition to servicing Imaging, then the WebCenter Content administrator should review the automatic configurations through the administration interfaces in Content Server. The additional configuration steps described in "Configuring Oracle WebCenter Content" in the *Oracle WebCenter Content Installation Guide* should be done on the WebCenter Content Managed Server to fully configure it for production.

The Imaging administrator should verify that the default WebCenter Content configurations are correct for use by the Imaging Managed Server. For Imaging use, many of the WebCenter Content postinstallation configuration steps, such as configuring Inbound Refinery, are not required.

### To complete the WebCenter Content configuration:

1. Start the Administration Server, as described in [Section 1.9.1, "Starting the Administration Server."](#)
2. Start the WebCenter Content Managed Server, as described in [Section 1.9.2, "Starting Managed Servers."](#)

3. Browse to the Content Server postinstallation configuration page, at this website:

`http://managedServerHost:16200/cs/`

---



---

**Important:** The first user to log in to Oracle WebCenter Content Server must be the administrator of the Oracle WebLogic Server domain, to complete the configuration of Content Server. For more information, see [Section 1.9, "Verifying the Oracle WebCenter Content Configuration,"](#) and "Overview of System Administration Tasks," "Understanding Security and User Access," and "Managing System Processes" in *Oracle Fusion Middleware Administering Oracle WebCenter Content*.

---



---

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

In the **FullText Search Option** field, you can select a full-text search engine. Leaving it blank will set up the system as metadata only.

For information about the values to enter, see "Completing the Initial Configuration of Content Server" in the *Oracle WebCenter Content Installation Guide*.

5. To enable access from Inbound Refinery, provide a value for **Incoming Socket Connection Address Security Filter**, as follows:

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

This field accepts wildcards in the value, like `10.*.*.*`. You can change this value later by setting `SocketHostAddressSecurityFilter` in `DomainHome/ucm/cs/config/config.cfg` and restarting Content Server.

For Oracle WSM security, the `SocketHostAddressSecurityFilter` value needs to set to like this:

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

For more information, see "Configuring the Server Socket Port and Incoming Socket Connection Address Security Filter for Oracle WSM" in the *Oracle WebCenter Content Installation Guide*.

6. If you want to set up a provider from Inbound Refinery back to Content Server, use the default value, `5555`, for **Server Socket Port**, or enter an unused port number.

You can change this value later by setting `IntradocServerPort` in `DomainHome/ucm/cs/config/config.cfg` and restarting Content Server.

7. Click **Submit**.

8. Restart Content Server.

You can restart a Content Server instance with the Oracle WebLogic Server Administration Console, shutdown and startup scripts, or Oracle Enterprise Manager Fusion Middleware Control. For more information, see [Section 1.9.3, "Restarting a Managed Server."](#)

## 1.5 Completing the Inbound Refinery Configuration

Before you can use Inbound Refinery with WebCenter Content, you need to complete the configuration of Inbound Refinery for document and image conversion to work with Content Server.

For transformations to work on some platforms, certain environment variables must be set before you start the Managed Server. On a UNIX operating system running XWindows, you need to export DISPLAY to a valid X Server before starting the Inbound Refinery Managed Server. For more information, see [Section 1.3.5, "Installing Libraries and Setting Environment Variables for Outside In Technology."](#)

### To Complete the Inbound Refinery configuration:

1. Configure Content Server, as described in [Section 1.4, "Completing the WebCenter Content Configuration."](#)
2. Start the Inbound Refinery Managed Server, as described in [Section 1.9.2, "Starting Managed Servers."](#)
3. Browse to the Inbound Refinery postinstallation configuration page, at this website:

```
http://managedServerHost:16250/ibr/
```

4. Enter or edit all necessary values.
  - To enable access from Content Server, provide a value for **Incoming Socket Connection Address Security Filter**, as follows:

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

This value should be the IP address of the Content Server instance 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 in the value, like 10.\*.\*.\*. You can change this value later by setting `SocketHostAddressSecurityFilter` in `DomainHome/ucm/ibr/config/config.cfg` and restarting Inbound Refinery.

- In the **Server Socket Port** field, leave the default value, 5555, or enter an unused port number.

This value is the number of the port for calling top-level services. Changing this field value changes the `IntradocServerPort` entry in `DomainHome/ucm/ibr/config/config.cfg`. The default `IntradocServerPort` value is 5555.

For more information about the values on the postinstallation configuration page, see "Installing and Configuring Inbound Refinery on WebCenter Content" in the *Oracle WebCenter Content Installation Guide*.

5. Restart Inbound Refinery, as described in [Section 1.9.3, "Restarting a Managed Server."](#)
6. Check all the entries in `DomainHome/ucm/ibr/config/config.cfg` have the values that you want for the Inbound Refinery configuration.

For more information, see "Installing and Configuring Inbound Refinery on WebCenter Content" in the *Oracle WebCenter Content Installation Guide*.



## 1.6 Completing the Imaging Configuration

Oracle WebCenter Content: Imaging uses Oracle WebCenter Content for its repository. Your system needs to have Content Server configured before the configuration of Imaging.

---

---

**Note:** For a new installation of both Imaging and WebCenter Content, before you use Imaging, you should log in to WebCenter Content, submit the configuration you want, and then restart the WebCenter Content Managed Server.

---

---

The user who logs in first to an Imaging Managed Server is provisioned with full security throughout the server. When this user first logs in, Imaging provides a user interface to complete the configuration, including connecting to a repository or repositories and, optionally, to a workflow server.

---

---

**Note:** This section describes how to complete the Imaging configuration on a development system. In a production system, Oracle WebCenter Content applications need to use an external Lightweight Directory Application Protocol (LDAP) authentication provider rather than the Oracle WebLogic Server embedded LDAP server, which is part of the default configuration. If you want to reassociate the identity store for Imaging with an external LDAP authentication provider, it is easier to do this before you complete the configuration of the Imaging Managed Server and before you connect it to the WebCenter Content repository. For more information, see "Reassociating the Identity Store with an External LDAP Authentication Provider" in the *Oracle WebCenter Content Installation Guide*.

---

---

To complete the configuration, you need to perform these tasks:

- [Starting the Imaging Managed Server and Accessing the Web Client](#)
- [Connecting to the Content Server Repository](#)
- [Configuring the GDFontPath MBean for a UNIX Operating System](#)
- [Importing Definitions](#)
- [Configuring the Imaging Viewer Cache](#)
- [Installing and Configuring AXF for BPM and AXF for BPEL](#)

For information about optional configuration tasks, see "Completing the Imaging Configuration After First Login" in the *Oracle WebCenter Content Installation Guide*. For information about using Oracle SOA Suite, Oracle BPEL Process Manager, and Oracle Business Process Management (Oracle BPM) with Imaging, see "Connecting to a Workflow Server" in *Oracle WebCenter Content Installation Guide*. For information about using Oracle Application Extension Framework (AXF), see "Installing and Configuring Oracle Application Extension Framework" in the *Oracle WebCenter Content Installation Guide*, and also see the *Oracle WebCenter Administrator's Guide for Application Adapters*.

## 1.6.1 Starting the Imaging Managed Server and Accessing the Web Client

After you complete the configuration tasks in [Section 1.3, "Configuring Oracle WebCenter Content,"](#) you can start the Imaging Managed Server and access its web client.

For transformations to work on some platforms, the following environment variables must be set before you start the Managed Server:

- Environment variables for library paths

- Solaris SPARC:

```
LD_LIBRARY_PATH=/usr/local/packages/gcc-3.4.2/lib
```

---

**Note:** For document conversions on a Solaris SPARC platform, Imaging requires the GNU Compiler Collection (GCC) package 3.4.2 or later in the `/usr/local/packages` directory.

Install this package on the Solaris operating system that will run Imaging. You can download GCC from the Sunfreeware website at

<http://www.sunfreeware.com>

You also need to set the `LD_LIBRARY_PATH` environment variable to `/usr/local/packages/gcc-3.4.2/lib` before starting the Imaging Managed Server. If you are using a later version of GCC, set that version instead of 3.4.2.

---

- AIX:

```
LIBPATH=DomainHome/oracle/imaging/imaging-server
```

- HP-UX Itanium:

```
LD_PRELOAD=/usr/lib/hpux64/libpthread.so.1
LD_LIBRARY_PATH=DomainHome/oracle/imaging/imaging-server
```

For more information, see [Section 1.2, "Installing Oracle WebCenter Content."](#)

- DISPLAY environment variable

On a UNIX operating system running XWindows, when redirecting the display to a system with suitable graphic capabilities, set `DISPLAY` to a valid X Server.

---

**Note:** If Oracle WebCenter Content: AXF for BPM is installed, proceed to [Section 1.6.6, "Installing and Configuring AXF for BPM and AXF for BPEL,"](#) before performing any configuration on the Imaging server.

---

### To start the Imaging Managed Server and access the web client:

1. Go to the `bin` directory under your domain home directory.
2. Start the Imaging Managed Server (see [Section 1.9.2](#)).
3. Enter the administrator user name and password.

4. Wait until the Imaging Managed Server is running.
5. Access the web client at this URL:

`http://managedServerHost:16000/imaging`

Log in with the administrator user name and password.

---



---

**Note:** The first user to connect to the Imaging system is automatically given full permissions. That user can then choose to give other users or groups access to the system. The first user is not a special user, and permissions can be removed or changed later as needed. If the Authorization Policy Store is to be switched, it should be done before the first login to Imaging, or the first user to log in should be a user that will also be available in the new policy store. Only users and groups that exist in the new store will be reassociated when policy stores are moved. For more information, see "Reassociating the Identity Store with an External LDAP Authentication Provider" in the *Oracle WebCenter Content Installation Guide*.

---



---

## 1.6.2 Connecting to the Content Server Repository

Before Imaging can use the WebCenter Content repository, you need to configure a connection to Content Server. You can create a connection to it from Imaging.

---



---

**Note:** You will not be able to import or upload content to the Imaging system unless you have created a repository connection.

---



---

### To connect to the Content Server repository:

1. Open a web browser, and navigate to this website:  
`http://managedServerHost:16000/imaging`
2. Log in with the administrator user name and password.
3. Navigate to the **Manage Connections** tray, and choose **Create Content Server Connection** from the list.
4. Enter a name for the connection on the **Basic Information** page, and optionally a description, and then click **Next**.
5. Enter the following values on the Connection Settings page:
  - **Repository Proxy:** `fmwadmin`
  - **Port:** The IDC port of the WebCenter Content instance, `4444` by default

If WebCenter Content Managed Server is on the same machine as the Imaging Managed Server, select **Use Local Content Server**. If the servers are not installed on the same machine, you will need to configure the WebCenter Content machine name as part of the Content Server Pool.

6. Click **Next**.

7. Enter a **Connection Security** value for the connection.  
Select which users and groups should have permission to access, modify, delete, or grant others access to this connection definition. At least one user or group must have the grant access permission.
8. Click **Next**.
9. At the Summary screen, click **Submit**.

### 1.6.3 Configuring the GDFontPath MBean for a UNIX Operating System

For conversions to work correctly on a UNIX operating system, it needs to have TrueType fonts available. If these fonts are not available on your system, you need to install them. To set the font path on a UNIX operating system, you need to configure the `GDFontPath` MBean. You can configure it through the System MBean Browser in Oracle Enterprise Manager Fusion Middleware Control.

#### To configure the GDFontPath MBean for a UNIX operating system:

1. Access the Imaging domain in Fusion Middleware Control at the following URL:

```
http://adminServerHost:adminServerPort/em
```

For `adminServerHost`, specify the name of the computer that hosts the Administration Server for your domain. For `adminServerPort`, specify the listen port number for the Administration Server. The default number is 7001. For example:

```
http://myhost.example.com:7001/em
```

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

2. In the navigation tree on the left, expand **Application Deployments**, and then click **imaging (IPM\_server1)**.
3. On the **Application Deployment** menu, select **System MBean Browser**.
4. In the navigation tree on the System MBean Browser page, under **Configuration MBeans**, close the **com.bea** folder.
5. Expand the **oracle.imaging** folder, under **Application Defined MBeans**.
6. Expand the **Server: IPM\_server1** and **config** folders.
7. Click **config**.
8. Set the value of the **GDFontPath** attribute to the location of your True Type Fonts (TTF) files; for example:

```
/usr/share/X11/fonts/TTF
```

For systems on which Oracle WebLogic Server includes a JDK, you can find some TTF files in the `JDK/jre/lib/fonts` directory.

Some standard font locations on different UNIX platforms follow:

- Solaris SPARC: `/usr/openwin/lib/X11/fonts/TrueType`

---

**Note:** For document conversions on a Solaris SPARC platform, Imaging requires the GNU Compiler Collection (GCC) package 3.4.2 or later in the `/usr/local/packages` directory.

Install this package on the Solaris operating system that will run Imaging. You can download GCC from the Sunfreeware website at

<http://www.sunfreeware.com>

You also need to set the `LD_LIBRARY_PATH` environment variable to `/usr/local/packages/gcc-3.4.2/lib` before starting the Imaging Managed Server. If you are using a later version of GCC, set that version instead of 3.4.2.

---

- AIX: `/usr/lpp/X11/lib/X11/fonts/TrueType`
- HP-UX Itanium: `/usr/lib/X11/fonts/TrueType`
- Linux: `/usr/lib/X11/fonts/TrueType`

9. Click **Apply**.

10. Restart Imaging, as described in [Section 1.9.3, "Restarting a Managed Server."](#)

## 1.6.4 Importing Definitions

At this point in the installation process, you can import previously exported Imaging definitions (applications, searches, and inputs). For more information, see "Exporting and Importing Definitions" in the *Oracle WebCenter Content Administrator's Guide for Imaging*.

For additional information about how to import definitions, see "Importing Definition Files into Imaging from Oracle SOA Suite" in the *Oracle WebCenter Content Installation Guide*.

## 1.6.5 Configuring the Imaging Viewer Cache

The Imaging viewer can cache documents on the server outside of the repository to increase rendering speed on the client machine. Security for the cached documents is controlled by authentication for the server on which they are stored. If additional security is required, cached documents can be encrypted.

For information about setting the Imaging to use cached documents, see "Configuring the Imaging Viewer Cache" in the *Oracle WebCenter Content Installation Guide*. This section also provides information about changing the viewer cache path and encrypting cached documents.

## 1.6.6 Installing and Configuring AXF for BPM and AXF for BPEL

Oracle WebCenter Content: AXF for BPM and Oracle Application Extensions Framework (AXF) for BPEL are installed automatically with Imaging, and AXF for BPEL is automatically deployed to the Imaging Managed Server. Before you can deploy AXF for BPM to the Imaging server, you need to create the required schemas with the Repository Creation Utility, as described in [Section 1.2.1.7, "Creating Oracle WebCenter Content Schemas with the Repository Creation Utility."](#) Then when the domain is created, you can select AXF for BPM to use it with the Imaging, as described in [Section 1.3, "Configuring Oracle WebCenter Content."](#)

You can configure either AXF for BPM or AXF for BPEL, or both, to run on the Imaging Managed Server:

- AXF for BPM

The newer AXF for BPM infrastructure takes advantage of the application development and configuration capabilities provided by technologies such as Oracle Business Process Management (Oracle BPM), Oracle Application Development Framework (Oracle ADF), Oracle Metadata Services Repository (Oracle MDS Repository), and Oracle Business Rules to create configurable business components. Administrators can use these business components to configure and develop integration solutions for WebCenter Content business applications.

For more information, see "Configuring and Verifying AXF for BPM" in the *Oracle WebCenter Content Installation Guide*.

- AXF for BPEL

The older AXF for BPEL infrastructure relies on AXF database tables (Imaging tables) as the basis for configuring AXF solutions, commands, and web tools. A solution developer or solution accelerator can implement and customize these solutions, commands, and tools.

For more information, see "Configuring and Verifying AXF for BPEL" in the *Oracle WebCenter Content Installation Guide*.

For additional information about configuring and using AXF for BPM or AXF for BPEL and the AXF for BPEL database tables (Imaging tables), see the *Oracle WebCenter Administrator's Guide for Application Adapters*.

## 1.7 Completing the Oracle IRM Configuration

Before logging in to the Oracle Information Rights Management (Oracle IRM) Management Console or using Oracle WebCenter Content: Rights Desktop (Rights Desktop), you need to complete the Oracle IRM configuration, as these topics describe:

- [Setting the Server URL Configuration Parameter for Oracle IRM](#)
- [Configuring a Key Store for Oracle IRM](#)
- [Configuring SSL for a Development Environment](#)
- [Validating the Oracle IRM Installation](#)

## 1.7.1 Setting the Server URL Configuration Parameter for Oracle IRM

You can set the Server URL configuration parameter to an Oracle IRM Managed Server on the General Settings page for Oracle IRM in Oracle Enterprise Manager Fusion Middleware Control.

---

**Caution:** The Server URL value is embedded into every sealed document, and Rights Desktop uses this value to identify and connect to an Oracle IRM Managed Server to retrieve licenses. This setting must not be changed after any documents have been sealed using this server, or no one will be able to access the documents.

---

### To set the Server URL configuration parameter:

1. Start Fusion Middleware Control by navigating to the following website:

```
http://adminServerHost:adminServerPort/em
```

For *adminServerHost*, specify the name of the computer that hosts the Administration Server for your domain. For *adminServerPort*, specify the listen port number for the Administration Server. The default number is 7001. For example:

```
http://myhost.example.com:7001/em
```

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

2. In the farm navigation tree on the left, expand **Content Management** and **Information Rights Management**, and then click **IRM**.
3. From the **IRM** menu, select **Administration** and then **General Settings**.

Fusion Middleware Control displays the General Settings page.

4. In the **Server URL** field, enter the URL to access the Oracle IRM Managed Server.

For a simple installation where the Managed Server is directly accessible to Rights Desktop, this value is the Managed Server URL, ending in *irm\_desktop*:

```
https://managedServerHost:managedServerPort/irm_desktop
```

The *managedServerHost* value is the name of the host where the Managed Server is running, such as *myhost.example.com*. The default SSL port for Oracle IRM (*managedServerPort* value) is 16101.

5. Click **Apply**.

## 1.7.2 Configuring a Key Store for Oracle IRM

The Oracle IRM Java EE application uses a cryptographic key to wrap (encrypt) and unwrap (decrypt) Oracle IRM sealed content keys stored in the database. This wrapping key, *oracle.irm.wrap*, must be generated and stored in a key store before contexts can be created.

Access to the key store requires a password, and access to the wrapping key requires an additional password. Both passwords are stored in the credential store.

---

---

**Note:** This section presents the instructions for creating a key store that will work on all systems but may not be the best configuration for a production system. If you plan to migrate your demo or pilot installation from development to production, see "Configuring a Key Store for Oracle IRM" in the *Oracle WebCenter Content Installation Guide* for a discussion of the key store options.

---

---

To configure a key store for Oracle IRM, you need to do the tasks described in these topics:

- [Creating a Key Store](#)
- [Setting the Key Store Location](#)
- [Adding Key Store Passwords to the Credential Store](#)

### 1.7.2.1 Creating a Key Store

The `keytool` command will generate a key store, which requires a password to open. Inside the key store, a key, `oracle.irm.wrap`, will be stored, and access to this key requires an additional password.

#### To create a key store for Oracle IRM:

1. Run the `setWLSEnv` script to set the environment:
  - **UNIX path:** `MW_HOME/wlserver_10.3/server/bin/setWLSEnv.sh`
  - **Windows path:** `MW_HOME\wlserver_10.3\server\bin\setWLSEnv.cmd`

For the Java and Oracle WebLogic Server tools to work, you should have the `weblogic.jar` file in the `MW_HOME/wlserver_10.3/server/lib` or `MW_HOME\wlserver_10.3\server\lib` directory.

2. Run the `keytool` utility, on a single command line, to generate an Oracle IRM key store:

```
keytool -genkeypair -alias oracle.irm.wrap
        -keyalg RSA -keysize 2048 -keystore irm.jks
```

When prompted for the certificate details, use the suggested default value, `unknown`. When prompted by `keytool`, choose appropriate passwords for the key store and the generated key.

---

---

**Note:** You should choose the most appropriate cryptographic algorithm, key size, and key store for the target platform. For most platforms, the Advanced Encryption Standard (AES) key wrapping algorithm should be used. Other platforms require an RSA key wrapping algorithm, which this procedure uses.

For information about generating an Oracle IRM key store with the AES key wrapping algorithm, see "Configuring a Key Store for Oracle IRM" in the *Oracle WebCenter Content Installation Guide*.

---

---



### 3. Copy the `irm.jks` file to the domain's `fmwconfig` directory:

- **UNIX path:**

`MW_HOME/user_projects/domains/DomainHome/config/fmwconfig`

- **Windows path:**

`MW_HOME\user_projects\domains\DomainHome\config\fmwconfig`

#### 1.7.2.2 Setting the Key Store Location

The Rights Server configuration needs to be updated so that Oracle IRM can locate the key store file. You can set the key store location in the server configuration with either Fusion Middleware Control, on the Oracle IRM General Settings page, or with the Oracle WebLogic Scripting Tool (WLST) `connect` and `setIRMKeyStore` commands.

---

**Note:** If SSL is enabled, before you use WLST to connect to the Administration Server for the Oracle WebLogic Server domain, you must either append the following parameters to the `JVM_ARGS` section of the `wlst.sh` file or set them in the `CONFIG_JVM_ARGS` environment variable:

```
-Dweblogic.security.SSL.ignoreHostnameVerification=true
-Dweblogic.security.TrustKeyStore=KeyStoreName
```

*KeyStoreName* is the name of the keystore in use (DemoTrust for the built-in demonstration certificate). The `wlst.sh` file is in the `bin` subdirectory of the `common` directory in the WebCenter Content Oracle home directory.

---

The suggested location for the key store is in a directory under the domain home:

- **UNIX path:**

`MW_HOME/user_projects/domains/DomainHome/config/fmwconfig`

- **Windows path:**

`MW_HOME\user_projects\domains\DomainHome\config\fmwconfig`

Placing the key store in this location ensures that the key store file is backed up when the domain and corresponding credential store files are backed up.

#### To set the key store location with Fusion Middleware Control:

1. Start Fusion Middleware Control at the following URL:

`http://adminServerHost:adminServerPort/em`

For *adminServerHost*, specify the name of the computer that hosts the Administration Server for your domain. For *adminServerPort*, specify the listen port number for the Administration Server. The default number is 7001. For example:

`http://myhost.example.com:7001/em`

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

2. In the farm navigation tree on the left, expand **Content Management** and **Information Rights Management**, and then click **IRM**.
3. From the **IRM** menu, select **Administration** and then **General Settings**.

4. Enter JKS for the key store type.
5. In the **Keystore** field on the General Settings page, enter a key store path:
  - **UNIX path:** *MW\_HOME/user\_projects/domains/DomainHome/config/fmwconfig/irm.jks*
  - **Windows path:** *MW\_HOME\user\_projects\domains\DomainHome\config\fmwconfig\irm.jks*
6. On the General Settings page, you can also specify other settings for Oracle IRM.
7. Click **Apply**.

**To set the key store location with WLST commands:**

1. Enter the following commands:

- **UNIX operating system**

```
WCC_ORACLE_HOME/oracle_common/common/bin/wlst.sh
connect('username','password','t3://adminServerHost:adminServerPort')
setIRMKeyStore()
```

- **Windows operating system**

```
WCC_ORACLE_HOME\oracle_common\common\bin\wlst.cmd
connect('username','password','t3://adminServerHost:adminServerPort')
setIRMKeyStore()
```

For *adminServerHost*, specify the name of the computer that hosts the Administration Server for your domain. For *adminServerPort*, specify the listen port number for the Administration Server. The default number is 7001. For example:

```
't3://myHost.example.com:7001'
```

2. Enter the key store type and key store path when prompted.

- For the key store type, enter one of the following values:

- \* JCEKS if you are using an AES key
- \* JKS if you are using an RSA key-pair

- For the key store path, enter one of the following values.

- \* Key store path for an AES key store

**UNIX path:** *MW\_HOME/user\_projects/domains/DomainHome/config/fmwconfig/irm.jceks*

**Windows path:** *MW\_HOME\user\_projects\domains\DomainHome\config\fmwconfig\irm.jceks*

- \* Key store path for an RSA key store:

**UNIX path:** *MW\_HOME/user\_projects/domains/DomainHome/config/fmwconfig/irm.jks*

**Windows path:** *MW\_HOME\user\_projects\domains\DomainHome\config\fmwconfig\irm.jks*

### 1.7.2.3 Adding Key Store Passwords to the Credential Store

You must add passwords for the Oracle IRM key store to the credential store with WLST commands. A key store password and a password for the generated key were set when the key store was created. These passwords are required by the Rights Server.

#### To add key store passwords to the credential store:

- Enter the following WLST commands:

- **UNIX operating system**

```
WCC_ORACLE_HOME/oracle_common/common/bin/wlst.sh
connect('username','password','t3://adminServerHost:adminServerPort')
createCred("IRM","keystore:irm.jks","dummy","password")
createCred("IRM","key:irm.jks:oracle.irm.wrap","dummy","password")
```

- **Windows operating system**

```
WCC_ORACLE_HOME\oracle_common\common\bin\wlst.cmd
connect('username','password','t3://adminServerHost:adminServerPort')
createCred("IRM","keystore:irm.jks","dummy","password")
createCred("IRM","key:irm.jks:oracle.irm.wrap","dummy","password")
```

---



---

#### Notes:

- In the `connect` command, substitute the correct values for `username` and `password`.
  - In the `createCred` command, substitute for `password` the password that was used for creating the key and key store.
  - The "dummy" parameter passed to the `createCred` command is the user name parameter. The key store does not use a user name, so this value is ignored. This is why the value is set as dummy.
  - It is normal for the `creatCred` command to return the text "Already in Domain Runtime Tree". This text does not signify an error.
- 
- 

## 1.7.3 Configuring SSL for a Development Environment

For a development environment, you can configure one-way SSL with a server-specific certificate. One-way SSL means that only the server certificate passes from the server to the client but not the other way around. After you configure one-way SSL for a development environment on the server, you must configure every machine running Rights Desktop to accept the server certificate.

### 1.7.3.1 Configuring One-Way SSL with a Server Certificate

You can configure one-way SSL with a server certificate for the Oracle IRM Managed Server so that Rights Desktop can be configured to trust the certificate.

#### To configure one-way SSL with a server certificate:

1. Run the `setWLSEnv` script to set the environment:

- **UNIX script:**

```
MW_HOME/wlserver_10.3/server/bin/setWLSEnv.sh
```

- **Windows script:**

```
MW_HOME\wlserver_10.3\server\bin \setWLSEnv.cmd
```

For the Java and Oracle WebLogic Server tools to work, you should have the `weblogic.jar` file in the `MW_HOME/wlserver_10.3/server/lib` or `MW_HOME\wlserver_10.3\server\lib` directory.

2. Use the `CertGen` utility to create a server-specific, private key and certificate, as follows (in a single command line):

```
java utils.CertGen -selfsigned
                  -certfile MyOwnSelfCA.cer
                  -keyfile MyOwnSelfKey.key
                  -keyfilepass mykeypass
                  -cn "hostname"
```

For `mykeypass`, substitute a password for the key file, and for `hostname`, substitute the name of the machine where Oracle IRM is deployed. You should use the same name while accessing Oracle Web Services. For example, to generate the server certificate for a machine named `myhost.us.example.com`, the command would be as follows (in a single command line):

```
java utils.CertGen -selfsigned
                  -certfile MyOwnSelfCA.cer
                  -keyfile MyOwnSelfKey.key
                  -keyfilepass mykeypass
                  -cn "myhost.us.example.com"
```

This command will generate a server certificate for the machine `myhost.us.example.com`.

The parameter `-cn "machine-name"` must be set to the fully qualified domain name of the Rights Server, which is the name that Oracle IRM will use to connect to the machine. Verify that the certificate has been issued to the machine name you specified.

`CertGen` creates a unique and secret Private Key for Oracle IRM and a Self-Signed Root Certificate.

3. Run the `ImportPrivateKey` utility to package the Private Key and Self-Signed Root Certificate into a keystore, as follows (in a single command line):

```
java utils.ImportPrivateKey
      -keystore MyOwnIdentityStore.jks
      -storepass identitypass
      -keypass keypassword
      -alias trustself
      -certfile MyOwnSelfCA.cer.pem
      -keyfile MyOwnSelfKey.key.pem
      -keyfilepass mykeypass
```

Substitute an identity store password for `identitypass`, a key password for `keypassword`, and a key-file password for `mykeypass`.

4. Run the `keytool` utility to package the key and certificate into a separate keystore called the Trust Keystore.

In the following `keytool` commands (each a single command line), `JAVA_HOME` represents the location of the JDK. For information about the `JAVA_HOME` environment variable, see [Section 1.2.1.8, "Installing Oracle WebLogic Server and Creating the Middleware Home."](#)

- **UNIX operating system**

```
JAVA_HOME/bin/keytool -import -trustcacerts -alias trustself
                        -keystore TrustMyOwnSelf.jks
                        -file MyOwnSelfCA.cer.der -keyalg RSA
```

- **Windows operating system**

```
JAVA_HOME\bin\keytool -import -trustcacerts -alias trustself
                        -keystore TrustMyOwnSelf.jks
                        -file MyOwnSelfCA.cer.der -keyalg RSA
```

5. Click **Next**, and then follow the instructions on the wizard screens.

6. Set Up a Custom Identity Keystore and Trust Store:

a. Log in to the Oracle WebLogic Server Administration Console at

```
http://adminServerHost:adminServerPort/console
```

For `adminServerHost`, specify the name of the computer that hosts the Administration Server for your domain. For `adminServerPort`, specify the listen port number for the Administration Server. The default number is 7001. For example:

```
http://myhost.example.com:7001/console
```

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

- b. Select **Environment** under your domain from Domain Structure.
- c. Select **Servers** from **Environment**.
- d. From **Summary of Servers**, select the server for which to enable SSL.
- e. Click the **Keystores** tab on the Settings for `servername` page.
- f. In the **Keystores** field, select **Custom Identity and Custom Trust**.
- g. Enter values in the other fields on the **Keystores** tab.
- h. Save the changes.
- i. Click the **SSL** tab.
- j. In the **Identity and Trust Locations** field, select **Keystores**.
- k. Enter values in the other fields on the **SSL** tab.
- l. Save the changes.

### 1.7.3.2 Configuring Client Machines Running Rights Desktop to Accept a Server Certificate

After you create a server certificate, you must install it on every machine running Rights Desktop. Then you can import the certificate into Rights Desktop so that it will trust the certificate and not show prompts when it connects to the Oracle IRM Managed Server.

**To configure client machines running Rights Desktop to accept a server certificate:**

1. On each client machine that is running Rights Desktop, double-click the certificate file to open the Certificate window, and then click **Install Certificate** to start the Certificate Import Wizard.

For a Windows operating system, the certificate file needs to be copied to the client machine that accesses this server through a browser.

For a UNIX operating system that is accessing a website over SSL rather than using the Rights Desktop, follow the procedure required for your operating system to trust the certificate.

2. On every machine running Rights Desktop, in the Certificate Import Wizard, explicitly select a certificate store for **Trusted Root Certification Authorities**. The root certificate must be trusted on *all* client computers that will access the server.

On a Windows operating system, install the certificate under Trusted Root Certification Authorities in Internet Explorer.

### 1.7.4 Validating the Oracle IRM Installation

When the Oracle IRM Managed Server is running, the Oracle IRM application is deployed to the Oracle WebLogic Server domain. You can validate that the installation was successful by accessing this URL:

```
https://managedServerHost:managedServerPort/irm_desktop
```

For example:

```
https://myhost.example.com:16101/irm_desktop
```

## 1.8 Completing the Records Configuration

To complete the configuration of Oracle WebCenter Content: Records, start the Records Managed Server, as described in [Section 1.9.2, "Starting Managed Servers,"](#) and access Records at this URL:

```
http://managedServerHost:managedServerPort/urm
```

For example:

```
http://myhost.example.com:16300/urm
```

Log in with the user name and password for Oracle WebLogic Server. The default port number for Records is 16300.

The WebCenter Content: Records Configuration page is displayed. Click the **Submit** button to accept the default values on the WebCenter Content: Records Configuration page. Then restart the Records Managed Server, as described in [Section 1.9.3, "Restarting a Managed Server."](#) For information about the fields on this page and the values you can enter to configure your Records instance, see "Completing the Initial Records Configuration" in the *Oracle WebCenter Content Installation Guide*.

After you restart the Records Managed Server, go to the Records URL and log in again. Records displays an alert, "Initial Records Management Setup is Not Complete!" Then you can select the Records install settings and installation level you want on the Configure: Enabled Features page and configure the features. For information about configuring these settings, see [Section 1.8.1, "Configuring the Level of Records Features."](#) The configuration of WebCenter Content with the Records template automatically completes the postinstallation configuration of Records, with an installation level of **Minimal**

After you configure the installation level and features, you can configure the items on the Setup Checklist page. For more information, see [Section 1.8.2, "Completing the Setup Checklist for Records."](#)

## 1.8.1 Configuring the Level of Records Features

On the Enabled Features page, you can configure and installation level and features for Records.

### To configure the level of Records features:

1. From the **Records** menu, choose **Configure**, then choose **Enabled Features**.
2. On the Enabled Features page, you can select an installation level, which selects all the features and disposition actions for that level.

The following table describes the installation levels and features that can be enabled. For information about the components to be enabled for each level, and the features and disposition actions to be installed, click the **Info** icon next to the level.

Element	Description
Installation Level	Specifies the type of configuration to be enabled: <ul style="list-style-type: none"> <li>■ Minimal</li> <li>■ Typical</li> <li>■ DoD Baseline</li> <li>■ DoD Classified</li> <li>■ Custom</li> </ul>
Features	When you select an installation level, the default features for that level are selected to be enabled. If you select the <b>Custom</b> installation level, you can select the features you want enabled: <ul style="list-style-type: none"> <li>■ Related Content</li> <li>■ Audit Trigger</li> <li>■ Subject to Review</li> <li>■ Revision Dates</li> <li>■ Security Markings</li> <li>■ Email Fields</li> <li>■ DoD Configuration</li> <li>■ Classified Topics</li> <li>■ FOIA/Privacy Act</li> </ul>

Element	Description
Disposition Actions	<p>This section contains the disposition actions that can be used for content:</p> <ul style="list-style-type: none"> <li>▪ Activate</li> <li>▪ Rescind</li> <li>▪ Approve Deletion</li> <li>▪ Obsolete</li> <li>▪ Expire</li> <li>▪ Destroy</li> <li>▪ Cancel</li> <li>▪ Cutoff</li> </ul>

---

**Note:** If you are using Oracle WebCenter with Records and want to use the DOD feature, you can set the DoD Baseline or Classified Installation level after WebCenterConfigure has been enabled and has had a chance to check in its conversion templates.

---

3. If you selected the **Custom** installation level, select the features and disposition actions that you want enabled, and deselect any that you do not want enabled.
4. Click the **Submit** button.

After making selections or if configuration options are changed (for example, switching from **Baseline** to **Classified**), restart the Records Managed Server again, and rebuild the Content Server index. For more information, see "Working with the Search Index" in *Oracle Fusion Middleware Administering Oracle WebCenter Content*.

## 1.8.2 Completing the Setup Checklist for Records

After the installation and configuration of Records on a Managed Server, you need to complete the Setup Checklist page before you can set up retention policies and procedures. This page is used to set global options for aspects of the retention management system.

For information about setting up retention policies and procedures, see "Retention Options" in the *Oracle WebCenter Content Setup Guide for Records*.

### To complete the Setup Checklist for Records:

1. From the **Records** menu, choose **Configure** then choose **Setup Checklist**.
2. On the Setup Checklist page, for each action that is marked **Not Done**, click the action, complete the configuration for it, refresh the Setup Checklist page, and then mark the checkbox to the right of the action to indicate that it is complete.

If any required configuration tasks on this page are not completed, a warning message with a link to this page appears on the home page of the Records system. You can click the link to display this page, or you can display the page from the **Records** menu again.

---

**Note:** The Configure Report Library task is only for the Records Management feature in Content Server. This library is not needed for Oracle WebCenter Content: Records.

---



3. For any of the other actions that you want to configure, click the action, complete the configuration for it, refresh the Setup Checklist page, and then mark the checkbox to the right of the action to indicate that it is complete.

Expanding any action in this list displays a detailed explanation of the action's purpose. The options available on the page depend on your installation level:

- **Minimal**
- **Typical**
- **DoD Baseline**
- **DoD Classified**
- **Custom**

The following table lists the actions that can be on the Setup Checklist and describes the purpose of each action.

<b>Action</b>	<b>Description</b>
Configure Installation	Used to configure optional components and metadata fields. Select from preset configurations to choose the features that are needed.
Configure Report Library	Used to configure the report library for the Records Management feature of Content Server, after adding the <code>oracle.xdo.runtime</code> library from the Oracle WebLogic Server Administration Console and a library reference to <code>weblogic-application.xml</code> . This library is not needed for Oracle WebCenter Content: Records.
Define Defaults	Used to define the default for audit trails, template locations, and metadata for content that is automatically checked in on a periodic basis. You can configure metadata for Audit Entries and for Screening reports.  Clicking an option brings up a check in page where you can edit the fields to be used as defaults.
Configure Security Settings	Used to define the security settings including roles, rights, and access control list use. This link opens the Admin Applets. Click the User Applet to configure security.
Configure Retention Management Settings	Used to configure many of the retention management options such as supplemental markings, triggers, and reports. Clicking this option displays the Configure Retention Settings page.  For information about this page, see "Configure Retention Settings Page" in the <i>Oracle WebCenter Content Setup Guide for Records</i> .
Configure Fiscal, Calendar, and Custom Periods	Used to set periods used for disposition processing. Selecting this option displays the Configure Periods page.  For information about this page, see "Configure Periods Page" in the <i>Oracle WebCenter Content Setup Guide for Records</i> .
Configure Global, Direct, and Indirect Triggers	Used to set up the triggers used for disposition processing. Selecting this option displays the Configure Triggers page.  For information about this page, see "Configure Triggers Page" in the <i>Oracle WebCenter Content Setup Guide for Records</i> .

Action	Description
Create Retention Schedule or Import Retention Schedule	Used to set up retention schedules. Selecting <b>Create Retention Schedule</b> displays the Exploring Retention Schedule page. Selecting Import Retention Schedule displays the Import/Export Screen.  For information about importing and exporting files, see "Managing Imports and Exports" in the <i>Oracle WebCenter Content Administrator's Guide for Records</i> .
Configure Freeze Reasons	Used to set up freezes. Selecting this option displays the Freeze Configuration page.  For information about this page, see "Freeze Configuration Page" in the <i>Oracle WebCenter Content Setup Guide for Records</i> .
Configure Workflows	Used to set up workflows to use with off-site storage, reservations, and category disposition processing. These workflows must be set up for that functionality to work properly.  For more information, see "Setting Up Workflows" in the <i>Oracle WebCenter Content Setup Guide for Records</i> .
Configure Default Reviewers	Used to add users who will be default reviewers. Click User Admin Applet to proceed.
Configure Related Content Types	Used to set up links. Selecting this option displays the Configure Links Type Page.  For more information, see "Configuring Related Content (Links)" in the <i>Oracle WebCenter Content User's Guide for Records</i> .
Configure Federated Search Default Category	Used to indicate a default category and default folder to use for Federated searches. Selecting this option displays the Admin Server page, where you can enter configuration variables: <ul style="list-style-type: none"> <li>■ FederatedSearchDefaultCategory=categoryId</li> <li>■ FederatedSearchDefaultFolder=folderId</li> </ul>
Configure 'Profile Trigger' as Trigger Field	Used to determine the trigger for profiles used in searching and checking in content and physical items.

## 1.9 Verifying the Oracle WebCenter Content Configuration

To verify the installation and configuration of Oracle WebCenter Content in an Oracle WebLogic Server domain, start a web browser and enter the following URLs to test access to the domain's Administration Server, Oracle WebLogic Server Administration Console, and Oracle Enterprise Manager Fusion Middleware Control, as well as to the Oracle WebCenter Content applications:

- To access the Administration Server:

```
http://adminServerHost:adminServerPort
```

For *adminServerHost*, specify the name of the computer that hosts the Administration Server for your domain. For *adminServerPort*, specify the listen port number for the Administration Server. The default number is 7001. For example:

```
http://myhost.example.com:7001
```

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

- To access the Administration Console:

`http://adminServerHost:adminServerPort/console`

For *adminServerHost*, specify the name of the computer that hosts the Administration Server for your domain. For *adminServerPort*, specify the listen port number for the Administration Server. The default number is 7001. For example:

`http://myhost.example.com:7001/console`

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

- To access Fusion Middleware Control:

`http://adminServerHost:adminServerPort/em`

For *adminServerHost*, specify the name of the computer that hosts the Administration Server for your domain. For *adminServerPort*, specify the listen port number for the Administration Server. The default number is 7001. For example:

`http://myhost.example.com:7001/em`

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

- To test a newly set up WebCenter Content instance, by accessing Content Server:

`http://managedServerHost:managedServerPort/cs`

The default port number for WebCenter Content is 16200.

The first user to log in to Oracle WebCenter Content Server must be the administrator of the Oracle WebLogic Server domain, to complete the configuration of Content Server. For more information, see [Section 1.4, "Completing the WebCenter Content Configuration,"](#) and also see "Overview of System Administration Tasks," "Understanding Security and User Access," and "Managing System Processes" in *Oracle Fusion Middleware Administering Oracle WebCenter Content*.

- To test a newly set up Inbound Refinery instance:

`http://managedServerHost:managedServerPort/ibr`

Log in with the user name and password for Oracle WebLogic Server. The default port number for Inbound Refinery is 16250.

- To test a newly set up Imaging instance:

`http://managedServerHost:managedServerPort/imaging`

Log in with the user name and password for Oracle WebLogic Server. The default port number for Imaging is 16000.

- To test a newly set up Oracle IRM instance:

`https://managedServerHost:managedServerPort/irm_desktop`

Log in with the user name and password for Oracle WebLogic Server. The default port number for Oracle IRM with SSL enabled is 16101.

- To test a newly set up Records instance:

`http://managedServerHost:managedServerPort/urm`

Log in with the user name and password for Oracle WebLogic Server. The default port number for Records is 16300.

## 1.9.1 Starting the Administration Server

Before you can start a Managed Server for an application, you need to start the Administration Server for the Oracle WebLogic Server domain.

### To start the Administration Server:

1. Run the `startWebLogic` script from the `bin` directory in the domain home directory:

- **UNIX path:** `MW_HOME/user_projects/domains/DomainHome/bin/startWebLogic.sh`

---



---

**Note:** On a Linux operating system, the shell is going to stay open.

---



---

- **Windows path:** `MW_HOME\user_projects\domains\DomainHome\startWebLogic.cmd`

The directory path to the Middleware home (`MW_HOME`) and the name of the domain (`domain_name`) were provided on the Specify Domain Name and Location screen in Fusion Middleware Configuration Wizard.

2. Access the Oracle WebLogic Server Administration Console at

`http://adminServerHost:adminServerPort/console`

For `adminServerHost`, specify the name of the computer that hosts the Administration Server for your domain. For `adminServerPort`, specify the listen port number for the Administration Server. The default number is 7001. For example:

`http://myHost.example.com:7001/console`

To log in, supply the user name and password that were specified on the Configure Administrator User Name and Password screen in the configuration wizard.

## 1.9.2 Starting Managed Servers

You can start each Managed Server from the `bin` directory inside your domain home directory:

- **UNIX path:** `MW_HOME/user_projects/domains/DomainHome`
- **Windows path:** `MW_HOME\user_projects\domains\DomainHome`

The directory path to the Middleware home (`MW_HOME`) and the name of the domain (`DomainHome`) were provided on the Specify Domain Name and Location screen in Fusion Middleware Configuration Wizard.

---



---

### Important:

- Before starting a Content Server, Inbound Refinery, or Imaging Managed Server for the first time, see [Section 1.3.5, "Installing Libraries and Setting Environment Variables for Outside In Technology."](#)
  - Before starting an Imaging Managed Server and logging in for the first time, see [Section 1.6, "Completing the Imaging Configuration,"](#) and do not start the Managed Server until you have completed the tasks before [Section 1.6.1, "Starting the Imaging Managed Server and Accessing the Web Client."](#)
  - Before logging in to the Oracle IRM Management Console for the first time or using Rights Desktop, see [Section 1.7, "Completing the Oracle IRM Configuration."](#)
- 
- 

### To start a Managed Server:

1. Start the Administration Server (see [Section 1.9.1](#)).
2. Run the `startManagedWebLogic` script:
  - **UNIX script:** `MW_HOME/user_projects/domains/DomainHome/bin/startManagedWebLogic.sh server_name [admin_url]`
  - **Windows script:** `MW_HOME\user_projects\domains\DomainHome\bin\startManagedWebLogic.cmd server_name [admin_url]`

This script requires that you specify a server name, such as one of these:

- `UCM_server1` (WebCenter Content)
- `IBR_server1` (Inbound Refinery)
- `IPM_server1` (Imaging)
- `IRM_server1` (Oracle IRM)
- `URM_server1` (Records)

The value of `admin_url` is the Administration Server URL. If the Administration Server does not use the default port, 7001, you need to specify a value for `admin_url`, such as `http://localhost:8001/`.

For example, the following script would start an Imaging Managed Server on a UNIX operating system:

```
cd MW_HOME/user_projects/domains/base_domain
/bin/startManagedWebLogic.sh IPM_server1 http://localhost:8001/
```

The following script would start an Oracle IRM Managed Server on a Windows operating system:

```
MW_HOME\user_projects\domains\base_domain
\bin\startManagedWebLogic.cmd IRM_server1
```

You will be prompted for the Oracle WebLogic Server user name and password before the server starts. These were provided on the Configure Administrator User Name and Password screen in the configuration wizard.

The names of the Managed Servers are in the `startManagedWebLogic_readme.txt` file. To view the server names on a UNIX operating system, run this script:

```
cat MW_HOME/user_projects/domains/domain_name/startManagedWebLogic_readme.txt
```

To view the server names on a Windows operating system, double-click this file:

```
MW_HOME\user_projects\domains\domain_name\startManagedWebLogic_readme.txt
```

For information about stopping or starting a Managed Server with Oracle Enterprise Manager Fusion Middleware Control, see "Starting and Stopping Managed Servers Using Fusion Middleware Control" in the *Oracle Fusion Middleware Administrator's Guide*.

### 1.9.3 Restarting a Managed Server

Before changes to the configuration of a Managed Server can take effect, you need to restart it. You can restart a Managed Server with the Oracle WebLogic Server Administration Console, shutdown and startup scripts, or Fusion Middleware Control.

The following example shows how to restart a Managed Server with the `stopManagedWebLogic` and `startManagedWebLogic` scripts. For more information, see "Managing System Processes" in *Oracle Fusion Middleware Administering Oracle WebCenter Content*.

#### To restart a Managed Server with scripts on the command line:

1. Stop the Managed Server with the `stopManagedWebLogic` script.
  - **UNIX script:**  
`DomainHome/bin/stopManagedWebLogic.sh UCM_server1`
  - **Windows script:**  
`DomainHome\bin\stopManagedWebLogic.cmd UCM_server1`
2. Stop the Administration Server with the `stopWebLogic` script.
  - **UNIX script:** `DomainHome/bin/stopWebLogic.sh`
  - **Windows script:** `DomainHome\bin\stopWebLogic.cmd`
3. Start the Administration Server with the `startWebLogic` script.
  - **UNIX script:** `DomainHome/bin/startWebLogic.sh`
  - **Windows script:** `DomainHome\bin\startWebLogic.cmd`

4. Start the Managed Server with the `startManagedWebLogic` script.
  - **UNIX script:**  
`DomainHome/bin/startManagedWebLogic.sh UCM_server1`
  - **Windows script:**  
`DomainHome\bin\startManagedWebLogic.cmd UCM_server1`

## 1.9.4 Using Node Manager with Oracle WebCenter Content

The Oracle WebLogic Server Node Manager enables you to start and stop Oracle WebLogic Server instances remotely, monitor them, and automatically restart them after an unexpected failure. You can configure Oracle WebCenter Content Managed Servers, the Administration Server, and Node Manager to work together in an Oracle WebLogic Server domain. Node Manager is installed on all the machines that host any server instance.

Before you can use Node Manager to start and stop Oracle WebCenter Content Managed Servers in a domain, you need to do these configuration tasks:

- Configure at least one machine for the domain.
- Assign the Administration Server and Managed Servers (such as `AdminServer`, `IPM_server1`, and `UCM_server1`) to one or more machines.
- Enable Node Manager to use the Oracle WebCenter Content startup scripts by setting the `StartScriptEnabled` property in the `nodemanager.properties` file to `true`.

This section describes how to configure a machine in an Oracle WebLogic Server domain, assign the Administration Server and Managed Servers to a machine, and enable Node Manager to use startup scripts before you start it. For information about creating or extending a domain to configure Oracle WebCenter Content, see [Section 1.3, "Configuring Oracle WebCenter Content."](#)

### 1.9.4.1 Configuring a Machine

The Administration Server uses a machine definition and the Node Manager application to start remote servers. During the initial configuration of Oracle WebCenter Content, you can configure machines through the Fusion Middleware Configuration Wizard. After the initial configuration, you can configure machines through the Oracle WebLogic Server Administration Console.

#### To configure a machine through the Fusion Middleware Configuration Wizard:

1. When you get to the Select Optional Configuration screen in the Fusion Middleware Configuration Wizard, be sure to select **Managed Servers, Clusters and Machines**.
2. On the Configure Machines screen, click **Add**.

3. Specify values for these fields:

- **Name**

Enter a valid machine name, such as **Linux-Box**. The machine name identifies the machine within the Oracle WebLogic Server domain; it does not have to match the network name for the machine. The name must be unique within the domain.

- **Node manager listen address**

Select a value from the drop-down list for the listen address used by Node Manager to listen for connection requests. By default, the IP addresses defined for the local system and `localhost` are shown in the drop-down list. The default value is `localhost`.

If you specify an IP address for a machine that hosts the Administration Server and you need to access Node Manager, you must disable host name verification. For more information, see "Using Host Name Verification" in *Oracle Fusion Middleware Securing Oracle WebLogic Server*.

- **Node manager listen port**

Enter a valid value for the listen port used by Node Manager to listen for connection requests. The valid listen port range for Node Manager is from 1 to 65535. The default value is 5556.

### 1.9.4.2 Assigning Servers to a Machine

During the initial configuration of Oracle WebCenter Content, you can assign the Administration Server and Managed Servers to one or more machines through the Fusion Middleware Configuration Wizard.

After the initial configuration, you can assign Managed Servers to machines through the Oracle WebLogic Server Administration Console.

#### **To assign servers to a machine through the Fusion Middleware Configuration Wizard:**

1. On the Assign Servers to Machines screen, select one or more servers in the Server area
2. Click the right arrow button to assign the selected server or servers to a machine.
3. Click **Next** when you are done.

### 1.9.4.3 Enabling the Use of Startup Scripts Before Starting Node Manager

Before you start Node Manager the first time, you can run the `setNMProps.sh` script to set the `StartScriptEnabled` property to `true`. This setting is required for Node Manager to start the Managed Servers with startup scripts. You must use the `StartScriptEnabled` property to avoid class-loading failures and other problems.

If you enable Node Manager to use startup scripts on a machine that hosts one or more Managed Servers that are assigned to a machine, you can start and stop the Managed Servers remotely using the Administration Console or the command line. Node Manager can also automatically restart a Managed Server after an unexpected failure.

For a Records Managed Server, before you start Node Manager, be sure to complete the Records setup checklist, described in [Section 1.8, "Completing the Records Configuration."](#)



**To enable startup scripts and start Node Manager:**

1. Navigate to the following directory:

```
MIDDLEWARE_HOME/oracle_common/common/bin
```

*MIDDLEWARE\_HOME* is the directory where Oracle Fusion Middleware is installed.

2. Run the `setNMProps.sh` script to set the `StartScriptEnabled` property to `true` before starting Node Manager:

```
./setNMProps.sh
```

This is a one-time action. After you run this script, you can skip this step before starting Node Manager again.

3. Start Node Manager with the `startNodeManager` script.

**UNIX script:** `WL_HOME/server/bin/startNodeManager.sh`

**Windows script:** `WL_HOME\server\bin\startNodeManager.cmd`

*WL\_HOME* is the directory where Oracle WebLogic Server is installed.

For more information about Node Manager, see *Managing Server Startup and Shutdown for Oracle WebLogic Server* and *Node Manager Administrator's Guide for Oracle WebLogic Server*.

### 1.9.5 Increasing the Java Heap Size for a Managed Server

The default Java heap size is 512 MB for an Oracle WebLogic Server Managed Server. For better performance with the JRockit JDK, increase the heap size for each Managed Server in an Oracle WebCenter Content domain to 1 GB (1024 MB). If you use Node Manager to start the Managed Servers, you can specify a heap size for a Managed Server by setting the `USER_MEM_ARGS` environment variable in its startup script or command file.

To increase the Java VM heap size, you set the value of the `-Xmx` parameter. For more information, see [Section 1.3.3.2, "Setting the USER\\_MEM\\_ARGS Environment Variable in the Startup Script for a Managed Server"](#)

## 1.10 Uninstalling Oracle WebCenter Content

Uninstalling Oracle WebCenter Content from your system involves the following tasks:

- [Stopping Oracle Fusion Middleware](#)
- [Removing Oracle WebCenter Content Schemas](#)
- [Uninstalling Oracle WebCenter Content](#)

Use the instructions provided in this section for removing the software. If you try to remove the software manually, you may experience problems when you try to reinstall the software again at a later time. Following the procedures in this section will ensure that the software is properly removed.

## 1.10.1 Stopping Oracle Fusion Middleware

Before uninstalling Oracle Fusion Middleware software components, you should stop all servers and processes.

1. Stop each Oracle WebLogic Server Managed Server with the `StopManagedWebLogic` script.

- **UNIX script:** `MW_HOME/user_projects/domains/DomainHome/bin/stopManagedWebLogic.sh managed_server_name admin_url username password`

For example:

```
MW_HOME/user_projects/domains/content_domain/bin/stopManagedWebLogic.sh
IPM_server1 t3://myhost.example.com:7001 weblogic password
```

- **Windows script:** `MW_HOME\user_projects\domains\DomainHome\bin\stopManagedWebLogic.cmd managed_server_name admin_url username password`

2. Stop the Administration Server with the `stopWebLogic` script.

- **UNIX script:** `MW_HOME/user_projects/domains/DomainHome/bin/stopWebLogic.sh username password`
- **Windows script:** `MW_HOME\user_projects\domains\DomainHome\bin\stopWebLogic.cmd username password`

For more information, see "Starting and Stopping Oracle Fusion Middleware" in *Oracle Fusion Middleware Administrator's Guide*.

## 1.10.2 Removing Oracle WebCenter Content Schemas

Run the Repository Creation Utility (RCU) to drop one or more Oracle WebCenter Content schemas from your database.

### 1.10.2.1 Starting Repository Creation Utility

Insert the Repository Creation Utility DVD, and then start RCU with the `bin/rcu` or `BIN\rcu.bat` file:

- **UNIX path:** `RCU_HOME/bin/rcu`
- **Windows path:** `RCU_HOME\BIN\rcu.bat`

You can also download a ZIP file containing the Repository Creation Utility from either of these websites:

- Oracle Software Delivery Cloud at <http://edelivery.oracle.com/>
- Oracle Fusion Middleware 11g Software Downloads page on Oracle Technology Network (OTN) at <http://www.oracle.com/technetwork/middleware/weblogic/downloads/index.html>

---

**Note:** On a Windows operating system, do not unzip the RCU ZIP file to a directory with a name that contains spaces.

---

After downloading the ZIP file, extract the contents to a directory of your choice, and then start RCU as the preceding text describes.

### 1.10.2.2 Dropping Schemas

Follow these instructions to drop one or more Oracle WebCenter Content schemas with RCU:

1. Welcome screen

Click **Next**.

2. Create Repository screen

Select **Drop**, and click **Next**.

3. Database Connection Details screen

Provide the credentials to connect to your database instance. These are the same credentials you provided on this screen when you created the Oracle WebCenter Content schemas. For more information, see [Section 1.2.1.7, "Creating Oracle WebCenter Content Schemas with the Repository Creation Utility."](#)

Click **Next**. The Checking Prerequisites screen appears.

If you have any prerequisite errors, the Database Connection Details screen displays details about the errors. Fix any errors, and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

4. Select Components screen

Select a schema prefix, and then select the name of each schema you want to drop from the repository.

Click **Next**. The Checking Prerequisites screen appears.

If you have any prerequisite errors, the Select Components screen displays details about the errors. Fix any errors, and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

5. Summary screen

Click **Drop**. A DROP screen appears.

If you have any drop errors, the Summary screen displays details about the errors. Fix them, and click **Next** again.

---

---

**Note:** If your database is running on a Windows operating system, ensure that previous sessions accessing the tablespace are closed before the drop. After the drop, you might need to manually delete the dbf files.

---

---

After the schemas are dropped with no errors, click **OK** to dismiss the screen.

6. Completion Summary screen

Click **Close**.

### 1.10.3 Uninstalling Oracle WebCenter Content

The deinstaller attempts to remove the Oracle home directory from which it was started. Before you remove the WebCenter Content Oracle home, make sure that it is not in use by an existing domain and that you stop all running processes that use this Oracle home. After you remove the software, you will no longer be able to use the WebCenter Content Oracle home.

This procedure does not remove any Oracle WebLogic Server domains that you have created. It removes only the software in the WebCenter Content Oracle home.

#### To uninstall Oracle WebCenter Content:

1. Start the Oracle Fusion Middleware 11g WebCenter Content Installer with the `-deinstall` option from the `bin` subdirectory of the `oui` directory in your WebCenter Content Oracle home:

- **UNIX command:** `WCC_ORACLE_HOME/oui/bin/runInstaller -deinstall`

If you do not specify the JRE location, the installer either prompts you for the location or returns an error. If you get an error, retry the command with the JRE location included.

- **Windows command:** `WCC_ORACLE_HOME\oui\bin\setup.exe -deinstall`

If you double-click `setup.exe`, the installer either prompts you for the JRE location or returns an error. If you get an error, enter the command with the JRE location included. If you are prompted for the JRE location, enter the path, and then click **Enter** to start the deinstallation.

The installer requires the location of a Java Runtime Environment (JRE) on your system. A JRE was installed with Oracle Fusion Middleware. [Table 1-2](#) shows the default JRE locations.

2. Welcome screen  
Click **Next**.
3. Deinstall Oracle Home screen  
Verify the Oracle home you are about to uninstall, and click **Deinstall** to continue.
4. Deinstall Progress screen  
This screen shows the progress and status of the deinstallation.
5. Deinstall Completed screen  
Click **Finish**.
6. If the WebCenter Content Oracle home directory still exists, manually remove it and all of its subdirectories:
  - **UNIX operating system:**

```
cd MW_HOME
rm -rf WCC_ORACLE_HOME
```

- **Windows operating system**

Use either of two methods:

- In Windows Explorer, navigate to the `C:\MW_HOME` directory, right-click the `WCC_ORACLE_HOME` folder, and then select **Delete**.
- Remove the program groups from the `Start Menu\Programs` folder, if they exist. For example, you might remove the following program groups from `C:\Documents and Settings\All Users\Start Menu\Programs`:

**Oracle WebLogic (BEAHOME 1)**

**Oracle WebCenter Content 11g - Home1**

The folder and program group names might be different on your Windows operating system.

## 1.11 Additional Resources

For additional information, see *Oracle WebCenter Content Installation Guide*, which is available on the Oracle Fusion Middleware Documentation DVD.

Documentation is available for sale through your Oracle representative or from the Oracle Store at

<http://shop.oracle.com>

To download free release notes, installation documentation, white papers, or other collateral, visit Oracle Technology Network (OTN). You must register online before using OTN; registration is free and can be done on OTN at

<http://www.oracle.com/technetwork/join>

If you already have a user name and password for OTN, then you can go directly to the Oracle Documentation page on OTN at

<http://www.oracle.com/technetwork/documentation>

### 1.11.1 Oracle Support Services

If you purchased Oracle Product Support, you can call Oracle Support Services for assistance. Oracle Support Services include phone assistance, version updates, and access to Oracle service offerings. You have access to phone support 24 hours a day, 7 days a week. In the U.S.A., you can call Product Support at 1-800-223-1711.

Make sure you have your CSI (CPU Support Identifier) number ready when you call. Keep the CSI number for your records because it is your key to Oracle Support Services. The Oracle Store sends the CSI number to you in an email alert when it processes your order. If you do not have your CSI number and you are in the U.S.A., you can look up your CSI number by accessing the online Order Tracker, which provides detailed order information. Go to the Oracle Store and click Order Tracker, above the top navigation bar.

For Oracle Support Services locations outside the U.S.A., call your local support center for information on how to access support. To find the local support center in your country, visit the Support Web Center at

<http://www.oracle.com/support>

The Support Web Center has information about Oracle Support Services:

- Contact information
- Instructions for accessing electronic services
- Helpful websites
- Support resources
- Oracle support portfolio
- Oracle Support Services news

With Oracle Product Support, you have round-the-clock access to My Oracle Support (formerly Oracle*MetaLink*), Oracle Support Services premier web support offering. My Oracle Support offers you access to installation assistance, product documentation, and a technical solution knowledge base.

It has technical forums, where you can post questions about your Oracle products and receive answers from Oracle Technical Support Analysts and other Oracle users. The questions and answers remain posted for the benefit of all users.

My Oracle Support includes these options:

- Technical Assistance Request (TAR) access
- Patch Downloads
- Bug Database Query Access
- Product Life-Cycle Information

You can access My Oracle Support at

<http://support.oracle.com>

### 1.11.2 Version Updates

If you do not have a currently supported license, you can purchase the most recent version of an Oracle product from the Oracle Store at

<http://shop.oracle.com>

If you do have a currently supported license, you can place nonurgent requests for version update shipments through the iTAR feature on My Oracle Support. You will need to log the iTAR type as a U.S. Client Relations/Non-Technical Request.

You can also request Version Update shipments in the U.S.A. by calling Client Relations. When requesting a Version Update, provide the following information to the Client Relations Analyst:

- CSI number
- Contact information
- Operating system and platform
- Product name
- Shipping address
- Product version number

Outside the U.S.A., call your local Oracle Support Center.

### 1.11.3 Premium Services

For information on our Premium Services, including on-site support, OracleGOLD, remote services, and upgrade packages, visit the Support Web Center at

<http://www.oracle.com/support>

You can also call your Support Sales Representative in the U.S.A at 1-800-833-3536.

### 1.11.4 Quick Reference

For quick access to additional information, see [Table 1-4](#).

**Table 1-4 Links to Additional Information and Resources**

<b>Task</b>	<b>Contact Information or Website</b>
Purchase additional products, full-use licenses, version updates, and documentation in the U.S.A.	<a href="http://shop.oracle.com">http://shop.oracle.com</a>
Access technical resources for developers	<a href="http://www.oracle.com/technetwork">http://www.oracle.com/technetwork</a>
Access installation documentation	<a href="http://www.oracle.com/technetwork/documentation">http://www.oracle.com/technetwork/documentation</a>
Access information about technical support	<a href="http://www.oracle.com/support">http://www.oracle.com/support</a>
Locate local Oracle Support Centers outside the U.S.A.	<a href="http://www.oracle.com/support">http://www.oracle.com/support</a>
Locate local Oracle offices outside the U.S.A.	<a href="http://www.oracle.com/us/corporate/contact/global-070511.html">http://www.oracle.com/us/corporate/contact/global-070511.html</a>
Call Client Relations in the U.S.A.	1-800-223-1711
Speak with your sales representative in the U.S.A.	1-800-ORACLE-1
Locate TTY Access to technical support in the U.S.A.	1-800-446-2398

