Oracle® Fusion Middleware

Quick Installation Guide for Oracle Enterprise Content
Management Suite

11*g* Release 1 (11.1.1)

E14538-02

May 2010

ORACLE®

Oracle Fusion Middleware Quick Installation Guide for Oracle Enterprise Content Management Suite, 11*g* Release 1 (11.1.1)

E14538-02

Contents

Preface

This quick installation guide provides instructions for installing and configuring Oracle Enterprise Content Management Suite on a single host, using default values for most of the configuration. It also provides instructions for deinstalling the suite.

Audience

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

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For additional information, see the following documents:

- *Oracle Fusion Middleware Administrator's Guide*

- *Oracle Fusion Middleware Concepts*

- *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Enterprise Content Management Suite*

- *Oracle Fusion Middleware High Availability Guide*

- *Oracle Fusion Middleware Administrator's Guide for Conversion*

- *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*

- *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*

- *Oracle Fusion Middleware Installation Planning Guide*

- *Oracle Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server*

- *Oracle Fusion Middleware Repository Creation Utility User's Guide*

Conventions

In this document, the term **UNIX system** or **UNIX operating 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.

Convention	Meaning
boldface	Boldface type indicates a graphical user interface element associated with an action or a term defined in the text or glossary.
italic	Italic type indicates a book title, emphasis, or a placeholder variable for which you can supply a value.
monospace	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 Enterprise Content Management Suite

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

This guide covers these topics:

- Installation Overview
- Meeting System Requirements and Certification
- Preparing to Install
- Creating Oracle Enterprise Content Management Suite Schemas
- Installing Oracle Enterprise Content Management Suite in a Middleware Home
- Configuring Oracle Enterprise Content Management Suite
- Performing Postinstallation Configuration
- Starting the Administration Server
- Completing the Oracle UCM Configuration
- Completing the Oracle IBR Configuration
- Completing the Oracle I/PM Configuration
- Completing the Oracle IRM Configuration
- Completing the Oracle URM Configuration
- Starting Managed Servers
- Starting Node Manager
- Verifying the Installation
- Deinstalling Oracle Enterprise Content Management Suite
- Additional Resources

1.1 Installation Overview

This guide contains instructions for installing and configuring the following Oracle Enterprise Content Management Suite products on a single host:

- **Oracle Universal Content Management (Oracle UCM)**

- **Oracle Inbound Refinery (Oracle IBR)**

- **Oracle Imaging and Process Management (Oracle I/PM)**

- **Oracle Information Rights Management (Oracle IRM)**

- **Oracle Universal Records Management (Oracle URM)**

Oracle Enterprise Content Management Suite requires a Middleware home with Oracle WebLogic 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 1.3.3, "Installing Oracle WebLogic Server in a Middleware Home."

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_3.5
    jdk160_18
    jrockit_160_17_R28.0.0-679
    logs
    modules
    wlserver_10.3
    oracle_common
    utils
    ECM_ORACLE_HOME
    user_projects
```

The installation of Oracle Enterprise Content Management Suite is a two-step process:

1. Running the installer to perform a base installation of the suite's products

2. Running Fusion Middleware Configuration Wizard to deploy one or more of the suite's 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	Meeting System Requirements and Certification
	Preparing to Install
	Installing Oracle WebLogic Server in a Middleware Home
	Creating Oracle Enterprise Content Management Suite Schemas
Installation tasks	Installing Oracle Enterprise Content Management Suite in a Middleware Home
	Configuring Oracle Enterprise Content Management Suite
Postinstallation tasks	Performing Postinstallation Configuration
	Verifying the Installation

Figure 1–1 illustrates the topology that installation and configuration of these products will create on your system. Numbers in the figure show the order in which to perform certain tasks.

Figure 1–1   Installation Topology and Order of Tasks
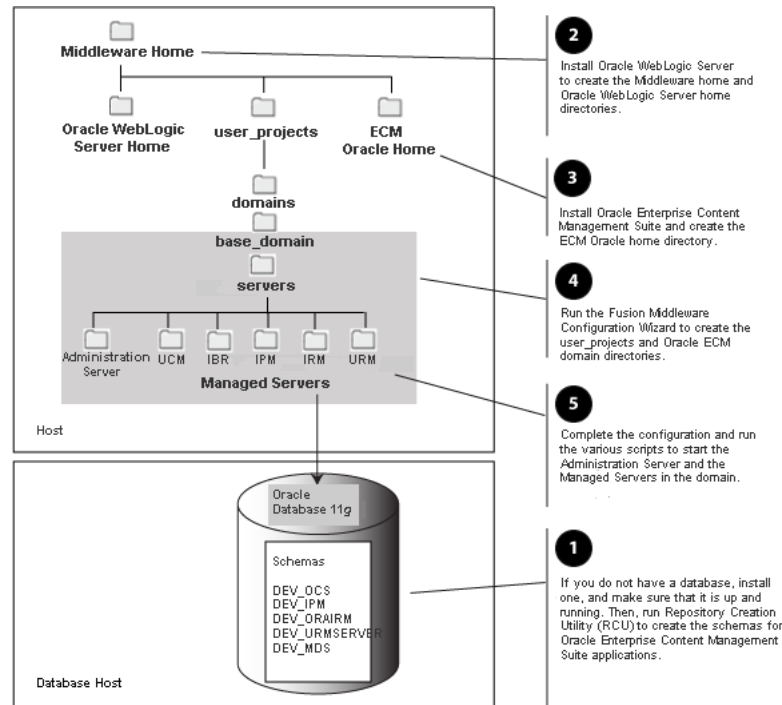
This guide is for users who are installing Oracle Enterprise Content Management Suite for the first time to become familiar with the products in the suite, show what they can do, perform basic testing, or prepare a POC. For information about installing a production system, see *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

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

For information about installing the suite on multiple machines, reassociating the identity store with an external LDAP directory, clustering, and other optional configurations, see *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

1.2 Meeting System Requirements and Certification

For system requirements and certification information, refer to the following documents, available on Oracle Technology Network (OTN):

- "Oracle Fusion Middleware System Requirements and Specifications" contains information related to hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches. This document is at

http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm

■ "Oracle Fusion Middleware Supported System Configurations" contains information related to supported installation types, platforms, operating systems, databases, JDKs, and third-party products. This document is at

`http://www.oracle.com/technology/software/products/ias/files/fusion_`
`certification.html`

> **Note:** 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.

1.3 Preparing to Install

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

■ Installing a Database

■ Creating Schemas for Oracle Enterprise Content Management Suite Applications

■ Installing Oracle WebLogic Server in a Middleware Home

■ Installing and Configuring Java Access Bridge (Windows Operating System Only)

■ Configuring a DHCP Host

■ Installing on a Non-Networked Computer

■ Installing on a Multihomed Computer

1.3.1 Installing a Database

The configuration of Oracle Enterprise Content Management Suite 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 suite's 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 the suite.

The database must be compatible with RCU. This guide describes using RCU with Oracle Database. For more information, see Section 1.4, "Creating Oracle Enterprise Content Management Suite Schemas." For information about using Microsoft SQL Server or IBM DB2 with RCU, see *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

> **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.

The overall performance of an Oracle UCM 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 the latest information about supported databases, see the Oracle Fusion Middleware Supported System Configurations page on Oracle Technology Network at

http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

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

http://www.oracle.com/technology/documentation/database.html

1.3.2 Creating Schemas for Oracle Enterprise Content Management Suite Applications

Before you can configure an Oracle Enterprise Content Management Suite application, you need to use RCU to create a schema for it in the database. You can create the schema before or after you install Oracle WebLogic Server or Oracle Enterprise Content Management Suite. For information about how to create schemas for applications, see Section 1.4, "Creating Oracle Enterprise Content Management Suite Schemas."

1.3.3 Installing Oracle WebLogic Server in a Middleware Home

Oracle Enterprise Content Management Suite requires a Middleware home directory in which Oracle WebLogic Server is 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. Insert the Oracle WebLogic Server DVD, or download WebLogic Server 11gR1 (10.3.3) for your platform from either of these web sites:

    ■ Oracle E-Delivery at

    http://edelivery.oracle.com/

    ■ Oracle WebLogic Server Downloads page on Oracle Technology Network (OTN) at

    http://www.oracle.com/technology/software/products/ias/htdocs/wls_main.html

    You can download one of the following executable files:

    ■ wls_linux32.bin (for a Linux x86 operating system)

    ■ wls_win32.exe (for a 32-bit Windows operating system)

    ■ wls_generic.jar (for any 64-bit operating system)

    The 32-bit executable files 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, described in Section 1.2, "Meeting System Requirements and Certification."

2. Either run your installer file directly from the DVD, or copy the file to your local system and run it locally, after considering these notes:

- 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.

- 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, execute 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
   ```

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

```
./wls_linux32.bin
```

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

```
wls_win32.exe
```

To run the installer on a 64-bit UNIX operating system, use either of these commands:

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

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

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

```
JAVA_HOME\bin\java -jar wls_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 Enterprise Content Management Suite.

   For more information, see "Middleware Home and WebLogic Home Directories" in *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* will represent in path names in this document. The default location for *WL_HOME* follows:

   - **UNIX operating system**

     MW_HOME/wlserver_10.3

   - **Windows operating system**

     MW_HOME\wlserver_10.3

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

1.3.4 Installing and Configuring Java Access Bridge (Windows Operating System Only)

If you are installing on a Windows operating system, you can install and configure Java Access Bridge for Section 508 Accessibility:

1. Download Java Access Bridge from the Java SE Desktop Accessibility page of the Sun Developer Network at

   http://java.sun.com/javase/technologies/accessibility/accessbridge/

2. Install Java Access Bridge.

3. Copy the `access-bridge.jar` and `jaccess-1_4.jar` files from your installation location to the `jre\lib\ext` directory.

4. Copy the `WindowsAccessBridge.dll`, `JavaAccessBridge.dll`, and `JAWTAccessBridge.dll` files from your installation location to the `jre\bin` directory.

5. Copy the `accessibility.properties` file to the `jre\lib` directory.

For more information about accessibility, see "Using Oracle Fusion Middleware Accessibility Options" in *Oracle Fusion Middleware Administrator's Guide*.

1.3.5 Configuring a DHCP Host

If you are installing Oracle Enterprise Content Management Suite on a DHCP host, you must follow the configuration steps in this section for your operating system.

1.3.5.1 Configuring a DHCP Host on a UNIX System

On a UNIX operating system, configure the host to resolve host names to the loopback IP address by modifying the `/etc/hosts` file to contain the following entries:

```
127.0.0.1 hostname.domainname hostname
127.0.0.1 localhost.localdomain localhost
```

To check that the host name resolves to the loopback IP address, use this command:

```
/bin/ping hostname.domainname
```

1.3.5.2 Configuring a DHCP Host on a Windows Operating System

On a Windows operating system, install a loopback adapter on the DHCP server (see Section 1.3.5.3, "Installing a Loopback Adapter on a Windows Operating System"). This assigns a local IP address to your computer.

After installing the adapter, add a line immediately after the `localhost` line in the `%SYSTEMROOT%\system32\drivers\etc\hosts` file, with the following format:

```
IP_address    hostname.domainname    hostname
```

Replace `IP_address` with the local IP address of the loopback adapter, `hostname` with the name of the host, and `domainname` with the name of the domain.

1.3.5.3 Installing a Loopback Adapter on a Windows Operating System

On a Windows operating system, you can install a loopback adapter on the DHCP server to assign a local IP address to your computer.

To install a loopback adapter on a Windows operating system:

1. Open Control Panel.

2. Select **Add Hardware**.

3. In the "Welcome" window, click **Next**.

4. On the "Is the hardware connected?" window, select **Yes, I have already connected the hardware**, then click **Next**.

5. In the "The following hardware is already installed on your computer" window, in the list of installed hardware, select **Add a new hardware device**, then click **Next**.

6. In the "The wizard can help you install other hardware" window, select **Install the hardware that I manually select from a list**, then click **Next**.

7. In the "From the list of hardware types, select the type of hardware you are installing" window, select **Network adapters**, then click **Next**.

8. In the "Select Network Adapter" window, make the following selections:

   - Manufacturer: **Microsoft**

   - Network Adapter: **Microsoft Loopback Adapter**

9. Click **Next**.

10. In the "The wizard is ready to install your hardware" window, click **Next**.

11. In the "Completing the Add Hardware Wizard" window, click **Finish**.

12. Restart your computer.

13. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections control panel.

14. Right-click the connection that was just created. This is usually named **Local Area Connection 2**. Choose **Properties**.

15. On the **General** tab, select **Internet Protocol (TCP/IP)**, then click **Properties**.

16. In the Internet Protocol (TCP/IP) Properties dialog box, click **Use the following IP address**, and then do the following steps:

    a. IP Address: Enter a nonroutable IP for the loopback adapter, such as one of the following nonroutable addresses:

    ```
    192.168.x.x (x is any value between 1 and 255)
    10.10.10.10
    ```

    b. Subnet mask: Enter `255.255.255.0`.

    c. Record the values you entered because you will need them later in this procedure.

    d. Leave all other fields empty.

    e. Click **OK**.

17. In the Local Area Connection 2 Properties dialog box, click **OK**.

18. Close the Network Connections control panel.

19. Restart your computer.

1.3.5.4 Removing a Loopback Adapter from a Windows Operating System

You can remove a loopback adapter through Control Panel.

To remove a loopback adapter from a Windows operating system:

1. Start the System control panel.

2. On the **Hardware** tab, click **Device Manager**.

3. In the Device Manager window, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.

4. Right-click **Microsoft Loopback Adapter** and select **Uninstall**.

5. Click **OK**.

1.3.6 Installing on a Non-Networked Computer

You can install Oracle Enterprise Content Management Suite on a non-networked computer, such as a laptop. Because a non-networked computer has no access to other computers, you have to install all the components that you need on the computer.

In addition, you must follow the instructions in Section 1.3.5, "Configuring a DHCP Host" to install a loopback adapter and modify the hosts file on your system.

1.3.7 Installing on a Multihomed Computer

You can install Oracle Enterprise Content Management Suite on a multihomed computer. A multihomed computer is associated with multiple IP addresses. This is typically achieved by having multiple network cards on the computer. Each IP address is associated with a host name; additionally, you can set up aliases for each host name.

The installer picks up the fully qualified domain name from the first entry in the hosts file:

- **UNIX operating system**

  ```
  /etc/hosts
  ```

- **Windows operating system**

  ```
  %SYSTEMROOT%\system32\drivers\etc\hosts
  ```

For example, the installer would pick up myhost1.example.com for configuration if your file contains the following entries:

```
127.0.0.1 localhost.localdomain localhost
10.148.56.76 myhost1.example.com myhost1
10.148.56.77 devhost2.example.com devhost2
```

For specific network configuration of a system component, refer to the individual component's configuration documentation.

1.4 Creating Oracle Enterprise Content Management Suite Schemas

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

To create Oracle Enterprise Content Management Suite Schemas:

1. Insert the Repository Creation Utility DVD, and then start RCU from the `bin` or `BIN` directory in the `rcuHome` directory:

   - **UNIX operating system**

     ```
     cd rcuHome/bin
     ./rcu
     ```

   - **Windows operating system**

     ```
     cd rcuHome\BIN
     rcu.bat
     ```

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

   - Oracle E-Delivery at

     http://edelivery.oracle.com/

   - Oracle Fusion Middleware 11*g* Software Downloads page on Oracle Technology Network (OTN) at

     http://www.oracle.com/technology/software/products/middleware

   ---

   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 run RCU as the preceding text describes.

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 *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

   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 and 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 **Enterprise Content Management** in the Components list, and then select one or more of the following applications:

   - **Oracle Information Rights Management**

   - **Oracle Content Server 11g - Complete**

   - **Oracle Content Server 11g - Search Only**

   - **Oracle Universal Records Management 11g**

   - **Oracle Imaging and Process Management**

   To create a schema for Oracle UCM, select **Oracle Content Server 11g - Complete**.

   If you select **Oracle Imaging and Process Management**, you should also select **Oracle Content Server 11g - Complete** to use Oracle UCM as the Oracle I/PM repository.

   Also, for Oracle WSM Policy Manager, expand **AS Common Schemas**, and then select **Metadata Services**.

   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 Oracle URM 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 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 appears.

   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

   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 data for an account, use the SQL statement `SELECT * FROM all_users` or `SELECT * FROM dba_users`.

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

1.5 Installing Oracle Enterprise Content Management Suite in a Middleware Home

Oracle Enterprise Content Management Suite requires a Middleware home with Oracle WebLogic 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 1.3.3, "Installing Oracle WebLogic Server in a Middleware Home." For more information about the structure and contents of a Middleware home, see "Understanding Oracle Fusion Middleware Concepts" in *Oracle Fusion Middleware Administrator's Guide*.

The ECM Oracle home contains the binary and library files necessary for Oracle Enterprise Content Management Suite. *ECM_ORACLE_HOME* represents the ECM Oracle home in path names.

When you install Oracle Enterprise Content Management Suite, you perform a base installation of the following products in an ECM Oracle home directory (represented by *ECM_ORACLE_HOME* in path names) under the Middleware home directory on your system:

- Oracle Universal Content Management (Oracle UCM)
- Oracle Inbound Refinery (Oracle IBR)
- Oracle Imaging and Process Management (Oracle I/PM)
- Oracle Information Rights Management (Oracle IRM)
- Oracle Universal Records Management (Oracle URM)

After installation, you can deploy one or more of these products to an Oracle WebLogic Server domain, as applications.

> **Note:** For document conversions on a Solaris SPARC platform, Oracle I/PM 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 Oracle I/PM. You can download GCC from the Sunfreeware web site 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 Oracle I/PM Managed Server. If you are using a later version of GCC, set that version instead of `3.4.2`.

1.5.1 Providing the Location of an 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 an 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 an 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**.

1.5.2 Installing Oracle Enterprise Content Management Suite

You can install Oracle Enterprise Content Management Suite before or after you create schemas for the suite's applications. You can deploy and configure one or more of these applications any time later by creating or extending an Oracle WebLogic Server domain.

To install Oracle Enterprise Content Management Suite:

1. Start the Oracle Enterprise Content Management Suite installer, which is on Disk 1 of the suite's media.

   If you are installing the suite from a ZIP file, you need to unzip the file to a directory. `Disk 1` will be a subdirectory of the suite's media directory.

   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.

Table 1–2   Default JRE Locations

Operating System	Production Environment	Development Environment
UNIX	*MW_HOME*/jrockit_160_17_Rnn.n.n-nnn/jre	*MW_HOME*/jdk160_18/jre
Windows	*MW_HOME*\jrockit_160_17_Rnn.n.n-nnn\jre	*MW_HOME*\jdk160_18\jre

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

- **UNIX operating system**

  ```
  cd ecm_media_loc/Disk1
  ./runInstaller -jreLoc jre_location
  ```

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

- **Windows operating system**

  ```
  cd ecm_installer_loc
  setup.exe -jreLoc jre_location
  ```

2. Welcome screen

   Click **Next**.

3. Prerequisite Checks screen

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

4. Specify Installation Location screen

   Oracle Middleware Home: Select the Middleware home directory (*MW_HOME*).

   Oracle Home Directory: Specify the directory where you want to install Oracle Enterprise Content Management Suite, inside the Middleware home directory:

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

   The installation directory becomes the ECM Oracle home directory for Oracle Enterprise Content Management Suite, represented by *ECM_ORACLE_HOME* in path names. Run-time components cannot write to this directory.

   Note: This document refers to this directory as the ECM Oracle home (*ECM_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 *Oracle Fusion Middleware Installation Planning Guide*.

   Click **Next**.

5. Installation Summary screen

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

6. Installation Progress screen

   After the progress reaches 100%, click **Next** to go to the last screen.

7. Installation Completed screen

   Click **Save** to save the installation configuration, and then click **Finish**.

1.6 Configuring Oracle Enterprise Content Management Suite

After you have successfully run the installer, you can deploy and configure the following Oracle Enterprise Content Management Suite products as applications:

- Oracle Universal Content Management (Oracle UCM)

- Oracle Inbound Refinery (Oracle IBR)

- Oracle Imaging and Process Management (Oracle I/PM)

- Oracle Information Rights Management (Oracle IRM)

- Oracle Universal Records Management (Oracle URM)

> **Note:** The Oracle I/PM 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 Oracle UCM, Oracle IBR, Oracle I/PM, Oracle IRM, or Oracle URM to a Managed Server or cluster that already has another application deployed.

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 Operating System

- Installing Libraries and Setting Environment Variables for Outside In Technology

For information about post-installation configuration tasks, including the configuration of Oracle UCM, Oracle IBR, Oracle I/PM, Oracle IRM, or Oracle URM, see Section 1.7, "Performing Postinstallation Configuration."

1.6.1 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 example, for Oracle I/PM, you can extend the domain with Oracle SOA Suite, which includes Oracle BPEL Process Manager.

The following procedure is for creating an Oracle WebLogic Server domain. For information about extending a domain, see "Extending an Existing Domain" in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

To create an Oracle WebLogic Server domain:

1. Start Fusion Middleware Configuration wizard:

   - **UNIX operating system**

     ```
     cd ECM_ORACLE_HOME/common/bin
     ./config.sh
     ```

   - **Windows operating system**

     ```
     cd ECM_ORACLE_HOME\common\bin
     config.cmd
     ```

   ECM_ORACLE_HOME represents the ECM Oracle home directory, where Oracle Enterprise Content Management Suite is installed.

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 one or more of these products:

   - **Oracle Universal Records Management Server**
   - **Oracle Information Rights Management**
   - **Oracle Universal Content Management - Inbound Refinery**
   - **Oracle Universal Content Management - Content Server**
   - **Oracle Imaging and Process Management**

   When you select **Oracle Imaging and Process Management**, you should also select **Oracle Universal Content Management - Content Server**. Oracle I/PM automatically selects **Oracle UCM RIDC**. If you deselect this automatic selection, Oracle Imaging and Process Management will also be deselected.

   When you select any Oracle ECM 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 ECM applications will also be deselected.

   Click **Next**.

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 operating system**

     ```
     MW_HOME/user_projects/domains/
     ```

   - Windows operating stem

     ```
     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 operating stem

  MW_HOME/user_projects/applications/

- Windows operating stem

  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 160_18** for development mode or, on a 64-bit system, the JDK you installed.

   Click **Next**.

7. Configure JDBC Component Schemas screen

   Configure a component schema in 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 Enterprise Content Management Suite" chapter in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

   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.

    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 1.14, "Starting Managed Servers."

1.6.2 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 your system does not have enough memory for 1 GB of RAM for the Java VM, then you will get an error. 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.

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

- Setting Server Startup Parameters for Managed Servers with the Administration Console

  This method is required if the Managed Server process will be run from Node Manager. For more information about running Managed Servers from Node Manager, see Section 1.15, "Starting Node Manager."

- 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. For more information about running Managed Servers from the command line, see Section 1.14, "Starting Managed Servers."

1.6.2.1 Setting Server 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 to at least 1 gigabyte, 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.

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=1024m`
Sun	Windows	`-Xms256m -Xmx1024m -XX:CompileThreshold=8000 -XX:PermSize=128m -XX:MaxPermSize=1024m`
JRockit	UNIX	`-Xms256m -Xmx1024m -XnoOpt`
JRockit	Windows	`-Xms256m -Xmx1024m -XnoOpt`

    d. Save the configuration changes.

5. Restart any running Managed Servers.

1.6.2.2 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 to at least 1 gigabyte, 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 (`.sh`)

  ```
  export USER_MEM_ARGS="-Xms256m -Xmx1024m -XX:CompileThreshold=8000
  -XX:PermSize=128m -XX:MaxPermSize=1024m"
  ```

- UNIX C shell (`.csh`)

  ```
  setenv  USER_MEM_ARGS "-Xms256m -Xmx1024m -XX:CompileThreshold=8000
  -XX:PermSize=128m -XX:MaxPermSize=1024m"
  ```

- Windows command script (`.cmd`)

  ```
  set USER_MEM_ARGS="-Xms256m -Xmx1024m -XX:CompileThreshold=8000
  -XX:PermSize=128m -XX:MaxPermSize=1024m"
  ```

> **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.

1.6.3 Setting Up Fonts on a UNIX Operating System

On a UNIX system, you need to make sure TrueType fonts are set up for Oracle IBR and Oracle UCM Dynamic Converter. If you are using a language other than English, you also need to set up fonts for national language support.

1.6.3.1 Setting Up TrueType Fonts on a UNIX System

For Oracle IBR and Oracle UCM Dynamic Converter to work correctly on a UNIX operating system, you need to set up TrueType fonts on the machine where Oracle IBR or the Dynamic Converter is running. If these fonts are not available on your system, you need to install them. Then you can configure Oracle IBR with the path to the font 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, Oracle I/PM 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 Oracle I/PM. You can download GCC from the Sunfreeware web site 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 Oracle I/PM 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`

To set the path to the font directory in Oracle IBR:

1. Log in to Oracle IBR.

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**.

6. Restart Oracle IBR.

1.6.3.2 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.

1.6.3.3 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.

1.6.4 Installing Libraries and Setting Environment Variables for Outside In Technology

Oracle UCM, Oracle IBR, Oracle I/PM, and the Oracle I/PM Advanced Viewer for clients use Outside In Technology (OIT), which requires certain libraries that are not part of Oracle ECM. Before an Oracle UCM, Oracle IBR, or Oracle I/PM 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.

1.6.4.1 Installing Libraries for Outside In Technology on UNIX Platforms

Before you start an Oracle UCM, Oracle IBR, or Oracle I/PM Managed Server, you need the libraries required for your platform are 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 requires GCC package 3.4.2 or later, which you can download from the Sunfreeware web site at

http://www.sunfreeware.com

HPUX Itanium requires GCC package 3.3.6, which you can download from the following web site:

http://hpacxx.external.hp.com/gcc

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 or directory in an HPUX ia64 system, on the machine where Oracle I/PM or Oracle UCM 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

```
/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, `compat-libstdc++-5.0.7-121.1 RPM` is required.

1.6.4.2 Setting Library Paths in Environment Variables on UNIX Platforms

Before Oracle Inbound Refinery or the Oracle UCM Dynamic Converter uses Outside In Technology for document and image conversions, the following environment variables must be set in the or Oracle I/PM or Oracle UCM Managed Server on the specified UNIX platforms:

- Environment variables for library paths for Oracle I/PM

  - 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=$DOMAIN_HOME/oracle/imaging/imaging-server
    ```

  - HP-UX Itanium:

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

■ Environment variables for library paths for Oracle UCM with Dynamic Converter and Oracle IBR

– 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 Oracle IBR `intradoc.cfg` file at *DomainHome*/ucm/ibr/bin:

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

Then restart Oracle IBR.

– 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 Oracle UCM 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 Oracle I/PM or Oracle IBR Managed Server or the Oracle UCM Dynamic Converter.

1.6.4.3 Downloading Visual C++ Libraries for a Windows Operating System

OutsideIn 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`.

1.7 Performing Postinstallation Configuration

After installing Oracle Enterprise Content Management Suite and configuring one or more of its applications on Oracle WebLogic Server, you need to start the Administration Server, complete the application configurations, start the Managed Servers and Node Manager, and verify the configuration. The following topics describe these postinstallation tasks:

- Starting the Administration Server

- Completing the Oracle UCM Configuration

- Completing the Oracle IBR Configuration

- Completing the Oracle I/PM Configuration

- Completing the Oracle IRM Configuration

- Completing the Oracle URM Configuration

- Starting Managed Servers

- Starting Node Manager

- Verifying the Installation

> **Note:** This guide describes postinstallation tasks for a development system. In a production system, Oracle Enterprise Content Management Suite 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 your application with an external LDAP authentication provider, it is easier to do this before you complete the configuration of a Managed Server and before you connect a Managed Server to a repository. For more information, see "Reassociating the Identity Store with an External LDAP Authentication Provider" in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

1.8 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 under the domain home directory:

   - **UNIX operating system**

     ```
     cd MW_HOME/user_projects/domains/domain_name/bin
     ./startWebLogic.sh
     ```

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

- **Windows operating system**

  `MW_HOME\user_projects\domains\domain_name\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 Completing the Oracle UCM Configuration

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

To complete the Oracle UCM configuration:

1. Start the Administration Server, as described in Section 1.8, "Starting the Administration Server," and the Oracle UCM Managed Server, as described in Section 1.14, "Starting Managed Servers."

2. Browse to the Oracle Content Server postinstallation configuration page, at this web site:

   `http://server:16200/cs/`

3. Enter or edit all necessary values.

   In the **FullText Search Option** field, you can select a full-text search engine.

   For information about the values to enter, see "Completing the Initial Configuration of Oracle Content Server" in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*

4. To enable access from Oracle IBR, provide a value for **Incoming Socket Connection Address Security Filter**, as follows:

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

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

5. If you want to set up a provider from Oracle IBR back to Oracle 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 *DOMAIN_HOME*`/ucm/cs/config/config.cfg` and restarting Oracle Content Server.

6. Restart Oracle Content Server.

   You can restart an Oracle Content Server instance with the Oracle WebLogic Server Administration Console, Oracle WebLogic Scripting Tool (WLST) commands, or Fusion Middleware Control.

   For more information, see "Restarting Content Server" in *Oracle Fusion Middleware System Administrator's Guide for Universal Content Management*.

1.10 Completing the Oracle IBR Configuration

Before you can use Oracle IBR with Oracle UCM, you need to complete the configuration of Oracle IBR for document and image conversion to work with Oracle 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 Oracle IBR Managed Server. For more information, see Section 1.6.4, "Installing Libraries and Setting Environment Variables for Outside In Technology."

To Complete the Oracle IBR configuration:

1. Configure Oracle Content Server, as described in Section 1.9, "Completing the Oracle UCM Configuration."

2. Start the Oracle IBR Managed Server, as described in Section 1.14, "Starting Managed Servers."

3. Browse to the Oracle IBR postinstallation configuration page, at this web site:

   `http://`*server*`:16250/ibr/`

4. Enter or edit all necessary values.

   ■ To enable access from Oracle Content Server, provide a value for **Incoming Socket Connection Address Security Filter**, as follows:

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

     This value should be the IP address of the Oracle Content Server instance or instances that will send jobs to Oracle IBR, not the IP address of Oracle IBR. (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 *DOMAIN_HOME*`/ucm/ibr/config/config.cfg` and restarting Oracle IBR.

   ■ 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 *DOMAIN_HOME*`/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 Oracle IBR on Oracle UCM" in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

5. Restart Oracle IBR.

6. Check all the entries in *DOMAIN_HOME*/ucm/ibr/config/config.cfg have the values that you want for the Oracle IBR configuration.

For more information, see "Installing and Configuring Oracle IBR on Oracle UCM" in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

1.11 Completing the Oracle I/PM Configuration

Oracle I/PM uses Oracle Universal Content Management (Oracle UCM) for its repository. Your system needs to have Oracle UCM configured before the configuration of Oracle I/PM.

The user who logs in first to an Oracle Imaging and Process Management (Oracle I/PM) Managed Server is provisioned with full security throughout the server. When this user first logs in, Oracle I/PM provides a user interface to complete the configuration, including connecting to a repository or repositories and, optionally, to a Business Process Execution Language (BPEL) server.

> **Note:** This section describes how to complete the Oracle I/PM configuration on a development system. In a production system, Oracle Enterprise Content Management Suite 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 Oracle I/PM with an external LDAP authentication provider, it is easier to do this before you complete the configuration of the Oracle I/PM Managed Server and before you connect it to the Oracle Universal Content Management (Oracle UCM) repository. For more information, see "Reassociating the Identity Store with an External LDAP Authentication Provider" in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

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

- Starting the Oracle I/PM Managed Server and Accessing the Web Client
- Connecting to the Oracle UCM Repository
- Configuring the AgentUser and GDFontPath MBeans

For information about optional configuration tasks, see "Completing the Oracle I/PM Configuration After First Login" in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

1.11.1 Starting the Oracle I/PM Managed Server and Accessing the Web Client

After you complete the configuration tasks in Section 1.6, "Configuring Oracle Enterprise Content Management Suite," you can start the Oracle I/PM 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, Oracle I/PM 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 Oracle I/PM. You can download GCC from the Sunfreeware web site 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 Oracle I/PM Managed Server. If you are using a later version of GCC, set that version instead of 3.4.2.

  - AIX:

    ```
    LIBPATH=$DOMAIN_HOME/oracle/imaging/imaging-server
    ```

  - HP-UX Itanium:

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

    For more information, see Section 1.5, "Installing Oracle Enterprise Content Management Suite in a Middleware Home."

- 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.

To start the Oracle I/PM Managed Server and access the web client:

1. Go to the bin directory under your domain home directory.

2. Start the Oracle I/PM Managed Server (see Section 1.14).

3. Enter the administrator user name and password.

4. Wait until the Oracle I/PM Managed Server is running.

5. Access the web client at this URL: http://*hostname*:16000/imaging

    Log in with the administrator user name and password.

    > **Note:** The first user to connect to the Oracle I/PM system is registered as the Oracle I/PM administrator.

1.11.2 Connecting to the Oracle UCM Repository

Before Oracle I/PM can use the Oracle UCM repository, you need to configure a connection to Oracle Content Server. You can create a connection to it from Oracle I/PM.

To connect to an Oracle UCM repository:

1. Open a web browser, and navigate to this web site:

    `http://`*`hostname`*`:16000/imaging`

2. Log in with the administrator user name and password.

3. Navigate to the **Manage Connections** tray, and select **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:** `weblogic`

    ■ **Port:** The IDC port of the Oracle UCM instance, `4444` by default

    If the Oracle UCM server is on the same machine as the Oracle IPM server, select **Use Local Content Server**. If the servers are not installed on the same machine, you will need to configure the Oracle UCM 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**.

1.11.3 Configuring the AgentUser and GDFontPath MBeans

Three agents run outside of Oracle I/PM, so they need to log into the Oracle I/PM system using a standard user in the security store. Oracle I/PM assigns security to this user name, which you need to configure as the agent user, by setting the `AgentUser` MBean. The user selected for the agent user is not allowed to sign on using the Oracle I/PM user interface.

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 these MBeans through the System MBean Browser in Oracle Enterprise Manager Fusion Middleware Control.

To configure the AgentUser and GDFontPath MBeans:

1. Access the Oracle I/PM domain in Oracle Enterprise Manager 11*g* 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 **AgentUser** attribute to a user name that already exists in the Oracle WebLogic Server LDAP authentication provider, click **Apply**, and then click **Return**.

   The selected user for **AgentUser** cannot log in to the Oracle I/PM application through its user interface.

9. On a UNIX operating system, 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, Oracle I/PM 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 Oracle I/PM. You can download GCC from the Sunfreeware web site 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 Oracle I/PM 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`

10. Click **Apply**.

11. Restart the Oracle I/PM Managed Server.

1.12 Completing the Oracle IRM Configuration

Before logging in to the Oracle Information Rights Management (Oracle IRM) Management Console or using Oracle IRM 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
- Accessing the Oracle IRM Management Console

1.12.1 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 Fusion Middleware Control.

> **Caution:** The Server URL value is embedded into every sealed document, and Oracle IRM Desktop uses this value to identify and connect to an Oracle IRM 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 web site:

    ```
    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. From the farm navigation tree in Fusion Middleware Control, 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 Oracle IRM Desktop, this value will be the URL of the Managed Server; for example:

    ```
    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**.

1.12.2 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 *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite* 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

1.12.2.1 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 `WLSEnv` script to set the environment:

   - **UNIX operating system**

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

     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` directory.

   - **Windows operating system**

     ```
     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` 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 *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*.

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

■ **UNIX operating system**

   MW_HOME/user_projects/domains/*domain_name*/config/fmwconfig

■ **Windows operating system**

   MW_HOME\user_projects\domains*domain_name*\config\fmwconfig

1.12.2.2 Setting the Key Store Location

The Oracle IRM server configuration needs to be updated so that it 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 WebLogic Scripting Tool (WLST) `connect` and `setIRMKeyStore` commands.

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

■ **UNIX operating system**

   MW_HOME/user_projects/domains/*domain_name*/config/fmwconfig

■ **Windows operating system**

   MW_HOME\user_projects\domains*domain_name*\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. From the farm navigation tree in Fusion Middleware Control, 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 operating system**

   MW_HOME/user_projects/domains/*domain_name*/config/fmwconfig/irm.jks

■ **Windows operating system**

   MW_HOME\user_projects\domains*domain_name*\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:

■ Enter the following commands:

   – **UNIX operating system**

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

   – **Windows operating system**

```
ECM_ORACLE_HOME\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:

```
http://myHost:7001/em
```

You will be prompted for the key store type and key store path.

   – 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 operating system

```
MW_HOME/user_projects/domains/domain_name/config/fmwconfig/irm.jceks
```

      Windows operating system

```
MW_HOME\user_projects\domains\domain_name\config\fmwconfig\irm.jceks
```

      * Key store path for an RSA key store:

      UNIX operating system

```
MW_HOME/user_projects/domains/domain_name/config/fmwconfig/irm.jks
```

      Windows operating system

```
MW_HOME\user_projects\domains\domain_name\config\fmwconfig\irm.jks
```

1.12.2.3 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 Oracle IRM server.

To add key store passwords to the credential store:

- Enter the following WLST commands:

  – **UNIX operating system**

  ```
  ECM_ORACLE_HOME/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**

  ```
  ECM_ORACLE_HOME/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.

1.12.3 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 Oracle IRM Desktop to accept the server certificate.

1.12.3.1 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 Oracle IRM Desktop can be configured to trust the certificate.

To configure one-way SSL with a server certificate:

1. Run the following script to set the environment:

   - **UNIX operating system**

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

   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` directory.

- **Windows operating system**

  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 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 Oracle IRM 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 1.3.3, "Installing Oracle WebLogic Server in a 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.

1.12.3.2 Configuring Client Machines Running Oracle IRM Desktop to Accept a Server Certificate

After you create a server certificate, you must install it on every machine running Oracle IRM Desktop. Then you can import the certificate into Oracle IRM 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 Oracle IRM Desktop to accept a server certificate:

1. On each client machine that is running Oracle IRM 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 web site over SSL rather than using the IRM Desktop, follow the procedure required for your operating system to trust the certificate.

2. On every machine running Oracle IRM 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.

1.12.4 Accessing the Oracle IRM Management Console

When the Oracle IRM Managed Server is in running mode, the Oracle IRM application is deployed and ready to be accessed through the Oracle IRM Management Console:

```
https://managedServerHost:managedServerPort/irm_rights
```

1.13 Completing the Oracle URM Configuration

To complete the configuration of Oracle URM, restart Oracle Content Server. The configuration of Oracle UCM with the Oracle URM template automatically completes the postinstallation configuration of Oracle URM, with an installation level of **Minimal**.

Oracle URM will start up with an Alert screen, where you can then configure the Oracle URM installation level you want. For more information about setting the installation level, see Section 1.13.1, "Enabling Oracle URM Components." If you change the installation level, you need to restart the Content Server and rebuild the Content Server index, as described in *Oracle Fusion Middleware System Administrator's Guide for Universal Content Management*.

After you configure the installation level, you can configure the items on the Setup Checklist page. For more information, see Section 1.13.2, "Completing the Setup Checklist for Oracle URM."

1.13.1 Enabling Oracle URM Components

The Enabled Features Page determines which Oracle URM components will be enabled for use.

After making selections or if configuration options are changed (for example, switching from Baseline to Classified), restart the Content Server and rebuild the Content Server index. See "Working with the Search Index" in *Oracle Fusion Middleware System Administrator's Guide for Universal Content Management* for details.

For details about the components enabled for each option, click the **Info** icon.

Element	Description
Installation Level	The type of configuration to be enabled. Options are: ■ Minimal ■ Typical ■ DoD Baseline ■ DoD Classified ■ Custom
Features	This section contains a list of features that can be enabled when using the Custom option. Default features are enabled when installation levels are chosen. These features include: ■ Related Content ■ Audit Trigger ■ Subject to Review ■ Revision Dates ■ Security Markings ■ Email Fields ■ DoD Configuration ■ Classified Topics ■ FOIA/Privacy Act
Disposition Actions	This section contains the disposition actions which can be used for content. They include: ■ Activate ■ Rescind ■ Approve Deletion ■ Obsolete ■ Expire ■ Destroy ■ Cancel ■ Cutoff

1.13.2 Completing the Setup Checklist for Oracle URM

After the installation and configuration of Oracle URM on an Oracle WebLogic Server 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 *Oracle Fusion Middleware Setup Guide for Universal Records Manager*.

If the configuration tasks on this page are not completed, a warning message with a link to this page appears on the home page of the Oracle Content Server system. Click the link to display this page.

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

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

Element	Description
Set Configuration Variables	Contains directions on how to set essential configuration variables.
Configure Installation	Used to configure optional components and metadata fields. Select from preset configurations to choose the features that are needed.
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 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 *Oracle Fusion Middleware Setup Guide for Universal Records Manager*.
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 *Oracle Fusion Middleware Setup Guide for Universal Records Manager*.
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 *Oracle Fusion Middleware Setup Guide for Universal Records Manager*.

Element	Description
Create Retention Schedule or Import Retention Schedule	Used to set up retention schedules. Selecting **Create Retention Schedule** 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 *Oracle Fusion Middleware Administrator's Guide for Universal Records Manager*
	For information about this page, see "Exploring Retention Schedule Page" in *Oracle Fusion Middleware Setup Guide for Universal Records Manager*.
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 *Oracle Fusion Middleware Setup Guide for Universal Records Manager*.
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 *Oracle Fusion Middleware Setup Guide for Universal Records Manager*.
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 *Oracle Fusion Middleware User's Guide for Universal Records Manager*.
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 the appropriate configuration variables can be entered: ■　`FederatedSearchDefaultCategory=categoryId` ■　`FederatedSearchDefaultFolder=folderId`
Configure 'Profile Trigger' as Trigger Field	Used to determine the trigger for profiles used in searching and checking in content and physical items.

1.14 Starting Managed Servers

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

- **UNIX operating system**

  MW_HOME/user_projects/domains/*domain_name*

- **Windows operating system**

  MW_HOME\user_projects\domains*domain_name*

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.

> **Important:**
>
> - Before starting an Oracle UCM, Oracle IBR, or Oracle I/PM Managed Server for the first time, see Section 1.6.4, "Installing Libraries and Setting Environment Variables for Outside In Technology."
>
> - Before starting an Oracle I/PM Managed Server and logging in for the first time, see Section 1.11, "Completing the Oracle I/PM Configuration," and do not start the Managed Server until you have completed the tasks before Section 1.11.1, "Starting the Oracle I/PM Managed Server and Accessing the Web Client."
>
> - Before logging in to the Oracle IRM Management Console for the first time or using Oracle IRM Desktop, see Section 1.12, "Completing the Oracle IRM Configuration."

To start a Managed Server:

1. Start the Administration Server (see Section 1.8).

2. Run the `startManagedWebLogic` script:

   - **UNIX operating system**

     ```
     cd MW_HOME/user_projects/domains/domain_name/bin
     ./startManagedWebLogic.sh server_name  [admin_url]
     ```

   - **Windows operating system**

     ```
     MW_HOME\user_projects\domains\domain_name\bin\startManagedWebLogic.cmd
     server_name [admin_url]
     ```

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

   - `UCM_server1` (Oracle Universal Content Management)

   - `IBR_server1` (Oracle Inbound Refinery)

   - `IPM_server1` (Oracle Imaging and Process Management)

   - `IRM_server1` (Oracle Information Rights Management)

   - `URM_server1` (Oracle Universal Records Management)

   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 command would start an Oracle I/PM Managed Server on a UNIX operating system:

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

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

   ```
   MW_HOME\user_projects\domains\domain_name\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, issue this command:

```
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 Fusion Middleware Control, see "Starting and Stopping Managed Servers Using Fusion Middleware Control" in *Oracle Fusion Middleware Administrator's Guide*.

1.15 Starting Node Manager

Starting Node Manager on a machine that hosts one or more Managed Servers enables you to 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.

Before you start Node Manager, be sure to complete the Oracle URM setup checklist, described in Section 1.13, "Completing the Oracle URM Configuration,".

To start Node Manager:

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

   UNIX operating system

   ```
   cd WL_HOME/server/bin
   ./startNodeManager.sh
   ```

   Windows operating system

   ```
   WL_HOME\server\bin\startNodeManager.cmd
   ```

2. Edit the `nodemanager.properties` file to change the entry `StartScriptEnabled=false` to `StartScriptEnabled=true`.

3. Restart Node Manager.

For more information about Node Manager, see *Oracle Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server*.

1.16 Verifying the Installation

To verify the installation of Oracle Enterprise Content Management Suite, start a web browser and enter the following URLs to test access to the WebLogic Administration Server, WebLogic Administration Console, and Fusion Middleware Control, as well as to applications in your Oracle WebLogic Server domain.

- 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 Oracle UCM instance:

  `http://managedServerHost:managedServerPort/cs`

  Log in with the user name and password for Oracle WebLogic Server. The default port number for Oracle UCM is `16200`.

- To test a newly set up Oracle IBR instance:

  `http://`*`managedServerHost`*`:`*`managedServerPort`*`/ibr`

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

- To test a newly set up Oracle I/PM instance:

  `http://`*`managedServerHost`*`:`*`managedServerPort`*`/imaging`

  Log in with the user name and password for Oracle WebLogic Server. The default port number for Oracle I/PM is `16000`.

- To test a newly set up Oracle IRM instance:

  `https://`*`managedServerHost`*`:`*`managedServerPort`*`/irm_rights`

  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 Oracle URM instance:

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

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

1.17 Deinstalling Oracle Enterprise Content Management Suite

Deinstalling Oracle Enterprise Content Management Suite from your system involves the following tasks:

- Stopping Oracle Fusion Middleware

- Removing Oracle Enterprise Content Management Suite Schemas

- Deinstalling Oracle Enterprise Content Management Suite

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.

1.17.1 Stopping Oracle Fusion Middleware

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

1. Stop each Oracle WebLogic Server Managed Server with the `StopManagedWebLogic` script, as follows:

   - **UNIX operating system**

     `MW_HOME``/user_projects/domains/`*`domain_name`*`/bin/stopManagedWebLogic.sh`
     `managed_server_name admin_url username password`

     For example:

     `MW_HOME``/user_projects/domains/ecm_domain/bin/stopManagedWebLogic.sh IPM_`
     `server1 t3://`*`managedserver_hostname`*`:`*`managedserver_port`* `weblogic `*`password`*

- **Windows operating system**

  MW_HOME\user_projects\domains*domain_name*\bin\stopManagedWebLogic.cmd
  managed_server_name admin_url username password

2. Stop the WebLogic Administration Server.

   - **UNIX operating system**

     MW_HOME/user_projects/domains/*domain_name*/bin/stopWeblogic.sh *username
     password*

   - **Windows operating system**

     MW_HOME\user_projects\domains*domain_name*\bin\stopWeblogic.cmd *username
     password*

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

1.17.2 Removing Oracle Enterprise Content Management Suite Schemas

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

1.17.2.1 Starting Repository Creation Utility

Insert the Repository Creation Utility DVD, and then start RCU from the `bin` or `BIN`
directory in the `rcuHome` directory:

- **UNIX operating system**

  ```
  cd rcuHome/bin
  ./rcu
  ```

- **Windows operating system**

  ```
  cd rcuHome\BIN
  rcu.bat
  ```

Instead of using the RCU DVD, you could download a ZIP file containing Repository
Creation Utility from the Oracle Fusion Middleware 11*g* Software Downloads page on
Oracle Technology Network at

http://www.oracle.com/technology/software/products/middleware

---

> **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 run RCU as the preceding text describes.

1.17.2.2 Dropping Schemas

Follow these instructions to drop one or more Oracle Enterprise Content Management Suite 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 Enterprise Content Management Suite schemas. For more information, see Section 1.4, "Creating Oracle Enterprise Content Management Suite Schemas."

   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**.

1.17.3 Deinstalling Oracle Enterprise Content Management Suite

The deinstaller attempts to remove the ECM Oracle home from which it was started. Before you remove the Oracle home for Oracle Enterprise Content Management Suite, 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 your ECM Oracle home.

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

To deinstall Oracle Enterprise Content Management Suite:

1. Start the Oracle ECM deinstaller from the `bin` subdirectory of the `oui` directory in your ECM Oracle home:

    ■ **UNIX operating system**

    ```
    cd ECM_ORACLE_HOME/oui/bin
    ./runInstaller -deinstall -jreLoc jre_location]
    ```

    The value of `jre_location` must specify the absolute path to the Java Runtime Environment (JRE) on your system. A relative path will not work.

    ■ **Windows operating system**

    ```
    ECM_ORACLE_HOME\oui\bin\setup.exe -deinstall -jreLoc jre_location
    ```

    The value of `jre_location` must specify the absolute path to the Java Runtime Environment (JRE) on your system. A relative path will not work.

    You can also start the installer from the **Start** menu by selecting **Programs**, then **Oracle ECM 11g - Home1**, and then **Uninstall**.

    For more information about the JRE location, see Section 1.5.2, "Installing Oracle Enterprise Content Management Suite."

2. Welcome screen

    Click **Next**.

3. Deinstall Oracle Home screen

    Verify the ECM Oracle home you are about to deinstall, 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 ECM Oracle home directory still exists, manually remove it and all of its subdirectories:

    ■ **UNIX operating system**

    ```
    cd /MW_HOME
    rm -rf ECM_ORACLE_HOME
    ```

- **Windows operating system**

  Use either of two methods:

  - In Windows Explorer, navigate to the `C:\`*`MW_HOME`* directory, right-click the *`ECM_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 ECM 11g - Home1

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

1.18 Additional Resources

For additional information, see *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*, 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/technology/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/technology/documentation

1.18.1 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 web sites

- 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

1.18.2 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.

1.18.3 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.

1.18.4 Quick Reference

For quick access to additional information, see Table 1–4.

Table 1–4 Links to Additional Information and Resources

Task	Contact Information or Web Site
Purchase additional products, full-use licenses, version updates, and documentation in the U.S.A.	http://shop.oracle.com
Access technical resources for developers	http://www.oracle.com/technology
Access installation documentation	http://www.oracle.com/technology/documentation
Access information about technical support	http://www.oracle.com/support
Locate local Oracle Support Centers outside the U.S.A.	http://www.oracle.com/support
Locate local Oracle offices outside the U.S.A.	http://www.oracle.com/global
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