

Oracle® Fusion Middleware

Using Patch Assistant to Migrate from 11.1.1.1.0 to 11.1.1.2.0

11g Release 1 (11.1.1)

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Oracle Fusion Middleware Using Patch Assistant to Migrate from 11.1.1.1.0 to 11.1.1.2.0, 11g Release 1 (11.1.1)

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Preface

This manual is intended for Oracle Fusion Middleware system administrators who are responsible for migrating Oracle Fusion Middleware 11.1.1.1.0 to 11.1.1.2.0. It is assumed that the readers of this manual have knowledge of the following:

- Oracle Fusion Middleware 11g Release 1 (11.1.1.1) and configuration
- Oracle WebLogic administration domain concepts
- The configuration and expected behavior of the system being migrated

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Related Documents

For more information, see the following related documentation available in the Oracle Fusion Middleware 11g documentation library:

- *Oracle Fusion Middleware Upgrade Planning Guide*
- *Oracle Fusion Middleware Upgrade Guide for Java EE*
- *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF*
- *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management*
- *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*
- *Oracle Fusion Middleware Installation Planning Guide*
- *Oracle Fusion Middleware Installation Guide for Oracle Portal, Forms, Reports and Discoverer*
- *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*
- *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*
- *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite*
- *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*
- *Oracle Fusion Middleware Installation Guide for Oracle Web Tier*
- *Oracle Fusion Middleware Administrator's Guide*
- *Oracle Fusion Middleware Security Guide*

Conventions

The following text conventions are used in this document:

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

Understanding the Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) Migration

This chapter contains the following sections:

- [What is a Patch Set?](#)
- [Overview of Oracle Fusion Middleware 11g Release 1 \(11.1.1.2.0\) Patch Assistant](#)
- [Migration Process](#)

1.1 What is a Patch Set?

Patch set is a mechanism for delivering fully tested and integrated product fixes. A patch set includes all files that have been rebuilt to implement the bug fixes. All of the fixes in the patch set have been tested and are certified to work with one another.

Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) is cumulative and includes all of the fixes from Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0).

Patch sets contain generic fixes that apply to all platforms and may also include platform-specific fixes.

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

<http://www.oracle.com/technology/membership>

If you already have a user name and password for OTN, then you can go directly to the documentation section of the OTN Web site at:

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

1.2 Overview of Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Patch Assistant

Patch Assistant enables you to migrate your existing configuration of Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) components, used in conjunction with the 11.1.1.1.0 and 11.1.1.2.0 installations. Patch Assistant is not a complete software distribution. You must run this Patch Assistant over an existing Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) installation. Patch Assistant is designed to work

with all Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) products. You may see messages that an Oracle product is not present in a domain or instance. This message is informational and does not indicate an error.

Refer to [Table 3-7](#) for the Oracle Fusion Middleware components supported by Patch Assistant.

Note: Patch Assistant is used only for updating Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) Domains and Oracle Instances. If you are not updating your existing 11.1.1.1.0 domains and instances, you are not required to use Patch Assistant.

Patch Assistant helps to migrate the following from Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0):

- Oracle Fusion Middleware Domains

Note: It is required that you migrate the entire Oracle WebLogic domain. When the domain is migrated, all components in the domain are also migrated.

- Oracle Instances
- Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) database schema created using Oracle Repository Creation Utility (RCU)

Note: You must migrate both the schema and the middle tier.

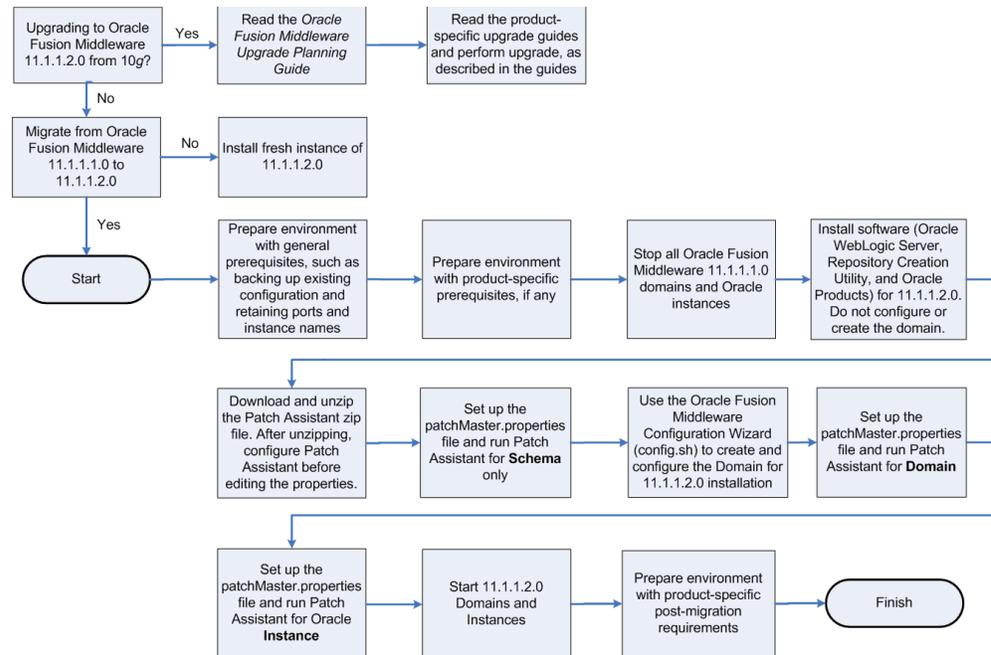
When you run Patch Assistant tool, the configuration files contained in the Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) domain and Instance directories are copied to the new directories in the Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) installation. The Middleware home is the full path of the Oracle directory that contains the Oracle Fusion Middleware installation, and *MW_HOME* will be used in this documentation to refer to the directory where the product is installed.

Note: *MW_HOME* must be replaced with the full path name of the installed Oracle Fusion Middleware instance.

1.3 Migration Process

[Figure 1-1](#) illustrates the migration process. Review this chart to get familiar with the steps you are required to take, based on your existing Oracle Fusion Middleware environment.

Figure 1–1 Flow Chart of the Migration Process



Preparing to Migrate

This chapter contains the following sections:

- [Evaluating and Reviewing your Oracle Fusion Middleware 11g Release 1 \(11.1.1.1.0\) Environment](#)
- [Preparing to Migrate Your Configuration](#)

2.1 Evaluating and Reviewing your Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) Environment

The first step in the migrating process is to evaluate your current Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) environment. During the migration process, the topology of the deployment must not change, the port configuration must be retained, and there must be minimal changes in namespaces. All the changes in the namespaces are encapsulated by the properties in the `patchMaster.properties` file, which is included in the `fmw11gR1ps1_patchassist.zip` file.

For a list of products included in this patch set, see [Section 3.7, "Oracle Fusion Middleware Components Supported by Patch Assistant"](#).

2.2 Preparing to Migrate Your Configuration

This section discusses the following topics:

- [Prerequisites](#)
- [Extracting the Contents of Patch Assistant](#)
- [Setting Up the Patch Assistant Environment](#)
- [Stopping Oracle Fusion Middleware](#)
- [Setting Logging Properties](#)

2.2.1 Prerequisites

This section describes the general and product-specific prerequisites for running Patch Assistant.

This section discuss the following topics:

- [General Prerequisites](#)
- [Product-Specific Prerequisites](#)

2.2.1.1 General Prerequisites

The following are the general prerequisites for running Patch Assistant:

- Ensure that Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) is installed and configured.
- Ensure that you install 11.1.1.2.0 on the same operating system used by the 11.1.1.1.0 installation.
- Ensure that the system configuration meets the recommended system configuration described in your product documentation. For more information, see http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html.
- Ensure that you have Apache Ant 1.7.0 and Java JDKs (Java SE 6 1.6.0_11 and jrookit_160_05_R27.6.2-20), which are packaged with Oracle WebLogic Server.

Note: If you are using Oracle Internet Directory, Oracle Virtual Directory, Oracle HTTP Server, or Oracle Web Cache as standalone Oracle Fusion Middleware installations, you must install and configure Apache Ant separately. For more information, see [Installing Ant](http://ant.apache.org/manual/installlist.html) at <http://ant.apache.org/manual/installlist.html> and [Setting Up the Patch Assistant Environment](#).

- Make a detailed note of the topology used for the Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) installation.
- Ensure that you do not change the port configuration and instance names in your existing Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) installation.
- Ensure that the environment variables for `tmp` and `temp` directories for Microsoft Windows are set, as described in the *Oracle Fusion Middleware Administrator's Guide*.
- Back up your Oracle software, inventory, schema, and domain before applying this patch set, or before making any other changes to your existing Oracle software. Refer to your product administrator's guide for instructions on backing up your Oracle software and inventory. For more information, see the "Advanced Administration: Backup and Recovery" part in the *Oracle Fusion Middleware Administrator's Guide*.
- On Windows, it is recommended that you edit the `patchMaster.properties` file in a Notepad. If you are using any other text editor, such as Windows WordPad, then save the file as Text Document. Do not save the file in Rich Text Format.
- On Windows, you must delete the service name for Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) before installing Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) because both the installations use the same service name. To do so, run the following Ant task on the command line:

```
ant master-opmn-delete-service
```

Enter the required information when prompted by the Ant task.

Note: If you want to abort the migration and revert to the 11.1.1.1.0 deployment, run the following Ant task on the command line:

```
ant master-opmn-create-service
```

- Heterogeneous nodes in a Cluster (one in 11.1.1.2.0, other in 11.1.1.2.0) is not supported during the migration process. You must migrate all nodes to 11.1.1.2.0 before environment can be used.

2.2.1.2 Product-Specific Prerequisites

Depending on your Oracle Fusion Middleware component, you may have to meet additional prerequisites as follows:

- [Oracle Fusion Middleware Audit Framework](#)
- [Oracle Directory Integration Platform](#)
- [Oracle Internet Directory and Oracle Virtual Directory](#)
- [Oracle WebCenter](#)

2.2.1.2.1 Oracle Fusion Middleware Audit Framework

For Oracle Fusion Middleware Audit Framework, the audit policy is configured for Java components in Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0), you must export the configuration before running Patch Assistant, as follows:

1. Log in to Oracle Enterprise Manager 11g Fusion Middleware Control.
2. Expand WebLogic Domain on the left pane, and select your domain.
Your selected domain page is displayed.
3. From the WebLogic Domain, select **Security**, and then **Audit Policy**.
The **Audit Policy** page is displayed.
4. Select the Audit Policy, and click **Export**.
5. Save the `AuditConfiguration` file to your machine.

2.2.1.2.2 Oracle Directory Integration Platform

For the Oracle Directory Integration Platform, do the following:

1. Ensure that your Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Oracle Internet Directory is up and running in SSL No-Auth mode.
2. Extend the Oracle WebLogic domain created during the Oracle Internet Directory 11g Release 1 (11.1.1.2.0) installation, by running the following command:

Windows

```
config.cmd (Located at: ORACLE_HOME\bin)
```

UNIX

```
config.sh (Located at: ORACLE_HOME/bin)
```

The Oracle Fusion Middleware Configuration Wizard appears. Enter the Oracle Internet Directory 11g Release 1 (11.1.1.2.0) connection details and credentials.

3. Stop the Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) domain.

2.2.1.2.3 Oracle Internet Directory and Oracle Virtual Directory

Depending on your installation, complete the following prerequisites:

- If your 11.1.1.1.0 configuration has Oracle Internet Directory and Oracle Virtual Directory created with a new Oracle WebLogic domain, then choose the **Create a new WebLogic domain** option on the Welcome screen of the Oracle Fusion Middleware Configuration Wizard when configuring the 11.1.1.2.0 domain.

During the configuration of 11.1.1.2.0, if you select the **Create a new WebLogic domain** option, then you must deselect Oracle Internet Directory and Oracle Virtual Directory, and select Oracle Directory Services Manager.
- If your Oracle Internet Directory and Oracle Virtual Directory are not registered to any Oracle WebLogic domain in your 11.1.1.1.0 configuration, then 11.1.1.2.0 configuration is not required. You must set the property `patchMaster.Oracleinstancenewlist` in the `patchMaster.properties` file to a new directory for the instance. Ensure that you retain the same instance name used in 11.1.1.1.0.
- If your 11.1.1.1.0 configuration has Oracle Internet Directory and Oracle Virtual Directory registered to an existing Oracle WebLogic domain, then 11.1.1.2.0 configuration is not required. You must set the property `patchMaster.Oracleinstancenewlist` in the `patchMaster.properties` file to a new directory and register the instance with the existing 11.1.1.2.0 WebLogic domain using Ant target. Ensure that you retain the same instance name used in 11.1.1.1.0.

2.2.1.2.4 Oracle WebCenter

To migrate Oracle WebCenter, you may choose either of these approaches:

- Keep two parallel instances of Oracle WebCenter, that is 11.1.1.1.0 as well as 11.1.1.2.0. To do this, you must perform a complete installation of Oracle WebCenter 11.1.1.2.0. You can then migrate your Oracle WebCenter 11.1.1.1.0 data into the new WebCenter instance by using the export and import utilities. This approach enables you to use both instances of Oracle WebCenter, if required. For example, you may run the two instances in parallel to minimize downtime or to ensure that the 11.1.1.2.0 instance is set up to the same level as the 11.1.1.1.0 instance before you switch over to the 11.1.1.2.0 instance completely.

For information about how to install Oracle WebCenter, see the *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*. For information about export and import utilities, see the "Managing Export, Import, Backup, and Recovery of WebCenter" chapter in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

- Migrate the Oracle WebCenter 11.1.1.1.0 repository and mid-tier completely to Oracle WebCenter 11.1.1.2.0. This approach preserves your Oracle WebCenter 11.1.1.1.0 repository data and enables you to reuse the repository.

This guide describes the tasks required to implement this migration approach for Oracle WebCenter.

2.2.2 Extracting the Contents of Patch Assistant

You can download the `fmw11gR1ps1_patchassist.zip`, which is included in the Oracle Fusion Middleware 11g Release 1 Patch Set 1 Patch Scripts media. The zip file is available in the same media pack as Oracle Fusion Middleware 11g Release 1

(11.1.1.2.0) on Oracle Technology Network (OTN) at the following URL:
<http://oracle.com/technology>

After downloading this zip file, extract its contents to its own location, in your local machine, where the old and new Oracle Fusion Middleware components are installed. Ensure that the same operating system is used for the 11.1.1.1.0 and 11.1.1.2.0 installations. The zip file includes the following files:

- **README** – Describes the environment.
- **patchMaster.properties** - The user input file.
- **build.xml** – The master build file. Each Oracle Fusion Middleware component has its own `build.xml` file.

2.2.3 Setting Up the Patch Assistant Environment

To set up the Patch Assistant environment for Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0), you must set up `ANT_HOME`, add it to your `PATH`, set the `JAVA_HOME` and the `permgen` size.

For example, on **Windows**:

```
set ANT_HOME=MW_HOME\modules\org.apache.ant_1.7.0
set PATH=%PATH%;%ANT_HOME%\bin
set JAVA_HOME=MW_HOME\jdk160_14_R27.6.4-18
set ANT_OPTS=-Xmx512M -XX:MaxPermSize=512m
```

For example, on **UNIX**:

```
setenv MW_HOME ##set mw home here##
setenv ANT_HOME $MW_HOME/modules/org.apache.ant_1.7.0
setenv PATH $ANT_HOME/bin:$PATH
setenv JAVA_HOME $MW_HOME/jdk160_14_R27.6.5-32
setenv ANT_OPTS "-Xmx512M -XX:MaxPermSize=512m"
```

2.2.4 Stopping Oracle Fusion Middleware

Before you run Patch Assistant, you must stop the following:

- Oracle WebLogic Server
- Administration Servers
- Managed Servers
- Oracle Management Agent
- Java EE Applications
- High Availability Environments

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

2.2.5 Setting Logging Properties

You can use the log file to verify the migration or to detect any errors after running Patch Assistant. Patch Assistant creates a time stamp file in the Patch Assistant home. You can specify the following logging levels:

- `info` (This is the default setting)

- error
- warning
- verbose
- debug

Note: The debug and the verbose options may display sensitive information in the logs, and they are not recommended for typical use.

Before you use your log file, you must set the logging properties as follows:

Open the `patchMaster.properties` file in a text editor, and update the following properties:

```
# Description: Specifies the directory where the log files go
patchMaster.Logdir=${patchMaster.Dir}
```

Specifies the default location where the log file is saved.

```
# Description: Specifies the logging level to be recorded in the log file
patchMaster.Loglevel=info
```

Sets the logging level.

To override the default `patchMaster.properties` Log level, run the command as shown in the following example:

```
ant -DpatchMaster.Loglevel=error
```

Note: You can override the `patchMaster.properties` by setting properties on the command line. If the debug or verbose options are used on the command line, they override the logging level property set in the `patchMaster.properties` file. For more information, see [Section 3.6.1, "Overriding Properties Set in the patchMaster.properties File"](#).

Migrating to Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0)

This chapter contains the following sections:

- [Migration Roadmap](#)
- [Migration Procedure](#)
- [Post-Migration Configuration for Oracle Fusion Middleware Components](#)
- [Installation Process](#)
- [Configuration Process](#)
- [Properties in the patchMaster.properties File](#)
- [Oracle Fusion Middleware Components Supported by Patch Assistant](#)

3.1 Migration Roadmap

[Table 3–1](#) describes the high-level tasks for migrating from Oracle Fusion Middleware 11.1.1.1.0 to 11.1.1.2.0. The table also provides information on where to get more details on each task.

Table 3–1 Tasks in the Migration Procedure

Task	Description	Documentation	Mandatory or Optional?
Task 1 - Prepare Environment with General Prerequisites, such as Backing Up Existing Configuration and Retaining Ports and Instance Names	Complete all general prerequisites for running Patch Assistant.	For more information, see General Prerequisites .	Mandatory
Task 2- Prepare Environment with Product-Specific Prerequisites, if any	Complete all product-specific prerequisites for running Patch Assistant, as applicable.	For more information, see Product-Specific Prerequisites .	Optional
Task 3 - Stop All Oracle Fusion Middleware 11.1.1.1.0 Domains and Instances	Ensure that you stop all Oracle Fusion Middleware 11.1.1.1.0 domains and instances.	For more information, see Stopping Oracle Fusion Middleware and Stopping the Old Domain .	Mandatory
Task 4 - Install Software (Oracle WebLogic Server, Repository Creation Utility, and Oracle Products) for 11.1.1.2.0	<p>Install Oracle software, including Oracle WebLogic Server, Repository Creation Utility, and Oracle products for 11.1.1.2.0. Do not create or configure a WebLogic domain at this stage of the migration process.</p> <p>Install the Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) and its components in a separate Middleware home on the same host as the Oracle Fusion Middleware 11g Release 1 (11.1.1) <i>MW_HOME</i>. Ensure that you stop the Oracle Fusion Middleware components for 11.1.1.1.0, before you begin the installation. This will enable the 11.1.1.2.0 installation to retain the same 11.1.1.1.0 port number, host name, and machine name.</p>	<p>Installation instructions for Oracle WebLogic Server are provided in <i>Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server</i>.</p> <p>For system requirements information, go to: http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm</p> <p>For certification information, go to: http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html</p> <p>For information about installing Oracle products, refer to the product-specific installation guides.</p>	Mandatory
Task 5 - Download the Patch Assistant Zip File	<p>Download the Patch Assistant zip file and extract its contents.</p> <p>After unzipping, configure Patch Assistant before editing the properties.</p>	For more information, see Downloading Patch Assistant .	Mandatory

Table 3–1 (Cont.) Tasks in the Migration Procedure

Task	Description	Documentation	Mandatory or Optional?
Task 6 - Set Up the patchMaster.properties File and Run Patch Assistant for Schema Only	<p>Ensure that the Oracle database that contains the 11.1.1.1.0 schemas is up and running. This will allow access to the SCHEMA_VERSION_REPOSITORY table by Patch Assistant.</p> <p>Specify the schema-related properties in the patchMaster.properties file, and run the ant master-patch-schema command to migrate the schema only.</p> <p>Note: For Oracle Portal, you must complete the steps in Task 7, 8, and 9, and then follow the steps to migrate the schema. It is recommended that you refer to the following topics in the <i>Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer</i> before you run Patch Assistant to migrate the schema:</p> <ul style="list-style-type: none"> ■ Understanding the Impact of the Oracle Portal Schema Upgrade ■ Checking for Invalid Objects in the Database Where the Oracle Portal 10g Schema Resides ■ Backing Up the Database Where the Oracle Portal 10g Schema Resides ■ Verifying the Required Database Parameters for Oracle Portal 11g ■ Verifying That the Database and Oracle Internet Directory Are Running <p>Log files specific to Oracle Portal migration are generated in the upgrade.log and precheck.log files in the ORACLE_HOME/upgrade/logs directory (UNIX).</p> <p>If your Oracle Portal repository is not stored in the Oracle Metadata Repository, and is instead installed in a separate database, then do not use the procedures in this section. Instead, refer to Appendix B, "Migrating the Oracle Portal Schema Located in a Customer Database".</p>	For more information, see Migrating the Schema .	Mandatory

Table 3–1 (Cont.) Tasks in the Migration Procedure

Task	Description	Documentation	Mandatory or Optional?
Task 7 - Use the Oracle Fusion Middleware Configuration Wizard (config.sh) to Create and Configure a WebLogic Domain for 11.1.1.2.0	Create and configure a WebLogic administration domain for your 11.1.1.2.0 installation. Ensure that you configure the domain as it was in your 11.1.1.1.0 installation.	For more information, see Creating a WebLogic Domain for 11.1.1.2.0 and the product-specific installation guides.	Mandatory
Task 8 - Set Up the patchMaster.properties File and Run Patch Assistant for Domain	Specify the domain-related properties in the patchMaster.properties file, and run the ant master-patch-domain command to migrate the WebLogic domain. You must patch all products in the domain being migrated.	For more information, see Migrating the Domain .	Mandatory
Task 9 - Set Up the patchMaster.properties File and Run Patch Assistant for Oracle Instance	Specify the instance-related properties in the patchMaster.properties file, and run the ant master-patch-oinstance command to migrate the instances.	For more information, see Migrating an Instance .	Optional
Task 10 - Run Patch Assistant for Registering Instance	After migrating the instances, run the ant master-register-oinstance command to register the instances.	For more information, see Registering the Instance .	Mandatory
Task 11 - Start 11.1.1.2.0 Domains and Instances	Run the ant master-start-domain-new command to start the new 11.1.1.2.0 domain. In addition, start the new instances.	For more information, see Starting or Stopping the 11.1.1.2.0 Domain .	Mandatory
Task 12 - Prepare Environment with Product-Specific Post-Migration Requirements	Perform any product-specific post-migration tasks.	For more information, see Post-Migration Configuration for Oracle Fusion Middleware Components .	Mandatory if your Oracle product requires any post-migration configuration.
Task 13 - Decommission 11.1.1.1.0 Installation	Deinstall the 11.1.1.1.0 installation.	For more information, see Decommissioning the 11.1.1.1.0 Installation .	Optional

3.2 Migration Procedure

Migrating your existing configuration from 11.1.1.1.0 to 11.1.1.2.0 involves the following tasks:

1. [Stopping the Old Domain](#)
2. [Installing Oracle Software for 11.1.1.2.0](#)
3. [Downloading Patch Assistant](#)

4. [Migrating the Schema](#)
5. [Creating a WebLogic Domain for 11.1.1.2.0](#)
6. [Migrating the Domain](#)
7. [Migrating an Instance](#)
8. [Registering the Instance](#)
9. [Completing Post-Migration Tasks](#)
10. [Starting or Stopping the 11.1.1.2.0 Domain](#)
11. [Decommissioning the 11.1.1.1.0 Installation](#)

3.2.1 Stopping the Old Domain

To stop the old 11.1.1.1.0 domain, complete the following steps:

Note: You can also use Fusion Middleware Control, Oracle WebLogic Server Administration Console, or WLST or OPMN commands to stop the Oracle Fusion Middleware components.

1. Open the `patchMaster.properties` file (Located in your `patchMaster` directory) in a text editor, and specify the following properties in the `patchMaster.properties` file, as applicable:

```
patchMaster.Oraclehomeold
patchMaster.Oracleinstanceoldlist
patchMaster.Domainadminhost
patchMaster.Domainadminport
```

If the `patchMaster.Domainadminhost` property is not specified, the default value `local host` is used. If the `patchMaster.Domainadminport` property is not specified, the default value `7001` is used. After editing the properties, save the file and close. For more information about properties in the `patchMaster.properties` file, see [Properties in the patchMaster.properties File](#).

Note: If you have multiple Oracle products installed, then you must run Patch Assistant once for each product and setting the `patchMaster.Oraclehomeold` for each product.

2. Run the following command on the command line:

```
ant master-stop-domain-old
```
3. Enter the domain user name and password, when prompted.

3.2.2 Installing Oracle Software for 11.1.1.2.0

You must install Oracle WebLogic Server, Repository Creation Utility (RCU), and Oracle products for 11.1.1.2.0:

- Create a new Middleware home directory.
- Install Repository Creation Utility.

- Perform a software-only installation of the product bundle.

Ensure that your system environment meets the general installation requirements for Oracle Fusion Middleware. Some Oracle Fusion Middleware Components require schemas that must be installed in an Oracle database. It is recommended that you do not install any new schemas for your existing 11g R1 (11.1.1.1.0) products. However, in the same environment, you can add new products for which you may have to create the appropriate schemas. For such products, you can create and load the schemas in your database by using RCU. Ensure that you have a supported Oracle database up and running. See

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

Ensure that same instance name used in 11.1.1.1.0 and 11.1.1.2.0.

Note: When you migrate the mid-tier, you are installing a fresh mid-tier in your new 11.1.1.2.0 environment. Patch Assistant migrates the middle tier configuration to this new instance.

For information about the installation process, including Cluster scenarios, see [Installation Process](#).

3.2.3 Downloading Patch Assistant

For information about downloading Patch Assistant and extracting its contents, see [Section 2.2.2, "Extracting the Contents of Patch Assistant"](#).

3.2.4 Migrating the Schema

Before you can update the repository, ensure that your 11.1.1.1.0 domain is configured and it includes tables populated from running the Repository Creation Utility (RCU).

Note: You can choose to install Oracle Content Server while installing Oracle WebCenter, or later by performing a standalone installation. In Oracle Fusion Middleware 11.1.1.1.0, if you performed a standalone installation of Oracle Content Server, then before you migrate the schemas, you must rename the Oracle Content Server's schema so that it contains the standard suffix, OCSEVER. For information, see [Section 3.2.4.1, "Renaming the Oracle Content Server Schema."](#)

To migrate the schema, complete the following steps:

1. Open the `patchMaster.properties` file (Located in your `patchMaster` directory) in a text editor, and specify the following schema-related properties in the `patchMaster.properties` file:

```
patchMaster.Schemaurl
patchMaster.Schemauser
patchMaster.Schemaprefix
patchMaster.Mwhomenew
patchMaster.Mwhomeold
patchMaster.Componentlist
```

Note: The `patchMaster.Componentlist` property is optional, if you are migrating the schema for a single component. For Oracle Portal, in addition to the above properties, you must specify the `patchMaster.Oraclehomenew` property.

In `patchMaster.Componentlist`, include Oracle Content Server as a component only if you created the server's schema using RCU. If you did not create the schema using RCU, then list the server in `patchMaster.Componentlist` only after completing the schema renaming process described in section [Section 3.2.4.1, "Renaming the Oracle Content Server Schema."](#)

After editing the properties, save the file and close. For more information about properties in the `patchMaster.properties` file, see [Properties in the patchMaster.properties File](#).

2. Run the following command on the command line to migrate the database schema, and provide the required user name and password when prompted:

```
ant master-patch-schema
```

Patch Assistant can only migrate one set of component schemas that share the same prefix. If different components in your deployment have different prefixes and you have multiple schemas sharing a repository, then you must invoke Patch Assistant multiple times, once for each prefix.

Note: If you migrate the Metadata Services schema for one component, it also affects all the other components using the same Metadata Services schema. If you are using Oracle SOA, you must enter `ant -q master-patch-schema` on the command line to migrate the schema.

Refer to your product-specific upgrade guides, in the *Oracle Fusion Middleware Online Documentation Library*, for more information about upgrading schema for your Oracle Fusion Middleware.

During the schema migration, exceptions may occur. Some of these exceptions can be ignored. The following example shows one such exception:

```
[java] SEVERE: Error while registering Oracle JDBC Diagnosability MBean.  
[java] java.security.AccessControlException: access denied  
(javax.management.MBeanTrustPermission register)  
[java] at  
java.security.AccessControlContext.checkPermission(AccessControlContext.java:323)
```

Note: Patch Assistant ensures that all required properties are set for each of the operations.

Patch Assistant attempts to migrate all Oracle Fusion Middleware components. If a component is not installed or configured in the deployment, log messages indicating these attempts are generated.

Log files specific to Oracle Portal migration are generated in the `upgrade.log` and `precheck.log` files in the `ORACLE_HOME/upgrade/logs` directory (UNIX).

3.2.4.1 Renaming the Oracle Content Server Schema

In Oracle Fusion Middleware 11.1.1.1.0, if you performed a standalone installation Oracle Content Server, then before migrating the schemas, you must rename the Oracle Content Server's schema so that it contains the standard suffix, `OCSERVER`. You must also rebuild indexes on Oracle Content Server.

To rename the Oracle Content Server schema:

1. Create a new schema (for example, `DEV_OCSERVER`) using the RCU. Ensure that you use the same password as that of your existing Oracle Content Server schema.
2. Export the existing schema (for example, `IDC_IR10`).
3. Import data into the new schema you created (`DEV_OCSERVER`).

Note: Before you import data into the newly created schema, ensure that all the seeded database objects are removed from that schema.

4. Open the `config/config.cfg` file from the installation directory of your Oracle Content Server.
5. Change the Oracle Content Server schema name listed in the configuration file to the newly created schema. (for example, rename `IDC_IR10` to `DEV_OCSERVER`)
6. Access the Oracle Content Server administration console and ensure that the data exists.

After renaming the Oracle Content Server schema, you must migrate the schema, as described in the beginning of this section.

After migrating the schemas, you must rebuild the indexes on Oracle Content Server.

To re-create the index:

1. Log on to Oracle Content Server as a system administrator.
2. Access Repository Manager from the Admin Console by navigating to **Administration > Admin Applets > Repository Manager**.
3. Click the **Indexer** tab.
4. In the Collection Builder Cycle section, click **Start**. If the collection rebuild is already in progress, do not choose to restart the operation. First stop the collection rebuild operation, and then start the operation. Note that the collection rebuild operation is a time-consuming task.

3.2.5 Creating a WebLogic Domain for 11.1.1.2.0

Create a WebLogic domain for 11.1.1.2.0 as follows:

1. Run the `MW_Home/oracle_common/common/bin/config.sh` command (on UNIX) or the `MW_Home\oracle_common\common\bin\config.cmd` command (on Windows) on the command line. The Oracle Fusion Middleware Configuration Wizard appears.

For Oracle Portal, Oracle Forms, Oracle Reports, and Oracle Discoverer the `config.sh` command is located at `ORACLE_HOME/bin` (on UNIX) and the `config.cmd` is located at `ORACLE_HOME\bin` (on Windows).

2. On the Welcome screen, select the **Create a new WebLogic domain** option. Click **Next**. The Select Domain Source screen appears.
3. On the Select Domain Source screen ensure that the **Generate a domain configured automatically to support the following products**: option is selected. Select templates for the products that are included in your existing 11.1.1.1.0 installation. For example, if the domain in your 11.1.1.1.0 installation had SOA configured, you must configure the new domain with SOA in 11.1.1.2.0. Click **Next**. The Select Domain Name and Location screen appears.
4. Enter a name and a location for the domain to be created, and click **Next**. Ensure that the domain name is same as the 11.1.1.1.0 domain. Click **Next**. The Configure Administrator User Name and Password screen appears.
5. Configure a user name and a password for the administrator. The default user name is `weblogic`. Click **Next**.
6. Choose a JDK in the Configure Server Start Mode and JDK screen.
7. Configure JDBC Component Schemas and ensure that you retain the same 11.1.1.1.0 topology during this configuration.
8. On the Select Optional Configuration screen, select the **Administration Server and Managed Servers, Clusters, and Machines**, and **Deployments and Services** check boxes. Click **Next**.
9. Configure the Administration Server, Managed Servers, Clusters, Machines, as required. Ensure that you retain the same 11.1.1.1.0 topology during this configuration.
10. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain.

The WebLogic domain with your configuration attributes is created.

Note: Patch Assistant ensures that all required properties are set for each of the operations.

Patch Assistant attempts to migrate all Oracle Fusion Middleware components. If a component is not installed or configured in the deployment, log messages indicating these attempts are generated.

For more information about the configuration process, including Cluster scenarios, see [Configuration Process](#).

3.2.6 Migrating the Domain

Before you can migrate the WebLogic domain, ensure that the database schemas are migrated, the new 11.1.1.2.0 products are installed, the new 11.1.1.2.0 domain is configured (as it was configured in the previous 11.1.1.1.0 installation), and all the

WebLogic domains are shut down. When you migrate the 11.1.1.1.0 domain, the products configured in the domain are also migrated to the new 11.1.1.2.0 domain.

Note: If you have multiple Oracle products installed, then you must run Patch Assistant once for each product and setting the `patchMaster.Oraclehomeold` property for each product. You must patch all products in the domain being migrated.

To migrate the WebLogic domain, complete the following steps:

1. Open the `patchMaster.properties` file (Located in your `patchMaster` directory) in a text editor, and specify the following domain-related properties:

```
patchMaster.Domainhomenew
patchMaster.Domainapplicationshomenew
patchMaster.Domainhomeold
patchMaster.Domainusername
patchMaster.Oracleinstanceoldlist
patchMaster.Oraclehomeold
```

After editing the properties, save the file and close. For more information about properties in the `patchMaster.properties` file, see [Properties in the patchMaster.properties File](#).

2. Run the following command on the command line to migrate the WebLogic domain:

```
ant master-patch-domain
```

Note: Patch Assistant ensures that all required properties are set for each of the operations.

Patch Assistant attempts to migrate all Oracle Fusion Middleware components. If a component is not installed or configured in the deployment, log messages indicating these attempts are generated.

For the Oracle Directory Integration Platform, you only need to enter the above target to complete the migration process. If you are using Oracle SOA, you must enter `ant -q master-patch-domain` on the command line to migrate the WebLogic domain.

If you are using a Cluster environment, ensure that the database schemas are migrated, the new 11.1.1.2.0 products are installed in a Cluster environment, the new 11.1.1.2.0 domain is configured (as it was configured in the previous 11.1.1.1.0 installation) in a Cluster environment, and all the WebLogic domains are shut down.

3.2.7 Migrating an Instance

Before you can migrate the Oracle Instances, ensure that the database schemas are migrated, the new 11.1.1.2.0 products are installed, the new 11.1.1.2.0 domain is configured (as it was configured in the previous 11.1.1.1.0 installation), the domain is migrated, and the Oracle Instances are shut down.

Note: For Oracle Business Intelligence Discoverer in a High Availability (clustered) environment with multiple Managed Servers, you can override the default value `WLS_DISCO` by specifying the following java properties on the command-line:

- `srcDiscoMgdServer`
- `destDiscoMgdServer`

For example:

```
ant -DsrcDiscoMgdServer=WLS_DISCO1 -DdestDiscoMgdServer=WLS_DISCO1
master-patch-oinstance
```

To migrate an instance, complete the following steps:

1. Open the `patchMaster.properties` file (Located in your `patchMaster` directory) in a text editor, and specify the following properties related to your Oracle Instance homes:

```
patchMaster.Oracleinstanceoldlist
patchMaster.Oracleinstancenewlist
```

After editing the properties, save the file and close. For more information about properties in the `patchMaster.properties` file, see [Properties in the patchMaster.properties File](#).

2. Run the following command on the command line to migrate the Oracle Instances:

```
ant master-patch-oinstance
```

Note: Patch Assistant ensures that all required properties are set for each of the operations.

Patch Assistant attempts to migrate all Oracle Fusion Middleware components. If a component is not installed or configured in the deployment, log messages indicating these attempts are generated.

3.2.8 Registering the Instance

After migrating an instance, you must register the instance by completing the following steps:

Note: Before registering the instance, ensure that your Administration Server is up and running.

1. Open the `patchMaster.properties` file (Located in your `patchMaster` directory) in a text editor, and specify the following properties in the `patchMaster.properties` file, as applicable:

```
patchMaster.Oracleinstancenewlist
```

After editing the properties, save the file and close. For more information about properties in the `patchMaster.properties` file, see [Properties in the patchMaster.properties File](#).

2. Run the following command on the command line:

```
ant master-register-oinstance
```

3. Enter the domain user name and password, when prompted.

Note: Patch Assistant ensures that all required properties are set for each of the operations.

Patch Assistant attempts to migrate all Oracle Fusion Middleware components. If a component is not installed or configured in the deployment, log messages indicating these attempts are generated.

3.2.9 Starting or Stopping the 11.1.1.2.0 Domain

Starting or stopping the new 11.1.1.2.0 domain requires the `patchMaster.Domainhomenew` property to be specified in the `patchMaster.properties` file.

To start the new 11.1.1.2.0 domain, run the following command on the command line:

```
ant master-start-domain-new
```

To stop the new 11.1.1.2.0 domain, run the following command on the command line:

```
ant master-stop-domain-new
```

3.2.10 Completing Post-Migration Tasks

For information about post-migration tasks specific to your product, see [Post-Migration Configuration for Oracle Fusion Middleware Components](#).

Note: When the Oracle Portal, Forms, Reports, and Discoverer installation is performed on a Windows machine, the System `PATH` is updated so that the `ORACLE_HOME\bin` for that installation precedes `PATH`. You cannot run Oracle Forms from the first installation, by default. To access the 11.1.1.1.0 components, right-click on **My Computer** and then **Properties**, select the **Advanced** tab, and click the **Environment Variables** button. Edit the System variable `PATH` so that the `ORACLE_HOME\bin` that you want to use is the one that precedes `PATH`.

3.2.11 Decommissioning the 11.1.1.1.0 Installation

After migrating to 11.1.1.2.0, you can deinstall Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0). For more information, refer to the following:

- "Deinstalling Oracle Identity Management 11g Release 1 (11.1.1)" chapter in the *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.
- "Deinstalling Oracle Portal, Forms, Reports and Discoverer" chapter in the *Oracle Fusion Middleware Installation Guide for Oracle Portal, Forms, Reports and Discoverer*.
- "Deinstalling Oracle SOA Suite" chapter in the *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite*.
- "Deinstalling Oracle WebCenter" chapter in the *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*.

- "Deinstalling Oracle Web Tier" chapter in the *Oracle Fusion Middleware Installation Guide for Oracle Web Tier*.

Note: When you deinstall 11.1.1.1.0, the Installer removes the previously created 11.1.1.2.0 windows service. Use the Ant command-line utility to re-create that service for each instance as follows:

```
ant master-opmn-create-service
```

Enter the required information when prompted by the Ant task.

3.3 Post-Migration Configuration for Oracle Fusion Middleware Components

After running the Patch Assistant, you must manually configure some of the Oracle Fusion Middleware Components:

- [Post-Migration Configuration for Oracle Fusion Middleware Audit Framework](#)
- [Post-Migration Configuration for Oracle Business Intelligence Discoverer](#)
- [Post-Migration Configuration for Oracle Directory Integration Platform](#)
- [Post-Migration Configuration for Oracle Identity Federation](#)
- [Post-Migration Configuration for Oracle Platform Security Services](#)
- [Post-Migration Configuration for Oracle Reports](#)
- [Post-Migration Configuration for Oracle SOA](#)
- [Post-Migration Configuration for Oracle User Messaging Service](#)
- [Post-Migration Configuration for Oracle WebCenter](#)
- [Post Migration Configuration for Oracle Web Services Manager](#)

3.3.1 Post-Migration Configuration for Oracle Fusion Middleware Audit Framework

After running Patch Assistant for Oracle Fusion Middleware Audit Framework, you must complete the following tasks:

- [Update the Translation Table in Audit Schema](#)
- [Migrating Audit Policy Configuration for Java Components](#)
- [Creating the Audit Data Source](#)

3.3.1.1 Update the Translation Table in Audit Schema

If the IAU_DISP_NAMES_TL audit event translation data is defined in the 11.1.1.1.0, then you can migrate them to the 11.1.1.2.0, by completing the following steps:

1. Run SQLPlus, and connect to the database as the system user. For example:

```
sqlplus sys as sysdba
```

2. Run SQL commands in the following order:

```
SQL> alter session set current_schema=<Name_of_Your_Audit_Schema>;
SQL> delete from iau_disp_names_tl;
SQL> @disp_names.sql;
```

`disp_names.sql` is located at `fmw11gR1ps1_patchassist\Audit` folder.

Note: To avoid scrambled characters, a Unicode-supported database is required to store the translation data. In addition, to ensure proper character set conversion between SQL*Plus and the database server, a compatible character set, such as UTF8 or AL32UTF8, needs to be set for the `NLS_LANG` environment variable before running `disp_names.sql`.

3.3.1.2 Migrating Audit Policy Configuration for Java Components

If the audit policy is configured for Java components in 11.1.1.1.0, you must import the configuration file after running Patch Assistant, as follows:

1. Log in to the Oracle Enterprise Manager 11g Fusion Middleware Control.
2. Expand the WebLogic Domain on the left pane, and select your domain.
Your selected domain page is displayed.
3. From the WebLogic Domain, select **Security**, and then **Audit Policy**.
The **Audit Policy** page is displayed.
4. Select the Audit Policy, and click **Import**.
5. Click **Browse**, and specify the path where your AuditConfiguration file is located.
6. Click **Ok**.

3.3.1.3 Creating the Audit Data Source

If the audit data source is used in Oracle Fusion Middleware 11.1.1.1.0, then you must re-create the audit data store used in 11.1.1.2.0. To do so, perform the following steps:

1. Log in to the Oracle WebLogic Server administration console:
`http://host:7001/console`
2. Under **JDBC**, click the **Data Sources** link.
The **Summary of JDBC Data Sources** page is displayed.
3. Click **New** to create a new data source.
The **Create a New JDBC Data Source** page is displayed.
4. Enter the following details for the new data source:
 - **Name:** Enter a name such as Audit Data Source-0
 - **JNDI Name:** `jdbc/AuditDB`
 - **Database Type:** Oracle
 - **Database Driver:** Oracle's Driver (Thin XA) Versions: 9.0.1, 9.0.2, 10, 11

If deploying to a managed cluster server, check **AdminServer**. This selection ensures that the data source is listed in the audit store when switching from file to database store.

5. Click **Next**.
The **Transaction Options** page is displayed.

6. Click Next.

The **Connection Properties** page is displayed.

7. In the Connection Properties page, enter the following information:

- **Database Name:** Enter the name of the database to which you will connect. This usually maps to the SID.
- **Host Name:** Enter the hostname of the database.
- **Port:** Enter the database port.
- **Database User Name:** This is the name of the audit schema that you created in RCU. The suffix is always IAU for the audit schema. For example, if you gave the prefix as `test`, then the schema name is `test_iau`.
- **Password:** This is the password for the audit schema that you created in RCU.

Click **Next**.

- 8.** The next page lists the JDBC driver class and database details. Accept the default values, and click **Test Configuration** to test the connection. If you see the message "Connection established Successfully", click **Next**. If it displays any error, go back and check the connection details.
- 9.** In the Select Targets page, select the servers where this data source must be configured, and click **Finish**.

3.3.2 Post-Migration Configuration for Oracle Business Intelligence Discoverer

After running Patch Assistant, ensure that all your existing Oracle BI Discoverer Plus OLAP users have proper access privileges to the Oracle BI Discoverer 11g Release 1 (11.1.1.2.0) Discoverer Catalog. To set proper access privileges, perform the following tasks using the command-line utilities:

- [Authorizing a New User to Access the Discoverer Catalog](#)
- [Updating the Privileges of an Existing Discoverer Catalog User](#)

3.3.2.1 Authorizing a New User to Access the Discoverer Catalog

Use the following commands to authorize one or more users so they can access the Discoverer Catalog:

```
java -classpath path_to_d4o_jar_file load . java -classpath path_to_d4o_jar_file
authorize -h hostname -po portname
        -sid database_SID -p d4osyspasswd -u user
```

For example, on **Windows**:

```
java -classpath C:\temp\d4o.jar load . java -classpath C:\temp\d4o.jar authorize
-h sys42.example.com -po 1521
        -sid disco_db1 -p nPword432 -u jones
```

For example, on **UNIX**:

```
java -classpath /home/abc/temp/d4o.jar load . java -classpath
/home/abc/temp/d4o.jar authorize -h sys42.example.com -po 1521
        -sid disco_db1 -p nPword432 -u jones
```

In this example, you must run the `load` command only once before authorizing any number of users. For example, if you want to authorize 10 users, run the `load` command once, and then run the `authorize` command once for each user.

3.3.2.2 Updating the Privileges of an Existing Discoverer Catalog User

To update the user's privileges to access all private and shared folders, use the following command:

```
java -classpath path_to_d4o_jar_file updatePrivileges -h hostname -po portname  
-sid database_SID -p d4osyspasswd -u user
```

For example, on **Windows**:

```
java -classpath C:\temp\d4o.jar updatePrivileges -h sys42.example.com -po 1521  
-sid disco_db1 -p nPword432 -u jones
```

For example, on **UNIX**:

```
java -classpath /home/abc/d4o.jar updatePrivileges -h sys42.example.com -po 1521  
-sid disco_db1 -p nPword432 -u jones
```

In this example, if you specify the `-u` option, then the privileges are upgraded only for that user. If you do not specify the `-u` option, then the privileges are upgraded for all users.

3.3.3 Post-Migration Configuration for Oracle Directory Integration Platform

After running Patch Assistant, start your Oracle Directory Integration Platform 11g Release 1 (11.1.1.2.0) domain. For more information, see the Starting and Stopping Oracle Fusion Middleware chapter in the *Oracle Fusion Middleware Administrator's Guide* and, then complete the following steps:

1. Log in to Oracle Enterprise Manager Fusion Middleware Control.
2. In the Oracle Enterprise Manager home page, select **Farm**, and then **Agent-Monitored Targets**.
The **Agent-Monitored Targets** page is displayed.
3. From the **Targets** table, select the target used by the Oracle Directory Integration Platform, and click **Configure**.
The **Configure Target** page is displayed.
4. Click **Change Agent** and, then select the Oracle Internet Directory Agent URL from the drop-down box.
5. Click **Ok**.
6. Click **Apply**.
7. Log out of Oracle Enterprise Manager.
8. Log in to Oracle Enterprise Manager again.
9. Unregister the ASInstance created during Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Directory Integration Platform configuration by running the following command:

Windows:

```
ORACLE_INSTANCE\bin\opmnctl unregisterinstance -adminHost -adminPort  
-adminUserName
```

UNIX:

```
$ORACLE_IMSTANCE/bin/opmnctl unregisterinstance -adminHost -adminPort  
-adminUserName
```

10. Delete the ASInstance created during Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Directory Integration Platform Configuration by running the following command:

Windows:

```
ORACLE_HOME\opmn\bin\opmnctl deleteinstance -oracleInstance <Oracle instance root directory>
```

UNIX:

```
$ORACLE_HOME/opmn/bin/opmnctl deleteinstance -oracleInstance <Oracle instance root directory>
```

3.3.4 Post-Migration Configuration for Oracle Identity Federation

After running Patch Assistant, your Credential Store Framework (CSF) is not migrated to Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0), if you are using an LDAP store. You must migrate the credentials manually from a source repository to a target repository by using the WLST command `migrateSecurityStore`. For information, see the "Migrating Credentials with the Command `migrateSecurityStore`" section in the *Oracle Fusion Middleware Security Guide*.

3.3.5 Post-Migration Configuration for Oracle Platform Security Services

You must manually migrate your existing Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) policy store because the corresponding schema changes when you install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0). During this migration, any existing 11.1.1.1.0 installation policies are updated to 11.1.1.2.0 policies. You will find the existing 11.1.1.1.0 data provisioned in the 11.1.1.2.0 LDAP store.

However, you must redeploy your applications after installing Oracle Fusion Middleware (11.1.1.2.0), but the provisioned policies are already in the migrated LDAP store.

Note: When redeploying your applications, you should not migrate the policies as they already exist in the policy store.

Note that Oracle WebLogic Server domains are containers of application policy data that is used by Oracle Platform Security Services. Typically, a domain is identified by its name, as in the following example:

```
Relative DN (RDN) cn=MyDomain, cn=JpsContext, cn=JpsTestNode
```

The Relative DN (RDN) `cn=MyDomain` is the node on the LDAP server that corresponds to a domain. All data under such a domain, including Credential Store and Policy Store data, is preserved.

Note: If you are using Oracle WebLogic Server LDAP, then you must re-create the user. For more information, see "Security Data Migration" section in the *Oracle Fusion Middleware Developing Security Providers for Oracle WebLogic Server*.

Migration Scenarios

If you are migrating Oracle Platform Security Services 11.1.1.1.0 Policy Store to 1.1.1.2.0 Policy Store, consider the following migration scenarios:

- [Migrating File-Based Policy and Credential Store](#)
- [Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server](#)

3.3.5.1 Migrating File-Based Policy and Credential Store

To migrate your existing file-based policy and credential store from 11.1.1.1.0 to 11.1.1.2.0, you must install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0), which is configured to use the file-based policy (XML), credential (wallet) stores, and then migrate the credentials and application policies by using the WebLogic Scripting Tool (WLST) command `migrateSecurityStore`. For more information, see the "Migrating Credentials with the Command `migrateSecurityStore`" section in the *Oracle Fusion Middleware Security Guide*.

3.3.5.2 Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server

To migrate your existing Oracle Internet Directory policy and credential store from Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) to Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0), start the servers in your Oracle Fusion Middleware domain and then complete the following steps:

Note: Ensure that your Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) installation has applications deployed on a single domain and configured with LDAP or credential store. In addition, make sure that you do not have any resource catalog information provisioned.

1. Reconfigure the LDAP authenticator to use the same LDAP server used in the 11.1.1.1.0 installation. For information, see the *Oracle Fusion Middleware Security Guide*.

Note: For information on reconfiguring the LDAP authenticator to use the same LDAP server used in Oracle WebCenter 11.1.1.1.0 installation, see the "Reassociating the Identity Store with an External LDAP" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

2. Update the Java Platform Security (JPS) LDAP schema in the LDAP store by using the WLST `reassociateSecurityStore` command. The reassociation creates a temporary node under a pre-existing `jps` root node. The temporary data is the domain, you specified during reassociation. The domain needs to be a new temporary name and the `jpsroot` should have the same name that contains the domain you are migrating from 11.1.1.1.0. For information, see the "reassociateSecurityStore" section in the *Oracle Fusion Middleware Security Guide*. This command creates a temporary domain that will be deleted later. For example:

```
reassociateSecurityStore(domain="ps1_tmp_domain", admin="cn=orcladmin",  
password="welcome1", ldapurl="ldap://example.com:3060", servertype="OID",  
jpsroot="cn=jpsroot_r1_name")
```

Note: Set a temporary name for the domain, and ensure that the `jpsroot` has the same name as in 11.1.1.1.0.

3. Ensure that the Oracle WebLogic Administration Server is stopped to change the server configuration. To stop the server, run the following command:

Windows:

```
MW_HOME\user_projects\domains\\bin\stopWebLogic.cmd
username password admin_url
```

UNIX:

```
$ MW_HOME/user_projects/domains/<domain_name>/bin/stopWeblogic.sh
username password admin_url
```

4. Rebuild the Oracle Internet Directory catalog by running the following catalog commands from the Oracle Internet Directory machine:

Note: Before you start using the Oracle Identity Management command-line tools, you must configure your environment. This involves setting the appropriate environment variables as follows:

- *ORACLE_HOME* - The location of non-writable files in your LDAP-based identity store installation.
- *ORACLE_INSTANCE* - The location of writable files in your LDAP-based identity store installation.
- *TNS_ADMIN* - The location of *tnsnames.ora* file in your Oracle home.

Ensure that the *tnsnames.ora* file (Located at *ORACLE_HOME/network/admin*) contains the *conn_str* that will be used in the catalog command.

- *PATH* - Add the following directory locations to your *PATH*:

```
ORACLE_HOME/bin
ORACLE_HOME/ldap/bin
ORACLE_HOME/ldap/admin
```

Drop the catalog first before re-creating it as follows:

```
catalog connect="conn_str" delete=true attribute= createtimestamp
catalog connect="conn_str" delete=true attribute= modifytimestamp
catalog connect="conn_str" delete=true attribute= orclJpsResourceName
catalog connect="conn_str" delete=true attribute= orclJPSObjGUID
catalog connect="conn_str" delete=true attribute=
orclJpsResourceTypeActionNames
```

Then add the following:

```
catalog connect="conn_str" add=true attribute= createtimestamp
catalog connect="conn_str" add=true attribute= modifytimestamp
catalog connect="conn_str" add=true attribute= orclJpsResourceName
catalog connect="conn_str" add=true attribute= orclJPSObjGUID
catalog connect="conn_str" add=true attribute= orclJpsResourceTypeActionNames
```

For more information, see "Performing Bulk Operations" chapter in the *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*.

5. Delete the temporary domain, created in step 1, by performing the following:

- a. Disable the Server Entry Cache. For more information, see "Tuning Recommendations for Server Entry Cache" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*.

- b. Stop Oracle Internet Directory by running the following command:

Windows

```
ORACLE_INSTANCE\bin\opmnctl stopall
```

UNIX

```
ORACLE_INSTANCE/bin/opmnctl stopall
```

- c. Run the following command:

```
bulkdelete connect="connect string" basedn="cn=ps1_tmp_
domain,cn=JPSText,cn=jpsroot_r1_name"
```

Note: Do not use JXplorer or any other LDAP browser to delete the JPS root node.

For more information, see "Deleting Entries or Attributes of Entries by Using bulkdelete" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*.

- d. Start Oracle Internet Directory by running the following command:

Windows

```
ORACLE_INSTANCE\bin\opmnctl startall
```

UNIX

```
ORACLE_INSTANCE/bin/opmnctl startall
```

- e. Enable the Server Entry Cache. For more information, see the "Tuning Recommendations for Server Entry Cache" section and the "Attributes of the Instance-Specific Configuration Entry" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*.

- f. Stop and start Oracle Internet Directory by running the following commands:

Windows

```
ORACLE_INSTANCE\bin\opmnctl stopall
ORACLE_INSTANCE\bin\opmnctl startall
```

UNIX

```
ORACLE_INSTANCE/bin/opmnctl stopall
ORACLE_INSTANCE/bin/opmnctl startall
```

- 6. Open the `jps-config.xml` file (located in your `MW_HOME\user_projects\domains\\config\fmwconfig` directory) in a text editor and replace the 11.1.1.2.0 domain name with 11.1.1.1.0 domain name. For example, replace `cn=ps1_tmp_domain` with `cn=R1_domain_name`.
- 7. Migrate the default system policies from the XML store to the LDAP store by using the WLST Command `migrateSecurityStore`. For more information, see the "Migrating Credentials with the Command `migrateSecurityStore`" section in the *Oracle Fusion Middleware Security Guide*. In the `jps-config.xml` file, add the

entries to specify the source and the destination source JPS context. The source JPS context must be the one that uses the XML store as the policy store, and the destination JPS context must be the one that uses the LDAP store. For example, add the following entries in the `jps-config.xml` file:

```
<jpsContext name="filestore">
  <serviceInstanceRef ref="policystore.xml"/>
</jpsContext>
<jpsContext name="ldapstore">
  <serviceInstanceRef ref="policystore.ldap"/>
</jpsContext>
```

Ensure that the `policystore.xml` service instance in `jps-config.xml` file refers to the shipped `system-jazn-data.xml` file (out-of-the-box), as in the following example:

```
<serviceInstance location="./system-jazn-data.xml"
provider="policystore.xml.provider" name="policystore.xml">
  <description>File Based Policy Store Service Instance</description>
</serviceInstance>
```

Migrate the system policies by using the WLST `migrateSecurityStore` command, as shown in the following example:

```
migrateSecurityStore(type="globalPolicies", configFile="<domain level
jpsconfig.xml file loc>", src="filestore" ,dst="ldapstore")
```

For more information about the migrating system policies, see the "Migrating Policies to the Domain Policy Store" section in the *Oracle Fusion Middleware Security Guide*.

8. Ensure that the LDAP server contains the `Role Categories` entry under your application policy node.
 - a. Run the `ldapsearch` command to search for this `Role Categories` entry from the Oracle Internet Directory machine:

```
LDAP_OH/bin/ldapsearch -h <host> -p <port> -D "<Admin DN>" -w password -b
"cn=Role Categories,cn=<app name>,cn=<domain
name>,cn=JpsContext,cn=<jpsroot name>" -s base "(objectclass=*)"
```

Where `LDAP_OH/bin` is the `OID/IdM IDM_ORACLE_HOME/bin` directory.

Example:

```
LDAP_OH/bin/ldapsearch -h oid.example.com -p 3060 -D "cn=orcladmin" -w
password -b "cn=Role
Categories,cn=appname,cn=domainname,cn=JpsContext,cn=jpsroot" -s base
"(objectclass=*)"
```

For detailed syntax, see the "ldapsearch" topic in the *Oracle Fusion Middleware User Reference for Oracle Identity Management*.

Note: If the `Role Categories` entry is not available, the following message is displayed:

```
ldap_search: No such object
```

- b. If the `Role Categories` entry is not present, create an LDIF file named `rolecat.ldif` with the following content:

```
dn: cn=Role Categories,cn=<app name>,cn=<domain
name>,cn=JPSTContext,cn=<jpsroot name>
objectclass: top
objectclass: orclContainer
cn: Role Categories
```

Example:

```
dn: cn=Role Categories,cn=webcenter,cn= R1_domain_
name,cn=JPSTContext,cn=jpsroot_r1_name
objectclass: top
objectclass: orclContainer
cn: Role Categories
```

- c. Run the `ldapadd` command to add this node to the application policy store as follows:

```
LDAP_OH/bin/ldapadd -p <port> -h <host> -D "<Admin DN>" -w <password> -vf
rolecat.ldif
```

Where `LDAP_OH/bin` is the `OID/IdM IDM_ORACLE_HOME/bin` directory.

Example:

```
LDAP_OH/bin/ldapadd -p 3060 -h oid.example.com -D "cn=orcladmin" -w
password -vf rolecat.ldif
```

For detailed syntax, see the "ldapadd" topic in the *Oracle Fusion Middleware User Reference for Oracle Identity Management*.

Note: If the node exists, the output of the `ldapadd` command indicates that the object already exists.

9. Start the Oracle WebLogic Administration Server, as shown in the following example:

```
MW_HOME/user_projects/domains/domain_name/bin/startWebLogic.sh
-Dweblogic.management.username=weblogic
-Dweblogic.management.password=password
```

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

10. Redeploy any user applications that were deployed in 11.1.1.1.0.

3.3.6 Post-Migration Configuration for Oracle Reports

After running Patch Assistant, your Oracle Internet Directory Policy and Credential Store (CSF) is not migrated to Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0). For information about migrating the Oracle Internet Directory Policy and Credential Store (CSF), see [Section 3.3.5.2, "Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server"](#).

3.3.7 Post-Migration Configuration for Oracle SOA

After running Patch Assistant, you must perform the following:

Note: Service Engine configuration has moved from file to the database in 11.1.1.2.0.

1. Re-deploy your J2EE applications, including TaskDetail Application used in Human Workflow Applications. For more information, see "Deploying SOA Composite Applications" chapter in the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.
2. Reconfigure any changes made to configuration files (For example: `soa-infra-config`) and component-level configuration files in 11.1.1.1.0 must be reconfigured for 11.1.1.2.0 using the Oracle Enterprise Manager Fusion Middleware Control.
3. Reconfigure the log level settings using the Oracle Enterprise Manager Fusion Middleware Control. For more information, see "Configuring Logging" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.
4. Re-create the seeding of the Workflow users.
5. Reconfigure the Secure Sockets Layer (SSL) for the SOA composite application. For more information, see the "Securing SOA Composite Applications" chapter in the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.
6. If you have configured the Oracle HTTP Server for 11.1.1.1.0, then you must reconfigure it for 11.1.1.2.0.
7. For composites involving BPEL Sensors with sensor action as JMS Queue, JMS Topic, JMS Adapter (remote JMS), re-create the JMS Queue, JMS topic, and the remote JMS set up.
8. Configure the identity and policy provider, as described in [Section 3.3.5.2, "Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server"](#).
9. Configure the SSO provider for 11.1.1.2.0.
10. Configure the adapters as follows:
 - Create the data source for the AQ adapter by following the steps described in the "Configuring the Data Sources in the Oracle WebLogic Server Administration Console" section in the *Oracle Fusion Middleware User's Guide for Technology Adapters*.
 - Configure AQ JMS in Oracle WebLogic Server Administration Console. For more information, see the *Oracle Fusion Middleware User's Guide for Technology Adapters*.
 - Create the foreign server for the AQJMS again and restart the server.
 - After migration, if the log was showing Queue Manager not available (with MQ reason code: 2059), you must modify the JNDI, which is used by the composite deployed to point to the Queue Manager, which was used for pre-upgrade. After making this change, you must restart SOA.
11. Migrate the B2B for 11.1.1.2.0 as follows:
 - a. Import previously exported repository from 11.1.1.1.0 with the Replace Existing MetaData flag.
 - b. Update the key store password and restart the B2B server.
 - c. Select the certificate alias in delivery channel and save.

- d. Deploy the B2B agreements.

3.3.8 Post-Migration Configuration for Oracle User Messaging Service

After running Patch Assistant, you must perform the following:

- [Migrating Configuration for Additional Custom-Deployed Drivers](#)
- [Migrating Configuration for User Messaging Service Worklist Driver](#)
- [Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server](#)

3.3.8.1 Migrating Configuration for Additional Custom-Deployed Drivers

If your Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) domain has configuration files for additional User Messaging Service driver deployments beyond those provisioned at install time, then you must migrate them to Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0). Run the following Ant command on the command-line:

```
ant -f UMS/build.xml patch-ums-driver-config -Ddriver.name=<driver_name>
```

Where <driver_name> is the deployment name of the custom driver. The build.xml file is located in your patchMaster directory.

Note: This command only migrates the configuration to Oracle Fusion Middleware (11.1.1.2.0) domain and will not deploy the driver.

3.3.8.2 Migrating Configuration for User Messaging Service Worklist Driver

If your Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) domain has the User Messaging Service Worklist Driver installed and configured, then the configuration of the Worklist Driver is automatically migrated by the Patch Assistant. Patch Assistant does not install this additional driver. You must re-install the driver in the Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) domain. For more information, see "Install the Worklist Driver" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.

3.3.9 Post-Migration Configuration for Oracle WebCenter

This section describes the tasks involved in getting your Oracle WebCenter 11.1.1.2.0 up and running after you have migrated the mid-tier.

3.3.9.1 Overview of Tasks for Configuring Oracle WebCenter Post Mid-Tier Migration

[Table 3–2](#) describes the tasks involved in configuring Oracle WebCenter 11.1.1.2.0 after the Patch Assistant script has been executed. The table also specifies whether these tasks are optional or mandatory.

Table 3–2 Post Mid-Tier Migration Tasks for Oracle WebCenter

Task	Description	Mandatory/Optional?
Reconfiguring Oracle WebCenter Identity Store and Migrating the Application Policy to the WebCenter Policy Store	Configure the identity store to use the same configuration as Oracle WebCenter 11.1.1.1.0. Also, run the <code>updateSpacesPolicy.py</code> script to update the application store to include appropriate security permissions for WebCenter Spaces. Note: You must run <code>updateSpacesPolicy.py</code> even if your Oracle WebCenter uses the embedded LDAP identity store.	Mandatory
Configuring Oracle WebCenter for Secure Sockets Layer (SSL)	Configure Oracle WebCenter 11.1.1.2.0 to use the same SSL configuration and keystore as Oracle WebCenter 11.1.1.1.0.	Mandatory if SSL is configured in Oracle WebCenter 11.1.1.1.0
Configuring Oracle WebCenter for Single Sign-On (SSO)	Configure your single sign-on (SSO) solution to use the same SSO configuration as Oracle WebCenter 11.1.1.1.0.	Mandatory if SSO is configured in Oracle WebCenter 11.1.1.1.0
Refreshing Group Space Data in WebCenter Spaces	Refresh the group space data and the data about group space members.	Mandatory
Reapplying Configuration Changes	Reapply any configuration changes made to Oracle WebCenter 11.1.1.1.0.	Mandatory
Importing Wiki Templates and Attachments	Migrate templates and attachments to the database repository of Oracle WebCenter Wiki and Blog Server.	Mandatory if Oracle WebCenter Wiki and Blog Server is configured for Oracle WebCenter 11.1.1.1.0
Migrating Oracle Content Server	Run the WebCenter configuration script <code>wc_contentserverconfig</code> to migrate to Oracle Content Server 10.1.3.5.1. Also, configure a JPS user provider in place of the existing LDAP user provider.	Mandatory if Oracle Content Server is configured for Oracle WebCenter 11.1.1.1.0
Configuring Oracle WebCenter Discussions for WebCenter Spaces	Configure Web Services Security (WS-Security) if you want to use Oracle WebCenter Discussions with Oracle WebCenter Spaces.	Mandatory
Migrating Custom WebCenter Applications	Migrate custom WebCenter applications to Oracle WebCenter 11.1.1.2.0.	Mandatory

3.3.9.2 Reconfiguring Oracle WebCenter Identity Store and Migrating the Application Policy to the WebCenter Policy Store

You must migrate your existing identity store and credential store. Before doing so, be sure to start all the servers in your WebCenter domain.

If you are using the embedded LDAP based policy and credential store, for information about the tasks that you need to perform, see the "Exporting and Importing a File-based Policy Store" and "Exporting and Importing a File-based Credential Store" sections in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

When Oracle WebCenter 11.1.1.1.0 is configured to use an external LDAP-based identity store, then post mid-tier migration you must migrate your identity store and credential store to Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0). For information about how to migrate Oracle Internet Directory policy and credential store, see [Section 3.3.5.2, "Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server."](#)

After migrating the identity and credential store, you must run the `updateSpacesPolicy.py` script to update the WebCenter Spaces application policy to include appropriate security permissions. If you do not run this script, WebCenter Spaces users will not be able to access their profile information or the service tabs in group spaces.

Note: You must run the `updateSpacesPolicy.py` script even if your Oracle WebCenter uses the embedded LDAP identity store.

To execute `updateSpacesPolicy.py`:

1. Launch WLST with this command:

```
WC_ORACLE_HOME/common/bin/wlst.sh
```

Where `WC_ORACLE_HOME` refers to the Oracle Webcenter installation directory.

2. At the WLST command prompt, enter the following command to connect to the Administration Server:

```
wls:/offline> connect('user_name','password','host_name:port_number')
```

For example, use the following command:

```
connect('weblogic','weblogic','myhost.example.com:7001')
```

3. Use the following command to run the `updateSpacesPolicy.py` script:

```
wls:/weblogic/serverConfig> execfile('WC_ORACLE_
HOME/webcenter/scripts/updateSpacesPolicy.py')
```

4. Ensure that there are no errors logged on the console. If there are errors, use the error message as a guide and inspect the `updateSpacesPolicy.py` script to determine the `grant` command that failed. You must fix errors, if any, and run the `grant` command manually.
5. Restart the Administration Server and the `WLS_Spaces` Managed Server.

3.3.9.3 Configuring Oracle WebCenter for Secure Sockets Layer (SSL)

Secure Sockets Layer (SSL) provides additional security for connections between WebCenter applications or components by providing an additional authentication layer, and by encrypting the data exchanged. During mid-tier migration, the SSL configuration does not get migrated. After running the Patch Assistant script, you must reconfigure SSL for Oracle WebCenter and, if required, for various WebCenter Services integrated into your WebCenter applications. For information about how to configure SSL for WebCenter applications and WebCenter Services, see the "Configuring WebCenter Applications and Components to Use SSL" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

For example, in Oracle WebCenter 11.1.1.1.0, if secured portlets were used in WebCenter Spaces, then your keystore must have been set to the Custom Identity and Java Standard Trust keystore and you would have imported the required portlet

certificates in the Java standard trust keystore (typically cacerts). Now, post mid-tier migration, you must configure the `WLS_Spaces` server, in your Oracle WebCenter 11.1.1.2.0 instance, to use the Custom Identity and Java Standard Trust keystore and other SSL-specific settings that were configured for Oracle WebCenter 11.1.1.1.0. Also, you must reimport all your portlet certificates into the trust keystore to access secured portlets in Oracle WebCenter 11.1.1.2.0.

3.3.9.4 Configuring Oracle WebCenter for Single Sign-On (SSO)

For single sign-on (SSO) authentication, your Oracle WebCenter 11.1.1.1.0 may be configured to use Oracle Access Manager (OAM), Oracle Single Sign-on (OSSO), or a SAML-based single sign-on solution for WebCenter applications only. After mid-tier upgrade, you may need to perform the following configuration, depending on the SSO solution used:

- **Configuring OAM:** Configure the authenticator and the OAM asserter to use the same configuration as used in Oracle WebCenter 11.1.1.1.0. For information, see the "Configuring Oracle Access Manager (OAM)" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
- **Configuring OSSO:** Configure the authenticator and the OSSO asserter to use the same configuration as used in Oracle WebCenter 11.1.1.1.0. For information, see the "Configuring Oracle Single Sign-On (OSSO)" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
- **Configuring SAML-based SSO:** You must set up your entire SAML-based SSO solution. For information, see the "Configuring SAML-based Single Sign-on" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

Note: If WebCenter is running with SSO, the OmniPortlet producer receives an authorization exception when it tries to store connection information in the Credential Store Framework (CSF) wallet. For information about how to resolve this issue, see the "OmniPortlet Producer Authorization Exception in SSO Environment" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

3.3.9.5 Refreshing Group Space Data in WebCenter Spaces

After mid-tier migration, you must refresh the group space data. Also, refresh the member data for *each* group space individually.

To refresh the group space data:

1. Log on to WebCenter Spaces as an administrator.
2. Click the **Administration** link, and go to the **Group Spaces** tab.
3. Click the **Refresh** icon.

To refresh the member data for a group space:

1. Log on to WebCenter Spaces as an administrator.
2. Go to the desired group space, open the **Settings** tab, and then the **Members** tab.
3. Click the **Refresh** icon in the **Manage Group Space Members** section.

You must perform this procedure for each group space individually.

Note: In your migrated WebCenter instance if access is denied to a group space, ensure that the credential store has been migrated successfully and the group space data has been refreshed.

3.3.9.6 Reapplying Configuration Changes

If you want the same configuration as defined in your Oracle WebCenter 11.1.1.1.0, then you must reapply the configuration changes in Oracle WebCenter 11.1.1.2.0.

Configuration changes may relate to the any of the following:

- WebCenter portlet producers: Any changes made to the `provider.xml` file of a portlet producer, like changing a proxy server, require that post mid-tier migration you reconfigure those changes, redeploy the portlet producer EAR application, and restart `WLS_Portlet` managed server. For information about redeploying portlet producers, see the "Managing Portlet Producers" chapter in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
- WebCenter Services: While installing Oracle Fusion Middleware 11.1.1.2.0, if you changed the host and port number of the back-end servers on which your WebCenter Services rely, you must reconfigure the required service connections to use the new server configuration. For information about specific services, see the "Managing Services, Portlet Producers, and External Applications" part in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
- WebCenter wikis and blogs: Any configuration changes made to your Oracle WebCenter Wiki and Blog Server 11.1.1.1.0, such as changing the theme or setting the attachment size, require that you reapply those changes in Oracle WebCenter Wiki and Blog Server 11.1.1.2.0. To reconfigure settings, use Administration mode of your Oracle WebCenter Wiki and Blog Server. For information, see the "Oracle WebCenter Wiki and Blog Server - Configuration" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
- WebCenter Spaces workflows: The WebCenter Spaces workflows functionality requires `sca_CommunityWorkflows.jar` and `WebCenterWorklistDetailApp.ear` to be deployed to a SOA server. If WebCenter Spaces workflows were enabled in Oracle WebCenter 11.1.1.1.0, you must redeploy these applications to the SOA server post mid-tier migration. For information, see the "Back-End Requirements for WebCenter Spaces Workflows" section in the *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*.

3.3.9.7 Importing Wiki Templates and Attachments

In Oracle WebCenter Wiki and Blog Server 11.1.1.1.0, regardless of the repository type configured for the server, templates and attachments are stored in a file-based repository. Oracle WebCenter Wiki and Blog Server 11.1.1.2.0 supports only a database repository; templates and attachments are also stored in the database repository.

If your Oracle WebCenter Wiki and Blog Server 11.1.1.1.0 used a database repository, then during migration templates and attachments are migrated to the database repository configured for Oracle WebCenter Wiki and Blog Server 11.1.1.2.0. If your Oracle WebCenter Wiki and Blog Server 11.1.1.1.0 used a file-based repository, then during migration wiki templates and attachments are migrated to a file-based repository. To make these templates and attachments available in Oracle WebCenter Wiki and Blog Server 11.1.1.2.0, you must manually migrate them to the database repository.

To import attachments for a wiki page, the user who owns that wiki page or you as an administrator must reupload the attachments on the wiki page. When you reupload an

attachment, the attachment gets stored in the database repository. Note that attachments must be reuploaded for each wiki page individually.

To migrate templates:

1. Log on to Oracle WebCenter Wiki and Blog Server 11.1.1.2.0 as an administrator.
2. Click the **Administration** link to open Administration mode.
3. Click **Templates**.
4. Click **import**.
5. On the **Import Templates** page, in the **Folder** field, enter the path to templates. For example:

```
$APPLICATIONS_DIRECTORY/owc_wiki/templates.
```

Where, *\$APPLICATIONS_DIRECTORY* is the directory where you installed Oracle WebCenter Wiki and Blog Server 11.1.1.2.0. That is, *\$APPLICATIONS_DIRECTORY = MW_HOME/user_projects/applications/DOMAIN_NAME*.

6. Click **Import Templates**. The existing file-based templates are individually re-created in the wiki database repository.

3.3.9.8 Migrating Oracle Content Server

Oracle WebCenter 11.1.1.2.0 is compatible with Oracle Content Server 10.1.3.5.1. To migrate your existing Oracle Content Server and prepare it to work with Oracle WebCenter 11.1.1.2.0, you must perform the following tasks:

- Run the WebCenter configuration script, *wc_contentserverconfig*. This script is available on the Universal Content Management (UCM) media shipped with Oracle WebCenter. For information about how to run the script, see the "Oracle Content Server - Installation" section in the *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*.
- Reconfigure the identity store for Oracle Content Server. To connect to an LDAP-based identity store, Oracle Content Server 10.1.3.5.1 requires a JPS user provider, instead of an LDAP user provider. Therefore, you must configure a JPS user provider and ensure that the existing LDAP user provider for Oracle Content Server is disabled. For information, see the "Configuring the Identity Store" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

3.3.9.9 Configuring Oracle WebCenter Discussions for WebCenter Spaces

When you migrate from Oracle Fusion Middleware 11.1.1.1.0 to Oracle Fusion Middleware 11.1.1.2.0, the patch assistant script migrates the database schema of your Oracle WebCenter Discussions server. Out-of-the-box, Oracle WebCenter Discussions 11.1.1.2.0 is configured to use the embedded LDAP identity store of Oracle WebLogic Server.

You must configure Web Services Security (WS-Security) if you want to use Oracle WebCenter Discussions with WebCenter Spaces.

To configure Oracle WebCenter Discussions:

1. Log on to the Oracle WebCenter Discussions 11.1.1.2.0 server as an administrator by using the following URL format:

```
http://host:port/owc_discussions/admin
```

Where *host:port* refer to the host name and port number of the system where Oracle WebCenter is installed.

2. To verify that Oracle WebCenter Discussions has been migrated successfully, in Jive Forums Admin Console, ensure that "Jive Forums Silver 5.5.20.2-oracle" is displayed in the top-right corner.
3. Configure WS-Security trusted authentication if you want to use Oracle WebCenter Discussions with WebCenter Spaces. For information about how to configure WS-Security, see the "Configuring WS-Security" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
4. Reconfigure SSO for Oracle WebCenter Discussions, if required. For information, see the "Configuring a WebCenter Application to Use Single Sign-On" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

3.3.9.10 Migrating Custom WebCenter Applications

To make your custom WebCenter applications available in Oracle WebCenter 11.1.1.2.0, you must migrate them from your Oracle WebCenter 11.1.1.1.0 instance. You do not need to migrate the metadata of these applications because Oracle WebCenter 11.1.1.2.0 schemas are an in-place patch of your Oracle WebCenter 11.1.1.1.0 schemas for MDS, PORTLET, and WEBCENTER.

To migrate a custom WebCenter application:

1. Open the application in Oracle JDeveloper 11.1.1.2.0.
This invokes the migration wizard that automatically migrates your application to Oracle WebCenter 11.1.1.2.0.
2. Save the application.
3. Create a WebLogic Managed Server instance and provision it with a required set of shared libraries. For information, see the "Creating and Provisioning a WebLogic Managed Server Instance" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
4. Create and register the Metadata Service (MDS) repository for your application on the WebLogic Domain's Administration Server instance. For information, see the "Creating and Registering the Metadata Service Repository" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
5. Deploy the application to a Managed Server. For information, see the "Deploying the Application to a WebLogic Managed Server Instance" section and the "Deploying Portlet Producer Applications" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

Your custom WebCenter applications may have WebCenter Services integrated that rely on back-end servers. For example, Discussions and Search services rely on Oracle WebCenter Discussions and Oracle SES, respectively. While installing Oracle Fusion Middleware 11.1.1.2.0, if you changed the host or port number of your back-end servers, you must reconfigure the required WebCenter Services to use the new server configuration. For information about specific services, see the "Managing Services, Portlet Producers, and External Applications" part in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

3.3.10 Post Migration Configuration for Oracle Web Services Manager

To migrate Oracle Web Services Manager (WSM), perform the following tasks:

- [Purging the Policy Usage Analysis Information from the Metadata Services Repository](#)
- [Migrating the Oracle WSM Policies in the MDS Repository](#)

■ Migrating Custom Policy Accessor Properties

Note: Before you can migrate Oracle WSM, you must migrate components of the security environment, such as the identity store and key store configurations. For more information, see [Section 3.3.5, "Post-Migration Configuration for Oracle Platform Security Services"](#).

3.3.10.1 Purging the Policy Usage Analysis Information from the Metadata Services Repository

In this release, the same Oracle Metadata Services (MDS) repository can be used to manage policies across multiple domains. In previous releases, an MDS repository could only be used by a single domain.

If you have analyzed policy usage using the Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) installation, you will need to purge the policy usage analysis information from the MDS repository to ensure that accurate usage results are reflected for the Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) version.

To purge the policy usage analysis information from the MDS repository, use the `deleteMetadata` MDS command as follows:

```
deleteMetadata(application='wsm-pm', server='server_name',
               docs='/policyAttachments/**')
```

`server_name` specifies the name of the server on which the Oracle WSM policy manager is running.

After purging the policy usage analysis information, you must restart the server.

For more information about managing MDS repositories, see "About the Metadata Services (MDS) Repository" section in the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

3.3.10.2 Migrating the Oracle WSM Policies in the MDS Repository

In Oracle WSM 11g Release 1 (11.1.1), predefined and custom Oracle WSM policies are stored in the Oracle MDS repository. In this patch set, there are two new predefined policies available:

- `oracle/wss_saml_or_username_token_over_ssl_service_policy`
- `oracle/wss11_saml_or_username_token_with_message_protection_service_policy`

You can use Oracle WebLogic Scripting Tool (WLST) commands to upgrade the repository with the new predefined policies. You can also refresh the repository by deleting all Oracle WSM policies from the repository, including custom policies, and then repopulating it using the predefined policies provided in your installation. All of the policies in the repository are also revalidated when you upgrade the repository.

For more information, see "Upgrading the Oracle WSM Policies in the MDS Repository" in the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

3.3.10.3 Migrating Custom Policy Accessor Properties

If you have customized the policy accessor properties, you must re-apply the policy manager connection information once you have migrated your installation. For more

information, see "Managing Policy Accessor, Cache, and Interceptor Properties" in the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

3.4 Installation Process

Table 3–3 describes the 11.1.1.2.0 installation process that must be completed during the migration process.

Table 3–3 Installation Process

Scenario	Description and Steps
Installing products in a new Middleware home	<p>Before you can install 11.1.1.2.0 products in a new Middleware home, ensure that the repository is updated and the 11.1.1.1.0 schema is migrated to the 11.1.1.2.0 schema.</p> <p>To install products, complete the following steps:</p> <ol style="list-style-type: none"> 1. Install Oracle WebLogic Server. This step is not required for Web tier. 2. Run product-specific Installers to install the new products. <p>For more information, see the <i>Oracle Fusion Middleware Installation Planning Guide</i> and the product installation guides in the <i>Oracle Fusion Middleware Documentation Library</i> for the products you are installing and configuring.</p>
Installing products in a new Middleware home, on a second machine, in a Cluster environment	<p>Before you can install 11.1.1.2.0 products in a new Middleware home, ensure that the repository is updated and the 11.1.1.1.0 schema is migrated to the 11.1.1.2.0 schema.</p> <p>To install products in a Cluster environment, complete the following steps:</p> <ol style="list-style-type: none"> 1. Install Oracle WebLogic Server. This step is not required for Web tier. 2. Run product-specific Installers to install the new products. Ensure that Middleware home on the second machine must be at the same file path as the first machine. <p>For more information, see the <i>Oracle Fusion Middleware Installation Planning Guide</i> and the product installation guides in the <i>Oracle Fusion Middleware Documentation Library</i> for the products you are installing and configuring.</p>

3.5 Configuration Process

Table 3–4 describes the 11.1.1.2.0 configuration process that must be completed during the migration process.

Table 3–4 Configuration Process

Scenario	Description and Steps
Configuring Oracle Instances in a new Middleware home	<p>Before you can configure Oracle Instances in a new Middleware home, ensure that the repository is updated, the 11.1.1.1.0 schema is migrated to the 11.1.1.2.0 schema, all 11.1.1.2.0 products are installed, and the WebLogic domain is migrated.</p> <p>To configure Oracle Instances, run the <code>ant master-patch-oinstance</code> command.</p>

Table 3–4 (Cont.) Configuration Process

Scenario	Description and Steps
Configuring Oracle Instances in a new Middleware home, on a second machine, in a Cluster environment	<p>Before you can configure Oracle Instances in a new Middleware home, ensure that the repository is updated, the 11.1.1.1.0 schema is migrated to the 11.1.1.2.0 schema, all 11.1.1.2.0 products are installed in the Cluster environment (on a second machine), and the WebLogic domain is migrated.</p> <p>To configure Oracle Instances, run the <code>ant master-patch-oinstance</code> command.</p>
Configuring products in a new WebLogic domain	<p>Before you can configure 11.1.1.2.0 products in a new WebLogic domain, ensure that the repository is updated, the 11.1.1.1.0 schema is migrated to the 11.1.1.2.0 schema, and the 11.1.1.2.0 products are installed in a new Middleware home.</p> <p>To configure products in a new WebLogic domain, complete the following steps:</p> <ol style="list-style-type: none"> 1. Start the Oracle Fusion Middleware Configuration Wizard from your new Middleware home. 2. Choose product templates to match components on the old 11.1.1.1.0 domain. 3. For the new domain, choose the same domain name as the old 11.1.1.1.0 domain. 4. Configure servers, machines, or clusters to match the old 11.1.1.1.0 topology. 5. Create domain. 6. Optional: Start Node Manager.
Configuring products in a new WebLogic domain, on a second machine, in a Cluster environment	<p>Before you can configure 11.1.1.2.0 products in a new WebLogic domain, ensure that the repository is updated, the 11.1.1.1.0 schema is migrated to the 11.1.1.2.0 schema, and the 11.1.1.2.0 products are installed in a new Middleware home on a second machine in the Cluster environment.</p> <p>To configure products in a new WebLogic domain, complete the following steps:</p> <ol style="list-style-type: none"> 1. Start the Oracle Fusion Middleware Configuration Wizard from your new Middleware home. 2. Choose product templates to match components on the old 11.1.1.1.0 domain. 3. For the new domain, choose the same domain name as the old 11.1.1.1.0 domain. 4. Configure servers, machines, or clusters to match the old 11.1.1.1.0 topology. 5. Create domain. 6. Optional: Start Node Manager. 7. Run the <code>pack</code> command on the new domain on the first machine. 8. Run the <code>unpack</code> command on the second machine.

3.6 Properties in the patchMaster.properties File

Table 3–5 describes the properties that you can set in the `patchMaster.properties` file. All the properties are not mandatory. For the list of properties that are required for specific components, see Table 3–6.

Note: On Windows, you must use / as the delimiter to specify the property path. For example:

c:/my/path/file

Table 3–5 Patch Master Properties

Properties	Description
patchMaster.Componentlist	List the Fusion Middleware components, you want to patch from 11.1.1.1.0 to 11.1.1.2.0. Example: patchMaster.Componentlist=Audit,BAM,DIP,Discoverer,Forms,JPS
patchMaster.Schemaurl	Specify the connection string to a single repository being patched. Example: patchMaster.Schemaurl=jdbc:oracle:thin:@localhost:1521:orcl
patchMaster.Schemauser	Specify the system user for the repository specified by patchMaster.Schemaurl. Example: patchMaster.Schemauser=SYS AS SYSDBA
patchMaster.Schemaprefix	Specify the repository schema metadata namespace. Example: patchMaster.Schemaprefix=DEV For Oracle Portal users, if you upgraded your Oracle Portal 10g to Oracle Portal 11g R1 (11.1.1.1.0), you must specify the schema prefix as APPSERVER. For Oracle Internet Directory, you must specify the schema prefix as ODS.
patchMaster.Mwhomenew	Specify the path where your 11.1.1.2.0 home is installed. Example: patchMaster.Mwhomenew=/scratch/newhome
patchMaster.Mwhomeold	Specify the path where your 11.1.1.1.0 home is installed. Example: patchMaster.Mwhomeold=/scratch/oldhome
patchMaster.Domainhomenew	Specify the Oracle WebLogic Server domain 11.1.1.2.0 home. Example: patchMaster.Domainhomenew=/scratch/newhome/user_projects/domains/newDomain
patchMaster.Domainapplicationshomenew	Specify the Oracle WebLogic Server domain applications; 11.1.1.2.0 home. Example: patchMaster.Domainapplicationshomenew=/scratch/newhome/user_projects/applications/newDomain

Table 3–5 (Cont.) Patch Master Properties

Properties	Description
patchMaster.Domainhomeold	Specify the Oracle WebLogic Server domain 11.1.1.1.0 home. Example: patchMaster.Domainhomeold=/scratch/oldhome/user_projects/domains/oldDomain
patchMaster.Domainusername	Specify the Oracle WebLogic Server domain user name. Example: patchMaster.Domainusername=currentuser
patchMaster.Syspassword	Specify the password for the Oracle Weblogic domain. This property is not available, by default. You may add and set this property. If the property is not present, Patch Assistant prompts you to enter the password. Example: patchMaster.Syspassword=welcome1
patchMaster.Oracleinstancenewlist	List the paths to 11.1.1.2.0 Oracle instances. Example: patchMaster.Oracleinstancenewlist=/scratch/newinst1,/scratch/newinst2
patchMaster.Oracleinstanceoldlist	List the paths to 11.1.1.1.0, Oracle instances corresponding to 11.1.1.2.0, Oracle instance paths. Example: patchMaster.Oracleinstanceoldlist=/scratch/oldinst1,/scratch/oldinst2
patchMaster.Oraclehomenew	Specify the path of 11.1.1.2.0 Oracle home. Example: patchMaster.Oraclehomenew=/scratch/myOhomenew
patchMaster.Oraclehomeold	Specify the Path of 11.1.1.1.0 Oracle home. Example: patchMaster.Oraclehomeold=/scratch/myOhome Note: You can patch only one Oracle home at once. Do not specify multiple Oracle homes in the properties file for this entry.
patchMaster.Logdir	The default directory where the log file will be saved. Example: patchMaster.Logdir=\${patchMaster.Dir}
patchMaster.Loglevel	Specify the logging level to be recorded in the log file. The default log level is info. The other options are error, warning, verbose, and debug. Example: patchMaster.Loglevel=info

Table 3–5 (Cont.) Patch Master Properties

Properties	Description
patchMaster.Domainadminhost	This is either the 11.1.1.1.0 or 11.1.1.2.0 Administration Server host depending on the operation. It is used for starting or stopping domain and instance registration. Example: patchMaster.Domainadminhost=localhost
patchMaster.Domainadminport	This is either the 11.1.1.1.0 or 11.1.1.2.0 Administration Server port depending on the operation. It is used for starting or stopping domain and instance registration. Example: patchMaster.Domainadminport=7001

Note: See [Appendix A, "Sample Patch Master Properties File"](#), for a sample patchMaster.properties file.

Product-Specific Properties Required in the patchMaster.properties File

[Table 3–6](#) lists the properties required by Oracle Fusion Middleware components in the patchMaster.properties file.

Note: Patch Assistant validates properties based on operations only. It does not validate properties at the individual product level.

Table 3–6 Properties Required in patchMaster.properties File

Product	Required Properties
Oracle Fusion Middleware Audit Framework	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Schemaurl ▪ patchMaster.Schemauser ▪ patchMaster.Schemaprefix
Oracle Business Intelligence Discoverer	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Oracleinstancenewlist ▪ patchMaster.Oracleinstanceoldlist ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold ▪ patchMaster.Logdir ▪ patchMaster.Loglevel ▪ patchMaster.Statusfile ▪ patchMaster.Failonerror

Table 3–6 (Cont.) Properties Required in patchMaster.properties File

Product	Required Properties
Oracle Directory Integration Platform	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold ▪ patchMaster.Domainadminhost ▪ patchMaster.Domainadminport
Oracle Internet Directory	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Schemaurl ▪ patchMaster.Schemauser ▪ patchMaster.Schemaprefix ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oracleinstancenewlist ▪ patchMaster.Oracleinstanceoldlist ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold ▪ patchMaster.Logdir ▪ patchMaster.Loglevel ▪ patchMaster.Failonerror
Oracle Virtual Directory	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oracleinstancenewlist ▪ patchMaster.Oracleinstanceoldlist ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold ▪ patchMaster.Logdir ▪ patchMaster.Loglevel ▪ patchMaster.Failonerror

Table 3–6 (Cont.) Properties Required in patchMaster.properties File

Product	Required Properties
Oracle Java Required Files	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold
Oracle Metadata Services	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Schemaurl ▪ patchMaster.Schemauser ▪ patchMaster.Schemaprefix ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Oraclehomenew
Oracle Platform Security Services	<ul style="list-style-type: none"> ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainapplicationshomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oracleinstancenewlist ▪ patchMaster.Oracleinstanceoldlist ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold ▪ patchMaster.Domainadminhost ▪ patchMaster.Domainadminport
Oracle Portal	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Schemaurl ▪ patchMaster.Schemauser ▪ patchMaster.Schemaprefix ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oracleinstancenewlist ▪ patchMaster.Oracleinstanceoldlist ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold ▪ patchMaster.Logdir ▪ patchMaster.Loglevel ▪ patchMaster.Statusfile ▪ patchMaster.Failonerror

Table 3–6 (Cont.) Properties Required in patchMaster.properties File

Product	Required Properties
Oracle Reports	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oracleinstancenewlist ▪ patchMaster.Oracleinstanceoldlist ▪ patchMaster.Oraclehomeold ▪ patchMaster.Logdir ▪ patchMaster.Loglevel ▪ patchMaster.Failonerror
Oracle User Messaging Service	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Schemaurl ▪ patchMaster.Schemauser ▪ patchMaster.Schemaprefix ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold ▪ patchMaster.Logdir ▪ patchMaster.Loglevel ▪ patchMaster.Statusfile ▪ patchMaster.Failonerror
Oracle Web Cache	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Mwhomenew ▪ patchMaster.Mwhomeold ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainusername ▪ patchMaster.Oracleinstancenewlist ▪ patchMaster.Oracleinstanceoldlist ▪ patchMaster.Oraclehomenew ▪ patchMaster.Oraclehomeold

Table 3–6 (Cont.) Properties Required in patchMaster.properties File

Product	Required Properties
Oracle WebCenter	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Schemaurl ▪ patchMaster.Schemauser ▪ patchMaster.Schemaprefix ▪ patchMaster.Domainhomeold ▪ patchMaster.Domainapplicationshomenew
Oracle Web Services Manager	<ul style="list-style-type: none"> ▪ patchMaster.Componentlist ▪ patchMaster.Domainhomenew ▪ patchMaster.Domainhomeold ▪ patchMaster.Logdir ▪ patchMaster.Loglevel ▪ patchMaster.Statusfile ▪ patchMaster.Failonerror

3.6.1 Overriding Properties Set in the patchMaster.properties File

You can use the Ant command-line utility to override the properties set in the `patchMaster.properties` file. You must specify the required property on the command line as follows:

```
ant -D<property>=<value>
```

For example, to select components to patch, enter the following command on the command line:

```
ant -DpatchMaster.Componentlist=SOA,UMS,WebCenter
master-patch-schema
```

Note that `master-patch-schema`, in the above example, is the command that uses the new values.

Refer to [Table 3–5, "Patch Master Properties"](#) for complete information about properties that you can specify on the command line or in the `patchMaster.properties` file.

Note: When you override the `patchMaster.Schemauser` property to specify the system user by using the command-line utility, ensure that you use double quotation marks, as in the following example:

```
ant -DpatchMaster.Schemauser="SYS AS SYSDBA"
```

Do not enter the double quotation marks if you edit the `patchMaster.properties` file directly.

3.7 Oracle Fusion Middleware Components Supported by Patch Assistant

[Table 3–7](#) lists Oracle Fusion Middleware components that are supported by Patch Assistant.

Table 3–7 Oracle Fusion Middleware Components Supported by Patch Assistant

Component Name	Release
Oracle Fusion Middleware Audit Framework	11.1.1.2.0
Oracle BPEL Process Manager	11.1.1.2.0
Oracle Business Rules	11.1.1.2.0
Oracle Business-to-Business Integration	11.1.1.2.0
Oracle Business Activity Monitoring	11.1.1.2.0
Oracle Business Intelligence Discoverer	11.1.1.2.0
Oracle Internet Directory	11.1.1.2.0
Oracle Directory Integration Platform	11.1.1.2.0
Oracle Identity Federation	11.1.1.2.0
Oracle Virtual Directory	11.1.1.2.0
Oracle Directory Services Manager	11.1.1.2.0
Oracle Forms	11.1.1.2.0
Oracle Platform Security Services	11.1.1.2.0
Oracle Java Required Files	11.1.1.2.0
Oracle Metadata Services	11.1.1.2.0
Oracle Access Manager	11.1.1.2.0
Oracle TopLink	11.1.1.2.0
Oracle Dynamic Monitoring System (DMS)	11.1.1.2.0
Oracle Java Object Cache	11.1.1.2.0
Oracle Enterprise Manager Fusion Middleware Control	11.1.1.2.0
Oracle HTTP Server	11.1.1.2.0
Oracle Reports	11.1.1.2.0
Oracle Portal	11.1.1.2.0
Oracle Portlet Producers	11.1.1.2.0
Oracle User Messaging Service	11.1.1.2.0
Oracle Web Cache	11.1.1.2.0
Oracle WebCenter Spaces	11.1.1.2.0
Oracle WebCenter Discussions	11.1.1.2.0
Oracle WebCenter Portlets	11.1.1.2.0
Oracle WebCenter Wiki and Blogs	11.1.1.2.0
Oracle Content Server	10.1.3.5.1
Oracle WebLogic Server	10.3.1.0
Oracle Wallet Manager	11.1.1.2.0
Oracle Web Services Manager	11.1.1.2.0

Sample Patch Master Properties File

This appendix shows a sample `patchMaster.properties` file.

```
# This is the property file for the 11gR1-11ps1 patchMaster.
# Set values for the properties below to the desired value.
# If a property is not needed, it must be commented out.

# Description: List of components to patch from 11gR1 to 11ps1
# Example:
patchMaster.Componentlist=Audit,BAM,DIP,Discoverer,Discussions,Forms,JPS,JRF,MDS,MOdpsql,OAM,OCServer,ODL,ODSM,OHS,OID,OIF,Opmn,OVD,OWSM,Portal,Portlet,Reports,SOA,UMS,WebCenter,Webcache,Webservices,Wiki
patchMaster.Componentlist=Audit,BAM,DIP,Discoverer,Discussions,Forms,JPS,JRF,MDS,MOdpsql,OAM,OCServer,ODL,ODSM,OHS,OID,OIF,Opmn,OVD,OWSM,Portal,Portlet,Reports,SOA,UMS,WebCenter,Webcache,Webservices,Wiki

# Description: Connection string to a single repository being patched.
# Example: patchMaster.Schemaurl=jdbc:oracle:thin:@localhost:1521:orcl
patchMaster.Schemaurl=jdbc:oracle:thin:@<host>:<port>:<sid>

# Description: A system user for the repository specified by patchMaster.Schemaurl
# Example: patchMaster.Schemauser=SYS AS SYSDBA
# patchMaster.Schemauser=<Value Unspecified>

# Description: The optional repository schema metadata namespace.
# Example: patchMaster.Schemaprefix=DEV
# patchMaster.Schemaprefix=<Value Unspecified>

# Description: Fusion Middleware 11ps1 home.
# Example: patchMaster.Mwhomenew=/scratch/newhome
# patchMaster.Mwhomenew=<Value Unspecified>

# Description: Fusion Middleware 11gR1 home.
# Example: patchMaster.Mwhomeold=/scratch/oldhome
# patchMaster.Mwhomeold=<Value Unspecified>

# Description: WLS domain 11ps1 home.
# Example: patchMaster.Domainhomenew=/scratch/newhome/user_
projects/domains/newDomain
# patchMaster.Domainhomenew=<Value Unspecified>

# Description: WLS domain applications 11ps1 home.
# Example: patchMaster.Domainapplicationshomenew=/scratch/newhome/user_
projects/applications/newDomain
# patchMaster.Domainapplicationshomenew=<Value Unspecified>

# Description: WLS domain 11gR1 home.
```

```
# Example: patchMaster.Domainhomeold=/scratch/oldhome/user_
projects/domains/oldDomain
# patchMaster.Domainhomeold=<Value Unspecified>

# Description: WLS domain username.
# Example: patchMaster.Domainusername=currentuser
# patchMaster.Domainusername=<Value Unspecified>

# Description: List paths to 11ps1 Oracle instances.
# Example: patchMaster.Oracleinstancenewlist=/scratch/newinst1,/scratch/newinst2
# patchMaster.Oracleinstancenewlist=<Value Unspecified>

# Description: List paths to 11gR1 Oracle instances corresponding to 11ps1 Oracle
instance paths.
# Example: patchMaster.Oracleinstanceoldlist=/scratch/oldinst1,/scratch/oldinst2
# patchMaster.Oracleinstanceoldlist=<Value Unspecified>

# Description: Path to 11ps1 Oracle home.
# Example: patchMaster.Oraclehomenew=/scratch/mynewOhome
# patchMaster.Oraclehomenew=<Value Unspecified>

# Description: Path to 11gR1 Oracle home.
# Example: patchMaster.Oraclehomeold=/scratch/myOhome
# patchMaster.Oraclehomeold=<Value Unspecified>

# Description: Specifies the directory where the log files go if a custom
# location is desired.
# Example: patchMaster.Logdir=/scratch/patchMasterDir
# patchMaster.Logdir=<Value Unspecified>

# Description: Specifies the logging level to be recorded in the log file
# Values={error|warning|info|verbose|debug} Default=info
patchMaster.Loglevel=info

# Description: WLS domain Adminserver hostname. This is *either* the R1 or PS1
Adminserver host
# depending the operation. Used for start/stop domain and instance registration.
# Example: patchMaster.Domainadminhost=localhost
# patchMaster.Domainadminhost=<Value Unspecified>

# Description: WLS domain Adminserver port number. This is *either* the R1 or PS1
Adminserver port
# depending the operation. Used for start/stop domain and instance registration.
# Example: patchMaster.Domainadminport=7001
# patchMaster.Domainadminport=<Value Unspecified>
```

Migrating the Oracle Portal Schema Located in a Customer Database

This appendix details the steps for upgrading a portal schema residing in a customer database configuration outside the Oracle Metadata Repository. To upgrade the portal schema residing in a customer database, you must use the `upgrade.bat` (Windows) or `upgrade` (UNIX) script. Perform the following steps to upgrade the portal schema residing in a customer database:

1. Set the `ORACLE_HOME` environment variable to the Oracle home of the middle tier.
2. Add the Transparent Network Services (TNS) entry of the database containing portal schema to `ORACLE_INSTANCE\config` on Windows, and `ORACLE_INSTANCE/config` on UNIX.
3. Set the `TNS_ADMIN` environment variable to the following location: `Oracle_INSTANCE/config` (UNIX).
4. Ensure that you are able to connect to database using portal schema.
5. Verify if you can connect to the portal schema in the database Oracle home by specifying the schema password and the TNS name using SQL*Plus.

For example on UNIX:

```
sqlplus portal/portal@orcl
```

6. Change the directory to `ORACLE_HOME/upgrade/portal/admin/plsql` (UNIX).
7. Stop all Oracle Fusion middleware services in the middle-tier Oracle homes that are associated with the portal schema being migrated. For this, stop `WLS_PORTAL` through the Oracle WebLogic Server Administration Console, and run `ORACLE_INSTANCE/bin/opmnctl stopall` (UNIX).
8. Verify that Oracle Internet Directory associated with the portal schema is up and running.
9. Run the upgrade script in precheck mode.

On UNIX, run the script as follows:

```
ORACLE_HOME/upgrade/portal/admin/plsql/upgrade -precheck
```

When `-precheck` is specified, only the pre-upgrade checks are done and the upgrade exits after that. In this mode, the upgrade is not immediately terminated if a precheck fails. Instead, the errors for all prechecks are consolidated in the `upgrade.log` file. This file is generated in the `ORACLE_HOME/upgrade/portal/admin/plsql` (UNIX) directory. Look at the end of the

log file to see a list of checks that failed. Run the upgrade in this mode until none of the prechecks fails. In this mode, the schema is not altered, so restoring from your backup is not necessary between runs.

Look up any errors found in the precheck log file. Contact Oracle Support Services for any errors that are not documented or that cannot be resolved by following documented actions.

10. After resolving all warnings and errors from the `precheck.log` file, run the upgrade script without any parameters.

On UNIX, run the script as follows:

```
ORACLE_HOME/upgrade/portal/admin/plsql/upgrade
```

The script prompts you for information about the system setup. Your answers are echoed for verification at the end of the script. However, if you discover that you have entered incorrect information before the end of the script, then you can exit before any changes are made by answering `n` to the last script inquiry.

The following are the questions from the script. Default answers to the questions are given in brackets.

- Have you backed up your database (y|n)? [y]:
If you have not backed up the database, then answer `n`, back up the database, and restart the script. If you have backed up the database, then answer `y`.
 - Enter the name of the schema you would like to upgrade [portal]:
If the schema name is different from the default Oracle Infrastructure installation schema name of Portal, then enter the schema name.
 - Enter the password of the schema you would like to upgrade [portal]:
If the password is not the same as the schema name, then enter the portal schema password.
 - Enter the password for the SYS user of your database [change_on_install]:
If the password is not `change_on_install`, then enter the database SYS password.
 - Enter the TNS connect string to connect to the database [orcl]:
Provide the TNS connect string. This can be found in the `ORACLE_INSTANCE/config/tnsnames.ora` file (UNIX).
11. When the script is complete, examine the upgrade log files in the current directory to make sure there are no errors reported at the end.
 12. Now start the middle tiers associated with this repository. Check that portal is accessible.