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This guide describes interoperability and compatibility considerations you should review when installing, upgrading, or patching Oracle Fusion Middleware 11g.

This preface contains these topics:

- **Audience**
- **Documentation Accessibility**
- **Related Documents**
- **Conventions**

**Audience**

This document is intended for system administrators responsible for installations, upgrade planning, and patch set application.

**Documentation Accessibility**


**Access to Oracle Support**

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

**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 Patching Guide for Identity and Access Management*

**Conventions**

The following text conventions are used in this document:
<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
This chapter provides an introduction to compatibility and interoperability and describes how to identify areas where compatibility and interoperability considerations may arise when you are upgrading Oracle Fusion Middleware 11g components, applying patch sets, or installing new Oracle Fusion Middleware components.

- Section 1.1, "What is Compatibility?"
- Section 1.2, "What is Interoperability?"
- Section 1.3, "Understanding Interoperability and Compatibility with Supported Databases"
- Section 1.4, "Identifying Potential Compatibility and Interoperability Issues"

### 1.1 What is Compatibility?

For the purposes of this guide, **compatibility** is defined as the ability of two Oracle Fusion Middleware components of different versions (or releases) to interoperate. It is possible that you will have compatibility considerations when upgrading Oracle Fusion Middleware 11g or when applying Oracle Fusion Middleware 11g patch sets.

When upgrading, for example, you may need to know which components must be updated so that your existing integration points continue to work. When applying a patch set you may want to know if the new products will work with other products of the same release or if they will continue to work with previous versions.

Compatibility can be further broken down into the following:

- **Compatibility Between Oracle Fusion Middleware Software Suites**
- **Compatibility Within Oracle Fusion Middleware Software Suites**

#### 1.1.1 Compatibility Between Oracle Fusion Middleware Software Suites

When you are upgrading your Oracle Application Server 10g environment to Oracle Fusion Middleware 11g, you will likely update one area of your environment at a time.

For example, you might upgrade your Oracle Identity and Access Management products to 11g Release 2 (11.1.2) in order to support new Oracle Identity and Access Management features. At the same time, you might leave your company-wide Oracle SOA Suite components at 11g Release 1 (11.1.1).
1.1.2 Compatibility Within Oracle Fusion Middleware Software Suites

While you are upgrading your Oracle Application Server environment to Oracle Fusion Middleware 11g, you should also consider potential compatibility issues within a specific software suite.

In most cases, issues are temporary and occur only during the upgrade process. After you finish the complete procedure for upgrading the software suite, the issues are typically resolved. However, you should still be aware of these potential concerns, because they can influence your upgrade planning.

1.2 What is Interoperability?

For the purposes of this guide, interoperability is defined as the ability of two Oracle Fusion Middleware components of the same version (or release) to work together (interoperate) in a supported Oracle Fusion Middleware configuration. Specifically, interoperability applies when the first 4 digits of the release or version number are the same. For example, Oracle Fusion Middleware 11g Release 1 (11.1.1.6.0) components are generally interoperable with other 11g Release 1 (11.1.1.6.0) components.

However, in some cases, there may be interoperability issues between Oracle Fusion Middleware software suites. In those cases, the issues would be covered in this guide.

1.3 Understanding Interoperability and Compatibility with Supported Databases

Each release of Oracle Fusion Middleware 11g is certified against specific database versions. Specifically, you can use these certified databases to host the Oracle Fusion Middleware 11g components schemas.

In some cases, you might have to upgrade your database to a supported version before upgrading to a specific Oracle Fusion Middleware 11g release. For more information on upgrading your Oracle Fusion Middleware components, see the Oracle Fusion Middleware Upgrade Planning Guide.

For the latest information about the databases supported by each Oracle Fusion Middleware 11g release, refer to Oracle Fusion Middleware Supported System Configurations on the Oracle Technology Network.

From the Supported Configurations page, you can locate the specific Oracle Application Server or Oracle Fusion Middleware release you are using, as well as the target Oracle Fusion Middleware release to which you want to upgrade. For each Oracle Application Server and Oracle Fusion Middleware release, there is a corresponding spreadsheet that lists the certified configurations, including the supported databases.

1.4 Identifying Potential Compatibility and Interoperability Issues

The following sections describe how to identify and answer common compatibility and interoperability issues using information from this guide, Oracle Technology Network (OTN) and other Oracle documents:

- Before You Begin
- Using This Guide
- Using Oracle Certification Matrices
- Understanding the Compatibility Matrices in this Guide
Identifying Potential Compatibility and Interoperability Issues

- Collecting Your Component and Infrastructure Information
- Using Release Notes
- Using the Oracle Fusion Middleware Documentation Library

1.4.1 Before You Begin

If you are installing a new product or updating an existing one (either to a new major version or a patch set), interoperability and compatibility issues may arise. During a new product component installation, interoperability considerations relate to the capability of the new product to integrate with other Oracle Fusion Middleware components of the same release.

Compatibility considerations relate to the capability of the new product to integrate with previous versions of Oracle Fusion Middleware products which may have already been installed. During product updates, the question is mainly one of compatibility and you may need to consider the other components that need to be updated so that existing integration points continue to work.

Table 1–1 provides a list of tasks that will help you collect the information necessary to plan your Oracle Fusion Middleware upgrade and installation strategy.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task 1</strong> - Gather release and version information for your installed components and supporting infrastructure.</td>
<td>In order for you to identify potential interoperability and compatibility issues with your Oracle Fusion Middleware components, you must first collect the release and version information for each component or suite of components you have installed or plan to install or upgrade. In addition, you should also have version and release information for your operating system, database, JDKs and other third-party products.</td>
<td>See Section 1.4.5, &quot;Collecting Your Component and Infrastructure Information&quot;</td>
</tr>
<tr>
<td><strong>Task 2</strong> - If you are planning an upgrade, you should develop an upgrade strategy and understand the supported starting points for upgrading to Oracle Fusion Middleware 11g.</td>
<td>An upgrade starting point is a specific version of Oracle Application Server that you must be running in order to upgrade to Oracle Fusion Middleware 11g. If you are not running a version of Oracle Application Server that is a supported upgrade starting point, then you must first upgrade to a supported starting point using documentation from a previous release.</td>
<td>The Oracle Fusion Middleware Upgrade Planning Guide provides detailed information for developing and implementing an Oracle Fusion Middleware upgrade plan. In addition, each of the Oracle Fusion Middleware products has an upgrade guide that details the upgrade process and identifies any post-upgrade configuration tasks that must be completed. See Section 1.4.7, &quot;Using the Oracle Fusion Middleware Documentation Library&quot; for more information on locating the correct documentation for your upgrade.</td>
</tr>
</tbody>
</table>
1.4.2 Using This Guide

The chapters in this guide are organized by the different types of interoperability or compatibility issues you might have while installing, upgrading or patching your Oracle Fusion Middleware components.

1.4.3 Using Oracle Certification Matrices

The Oracle Fusion Middleware Certification matrices provide important compatibility and interoperability information such as supported system configurations, database versions, and third-party products. Refer to these documents to ensure that your current environment can support an upgrade or patch set.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 3 - If you are applying a patch set, you should understand the patching requirements for your components and supporting infrastructure.</td>
<td>Patching involves copying a small collection of files over an existing installation. A patch is normally associated with a particular version of an Oracle product and involves updating from one minor version of the product to a newer minor version of the same product (for example, from version 11.1.1.2.0 to version 11.1.1.3.0).</td>
<td>The Oracle Fusion Middleware Patching Guide for Identity and Access Management describes the tools available for you to patch your existing Oracle Fusion Middleware or upgrade your existing Oracle Application Server environment. The guide also describes product-specific prerequisites that must be met before patching. Information about the latest patches and patch sets is located in the Oracle Fusion Middleware System Requirements and Specifications Document.</td>
</tr>
<tr>
<td>Task 4 - If you are installing new Oracle Fusion Middleware components, you should understand the installation requirements and the supported starting points.</td>
<td>Each Fusion Middleware product suite has an installation guide that describes prerequisites, supported starting points and post-installation configuration procedures. It is important to read and follow the installation procedures to avoid potential interoperability and compatibility issues.</td>
<td>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: <a href="http://www.oracle.com/technetwork/community/join/overview/index.html">http://www.oracle.com/technetwork/community/join/overview/index.html</a> 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: <a href="http://www.oracle.com/technology/documentation">http://www.oracle.com/technology/documentation</a></td>
</tr>
</tbody>
</table>

Note: The information in this guide is meant to complement the information contained in the Oracle Fusion Middleware certification matrices. If there is a conflict of information between this guide and the certification matrices, then the information in the certification matrices should be considered the correct version as they are frequently updated.
1.4.4 Understanding the Compatibility Matrices in this Guide

Interoperability and compatibility matrices are used throughout the book to identify potential issues and to provide links to additional information. When you use the interoperability and compatibility matrices in this guide, the level of support can be defined in one of the following ways:

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible or Interoperable</td>
<td>Integration between the components involved is expected to work with appropriate configuration. It is important to note, however, that compatibility is not a statement of certification. Certification information is located in the certification matrices described in Table 1–2.</td>
<td>For example, the Oracle HTTP Standalone Server 10.1.3 is compatible with Forms, Portal, Reports, Discoverer 10.1.2, but you may have some restrictions depending on your configuration.</td>
</tr>
<tr>
<td>Not Compatible or Interoperable</td>
<td>Integration between the components involved is not expected to work.</td>
<td>For example, Oracle HTTP Server 11g R1 is not compatible with Forms, Portal, Reports, Discoverer 10.1.2 and Oracle highly discourages their being used together.</td>
</tr>
<tr>
<td>A reference to a specific guide or section</td>
<td>This reference is provided when an individual guide provides more detailed information about the compatibility requirements and considerations that you should review when upgrading, patching or installing Oracle Fusion Middleware 11g.</td>
<td>For example, refer to the <em>Oracle Fusion Middleware Upgrade Guide for Oracle Identity and Access Management</em> for specific information about the upgrading your Oracle Identity and Access Management components to 11g Release 2 (11.1.2).</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Applicable.</td>
<td>For example, there is normally no communication or interaction between custom Java EE Applications and Oracle Portal, Forms, Reports, and Discoverer installations.</td>
</tr>
</tbody>
</table>

1.4.5 Collecting Your Component and Infrastructure Information

Oracle Fusion Middleware release and version information is available for each installed component on your system. This information is required before you can effectively identify and solve interoperability or compatibility issues. The certification
matrices described in Section 1.4.3 provide certification and system requirements information for Oracle Fusion Middleware components.

This section provides information for the following:

- Locating Oracle Fusion Middleware Product Release Information
- Locating your database-specific version and release information:
  - Locating Your Oracle Database Release Information
  - Locating your Microsoft SQL Server Version Information
  - Locating your DB2 Version Information
- Locating JDK Version Information

### 1.4.5.1 Locating Oracle Fusion Middleware Product Release Information

To find specific release and version information for your Oracle Fusion Middleware components, see the installed product information using the Oracle Universal Installer (OUI). For more information, see "Viewing Release Numbers" in the Oracle Fusion Middleware Administrator’s Guide.

**Note:** You can also find version and release information in the installation log files located in the `oraInventory/logs` directory of your Oracle Home.

### 1.4.5.2 Locating Your Oracle Database Release Information

To determine the release information of your Oracle database:

Start SQL*Plus from the Oracle home directory:

```
sqlplus /nolog
SQL> CONNECT / AS SYSDBA
SQL> select * from v$version;
```

The command returns the release information, such as the following:

```
Oracle9i Enterprise Edition Release 9.2.0.8.0 - Production
PL/SQL Release 9.2.0.8.0 - Production
CORE 9.2.0.8.0 Production
TNA for 32-bit Windows: Version 9.2.0.8.0 - Production
NLSRTL Version 9.2.0.8.0 - Production
```

### 1.4.5.3 Locating your Microsoft SQL Server Version Information

To determine the release information of your Microsoft SQL database:

From the command line, enter the following:

```
exec xp_msver ProductVersion
```

The command returns the product version information, such as the following:

```
ProductVersion 589824 9.00.1399.06
```

### 1.4.5.4 Locating your DB2 Version Information

To determine the release information of DB2, do the following:

- From the Windows operating system command line, navigate to the following:
The command returns the database version and applicable fix pack information such as the following:

DB21085I Instance "DB2? uses "32? bits and DB2 code release "SQL09011? with level identifier "01020107?.
Informational tokens are "DB2 v9.1.100.129?, "s061104?, "WR21374?, and Fix Pack "1?.
Product is installed at 'D:\PROGRA~1\IBM\SQLLIB' with DB2 Copy Name "DB2COPY1".

From UNIX operating system command line, type the following:

db2ls

This command shows the installation path, version level, fix pack information and installation date of the installed DB2 product. Output from this command goes to the console by default.

<table>
<thead>
<tr>
<th>Install Path</th>
<th>Level</th>
<th>Fix Pack</th>
<th>Install Number</th>
<th>Install Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>/opt/ibm/db2/V9.1</td>
<td>9.1.0.0</td>
<td>0</td>
<td>1</td>
<td>Fri Sep 3 10:26:33 2010 EDT</td>
</tr>
</tbody>
</table>

### 1.4.5 Locating JDK Version Information

Many Fusion Middleware Components are dependent on having a supported JDK installed and configured. The currently supported JDK version information is documented in the Oracle Fusion Middleware Supported System Configurations matrix as described in Section 1.4.3.

Before you install and configure your Oracle Fusion Middleware software, you must install a supported JDK and set the JAVA_HOME environment variable to point to that installed JDK.

You can then use the following command to verify that you are using a supported JDK:

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

For example:

```
$JAVA_HOME/bin/java -version
java version "1.8.0_20"
Java(TM) SE Runtime Environment (build 1.8.0_20-b26)
Java HotSpot(TM) 64-Bit Server VM (build 25.20-b23, mixed mode)
```

### 1.4.6 Using Release Notes

Refer to the Oracle Fusion Middleware Release Notes for specific information about required patch sets that address specific interoperability and compatibility issues which may surface during upgrade or patching process. The release notes for each release are available on the Oracle Technology Network (OTN):

```
http://docs.oracle.com/
```

### 1.4.7 Using the Oracle Fusion Middleware Documentation Library

The Oracle Fusion Middleware documentation library provides access to information that may assist you when upgrading and patching your Oracle environment. You can review component-specific administration, installation, and upgrade guides for Oracle Fusion Middleware Release 11g Release 1 (11.1.1) documentation at:
2

Compatibility With Previous Oracle Fusion Middleware Products

There are cases where you need to run your Oracle Identity and Access Management 11g Release 2 (11.1.2) software with previous versions of Oracle Fusion Middleware products.

The following sections provide some specific compatibility issues and considerations between Oracle Fusion Middleware 11g and Oracle Application Server 10g:

- Oracle Identity and Access Management 11g Release 2 (11.1.2) Compatibility with Oracle Fusion Middleware 11g Release 1 (11.1.1) Products
- Oracle Identity and Access Management 11g Release 2 (11.1.2) Compatibility with Pre-11g Products

2.1 Oracle Identity and Access Management 11g Release 2 (11.1.2) Compatibility with Oracle Fusion Middleware 11g Release 1 (11.1.1) Products

If you plan to upgrade your Oracle Identity and Access Management products to 11g Release 2 (11.1.2), be sure to verify that your existing Oracle Fusion Middleware 11g Release 1 products are certified to work with 11g Release 2 (11.1.2).

For more information, see Section 1.4.3, "Using Oracle Certification Matrices".

2.2 Oracle Identity and Access Management 11g Release 2 (11.1.2) Compatibility with Pre-11g Products

As described in the Oracle Fusion Middleware Upgrade Guide for Oracle Identity and Access Management, you can upgrade from selected pre-11g Identity Management products to specific Oracle Identity and Access Management 11g Release 2 (11.1.2) products. This upgrade process is referred to as a migration from one release to another.

For more information, see the Oracle Fusion Middleware Migration Guide for Oracle Identity and Access Management:

When you migrate from these selected pre-11g products, you might have to use a phased approach, where not all the products are upgraded at the same time. In these scenarios, you might have to run both the existing pre-11g products with some newly upgraded 11g Release 2 (11.1.2) products.
In most cases, Oracle supports these interim co-existence scenarios, but some configuration and post-migration steps are required to ensure the two versions are compatible and can run in the same environment.

For more information, see Part III, "Coexistence Scenarios" in the Oracle Fusion Middleware Migration Guide for Oracle Identity and Access Management.
Interoperability for Oracle Identity and Access Management 11g Release 2 (11.1.2.3)

The following sections describe interoperability scenarios to consider when you are using Oracle Fusion Middleware 11g components with other Oracle Fusion Middleware 11g components.

This chapter contains the following sections:

- Section 3.1, "Oracle Identity and Access Management Interoperability"
- Section 3.2, "Interoperability with Oracle Forms and Reports 11g Release 2 (11.1.2.3) Products"
- Section 3.3, "Middleware Home and Domain Interoperability"
- Section 3.4, "Patch Set Interoperability"

3.1 Oracle Identity and Access Management Interoperability

This section describes Oracle Identity Management interoperability considerations:

- Interoperability Between Oracle Identity and Access Management and Other Oracle Fusion Middleware Products
- Interoperability Between Oracle Identity Management Components and Oracle Identity and Access Management Components

3.1.1 Interoperability Between Oracle Identity and Access Management and Other Oracle Fusion Middleware Products

Before you install new Oracle Identity and Access Management components or configure your Oracle Fusion Middleware products to use Oracle Identity and Access Management services, review:

- The Oracle Fusion Middleware certification information to identify which Oracle Identity Management products are compatible with the Oracle Fusion Middleware products you are using. For more information, see Section 1.4.3, "Using Oracle Certification Matrices".
- The information in this chapter, to be sure you understand some of the general Oracle Fusion Middleware interoperability concepts and rules.

Similarly, before you apply an Oracle Fusion Middleware patch set, review your current environment and verify that applying the patch set or installing the new version of your software won’t affect the interoperability between your Oracle Identity and Access Management components and the Oracle Fusion Middleware products.
that depend on them. For more information pertinent to patch sets, see Section 3.4, "Patch Set Interoperability".

3.1.2 Interoperability Between Oracle Identity Management Components and Oracle Identity and Access Management Components

Oracle offers two distinct identity management solutions:

- Oracle Identity Management

  For more information about the Oracle Identity Management 11g software components, see the Oracle Fusion Middleware Installation Guide for Oracle Identity Management in the Oracle Fusion Middleware 11g documentation library.

- Oracle Identity and Access Management

  For more information about the Oracle Identity and Access Management components available in the current release, see "Overview of Oracle Identity and Access Management 11g Release 2 (11.1.2.3.0)" in the Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management.

These two identity management solutions are updated independently, as illustrated in Table 3–1, which shows the availability of the Oracle Identity Management and Oracle Identity and Access Management software in recent 11g patch sets.

---

**Note:** As shown in Table 3–1, the last Oracle Fusion Middleware 11g update of the Oracle Identity and Access Management was 11g Release 1 (11.1.1.7.0). Users who installed and configured Oracle Identity and Access Management 11g Release 1 (11.1.1.7.0) should consider upgrading to Oracle Identity and Access Management 11g Release 2 (11.1.2).

For more information, see the Oracle Fusion Middleware Upgrade Guide for Oracle Identity and Access Management.

---

In general, unless otherwise noted, you can use different versions of these solutions together, as long as they are not configured within the same domain. For more information, see the following sections:

- Section 3.3, "Middleware Home and Domain Interoperability"
- Section 3.4.4, "Patch Set Interoperability Between Oracle Identity Management and Oracle Identity and Access Management"

---

**Table 3–1 Summary of Oracle Identity Management Patch Set Releases and Oracle Identity and Access Management Releases**

<table>
<thead>
<tr>
<th></th>
<th>Oracle Identity Management</th>
<th>Oracle Identity and Access Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0)</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.3.0)</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.4.0)</td>
<td>Included</td>
<td>Not Included</td>
</tr>
</tbody>
</table>
3.2 Interoperability with Oracle Forms and Reports 11g Release 2 (11.1.2.3) Products

As of the publication of this document, only Oracle Forms and Reports and Oracle Identity and Access Management are available as 11g Release 2 (11.1.2) products.

Oracle Forms and Reports 11g Release 2 (11.1.2) is released on a different schedule from Oracle Identity and Access Management. If you are using any Oracle Identity Management or Oracle Identity and Access Management products with your Oracle Forms and Reports installation, be sure to review the certification information on the Oracle Technology Network (OTN) to be sure Oracle Forms and Reports 11g Release 2 (11.1.2) is certified with Oracle Identity and Access Management 11g Release 2 (11.1.2.3).

For more information, see Section 1.4, "Identifying Potential Compatibility and Interoperability Issues".

3.3 Middleware Home and Domain Interoperability

The following sections provide information about the interoperability of Oracle Fusion Middleware products when installing products in a Middleware home and when extending existing Oracle WebLogic Server domains:

- Section 3.3.1, "General Interoperability Rules When Installing Software or Extending a Domain"
- Section 3.3.2, "Interoperability of Components Delivered in Specific Oracle Fusion Middleware Distributions"
- Section 3.3.3, "Interoperability with Oracle WebLogic Server"
3.3.1 General Interoperability Rules When Installing Software or Extending a Domain

In general, except for the specific scenarios described in Table 3–2, you should ensure that all the Oracle Fusion Middleware products you install in a single Middleware home are of the same version.

Similarly, except for the specific scenarios in Table 3–2, you should ensure that the Oracle Fusion Middleware products you configure within a domain are of the same version.

Specifically for the Oracle Fusion Middleware 11g Release 1 (11.1.1.8.0), if you configure both Oracle WebCenter Portal and Oracle WebCenter Content within the same domain, then you should ensure that both products are at the same patch set level.

---

**Note:** The guidelines described here assume you are installing Oracle Fusion Middleware with the version of Oracle WebLogic Server that was distributed or is certified with the Oracle Fusion Middleware product you are installing.

For more information, see Section 3.3.3, "Interoperability with Oracle WebLogic Server".

---

### Table 3–2 Scenarios Where Oracle Fusion Middleware Products of Different Versions Can Reside Within the Same Middleware Home or Domain

<table>
<thead>
<tr>
<th>Product</th>
<th>Can be installed in the same Middleware home or configured in the same domain with...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle WebCenter Content 11g Release 1 (11.1.1.8.0)</td>
<td>Oracle SOA Suite 11g Release 1 (11.1.1.7.0)</td>
</tr>
<tr>
<td>Oracle WebCenter Portal 11g Release 1 (11.1.1.8.0)</td>
<td>Oracle SOA Suite 11g Release 1 (11.1.1.7.0)</td>
</tr>
<tr>
<td>Oracle Identity Manager (component of Oracle Identity and Access Management) 11g Release 1 (11.1.1.2.0)</td>
<td>Oracle SOA Suite 11g Release 1 (11.1.1.5.0)</td>
</tr>
<tr>
<td>Oracle Identity Manager (component of Oracle Identity and Access Management) 11g Release 2 (11.1.2.1)</td>
<td>Oracle SOA Suite 11g Release 1 (11.1.1.6.0)</td>
</tr>
<tr>
<td>Oracle Identity Manager (component of Oracle Identity and Access Management) 11g Release 2 (11.1.2.2)</td>
<td>Oracle SOA Suite 11g Release 1 (11.1.1.7.0)</td>
</tr>
<tr>
<td>Oracle Identity Manager (component of Oracle Identity and Access Management) 11g Release 2 (11.1.2.3)</td>
<td>Oracle SOA Suite 11g Release 1 (11.1.1.9.0)</td>
</tr>
</tbody>
</table>

3.3.2 Interoperability of Components Delivered in Specific Oracle Fusion Middleware Distributions

Some Oracle Fusion Middleware products are distributed with infrastructure components that are based on existing, earlier released Oracle Fusion Middleware software.

In particular, Table 3–3 lists the Oracle Fusion Middleware products that include and are based on previous versions of the Oracle JRF software. Oracle JRF represents the core Oracle Fusion Middleware infrastructure components, such as Oracle ADF, Fusion Middleware Control, and Metadata Services (MDS).
3.3.3 Interoperability with Oracle WebLogic Server

Each version and patch set of Oracle Fusion Middleware is certified with a specific release of Oracle WebLogic Server. Create domains for a specific Oracle Fusion Middleware product release only with the certified version of Oracle WebLogic Server, as shown in Table 3–4.

In the case of Oracle Fusion Middleware 11g Release 1 (11.1.1.6.0), the Oracle Fusion Middleware software is certified to work with both Oracle WebLogic Server 10.3.5 and Oracle WebLogic Server 10.3.6. This allows you to apply the Oracle Fusion Middleware 11g Release 1 (11.1.1.6.0) patch set to an 11g Release 1 (11.1.1.5.0) installation without updating Oracle WebLogic Server.

Note, however, that if you configure Oracle Fusion Middleware 11g Release 1 (11.1.1.6.0) components using Oracle WebLogic Server 10.3.5, you will not be able to take advantage of any of product features that depend upon Oracle WebLogic Server 10.3.6. For information on the new features available in Oracle WebLogic Server 11g (10.3.6), see Oracle Fusion Middleware What’s New in Oracle WebLogic Server.

Table 3–3 Interoperability of Components Distributed with Specific Oracle Fusion Middleware Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Distributed with the following existing Oracle Fusion Middleware components...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Identity and Access Management 11g Release 1 (11.1.1.2.0)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.5.0)</td>
</tr>
<tr>
<td>Oracle Identity and Access Management 11g Release 2 (11.1.2.1)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.6.0)</td>
</tr>
<tr>
<td>Oracle Forms and Reports 11g Release 1 (11.1.2.0)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.5.0)</td>
</tr>
<tr>
<td>Oracle Forms and Reports 11g Release 2 (11.1.2.1)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.6.0)</td>
</tr>
<tr>
<td>Oracle WebCenter Portal 11g Release 1 (11.1.1.8.0)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.7.0)</td>
</tr>
<tr>
<td>Oracle WebCenter Content 11g Release 1 (11.1.1.8.0)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.7.0)</td>
</tr>
<tr>
<td>Oracle Identity and Access Management 11g Release 2 (11.1.2.2)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.7.0)</td>
</tr>
<tr>
<td>Oracle Identity and Access Management 11g Release 2 (11.1.2.3)</td>
<td>Oracle JRF 11g Release 1 (11.1.1.9.0)</td>
</tr>
</tbody>
</table>

Note: As of Oracle Fusion Middleware 11g Release 1 (11.1.1.8.0), only Oracle WebLogic Server 10.3.6 is certified to work with Oracle Fusion Middleware. If you are currently running a WebLogic Server version 10.3.5 (or lower), you must upgrade to version 10.3.6 before you can install and configure Fusion Middleware 11g Release 1 (11.1.1.8.0).

For information on the new features available in Oracle WebLogic Server 11g (10.3.6), see Oracle Fusion Middleware What’s New in Oracle WebLogic Server.

Table 3–4 Summary of Oracle WebLogic Server Versions Supported by Each Oracle Fusion Middleware 11g Patch Set

<table>
<thead>
<tr>
<th>Oracle Fusion Middleware and Oracle JRF Version</th>
<th>Oracle WebLogic Server Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0)</td>
<td>10.3.2</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.3.0)</td>
<td>10.3.3</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.4.0)</td>
<td>10.3.4</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.5.0)</td>
<td>10.3.5</td>
</tr>
</tbody>
</table>
3.4 Patch Set Interoperability

This section describes some general interoperability guidelines and considerations when you are applying an Oracle Fusion Middleware 11g Release 1 (11.1.1) patch set to an existing Oracle Fusion Middleware environment.

This section contains the following topics:

- Installing Different Patch Sets Within the Same Middleware Home
- Using Different Patch Sets Within a Single Domain
- Patch Set Interoperability Between Oracle Identity Management or Oracle Identity and Access Management and Other Oracle Fusion Middleware Products
- Patch Set Interoperability Between Oracle Identity Management and Oracle Identity and Access Management
- Interoperability with Oracle WebLogic Server

3.4.1 Installing Different Patch Sets Within the Same Middleware Home

When you are applying an Oracle Fusion Middleware 11g Release 1 (11.1.1) patch set, ensure that all the products within the selected Middleware home are supported by the patch set.

For example, unless otherwise documented, do not install 11g Release 1 (11.1.1.9.0) and 11g Release 1 (11.1.1.7.0) products within the same Middleware home. Each product has its own maintenance schedule and it is possible that future interoperability issues could result.

3.4.2 Using Different Patch Sets Within a Single Domain

When you configure a domain, ensure that all products configured within the domain are at the same patch set. For example, do not configure Oracle SOA Suite 11g Release 1 (11.1.1.7.0) in the same domain with Oracle WebCenter Portal 11g Release 1 (11.1.1.9.0).

3.4.3 Patch Set Interoperability Between Oracle Identity Management or Oracle Identity and Access Management and Other Oracle Fusion Middleware Products

Oracle often releases Oracle Identity Management and Oracle Identity and Access Management products on a schedule different from the schedule for the other Oracle Fusion Middleware products. As a result, it is common to use a different release or patch set of an Oracle Identity Management or Oracle Identity and Access Management product with your Oracle Fusion Middleware products, as long as they are not configured within the same domain.

### Table 3-4 (Cont.) Summary of Oracle WebLogic Server Versions Supported by Each Oracle Fusion Middleware 11g Patch Set

<table>
<thead>
<tr>
<th>Oracle Fusion Middleware and Oracle JRF Version</th>
<th>Oracle WebLogic Server Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.6.0)</td>
<td>10.3.5 or 10.3.6</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.7.0)</td>
<td>10.3.5 or 10.3.6</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.8.0)</td>
<td>10.3.6</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.9.0)</td>
<td>10.3.6</td>
</tr>
</tbody>
</table>
For example, you can use Oracle Identity and Access Management 11g Release 2 (11.1.2) products with your Oracle WebCenter Portal 11g Release 1 (11.1.1.9.0) products, if they are in separate domains. In these scenarios, the Oracle Identity and Access Management products are typically installed on a separate host and in a separate Middleware home.

An exception to this rule is Oracle Identity Manager 11g Release 2 (11.1.2.3) and Oracle SOA Suite 11g Release 1 (11.1.1.9.0). Oracle Identity Manager is one of the Oracle Identity and Access Management products. It requires Oracle SOA Suite. At the time this document was published, 11g Release 1 (11.1.1.9.0) was the latest version of Oracle SOA Suite.

For more information about configuring Oracle Identity Manager and Oracle SOA Suite in the same domain, see "Installation and Configuration Roadmap for Oracle Identity Manager" in the Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management.

For complete information about the supported Oracle Identity Management and Oracle Identity and Access Management patch sets and versions you can use with your other Oracle Fusion Middleware products, refer to the certification information on the Oracle Technology Network (OTN). For more information, see Section 1.4.3, "Using Oracle Certification Matrices”.

### 3.4.4 Patch Set Interoperability Between Oracle Identity Management and Oracle Identity and Access Management

You can configure an Oracle Fusion Middleware environment where Oracle Identity Management and Oracle Identity and Access Management components are at different patch sets, as long as the products are not configured within the same domain.

Do not attempt to configure a single domain that contains Oracle Identity Management components at one version or patch set and Oracle Identity and Access Management components at another.

Further, if you have an existing domain that contains both Oracle Identity Management components and Oracle Identity and Access Management components, do not apply a patch set unless you can apply the patch set to both the Oracle Identity Management components and Oracle Identity and Access Management components.

For more information about Oracle Identity Management and Oracle Identity and Access Management interoperability, see Section 3.1.2, "Interoperability Between Oracle Identity Management Components and Oracle Identity and Access Management Components".