Oracle® Fusion Middleware

Upgrade Guide for Oracle Forms and Reports

11*g* Release 2 (11.1.2.2)

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Oracle Fusion Middleware Upgrade Guide for Oracle Forms and Reports, 11*g* Release 2 (11.1.2.2)

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Preface

This preface contains the following sections:

- Audience
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Audience

This manual is intended for Oracle Fusion Middleware system administrators who are responsible for installing and upgrading Oracle Fusion Middleware. It is assumed that the readers of this manual have knowledge of the following:

- Oracle Application Server 10*g* system administration and configuration (if you are upgrading from Oracle Application Server 10*g*)

- Oracle Fusion Middleware 11*g* system administration and configuration (if you are upgrading from a previous release of Oracle Fusion Middleware 11*g*)

- The configuration and expected behavior of the system being upgraded

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
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Access to Oracle Support

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

Related Documents

For more information, see the following related documentation available in the Oracle Forms and Reports 11*g* Release 2 (11.1.2) documentation library:

- *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*

In addition, refer the following documentation in the latest Oracle Fusion Middleware 11*g* Release 1 (11.1.1) documentation library:

- *Oracle Fusion Middleware Upgrade Planning Guide*
- *Oracle Fusion Middleware Installation Planning Guide*
- *Oracle Fusion Middleware Administrator's 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.
italic	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.

1

Planning an Upgrade to Oracle Forms and Reports

This chapter provides information about planning your Oracle Forms and Reports 11*g* Release 2 (11.1.2) upgrade.

This chapter contains the following sections:

- Understanding the Supported Starting Points for Upgrade to Oracle Forms and Reports 11g Release 2 (11.1.2)

- Understanding the Scope of the Oracle Forms and Reports Upgrade

- Planning an Upgrade from Oracle Application Server 10g

- Planning an Upgrade from Oracle Application Server 11g Release 1 (11.1.1)

- Summary of the Impact on Oracle Forms and Reports Related Products

- About Using the Web Tier Components with Oracle Forms and Reports 11g Release 2 (11.1.2)

- About Using Identity Management and Single Sign-On With Oracle Forms and Reports 11g Release 2 (11.1.2)

- About Using Oracle Portal and Oracle Business Intelligence Discoverer with Oracle Forms and Reports 11g Release 2 (11.1.2)

1.1 Understanding the Supported Starting Points for Upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2)

If you are running any of the following software versions, you can use the instructions in this guide to upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- Oracle Application Server 10*g* Release 2 (10.1.2.3)

  This document assumes that you have applied the latest Oracle Application Server 10*g* Release 2 (10.1.2) patch set to your 10*g* environment before starting an upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2).

  At the time this document was published, the latest patch set was 10*g* Release 2 (10.1.2.3). For information on the latest patch sets available for Oracle Application Server 10*g* Release 2 (10.1.2), refer to My Oracle Support.

- Oracle Fusion Middleware 11*g* Release 1 (11.1.1)

  This document assumes that you have applied the latest Oracle Application Server 11*g* Release 1 (11.1.1) patch set to your 11*g* environment before starting an upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2).

For information on the latest patch sets available for 11*g* Release 1 (11.1.1), refer to My Oracle Support.

Note that any upgrade from 10*g* Release 2 (10.1.2) or 11*g* Release 1 (11.1.1) will upgrade only Oracle Forms and Reports. Any other components you have configured in your Oracle Application Server 10*g* environment or in your 11*g* Release 1 (11.1.1) environment will not be upgraded.

If you have configured any other components in your Oracle Application Server 10*g* or Oracle Fusion Middleware 11*g* Release 1 (11.1.1) environment, then carefully review the information in this chapter before starting your upgrade to 11*g* Release 2 (11.1.2).

1.2 Understanding the Scope of the Oracle Forms and Reports Upgrade

Before you begin upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2), review the following information about the scope of the Oracle Forms and Reports upgrade process and tools:

- Understanding the Difference Between Upgrade and Applying a Patch Set to Your 11g Release 2 (11.1.2) Installation

- Restrictions When Upgrading Your Operating System or Computer Hardware

1.2.1 Understanding the Difference Between Upgrade and Applying a Patch Set to Your 11*g* Release 2 (11.1.2) Installation

If you are already running 11*g* Release 2 (11.1.2) and you want to apply a newer patch set for this release, then refer to the *Oracle Fusion Middleware Patching Guide*.

For example, if you previously installed Oracle Forms and Reports 11*g* Release 2 (11.1.2) and you now want to apply the 11*g* Release 2 (11.1.2.1) patch set, then use the instructions in the Oracle Fusion Middleware Patching Guide, rather than the instructions in this book.

This guide is exclusively for upgrading from Oracle Fusion Middleware 10*g* or 11*g* Release 1 (11.1.1).

1.2.2 Restrictions When Upgrading Your Operating System or Computer Hardware

When you upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2), you install the new software in a new Middleware home on the same host as the current software. You then use the Oracle Fusion Middleware Upgrade Assistant (when upgrading from 10*g*) or an upgrade script (when upgrading from 11*g* Release 1). These upgrade tools copy your configuration data from your existing installation to the new 11*g* Release 2 (11.1.2) installation.

The upgrade tools documented in this guide do not support upgrading your software from one host to another during the upgrade process. If you plan to upgrade your operating system software or your computer hardware, then you must do that separately from the Oracle Fusion Middleware upgrade process. You can perform your operating system or hardware upgrade before or after you complete and verify the Oracle Fusion Middleware upgrade.

When performing the upgrade of your hardware or software, be sure to verify that the your Oracle Fusion Middleware software is certified to support the new operating system or computer hardware. For more information, refer to the following resources:

- *Oracle Fusion Middleware System Requirements and Specifications* on the Oracle Technology Network (OTN)

- *Oracle Fusion Middleware Supported System Configurations* on OTN

- *Oracle Fusion Middleware Interoperability and Compatibility Guide for Oracle Forms and Reports*

1.3 Planning an Upgrade from Oracle Application Server 10*g*

The following sections will help you plan and set expectations for a successful upgrade from Oracle Application Server 10*g* Release 2 (10.1.2) to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- Understanding the New Features and Concepts of Oracle Fusion Middleware 11g

- About the Middle-Tier Components Provided with Oracle Forms and Reports 11g Release 2 (11.1.2)

1.3.1 Understanding the New Features and Concepts of Oracle Fusion Middleware 11*g*

If you are currently using Oracle Application Server 10*g* and you are unfamiliar with Oracle Fusion Middleware 11*g*, then be aware that Oracle Fusion Middleware 11*g* introduced many new features and concepts that are different from Oracle Application Server 10*g*.

For an introduction to Oracle Fusion Middleware 11*g*, refer to the following resources in the Oracle Fusion Middleware 11*g* documentation library before you begin the upgrade process:

- "Introduction to Oracle Fusion Middleware for 10g Users" in the *Oracle Fusion Middleware Upgrade Planning Guide*

- "Understanding Oracle Fusion Middleware" in the *Oracle Fusion Middleware Administrator's Guide*

- "Developing an Upgrade Strategy" in the *Oracle Fusion Middleware Upgrade Planning Guide*

1.3.2 About the Middle-Tier Components Provided with Oracle Forms and Reports 11*g* Release 2 (11.1.2)

Oracle Application Server 10*g* Release 2 (10.1.2) provided users with the following middle-tier components:

- Oracle Portal

- Oracle Business Intelligence Discoverer

- Oracle Forms Services

- Oracle Reports

- Oracle HTTP Server

- Oracle Web Cache

Oracle Forms and Reports 11*g* Release 2 (11.1.2) provides the following middle-tier components:

- Oracle Forms Services

- Oracle Reports

- Oracle HTTP Server

This document describes how to upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2). The other middle-tier components of Oracle Application Server 10*g* are not provided in this release and are not upgraded by the Upgrade Assistant.

To understand the impact of the upgrade on the other products you might have configured in your Oracle Application Server 10*g* environment, carefully review the information in the rest of this chapter before you start your upgrade to 11*g* Release 2 (11.1.2).

1.4 Planning an Upgrade from Oracle Application Server 11*g* Release 1 (11.1.1)

If you are currently running any of the Oracle Portal, Forms, Reports, and Discoverer 11*g* Release 1 (11.1.1) products, then you can upgrade Oracle Forms and Reports 11*g* Release 1 (11.1.1) to 11*g* Release 2 (11.1.2).

However, only the following components can be upgraded to this release:

- Oracle Forms Services
- Oracle Reports
- Oracle HTTP Server

The other Oracle Portal, Forms, Reports, and Discoverer components are not provided in this release.

To understand the impact of the upgrade on the other products you might have configured in your Oracle Application Server 10*g* environment, carefully review the information in the rest of this chapter before you start your upgrade to 11*g* Release 2 (11.1.2).

1.5 Summary of the Impact on Oracle Forms and Reports Related Products

Refer to Table 1–1 for information about the impact of the Oracle Forms and Reports components on the other related Oracle Fusion Middleware products.

Table 1–1 Impact of the Oracle Forms and Reports Upgrade On Related Products

Related Products	Impact	More information
Oracle Web Cache and Oracle HTTP Server	Oracle Web Cache is not included with Oracle Forms and Reports 11*g* Release 2 (11.1.2). If you are using Oracle Web Cache as a front-end to an Oracle Application Server 10*g* Oracle HTTP Server instance, then consider your options after upgrade.	Section 1.6, "About Using the Web Tier Components with Oracle Forms and Reports 11g Release 2 (11.1.2)"

Table 1–1   (Cont.) Impact of the Oracle Forms and Reports Upgrade On Related

Related Products	Impact	More information
Oracle Internet Directory and Oracle Single Sign-On	Oracle Forms and Reports 11*g* Release 2 (11.1.2) now supports Oracle Access Manager 11*g*, as well as Oracle Single Sign-On. If you are currently using Oracle Single Sign-On 10*g*, then consider upgrading to Oracle Access Manager 11*g* after you upgrade to Oracle Forms and Reports. If you are not using Single Sign-On currently, but you are planning on using it as part of your upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2), then do not install Oracle Single Sign-On 10*g*. Use Oracle Access Manager 11*g* instead.	Section 1.7.2, "About Upgrading Oracle Single Sign-On 10g to Oracle Access Manager 11g"
Oracle Portal and Oracle Business Intelligence Discoverer	If you are planning to continue using Oracle Portal and Oracle Business Intelligence Discoverer after upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2), then review several important considerations. If you are currently using any of the other Oracle Application Server 10*g* Release 2 (10.1.2) components, you can upgrade those separately to Oracle Fusion Middleware 11*g* Release 1 (11.1.1), using the information in the latest Oracle Fusion Middleware 11*g* Release 1 (11.1.1) documentation library on the Oracle Technology Network (OTN).	Section 1.8, "About Using Oracle Portal and Oracle Business Intelligence Discoverer with Oracle Forms and Reports 11g Release 2 (11.1.2)"

1.6 About Using the Web Tier Components with Oracle Forms and Reports 11*g* Release 2 (11.1.2)

The following sections describe information about using the Web Tier components when you are planning an upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- About Upgrading Oracle HTTP Server with Oracle Forms and Reports 11g Release 2 (11.1.2)

- Using Oracle Web Cache with Oracle Forms and Reports 11g Release 2 (11.1.2)

1.6.1 About Upgrading Oracle HTTP Server with Oracle Forms and Reports 11*g* Release 2 (11.1.2)

The following sections provide information about how your Oracle HTTP Server software is affected by an upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- Installing Oracle HTTP Server 11g with Oracle Forms and Reports 11g Release 2 (11.1.2)

- Upgrading Oracle HTTP Server 10g to Oracle HTTP Server 11g

- Upgrading Oracle HTTP Server 11g Release 1 (11.1.1) to Oracle Forms and Reports 11g Release 2 (11.1.2)

1.6.1.1 Installing Oracle HTTP Server 11*g* with Oracle Forms and Reports 11*g* Release 2 (11.1.2)

When you install your new Oracle Forms and Reports 11*g* Release 2 (11.1.2) software, you can also install Oracle HTTP Server 11*g*, but only if you select the option to install Oracle Forms and Reports 11*g* Release 2 (11.1.2) for a deployment environment, as opposed to a development environment.

For more information, see the *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*.

1.6.1.2 Upgrading Oracle HTTP Server 10*g* to Oracle HTTP Server 11*g*

If you are upgrading from Oracle Application Server 10*g*, then you can use the Upgrade Assistant to upgrade Oracle HTTP Server 10*g* to Oracle HTTP Server 11*g*. However, this upgrade is possible only if Oracle HTTP Server is installed and configured in both the source (10*g*) Oracle home and in the new destination (11*g*) Oracle home before you begin the upgrade process.

1.6.1.3 Upgrading Oracle HTTP Server 11*g* Release 1 (11.1.1) to Oracle Forms and Reports 11*g* Release 2 (11.1.2)

If you are upgrading from Oracle Fusion Middleware 11*g* Release 1 (11.1.1), then you can use the procedures in this guide to upgrade your Oracle HTTP Server configuration information from your 11*g* Release 1 (11.1.1) Oracle home to your new Oracle Forms and Reports 11*g* Release 2 (11.1.2) Oracle home.

Note that the version of Oracle HTTP Server provided with Oracle Forms and Reports 11*g* Release 2 (11.1.2) is the same as the version provided with Oracle Fusion Middleware 11*g* Release 1 (11.1.1).

1.6.1.4 Preparing to Upgrade Oracle HTTP Server

To avoid additional post-upgrade configuration steps, check your HTTP Server configuration files and verify that you are using environment variables for the directory paths in any httpd.conf directives.

Because Oracle HTTP Server uses the same configuration files as Apache, you can reference the Apache Web site at http://httpd.apache.org/docs/2.2/configuring.html. The section on "Syntax of the Configuration Files" describes how to use an environment variable within the httpd.conf file.

1.6.2 Using Oracle Web Cache with Oracle Forms and Reports 11*g* Release 2 (11.1.2)

Oracle Web Cache is not included with the Oracle Forms and Reports 11*g* Release 2 (11.1.2) software installation.

Consider the following if you are currently using Oracle Web Cache in your Oracle Forms and Reports installation:

- If you want to continue using your existing instance of Oracle Web Cache, then you must reconfigure both Oracle HTTP Server and Oracle Web Cache after upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2).

   This is necessary if you want your existing Oracle Web Cache and Oracle HTTP Server instances to route requests to the newly upgraded Oracle Forms and Reports 11*g* Release 2 (11.1.2) software.

   For more information, refer to the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache* in the latest Oracle Fusion Middleware 11*g* Release 1 (11.1.1) documentation library.

- If you are using Oracle Web Cache 10*g* Release 2 (10.1.2), then you can consider upgrading to Oracle Web Cache 11*g* Release 1 (11.1.1). This will require installing and configuring a new Oracle Fusion Middleware 11*g* Release 1 (11.1.1) Web Tier domain and upgrading your current Web Tier installation.

   It will also require reconfiguring your Web Tier components to route requests to your new Oracle Forms and Reports 11*g* Release 2 (11.1.2) installation.

   For more information, see "Upgrading a Java EE and Web Server Environment" in the *Oracle Fusion Middleware Upgrade Guide for Java EE*.

- If you want to stop using Oracle Web Cache for Oracle Forms and Reports 11*g* Release 2 (11.1.2), then after the upgrade, you must verify that Oracle HTTP Server is accepting all requests and routing them directly to Oracle Forms and Reports without the use of Oracle Web Cache.

   For more information, see the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server*.

1.7 About Using Identity Management and Single Sign-On With Oracle Forms and Reports 11*g* Release 2 (11.1.2)

Refer to the following sections for more information about the impact of upgrading Oracle Forms and Reports on your existing Oracle Identity Management components:

- About Using Oracle Identity Management Products When Upgrading From Oracle Portal, Forms, Reports, and Discoverer 10g

- About Upgrading Oracle Single Sign-On 10g to Oracle Access Manager 11g

1.7.1 About Using Oracle Identity Management Products When Upgrading From Oracle Portal, Forms, Reports, and Discoverer 10*g*

In Oracle Application Server 10*g* Release 2 (10.1.2), the Oracle Identity Management components, such as Oracle Internet Directory, Oracle Directory Integration Platform, Oracle Single Sign-On, and Oracle Delegated Administration Services were available as part of the Oracle Portal, Forms, Reports, and Discoverer suite of products.

In Oracle Fusion Middleware 11*g*, your Oracle Identity Management components are packaged and installed separately, but they still provide the same resources and services.

You can upgrade your Identity Management components to Oracle Fusion Middleware 11*g* Release 1 (11.1.1) independently of the Oracle Forms and Reports components.

For more information, see the following:

- About Upgrading Oracle Single Sign-On 10g to Oracle Access Manager 11g
- The *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management* in the latest Oracle Fusion Middleware 11*g* Release 1 (11.1.1) documentation library

1.7.2 About Upgrading Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g*

Oracle Access Manager is a component of Oracle Fusion Middleware 11*g* that you can use in place of Oracle Single Sign-On 10*g* to implement centralized authentication, policy-based authorizations, delegated administration, and so on.

One of the main new features of Oracle Forms and Reports 11*g* Release 2 (11.1.2) is support for Oracle Access Manager 11*g*:

- For more information about the version of Oracle Access Manager 11*g* that is supported by Oracle Forms and Reports 11*g* Release 2 (11.1.2), see the *Oracle Fusion Middleware Supported System Configurations* on the Oracle Technology Network (OTN).
- For more information about Oracle Access Manager, see "Introduction to Oracle Access Manager" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager*.

If you are currently using Oracle Single Sign-On 10*g* with your existing Oracle Forms and Reports components, then consider the following information before you upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- Upgrading Oracle Single Sign-On to Oracle Access Manager 11g After Upgrading Oracle Forms and Reports
- Configuring Oracle Access Manager 11g Before Upgrading to Oracle Forms and Reports 11g Release 2 (11.1.2)

1.7.2.1 Upgrading Oracle Single Sign-On to Oracle Access Manager 11*g* After Upgrading Oracle Forms and Reports

To upgrade Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g* after your upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2), do the following:

1. Use the procedures in this book to upgrade Oracle Forms and Reports to 11*g* Release 2 (11.1.2).

   When you install and configure your new Oracle Forms and Reports 11*g* Release 2 (11.1.2) products as part of the upgrade process, associate the new products with the existing Oracle Single Sign-On 10*g* instance. In some cases, this will require a post-upgrade step where you register the new installation with the existing Oracle Single Sign-On.

2. After you have successfully upgraded and verified your new 11*g* Release 2 (11.1.2) installation with Oracle Single Sign-On 10*g*, then perform the Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g* upgrade.

   For more information about upgrading to Oracle Access Manager for your single-sign on solution, see "Upgrading Your Oracle Single Sign-On Environment" in the *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management* in the in the Oracle Fusion Middleware 11*g* documentation library.

   Note that there are several Oracle Single Sign-On to Oracle Access Manager upgrade scenarios. For example, if you decide to retain Oracle Delegated Administration Services, then refer to the following Oracle Single Sign-On

upgrade scenario in the *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management*:

Oracle Delegated Administration Services Required After Upgrading from Oracle Single Sign-On to Oracle Access Manager

1.7.2.2 Configuring Oracle Access Manager 11*g* Before Upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2)

As an alternative to the procedure described in Section 1.7.2.1, "Upgrading Oracle Single Sign-On to Oracle Access Manager 11g After Upgrading Oracle Forms and Reports", you can use a slightly modified upgrade process:

1. Install and configure an Oracle Access Manager 11*g* instance.

    For more information, refer to the *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.

2. Use the procedures in this book and the following information to upgrade to Oracle Forms and Reports to 11*g* Release 2 (11.1.2):

    During the upgrade process, when you install and configure your new Oracle Forms and Reports 11*g* Release 2 (11.1.2) products, use the installer to configure the software to use the Oracle Access Manager 11*g* instance. In some cases, this will require a post-upgrade step where you must re-register the upgraded products with your Oracle Access Manager 11*g* instance.

    For more information, refer to Chapter 6, "Post-Upgrade Tasks After Upgrading to Oracle Forms and Reports 11g Release 2 (11.1.2)".

1.8 About Using Oracle Portal and Oracle Business Intelligence Discoverer with Oracle Forms and Reports 11*g* Release 2 (11.1.2)

If your starting point for the Oracle Forms and Reports 11*g* Release 2 (11.1.2) upgrade is the complete Oracle Portal, Forms, Reports, and Discoverer suite, then consider the following:

-   If you are upgrading from Oracle Application Server 10*g*, note that the Oracle Portal and Oracle Business Intelligence Discoverer components of your Oracle Portal, Forms, Reports, and Discoverer 10*g* installation are not available in Oracle Forms and Reports 11*g*. However, you can upgrade them separately to the latest Oracle Fusion Middleware 11*g* release.

    For more information, see the *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*.

-   Similarly, if your starting point is Oracle Portal, Forms, Reports, and Discoverer 11*g*, then you can apply the latest Oracle Fusion Middleware patch set to your existing installation to ensure you are running the latest Oracle Portal and Oracle Business Intelligence Discoverer products.

    For more information, see the *Oracle Fusion Middleware Patching Guide*.

-   If you are upgrading from Oracle Application Server 10*g* and you want to continue using Oracle Portal and Oracle Business Intelligence Discoverer 10*g*, then do not select the **Use Source Oracle home ports in destination** option in the Upgrade Assistant.

    If you select this option, then you will likely experience port conflicts when you attempt to start both the 10*g* and 11*g* instances.

For more information, see Section 4.3.3, "Important Notes When Using the Source Oracle Home Ports in the Destination Oracle Instance".

- Similarly, if you are upgrading from 11*g* Release 2 (11.1.2) and you want to continue using Oracle Portal and Oracle Business Intelligence Discoverer 10*g*, then do not enable the `retain_source-ports` property in the `upgrade.properties` file.

    For more information, see Section 5.2, "Locating and Editing the Oracle Forms and Reports Upgrade Properties File".

- If you are upgrading to Oracle Access Manager 11*g* as part of your upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2), then consider the impact of upgrading to Oracle Access Manager on your Oracle Portal installation.

    For example, you can continue using Oracle Single Sign-On 10*g* with Oracle Portal even if you use Oracle Access Manager 11*g* for your new Oracle Forms and Reports 11*g* Release 2 (11.1.2) software.

    For information about using Oracle Portal with Oracle Access Manager, see "Relationship Between Oracle Portal and Oracle Access Manager" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

2

Summary of the Oracle Forms and Reports Upgrade Process

This chapter provides a high-level summary of the steps required to upgrade an Oracle Forms and Reports environment to Oracle Fusion Middleware 11*g*.

This chapter contains the following sections:

- Flow Chart of the Oracle Forms and Reports Upgrade Process
- Table Describing the Steps in the Oracle Forms and Reports Upgrade Process

2.1 Flow Chart of the Oracle Forms and Reports Upgrade Process

Figure 2–1 provides a flow chart of the Oracle Forms and Reports upgrade process. Review this chart to get familiar with the steps you will be required to take, based on your existing Oracle Application Server environment.

Figure 2–1   Flow Chart of the Oracle Forms and Reports Upgrade Process
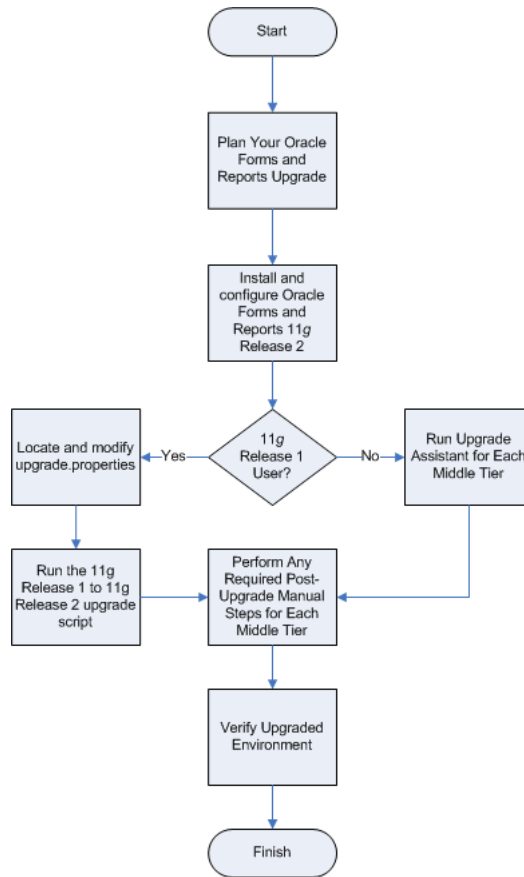
2.2 Table Describing the Steps in the Oracle Forms and Reports Upgrade Process

Table 2–1 describes each of the steps in the upgrade process flow chart, which is shown in Figure 2–1. The table also provides information on where to get more information on each step in the process.

Table 2–1   Table Describing the Steps in the Oracle Forms and Reports Upgrade Process

Step	Description	More Information
Plan Your Oracle Forms and Reports Upgrade	Review the supported starting points and other considerations before starting the Oracle Forms and Reports upgrade.	Chapter 1, "Planning an Upgrade to Oracle Forms and Reports"
Install and configure Oracle Forms and Reports 11g Release 2	Use the Oracle Forms and Reports installer to install your new Oracle Fusion Middleware middle tier. Install the new software in a new Middleware home on the same host as your existing Oracle Forms and Reports Oracle home.	Chapter 3, "Installing Oracle Forms and Reports 11g Release 2 (11.1.2) In Preparation for Upgrade"
Run Upgrade Assistant for Each Middle Tier	If you are upgrading from Oracle Application Server 10g, then use the Oracle Fusion Middleware Upgrade Assistant to copy configuration data from your existing Oracle Application Server middle tiers to the newly installed Oracle Forms and Reports middle tiers.	Chapter 4, "Upgrading from Oracle Forms and Reports 10g"
Locate and modify the upgrade.properties file	If you are upgrading from Oracle Fusion Middleware 11g Release 1 (11.1.1), then you can use a set of scripts to automate the upgrade of your Oracle Forms and Reports configuration settings from to your new 11g Release 2 (11.1.2) Oracle home. The first step in this process is to enter information about your source 11g Release 1 (11.1.1) environment and target 11g Release 2 (11.1.2) environment in the upgrade.properties file.	Section 5.2, "Locating and Editing the Oracle Forms and Reports Upgrade Properties File"
Run the 11g Release 1 to 11g Release 2 upgrade script	After you locate and modify the upgrade.properties file, then you can run the script that automatically upgrades configuration settings from your 11g Release 1 (11.1.1) Oracle home to your 11g Release 2 (11.1.2) Oracle home.	Section 5.3, "Performing the Oracle Forms and Reports 11g Release 1 (11.1.1) Upgrade"
Perform Any Required Post-Upgrade Manual Steps for Each Middle Tier	The Upgrade Assistant and the upgrade script automate many of the upgrade tasks, but there are cases where you must manually modify the configuration settings after running the Upgrade Assistant.	Chapter 6, "Post-Upgrade Tasks After Upgrading to Oracle Forms and Reports 11g Release 2 (11.1.2)"
Verify Upgraded Environment	The Upgrade Assistant provides a feature that will verify the upgraded environment to make sure specific components and URLs are functional.	Section 4.5, "Verifying the Oracle Forms and Reports Upgrade"

3

Installing Oracle Forms and Reports 11*g* Release 2 (11.1.2) In Preparation for Upgrade

Before you upgrade to Oracle Fusion Middleware 11*g* Release 2 (11.1.2), you must install and configure an Oracle Fusion Middleware environment that is similar to the topology you are currently running.

The tasks in this chapter are required for upgrade from Oracle Application Server 10*g* and for upgrade from Oracle Fusion Middleware 11*g* Release 1 (11.1.1).

To use the Oracle upgrade tools described in this book, you must install the Oracle Forms and Reports 11*g* Release 2 (11.1.2) software on the same host as your existing 10*g* or 11*g* Release 1 (11.1.1) software.

For more information, see the following:

- Locating the Documentation for Installing and Configuring Oracle Forms and Reports 11g
- Considerations When Configuring Single Sign-On During Installation
- Summary of the Oracle Forms and Reports 11g Installation Steps

3.1 Locating the Documentation for Installing and Configuring Oracle Forms and Reports 11*g*

Refer to the following documentation resources for complete instructions on installing and configuring the Oracle Forms and Reports middle tiers:

- The *Oracle Fusion Middleware Installation Planning Guide*
- The *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*

3.2 Considerations When Configuring Single Sign-On During Installation

When you install and configure your Oracle Forms and Reports 11*g* Release 2 (11.1.2) software, you can use the installer to configure the software to use an existing Oracle Single Sign-On 10*g* or an existing Oracle Access Manager 11*g* instance:

- If you are planning to use Oracle Single Sign-On 10*g*, then be sure to select the installation options for configuring the software with your existing Oracle Single Sign-On 10*g* instance.
- If you are planning to use Oracle Access Manager 11*g*, then you can use the installer to configure the 11*g* Release 2 (11.1.2) software with Oracle Access Manager.

Alternatively, you can use the installer to configure Oracle Forms and Reports 11*g* Release 2 (11.1.2) with your existing Oracle Single Sign-On 10*g* software and upgrade from Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g* later.

Regardless of the single sign-on solution you use, you might have to perform some post-upgrade steps. For more information, see Section 6.3, "Post-Upgrade Tasks Required When Using Single Sign-On Software".

For more information, see Section 1.7, "About Using Identity Management and Single Sign-On With Oracle Forms and Reports 11g Release 2 (11.1.2)".

3.3 Summary of the Oracle Forms and Reports 11*g* Installation Steps

Table 3–1 provides a high-level summary of the main steps you must perform when installing and configuring the Oracle Forms and Reports middle tiers.

Table 3–1   Summary of the Steps Required to Install and Configure Oracle Forms and Reports 11g Release 2 (11.1.2)

Task	Description	More Information
Verify your system environment.	Before you download the software or begin the installation, be sure that you have the required hardware and software.	*Oracle Fusion Middleware System Requirements and Specifications* on the Oracle Technology Network (OTN) *Oracle Fusion Middleware Supported System Configurations* on OTN *Oracle Fusion Middleware Interoperability and Compatibility Guide for Oracle Forms and Reports*
Obtain the Oracle WebLogic Server and Oracle Forms and Reports software.	Before you begin the installation, be sure that you have downloaded and unpacked all the required software.	*Oracle Fusion Middleware Download, Installation, and Configuration Readme Files* on OTN
Install Oracle WebLogic Server and create the Middleware home.	Run the Oracle WebLogic Server installer to install the Oracle WebLogic Server software on disk and create the Middleware home. Provide a location for the Middleware home, in which you will install your Oracle Fusion Middleware Oracle homes. If you are upgrading from 11*g* Release 1 (11.1.1), then be sure to create the new Middleware home using the supported version of Oracle WebLogic Server, as described in *Oracle Fusion Middleware System Requirements and Specifications*.	"Installing Oracle WebLogic Server" in the *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports* *Oracle Fusion Middleware Supported System Configurations* on OTN
Install and configure Oracle Forms and Reports 11*g* Release 2 (11.1.2)	Run the Oracle Forms and Reports 11*g* Release 2 (11.1.2) installer, and install and configure a new Oracle WebLogic Server domain for your new Oracle Forms and Reports products.	"Installing and Configuring Oracle Forms and Reports" in the *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*
Verify the installation.	Perform a set of procedures that verify that the installation was successful and complete.	"Verifying Oracle Forms and Reports Installation and Configuration" in the *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*

4

Upgrading from Oracle Forms and Reports 10*g*

This chapter describes how to upgrade your existing Oracle Application Server 10*g* Release 2 (10.1.2) environment to Oracle Forms and Reports 11*g*.

This chapter contains the following sections:

- Planning Your Upgrade to Oracle Forms and Reports 11g Release 2 (11.1.2)
- Installing and Configuring Oracle Forms and Reports Middle Tiers
- Using the Upgrade Assistant to Upgrade Oracle Forms and Reports
- Performing Any Required Post-Upgrade Tasks
- Verifying the Oracle Forms and Reports Upgrade

4.1 Planning Your Upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2)

Before you begin the upgrade process, be sure you have reviewed the information in Chapter 1, "Planning an Upgrade to Oracle Forms and Reports".

This important information can help you perform an efficient and successful upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2).

4.2 Installing and Configuring Oracle Forms and Reports Middle Tiers

Before you upgrade to Oracle Fusion Middleware 11*g*, you must install and configure an Oracle Fusion Middleware environment that is similar to the topology you set up for Oracle Application Server 10*g*.

For more information, see Chapter 3, "Installing Oracle Forms and Reports 11g Release 2 (11.1.2) In Preparation for Upgrade".

4.3 Using the Upgrade Assistant to Upgrade Oracle Forms and Reports

The Oracle Fusion Middleware Upgrade Assistant automates the upgrade of many aspects of your Oracle Application Server 10*g* environment.

The Upgrade Assistant is installed automatically into the `bin` directory of your Oracle Fusion Middleware Oracle home.

> **Note:** The following sections describe how to use the Upgrade Assistant in graphical user interface mode. You can also use the Upgrade Assistant command line to perform these tasks.
>
> For more information, see "Using the Upgrade Assistant Command-Line Interface" in the *Oracle Fusion Middleware Upgrade Planning Guide*.

The following sections provide more information:

- Starting the Upgrade Assistant for an Oracle Forms and Reports Upgrade
- Upgrading the Oracle Forms and Reports Middle Tiers
- Important Notes When Using the Source Oracle Home Ports in the Destination Oracle Instance
- Warning Message When Components in the Source Oracle Home Are Not Configured in the Destination Oracle Home

4.3.1 Starting the Upgrade Assistant for an Oracle Forms and Reports Upgrade

To start the Upgrade Assistant using the graphical user interface:

1. Change directory to the `ORACLE_HOME`/bin directory of the Oracle Fusion Middleware installation.

2. Enter the following command to start the Upgrade Assistant.

   On UNIX system:

   ```
   ./ua
   ```

   On Windows systems:

   ```
   ua.bat
   ```

   The Upgrade Assistant displays the Welcome screen as shown in Figure 4–1.

Figure 4–1   Upgrade Assistant Welcome Screen
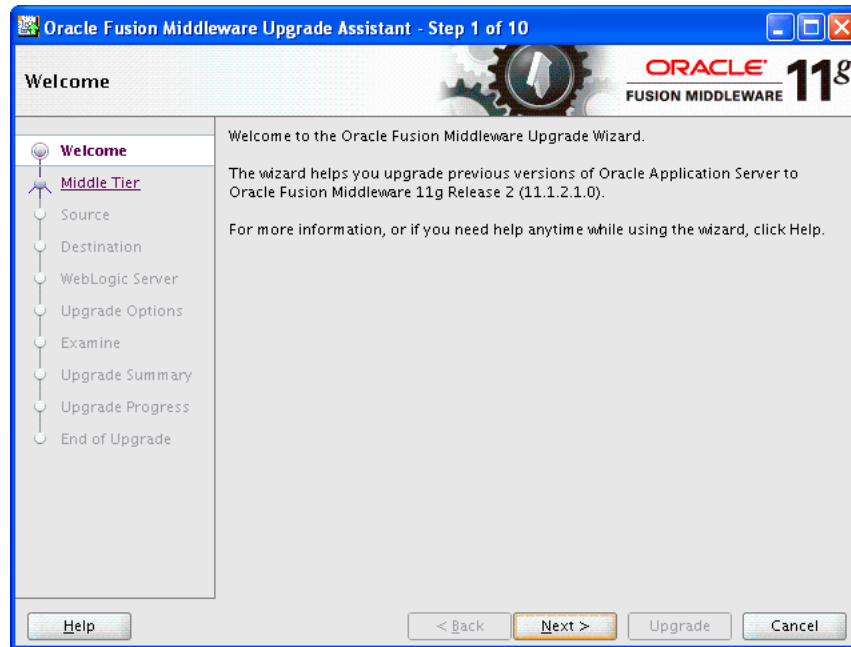
3.   Click **Next** to display the Specify Operation screen (Figure 4–2).

The options available in the Upgrade Assistant are specific to the Oracle home from which it started. For example, when you start Upgrade Assistant from an Oracle Forms and Reports Oracle home, the options shown on the Specify Operation screen are the valid options for an Oracle Forms and Reports Oracle home.

Figure 4–2   Upgrade Assistant Select Operation Screen for an Oracle Forms and Reports Upgrade
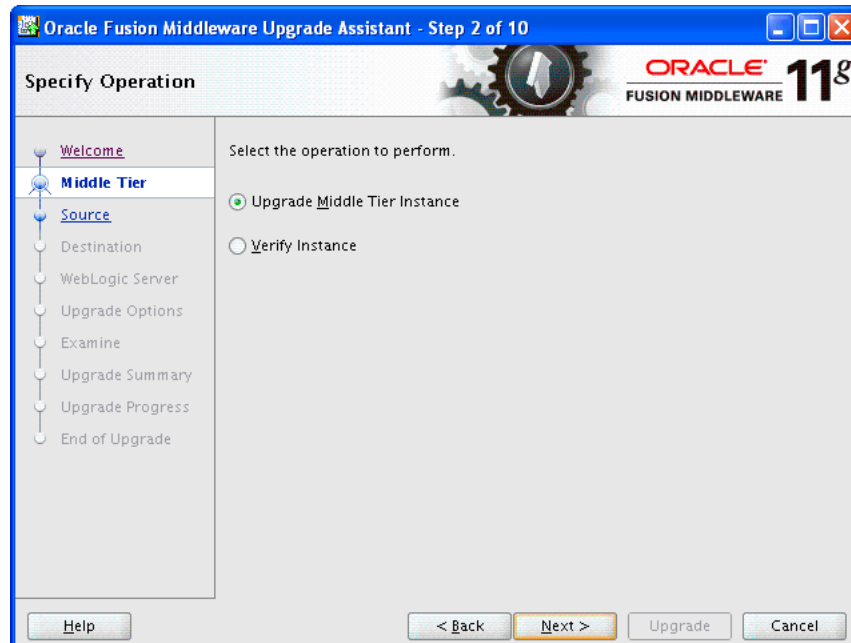
4.3.2 Upgrading the Oracle Forms and Reports Middle Tiers

To upgrade an Oracle Application Server 10*g* Release 2 (10.1.2) middle tier to Oracle Fusion Middleware 11*g*:

1. Start the Upgrade Assistant as described in Starting the Upgrade Assistant for an Oracle Forms and Reports Upgrade.

2. Select **Upgrade Middle Tier Instance** on the Specify Operation screen (Figure 4–2).

3. Refer to Table 4–1 for a description of the Upgrade Assistant screens that require input from you during a middle-tier instance upgrade and the options on each screen.

   The Upgrade Assistant performs the following tasks and provides the progress on each task:

   - Examines the components to be upgraded.

   - Provides a summary of the components to be upgraded so you can verify that the Upgrade Assistant is upgrading the components you expect.

   - Provides a progress screen so you can see the status of the upgrade as it proceeds.

   - Alerts you of any errors or problems that occur during the upgrade.

     See Also: "Troubleshooting Your Upgrade" in the *Oracle Fusion Middleware Upgrade Planning Guide* for specific instructions for troubleshooting problems that occur while running the Upgrade Assistant

   - Displays the End of Upgrade screen, which confirms that the upgrade was complete.

Table 4–1   Upgrade Assistant Screens That Require Input During a Middle-Tier Instance Upgrade

Upgrade Assistant Screen	Description
Specify Source Home	Select the 10*g* source Oracle home.
	If the Oracle home you want to upgrade does not appear in the drop-down lists, see "Source Oracle Home Not Listed by the Upgrade Assistant" in the *Oracle Fusion Middleware Upgrade Planning Guide*.
Specify Destination Instance	Enter the complete path to the 11*g* Oracle instance, or click **Browse** to locate the instance directory.
Specify WebLogic Server	Enter the host, Administration Server port, and administration credentials for the Oracle WebLogic Server you installed in Section 3.3, "Summary of the Oracle Forms and Reports 11g Installation Steps".

Table 4–1   (Cont.) Upgrade Assistant Screens That Require Input During a Middle-Tier Instance Upgrade

Upgrade Assistant Screen	Description
Specify Upgrade Options	Select the upgrade options you want to apply to the Oracle Forms and Reports upgrade:
	■ **Use source Oracle home ports in destination:** If you want to migrate the port assignments used by your Oracle Application Server 10g Oracle home to your new Oracle Fusion Middleware Oracle instance.
	For more information, see Section 4.3.3, "Important Notes When Using the Source Oracle Home Ports in the Destination Oracle Instance".
	■ **Stop source components before upgrade:** By default, this check box is selected and all the components in the Source Oracle home will be stopped before the upgrade process begins. Stopping the source components is necessary to avoid any port conflicts when you select the Use source Oracle home ports in destination option.
	■ **Start destination components after successful upgrade:** If you want the Upgrade Assistant to automatically start the components in the destination Oracle home after a successful upgrade is complete. If you do not select this option, then you will have to manually start the destination instance after the upgrade. Note that this option works only if the upgrade is successful.
	Click **Help** to display more information about the upgrade options on this screen.

4.3.3 Important Notes When Using the Source Oracle Home Ports in the Destination Oracle Instance

When you select the **Use Source Oracle home ports in destination** option in the Oracle Fusion Middleware Upgrade Assistant, note the following.

■ If you select this option, then you will not be able to run both the 10*g* and 11*g* middle tiers at the same time; otherwise, port conflicts will occur.

> **Important Note to Portal and Discoverer Users:**   This consideration is particularly important if you are upgrading from a full Oracle Portal, Forms, Reports, and Discoverer installation and you want to continue using your Oracle Portal and Oracle Business Intelligence Discoverer 10*g* products.
>
> If Upgrade Assistant configures your 11*g* instance as in your 10*g* instance to use the same ports as your 10*g* instance, then port conflicts will occur when you attempt to run Oracle Portal and Oracle Business Intelligence Discoverer 10*g* while the Oracle Forms and Reports 11*g* Release 2 (11.1.2) instance is running.

■ If you are upgrading to multiple instances of a particular Oracle Fusion Middleware 11*g* component, then you can select this option only once for each component that you upgrade on a host.

For example, suppose you upgrade Oracle HTTP Server in one Oracle instance on MYHOST1.

If you use the option again while upgrading another Oracle HTTP Server instance in another Oracle instance on MYHOST1, then the same listening ports are assigned to the second Oracle HTTP Server instance. Two instances of Oracle HTTP Server on the same host cannot use the same listening ports.

■ If you are upgrading Oracle Reports and you select this option, then Fusion Middleware Control may not be able to gather performance metrics about the Oracle Reports instance. This is because Oracle Enterprise Manager Fusion Middleware Control is using the new Oracle HTTP Server 11*g* port and not the Oracle HTTP Server 10*g* port to communicate with Oracle Reports.

To address this issue, modify the Agent-Monitored Target properties for the Oracle Reports component in Fusion Middleware Control. Change the following properties to reflect the 10*g* Oracle HTTP Server port information:

– The **HTTP Port** property

– The port identified in the **Servlet URL** property

– The **Server** property for the WLS_REPORTS Java EE application. You must change this property because, during upgrade, the Oracle Reports 11g in-process server is renamed to use the same name as the 10g in-process server.

For information on changing the Agent-Monitored Target properties, see "Troubleshooting the Display of Performance Metrics and Charts in Fusion Middleware Control" in the *Oracle Fusion Middleware Administrator's Guide*.

4.3.4 Warning Message When Components in the Source Oracle Home Are Not Configured in the Destination Oracle Home

In some cases, the Upgrade Assistant displays a dialog box to warn you that some components in the source Oracle home do not exist in the destination Oracle home. As a result, those components will not be upgraded.

When this dialog box appears, carefully review the list of components in the warning dialog box and verify that it matches your expectations for the destination Oracle home. Use the information in Table 4–2 to help determine the cause of the warning dialog box.

Table 4–2   Typical Reasons for the Upgrade Warning Dialog Box

Typical Reason for Warning Dialog Box	Description	More Information
You configured Oracle Forms and Reports for Development	If you configure for development, then some components (such as Oracle HTTP Server) are not installed.	"Understanding Oracle Forms and Reports Configuration Types" in the *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*
You are upgrading from Oracle Portal, Forms, Reports, and Discoverer 10*g*	Not all the components available in this release are available in Oracle Forms and Reports 11*g* Release 2 (11.1.2).	Section 1.1, "Understanding the Supported Starting Points for Upgrade to Oracle Forms and Reports 11g Release 2 (11.1.2)"

4.4 Performing Any Required Post-Upgrade Tasks

Refer to Chapter 6, "Post-Upgrade Tasks After Upgrading to Oracle Forms and Reports 11g Release 2 (11.1.2)" for a description of the post-upgrade tasks you might need to perform for each of the Oracle Forms and Reports components.

4.5 Verifying the Oracle Forms and Reports Upgrade

To verify that your Oracle Forms and Reports upgrade was successful:

1. Run the Upgrade Assistant again and select **Verify Instance** on the Specify Operation page.

    Follow the instructions on the screen for information on how to verify that specific Oracle Fusion Middleware components are up and running.

2. Use the Fusion Middleware Control to verify that the Oracle Forms and Reports components are up and running.

    For more information, see "Getting Started Using Oracle Enterprise Manager Fusion Middleware Control" in the *Oracle Fusion Middleware Administrator's Guide*.

5

Upgrading from Oracle Forms and Reports 11*g* Release 1

Use this chapter to upgrade from Oracle Forms and Reports 11*g* Release 1 to Oracle Forms and Reports 11*g* Release 2.

This chapter contains the following sections:

- Overview of Upgrading from Oracle Forms and Reports 11g Release 1 (11.1.1)
- Locating and Editing the Oracle Forms and Reports Upgrade Properties File
- Performing the Oracle Forms and Reports 11g Release 1 (11.1.1) Upgrade
- Troubleshooting the 11g Release 1 (11.1.1) to 11g Release 2 (11.1.2) Upgrade
- Performing any Post-Upgrade Manual Steps
- Verifying a Successful Upgrade

5.1 Overview of Upgrading from Oracle Forms and Reports 11*g* Release 1 (11.1.1)

The following sections provide information you should know before performing the upgrade procedure:

- Identifying the Source Oracle Instance and the Destination Oracle Instance When Upgrading from 11g Release 1 (11.1.1)
- Understanding the Tasks Performed by the 11g Release 1 (11.1.1) to 11g Release 2 (11.1.2) Upgrade Scripts

5.1.1 Identifying the Source Oracle Instance and the Destination Oracle Instance When Upgrading from 11*g* Release 1 (11.1.1)

To upgrade from Oracle Forms and Reports 11*g* Release 1 (11.1.1) to Oracle Forms and Reports 11*g* Release 2 (11.1.2) involves running a script that will copy configuration information from your **source** 11*g* Release 1 (11.1.1) Oracle instance to your **destination** 11*g* Release 2 (11.1.2) Oracle instance:

- The **source Oracle instance** is your currently running Oracle Forms and Reports 11*g* Release 1 (11.1.1) instance.
- The **destination Oracle instance** is the Oracle Forms and Reports 11*g* Release 2 (11.1.2) Oracle instance that you created in Chapter 3, "Installing Oracle Forms and Reports 11g Release 2 (11.1.2) In Preparation for Upgrade".

5.1.2 Understanding the Tasks Performed by the 11*g* Release 1 (11.1.1) to 11*g* Release 2 (11.1.2) Upgrade Scripts

Before you run the script, you must enter some required information about the source and destination Oracle instances in a properties file. You can then run the script, perform any manual steps, and then verify the upgrade.

When you run the upgrade scripts, the scripts automatically do the following:

- Uses the values you entered in the upgrade properties file to determine the location of the source and destination configuration files.

  For more information, see Section 5.2, "Locating and Editing the Oracle Forms and Reports Upgrade Properties File".

- Backs up the destination Oracle Instance and the destination domain home, using the current date_time stamp as suffix.

  The scripts create the instance backup in the parent directory of destination Oracle instance directory. The scripts create the domain backup directory in the parent directory of Domain home directory.

- Copies configuration files from the source location to the destination location.

- Replaces references to the source paths in the configuration files with the destination paths.

- Invokes any MBean operations or System calls required by each component.

- Restarts the destination Oracle WebLogic Server domain servers and the Oracle instance.

5.2 Locating and Editing the Oracle Forms and Reports Upgrade Properties File

To locate and edit the Oracle Forms and Reports upgrade properties file:

1. Change directory to the following directory in the Oracle Forms and Reports 11*g* Release 2 (11.1.2) Oracle home:

   ```
   (UNIX) ORACLE_HOME/upgrade/scripts/
   (Windows) ORACLE_HOME\upgrade\scripts\
   ```

2. Use a text editor to open the following file:

   ```
   upgrade.properties
   ```

3. Provide a value for each element in the properties file. Refer to Table 5–1 for a description of each element.

   Notes:

   - Elements with a prefix of "d_" identify the properties of the destination 11*g* Release 2 (11.1.2) software. Elements with a prefix of "s_" identify the properties of the source 11*g* Release 1 (11.1.1) software.

   - On the Windows platform, you must use a slash (/) as the delimiter if a directory path is required as a property value. For example:

     ```
     C:/Oracle/Middleware/Oracle_FRHome/
     ```

   - All the elements in the properties file are required.

■ Do not use any leading or trailing spaces before or after the values you enter in the properties file; otherwise, Apache Ant build might fail.

4. Save the file with the values you have entered.

Table 5–1   Description of the Elements in the upgrade.properties File

Element	Description
d_fmw-home	The complete path to the Middleware home where the newly installed Oracle Forms and Reports 11*g* Release 2 (11.1.2) Oracle home has been installed.
d_admin-server-host	The name of the host computer of the Administration Server for the Oracle WebLogic Server domain where the new Oracle Forms and Reports 11*g* Release 2 (11.1.2) software has been configured.
	Note that this value can be found in the following domain configuration file:
	DOMAIN_HOME/config/config.xml
	This value is typically defined in the HOSTNAME variable on UNIX systems or by the COMPUTERNAME variable on Windows systems.
d_hostname	The name of the host where Oracle Forms and Reports 11*g* Release 2 (11.1.2) was installed and configured.
	In some scenarios, this host name is different from the host where the Administration Server is installed. For example, this can be the case if the domain has been extended to multiple hosts.
d_domain-home	The complete path to the domain home directory for the Oracle WebLogic Server domain where Oracle Forms and Reports 11*g* Release 2 (11.1.2) has been configured.
d_weblogic.username	The user name of the Oracle WebLogic Server Administration user. In most cases, this is the weblogic user.
d_weblogic.port	The Administration Server port for the Oracle WebLogic Server domain where Oracle Forms and Reports 11*g* Release 2 (11.1.2) has been configured. By default, this port is 7001.
d_oracle-home	The complete path to the Oracle Forms and Reports 11*g* Release 2 (11.1.2) Oracle home.
d_oracle-instance	The complete path to the Oracle Forms and Reports 11*g* Release 2 (11.1.2) Oracle instance directory.
s_fmw-home	The complete path to the Middleware home where the Oracle Forms and Reports 11*g* Release 1 (11.1.1) Oracle home is installed.
s_domain-home	The complete path to the Domain home for the Oracle WebLogic Server domain where Oracle Forms and Reports 11*g* Release 1 (11.1.1) was configured.
s_oracle-home	The complete path to the Oracle Forms and Reports 11*g* Release 1 (11.1.1) Oracle home.
s_oracle-instance	The complete path to the Oracle Forms and Reports 11*g* Release 1 (11.1.1) Oracle instance.

Table 5–1 (Cont.) Description of the Elements in the upgrade.properties File

Element	Description
retain_source-ports	Specify true or false. Default setting is true.
	If set to true, then the upgrade scripts configure the destination software to use the same ports as those used in the source Oracle home.
	If set to false, then the upgrade scripts do not change any port values in the destination instance. As a result, they will use the values set during the Oracle Forms and Reports 11*g* Release 2 (11.1.2) installation and configuration.
	Note: If your 11*g* Release 1 (11.1.1) instance contains Oracle Portal or Oracle Business Intelligence, then you must set this value to false if you want to continue using Oracle Portal and Oracle Business Intelligence after the upgrade. For more information, see Section 1.8, "About Using Oracle Portal and Oracle Business Intelligence Discoverer with Oracle Forms and Reports 11g Release 2 (11.1.2)".
	This property is similar to the **Use Source Oracle home ports in destination** option in the Upgrade Assistant when you are upgrading from Oracle Forms and Reports 10*g*. For more information, see description of the Specify Upgrade Options screen in Table 4–1.

5.3 Performing the Oracle Forms and Reports 11*g* Release 1 (11.1.1) Upgrade

After you have entered the required values in the properties file, you can use the Oracle Forms and Reports 11*g* Release 2 (11.1.2) upgrade scripts to upgrade your 11*g* Release 1 (11.1.1) configuration settings to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

1. Stop the source Oracle instance and the Oracle WebLogic Server domain where the Oracle Forms and Reports 11*g* Release 1 (11.1.1) products have been configured:

   - To stop the Oracle instance, use the appropriate OPMN commands for your platform.

   - To stop the Oracle WebLogic Server domain, stop the managed servers and the Administration server, using the standard start and stop procedures for your domain.

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

2. Make sure that the destination Oracle instance and the destination Oracle WebLogic Server domain are up and running.

   To verify that the instance and the domain are running, log in to the Oracle Enterprise Manager Fusion Middleware Control for the domain and verify that the managed servers and Oracle Forms and Reports components are running.

3. Set the following environment variables:

   - **JAVA_HOME**: Depending on the operating system and platform, the JDK installed with Oracle Forms and Reports is usually in one of the following locations:

     UNIX:

     DEST_MW_HOME/jdkrel_version

DEST_ORACLE_HOME/jdk

Windows:

```
DEST_MW_HOME\jdkrel_version
DEST_ORACLE_HOME\jdk
```

- **ANT_HOME:** Depending on the operating system and platform, the ANTinstalled with Oracle Forms and Reports is usually in the following locations:

  UNIX:

  DEST_MW_HOME/modules/org.apache.ant_1.7.1

  Windows:

  DEST_MW_HOME\modules\org.apache.ant_1.7.1

- **PATH:** Make sure that the Java Development Kit (JDK) and Apache Ant binaries are included in the PATH variable.

  UNIX:

  ```
  JAVA_HOME/bin
  ANT_HOME/bin
  ```

  Windows:

  ```
  JAVA_HOME\bin
  ANT_HOME\bin
  ```

- **CLASSPATH**: Make sure the following is in the CLASSPATH variable:

  UNIX:

  DEST_MW_HOME/wlserver_10.3/server/lib/weblogic.jar

  Windows:

  DEST_MW_HOME\wlserver_10.3\server\lib\weblogic.jar

4. Change directory to the following directory in the Oracle Forms and Reports 11*g* Release 2 (11.1.2) Oracle home:

   ```
   (UNIX) DEST_ORACLE_HOME/upgrade/scripts/
   (Windows) DEST_ORACLE_HOME\upgrade\scripts\
   ```

5. Enter the following command, which will run each of the required upgrade scripts:

   ```
   ant
   ```

6. If any errors are generated during the upgrade, see Section 5.4, "Troubleshooting the 11g Release 1 (11.1.1) to 11g Release 2 (11.1.2) Upgrade".

5.4 Troubleshooting the 11*g* Release 1 (11.1.1) to 11*g* Release 2 (11.1.2) Upgrade

The following sections provide information you can use if you have problems with the upgrade from Oracle Forms and Reports 11*g* Release 1 (11.1.1):

- Locating the 11g Release 1 (11.1.1) to 11g Release 2 (11.1.2) Upgrade Log Files

- Locating the Automatic Backup of the Destination Oracle Instance and Domain
- Re-Running the 11g Release 1 (11.1.1) to 11g Release 2 (11.1.2) Upgrade Scripts

5.4.1 Locating the 11*g* Release 1 (11.1.1) to 11*g* Release 2 (11.1.2) Upgrade Log Files

Each time you run the Oracle Forms and Reports upgrade scripts, the scripts generate a log file that you can use to troubleshoot the upgrade. The log file is written to the following directory in the destination Oracle home:

```
(UNIX) DEST_ORACLE_HOME/upgrade/logs/
(Windows) DEST_ORACLE_HOME\upgrade\logs\
```

The name of the log file uses the following format to help you identify which log file to review:

```
upgrade_date-time.log
```

For example:

```
upgrade_08-22-2011-12_10_30_PM.log
```

5.4.2 Locating the Automatic Backup of the Destination Oracle Instance and Domain

Each time you run the upgrade scripts, the scripts make a complete backup copy of the destination Oracle instance directory and the Oracle WebLogic Server domain directory.

These directories is created in the same directories where the original Oracle instance and domain directories reside. The name of the directories are saved using the following format to help you identify the backup directory:

```
instance_name.preUpgrade_date-time
domain_name.preUpgrade_date-time
```

For example:

```
forms_reports_1112_instance1.preUpgrade_08-22-2012-12_10_30_PM
forms_reports_domain1.preUpgrade_08-22-2012-12_10_30_PM
```

If you need to restore your Oracle Instance or domain after a failed upgrade attempt, you can obtain the backed up files from this location.

5.4.3 Re-Running the 11*g* Release 1 (11.1.1) to 11*g* Release 2 (11.1.2) Upgrade Scripts

If you have problems upgrading your environment, you can review the log files and then re-run the upgrade scripts. To re-run the upgrade scripts:

1. Verify that the values in the properties file are set correctly, as described in Section 5.2, "Locating and Editing the Oracle Forms and Reports Upgrade Properties File".

2. Run the scripts again, as described in Section 5.3, "Performing the Oracle Forms and Reports 11g Release 1 (11.1.1) Upgrade".

5.5 Performing any Post-Upgrade Manual Steps

Refer to Chapter 6, "Post-Upgrade Tasks After Upgrading to Oracle Forms and Reports 11g Release 2 (11.1.2)" for a description of the post-upgrade tasks you might need to perform for each of the Oracle Forms and Reports components.

5.6 Verifying a Successful Upgrade

To verify a successful upgrade:

1. Use your browser to navigate to the Fusion Middleware Control home page:

   ```
   http://hostname:port/em
   ```

   For more information, see "Displaying Fusion Middleware Control" in the *Oracle Fusion Middleware Administrator's Guide*.

2. Review the list of managed servers and verify that your configuration settings have been migrated to the new Oracle Forms and Reports 11*g* Release 2 (11.1.2) installation.

3. Verify the Forms and Reports URLs, as described in "Checking Browser URLs" in the *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*.

6

Post-Upgrade Tasks After Upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2)

This chapter covers tasks you shoudl complete after upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2).

This task involves completing the following component-specific upgrade steps:

- Post-Upgrade Tasks for Oracle Forms Services
- Post-Upgrade Tasks for Oracle Reports
- Post-Upgrade Tasks Required When Using Single Sign-On Software
- Post-Upgrade Tasks and Information for the Web Tier Components

6.1 Post-Upgrade Tasks for Oracle Forms Services

Review the following list of manual tasks that you might have to perform after upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- Post-Upgrade Steps After Upgrading from Oracle Forms Services 10g
- Post-Upgrade Steps After Upgrading from 11g Release 1 (11.1.1)

> **Note:** For information on upgrading from Oracle Forms Release 6i , refer to "Upgrading to Oracle Forms Services" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

6.1.1 Post-Upgrade Steps After Upgrading from Oracle Forms Services 10*g*

Review the following list of post-upgrade tasks you might have to perform after using the Upgrade Assistant to upgrade Oracle Forms Services 10*g* Release 2 (10.1.2) to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- Regenerate the Forms application files: fmx's, mmx's, and plx's to run on Oracle Forms Services 11*g*.
- If you deployed the Oracle Forms Services J2EE applications EAR file (`formsapp.ear`) on multiple OC4J instances for load balancing and high availability purposes, then you deploy them in a similar manner on Oracle WebLogic Server.

  Specifically, you can create additional managed servers and deploy the Oracle Forms Services J2EE application ear file on each server.

The ear file is stored in the following location in Oracle Fusion Middleware 11*g*:

`ORACLE_HOME/forms/j2ee/formsapp.ear`

For more information, see "Expanding Forms Managed Server Clusters" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

- If you deployed the Oracle Forms Services J2EE custom application ear file (`formsapp.ear`) file to override the context root or Forms servlet alias, then you should perform similar steps in the 11*g* Oracle WebLogic Server domain.

  For more information, see "Custom Deployment of Forms Java EE Application" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

- Manually copy any customizations to the shell scripts in the source Oracle home to the equivalent shell scripts that reside Oracle Fusion Middleware 11*g* Oracle instance directory.

- The Upgrade Assistant copies the FMA utility configuration files (`converter.properties` and `search_replace.properties`) to the Oracle Fusion Middleware 11*g* destination Oracle instance and renames them so they have a `.10.1.2` suffix.

  You can then manually copy the required entries from the `.10.1.2` configuration files into the Oracle Fusion Middleware 11*g* version of these files as needed.

6.1.2 Post-Upgrade Steps After Upgrading from 11*g* Release 1 (11.1.1)

Review the following list of manual tasks that you might have to perform after using the Upgrade Scripts to upgrade Oracle Forms Services in Oracle Fusion Middleware 11g Release 1 (11.1.1) to Oracle Fusion Middleware 11g Release 2 (11.1.2):

- If you deployed the Oracle Forms Services J2EE applications EAR file (`formsapp.ear`) on multiple managed servers for load balancing and high availability purposes, then be sure to redeploy it in a similar manner after you upgrade from Oracle Fusion Middleware 11*g* Release 1 (11.1.1).

  The ear file is stored in the following location in Oracle Fusion Middleware 11g:

  `ORACLE_INSTANCE/config/Formscomponent/forms/provision/formsapp.ear`

  For more information, see "Expanding Forms Managed Server Clusters" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

- If you deployed the Oracle Forms Services J2EE custom application ear file (`formsapp.ear`) file to override the context root or Forms servlet alias, then you should perform similar steps in the 11g Oracle WebLogic Server domain.

  For more information, see "Custom Deployment of Forms Java EE Application" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

- If you made any customizations to the Forms Oracle HTTP Server configuration file, `forms.conf`, in the source instance, then you must manually add those customizations to the equivalent file in the destination instance.

  In Oracle Forms and Reports 11*g* Release 2 (11.1.2), the configuration file is installed in the following location:

  `ORACLE_INSTANCE/config/OHS/ohs1/modulesconf/forms.conf`

  Note that you must restart the Oracle HTTP Server instance after you modify the `forms.conf` file.

6.1.3 Oracle HTTP Server Port Conflicts After Upgrade from Oracle Fusion Middleware 11*g* Release 1 (11.1.1)

When you upgrade from Oracle Fusion Middleware 11*g* Release 1 (11.1.1), you can choose to modify your new 11*g* Release 2 (11.1.2) installation to use the same ports as your 11*g* Release 1 (11.1.1) installation.

Alternatively, you can continue use the ports defined during the 11*g* Release 2 (11.1.2) installation.

In the latter case, you can run both the 11*g* Release 1 (11.1.1) environment and the newly upgraded 11*g* Release 2 (11.1.2) instance at the same time with no port conflicts.

However, in some cases, after upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2), you might experience port conflicts when attempting to start the Oracle HTTP Server in both the 11*g* Release 1 (11.1.1) and 11*g* Release 2 (11.1.2) instances. This is because not all the paths in the Oracle HTTP Server configuration files were upgraded successfully.

This issue occurs if the paths to the `admin.conf` and `ssl.conf` files in the `httpd.conf` file are hard-coded, rather than defined using system variables. As a result, they continue to reference the configuration files in the 11*g* Release 1 (11.1.1) source Oracle instance, rather than the files in the 11*g* Release 2 (11.1.2) destination Oracle instance.

To work around this issue, perform the following task in the destination Oracle instance:

1. Locate the `httpd.conf` file for the destination Oracle HTTP Server.

   The file is located in the following location in the destination Oracle instance:

   ```
   (WINDOWS> DEST_ORACLE_INSTANCE\config\OHS\ohs1\httpd.conf
   ```

2. Edit the `httpd.conf` file with a text editor and replace all source paths with destination paths for all the directives in `httpd.conf` file.

   For example, replace the following path:

   ```
   "ServerRoot "<Source Oracle Instance>/config/OHS/ohs1"
   ```

   with

   ```
   "ServerRoot "<Destination Oracle Instance>/config/OHS/ohs1"
   ```

3. Save and close the `httpd.conf` file.

4. Edit the `ssl.conf` file located at `<Destination Oracle Instance>/config/OHS/ohs1/ssl.conf` by replacing the forward slash with the backward slash as shown in the following example:

   Before workaround:

   ```
   </Directory>

   BrowserMatch ".*MSIE.*" /
   nokeepalive ssl-unclean-shutdown /
   downgrade-1.0 force-response-1.0

   </IfModule>
   ```

   After workaround:

   ```
   </Directory>
   ```

```
BrowserMatch ".*MSIE.*" \
nokeepalive ssl-unclean-shutdown \
downgrade-1.0 force-response-1.0

</IfModule>
</VirtualHost>
```

5. Save and close the `ssl.conf` file.

6. Restart the Oracle HTTP Server instance.

6.2 Post-Upgrade Tasks for Oracle Reports

After you upgrade from Oracle Reports 10*g* to Oracle Reports 11*g*, review the following sections, which provide information about typical post-upgrade tasks for OracleAS Reports Services users:

- Configuring Security After Upgrade to Oracle Reports 11g

- Additional Oracle Reports Post-Upgrade Tasks

6.2.1 Configuring Security After Upgrade to Oracle Reports 11*g*

When you upgrade to Oracle Reports 11*g*, the security configuration is not upgraded. As a result, the security configuration of Oracle Reports 11*g* remains the same as it was before the upgrade.

For information about the security features available in Oracle Reports 11*g* and how to configure them, see "Securing Oracle Reports Services" in the *Oracle Fusion Middleware Publishing Reports to the Web with Oracle Reports Services*.

6.2.2 Additional Oracle Reports Post-Upgrade Tasks

The following sections describe some other common post-upgrade tasks to complete after upgrading to OracleAS Reports Services 11*g*:

- Modifying Oracle Reports Shell Scripts After Upgrade

- Modifying Oracle Reports DAT Files After Upgrade

- About the In-process Server Target After Upgrade

- Viewing Cached Reports Output Files After Upgrade

6.2.2.1 Modifying Oracle Reports Shell Scripts After Upgrade

Any shell scripts that are stored in the bin directory of the Oracle Reports 10*g* Oracle home, such as `reports.sh`, `rwrun.sh`, and `rwserver.sh` are not upgraded automatically during the upgrade process. Instead, you must change these scripts manually, as needed. After the upgrade, you can find these scripts in the following Oracle Fusion Middleware 11*g* directory:

ORACLE_INSTANCE/config/reports/bin

6.2.2.2 Modifying Oracle Reports DAT Files After Upgrade

OracleAS Reports Services DAT files are upgraded during the upgrade process. However, if job command entries in the DAT files contain references to old Oracle Home path names or invalid path names, then those jobs will fail. Therefore, you must reschedule any such report jobs.

6.2.2.3 About the In-process Server Target After Upgrade

In OracleAS Reports Services 10*g*, the in-process server target appears in Oracle Enterprise Manager Application Server Control as `Reports Server`.

However, after you upgrade to OracleAS Reports Services 11*g*, the in-process server appears in Oracle Enterprise Manager Fusion Middleware Control as an application, called `reports`, and you can manage the in-process server target and the Reports servlet on the Reports application page.

6.2.2.4 Viewing Cached Reports Output Files After Upgrade

Cached Reports output files are not upgraded to Oracle Reports 11*g*.

6.3 Post-Upgrade Tasks Required When Using Single Sign-On Software

If you are using single sign-on software for authentication, then in certain upgrade scenarios, you must re-register your Oracle Forms and Reports software with the single sign-on software.

Refer to the following sections for more information:

- Scenarios That Require Regeneration of Single Sign-on Configuration Information
- Product-Specific Instructions for Regenerating Single Sign-On Configuration Information

6.3.1 Scenarios That Require Regeneration of Single Sign-on Configuration Information

The following table describes the typical upgrade scenarios that require the re-generation of the single sign-on client access files after the upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2).

Table 6–1 Upgrade Scenarios That Require Regeneration of Single Sign-On Configuration information

Upgrade Scenario	Description
Upgrading from Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g*	Oracle Forms and Reports 11*g* Release 2 (11.1.2) supports Oracle Access Manager 11*g* as a single sign-on alternative to your existing Oracle Single Sign-On 10*g* software.
	For more information, see Section 1.7, "About Using Identity Management and Single Sign-On With Oracle Forms and Reports 11g Release 2 (11.1.2)".
	If you install your target Oracle Forms and Reports 11*g* Release 2 (11.1.2) software against Oracle Access Manager 11*g*, then after you upgrade, you must generate new configuration information for the Oracle HTTP Server so the server can connect to Oracle Access Manager, instead of Oracle Single Sign-On 10*g*.
	Similarly, if you later upgrade from Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g*, then you must perform the same procedure.
Configuring Oracle HTTP Server to work with Oracle Web Cache	Oracle Forms and Reports 11*g* Release 2 (11.1.2) does not include Oracle Web Cache. As a result, configuration data for connecting Oracle HTTP Server with your existing Oracle Web Cache instances is not preserved during upgrade.
	For more information, see Section 1.6, "About Using the Web Tier Components with Oracle Forms and Reports 11g Release 2 (11.1.2)".
	If--after upgrade--you configure your Oracle HTTP Server instance to work with your existing Oracle Web Cache instances, you must generate new configuration information for the Oracle HTTP Server so the server can connect to your single sign-on software.

6.3.2 Product-Specific Instructions for Regenerating Single Sign-On Configuration Information

The procedure you use to regenerate your single sign-on configuration information varies depends on the single sign-on software you are using, as well as the way it was configured. See the following for more information:

- If you are using Oracle Single Sign-On 10*g*, then you must regenerate the osso.conf file and copy it to the proper location where the Oracle HTTP Server can read it.

  For more information, see "Generating the osso.conf file for the OracleAS Single Sign-On Server 10g" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

- If you are using Oracle Access Manager 11*g* and you are not using the Oracle HTTP Server WebGate plugin, then you must regenerate the osso.conf file and copy it to the proper location where the Oracle HTTP Server can read it.

  For more information, see "Generating the osso.conf file for Oracle Access Manager" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

- If you are using Oracle Access Manager 11*g* and you are using the Oracle HTTP Server WebGate plugin, then you must register WebGate agent, copy the generated files to the proper location, and then restart the Oracle HTTP Server instance.

  For more information, see:

  - "Installing and Configuring Webgate with OAM" in the *Oracle Fusion Middleware Forms Services Deployment Guide*.

- "Getting Started with a New Oracle HTTP Server 11g Webgate Agent for Oracle Access Manager" in the *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.

6.4 Post-Upgrade Tasks and Information for the Web Tier Components

Refer to the following sections for information about post-upgrade tasks you must perform for your Web Tier components after upgrading to Oracle Forms and Reports 11*g* Release 2 (11.1.2):

- Reconfiguring the Connections and Ports for Oracle Web Cache
- Additional Web Tier Component Post-Upgrade Tasks

6.4.1 Reconfiguring the Connections and Ports for Oracle Web Cache

If you were using Oracle Web Cache prior to the Oracle Forms and Reports 11*g* Release 2 (11.1.2) upgrade, you can continue to use your existing Oracle Web Cache instance. However, you must reconfigure both Oracle Web Cache and Oracle HTTP Server after the upgrade is complete.

For more information, see "Basic Tasks for Configuring and Managing Oracle Web Cache" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

If you are also using Oracle Single Sign-On 10*g* or Oracle Access Manager 11*g*, then after you reconfigure the ports and connections, you will likely need to re-register your installation with your single sign-on software. For more information, see Section 6.3, "Post-Upgrade Tasks Required When Using Single Sign-On Software".

In addition:

- If you are currently using Oracle Web Cache 10*g*, then you can consider upgrading your Oracle Web Cache 10*g* installation to Oracle Web Cache 11*g*.

  For information on upgrading from Oracle Web Cache 10*g*, see "Upgrading a Java EE and Web Server Environment" in the *Oracle Fusion Middleware Upgrade Guide for Java EE*.

- If you are already running Oracle Web Cache 11*g*, consider applying the latest 11*g* patch set so you are running the very latest Oracle Web Cache software.

  For information on applying the latest Oracle Fusion Middleware patch set, see the *Oracle Fusion Middleware Patching Guide*.

6.4.2 Additional Upgrade Step When Using Secure (SSL) Connections

If you are using SSL to secure your Oracle HTTP Server, you must perform the following task after you complete the upgrade to Oracle Forms and Reports 11*g* Release 2 (11.1.2).

If you do not perform this step, you will receive an error message when attempting to access services or URLs via the Oracle HTTP Server instance. For example, if you are using a single sign-on server, then you might receive an error message similar to the following:

```
Oracle SSO Failure - Unable to process request
Either the requested URL was not specified in terms of a fully-qualified host name
or OHS single sign-on is incorrectly configured.
Please notify your administrator.
```

To address this problem:

1. Locate the following element in the `httpd.conf` file for the Oracle HTTP Server:

   ```
   ServerName hostname:portValue
   ```

2. Update the portValue so it references the secure HTTPS listening port for the Oracle HTTP Server instance.

   For example:

   ```
   ServerName webhost1.example.com:8090
   ```

For more information, see "Modifying an Oracle HTTP Server Configuration File" in the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server*.

6.4.3 Additional Web Tier Component Post-Upgrade Tasks

For more information about tasks and information for Oracle HTTP Server and Oracle Web Cache after you upgrade to Oracle Fusion Middleware 11*g*, see "Task 5: Perform Any Required Post-Upgrade Tasks for the Web Tier Components" in the *Oracle Fusion Middleware Upgrade Guide for Java EE*.