

# Oracle® Fusion Middleware

## Installing Oracle Forms



12c (12.2.1.19.0)

F70508-05

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The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

Oracle Fusion Middleware Installing Oracle Forms, 12c (12.2.1.19.0)

F70508-05

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# Preface

This document covers requirements, instructions, and troubleshooting tips for installing and configuring Oracle Forms.

## Audience

This guide is intended for users who are installing Oracle Fusion Middleware for the first time and are comfortable running some system administration operations, such as creating users and groups, adding users to groups, and installing operating system patches on the computer where you products will be installed. Users in UNIX systems who are installing need `root` access to run some scripts.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

### Access to Oracle Support

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> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## Related Documents

You can refer the Oracle Fusion Middleware Library for additional information.

- For 12c Oracle Forms information, see Oracle Forms Documentation Library.
- Oracle Forms Developer Online Help, available from the Help menu in Oracle Forms Developer.
- For Oracle Forms technical papers and other resources, see [Oracle.com](http://www.oracle.com).
- For upgrade information, see Fusion Middleware Upgrade Documentation.
- For release-related information, see Fusion Middleware Release Notes.

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.

<b>Convention</b>	<b>Meaning</b>
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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# 1

## Installation and Configuration Overview

This chapter provides a summary and roadmap for Oracle Forms installation and configuration.



### Note:

Although Oracle Reports is included in this release, it has been deprecated. Refer the [12.2.1.3.0 Documentation Library](#) for installation information specific to Oracle Reports.

The following sections are included

- [Components Available for Installation](#)
- [Secure Oracle Forms with Identity Management](#)
- [Installation and Configuration Roadmap for Oracle Forms](#)
- [Installation and Configuration Roadmap for Standalone Form Builder](#)

## Components Available for Installation

The following components are available:

- Oracle Forms
  - Oracle Form Builder
  - Oracle Forms Deployment (Forms Services)
- Oracle Reports
- Oracle HTTP Server
- Oracle Common Configuration Infrastructure
  - CIE CAM Shared Config
  - Enterprise Manager Plugin for Forms
- Infrastructure
  - Database Client Components 19.14.0.0
  - OPatch version 13.9.4.2.11

## Secure Oracle Forms with Identity Management

If you want to have your Oracle Forms installation protected by an Identity Management tier, you must secure Oracle Forms with Oracle Access Manager.

An Oracle Forms installation secured with Identity Management is only supported when the Domain Mode is configured for "Production".



Refer to the [Installing and Configuring Oracle Identity and Access Management](#) guide for information about installing and configuring Oracle Internet Directory with Oracle Access Manager.

If you have an existing Oracle Internet Directory with Oracle Single Sign-On, you can upgrade to Oracle Internet Directory with Oracle Access Manager, as described in [Upgrading Oracle Forms](#)

## Installation and Configuration Roadmap for Oracle Forms

This roadmap provides an overview of the steps required to install Oracle Forms.

Review the tasks you have to perform for a typical Oracle Forms installation and configuration.




### Note:

If you are planning to use the Standalone Form Builder installation option, see [Table 1-2](#).

**Table 1-1 Tasks in thr Oracle Forms Installation**

Task	Description	Additional Information
Verify your system's environment	Ensure that your system environment meets the general installation requirements for Oracle Fusion Middleware and Oracle Forms.	Read the information provided in <a href="#">Preparing to Install</a> .
Obtain the software	Obtain all necessary software to install and configure Oracle Forms.	The software required to install Oracle Forms is described in <a href="#">Obtaining the Oracle Fusion Middleware Software</a> .
Install Oracle Java JDK (64-bit)	Oracle JDK is required for both installation and post-install operations.	Refer to the <a href="#">Fusion Middleware Certification Matrix</a> to identify the needed certified Oracle JDK version.
Install Fusion Middleware Infrastructure and create an Oracle home	Oracle Forms requires an Oracle home directory for installation and a WebLogic Server domain during configuration.	Follow the steps described in <a href="#">Installing Fusion Middleware Infrastructure</a> . Note that only specific versions of Oracle WebLogic Server are supported. You automatically obtain the correct version when you install the Fusion Middleware Infrastructure distribution for the current release. Additional information about certifying your environment is available in <a href="#">Reviewing Certification, System, and Interoperability Requirements</a> .
Install Oracle Forms	Install the components using Oracle Universal Installer.	Follow the steps described in <a href="#">Installing Using Oracle Universal Installer</a> .
Run Repository Creation Utility	Create Oracle Fusion Middleware database schemas.	Follow the steps described in <a href="#">Using the Repository Creation Utility</a> .

**Table 1-1 (Cont.) Tasks in the Oracle Forms Installation**

Task	Description	Additional Information
Create and configure the WLS Domain using the Configuration Wizard	Use Configuration Wizard to configure your components.	Follow the steps described in <a href="#">Configuring Forms Using the Configuration Wizard</a> and <a href="#">Configuring Form Builder Standalone Using the Configuration Wizard</a> .
<div style="border: 1px solid #0070C0; padding: 10px; background-color: #E6F2FF;">  <b>Note:</b>                      Be sure to include Oracle HTTP Server (Collocated) if this environment will be integrated with Oracle Access Manager for SSO support.                 </div>		
Start servers to complete the configuration	Start the Node Manager then the WebLogic Admin Server. Once started, start any managed servers created during the Domain creation (for example, WLS_FORMS). This will complete the configuration process.	Follow the steps described in <i>Starting and Stopping Servers in Administering Server Startup and Shutdown for Oracle WebLogic Server</i> .
Verify your environment	Verify that your installation and configuration were successful.	Follow the steps described in <a href="#">Verifying the Installation and Configuration</a> .

## Installation and Configuration Roadmap for Standalone Form Builder

Review the tasks you have to perform if you are planning to use the Standalone Form Builder installation option.

**Table 1-2 Tasks in the Standalone Form Builder Installation**

Task	Description	Additional Information
Verify your system's environment	Ensure that your system environment meets the general installation requirements for Oracle Fusion Middleware and Oracle Forms.	Read the information provided in <a href="#">Preparing to Install</a> .
Obtain the software	Obtain all necessary software to install and configure Oracle Forms.	The software required to install Oracle Forms is described in <a href="#">Obtaining the Oracle Fusion Middleware Software</a> .

**Table 1-2 (Cont.) Tasks in the Standalone Form Builder Installation**

<b>Task</b>	<b>Description</b>	<b>Additional Information</b>
Start the Oracle Forms installer	Start the Oracle Forms installer to install the software.	When you are ready to begin, see <a href="#">Starting the Oracle Forms Installer</a> .
Install Standalone Form Builder	Install the components using Oracle Universal Installer.	Follow the steps described in <a href="#">Installing Using Oracle Universal Installer</a> .
Configure Standalone Form Builder Using the Form Builder Configuration Wizard	Use Form Builder Configuration Wizard to configure your components.	Follow the steps described in <a href="#">Configuring Form Builder Standalone Using the Configuration Wizard</a> .
Verify your environment	Verify that your installation and configuration were successful.	Follow the steps described in <a href="#">Verifying the Installation and Configuration</a> .

# 2

## Installing and Configuring Oracle Forms

This chapter describes how to install and configure Oracle Forms. The following topics are covered:

- [Preparing to Install](#)
- [Installing Fusion Middleware Infrastructure](#)
- [Installing Oracle Identity and Access Management](#)
- [Installing and Configuring Oracle Forms](#)
- [Installing Oracle Forms in Silent Mode](#)
- [Installing the Forms Application Deployment Services](#)
- [Oracle Forms Accessibility Information](#)

### Preparing to Install

To prepare for your Oracle Forms installation, verify that your system meets the basic requirements, then obtain the correct installation software.

You should also ensure that your environment and other software requirements are met.

- [Reviewing Certification, System, and Interoperability Requirements](#)
- [Understand Oracle Fusion Middleware Concepts](#)
- [Obtaining the Oracle Fusion Middleware Software](#)
- [Installing Oracle Forms in a New Oracle Home](#)
- [Installing Oracle Forms as a Non-Default User](#)
- [Overview of Installation and Configuration Steps](#)

### Reviewing Certification, System, and Interoperability Requirements

Oracle recommends that you use the certification matrix and system requirements documents with each other to verify that your environment meets the requirements for installation.

#### 1. Verifying that your environment meets certification requirements

Make sure that you install your product on a supported hardware and software configuration. See the certification document for your release on the Oracle Fusion Middleware Supported System Configurations page.

#### 2. Using the system requirements document to verify certification

Oracle recommends that you use the System Requirements and Specifications for Oracle Forms and Reports document to verify that the certification requirements are met. For example, if the certification document indicates that your product is certified for installation on 64-Bit Oracle Linux 6.5, use this document to verify that your system meets the required minimum specifications. These include disk space, available memory, specific platform packages and patches, and other operating system-specific requirements. System

requirements can change in the future. Therefore, the system requirement documents are kept outside of the documentation libraries and are available on Oracle.com.

### 3. Verifying interoperability among multiple products

To learn how to install and run multiple Fusion Middleware products from the same release or mixed releases with each other, see Oracle Fusion Middleware 12c (12.2.1.4.0) Interoperability and Compatibility in *Understanding Interoperability and Compatibility*.

## Understand Oracle Fusion Middleware Concepts

If you are new to Oracle Fusion Middleware, see About Key Oracle Fusion Middleware Concepts in *Understanding Oracle Fusion Middleware* to familiarize yourself with some of the concepts and terminology you will encounter.

## Obtaining the Oracle Fusion Middleware Software

Depending on your specific needs, there are multiple locations to obtain Oracle Fusion Middleware software.

Specific information on the distributions you may need to download is available in the [Oracle Fusion Middleware Download, Installation, and Configuration Readme Files](#).

### Before You Begin:

Refer to the certification requirements documentation, as described in [Reviewing Certification, System, and Interoperability Requirements](#), to verify that your environment meets certification requirements.

In particular, to run an Oracle Forms application, user machines will be required to have a Java Runtime Environment installed. This can be accomplished either by installing a JDK or JRE. Either of these downloads is available from the [Java SE Downloads](#) page. Click the system certification link to ensure the appropriate version is downloaded and installed.

To install and configure Oracle Forms, you will need to download the following software:

1. Download the Fusion Middleware Infrastructure distribution from the [Oracle WebLogic Server Installers](#) download page.  
Note that the **Fusion Middleware Infrastructure Installer** is available from the Oracle WebLogic Server Installer download page because the Fusion Middleware Infrastructure distribution includes Oracle WebLogic Server and the Oracle JRF Infrastructure components. While only specific versions of Oracle WebLogic Server are supported for a specific distribution, you automatically obtain the correct version when you install Fusion Middleware Infrastructure for the current release.

#### Note:

The Standalone Forms Builder does not use Fusion Middleware Infrastructure and therefore cannot be installed into a home containing Fusion Middleware Infrastructure.

2. Download the Oracle Forms and Reports software from [Oracle Software Delivery Cloud](#).

Make a note of the directory where you download each installer; you will need this information when it is time to run the installer for each product.

## Installing Oracle Forms in a New Oracle Home

For installations that will include Fusion Middleware Infrastructure, install the Oracle Forms software in the Oracle Home created with that installation. If you are installing Oracle Forms by using the Form Builder Standalone option, create a new empty directory as the standalone installation cannot coexist with Fusion Middleware Infrastructure in the same Home.

This release of Forms and Reports requires the use of Fusion Middleware Infrastructure version 12.2.1.4.0. This is the only release that supports using an Infrastructure version that does not match the Forms and Reports version.

## Installing Oracle Forms as a Non-Default User

On UNIX operating systems, the installation of Fusion Middleware products is owned and controlled by the same user (for example, "oracle"). The file permissions associated with this installation are configured to ensure the highest level of security possible, which by default are 700 (meaning all files are owned and accessible by the owner only).

Changing the default permissions settings will reduce the security of the installation and possibly your system. Therefore, making such a change is not recommended. If other users require access to particular files or executables, the UNIX sudo command (or other similar command) should be considered in lieu of changing file permissions.

Refer to your UNIX operating system Administrator's Guide or contact your operating system vendor if you need further assistance.

On Windows operating systems, the user must be a member of the Windows Administrators group. This gives the user the proper permissions required to start and stop processes after the installation, including the Builders.

 **Note:**

For some operations, the use of an elevated DOS shell is required. An elevated shell is not the same as being a member of the Windows Administrator user group. Details related to when and how to use an elevated shell are described as needed in the content that follows. Refer to the Microsoft Windows documentation for additional information related to using elevated shells and other operating system specific features.

## Overview of Installation and Configuration Steps

To complete the installation and configuration of Oracle Forms, this section lists the basic steps you have to perform.

### Installation and Configuration Steps

Perform the following steps to complete the installation and configuration of Oracle Forms:

- Install Fusion Middleware Infrastructure.
- Install Forms and Reports.
- Run Repository Creation Utility (RCU).
- Run Configuration Wizard.

- Start all servers to complete configuration.
- If any of the Oracle Reports components were selected when running the Configuration Wizard, complete the steps in [2.4.7.3 Provisioning a Machine of Installing Oracle Forms and Reports](#), version 12.2.1.3.

## Installing Fusion Middleware Infrastructure

Oracle Forms requires Fusion Middleware Infrastructure, which creates the Oracle home directory during installation.

The Oracle Fusion Middleware certification document for a specific release should be used to verify your environment meets the requirements for installation, as described in [Reviewing Certification, System, and Interoperability Requirements](#).

### Download the Correct Installer for Your Operating System

To obtain the Fusion Middleware Infrastructure Installer, see [Obtaining the Oracle Fusion Middleware Software](#).

### Find Fusion Middleware Infrastructure Installation Instructions

Follow the Fusion Middleware Infrastructure Installer instructions, as described in [Installing the Infrastructure Software](#). The Fusion Middleware Infrastructure installation must be completed so that an Oracle home directory is created; you do not have to create a WebLogic Server domain, as the Oracle Forms installer will allow you to do this for your Oracle Forms products.

If you are installing on Microsoft Windows operating system, after your Fusion Middleware Infrastructure installation is complete, perform the steps in the following section.

## Installing Oracle Identity and Access Management

Protect your Oracle Forms installation with Identity Management using Oracle Identity and Access Management.

If you choose to use Oracle Internet Directory and Oracle Access Manager, download and install these products if you do not already have them. Refer to [Reviewing Certification, System, and Interoperability Requirements](#) to determine which versions of these products have been certified for use with your Oracle Forms release.

To install and configure Oracle Internet Directory with Oracle Access Manager:

1. Install Oracle Identity and Access Management in a separate Oracle home directory from your Oracle Forms installation. See [Installing and Configuring the Oracle Access Management Software](#) in *Installing and Configuring Oracle Identity and Access Management*.

Do not attempt to install Oracle Access Manager or Oracle Internet Directory in the same Oracle home directory with Fusion Middleware Infrastructure and Forms.

For performance reasons, Oracle recommends that Oracle Forms is installed on a separate machine from your Oracle Identity Management product.

2. Configure a WebLogic Server domain for Oracle Access Manager, as described in [Configuring the Oracle Access Management Domain](#) in *Installing and Configuring Oracle Identity and Access Management*.

If you have an existing Oracle Internet Directory with Oracle Single Sign-On, you can upgrade to Oracle Internet Directory with Oracle Access Manager, as described in [Upgrading Oracle Forms](#).

## Installing and Configuring Oracle Forms

You have to perform a series of steps to install and then configure Oracle Forms using the configuration wizard.

The following sections are included:

- [Starting the Oracle Forms Installer](#)
- [View the Installation Log Files](#)
- [Configuring Your Oracle Inventory \(UNIX\)](#)
- [Installing Using Oracle Universal Installer](#)
- [Using the Repository Creation Utility](#)
- [Configuring Forms Using the Configuration Wizard](#)
- [Configuring Form Builder Standalone Using the Configuration Wizard](#)

### Starting the Oracle Forms Installer

To start the installer, navigate to the directory where you have downloaded the Forms compressed folder containing the installer files.

#### Windows

1. Extract the compressed folder:

```
fmw_12.2.1.19.0_fr_win64_Disk1_1of2.zip
```

The following executable **.exe** file is extracted from the zip file:

```
setup_fmw_12.2.1.19.0_fr_win64.exe
```

2. To start the installer, either run it in an elevated DOS shell or right-click and select "Run as administrator".

#### UNIX/Linux

On UNIX/Linux operating systems, an executable **.bin** file is extracted from the compressed folder, which is used to start the installer.

```
unzip fmw_12.2.1.19.0_fr_linux64_Disk1_1of1.zip  
./fmw_12.2.1.19.0_fr_linux64.bin
```



 **Note:**

- Some platforms may have multiple download files or disks, such as **Disk-1** and **Disk-2**. You should extract all the files, for example executable **.exe** file, from the downloaded compressed (zipped) folder. If the downloaded compressed (zipped) folder contains another compressed (zipped) file, you should not extract that compressed file contained within the original compressed (zipped) folder. You should store all the extracted files from the compressed folder in the same directory before starting the installer.
- The Forms 12c **Disk-1** compressed installer files folder for IBM AIX operating system does not include the `rootpre.sh` script files. So, you do not need to run the `rootpre.sh` script as the root user before starting the installer. The `rootpre.sh` script was used in previous version of FMW installer to load postwait driver `pw=syscall`.
- When running the Forms and Reports bin installer on the IBM AIX platform, the installer may core dump when the progress reaches 98%. To work around this issue and successfully complete installation, launch the installer with the following JVM parameters. `-J-Xmx2048m -J-XX:MaxPermSize=2048m`  
Here is an example.  

```
./fmw_12.2.1.19.0_fr_aix_ppc64.bin -J-Xmx2048m -J-XX:MaxPermSize=2048m
```
- In order to perform the installation on SUSE Linux Enterprise Server 15, you must download and install Patch 35299885 when starting the Installer. You can find the patch on the Oracle Support site at <https://support.oracle.com/epmos/faces/PatchResultsNDetails?patchId=35299885&platformId=2000>.

 **Note:**

Review the included Readme carefully before installing the software.

## View the Installation Log Files

The installer writes logs files to the `Oracle_Inventory_Location/log` (on UNIX operating systems) or `Oracle_Inventory_Location\logs` (on Windows operating systems) directory. See [Installation Log Files](#) for information about log files and their contents.

## Configuring Your Oracle Inventory (UNIX)

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

Use the inventory screens in [Table 2-1](#) to configure the inventory directory and group information. For more help, select the screen name in the table, or click the **Help** button in the GUI.

**Table 2-1 Inventory Directory and Group Screens**

Screen	Description
Specify Inventory Directory	Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory.
Inventory Location Confirmation	Run the <code>createCentralInventory.sh</code> script as root.

If you do not want to use the Oracle central inventory, you can create a file called `oraInst.loc` and in this file, include the full path of the inventory directory of your choice. For example, a typical `oraInst.loc` file would contain the following:

```
inventory_loc=/home/username/oraInventory
inst_group=group
```

Then, you can start the installer and point to the `oraInst.loc` file. For example:

```
./fmw_12.2.1.19.0_fr_linux64.bin -invPtrLoc /location_of_oraInst.loc_file
```

## Installing Using Oracle Universal Installer

Follow these instructions to install Oracle Forms using Oracle Universal Installer. After invoking Oracle Universal Installer as described in [Starting the Oracle Forms Installer](#):

1. *Welcome* page. This page welcomes you to the installation. Click **Next**.
2. The *Auto Updates* page appears. This page enables you to choose to automatically receive software updates for your components from Oracle Corporation. Make your choices, then click **Next**.
3. The *Installation Location* page appears. Specify the Oracle home location into which you want to install the product(s). Click **Next**.
4. The *Installation Type* page appears. You can select *Standalone Forms Builder* if you want only that functionality, or choose *Forms Deployment* to install all of the products. Click **Next**.
5. The *Prerequisites Checks* page appears. This page shows you the progress of the system checking the prerequisites on your system before installation. If you are lacking any prerequisites, a message will appear telling you so. You do not need to take any actions on this page, though you can view the log from here. Click **Next**.
6. The *Installation Summary* page appears, showing you what components and features are about to be installed. If you need to make changes, click **Back**, otherwise, click **Install** to start the installation.
7. The *Installation Progress* page appears. This page shows you the progress of the installation, and will warn you if there are any problems. You can view messages and logs from this page, but typically no action is required here. When progress is complete, click **Next** (go to a *Summary* page). Alternatively, you can click **Finish**.
8. If you clicked **Next**, the *Installation Complete* page appears, showing you the components that have been installed. Click **Finish**.
9. If installing on Unix/Linux, execute the following in a shell as the same user that owns this new installation:
  - a. Set the `ORACLE_HOME` environment variable and point it to the Forms home, for example:

```
export ORACLE_HOME=<FORMS_HOME>
```

**b.** Issue the following commands:

```
cd $ORACLE_HOME/procbuilder/lib
make -f ins_procbuilder.mk sharedlibs dejvm_install

cd $ORACLE_HOME/forms/lib
make -f ins_forms.mk sharedlib frmopmn_wrp_install frmctrl_install
frmweb_install frmcmpb_install frmcmp_install frmblld_install
```

## Using the Repository Creation Utility

Before proceeding to the next tasks, follow the instructions in this topic to set up Repository Creation Utility (RCU) schemas for configuring Oracle Forms.

RCU is available with the Oracle Fusion Middleware Infrastructure distribution. After you install Oracle Fusion Middleware Infrastructure and create your Oracle home, you can start RCU from the `ORACLE_HOME/oracle_common/bin` directory. Follow these instructions to set up schemas.

Run `$FMW_HOME/oracle_common/bin/rcu.sh`. Unless otherwise noted, click **Next** to continue to the next screen.

**Table 2-2** Schema Setup Steps

Screen	Description
Welcome	This screen introduces you to RCU.
Create Repository	Select <b>Create Repository</b> , then select <b>System Load and Product Load</b> (default).
Database Connection Details	Specify RCU database connection credentials. Click <b>Next</b> when you have specified your credentials. The Checking Prerequisites dialog window appears. It shows the progress of prerequisites checking. Click <b>OK</b> , when the database checking has passed without errors, to dismiss the dialog window, and go to the next screen.

Table 2-2 (Cont.) Schema Setup Steps



Screen	Description
Select Components	<p>Select the <b>Create new prefix</b> radio button and provide a schema prefix (such as <i>DEMO</i>).</p> <p>You must remember the prefix and schema names for the components you are installing. It is recommended that you write down these values.</p> <p>Select the following components:</p> <ul style="list-style-type: none"> <li>• <b>Oracle Platform Security Services</b></li> <li>• <b>User Messaging Service (UMS)</b></li> </ul> <div style="border: 1px solid #ccc; background-color: #e6f2e6; padding: 10px; margin: 10px 0;"> <p> <b>Tip:</b></p> <p>If Forms Application Deployment Services (FADS) is also planned to be configured, include <b>User Messaging Services (UMS)</b>.</p> </div> <ul style="list-style-type: none"> <li>• <b>Audit Services</b></li> <li>• <b>Audit Services Append</b></li> <li>• <b>Audit Services Viewer</b></li> </ul> <div style="border: 1px solid #ccc; background-color: #e6f2f2; padding: 10px; margin: 10px 0;"> <p> <b>Note:</b></p> <p>Additional dependent components will automatically be selected.</p> </div> <p>The Checking Prerequisites pops up box appears. It shows the progress of prerequisites checking. Click <b>OK</b>, when it is complete, to dismiss the dialog window and go to the next screen.</p>
Schema Passwords	<p>Leave the default <b>Use same passwords for all schemas</b> radio button selected, and enter the password in the <b>Password</b> field.</p> <p>You must remember the passwords you enter on this screen; you need this information during the configuration phase of product installation.</p>
Map Tablespaces	<p>Use this screen to configure the desired tablespace mapping for the schemas that you want to setup.</p> <p>When you click <b>Next</b>, Repository Creation Utility dialog window appears, asking you to confirm that you want to create these tablespaces. Click <b>OK</b> to proceed and dismiss the dialog window.</p> <p>A second dialog window, Creating Tablespaces appears showing the progress of tablespace creation. Click <b>OK</b>, after the tablespaces are created, to dismiss this window and go to the next screen.</p>
Summary	<p>Verify the information on this screen, then click <b>Create</b> to begin schema setup.</p> <p>A System Load progress dialog window appears, showing progress. The dialog window will disappear when complete.</p>

Table 2-2 (Cont.) Schema Setup Steps

Screen	Description
Completion Summary	Review the information on this screen to verify that the operation was completed successfully. Click <b>Close</b> to complete the schema setup and close RCU.

## Configuring Forms Using the Configuration Wizard

The Configuration Wizard helps and simplifies the task of configuring Oracle Forms.

The Configuration Wizard shows a series of screens where you verify or enter information.

### Note:

To complete the configuration, the Configuration Wizard must be run from an elevated Administrator Windows DOS shell and Unix shells must be owned by the same user who performed the installation (for example, *oracle*). Failure to follow this instruction may result in the configuration failing silently.

Perform the following steps in the Configuration Wizard:

1. Run the Configuration Wizard using *config.sh* (config.cmd on Windows) located in the `ORACLE_HOME/oracle_common/common/bin` directory.
2. Choose *Create a new domain*, and enter the desired domain home path.
3. Click **Next**. The *Templates* screen appears. Keep the default selection (*Create Domain using Product Templates*), and select *Oracle Forms* [forms]. Any dependent templates will be automatically selected. Additional templates, like Oracle HTTP Server and others, can be selected based on the components desired. Refer to those individual component documents for more details.
4. Click **Next**. The *Application Location* screen appears. Keep the default value for Application location.
5. Click **Next**. The *Administrator Account* screen appears. Enter the desired WebLogic Domain administration user name and password. This information will be needed to access WebLogic Server Control and Fusion Middleware Control.
6. Click **Next**. The *Domain Mode and JDK* screen appears. Select the *Domain Mode* (either **Development** or **Production**). To ensure the highest degree of security, selecting **Production** is recommended. Retain the default JDK selection unless you need to use a different version the JDK.
7. Click **Next**. The *Database Configuration Type* screen appears. Enter the RCU DB connection information. This information was created when running the Repository Creation Utility (RCU) in an earlier step. After entering the requested information, click **Get RCU Configuration**. Verify that a successful message is presented in the Results Log panel. If an indication of success is not indicated, check the databases entries made in this step. Mostly it will only be necessary to enter data for *DBMS/Service*, *Host Name*, *Port*, *Schema Owner*, and *Schema Password*. Other entries can remain as the default value.
8. Click **Next**. The *JDBC Component Schema* screen appears. These instructions assume each Repository schema uses the same password. If not, enter the correct schema passwords.

9. Click **Next**. The *JDBC Component Schema Test* screen appears. If any tests fail, it may be necessary to go back and make corrections.
10. Click **Next**. The *Advanced Configuration* screen appears. Select *Topology*, *System Components*, and *Deployments and Services*. Depending on the level of customization desired, other selections may be used.

 **Tip:**

If you want to configure server templates and dynamic server, see:

- Using Server Templates in *Understanding Domain Configuration for Oracle WebLogic Server*.
- Creating and Configuring Dynamic Clusters in *Administering Clusters for Oracle WebLogic Server*.

11. Click **Next**. The *Managed Servers* screen appears. Verify that the Server Groups is set to *FORMS-MAN-SVR* (for Forms). This screen can also be used to add additional managed servers if desired.
12. Click **Next**. The *Clusters* screen appears. Default entries will be acceptable mostly, unless adding new clusters is desirable.
13. Click **Next**. The *Assign Servers to Clusters* screen appears. The default values will be appropriate for most cases. However, if new managed servers were added in the previous step, they should be added to the cluster here.
14. Click **Next**. The *Coherence Clusters* screen appears. The default values will be appropriate for most cases.
15. Click **Next**. The *Machines* screen appears. Use this screen to override the machine name or add addition machine names for extend domain scenarios (add remote Forms nodes).
16. Click **Next**. The *Assign Servers to Machines* screen appears. Move the AdminServer to the AdminServerMachine by clicking the > button.
17. Click **Next**. The *Virtual Targets* screen appears. This option is unsupported by Oracle Forms. Leave the option empty and continue the configuration process.
18. Click **Next**. The *Partitions screen* appears. Use this screen to add Weblogic Partitions if desired. Refer to the WebLogic Server documentation for details on how to use Partitions.
19. Click **Next**. The *System Components* screen appears. The default values will be appropriate for most cases. You can add additional Forms or other System Component instances on this screen (for example, extending a domain).
  - a. If Oracle HTTP Server (OHS) was selected in the *Templates* screen, the OHS component would need to be added in this step.
  - b. Click the *Add* button to add the OHS component and then click *Next* button.
  - c. Accept the default settings for the OHS Server component and then click *Next* button.
20. The *Assign System Components to Machines* screen appears. The default values will be appropriate for most cases. If OHS added in the previous step, move it to the *Machines* column under the Admin Server using the > button.

 **Note:**

In case of extend domain scenario; assign the Forms System Component to the relevant Machine.

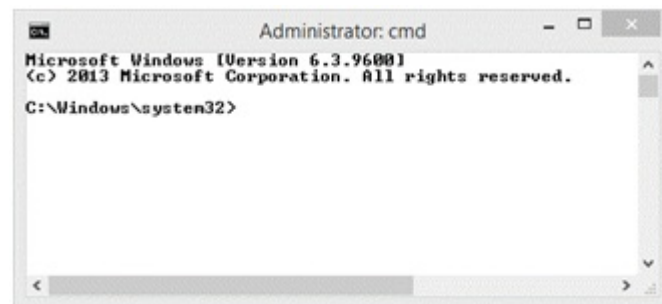
21. Click **Next**. The *Deployments Targeting* screen appears. Use this screen to target the WSM-PM application to the Admin Server. To do this, move **WSM-PM** under **AppDeployment** in the Deployments pane to **AppDeployment** under **AdminServer** in the Deployment Targets pane.

 **Note:**

This step only applies if Forms Application Deployment Services (FADS) was selected on the Templates screen in step 3.

22. Click **Next**. The *Configuration Summary* screen appears.
23. Click **Create**. The *Configuration Progress* screen appears.
24. Depending on the location and performance of the Repository database, this process may take a few minutes. Click **Finish**. The *End of Configuration* screen appears.
25. Start Node Manager and Admin Server to complete the configuration.
  - On Unix/Linux platforms, the shell used to start these servers the first time, must be the installation owner's (for example, *oracle*).
  - On Microsoft Windows, the DOS shell used to start these servers the first time must have Administrator permissions. To enable an Administrator shell session, right-click the Command Prompt shortcut and select **Run as Administrator**. The shell that opens will indicate that it has Administrator privileges in its title bar.

**Figure 2-1 Command Prompt with Administrator Privileges**



For more information on how to start and stop servers, review *Starting and Stopping Servers*.

## Configuring Form Builder Standalone Using the Configuration Wizard

Describes how to install and configure the Form Builder Standalone environment.

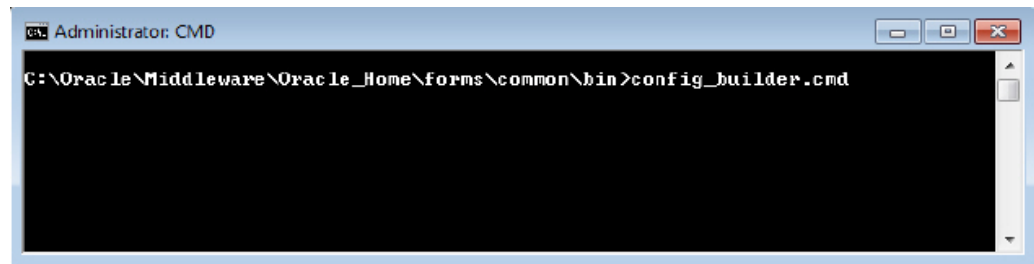
Perform the following steps to configure the Form Builder Standalone environment:

1. Install the Form Builder Standalone 12c software.

Start the Installer as described in [Starting the Oracle Forms Installer](#). Follow the prompts. You must install into a new and empty Oracle home.

2. Launch the Form Builder Configuration Assistant using one of the following methods:
  - a. Choose to run it after the Form Builder Standalone software installation.  
After the installation is complete, check the **Automatically Launch Forms Builder Configuration Wizard** option and click **Finish**.
  - b. Launch the configuration tool later from the location. `$FMW_HOME/forms/common/bin/config_builder.sh` .  
`config_builder.cmd` for Microsoft Windows.

**Figure 2-2** Launching the Configuration Tool in Windows



Optionally, you can specify the following arguments to perform a scripted or silent instance configuration. If you do not specify any of these, the Configuration Wizard user interface is presented.

- `autoconfig` - Specify to automatically configure a new instance named *formsN* where N is a sequential number starting with 1. Each time the command is run against this Oracle home, N increments by 1. The new instance is automatically created in the Oracle home.
- `formBuilderInstance` - Use this argument in conjunction the `autoconfig` argument to specify the path of the instance location. Specifying this parameter overrides the auto-naming behavior of the `autoconfig` argument. The path should be a value that does not include directories with spaces.

Here is an example of the command usage.

```
config_builder.cmd autoconfig formBuilderInstance=C:\myFormBuilder\inst1
```

 **Note:**

To complete the configuration, Windows DOS shells must be run with Administrator permissions and UNIX shells must be owned by the same user who performed the installation (for example, *oracle*). Failure to follow this instruction may result in the configuration failing silently.

3. Enter a name for the **Form Builder Instance** path in the Configuration Wizard, Instance Configuration screen. Click **Next**.
4. After configuration is complete, the Configuration Progress screen shows Configuration Succeeded message. Click **Next**.



5. End of Configuration screen shows the Oracle Home and Form Builder Instance location. Click **Finish** to exit the installer.

## Verifying the Installation and Configuration

After you complete the installation and configuration of Oracle Forms, verify it was successful by performing a series of tasks.

You can verify the status of your installation by performing the tasks in any combination.

- [Reviewing the Installation Logs](#)
- [Reviewing the Domain Server Logs](#)
- [Checking the Installed Products and Product Versions](#)
- [Checking Browser URLs](#)
- [Performing Basic Administration Tasks](#)

## Reviewing the Installation Logs

Check for the presence of installation log files in `logs` directory inside your Oracle Inventory directory.

On UNIX operating systems, if you do not know the location of your Oracle Inventory directory, you can find it in the `ORACLE_HOME/oraInst.loc` file.

On Windows operating systems, the location for the inventory directory is `C:\Program Files\Oracle\Inventory\logs`.

For information about installation log files, see [Installation Log Files](#).

## Reviewing the Domain Server Logs

You can check the domain server logs, which are located in the `servers` directory inside the domain home directory.

On UNIX operating systems:

```
DOMAIN_HOME/servers/server_name
```

On Windows operating systems:

```
DOMAIN_HOME\servers\server_name
```

## Checking the Installed Products and Product Versions

The contents of your installation vary based on the options that you selected during the installation.

Check the products and product version numbers by running the `opatch lsinventory -detail` command from the `ORACLE_HOME/OPatch` directory.

## Checking Browser URLs

To verify the installed products URLs are provided.

The Installation Complete screen contains URLs that can be used to access your installed and configured products, as described in the following table.

**Table 2-3 Oracle Forms Product URLs**

Product or Component	URL
Administration Server Console	<code>http://host:port/console</code>
Enterprise Manager Console	<code>http://host:port/em</code>
Oracle Forms	<code>http://host:port/forms/frmservlet</code>

## Performing Basic Administration Tasks

After running the installer and configuration tool, all of your system components, the Administration Server, and Managed Servers should be manually started in order to complete the configuration process.

In the event that some of your servers or components are stopped unexpectedly, you can restart your Oracle Fusion Middleware environment by following the instructions, as described in *Starting an Oracle Fusion Middleware Environment*.

Your Oracle Fusion Middleware environment can also be stopped, as described in *Stopping an Oracle Fusion Middleware Environment*.

## Installing Oracle Forms in Silent Mode

This section describes how to install Oracle Forms from the command line in silent mode.

You can use the silent installation mode to bypass the need to monitor your product installation because no graphical output is displayed and no input by the user is required. To install Oracle Forms in silent mode, use the `-silent` flag on the command line when you start the installer.

Silent installation does not include configuration. That is, you cannot configure Oracle Forms silently using the same silent installation commands and response file. In this release, product installation and configuration are separate processes. The Configuration Wizard cannot be run in silent mode (or used with response files) in this release.

See the following sections in *Installing Software with the Oracle Universal Installer*, for details on silent mode:

- [About Silent Installation](#)
- [About Response Files](#)
- [Running the Oracle Universal Installer in Silent Mode](#)

After you have completed the installation in silent mode, perform the separate step-by-step process in the following sections to configure Oracle Forms using the Configuration Wizard:

- [Configuring Forms Using the Configuration Wizard](#)
- [Configuring Form Builder Standalone Using the Configuration Wizard](#)

### Deinstalling in Silent Mode

Follow the instructions in *Running the Oracle Universal Installer for Silent Deinstallation*, to deinstall Oracle Forms in silent mode.

## Installing the Forms Application Deployment Services

The Forms Application Deployment Services (FADS) simplifies the process of packaging applications, deploying, configuring, and storing archived copies of the applications. Follow the instructions in this section to install and configure Forms Application Deployment Services (FADS).

The followings sections are included:

- [Prerequisites for Installation](#)
- [Configuring Forms Application Deployment Services](#)
- [Run FADS Post Configuration Steps](#)

### Prerequisites for Installation

Forms Application Deployment Services is available in the latest Oracle Forms and Reports 12c shiphome.

To complete the installation and begin configuring FADS, you should perform these tasks in the given order:

1. Install Oracle Fusion Middleware Infrastructure 12c (12.2.1.4.0)
2. Install Oracle Forms 12c (12.2.1.19.0)
3. Upgrade the version of Oracle SQL Developer to 21.4.3.

 **WARNING:**

Do not upgrade to a version newer than 21.4.3.

- a. Download the Oracle SQL Developer 21.4.3 zip file from the [SQL Developer 21.4.3 Downloads](#) page using the **Other Platforms** link in the table. The download file is a zip file, for example: `sqldeveloper-21.4.3.063.0100-no-jre.zip`.
- b. In the new Oracle Home directory, rename the existing `sqldeveloper` folder (for example, `sqldeveloper_old`).
- c. Extract the contents of the Oracle SQL Developer 21.4.3 zip file to the new Oracle Home. This should result in a new `sqldeveloper` top-level directory within the Oracle Home.

### Configuring Forms Application Deployment Services

After you have completed the installation steps, you can start configuring Forms Application Deployment Services applications.

You have to perform the following FADS application configuration steps in a Fusion Middleware domain:

- [Setting up RCU Schema](#)
- [Apply the FADS Template](#)

## Prerequisite

As a prerequisite, Repository Creation Utility Schemas must be set up for configuring Oracle Forms or FADS domain. Configuring FADS will require the Repository's User Messaging Service (UMS) and its dependencies. See [Setting up RCU Schema](#).

## Setting up RCU Schema

Follow the instructions in this section to set up Repository Creation Utility (RCU) schemas for configuring Oracle Forms or FADS domain.

RCU is available with the Oracle Fusion Middleware Infrastructure distribution. After you install Oracle Fusion Middleware Infrastructure and create your Oracle home, you can start RCU from the `ORACLE_HOME/oracle_common/bin` directory. Follow these instructions to set up schemas.

Run `$ORACLE_HOME/oracle_common/bin/rcu.sh`. Unless otherwise noted, click **Next** to continue to the next screen.

**Table 2-4 Schema Setup Steps**

Screen	Description
Welcome	This screen introduces you to RCU.
Create Repository	Select <b>Create Repository</b> , then select <b>System Load and Product Load</b> (default).
Database Connection Details	Specify RCU database connection credentials. Click <b>Next</b> when you have specified your credentials. The Checking Prerequisites dialog window appears. It shows the progress of prerequisites checking. Click <b>OK</b> , when the database checking has passed without errors, to dismiss the dialog window, and go to the next screen.
Select Components	Select the <b>Create new prefix</b> radio button and provide a schema prefix (for example, FADS). You must remember the prefix and schema names for the components you are installing. It is recommended that you write down these values. Select the following components: <ul style="list-style-type: none"> <li>• <b>Oracle Platform Security Services</b></li> <li>• <b>User Messaging Service (UMS)</b></li> <li>• <b>Audit Services</b></li> <li>• <b>Audit Services Append</b></li> <li>• <b>Audit Services Viewer</b></li> </ul> <div data-bbox="662 1444 711 1486" style="float: left; margin-right: 5px;"></div> <div data-bbox="711 1444 792 1478" style="float: left;"><b>Note:</b></div> <div data-bbox="709 1501 1401 1533" style="clear: both; text-align: right; margin-top: 10px;">Additional dependent components will automatically be selected.</div>
Schema Passwords	Leave the default <b>Use same passwords for all schemas</b> radio button selected, and enter the password in the <b>Password</b> field. You must remember the passwords you enter on this screen; you need this information during the configuration phase of product installation.

**Table 2-4 (Cont.) Schema Setup Steps**

Screen	Description
Map Tablespaces	Use this screen to configure the desired tablespace mapping for the schemas that you want to setup.  When you click <b>Next</b> , Repository Creation Utility dialog window appears, asking you to confirm that you want to create these tablespaces. Click <b>OK</b> to proceed and dismiss the dialog window.  A second dialog window, Creating Tablespaces appears showing the progress of tablespace creation. Click <b>OK</b> , after the tablespaces are created, to dismiss this window and go to the next screen.
Summary	Verify the information on this screen, then click <b>Create</b> to begin schema setup.  A System Load progress dialog window appears, showing progress. The dialog window will disappear when complete.
Completion Summary	Review the information on this screen to verify that the operation was completed successfully. Click <b>Close</b> to complete the schema setup and close RCU.

## Apply the FADS Template

Apply the FADS template using the Configuration Wizard.

You can create a new domain by selecting the FADS template in the Configuration Wizard. When you select the FADS template, it automatically selects the Forms template as a dependency. This configures Forms in the Domain along with the FADS Applications. Alternatively, you can also configure FADS in a Forms domain by applying the FADS template later.

The following topics are included:

- [Creating a New Domain that Includes Both Forms and FADS](#)
- [Applying FADS Template to an Existing Forms Domain](#)

## Creating a New Domain that Includes Both Forms and FADS

Follow the steps in this topic to create a new domain by using the FADS template.

Use the Configuration Wizard to create the new domain.

### Starting the Configuration Wizard

1. Change to the following directory:

(UNIX) `ORACLE_HOME/oracle_common/common/bin`

(Windows) `ORACLE_HOME\oracle_common\common\bin`

where `ORACLE_HOME` is your 12c Oracle home.

2. Enter the following command:

(UNIX) `./config.sh`

(Windows) `config.cmd`

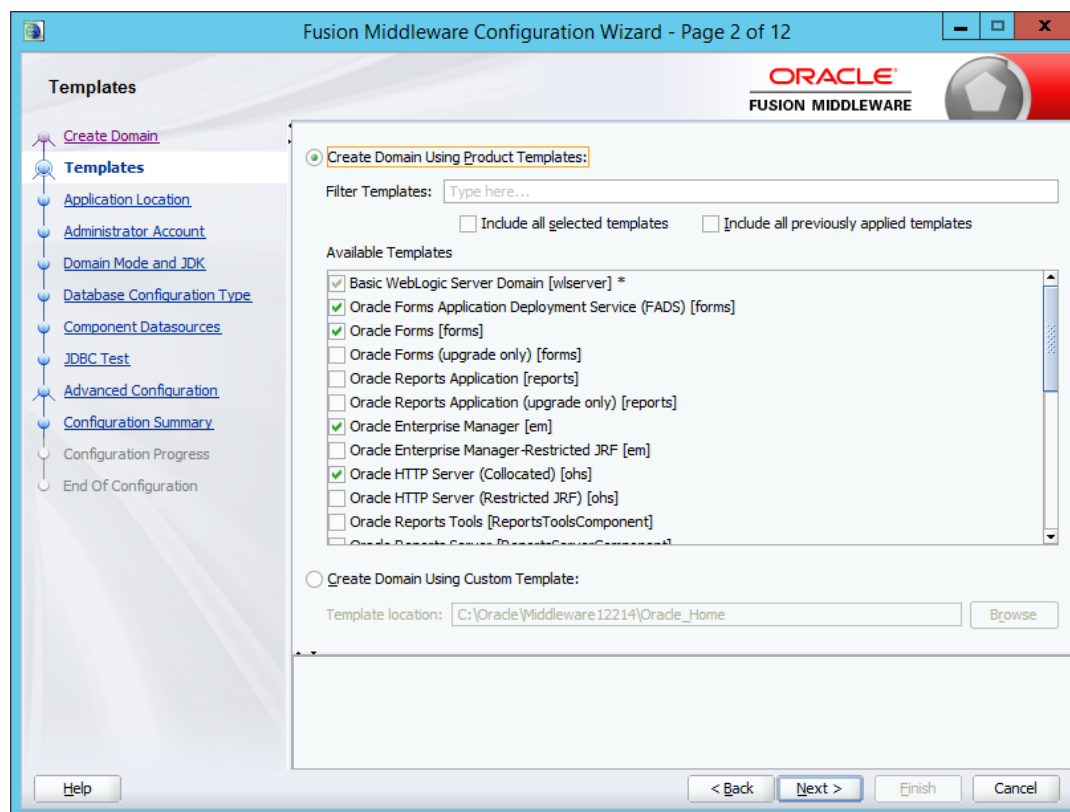
## Creating the Domain

In the Configuration Wizard, you have to perform the steps similar to Forms configuration, as described in [Configuring Forms Using the Configuration Wizard](#), but there are a few exceptions.

The following tasks performed in the Configuration Wizard screens, are not similar to the Forms configuration steps:

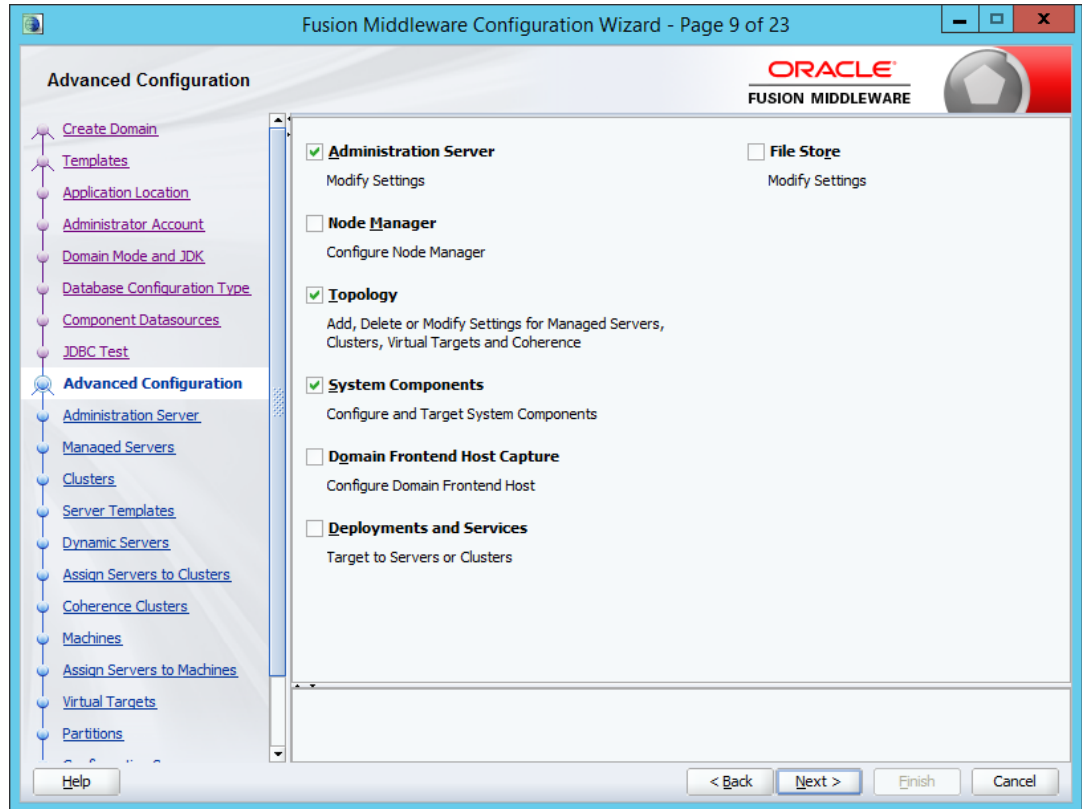
- **Templates screen:** Select **Forms Application Deployment Services (FADS)** template check box, when selecting the domain template. The dependent templates, including **Oracle Forms** template, are automatically selected or included in the domain.

Figure 2-3 Templates Screen



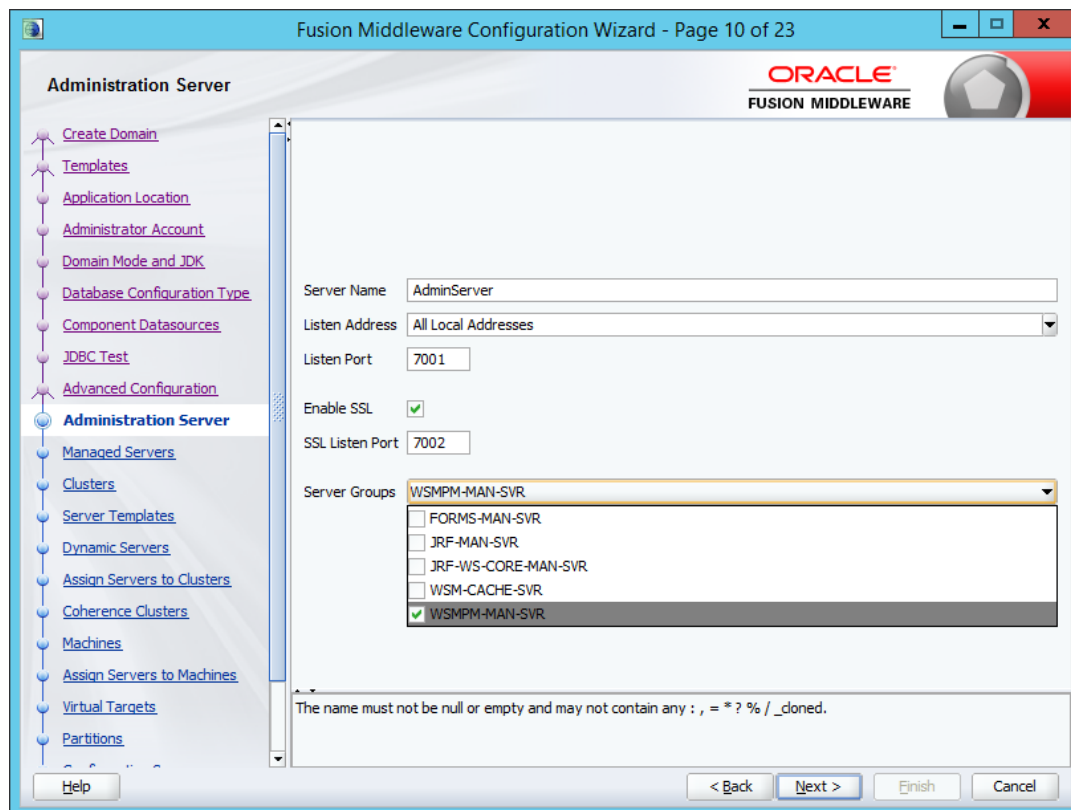
- **Advanced Configuration screen:** Select the following categories: **Administration Server**, **Topology**, and **System Components**. For each category you select, the appropriate configuration screen is displayed to allow you to perform advanced configuration.

Figure 2-4 Advanced Configuration Screen



- Administration Server settings screen: Select **WSMPM-MAN-SRV** from the Server Groups drop-down list. The default Server Name is **AdminServer**.

**Figure 2-5 Administration Server Screen**



## Writing Down Domain Home and Administration Server URL

The End of Configuration screen shows information about the domain just configured.

Make a note of the following items as they are required later:

- Domain Location
- Administration Server URL

Domain location information is required for accessing scripts that start Administration Server, and URL for accessing the Administration Server.

Click **Finish** to exit the Configuration Wizard.

## Starting the Administration Server

Start the Administration Server, after configuration is complete, and then perform the post configuration task described in [Run FADS Post Configuration Steps](#).

## Applying FADS Template to an Existing Forms Domain

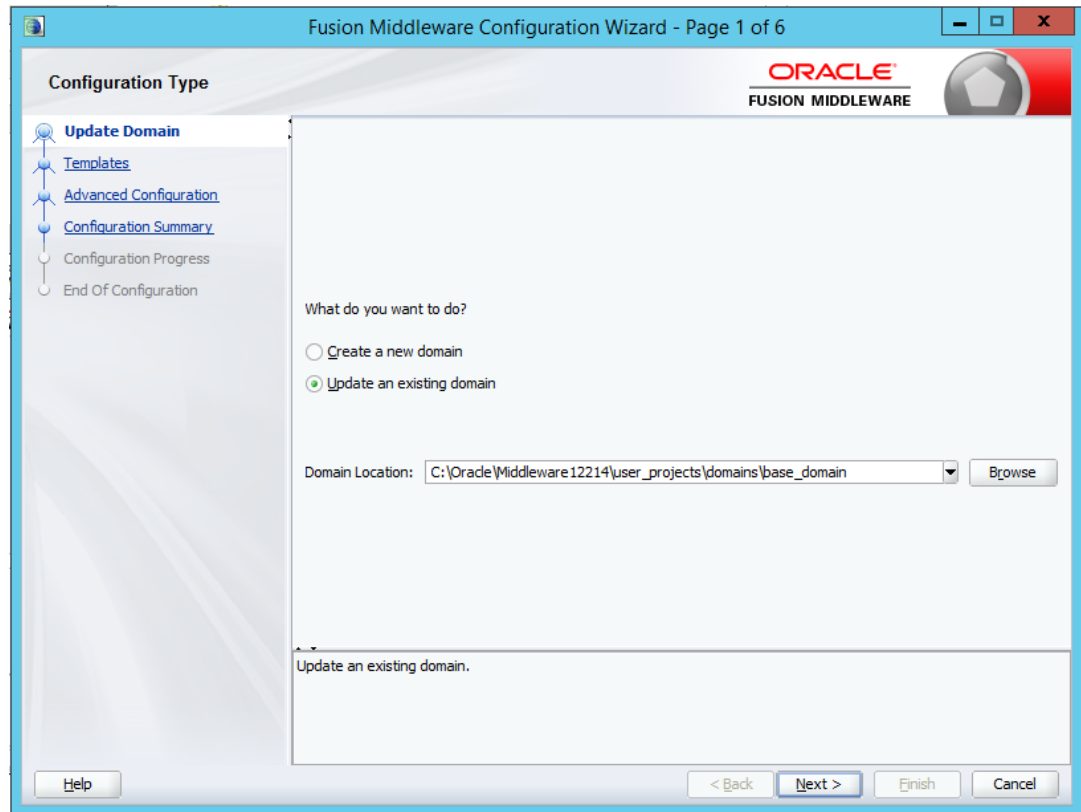
This topic describes how to use the Configuration Wizard to apply FADS extension template to an existing Forms domain.

Start the Configuration Wizard, to begin the update process, as described in [Creating a New Domain that Includes Both Forms and FADS](#).

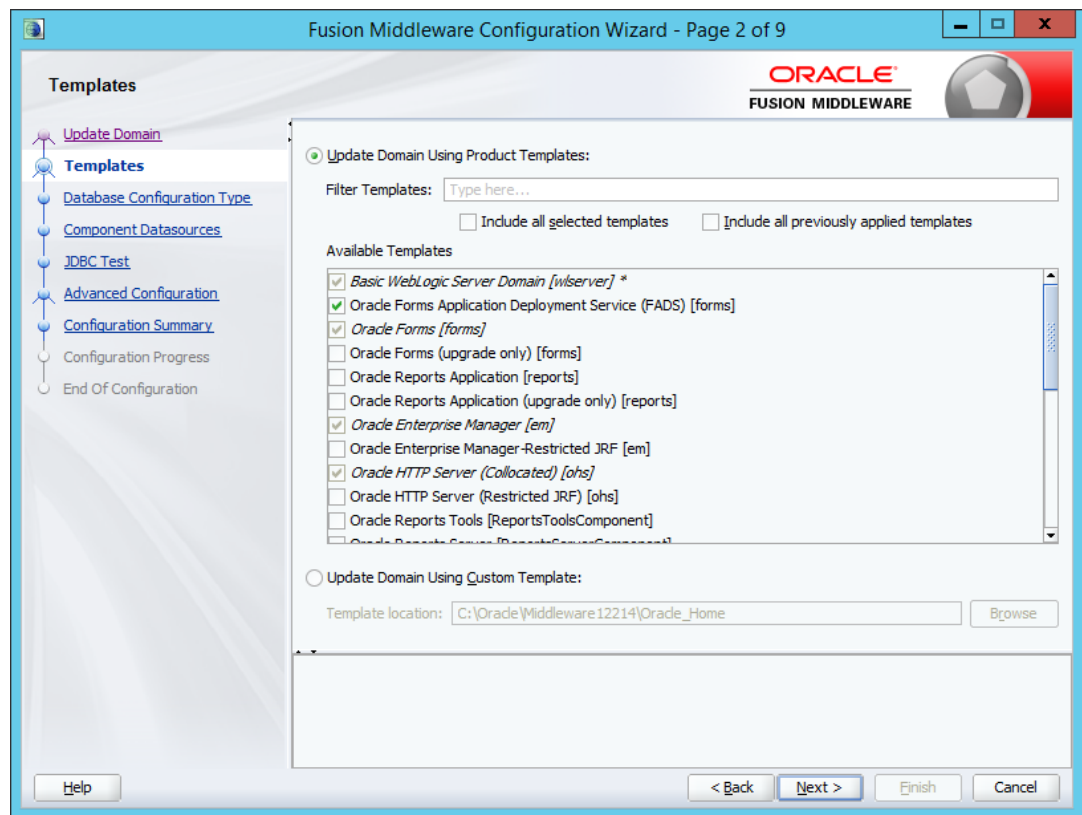
Perform the following actions in the Configuration Wizard screens for extending an existing Forms Domain:



1. Configuration Type screen: Select **Update an Existing Domain**. In the **Domain Location** field, Enter the full path for the Forms domain, or use the **Browse** button to navigate to the Forms domain. This field contains a drop-down list of the domains, if multiple domains exist in the Forms installation. Select the domain that you want to update from the drop-down list. Click **Next** to continue.



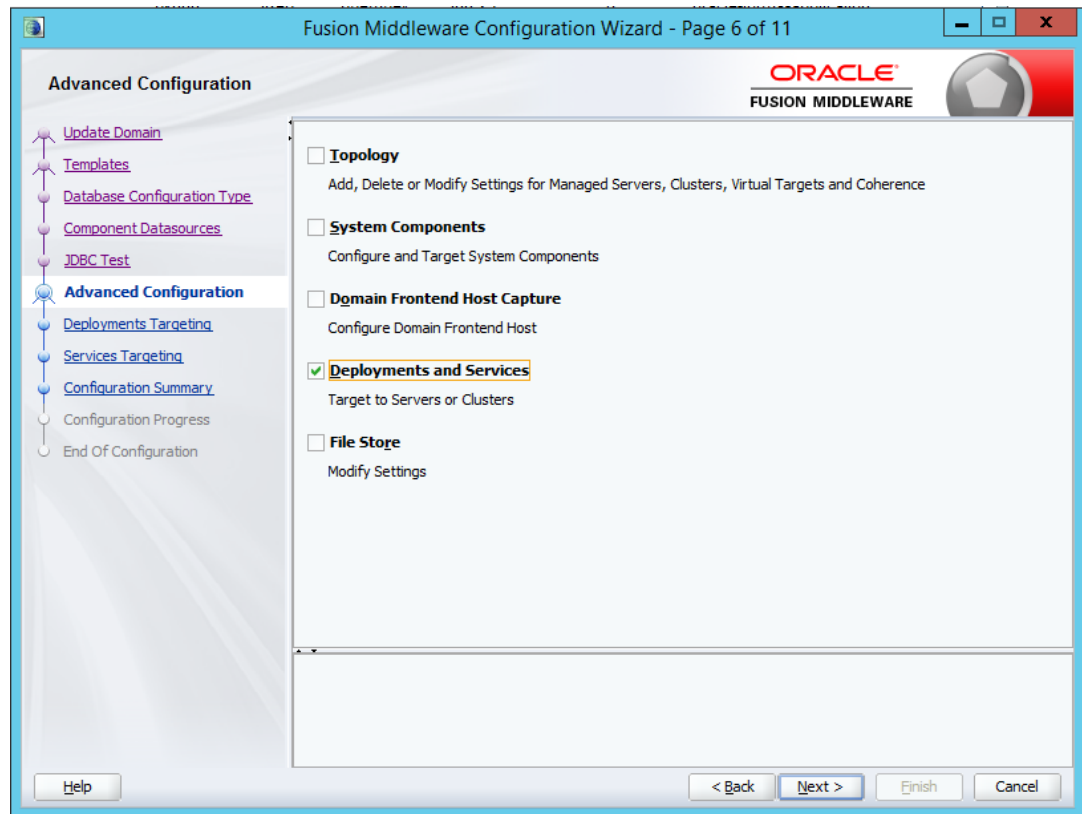
2. Templates screen: Select **Update Domain Using Product Templates**, and then select the **Forms Application Deployment Services (FADS)** check box to add to the domain. Click **Next** to continue.



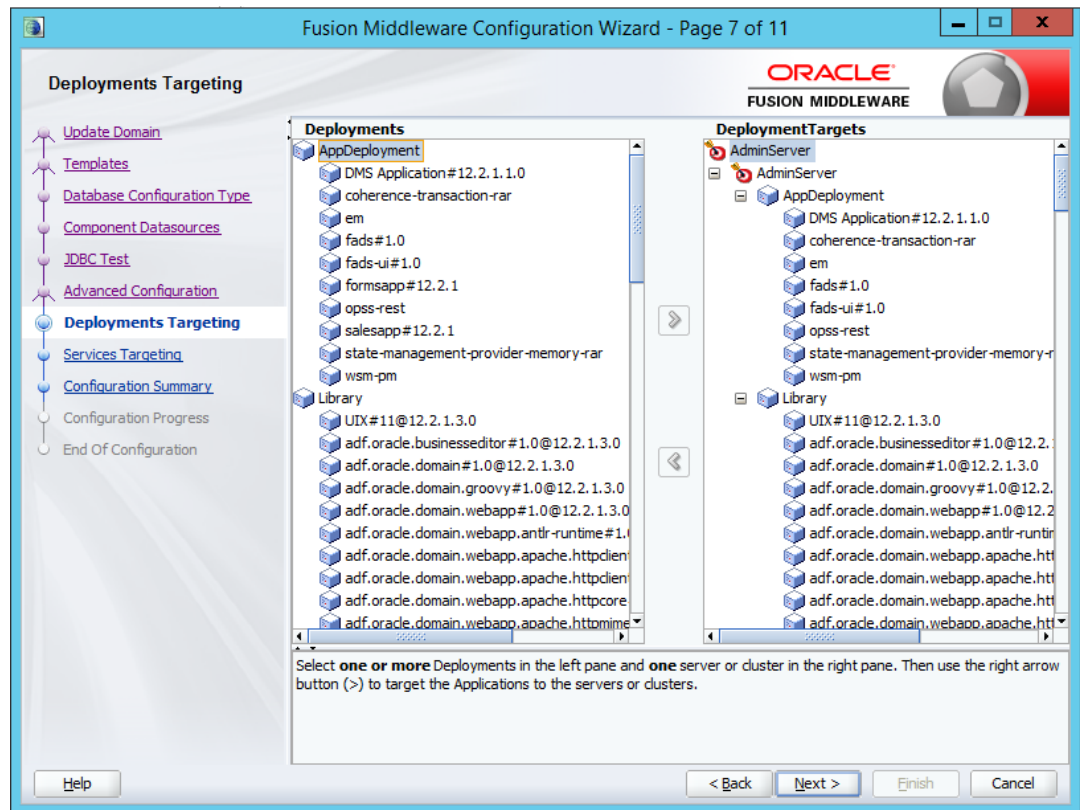
3. Advanced Configuration screen: Select the **Deployments and Services** checkbox. For this category you would be performing advanced configuration tasks.

When extending a domain, you cannot change the Administration Server and Node Manager configurations. Therefore, these options are not available.

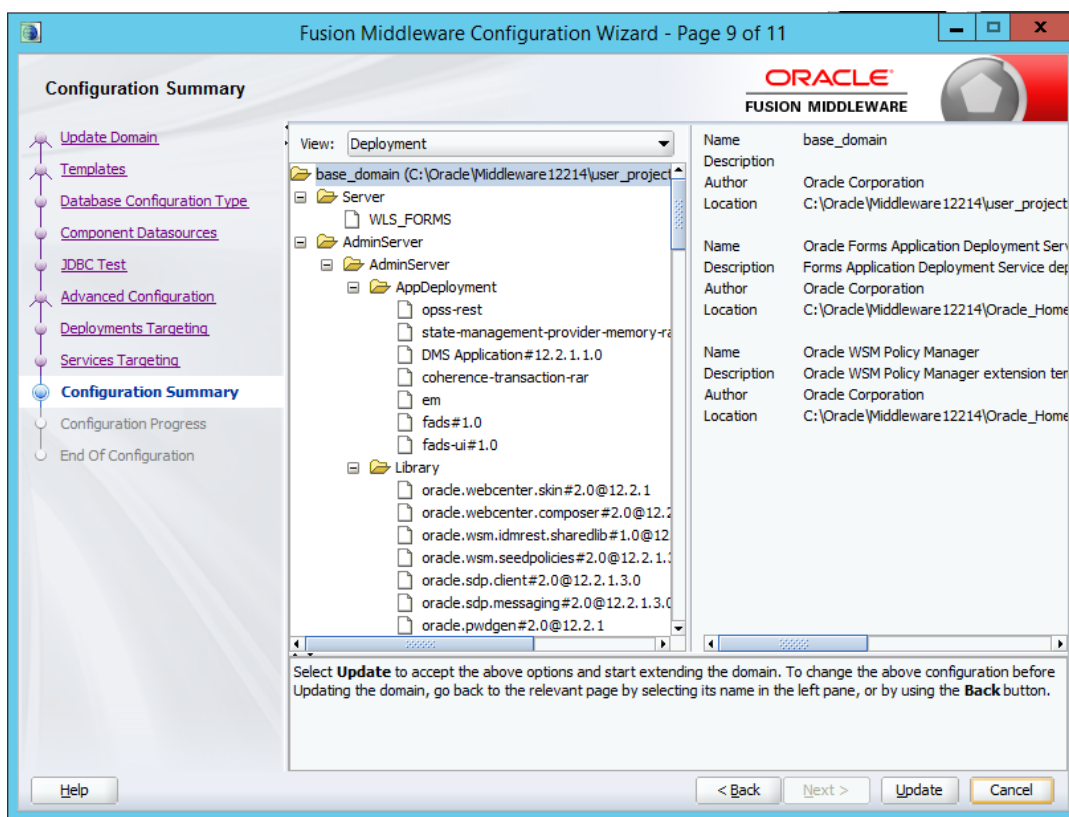
Click **Next** to continue.



4. Deployments Targeting screen: Target applications for deployment on servers. This screen is displayed as you selected **Deployments and Services** on the Advanced Configuration screen.
  - In the Deployment Targets list box, select **WSM-PM** application for the **AppDeployment** under the **AdminServer**.
  - If **WSM-PM** application is not available in Deployment Targets list box, then select it under **AppDeployment** on the Deployments list box and then move it to **AppDeployments** under **AdminServer** in Deployment Targets list box, using the right arrow in the top-middle.



5. Configuration Summary screen: Review the detailed configuration settings of your domain before continuing. In the **Domain Summary** pane, select an item to display details about that item in the **Details** pane on the right. You can limit the items that are displayed in the **Domain Summary** pane by selecting a filter option from the Summary View drop-down list. Click **Back** to return to the appropriate screen, if you need to change the configuration. Click **Update** to extend the domain, if the domain is configured as you want it.



6. Configuration Progress screen: Shows the progress of the domain update. Click **Next**, when the process completes, .
7. End of Configuration screen: Shows information about the Forms domain you just updated. Make a note of the following items because you need them later:

- Domain Location
- Administration Server URL

You need the domain location to access scripts that start Administration Server, and you need the URL to access the Administration Server. Click **Finish** to exit the Configuration Wizard.

Start the Administration Server, when you finish updating the Forms domain, and then perform the post configuration task described in [Run FADS Post Configuration Steps](#).

## Run FADS Post Configuration Steps

After creating or updating your Forms domain or after patching, you must perform few steps.

1. If you created or updated your Forms domain, start the Node Manager, and then the Administration Server.
2. Run one of the following sets of commands.
  - If you created or updated your Forms domain, run the following set of commands.  
`$ORACLE_HOME/oracle_common/common/bin/wlst.sh $ORACLE_HOME/forms/fads/fads_config.py config`
  - If you applied a new Forms patch set or one-off, execute the FADS post configuration script with the `updateHostPort` arguments.

```
$ORACLE_HOME/oracle_common/common/bin/wlst.sh $ORACLE_HOME/forms/fads/  
fads_config.py updateHostPort www.example.com 7001 $ORACLE_HOME/  
user_projects/applications/base_domain
```

3. Follow the prompts to complete the configuration.
4. Perform one of the following steps:
  - If you created or updated your Forms domain, restart the Node Manager, then the Administration Server, and Forms Managed Servers.
  - If you applied a new Forms patch set or one-off, complete other patching steps and then start the Node Manager, Administration Server, and Forms Managed Servers.

## Oracle Forms Accessibility Information

This topic provides information about accessibility features and related information for Oracle Forms.

### Oracle Forms

Oracle Forms Builder 12c provides a range of features designed to support accessibility. While running Forms, you can configure your system and use features that support accessibility.

The Oracle Forms 12c runtime is accessible if coded based on the instructions provided in [Accessibility Features and Tips for Oracle Forms](#). This link also provides information about the minimum requirement that assistive technology must meet to run with Oracle Forms.

# 3

## Deinstalling Oracle Forms

Follow the instructions in this chapter to deinstall Oracle Forms.

It is recommended that you always use the instructions provided in this chapter to remove the software. If you try to remove the software manually, you may encounter problems when you try to reinstall the software again at a later time. Following the procedures in this chapter will ensure that the software is properly removed. If you need to remove a particular product component, you must remove the entire domain containing the component. It is not possible to remove a single product from a domain containing multiple products.

The following topics are covered:

- [Preparing to Deinstall Oracle Forms](#)
- [Dropping the Associated Repository](#)
- [Deinstalling the Software](#)
- [Removing the Oracle Home Directory Manually](#)
- [Removing the Program Shortcuts on Windows Operating Systems](#)
- [Removing the Domain and Application Data](#)
- [Reinstalling the Software](#)

### Preparing to Deinstall Oracle Forms

Before deinstalling Oracle Fusion Middleware software components, you must stop all servers and processes associated with the Oracle home you are going to remove.

See [Starting and Stopping Oracle Fusion Middleware](#) in *Administering Oracle Fusion Middleware*.

### Dropping the Associated Repository

If you do not need the repository and is not shared, you can drop the associated repository.

Before deinstalling Oracle Forms, you should drop the repository by following the instructions as described in [Dropping Schemas](#) in *Creating Schemas with the Repository Creation Utility*.

#### Starting Repository Creation Utility (RCU)

You can start RCU, by navigating to the `ORACLE_HOME/oracle_common/bin` directory.

On UNIX operating systems:

```
cd ORACLE_HOME/oracle_common/bin
./rcu
```

On Windows operating systems:

```
cd ORACLE_HOME\oracle_common\bin
rcu.bat
```

**Note:**

Schemas should not be dropped if the associated domain will be used for other components. Only drop schemas when the domain is to be deleted. Dropping the repository schemas will also delete all data stored in them.

## Deinstalling the Software

This section contains instructions to start the product deinstaller and remove the Oracle Forms and Reports software.

When you start the deinstaller from Oracle home, be sure that no system components are using the Oracle home you want to remove.

If you want to perform a silent (command-line) deinstallation, see Running the Oracle Universal Installer for Silent Deinstallation in *Installing Software with the Oracle Universal Installer*.

## Starting the Deinstallation Program

Follow the instructions to start the Oracle Forms and Reports software deinstaller.

The method you use to start the deinstallation program depends on your operating system: Windows or UNIX.

To start the deinstaller:

1. On UNIX

On the command line, enter the following commands:

```
cd ORACLE_HOME/oui/bin
./deinstall.sh
```

2. On Windows

Do one of the following:

- a. Use a file manager window to navigate to the `ORACLE_HOME\oui\bin` directory and double-click `deinstall.cmd`.

- b. Open a command prompt and enter the following commands:

```
cd %ORACLE_HOME%\oui\bin
deinstall.cmd
```

- c. From the **Start** menu, select **All Programs**, then **Oracle**, then **OracleHome**, and then **Uninstall Oracle Software**, to open the **Oracle Forms Deinstaller**



## Navigating the Deinstallation Screens

The deinstaller displays a series of screens to confirm the deinstallation.

If you need help on screens listed in the following table, click **Help** on the screen.

**Table 3-1 Deinstallation Screens and Descriptions**

Screen	Description
Welcome	Introduces you to the product deinstaller. The deinstallation Welcome screen contains a navigation pane on the left that summarizes the tasks the deinstaller will help you complete.
Deinstallation Summary	Shows the Oracle home directory and its contents that will be deinstalled. Verify that this is the correct directory.  If you want to save these options to a response file, click <b>Save Response File</b> and enter the response file location and name. You can use the response file later during a silent deinstallation. See Running the Oracle Universal Installer for Silent Deinstallation in <i>Installing Software with the Oracle Universal Installer</i> .  Click <b>Deinstall</b> , to begin removing the software.
Deinstallation Progress	Shows the deinstallation progress.
Deinstallation Complete	Appears when the deinstallation is complete. Review the information on this screen, then click <b>Finish</b> to close the deinstaller.

## Removing the Oracle Home Directory Manually

After you deinstall the software, you must manually remove your Oracle home directory and any existing subdirectories that the deinstaller did not remove.

For example, if your Oracle home directory is `/home/Oracle/product/ORACLE_HOME` on a UNIX operating system, enter the following commands:

```
cd /home/Oracle/product
rm -rf ORACLE_HOME
```

On a Windows operating system, if your Oracle home directory is `C:\Oracle\Product\ORACLE_HOME`, use a file manager window and navigate to the `C:\Oracle\Product` directory. Right-click the `ORACLE_HOME` folder and select **Delete**.

## Removing the Program Shortcuts on Windows Operating Systems

On Windows operating systems, you must also manually remove the program shortcuts from the `Start Menu\Programs` folder; the deinstaller does not remove them.

To remove the program shortcuts on Windows:

1. Go to the `C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Oracle\ORACLE_HOME\Product` directory.
2. If you only have one product installed in your Oracle home, delete the `ORACLE_HOME` directory. If you have multiple products installed in your Oracle home, delete all products before you delete the `ORACLE_HOME` directory.

**Note:**

The program shortcuts and folder names on your system may be different; you have to remove them from `C:\ProgramData\Microsoft\Windows\Start Menu\Programs`.

**Rebooting Your System (Windows Operating Systems)**

On Windows operating systems, you should reboot your computer after you have finished removing all your programs to ensure proper cleanup.

## Removing the Domain and Application Data

After you deinstall the software, you must manually remove your domain and application data.

To remove the domain and application data:

1. Remove your Domain home directory. Use your normal operating system commands to remove your Domain home directory, for example:

On a UNIX operating system, if your Domain home directory is `/home/Oracle/user_projects/domains/frs_domain`, enter the following command:

```
cd /home/Oracle/user_projects/domains
rm -rf frs_domain
```

On a Windows operating system, if your Domain home directory is `C:\Oracle\user_projects\domains\frs_domain`, use a file manager window and navigate to the `C:\Oracle\user_projects\domains` directory. Right-click on the `frs_domain` folder and select **Delete**.

2. Remove your Application home directory. For example:

On a UNIX operating system, if your Application home directory is `/home/Oracle/user_projects/applications/frs_domain`, enter the following commands:

```
cd /home/Oracle/user_projects/applications
rm -rf frs_domain
```

On a Windows operating system, if your Application home directory is `C:\Oracle\user_projects\applications\frs_domain`, use a file manager window and navigate to the `C:\Oracle\user_projects\applications` directory. Right-click on the `frs_domain` folder and select **Delete**.

3. Back up the `domain_registry.xml` file in your Oracle home, then edit the file and remove the line associated with the domain that you are removing. For example, to remove the `frs_domain`, find the following line and remove it:

```
<domain location="/home/Oracle/user_projects/domains/frs_domain"/>
```

Save and exit the file when you are finished.

## Reinstalling the Software

You can reinstall your software into the same Oracle home as a previous installation only if you deinstalled the software according to the instructions in this chapter, including manually removing the Oracle home directory.

When you reinstall, you can then specify the same Oracle home as your previous installation.

Consider the following cases where the Oracle home is not empty:

- Installing in an existing Oracle home that contains the same feature sets.

The installer warns you that the Oracle home that you specified during installation already contains the same software you are trying to install. Your options are to:

1. Select a different installation type. In this case, only the feature sets that do not exist in the Oracle home directory are installed.
2. Select a different Oracle home directory.

- Installing in an existing, non-empty Oracle home.

For example, suppose you chose to create your Domain home or Application home somewhere inside your existing Oracle home. This data is not removed during the deinstallation process, so if you try to reinstall into the same Oracle home, the installer does not allow it. Your options are to:

1. Deinstall your software from the Oracle home as described in this chapter and then remove the Oracle home directory. After you deinstall the software and remove the Oracle home directory, you can reinstall and reuse the same Oracle home location, using the instructions in [Installing and Configuring Oracle Forms](#). Any domain or application data that was in the Oracle home must be re-created.
2. Select a different Oracle home directory.

# 4

## Upgrading Oracle Forms

This chapter describes how to upgrade Oracle Forms from version 12.2.1.3 or 12.2.1.4 to version 12.2.1.19.

To upgrade from a version prior to 12.2.1.3, follow one of these upgrade paths:

- First upgrade to 12.2.1.4 by following the upgrade instructions in the 12.2.1.4 version of [Installing Oracle Forms](#). Then, follow the steps provided in this section to upgrade to 12.2.1.19.
- Perform a fresh installation of 12.2.1.19 and manually configure the new environment, as required.



### Note:

Although Oracle Reports is included in this release, it has been deprecated. Refer to the [12.2.1.3.0 Documentation Library](#) for upgrade information specific to Oracle Reports.

These topics are covered:

- [Planning an Upgrade of Oracle Forms](#)
- [Performing a Pre-Upgrade Readiness Check](#)
- [Create Copies of Oracle Forms Template Files](#)
- [Upgrading to Oracle Forms 12.2.1.19.0](#)
- [Post-Upgrade Steps after Upgrading Oracle Forms](#)

## Planning an Upgrade of Oracle Forms

Upgrading to version 12.2.1.19.0 is only supported when the starting version is 12.2.1.3 or 12.2.1.4.

Before you continue, it is recommended that you first create a backup of the existing installation.

When planning an upgrade, you'll need to decide where to install the software. There are two options. You can install the software in the same Oracle Home directory where the previous version is installed. This is referred to as an "in-place" upgrade.

Or, you can instead install in a new Oracle Home directory. This is referred to as an "out-of-place" upgrade.

An in-place upgrade is simpler: All you have to do is rename the existing Oracle Home directory, install the software in the directory path that was previously used, then copy over any required files from the backup directory. This upgrade is particularly useful for multi-node environments since you can shut down and upgrade one node at a time, ensuring minimal to no downtime.

Out-of-place upgrades are used when you want to install Oracle Forms in a new directory. For this option, install the software as for a fresh install, then use the WLS Reconfiguration Wizard and Upgrade Assistant to complete the upgrade.

In both cases, you'll need to complete the applicable configuration steps following the upgrade, as set out in this chapter.

The steps you'll need to complete may depend on the type of upgrade you are doing as well as your starting version. Review the following sections carefully to determine which procedures are required for your environment.

If your current version is earlier than 12.2.1.3, you need to first upgrade to 12.2.1.4 before proceeding. Refer to version 12.2.1.4 of [Installing Oracle Forms](#) for information on how to upgrade to that version.

When you believe you have a working 12.2.1.4 environment, return to this document and continue.

## Performing a Pre-Upgrade Readiness Check

To identify potential issues with the upgrade, Oracle recommends that you run a readiness check using the Upgrade Assistant before you start the upgrade process.

To run the pre-upgrade readiness check, refer to [Running a Pre-Upgrade Readiness Check in Upgrading with the Upgrade Assistant](#).

When you run the Upgrade Assistant in `readiness` mode, it performs a pre-upgrade check on the schemas and component configurations associated with a domain. When completed, the readiness check generates a formatted, time-stamped readiness report so you can address potential issues before you attempt the actual upgrade.

Oracle recommends that you read this report thoroughly before performing an upgrade.

If no issues are detected, you can begin the upgrade process.

### Note:

Be aware that the readiness check may not be able to discover all potential issues with your upgrade. An upgrade may still fail, even if the readiness check reports success.

## Create Copies of Oracle Forms Template Files

Before you start an upgrade to the latest 12c release, it is recommended that you create copies of existing Forms template files.

This includes all files in the following directory:

`DOMAIN_HOME\user_projects\domains\base_domain\config\fmwconfig\components\FORMS\instances\<INSTANCE NAME>\server`. If you are upgrading from a previous 12c release to the latest release, the files are located in the same directory as mentioned in the previous line.

The copy of template files will help you to restore user-specific customization in the new forms template files.

After you have completed the upgrade process, you should manually copy or merge user-specific customizations created in the earlier version to the new Forms template files.

## Upgrading to Oracle Forms 12.2.1.19.0

Upgrade to Oracle Forms 12.2.1.19.0 by either installing the software in the same Oracle Home directory or installing in a new Oracle Home directory you create. After the upgrade, complete the applicable configuration steps.

If you plan to use the existing Oracle Home directory, follow the procedures for an "in-place" upgrade. In this case, you'll back up the existing directory, install the software in the existing directory, then copy over any required files from the backup directory. See [Performing an In-Place Upgrade](#).

This upgrade is particularly useful for multi-node environments since you can shut down and upgrade one node at a time, ensuring minimal to no downtime.

If you plan to create a new directory for this installation, follow the "out-of-place" procedures instead. This involves installing the software as for a fresh install, then use the WLS Reconfiguration Wizard and Upgrade Assistant to complete the upgrade. See [Performing an Out-of-Place Upgrade](#).

Regardless of which upgrade path you choose, if the existing WLS domain was previously configured to use Forms Application Deployment Services (FADS), you must upgrade the Oracle SQL Developer version found in the Oracle Home directory to 21.4.3.

Download this version of Oracle SQL Developer from the [Oracle SQL Developer Downloads 21.4.3](#) page. In the table, use the link for **Other Platforms**.



### **WARNING:**

Do not upgrade Oracle SQL Developer to a version newer than 21.4.3.

To get the Oracle Fusion Middleware Infrastructure and Oracle Forms and Reports software, refer to [Obtaining the Oracle Fusion Middleware Software](#).

When you have finished installing 12.2.1.19, you'll need to perform some additional tasks to complete the upgrade. See [Completing the Upgrade](#).

This section includes these topics:

- [Performing an In-Place Upgrade](#)
- [Performing an Out-of-Place Upgrade](#)
- [Completing the Upgrade](#)

## Performing an In-Place Upgrade

To perform an "in-place" upgrade, you'll back up the existing Oracle Home directory, install the latest versions of the required software in the existing directory, then copy over any required files from the backup directory.

In an in-place upgrade, you install the 12.2.1.19.0 software in the same Oracle Home path that 12.2.1.4.0 or 12.2.1.3.0 previously used. This upgrade is recommended for multi-node load balanced Forms deployment.

This procedure uses a two-node environment as an example: A primary node, named "node1", with Admin Server, Forms (managed Server WLS\_FORMS and System component forms1)

and Oracle HTTP Server (OHS); and a secondary node, named "node2", with Forms Instance (managed Server WLS\_FORMS and System component forms1).

For single node configurations, complete steps 1 - 8. For each additional node, complete steps 9 - 12.

To perform an in-place upgrade:

1. Shutdown any system components like OHS (if in use), the managed servers, the Admin Server, then the Node Manager on node 1.
2. Rename the Oracle Home parent directory on node 1. For example, you can rename it to `Oracle_Home_Old`.
3. Install Fusion Middleware Infrastructure 12.2.1.4.0 on node 1 using the same Oracle Home path as used previously (before renaming it in Step 2).
4. Install Oracle Forms 12.2.1.19.0 on node 1 using the same Oracle Home path.
5. If the WLS Domains directory (`user_projects`) and its subdirectories are located within the old Oracle Home, copy these directories to the new Oracle Home in the same location as they were previously.
6. If installing on Unix/Linux, execute the following in a shell as the same user that owns this new installation:

- a. Set the `ORACLE_HOME` environment variable and point it to the Forms home, for example:

```
export ORACLE_HOME=<FORMS_HOME>
```

- b. Issue the following commands:

```
cd $ORACLE_HOME/procbuilder/lib
make -f ins_procbuilder.mk sharedlibs dejvm_install
cd $ORACLE_HOME/forms/lib
make -f ins_forms.mk sharedlib frmopmn_wrp_install
frmctrl_install frmweb_install frmcmpb_install frmcmp_install
frmbld_install
```

7. If required, upgrade Oracle SQL Developer to 21.4.3.

You'll need to upgrade to 21.4.3 if the existing WLS domain was previously configured to use Forms Application Deployment Services (FADS). An older version of SQL Developer is installed with the latest Forms release.

 **WARNING:**

Do not upgrade Oracle SQL Developer to a version newer than 21.4.3.

- a. Download Oracle SQL Developer 21.4.3 from the [SQL Developer 21.4.3 Downloads](#) page using the **Other Platforms** link in the table.

The download file is a zip file, for example: `sqldeveloper-21.4.3.063.0100-no-jre.zip`.

- b. Rename the `sqldeveloper` directory located in the `$ORACLE_HOME` directory. For example, rename it to `sqldeveloper_old`.

- c. Extract the contents of the Oracle SQL Developer 21.4.3 zip file to the Oracle Home directory.

This results in a new `sqldeveloper` top-level directory within the Oracle Home.

8. Start the Node Manager, Admin Server, the managed servers, and any other system components (such as OHS) on node 1.

This completes the upgrade of node 1. For additional nodes, perform the remaining steps.

9. Shutdown system components and the managed servers on node 2.
10. Repeat steps 2 to 8 to install Oracle Forms on node 2.
11. Start system components and the managed servers on node 2.
12. After completing the installation and starting the servers correctly, delete the `Oracle_Home_Old` directories from nodes 1 and 2. Before deleting, make sure you copy any custom files you need from the `Oracle_Home_Old` directory.

Once you have completed these steps, proceed to [Completing the Upgrade](#).

## Performing an Out-of-Place Upgrade

To perform an "out-of-place" upgrade, you'll install the software as for a fresh install, then use the WLS Reconfiguration Wizard and Upgrade Assistant to complete the upgrade.

In an out-of-place upgrade, you install the 12.2.1.19.0 software in a new Oracle Home directory rather than the one used by the 12.2.1.4.0 or 12.2.1.3.0 install.

- [Install the Software in a New Oracle Home](#)
- [Reconfiguring the Domain using the WLS Reconfiguration Wizard](#)
- [Running the Upgrade Assistant to Upgrade the Components Configuration](#)
- [Starting Oracle Forms After an Upgrade](#)

## Install the Software in a New Oracle Home

Install the Oracle Fusion Middleware Infrastructure 12.2.1.4 and Forms 12.2.1.19 software into a new Oracle home directory.

After installing the software, skip any additional steps and return here to update your existing WLS domain. Do not create new Repository schemas and do not run the Configuration Wizard.

Refer to the *Installing and Configuring Oracle Forms* chapter starting with [Installing Oracle Forms in a New Oracle Home](#) for the steps to install the software.

## Reconfiguring the Domain using the WLS Reconfiguration Wizard

You have to reconfigure the domain using the WLS Reconfiguration wizard.

To reconfigure the domain:

1. Run the WLS Reconfiguration wizard from the following location in the new Oracle home:  
`$ORACLE_HOME/oracle_common/common/bin/reconfig.sh`
2. Provide the location of the 12.2.1.4.0 or 12.2.1.3.0 FMW domain to be upgraded.
3. Enter the RCU schema information.



4. Select the Administration Server and Topology options from the *Advanced Configuration* screen.

Do not select the System Components option. Those will be automatically configured/ upgraded by the Upgrade Assistant.

5. *Administration Server Settings* screen: If the previous environment was configured to use Forms Application Deployment Services (FADS), ensure that **WSMPM-MAN-SVR** is selected from the **Server Groups** drop-down list.

 **Note:**

Do not select it if FADS was not previously configured.

6. Leave the default selections on the *Node Manager* screen. Enter user name and password if needed.
7. Click **Next** until you get to the last screen of the wizard.

## Running the Upgrade Assistant to Upgrade the Components Configuration

To upgrade the Components configuration, complete a series of steps using the 12.2.1.19.0 Upgrade Assistant.

To upgrade the Components configuration:

1. Run the 12.2.1.19.0 Upgrade Assistant from the following location:  
`$ORACLE_HOME/oracle_common/upgrade/bin/ua`
2. Select the *All Configuration Used by the Domain* option.
3. Provide the location of the reconfigured 12c domain.
4. Select the prerequisite check boxes.
5. Click **Upgrade**.

## Starting Oracle Forms After an Upgrade

After you have installed the Oracle Fusion Middleware Infrastructure and Oracle Forms software and run both the WLS Reconfiguration wizard and the Upgrade Assistant, you'll need to start Oracle Forms.

If the existing WLS domain was previously configured to use Forms Application Deployment Services (FADS), you'll need to upgrade Oracle SQL Developer to version 21.4.3 before you start the servers. An older version of SQL Developer is installed with the latest Forms release.

1. If required, upgrade Oracle SQL Developer to 21.4.3.

 **WARNING:**

Do not upgrade Oracle SQL Developer to a version newer than 21.4.3.

- a. Download Oracle SQL Developer 21.4.3 from the [SQL Developer 21.4.3 Downloads](#) page using the **Other Platforms** link in the table.

The download file is a zip file, for example: `sqldeveloper-21.4.3.063.0100-no-jre.zip`.

- b. Rename the `sqldeveloper` directory located in the `$ORACLE_HOME` directory. For example, rename it to `sqldeveloper_old`.
- c. Extract the contents of the Oracle SQL Developer 21.4.3 zip file to the Oracle Home directory.

This results in a new `sqldeveloper` top-level directory within the Oracle Home.

2. Start the Node Manager, Admin Server, the managed servers, and any other system components (such as Oracle HTTP Server).

Once you have completed these steps, proceed to [Completing the Upgrade](#).

## Completing the Upgrade

After you upgrade Oracle Forms to 12.2.1.19.0, you may need to perform these additional steps depending on your configuration.

### Forms Application Services (FADS) Configuration

If Forms Application Services (FADS) was configured in the 12.2.1.4.0 or 12.2.1.3.0 domain, you'll need to run the FADS configuration script (`fads_config.py`) with the upgrade option:

1. Run the following command: `ORACLE_HOME/oracle_common/common/bin/wlst.sh fads_config.py upgrade`
2. Complete the prompts.

### Userid Encryption

If upgrading from 12.2.1.3.0, enable encryption for the `userid` parameter and grant access to the Forms application keystore.



#### Note:

These steps are not necessary if upgrading from 12.2.1.4.0.

To enable encryption for the `userid` parameter:

1. ("Out-of-place" upgrade only) Set the `forms.userid.encryption.enabled` server parameter to `true` for the Admin Server and the Forms managed servers. Refer to Customizing Domain Wide Server Parameters in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

Here is a sample of the `setUserOverridesLate.sh` file (use `setUserOverridesLate.cmd` for Windows), where the `forms.userid.encryption.enabled` parameter is enabled.

```
echo ""
echo "*****"
echo "*** Executing setUserOverridesLate.sh"
echo "*****"

# specify additional java command line options for all servers
```

```
EXTRA_JAVA_PROPERTIES="${EXTRA_JAVA_PROPERTIES} -
Dforms.userid.encryption.enabled=true"
export EXTRA_JAVA_PROPERTIES

echo "USER_MEM_ARGS=\"${USER_MEM_ARGS}\""
echo "EXTRA_JAVA_PROPERTIES=\"${EXTRA_JAVA_PROPERTIES}\""
echo ""
echo "*****"
echo "*** End of setUserOverrideLate.sh"
echo "*****"
echo ""
```

2. Run the following commands using WLST (online mode) to provide grants to the forms application or mbeans to access the Forms application keystore.

```
connect("weblogic","welcome1", "localhost:7001")

grantPermission(codeBaseURL="file:${common.components.home}/../forms/
provision/forms-config-mbeans.jar",
permClass="oracle.security.jps.service.keystore.KeyStoreAccessPermission",p
ermTarget="stripeName=formsapp,
keystoreName=formsks,alias=*", permActions="*")

grantPermission(codeBaseURL="file:${domain.home}/servers/$
{weblogic.Name}/tmp/_WL_user/formsapp_12.2.1/-",
permClass="oracle.security.jps.service.keystore.KeyStoreAccessPermission",
permTarget="stripeName=formsapp,
keystoreName=formsks,alias=*,permActions="*")
```

3. Restart the Node Manager, the Admin Server, and Forms managed server(s).

## Post-Upgrade Steps after Upgrading Oracle Forms

After using the Upgrade Assistant to upgrade Oracle Forms, you'll need to perform a number of post-upgrade tasks.

Complete these tasks:

- Regenerate the Forms application files (fmx, mmx, and plx) to run on Oracle Forms Services 12.2.1.19.0.
- If you deployed the Oracle Forms Services J2EE custom application ear file (formsapp.ear) file to override the context root or Forms servlet alias, you should perform similar steps in the 12.2.1.19.0 Oracle WebLogic Server domain, see Custom Deployment of Forms Java EE Application. For more information, see Oracle Forms Configuration Helper Script in the *Working With Oracle Forms* guide.
- Manually copy any customizations made to provided shell script to the new environment as necessary.
- Be sure to copy any custom files stored in the old Oracle Home into the corresponding directories of the new installation.

 **Note:**

It may be necessary to stop the servers before copying the old files into the new directories in order for the new servers to become aware of their existence.

# 5

## About Oracle Reports

Although included in this release, Oracle Reports has been deprecated as of Fusion Middleware 12c Release 2 (12.2.1.3.0).

For more information on the deprecation, review Deprecation Notice for Oracle Reports in *Release Notes for Oracle Forms*.

Because no changes have been made to Oracle Reports in the 12.2.1.19.0 release, refer to the [12.2.1.3.0 Documentation Library](#) for information on installing, configuring, and using Oracle Reports. Download and install the 12.2.1.19.0 version and refer to this [section](#) of the 12.2.1.3 Installation Guide. Ignore any suggestions of using the 12.2.1.3 software in the guide.

For Oracle Reports usage, administration, and report deployment information, refer to the [Publish Reports to the Web with Oracle Reports Services](#) book. Because no further enhancements are planned for Oracle Reports, Oracle recommends migrating from Oracle Reports to Analytics Publisher (previously BI-Publisher). For more information about Oracle Analytics Publisher, see this [page](#).

# A

## Troubleshooting

This appendix describes solutions to common problems that you might encounter when installing Oracle Forms.

The following sections are included:

- [General Troubleshooting Tips](#)
- [Installation and Configuration Log Files](#)

If this Troubleshooting appendix does not solve the problem you encountered, try looking for a solution on [My Oracle Support](#). You can also raise a service request, if you are unable to find a solution for your problem.

### General Troubleshooting Tips

You may encounter errors during installing and configuring Oracle Forms.

Follow the tips to resolve the errors:

- To complete the configuration, an elevated Windows DOS shell must be run by a user who is a member of the Windows Administrator group. UNIX shells must be owned by the same user who performed the installation (for example, *oracle*). Failure to follow this instruction may result in the configuration failing silently.
- See Install and Configure in *Release Notes for Oracle Fusion Middleware Infrastructure* for the latest updates and issues related to Oracle Fusion Middleware product installation and configuration.
- Verify that your computer meets the requirements specified in the Oracle Fusion Middleware System Requirements and Specifications. Select the document that is applicable for your release.
- Verify that your environment meets the certification requirements for your release and platform, as specified on the Oracle Fusion Middleware Supported System Configurations page.
- To review the latest Oracle Fusion Middleware Release Notes for other products, go to Oracle Fusion Middleware Library and select the documentation library for your specific product release to view the release notes.
- If you entered incorrect information on one of the installation screens, return to previous screen by clicking **Back** until you see the specific screen, or by using the navigation pane on the left side of the screen.
- If you encounter an error while the installer is copying or linking files:
  1. Note the error and review the installation log files.
  2. Remove the failed installation.
  3. Correct the issue that caused the error.
  4. Restart the installation.

## Installation and Configuration Log Files

Log files are created when running the Oracle Forms installer and configuration tool.

The following log files contains information that can help you to troubleshoot problems during installation or configuration:

- [Installation Log Files](#)
- [Configuration Log Files](#)

### Installation Log Files

The log files generated during your installation help you determine whether any problems occurred during installation.

The installer writes logs files to the *Oracle\_Inventory\_Location/log* (on UNIX operating systems) or *Oracle\_Inventory\_Location/logs* (on Windows operating systems) directory. On UNIX operating systems, if you do not know the location of your Oracle Inventory directory, you can find it in the *oraInst.loc* file in the following directories (default locations):

- Linux: */etc/oraInst.loc*
- HP-UX and Solaris: */var/opt/oracle/oraInst.loc*

On Windows operating systems, the location for the inventory directory is *C:\Program Files\Oracle\Inventory\logs*.

The following install log files are written to the log directory:

- *installdate-time-stamp.log*  
This is the main log file.
- *installdate-time-stamp.out*  
This log file contains the output and error streams during the installation.
- *installActionsdate-time-stamp.log*  
This file is used by the installer GUI to keep track of internal information.
- *installProfiledate-time-stamp.log*  
This log file contains the overall statistics like time taken to complete the installation, also configuration, memory and CPU details.
- *oraInstalldate-time-stamp.log*  
This log file contains the output stream of the copy session.

If you start the installer with the *-printtime* parameter, the *timeTakedate-time-stamp.log* and *timedate-time-stamp.log* files are created in the same directory:

- *timeTakedate-time-stamp.log*  
This file contains information for the amount of time taken to move between screens (applicable for GUI installations only).
- *timedate-time-stamp.log*  
This file contains time information for the copy session.

If you start the installer with the `-printmemory` parameter, the `memorydate-time-stamp.log` file is created. This file contains memory usage information for the copy session.

## Configuration Log Files

To create a log file of your configuration session, start the configuration tool with the `-log` option.

For specific operating systems use the following `-log` option.

On UNIX operating systems:

```
% ./config.sh -log=log_filename
```

On Windows operating systems:

```
G:\ config.cmd -log=log_filename
```

If you specify an absolute path with your `log_filename` then your log file will be created there. If you only specify a file name with no path, then the log files are created in the `ORACLE_HOME/common/bin` (on UNIX operating systems) or `ORACLE_HOME\common\bin` (on Windows operating systems) directory.