

Oracle Forms&Reports 12c Installation On Windows

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Assumptions

- You have a database with the AL32UTF8 character set.

Software

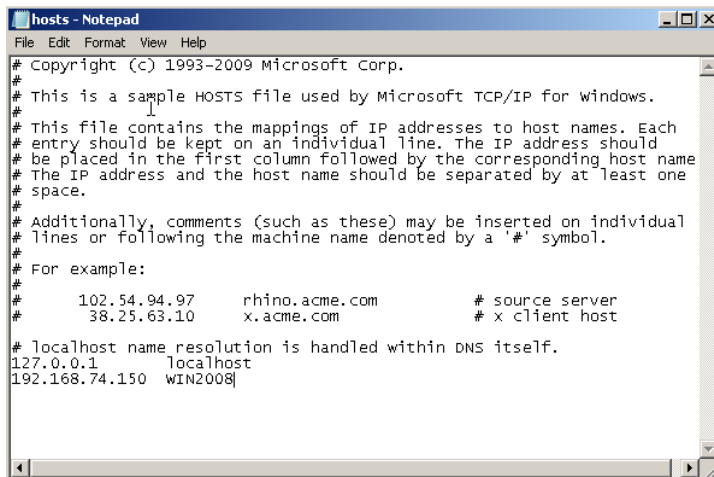
Download the required software from [Oracle Technology Network](#).

- [Java Development Kit](#) (I used 8u65 [jdk-8u65-windows-x64.exe](#))
- [Fusion Middleware Infrastructure Installer](#) (1.4G)
- [Oracle Forms and Reports 12c \(12.2.1.0\)](#) (fmw_12.2.1.0.0_fr_win64_Disk1_1of1.zip)

Setup

Make sure the "C:\Windows\System32\drivers\etc\hosts" file contains correct entries for both the "localhost" and real host names.

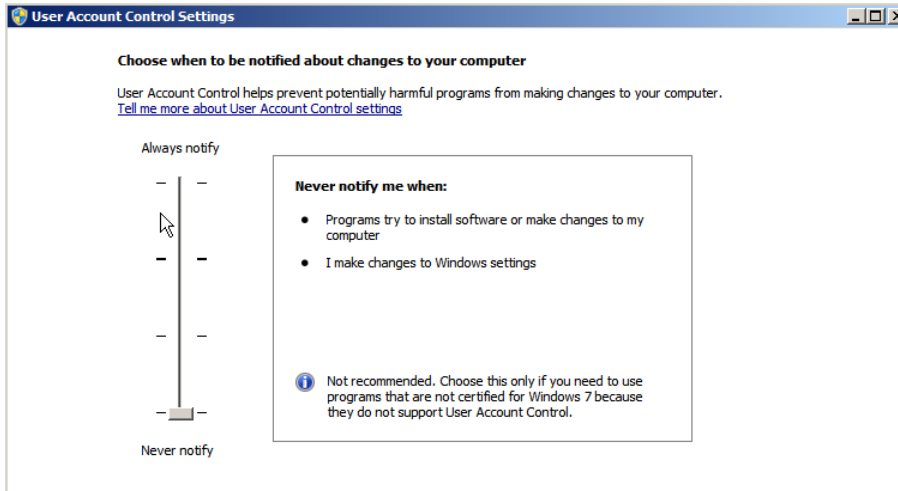
```
127.0.0.1      localhost
192.168.74.150 win2008
```



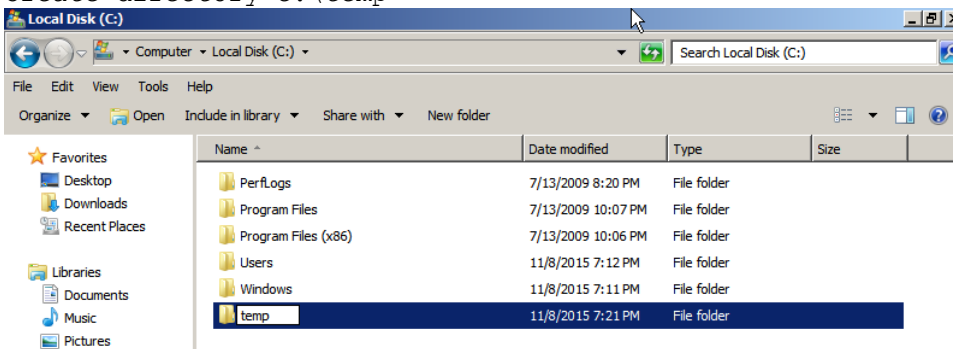
```
# Copyright (c) 1993-2009 Microsoft Corp.
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97       rhino.acme.com   # source server
#       38.25.63.10      x.acme.com       # x client host

# localhost name resolution is handled within DNS itself.
127.0.0.1      localhost
192.168.74.150 win2008
```

Disable notifications from Control Panel -> User Accounts -> User Account Settings



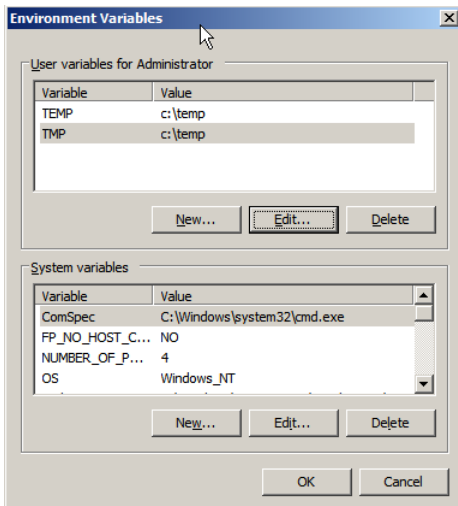
Create directory c:\temp



Change default temp location to the c:\temp

Control Panel -> System -> Advanced system settings -> Environment Variables

Edit both TEMP and TMP and change the value to c:\temp

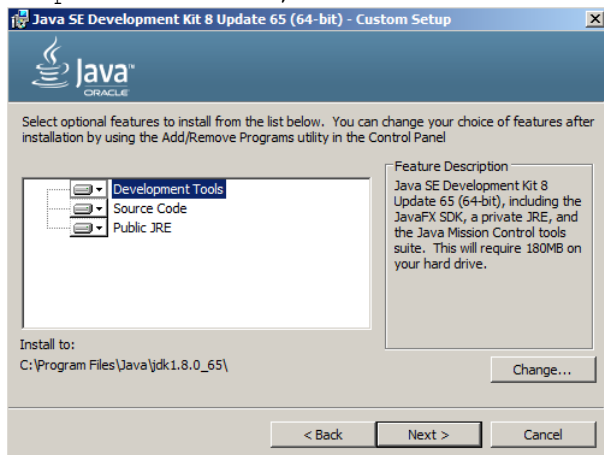


JDK Installation

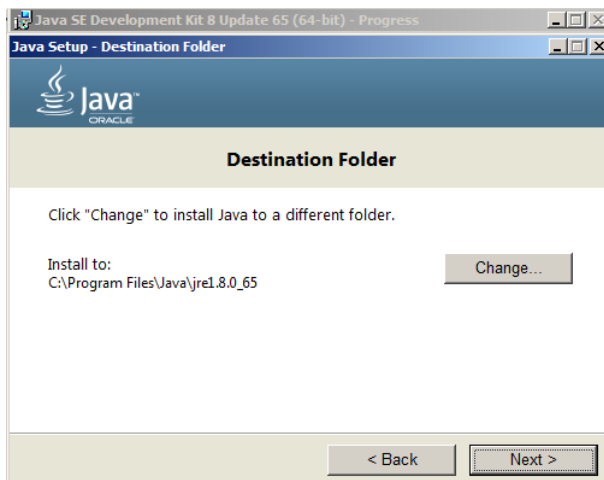
Double click on `jdk-8u65-windows-x64.exe`
Click "Next" in the welcome screen



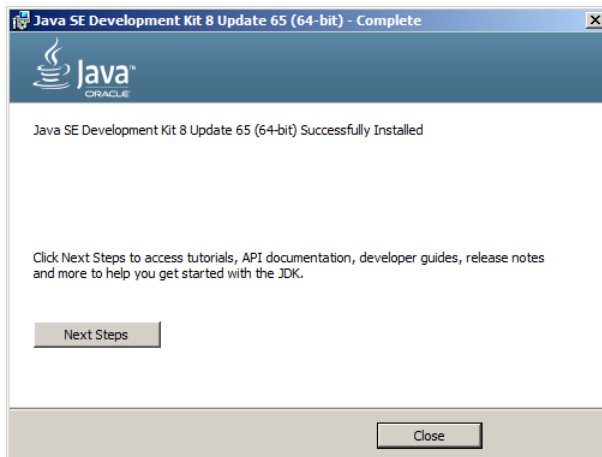
Keep the defaults, click "Next"



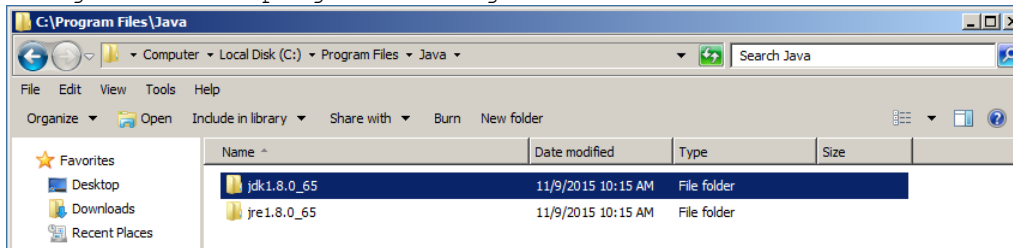
Click "Next"



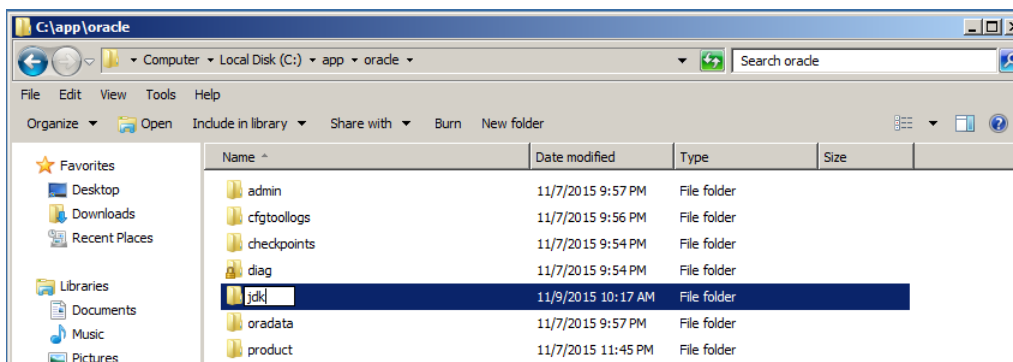
Click "Close"



Navigate to "c:\program files\java"



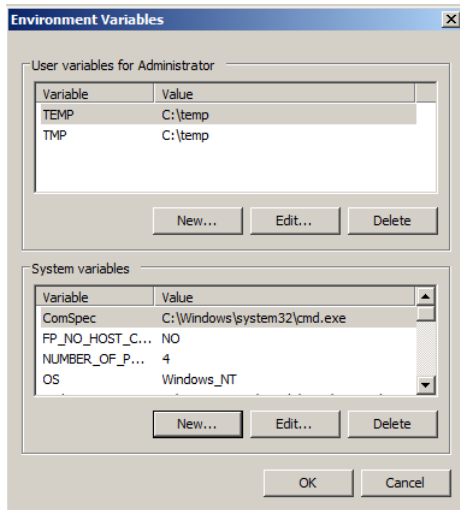
Copy "c:\program files\java\jdk1.8.0_65" to "c:\app\oracle" and rename the folder name to jdk.



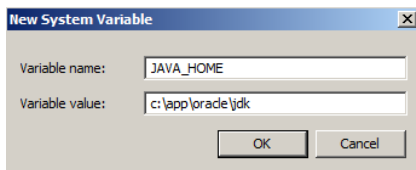
Add the environment variable "JAVA_HOME"

Control Panel -> System -> Advanced system settings -> Environment Variables

Click "New" on the System variables.

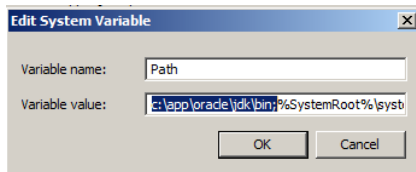


Enter "JAVA_HOME" in the variable name, and "c:\app\oracle\jdk" in the variable value and click "OK"



Find the system environment "Path" and click "Edit"

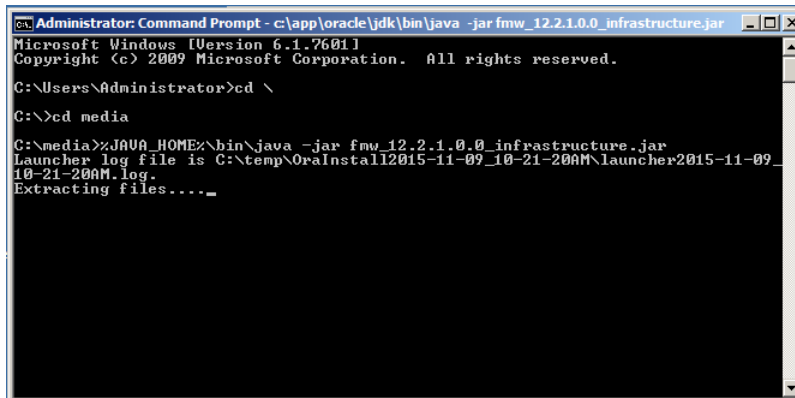
Add "c:\app\oracle\jdk\bin;" to the beginning of variable value.



Weblogic Installation

Run the installer

```
C:\media> unzip fmw_12.2.1.0.0_infrastructure_Disk1_lof1.zip  
C:\media> %JAVA_HOME%\bin\java -jar fmw_12.2.1.0.0_infrastructure.jar
```

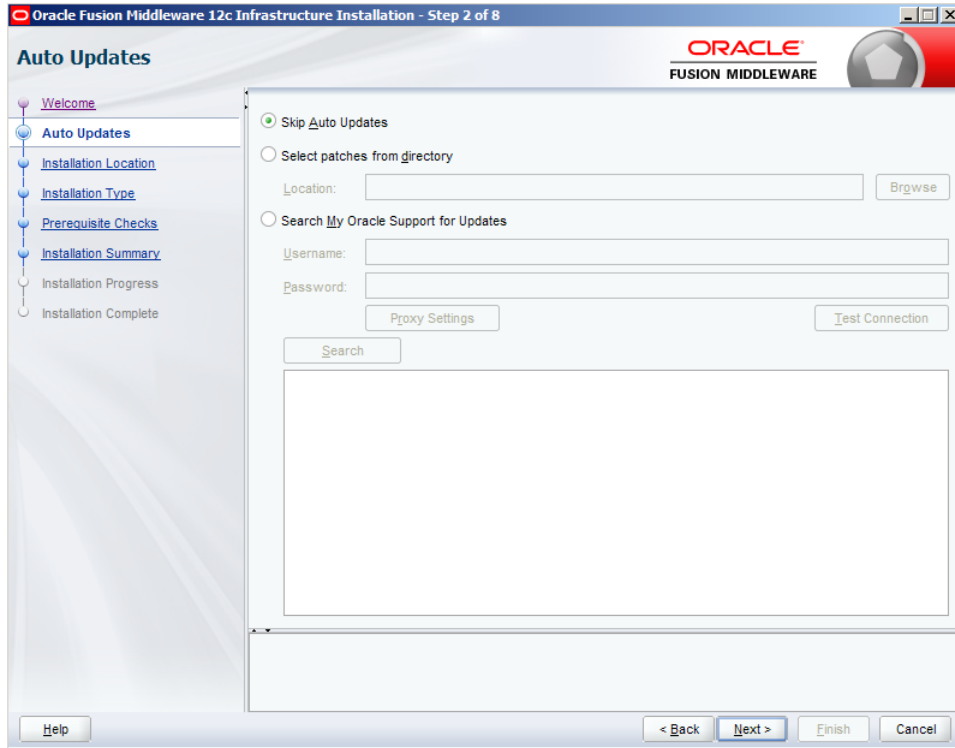


```
Administrator: Command Prompt - c:\app\oracle\jdk\bin\java -jar fmw_12.2.1.0.0_infrastructure.jar  
Microsoft Windows [Version 6.1.7601]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
  
C:\Users\Administrator>cd \  
  
C:\>cd media  
  
C:\media>%JAVA_HOME%\bin\java -jar fmw_12.2.1.0.0_infrastructure.jar  
Launcher log file is C:\temp\OraInstall\2015-11-09_10-21-20AM\launcher2015-11-09-10-21-20AM.log.  
Extracting files.....
```

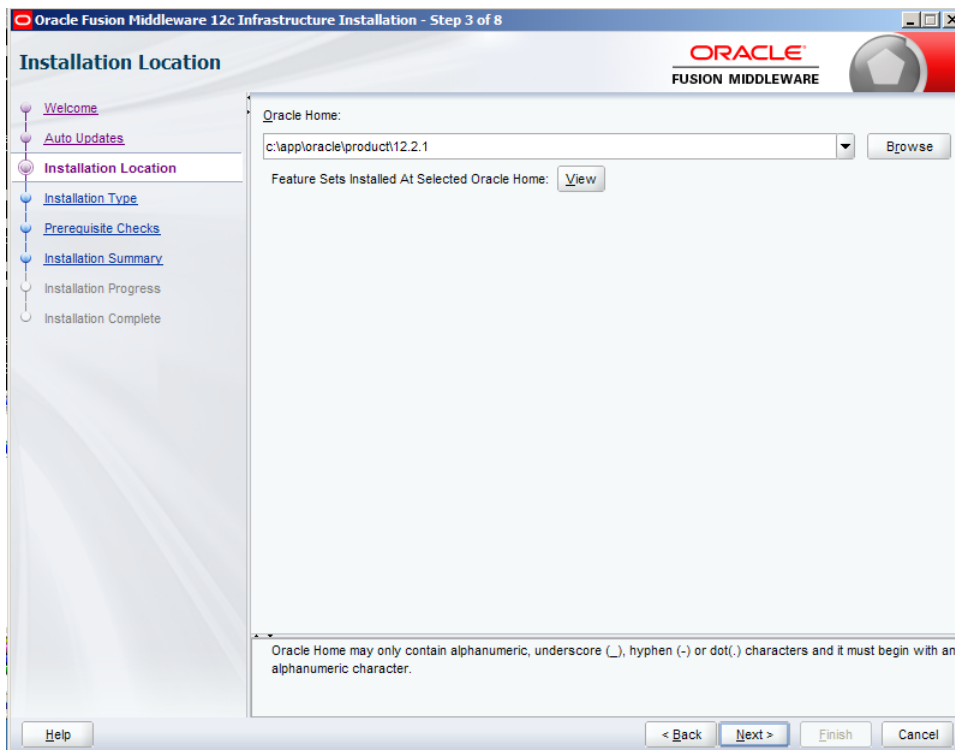
Click the "Next" button on the welcome screen.



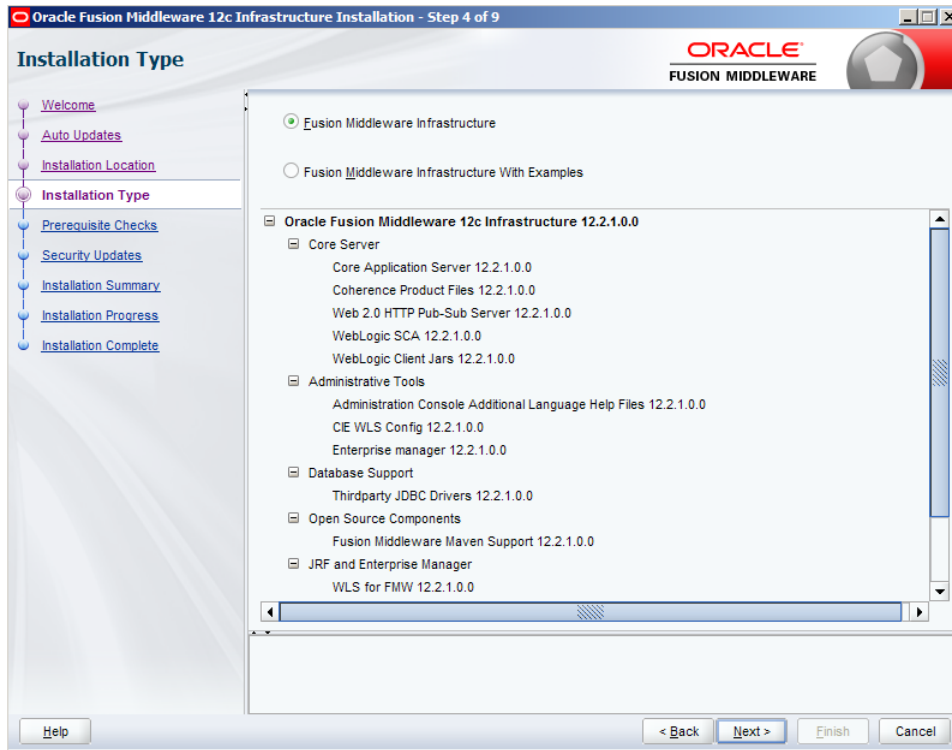
Select the "Skip Auto Updates" options, then click the "Next" button.



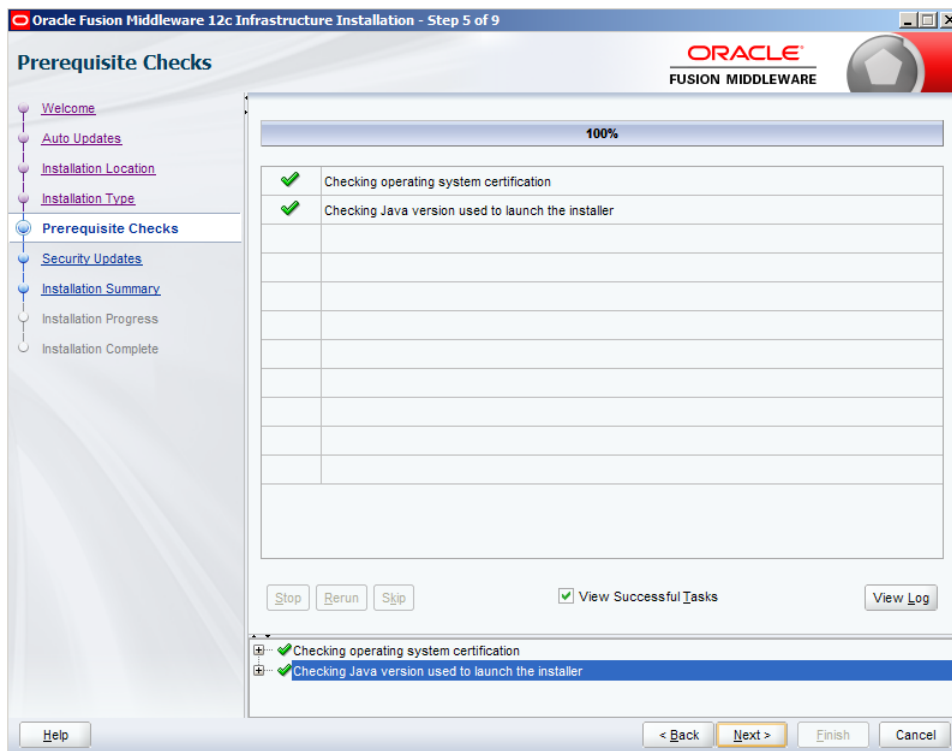
Enter the middleware home ("c:\app\oracle\product\12.2.1") and click the "Next" button.



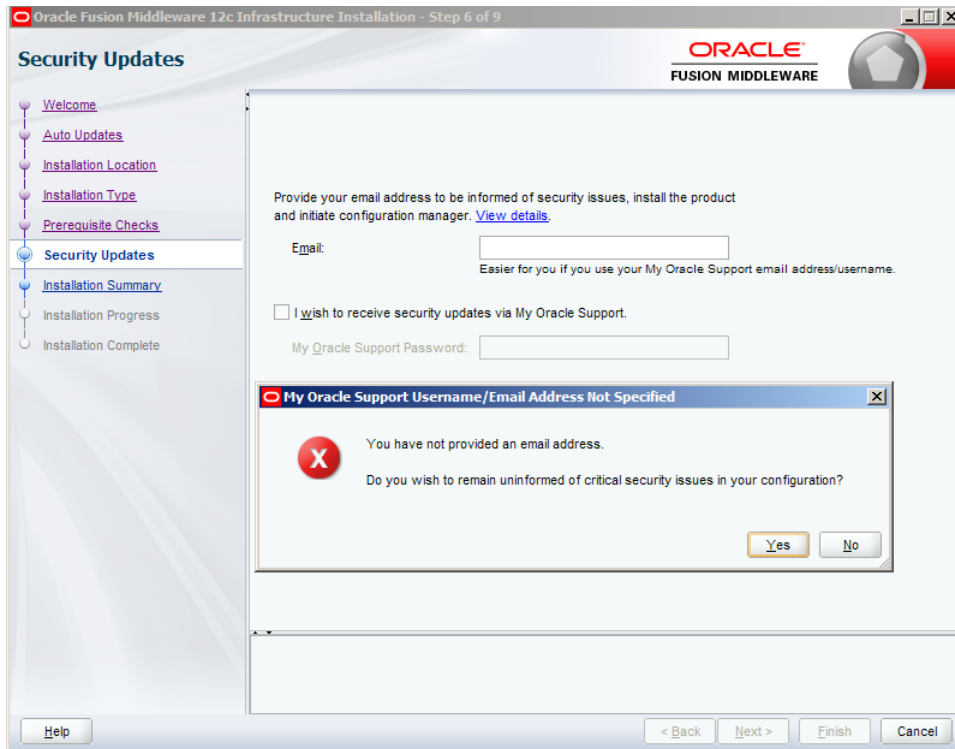
Accept the "Fusion Middleware Infrastructure" option by clicking the "Next" button.



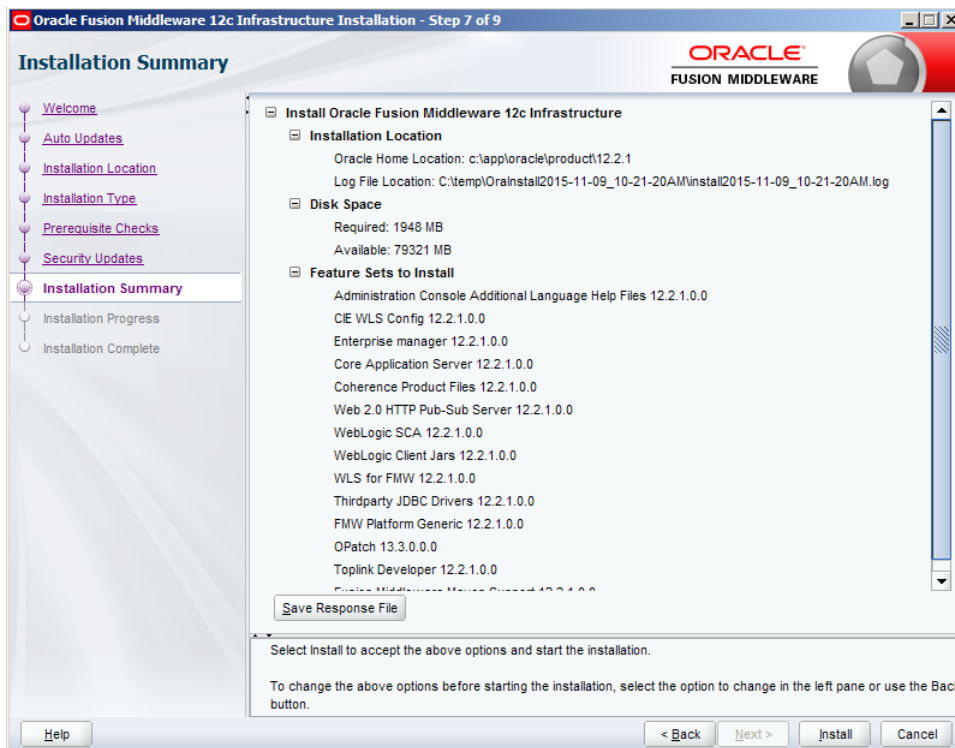
Wait for the prerequisite checks to complete. If everything is ok, click the "Next" button.



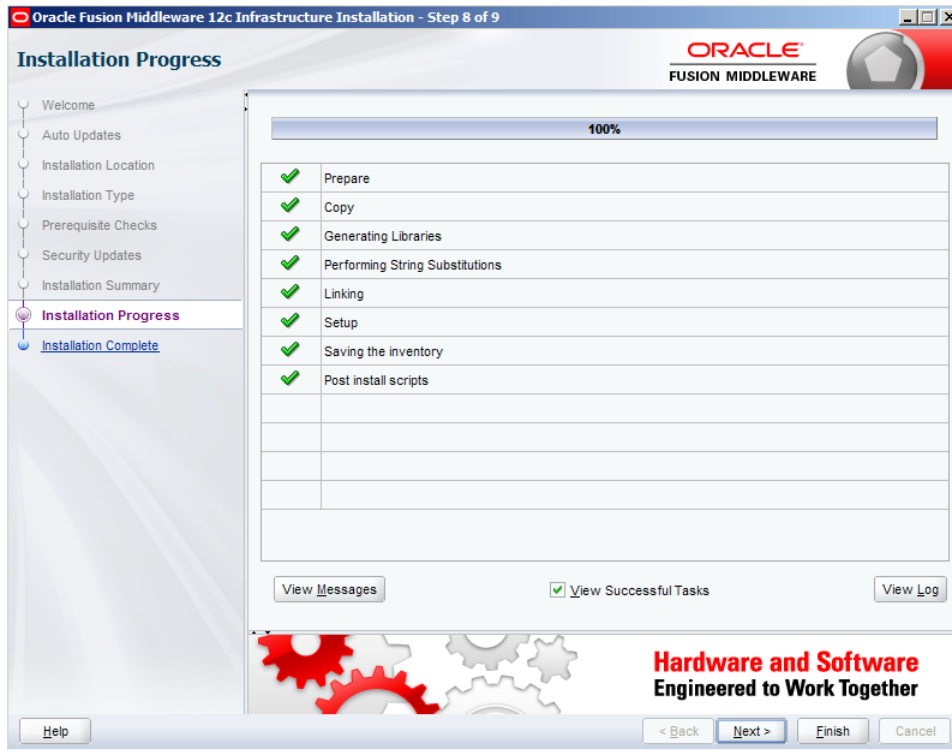
Either enter your support details, or uncheck the security updates checkbox. Click the "Next" button. If you chose not to receive security updates, click the "Yes" button on the warning dialog.



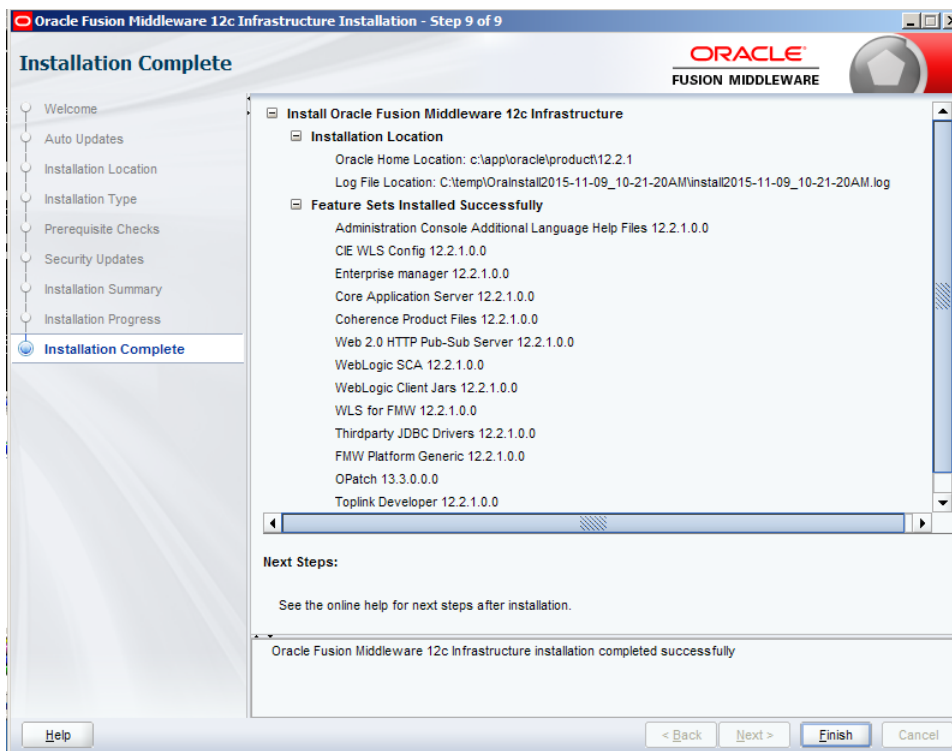
Click the "Install" button.



Wait for the installation to complete, and then click the "Next" button.

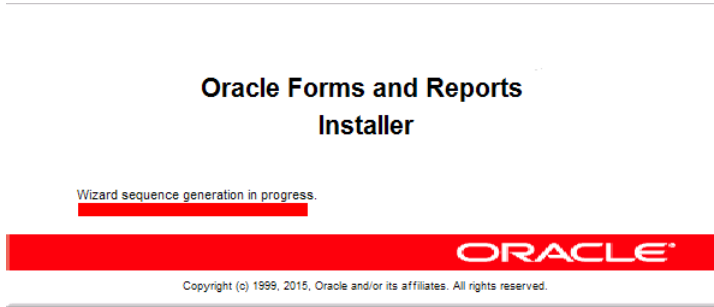


Once the installation complete, click the "Finish" button.



Oracle Forms and Reports 12c (12.2.1) Installation

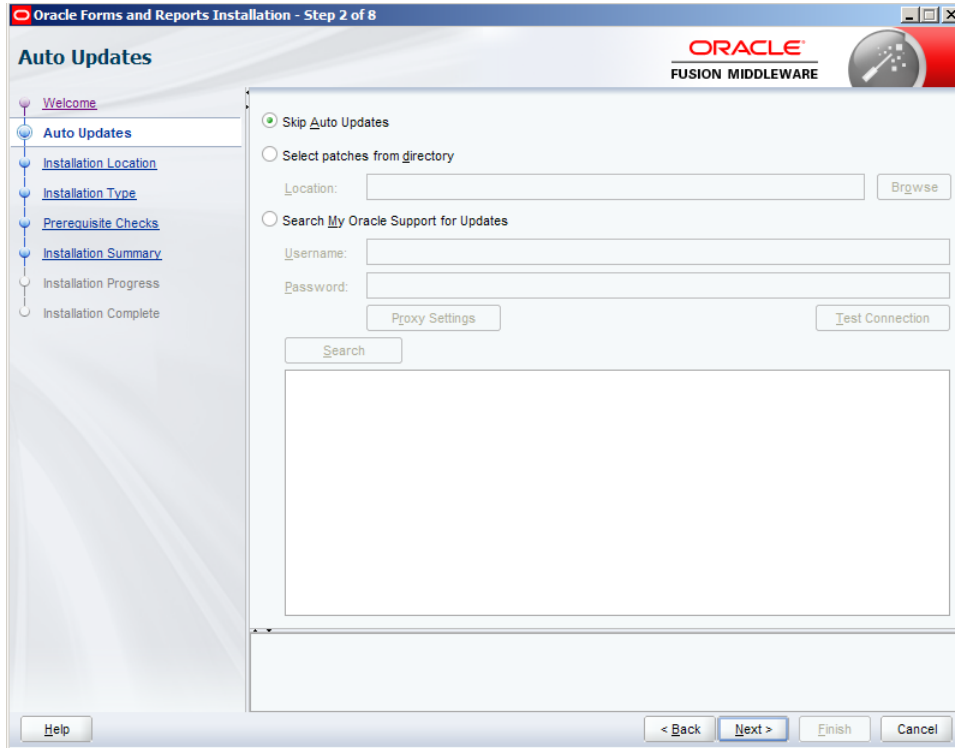
```
c:\media> unzip fmw_12.2.1.0.0_fr_linux64_Disk1_1of1.zip  
c:\media> setup_fmws_12.2.1.0.0_fr_win64.exe
```



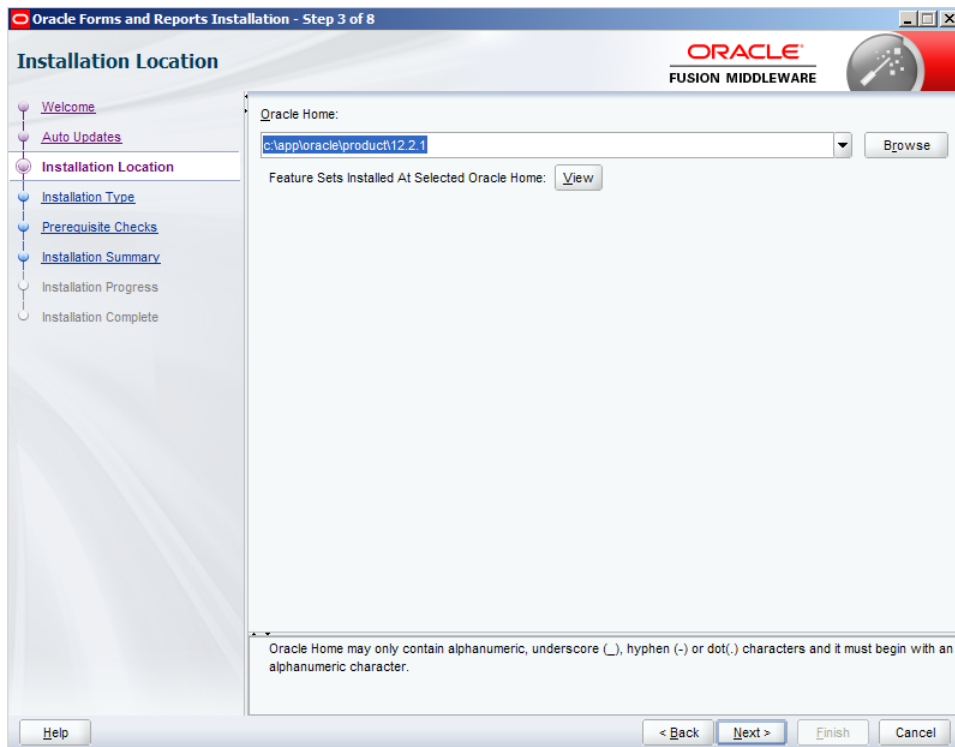
Click the "Next" button on the Welcome screen.



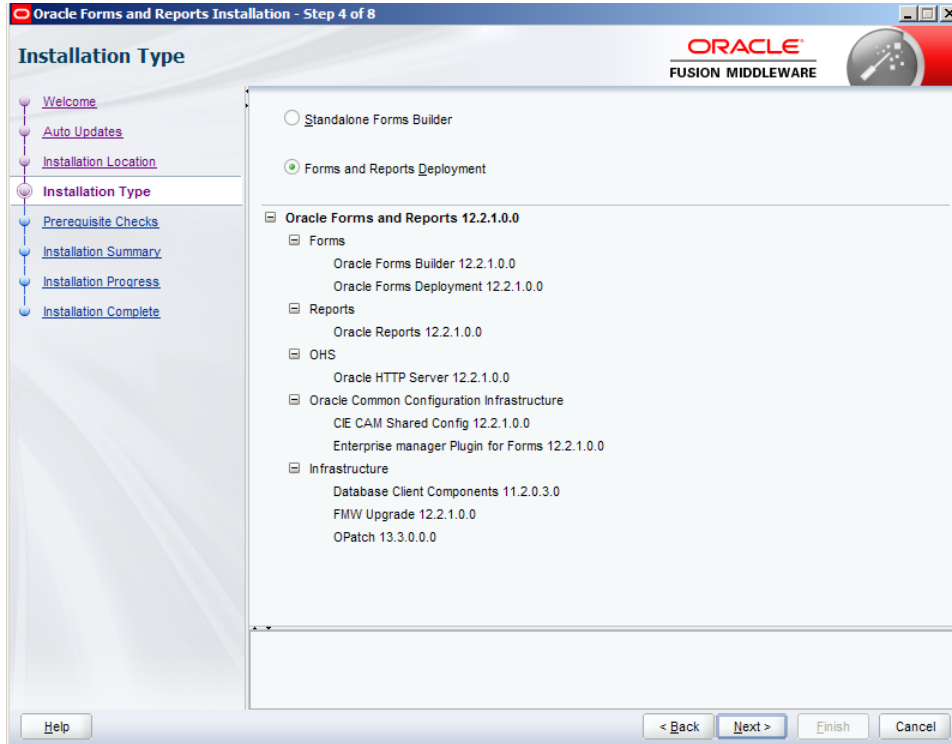
Select the "Skip Auto Updates" radio group, then click the "Next" button.



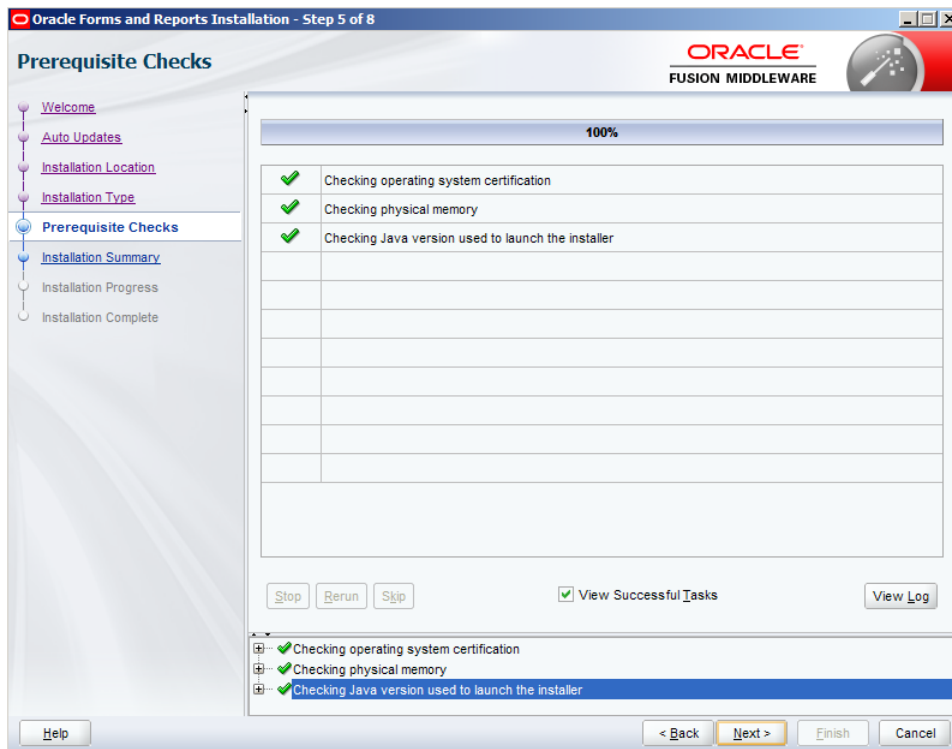
Enter the path for a previously installed 12.2.1 middleware home, then click the "Next" button.



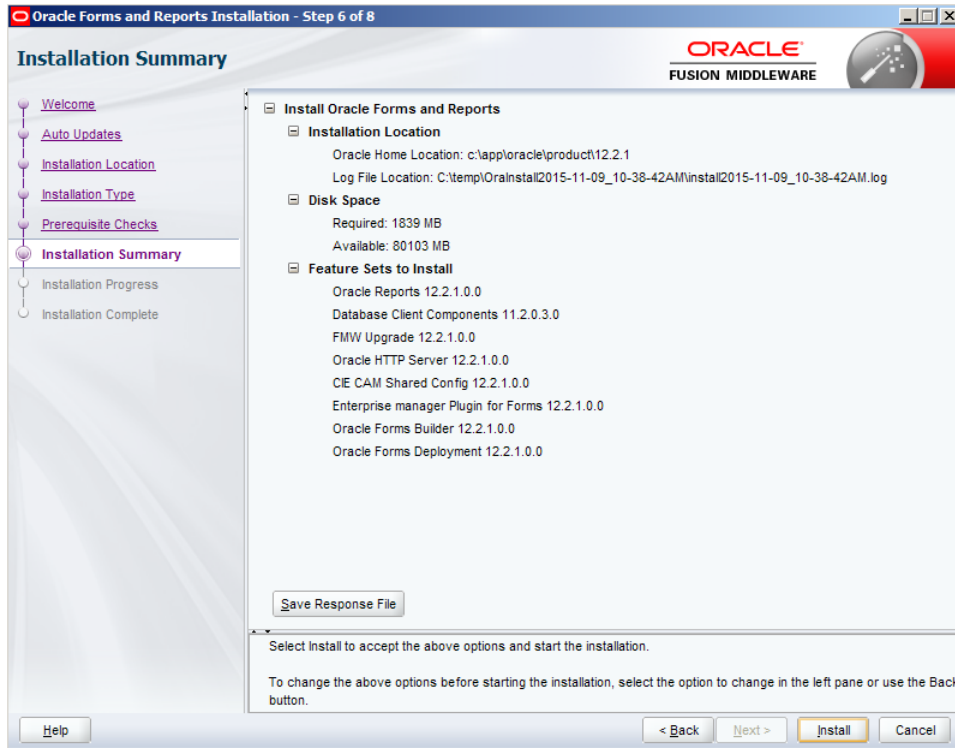
Select the "Forms and Reports Deployment" option, then click the "Next" button.



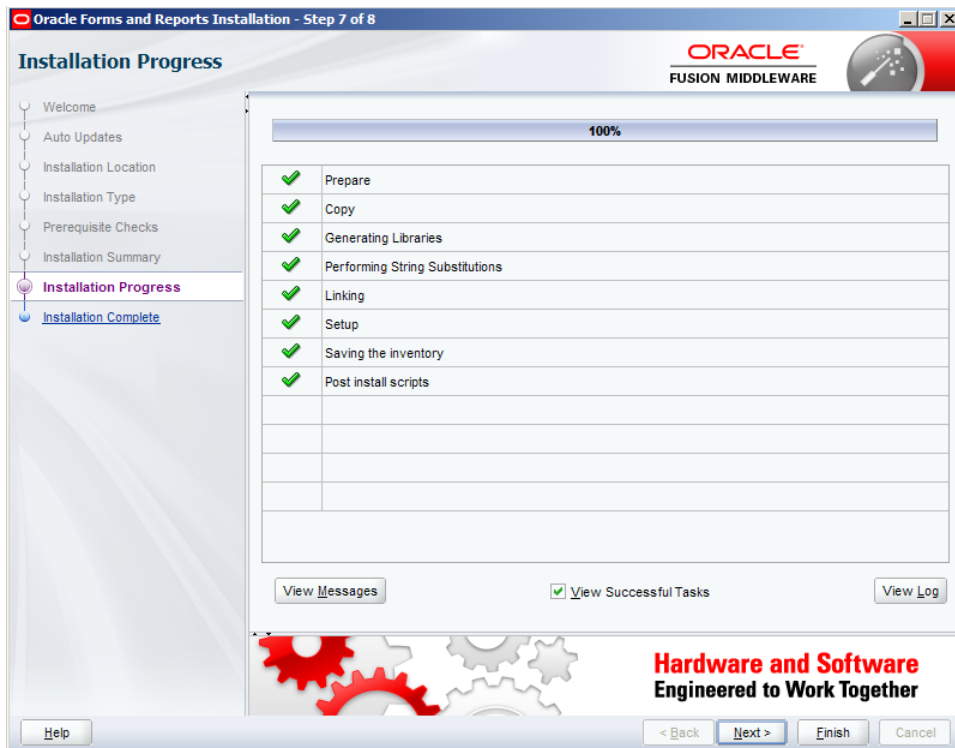
If the prerequisites were successful, click the "Next" button.



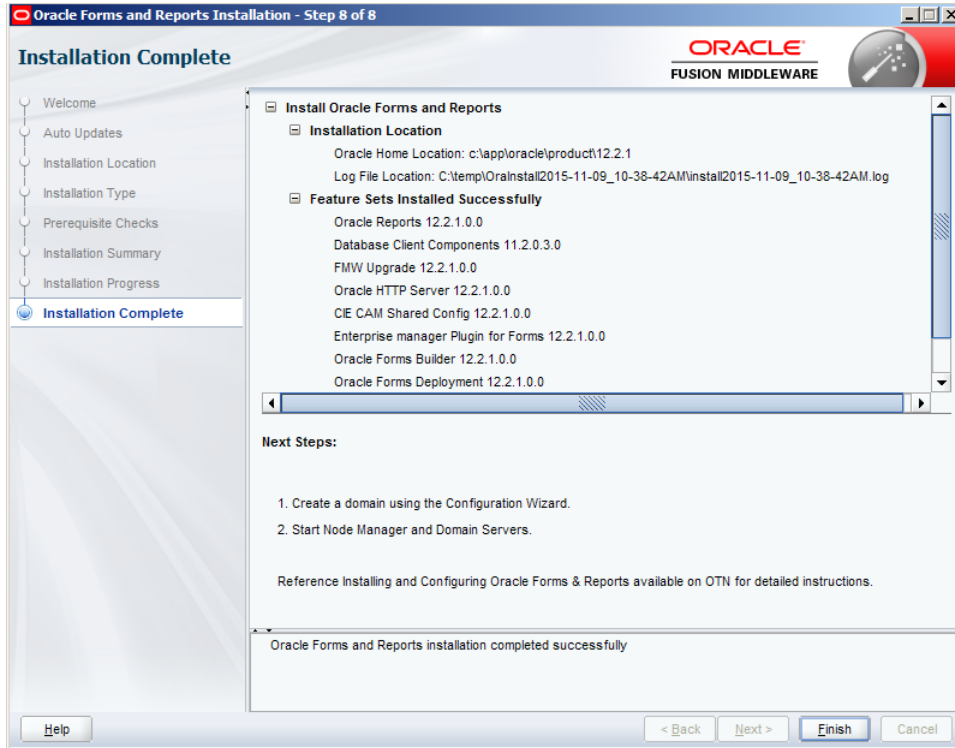
click the "Install" button.



Once the installation complete, click the "Next" button.



click the "Finish" button.



Your installation is now complete.

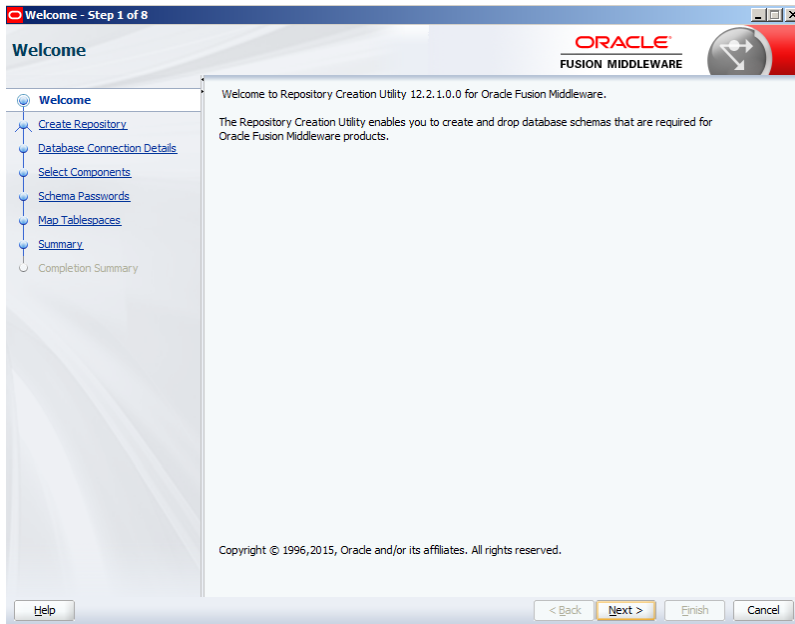
Unlike previous versions, where the Forms and Reports Services installation automatically created the domain, in 12c you need to create repository and configure domain manually.

Repository Configuration Utility (RCU)

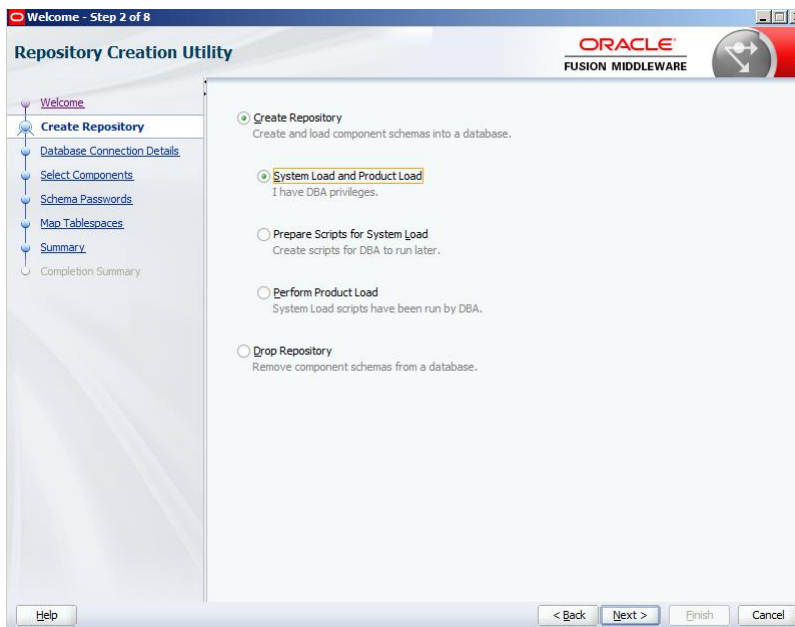
Start the Repository Configuration Utility (RCU).

C:\app\oracle\product\12.2.1\oracle_common\bin\rcu.bat

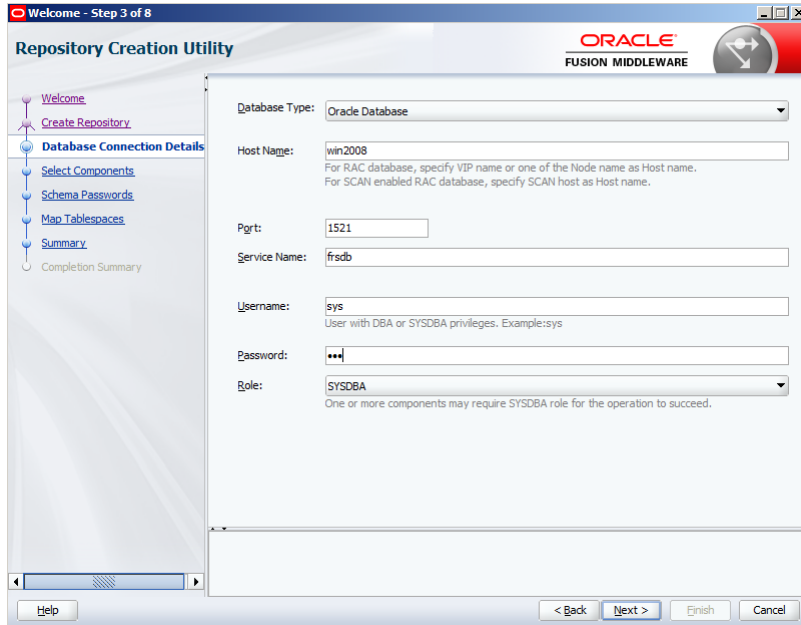
Click the "Next" button on the welcome page.



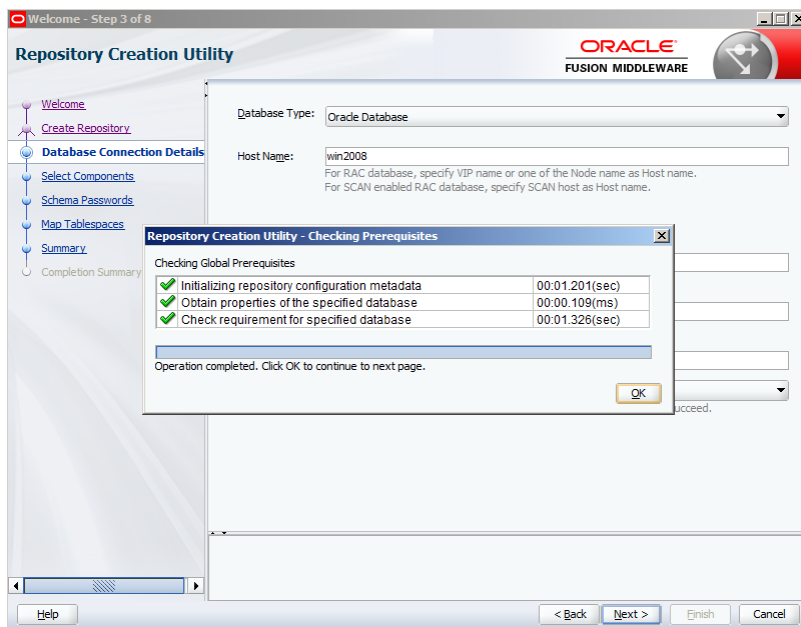
Accept the "Create Repository" and "System Load and Product Load" options by clicking the "Next" button.



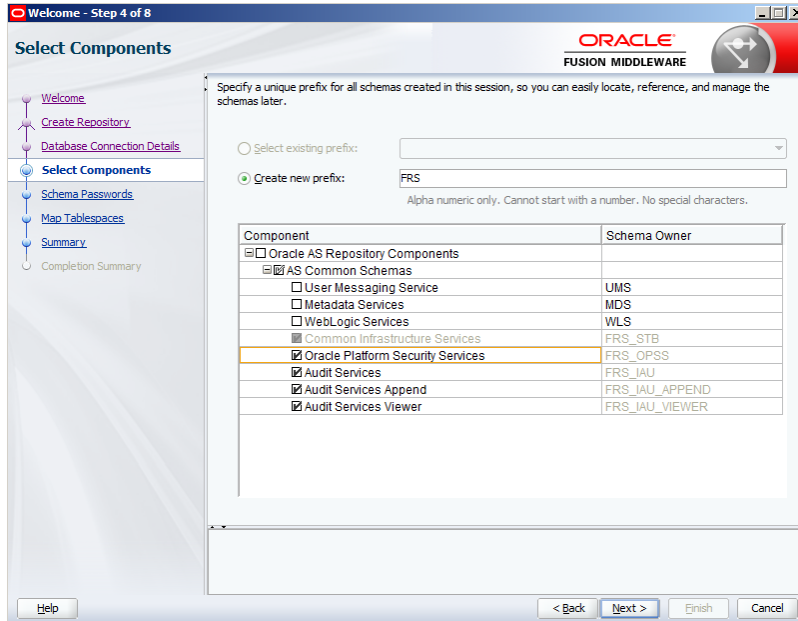
Enter the database connection details and click the "Next" button.



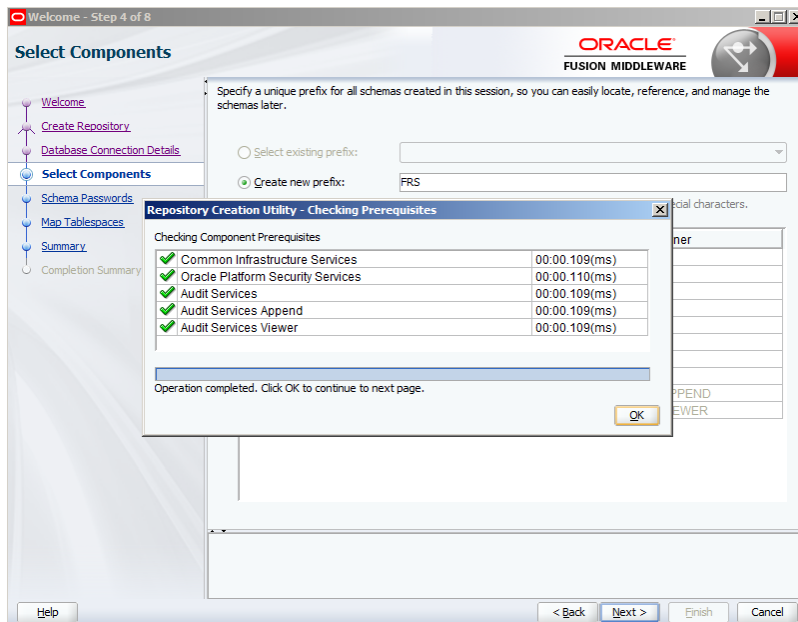
If all the prerequisite checks are successful, click the "OK" button.



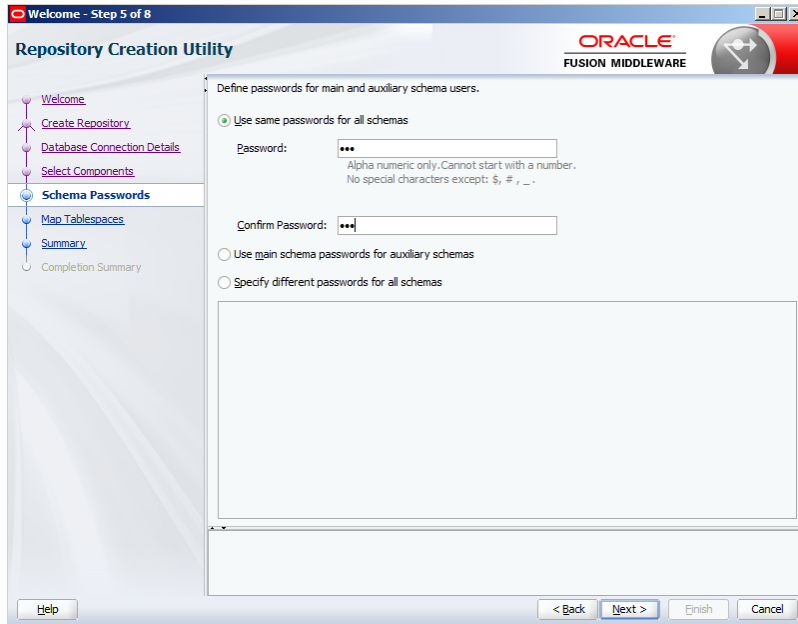
Enter a schema prefix, select the components of interest and click the "Next" button. For Forms and Reports Services, you should check the "Oracle Platform Security Services" option, which will automatically select others.



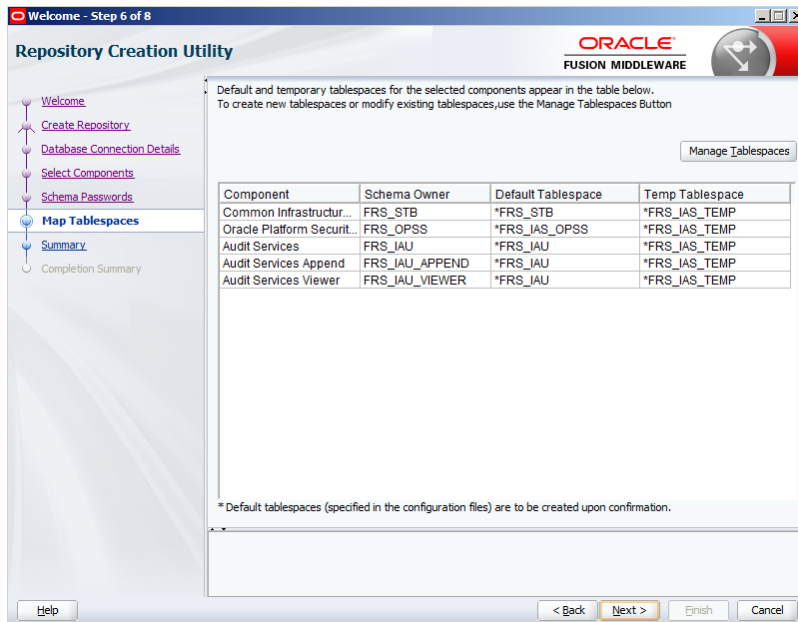
If all the prerequisite checks are successful, click the "OK" button.



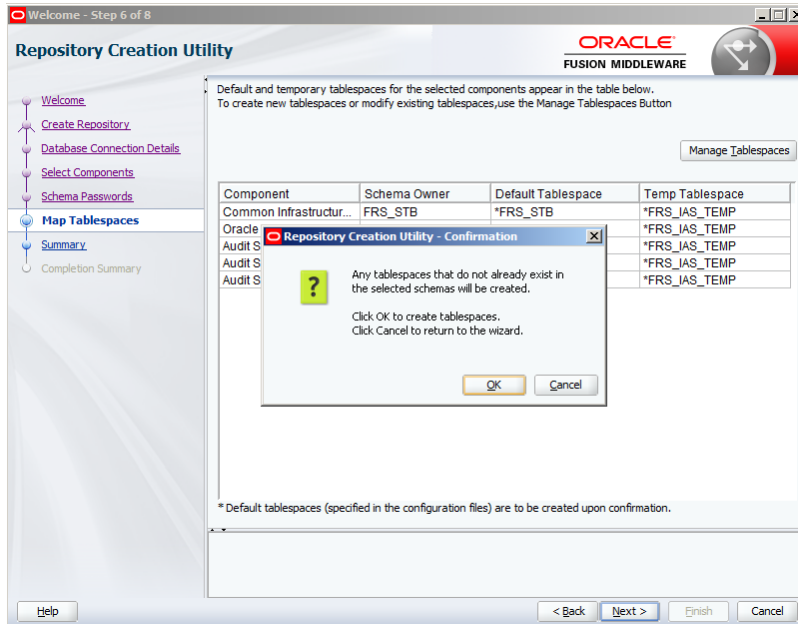
Enter the credentials for the schemas and click the "Next" button.



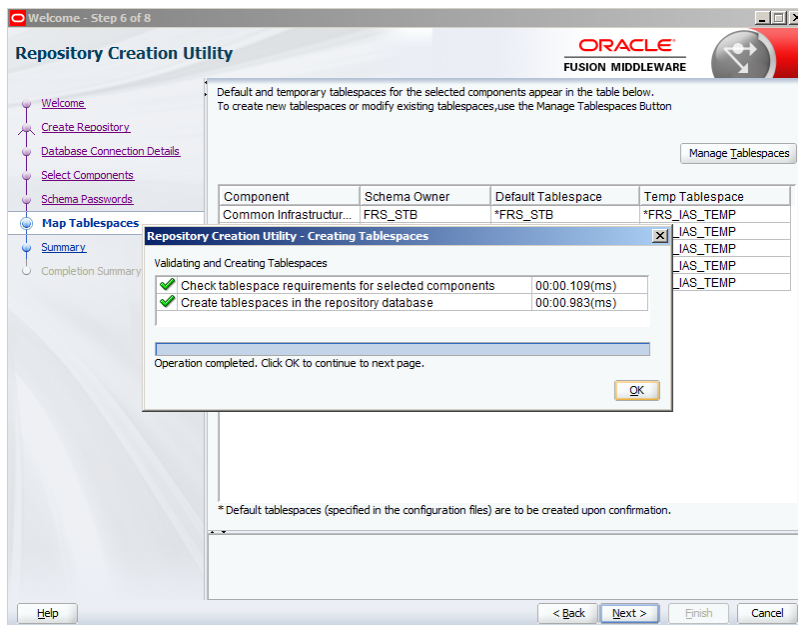
Optionally the "Manage Tablespaces" button if you want, or accept the defaults by clicking the "Next" button.



Accept the tablespace creation confirmation by clicking the "OK" button.



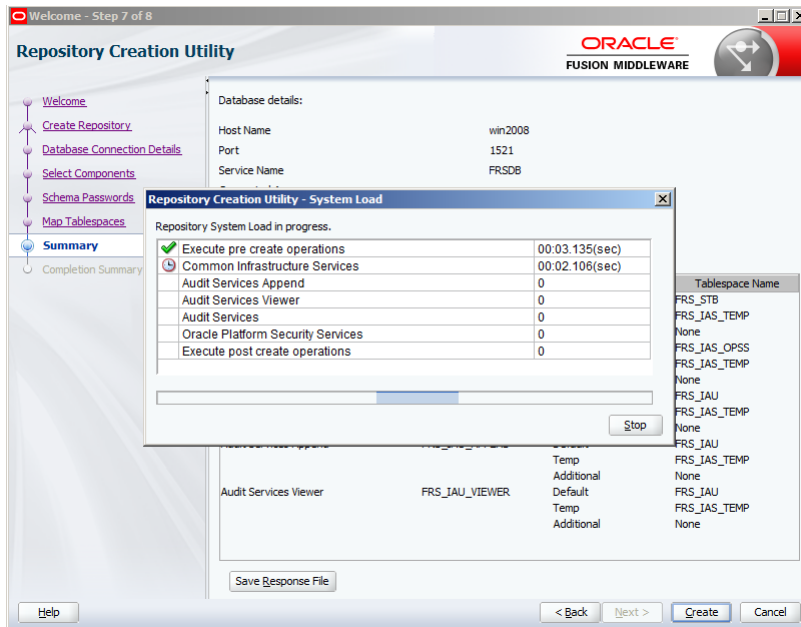
Once the tablespaces are created click the "OK" button.



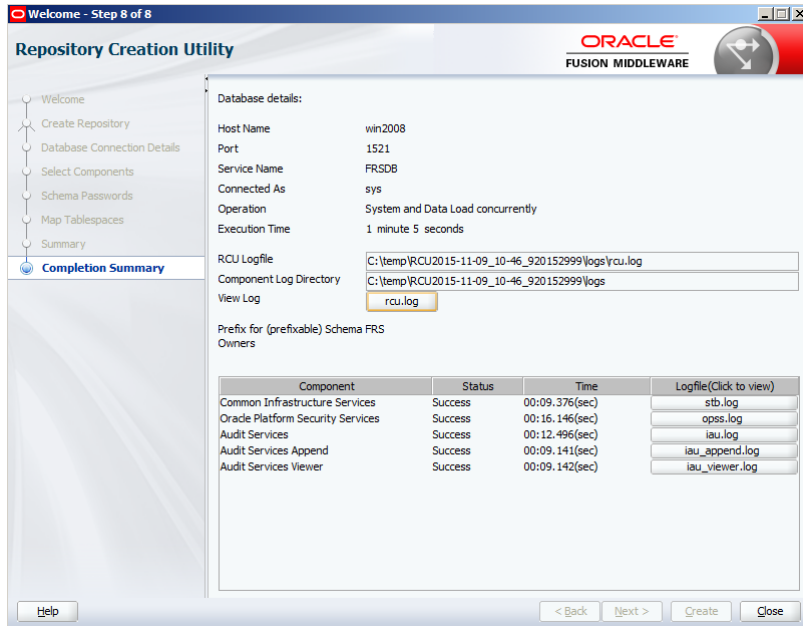
click the "Create" button.



Wait while the repository creation finish.



Exit the RCU by clicking the "Close" button.



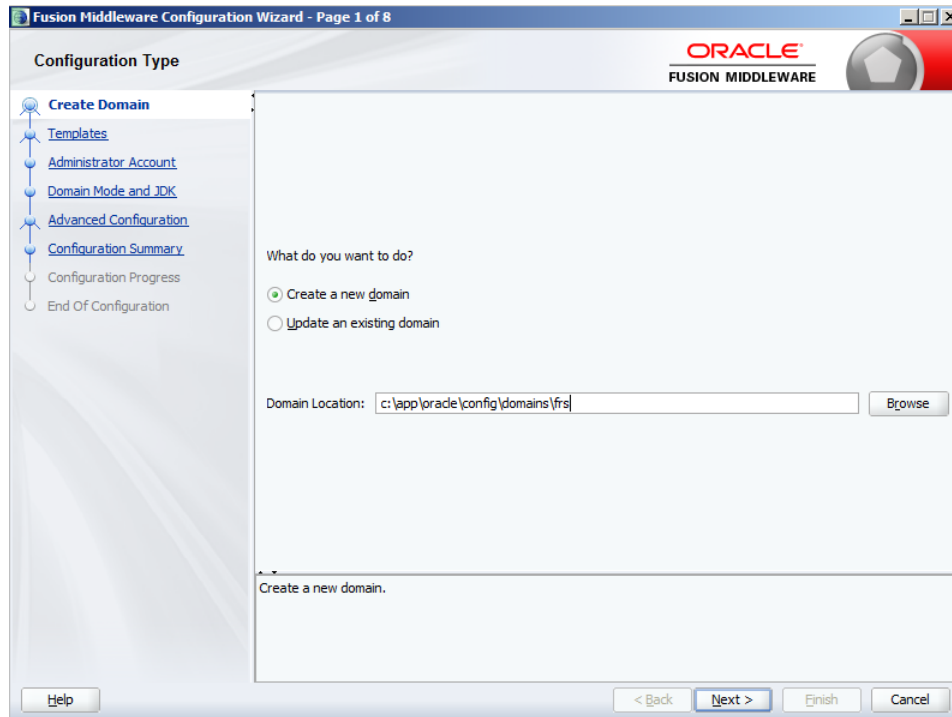
The repository creation is complete.

Create Domain

Launch the Configuration Wizard with the following command.

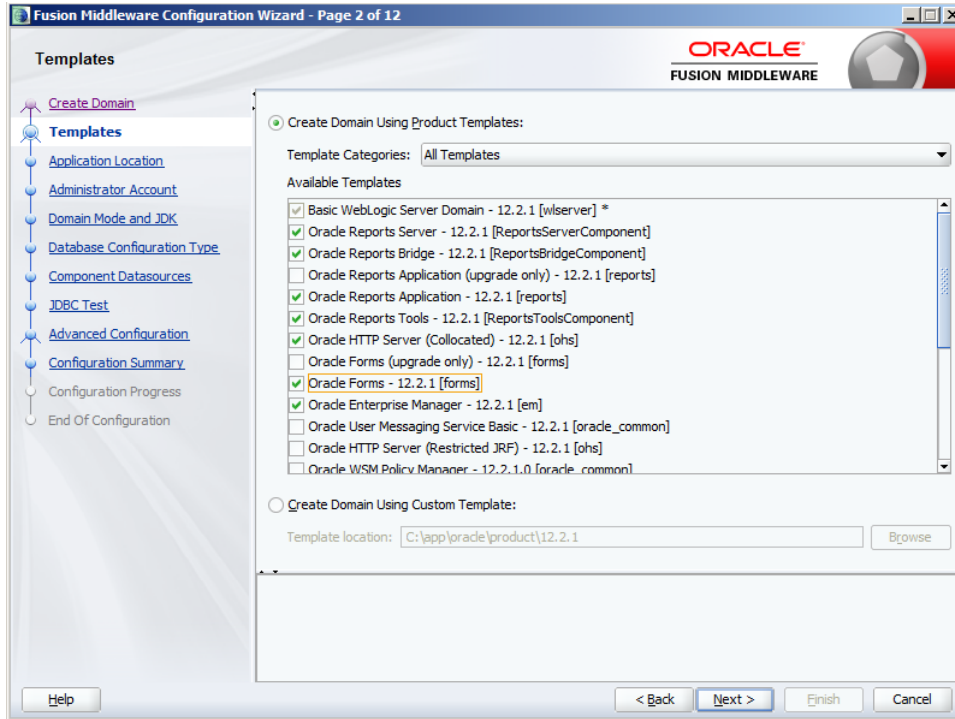
```
C:\app\oracle\product\12.2.1\oracle_common\common\bin\config.cmd
```

Accept the "Create a new domain" option, enter the domain name at the end of the "Domain Location", then click the "Next" button. In this case my domain was called "frs", so the path I used was "c:\app\oracle\config\domains\frs".

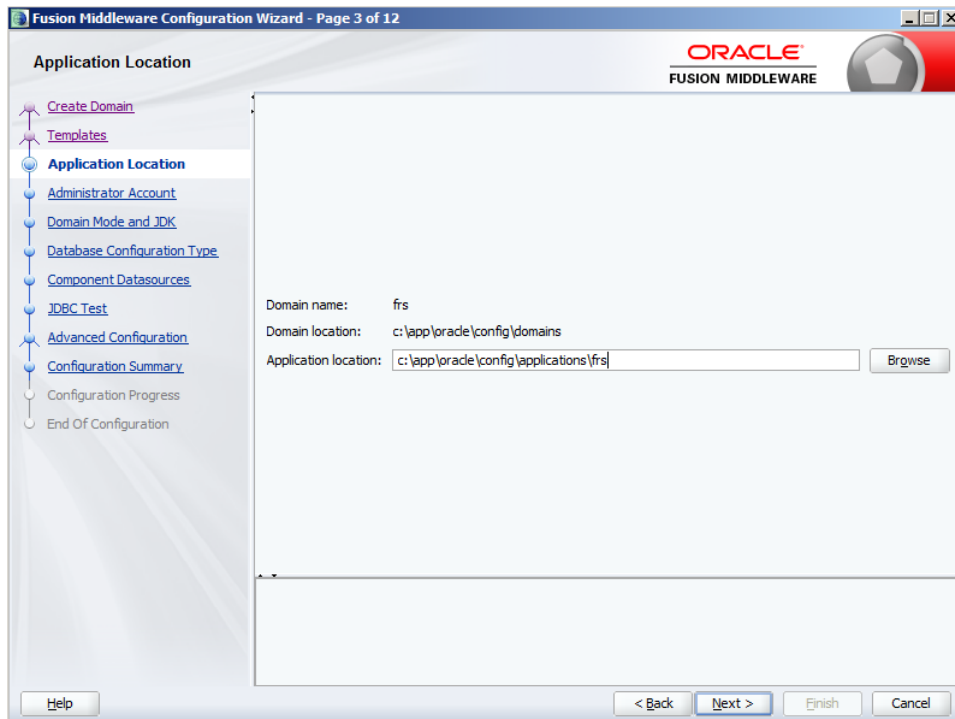


Select the required product templates and click the "Next" button. In this case, we need the following, which will bring some dependencies with them.

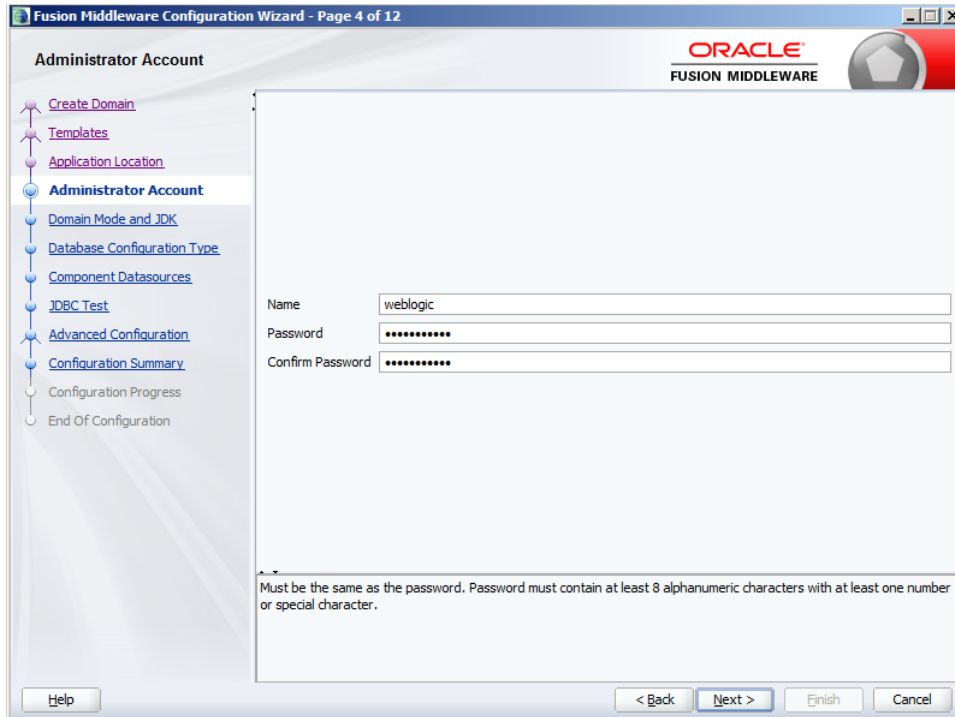
- Oracle Reports Server - 12.2.1 [ReportsServerComponent]
- Oracle Reports Bridge - 12.2.1 [ReportsBridgeComponent]
- Oracle Reports Application - 12.2.1 [reports]
- Oracle Reports Tools - 12.2.1 [ReportsToolsComponent]
- Oracle HTTP Server (Collocated) - 12.2.1 [ohs]
- Oracle Forms - 12.2.1 [forms]



Enter the application location and click the "Next" button. I used "c:\app\oracle\config\applications\frs".

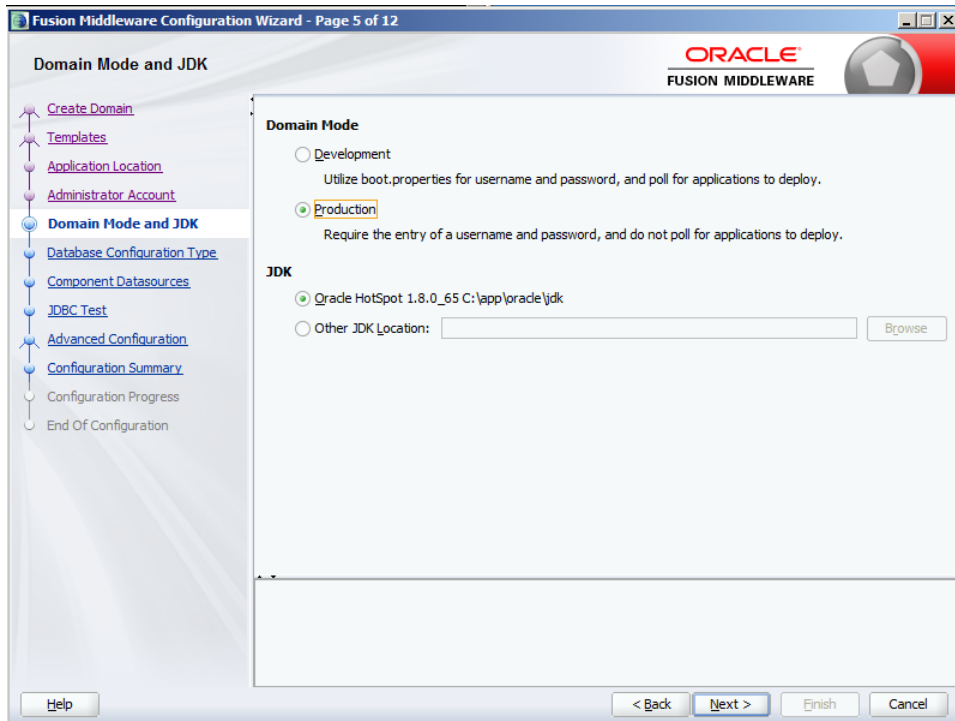


Enter the admin name and password then click the "Next" button.



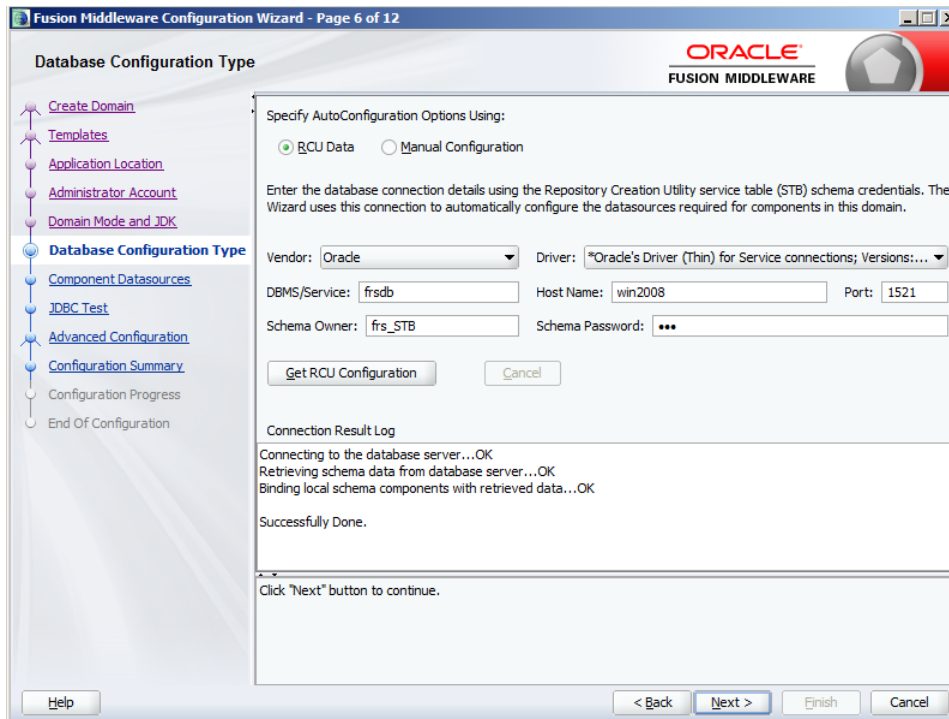
The screenshot shows the "Administrator Account" configuration screen in the Fusion Middleware Configuration Wizard. The left sidebar contains a navigation tree with the following items: Create Domain, Templates, Application Location, Administrator Account (selected), Domain Mode and JDK, Database Configuration Type, Component Datasources, JDBC Test, Advanced Configuration, Configuration Summary, Configuration Progress, and End Of Configuration. The main area contains three input fields: "Name" with the value "weblogic", "Password" with masked characters, and "Confirm Password" with masked characters. Below the fields is a note: "Must be the same as the password. Password must contain at least 8 alphanumeric characters with at least one number or special character." At the bottom, there are buttons for "< Back", "Next >", "Finish", and "Cancel".

Enter the domain mode and JDK details, then click the "Next" button.

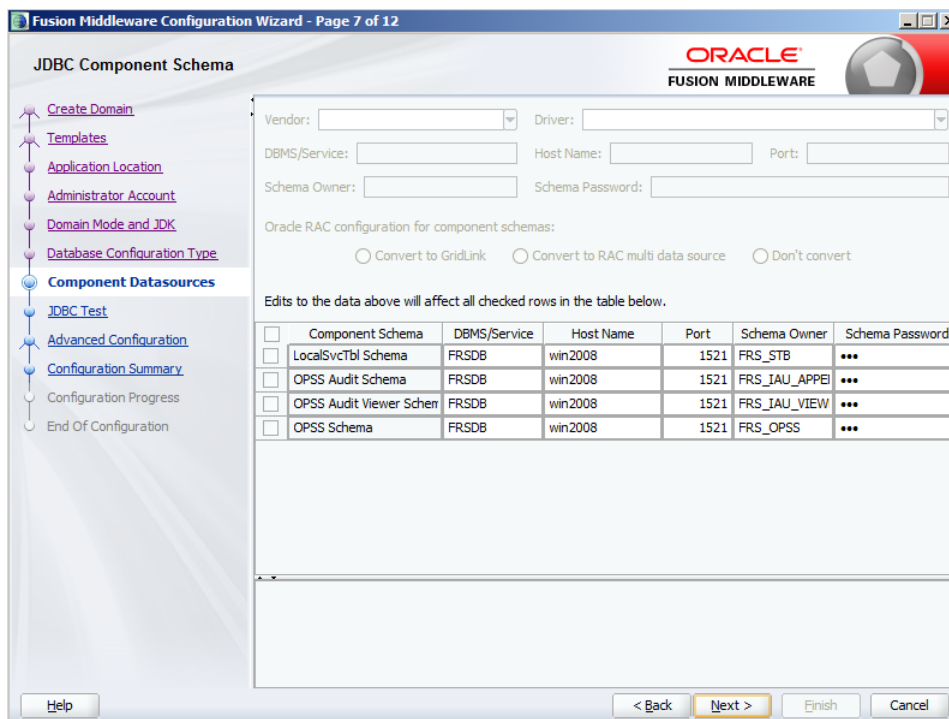


The screenshot shows the "Domain Mode and JDK" configuration screen in the Fusion Middleware Configuration Wizard. The left sidebar contains a navigation tree with the following items: Create Domain, Templates, Application Location, Administrator Account, Domain Mode and JDK (selected), Database Configuration Type, Component Datasources, JDBC Test, Advanced Configuration, Configuration Summary, Configuration Progress, and End Of Configuration. The main area is divided into two sections: "Domain Mode" and "JDK". Under "Domain Mode", there are two radio buttons: "Development" (unselected) and "Production" (selected). Under "JDK", there are two radio buttons: "Oracle HotSpot 1.8.0_65 C:\app\oracle\jdk" (selected) and "Other JDK Location:" (unselected) with a text input field and a "Browse" button. At the bottom, there are buttons for "< Back", "Next >", "Finish", and "Cancel".

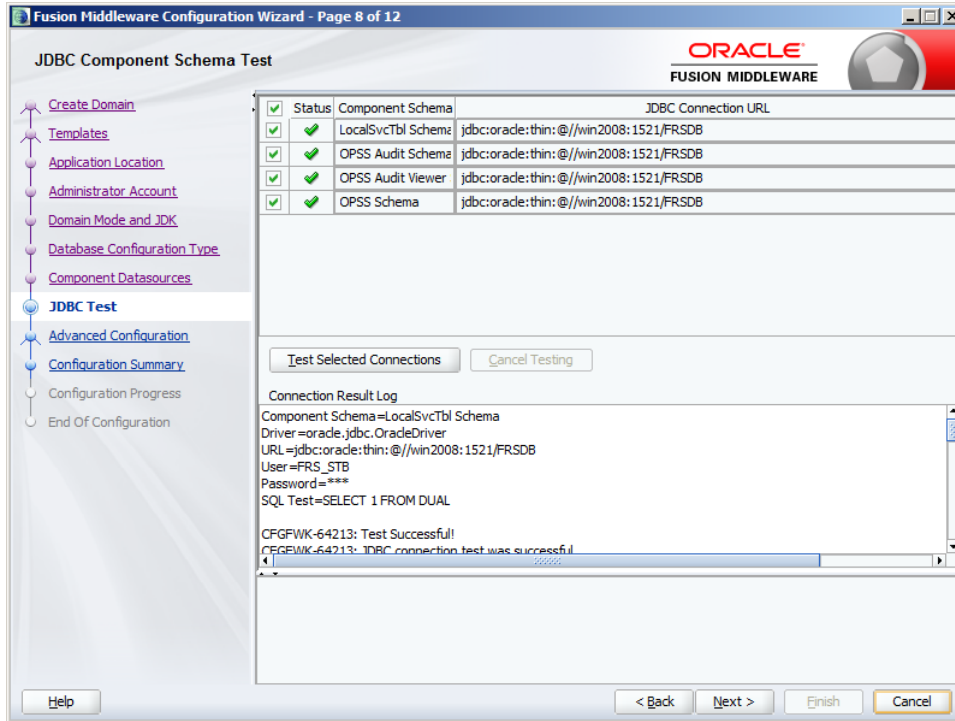
Enter the repository database connection details and click the "Get RCU Configuration" button. If the connection is successful, click the "Next" button.



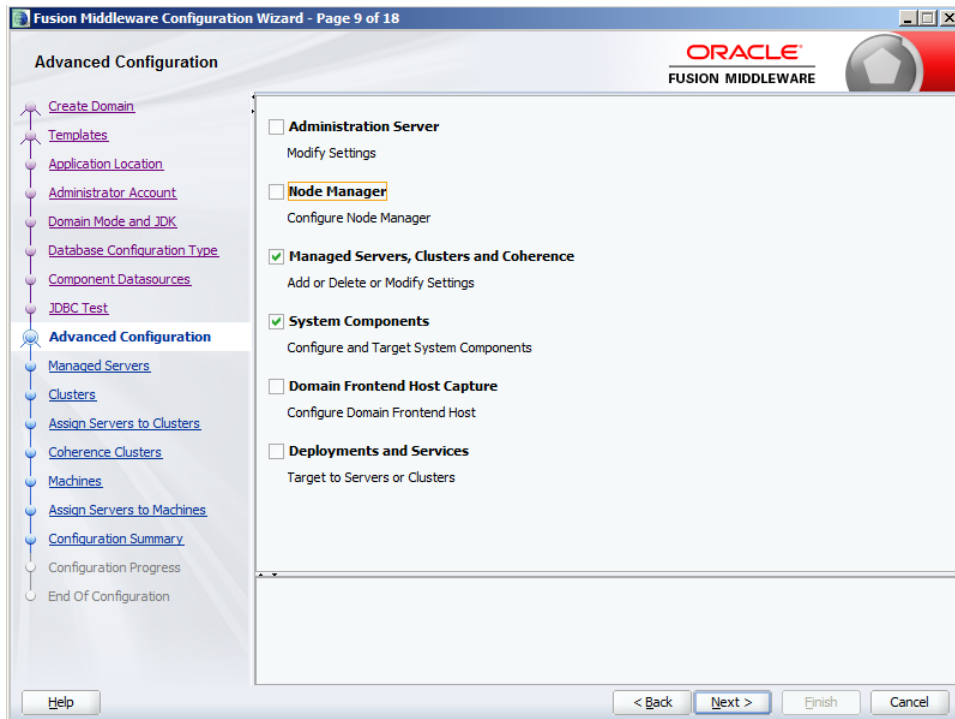
If you used the same password for all schemas, click the "Next" button. If not, fill in the correct passwords first.



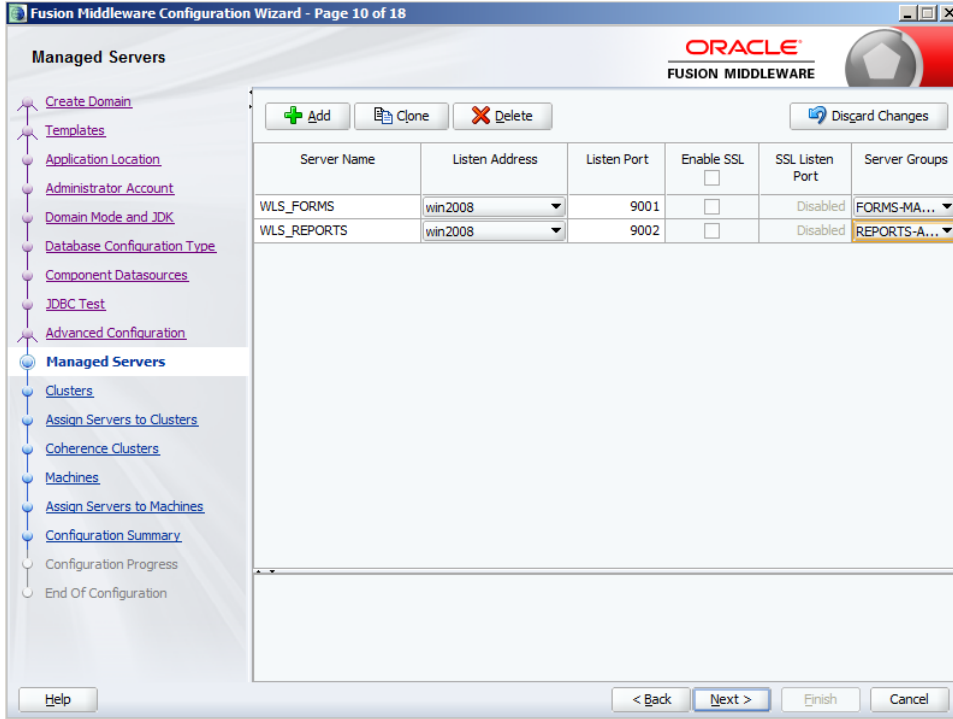
If all the connection tests were successful, click the "Next" button.



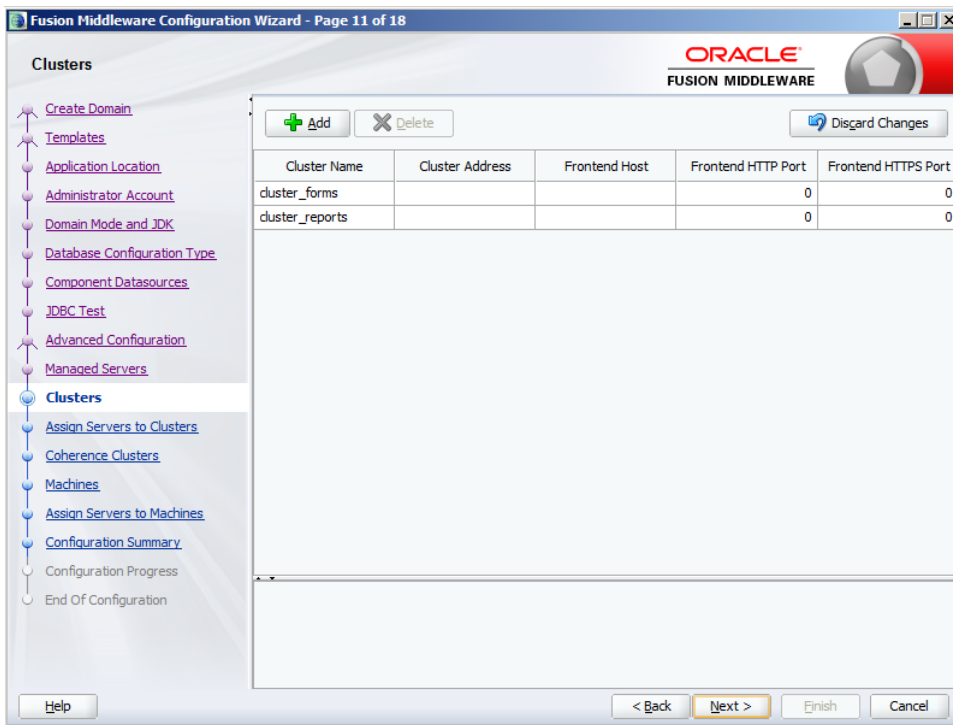
Select the "Managed Servers, Clusters and Coherence" and "System Components" options, then click the "Next" button.



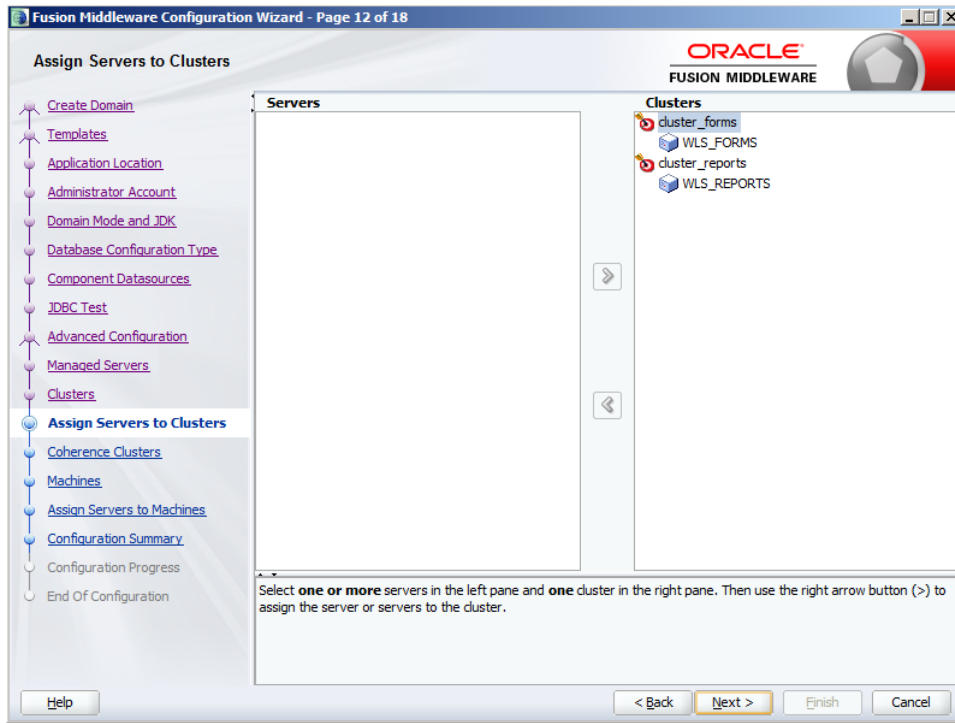
Enter the details for one or more managed servers, then click the "Next" button.



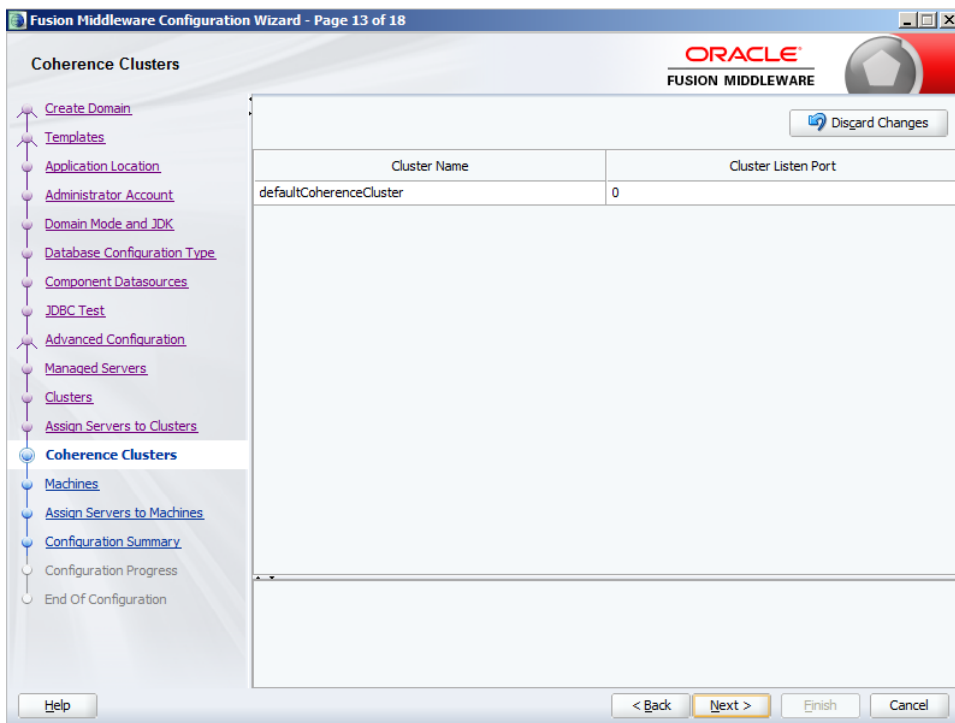
accept the default cluster settings by clicking the "Next" button.



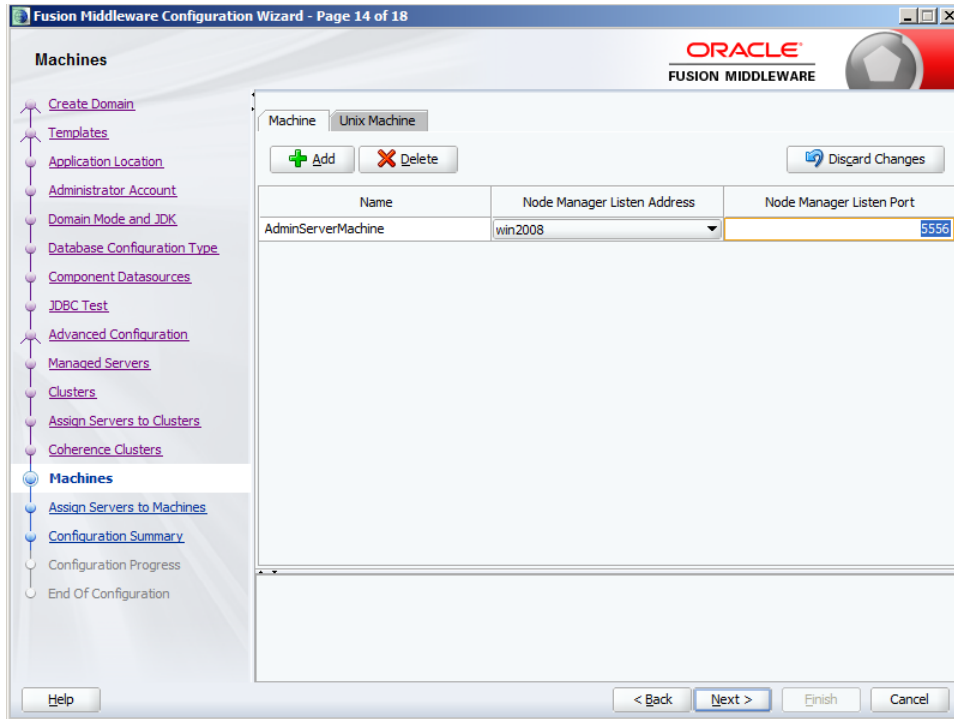
accept the default managed server to cluster assignments by clicking the "Next" button.



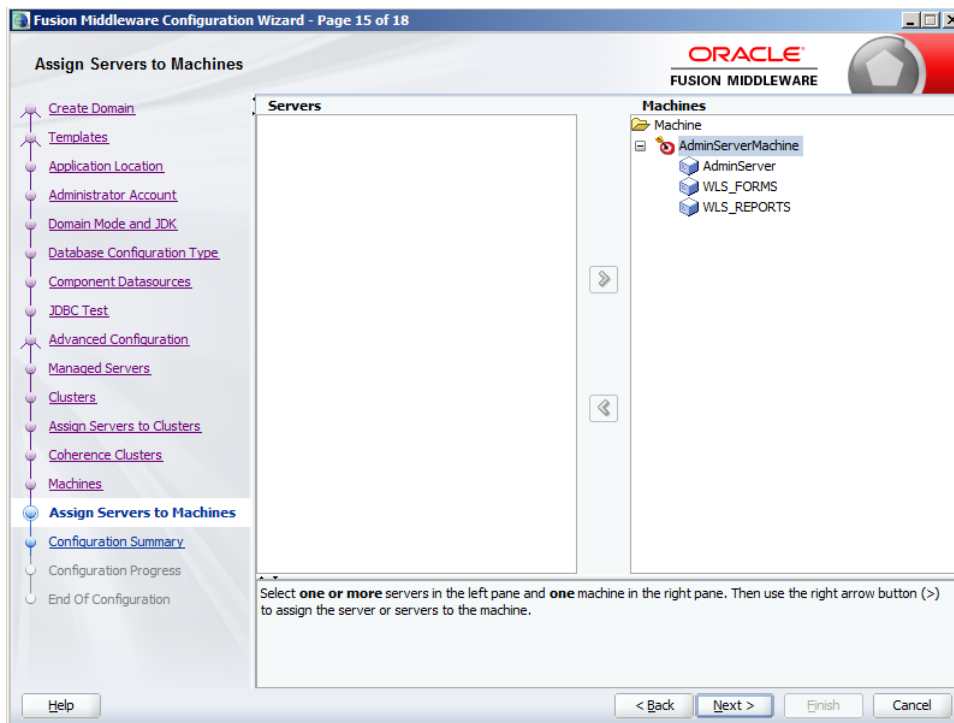
Accept the default coherence configuration by clicking the "Next" button.



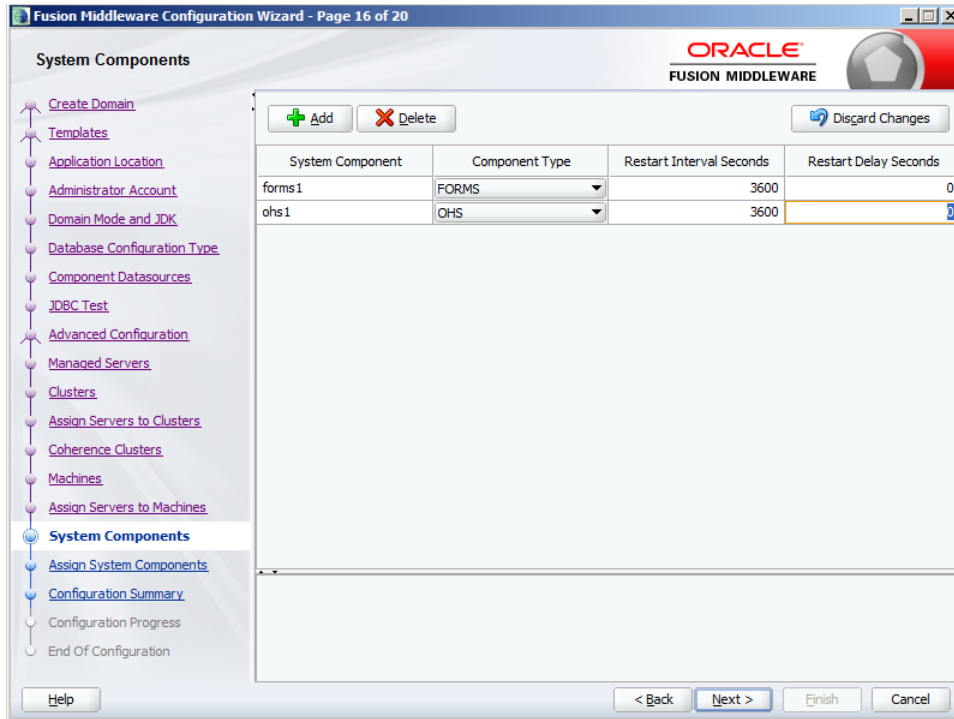
accept the defaults by clicking the "Next" button.



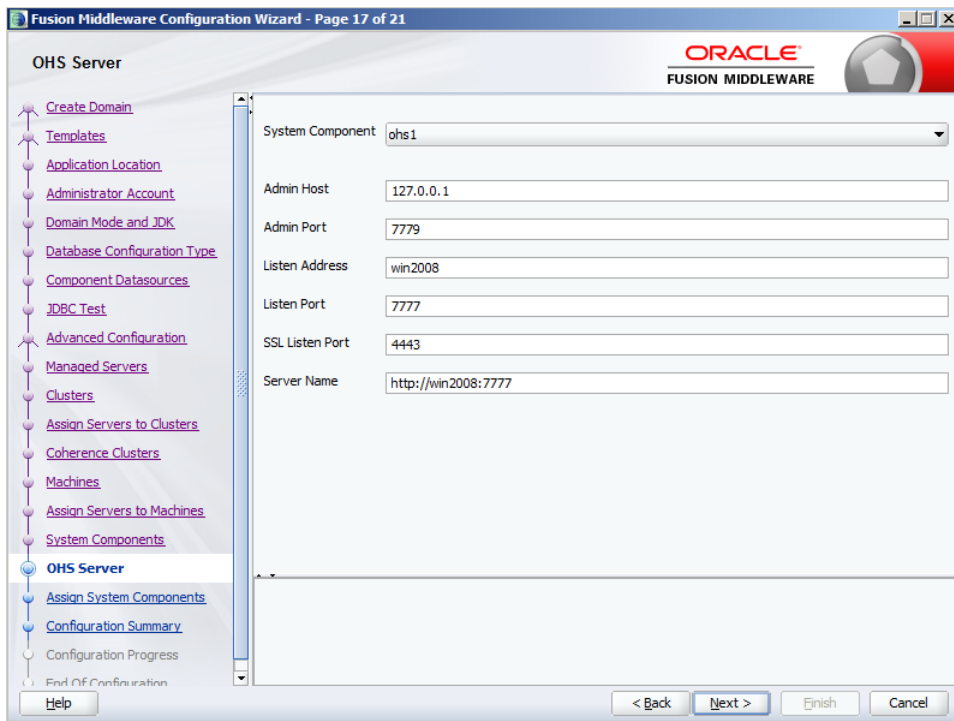
Map AdminServer to AdminSeverMachine then click "Next" button.



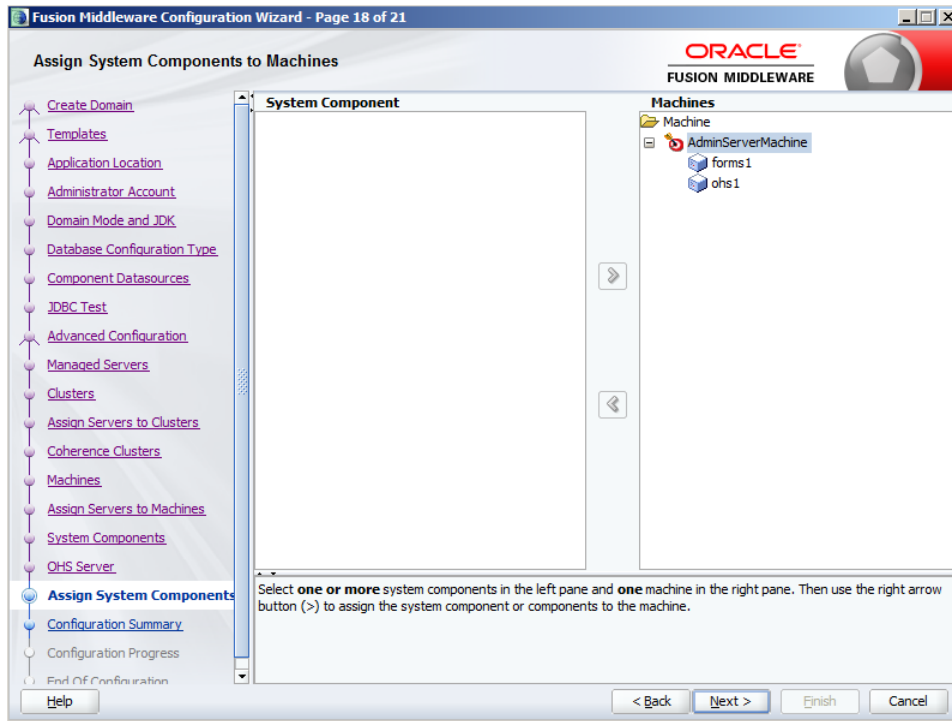
Click the "+ Add" button to add the OHS component (ohs1), then click the "Next" button.



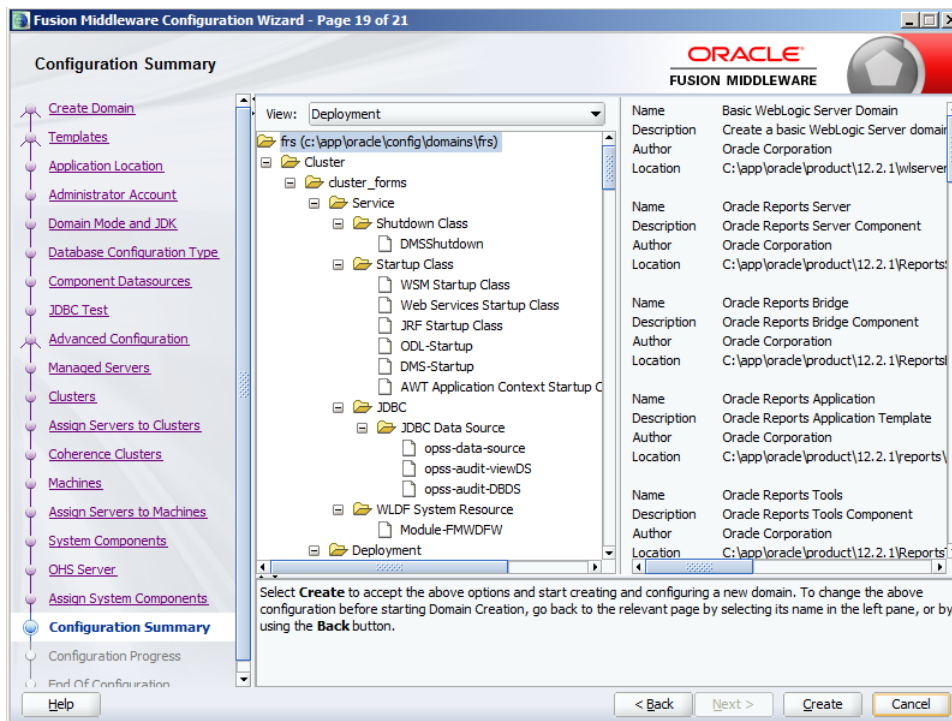
Accept the default settings for the OHS Server component by clicking the "Next" button.



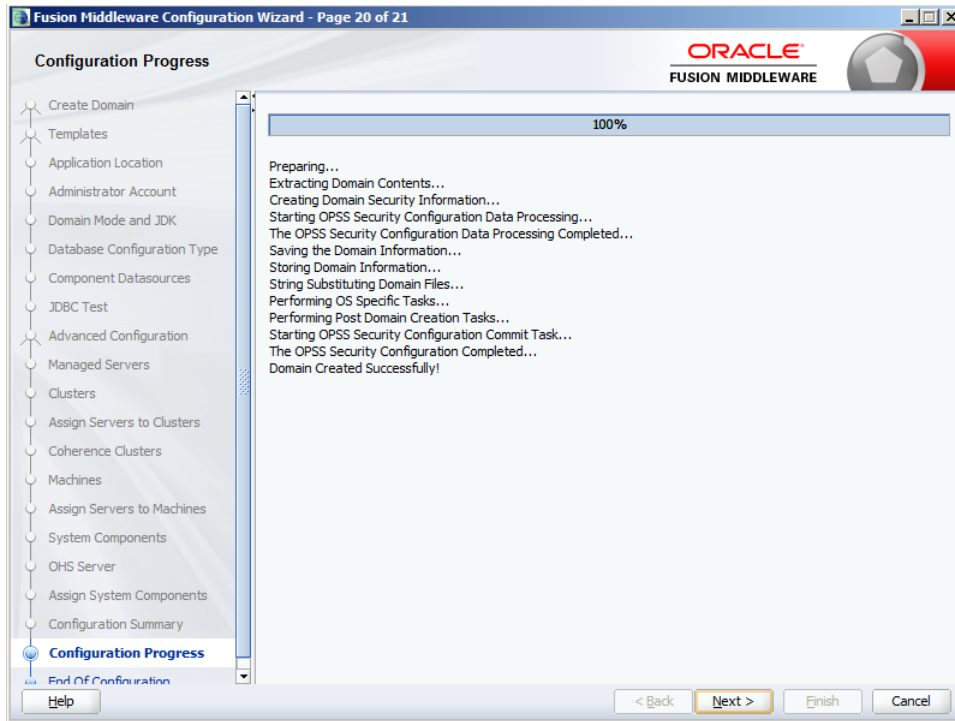
Map the system components to the managed server that controls them. Click the "Next" button.



click the "Create" button.



Once the domain is created, click the "Next" button.



Make a note of the Admin Server URL and click the "Finish" button.



Additional Configuration

If you chose the "Production Mode" options for the domain, you will need to create a "boot.properties" file for the scripts referred to later to work without credentials. Adjust the DOMAIN_HOME and credentials appropriately.

```
C:\>mkdir C:\app\oracle\config\domains\frs\servers\AdminServer\security
C:\>echo username=weblogic> C:\app\oracle\config\domains\frs\servers\AdminServer\security\boot.properties
C:\>echo password=weblogic123>> C:\app\oracle\config\domains\frs\servers\AdminServer\security\boot.properties

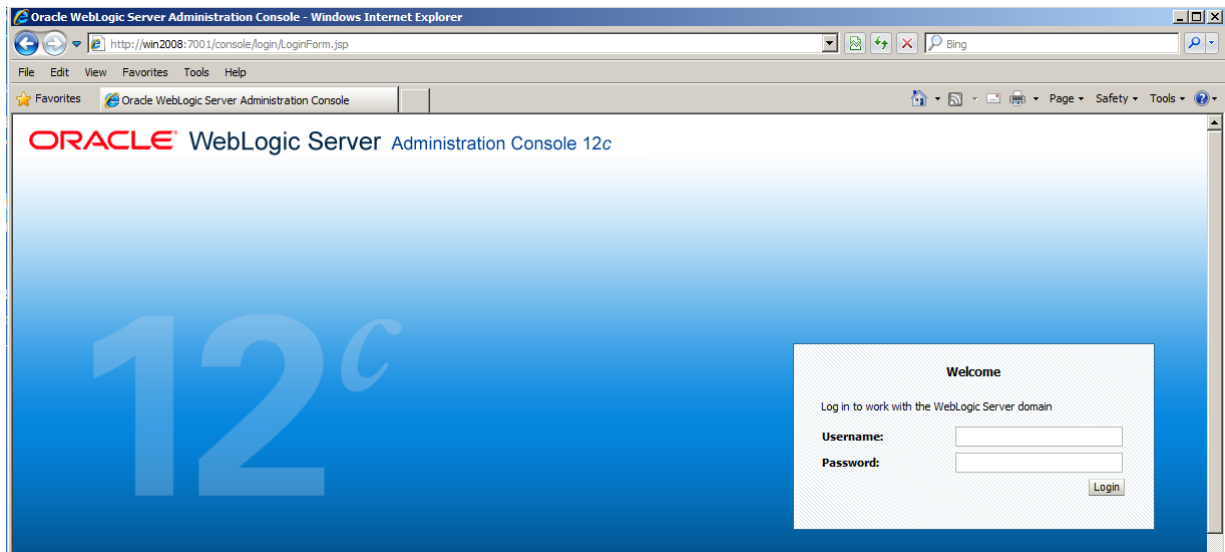
C:\>mkdir C:\app\oracle\config\domains\frs\servers\WLS_FORMS\security
C:\>echo username=weblogic> C:\app\oracle\config\domains\frs\servers\WLS_FORMS\security\boot.properties
C:\>echo password=weblogic123>> C:\app\oracle\config\domains\frs\servers\WLS_FORMS\security\boot.properties

C:\>mkdir C:\app\oracle\config\domains\frs\servers\WLS_REPORTS\security
C:\>echo username=weblogic> C:\app\oracle\config\domains\frs\servers\WLS_REPORTS\security\boot.properties
C:\>echo password=weblogic123>> C:\app\oracle\config\domains\frs\servers\WLS_REPORTS\security\boot.properties
```

The "c:\app\oracle\config\domains\frs" directory now contains a script that can be used to start the server. Remember to use the "&" if you want access to the command line to be returned.

```
C:\app\oracle\config\domains\frs\startWebLogic.cmd
```

Once the server is started you can access the administrator console using the "http://hostname:port/console" URL. Log in using the username and password provided in the previous step.



Start/Stop Weblogic

Use following commands to start/stop Weblogic:

```
# Start NodeManager
C:\app\oracle\config\domains\frs\bin\startNodeManager.cmd

# Start WebLogic Domain
C:\app\oracle\config\domains\frs\bin\startWebLogic.cmd
# Start the managed Servers
C:\app\oracle\config\domains\frs\bin\startManagedWebLogic.cmd WLS_FORMS
C:\app\oracle\config\domains\frs\bin\startManagedWebLogic.cmd
WLS_REPORTS

# Stop the managed Servers
C:\app\oracle\config\domains\frs\bin\stopManagedWebLogic.cmd WLS_FORMS
C:\app\oracle\config\domains\frs\bin\stopManagedWebLogic.cmd WLS_REPORTS

# Stop WebLogic Domain
C:\app\oracle\config\domains\frs\bin\stopWebLogic.cmd
```

HTTP Setup

Since OPMN is no longer used, starting the HTTP Server must be done using the Enterprise Manager console as below.

- Log into the Enterprise Manager console.
- Click on the "Target Navigation" icon.
- Expand the "HTTP Server" node.
- Click on the "ohs1" instance.
- The "ohs1" page has "Start Up" and "Shut Down" links at the top.

If you have any problems starting the OHS, start nodemanager and try again.

if HTTP Server fails to start even after starting nodemanager then try installing the following windows patches:

<http://www.microsoft.com/en-us/download/confirmation.aspx?id=30679>

<http://www.microsoft.com/en-us/download/details.aspx?id=16771>

<http://www.microsoft.com/en-us/download/details.aspx?id=2092>

The HTTP Server must be started once, for the directories associated with "ohs1" instance to be created. The web tier is not configured by default, so you will need to do the following.

Edit the "C:\app\oracle\product\12.2.1\forms\templates\config\forms.conf" file to contain the following.

```
<Location /forms>
  SetHandler weblogic-handler
  WebLogicHost win2008
  WebLogicPort 9001
</Location>
```

Edit the "C:\app\oracle\product\12.2.1\reports\conf\reports_ohs.conf" file to contain the following.

```
<Location /reports>
  SetHandler weblogic-handler
  WebLogicHost win2008
  WebLogicPort 9002
</Location>
```

Copy the config files to the "moduleconf" directory under the "ohs1" instance.

```
copy C:\app\oracle\product\12.2.1\forms\templates\config\forms.conf
C:\app\oracle\config\domains\frs\config\fmwconfig\components\OHS\instances\ohs1\moduleconf

copy C:\app\oracle\product\12.2.1\reports\conf\reports_ohs.conf
C:\app\oracle\config\domains\frs\config\fmwconfig\components\OHS\instances\ohs1\moduleconf
```

Restart the HTTP Server to take effect.

Opening Forms builder:

C:\app\oracle\product\12.2.1\bin\frmblde.exe

Opening Reports builder:

You need to perform the following steps one time after installation in order to start reports builder

1- Execute wlst.cmd from C:\app\oracle\product\12.2.1\oracle_common\common\bin

2- Connect to AdminServer.

```
connect("weblogic","weblogic_password","hostname:7001")
```

3- Run the following wlst command.

```
createReportsToolsInstance(instanceName='reptools1',machine='AdminServerMachine')
```

4- restart WLS_REPORTS

5- At this moment reports builder can be used:

```
C:\app\oracle\config\domains\frs\reports\bin\rwbuilder.bat
```

Create standalone reports server:

1- Execute wlst.cmd from C:\app\oracle\product\12.2.1\oracle_common\common\bin

2- Connect to the AdminServer.

```
connect("weblogic","weblogic_password","hostname:7001")
```

3- Run the following WLST command.

```
createReportsServerInstance(instanceName='my_server1',machine='AdminServerMachine')
```

4- At this point-in-time, the standalone reports server can be used.

Start/Stop reports Server:

Standalone:

```
cd "Domain home"\bin

cd C:\app\oracle\config\domains\frs\bin
startComponent.cmd "Reports Server Name"
or
stopComponent.cmd "Reports Server Name"
```

in-process:

Execute any of the following URLs:
<http://hostname:9002/reports/rwservlet/startserver>
or
<http://hostname:9002/reports/rwservlet/stopserver>

The basic URLs of importance are shown below. Ports may vary between installations.

- Console : <http://localhost:7001/console> (Console)
- Enterprise Manager : <http://localhost:7001/em> (Enterprise Manager)
- Forms <http://localhost:9001/forms/frmservlet> or <http://localhost:7777/forms/frmservlet>
- Reports <http://localhost:9002/reports/rwservlet> or <http://localhost:7777/reports>

Web Start

Oracle Forms can easily be run using Java Web Start, freeing you from issues with browser compatibility. For this to work, you need a Java 8 JRE installed on the PC. To run using Web Start for the first time, simply issue the URL in the following form.

```
http://hostname:9001/forms/frmservlet?config=webstart  
http://hostname:7777/forms/frmservlet?config=webstart
```

Depending on your browser, the Web Start version of the URL will either just run, or will ask you to save a ".jnlp" file on your computer. Once saved, you can double click on the file and it will launch Forms directly from the PC as a Web Start application, without using a browser.

HTH
Abdellatif