# Application Installation Guide

# Oracle Financial Services Lending and Leasing

Release 14.0.0.0.0

[April] [2013]

Oracle Part Number E51531-01

ORACLE®
FINANCIAL SERVICES

# Table of Contents

# 1. Preface

*For recommendations on security configuration, refer Security Configuration Guide.*

This document contains notes and installation steps needed to install and setup Oracle Financial Services Lending and Leasing. Oracle Financial Services Lending and Leasing relies on several pieces of Oracle software in order to run and this document is in no way meant to replace Oracle documentation supplied with these Oracle products or available via Oracle technical support. The purpose of this document is only meant to supplement the Oracle documentation and to provide Oracle Financial Services Lending and Leasing specific installation instructions.

It is assumed that anyone installing Oracle Financial Services Lending and Leasing will have a thorough knowledge and understanding of Oracle Weblogic Server 10.3.5, Oracle BI Publisher 11.1.1.6.

Application installation is a seven step process.

1. Installing Software
2. Creating Domains, Repositories, Data Sources
3. Configuring Policies
4. Configuring Oracle BI Publisher for Application
5. Deploying Application
6. Enabling SSL
7. Launching Application

## 1.1 Prerequisites

The following software are required to install Oracle Financial Services Lending and Leasing application.

1. Sun JDK Version 1.6 update 31 or above http://www.oracle.com/technetwork/java/javase/downloads/index.html

   OR

   Oracle JRockit JDK Version 1.6 update 22 or above http://www.oracle.com/technetwork/middleware/jrockit/downloads/index.html

2. Oracle Repository Creation Utility (RCU) Version 11.1.1.6.0. Download RCU for the respective platform from the "Required Additional Software" section of http://www.oracle.com/technetwork/middleware/bi-publisher/downloads/index.html

3. Oracle WebLogic Server 11gR1 Version 10.3.5

   http://www.oracle.com/technetwork/middleware/weblogic/downloads/wls-main-097127.html)

   Navigate to Oracle WebLogic Server 11gR1 (10.3.5) + Coherence - Package Installer and download the file for respective OS.

   To use WebLogic Server with 64-bit JVM's on Linux and Solaris or to use WLS on other supported platforms, use the WebLogic Server generic installer listed under "Additional Platforms". The generic installers do not include a JVM/JDK. These are to be downloaded and installed prior to installing the Weblogic Server.

4. Oracle ADF 11g http://www.oracle.com/technetwork/developer-tools/adf/downloads/index.html

**Note**

Please use all 64-bit software's for machine hosted with 64-bit O/S.

**Note**

Use XManager for remote UNIX/LINUX machine. Please refer XManager Usage.

## 1.2 Audience

This document is intended for system administrators or application developers who are installing Oracle Financial Services Lending and Leasing Application.

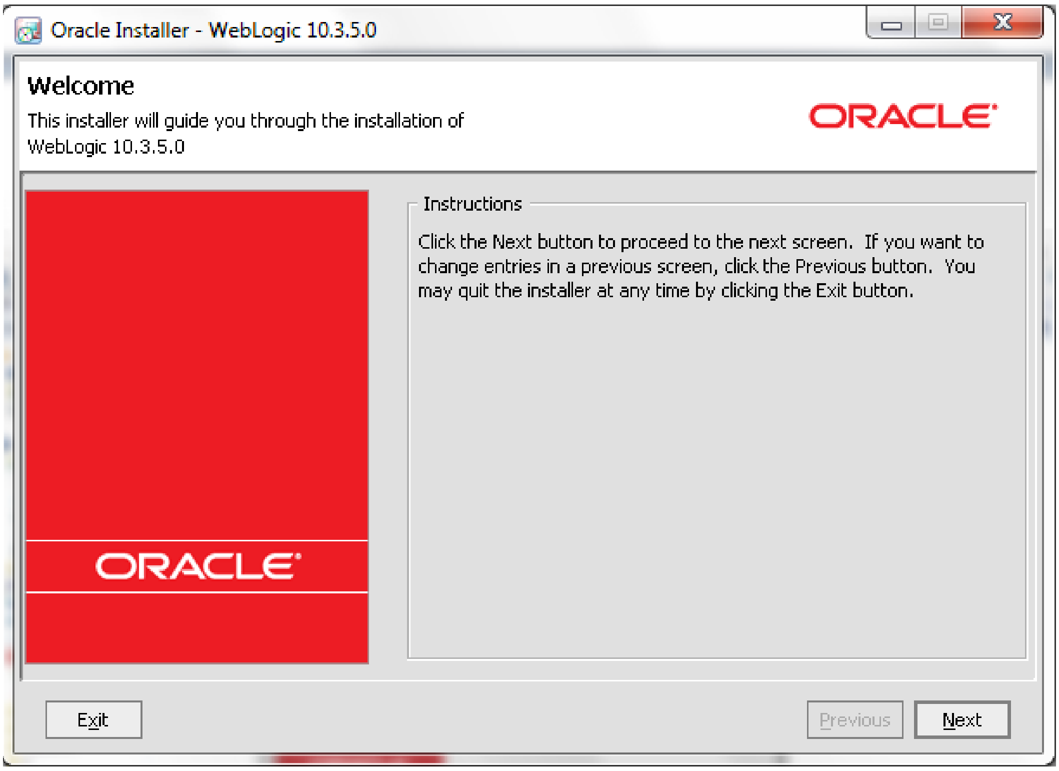
## 1.3 Conventions Used

| Term | Refers to |
|---|---|
| Application | Oracle Financial Services Lending and Leasing |

## 2.1 Installing Oracle WebLogic Server

To install using generic Weblogic installer -

1. Run the command → java –jar wls1035_generic.jar
2. Welcome screen is displayed as shown below.



Oracle Installer - WebLogic 10.3.5.0

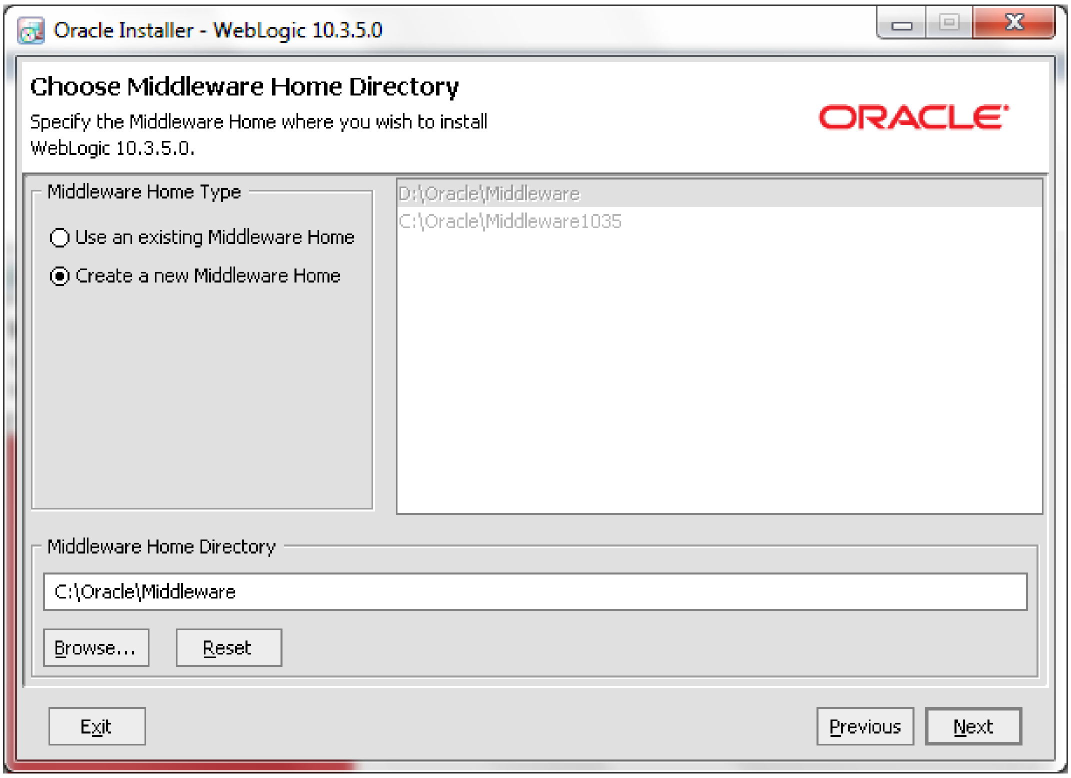
Welcome

This installer will guide you through the installation of WebLogic 10.3.5.0

Instructions

Click the Next button to proceed to the next screen. If you want to change entries in a previous screen, click the Previous button. You may quit the installer at any time by clicking the Exit button.

3. Click **Next** to continue.


Oracle Installer - WebLogic 10.3.5.0

Choose Middleware Home Directory

Specify the Middleware Home where you wish to install WebLogic 10.3.5.0.

Middleware Home Type

○ Use an existing Middleware Home

● Create a new Middleware Home

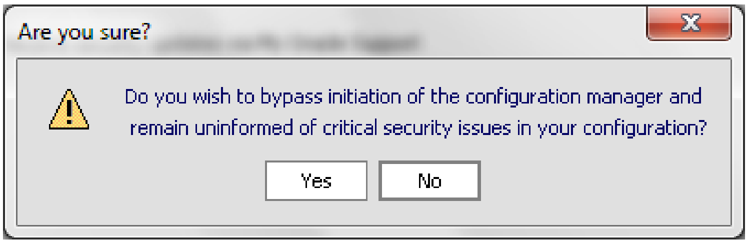
D:\Oracle\Middleware

C:\Oracle\Middleware1035

Middleware Home Directory

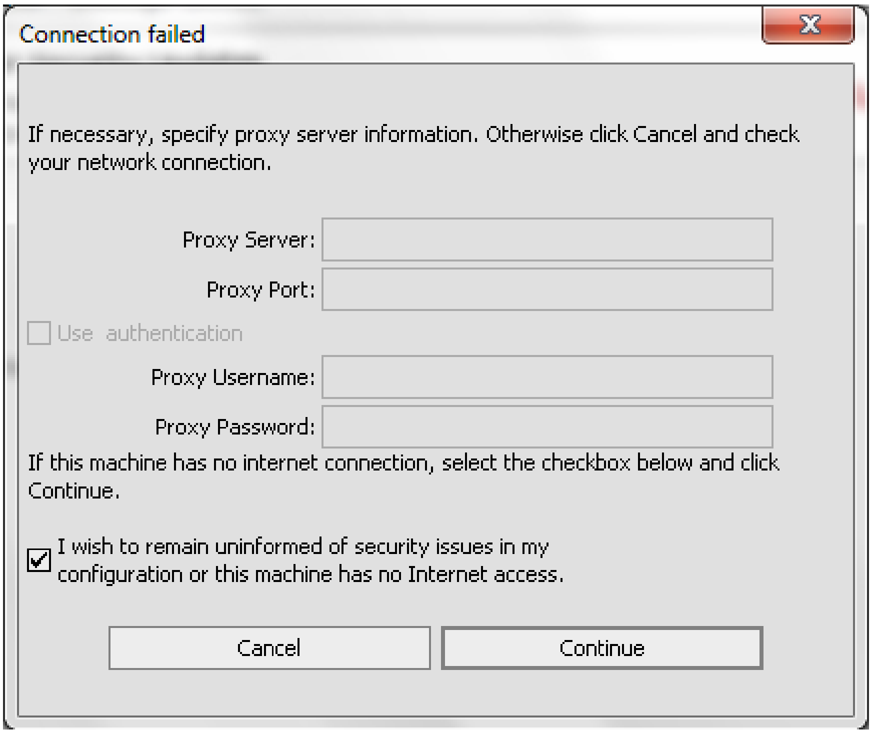
C:\Oracle\Middleware

4. Select **Create a new Middleware Home** as **Middleware Home Type**
5. Specify the path for **Middleware Home Directory**, and then click **Next**.
6. Confirmation window is displayed as shown below.


Are you sure?

Do you wish to bypass initiation of the configuration manager and remain uninformed of critical security issues in your configuration?

7. Click **Yes** to continue.



Connection failed

If necessary, specify proxy server information. Otherwise click Cancel and check your network connection.

Proxy Server:

Proxy Port:

□ Use authentication

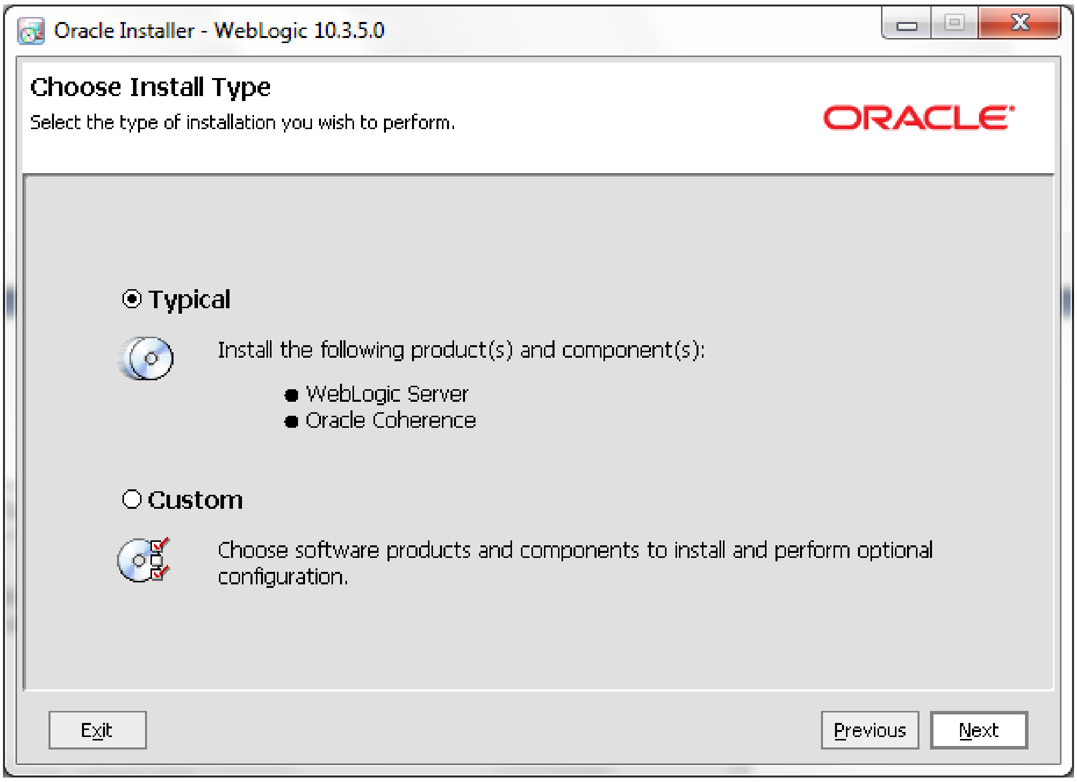
Proxy Username:

Proxy Password:

If this machine has no internet connection, select the checkbox below and click Continue.

☑ I wish to remain uninformed of security issues in my configuration or this machine has no Internet access.

8. Check the check box as shown in the above screen shot and click **Continue**. The following window is displayed.



Oracle Installer - WebLogic 10.3.5.0

Choose Install Type

Select the type of installation you wish to perform.

● Typical

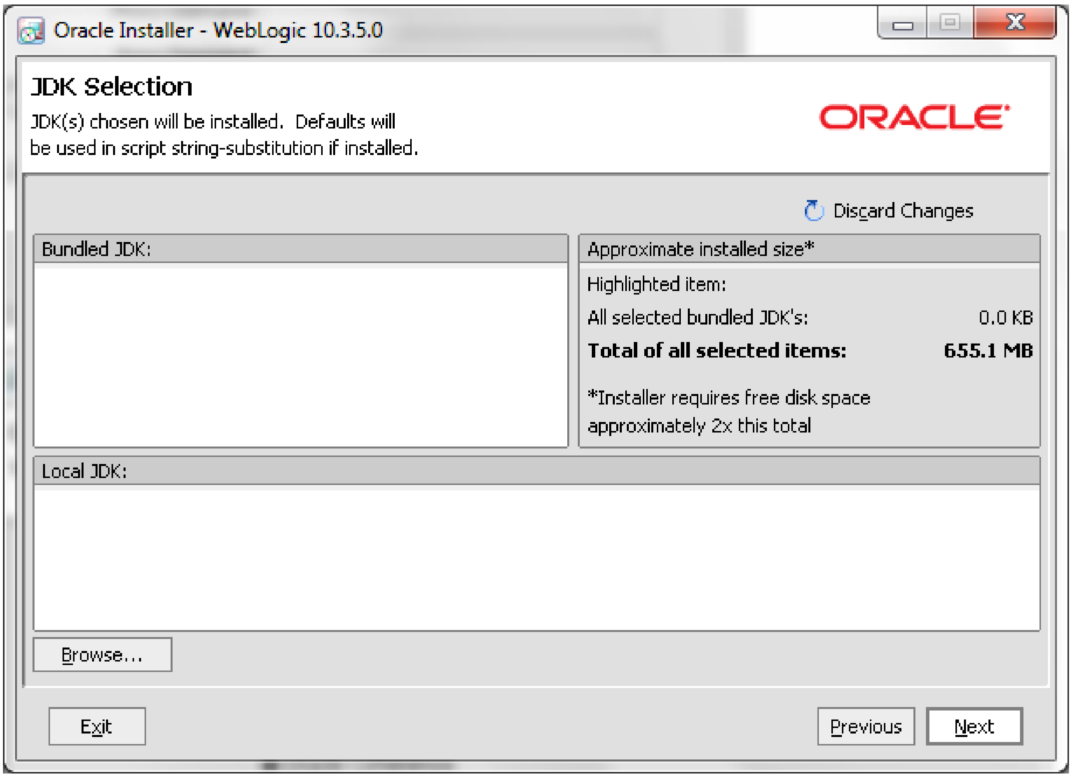
Install the following product(s) and component(s):

- WebLogic Server
- Oracle Coherence

○ Custom

Choose software products and components to install and perform optional configuration.

9. Select 'Typical' as the 'Install Type' and click **Next.** The following window is displayed.



Oracle Installer - WebLogic 10.3.5.0

JDK Selection

JDK(s) chosen will be installed. Defaults will be used in script string-substitution if installed.

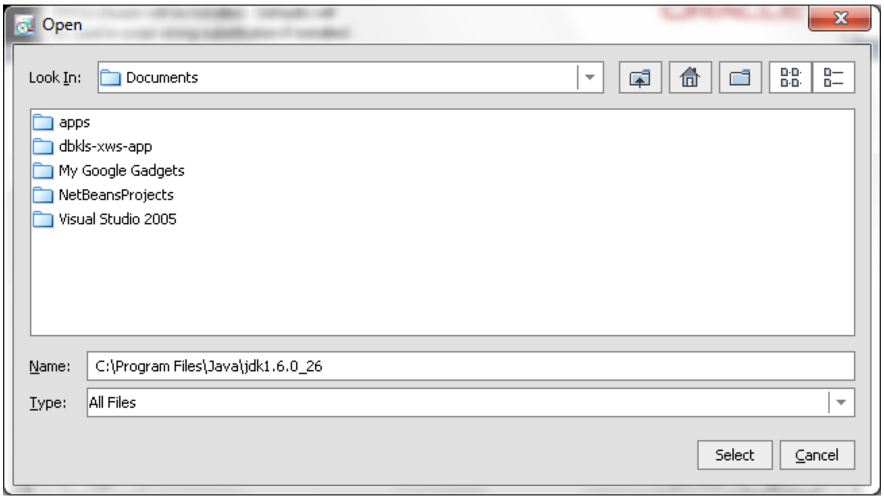
Approximate installed size*

Highlighted item:

| | |
|---|---|
| All selected bundled JDK's: | 0.0 KB |
| **Total of all selected items:** | **655.1 MB** |

*Installer requires free disk space approximately 2x this total

10. Click Browser button and select existing JDK Home Path as shown below.



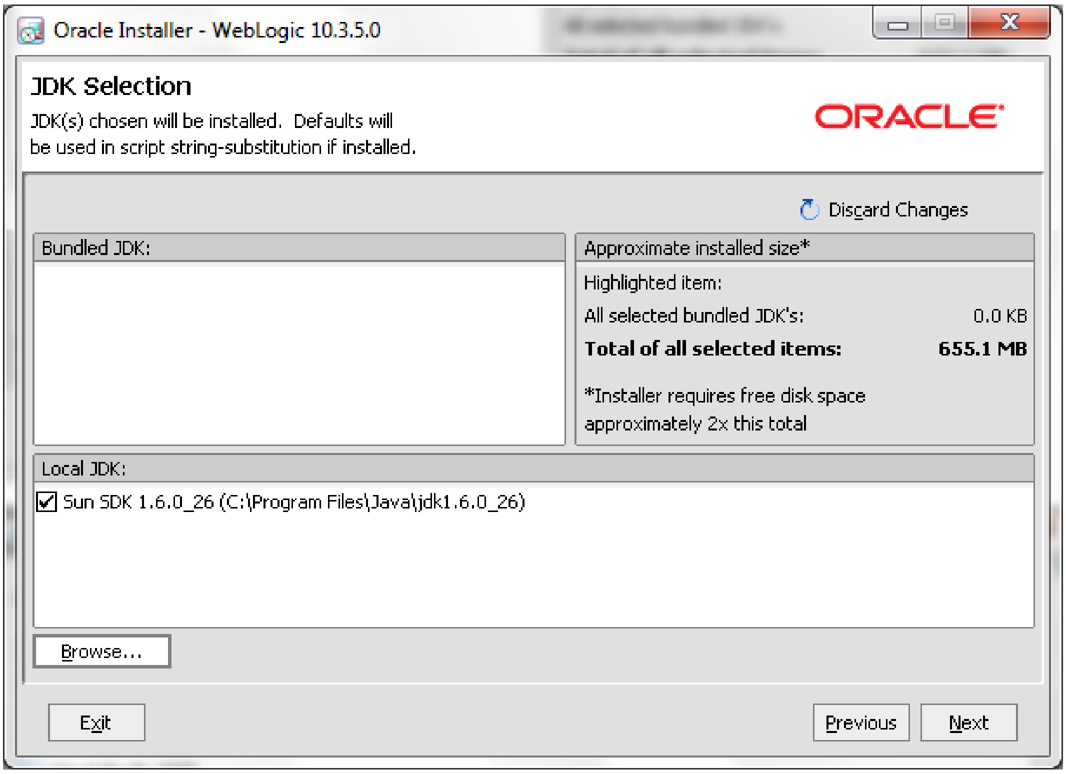
Open

Look In: Documents

Name: C:\Program Files\Java\jdk1.6.0_26

Type: All Files

11. The selected Java Home is displayed as shown below.



Oracle Installer - WebLogic 10.3.5.0

JDK Selection

JDK(s) chosen will be installed. Defaults will be used in script string-substitution if installed.

Bundled JDK:

Approximate installed size*

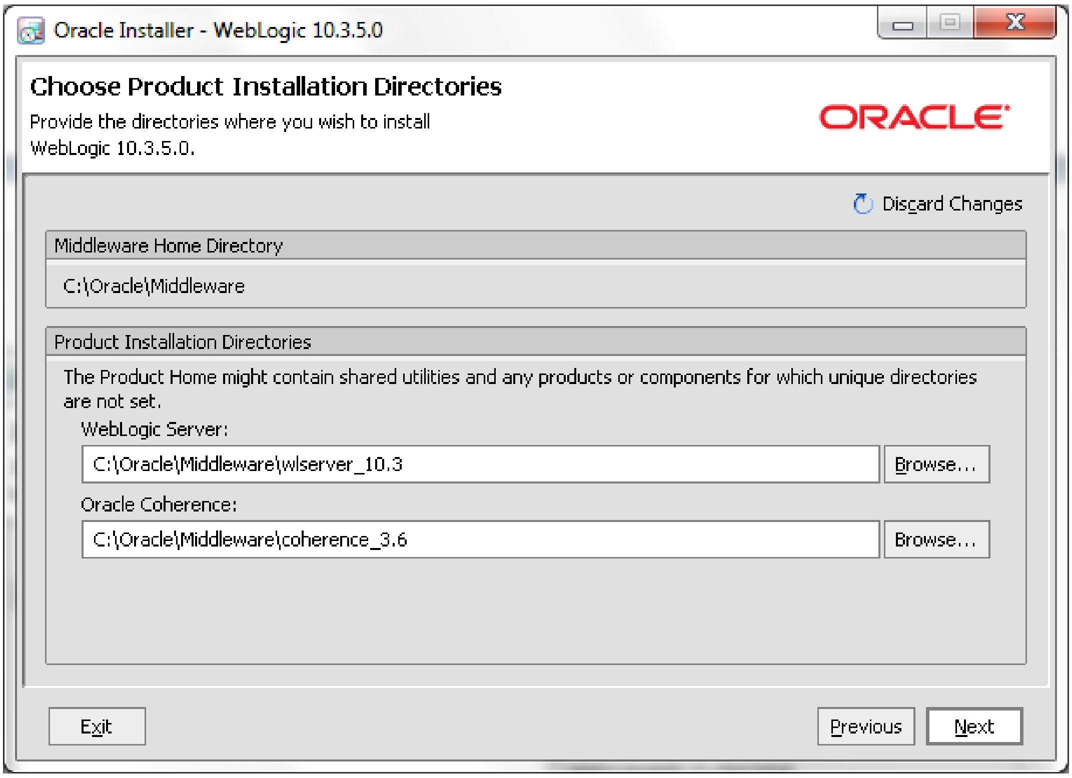
| | |
|---|---|
| Highlighted item: | |
| All selected bundled JDK's: | 0.0 KB |
| **Total of all selected items:** | **655.1 MB** |

*Installer requires free disk space approximately 2x this total

Local JDK:

☑ Sun SDK 1.6.0_26 (C:\Program Files\Java\jdk1.6.0_26)

12. Click **Next**. The following window is displayed.



Oracle Installer - WebLogic 10.3.5.0

Choose Product Installation Directories

Provide the directories where you wish to install WebLogic 10.3.5.0.

Middleware Home Directory

C:\Oracle\Middleware

Product Installation Directories

The Product Home might contain shared utilities and any products or components for which unique directories are not set.

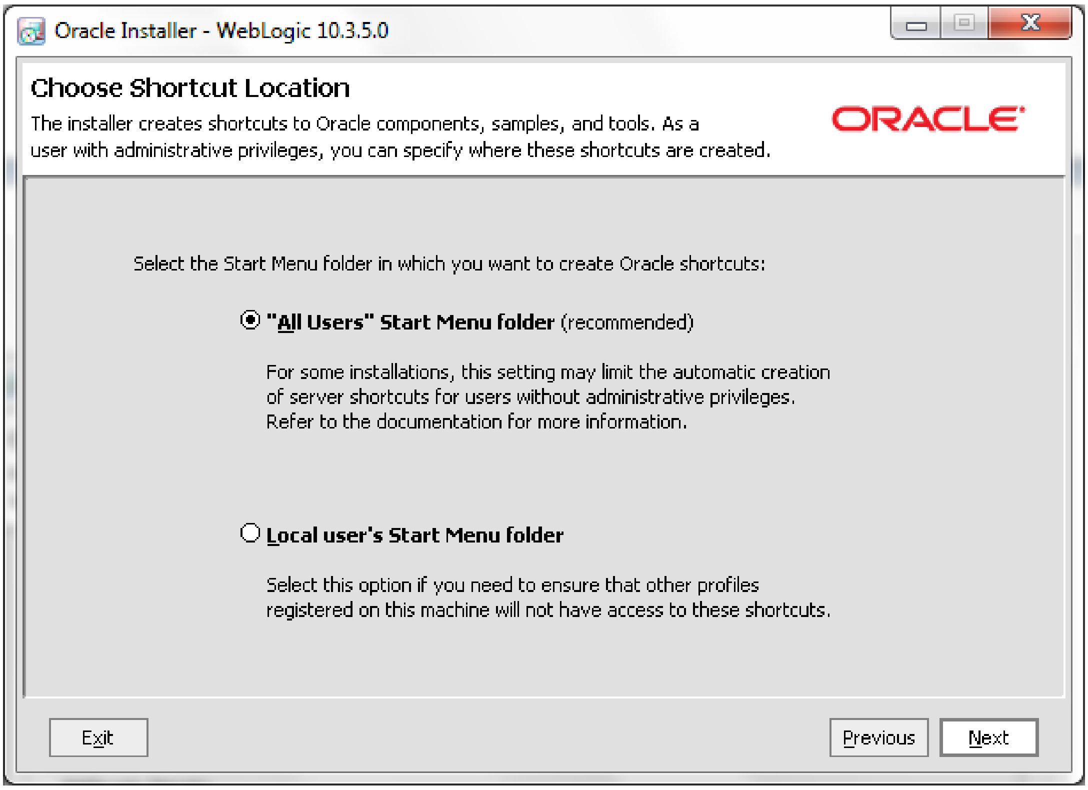
WebLogic Server: C:\Oracle\Middleware\wlserver_10.3

Oracle Coherence: C:\Oracle\Middleware\coherence_3.6

13. Click **Next**. The following window is displayed.

**Note**

You can change the Oracle WebLogic Server and Oracle Coherence paths, if needed.



Choose Shortcut Location

The installer creates shortcuts to Oracle components, samples, and tools. As a user with administrative privileges, you can specify where these shortcuts are created.

Select the Start Menu folder in which you want to create Oracle shortcuts:

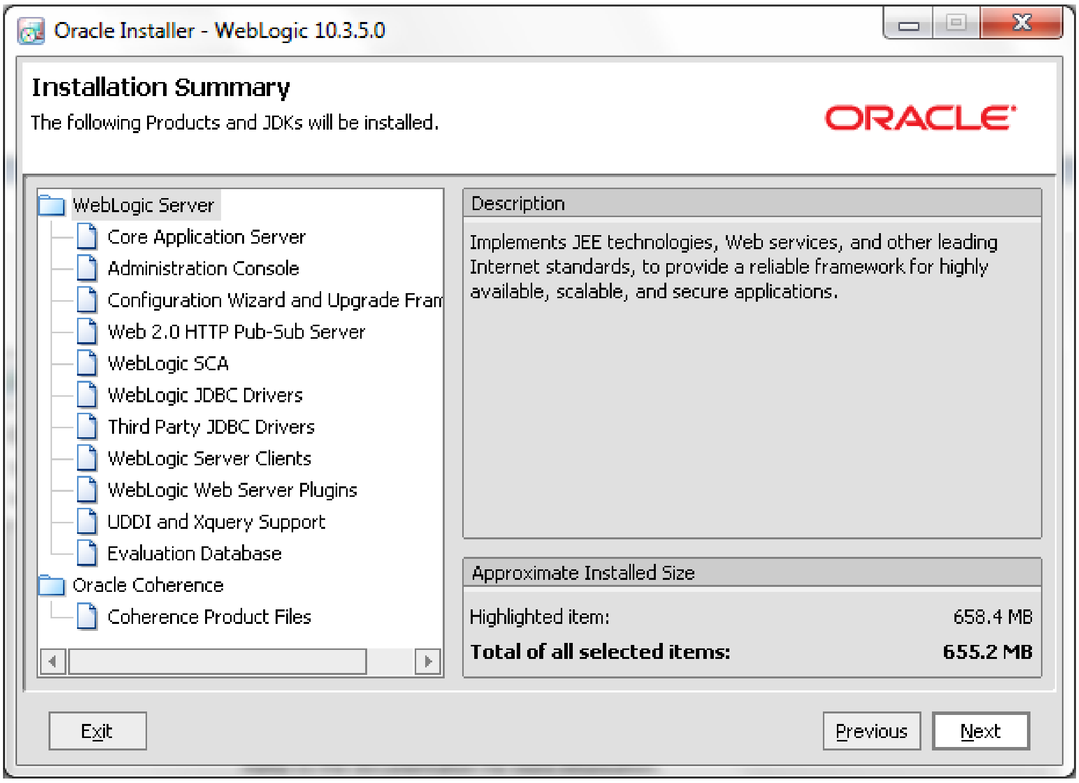
● **"All Users" Start Menu folder** (recommended)

For some installations, this setting may limit the automatic creation of server shortcuts for users without administrative privileges. Refer to the documentation for more information.

○ **Local user's Start Menu folder**

Select this option if you need to ensure that other profiles registered on this machine will not have access to these shortcuts.

14. Select the recommended option for the Shortcut Location and click **Next**. The following window is displayed.



Installation Summary

The following Products and JDKs will be installed.

- WebLogic Server
  - Core Application Server
  - Administration Console
  - Configuration Wizard and Upgrade Fram
  - Web 2.0 HTTP Pub-Sub Server
  - WebLogic SCA
  - WebLogic JDBC Drivers
  - Third Party JDBC Drivers
  - WebLogic Server Clients
  - WebLogic Web Server Plugins
  - UDDI and Xquery Support
  - Evaluation Database
- Oracle Coherence
  - Coherence Product Files

Description

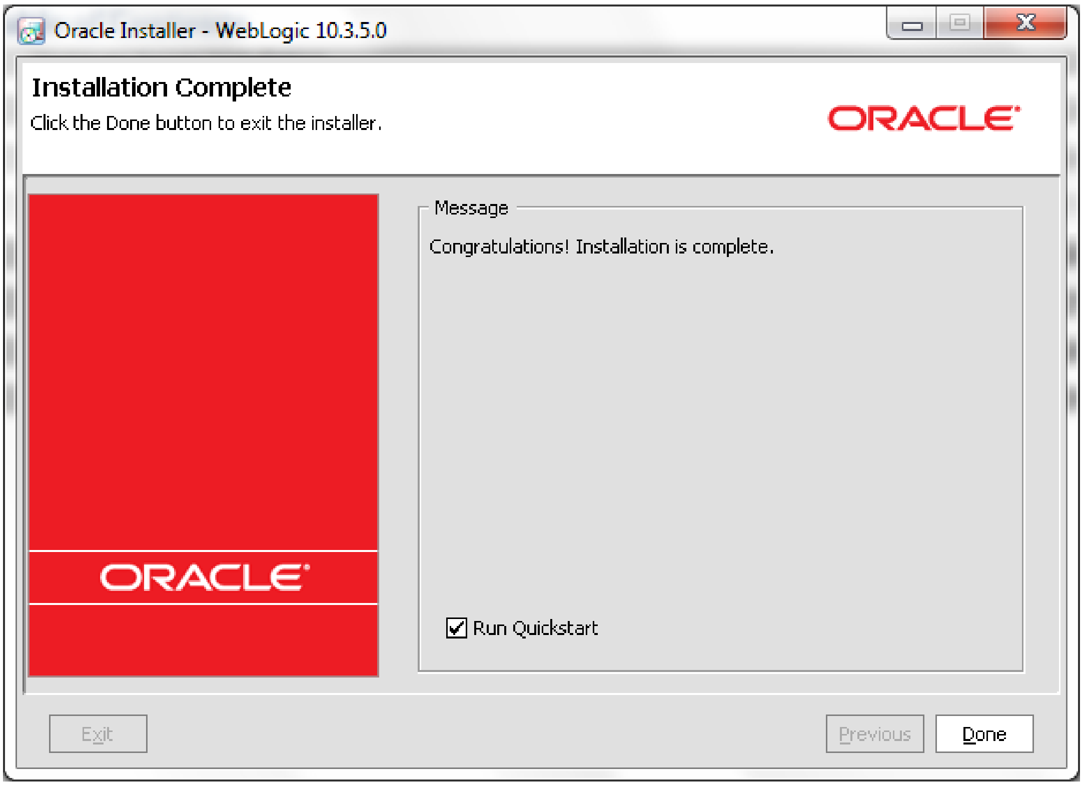
Implements JEE technologies, Web services, and other leading Internet standards, to provide a reliable framework for highly available, scalable, and secure applications.

Approximate Installed Size

Highlighted item: 658.4 MB

**Total of all selected items: 655.2 MB**

15. Click **Next**. The following window is displayed.



Oracle Installer - WebLogic 10.3.5.0

Installation Complete

Click the Done button to exit the installer.

Message

Congratulations! Installation is complete.

☑ Run Quickstart

16. Click **Done** to close the window.

## 2.2 Installing Oracle ADF Runtime

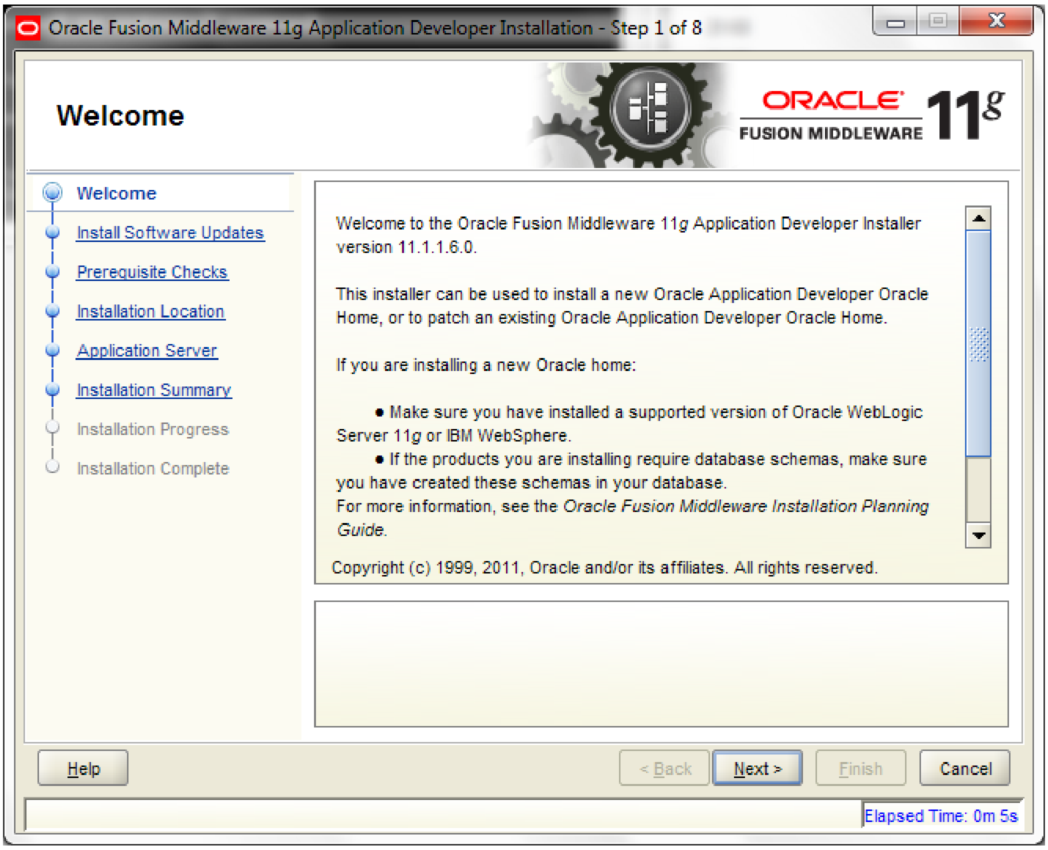
1. Extract the zipped file ofm_appdev_generic_11.1.1.6.0_disk1_1of1.zip.
2. Go to Disk1 folder of the above unzipped file. Run the following command

**In Unix\Linux**:./runInstaller

3. Enter JDK/JRE Home Path, when prompted.

**In Windows**:setup.exe –jreLoc <JDK/JRE Home Path>

4. Welcome window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 1 of 8

## Welcome

Welcome to the Oracle Fusion Middleware 11g Application Developer Installer version 11.1.1.6.0.

This installer can be used to install a new Oracle Application Developer Oracle Home, or to patch an existing Oracle Application Developer Oracle Home.

If you are installing a new Oracle home:

- Make sure you have installed a supported version of Oracle WebLogic Server 11*g* or IBM WebSphere.
- If the products you are installing require database schemas, make sure you have created these schemas in your database.

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

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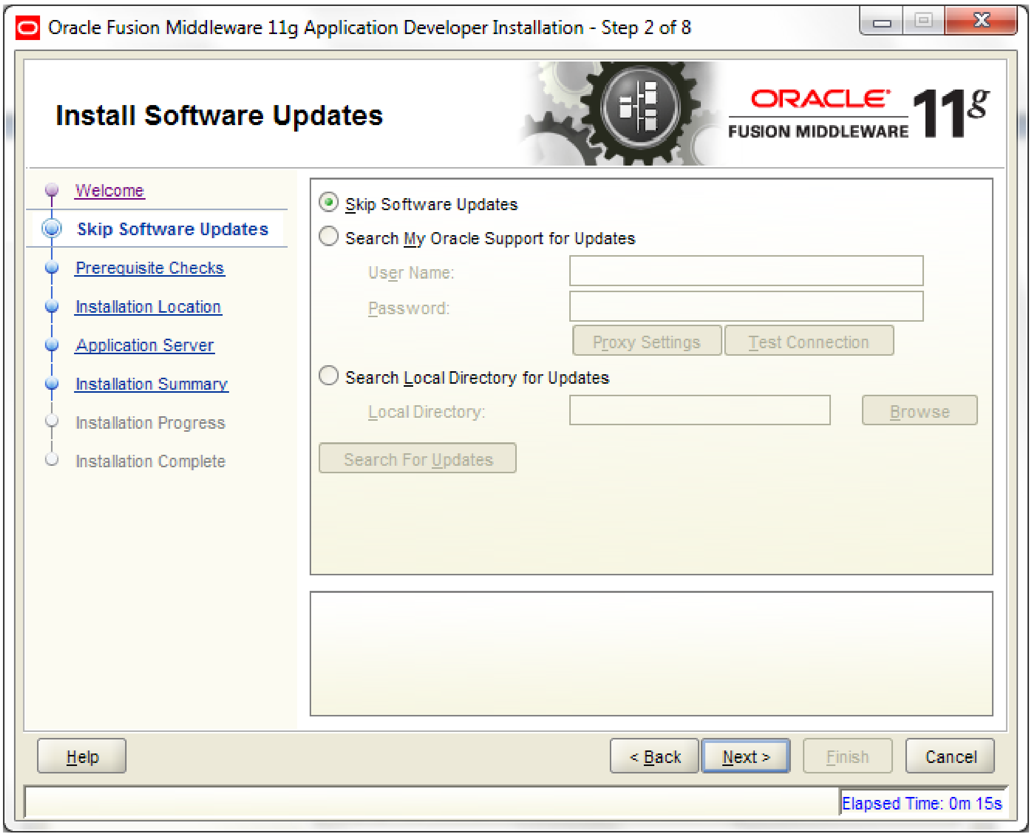
Elapsed Time: 0m 5s

5. Click **Next**. The following window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 2 of 8

## Install Software Updates

● Skip Software Updates

○ Search My Oracle Support for Updates

User Name:

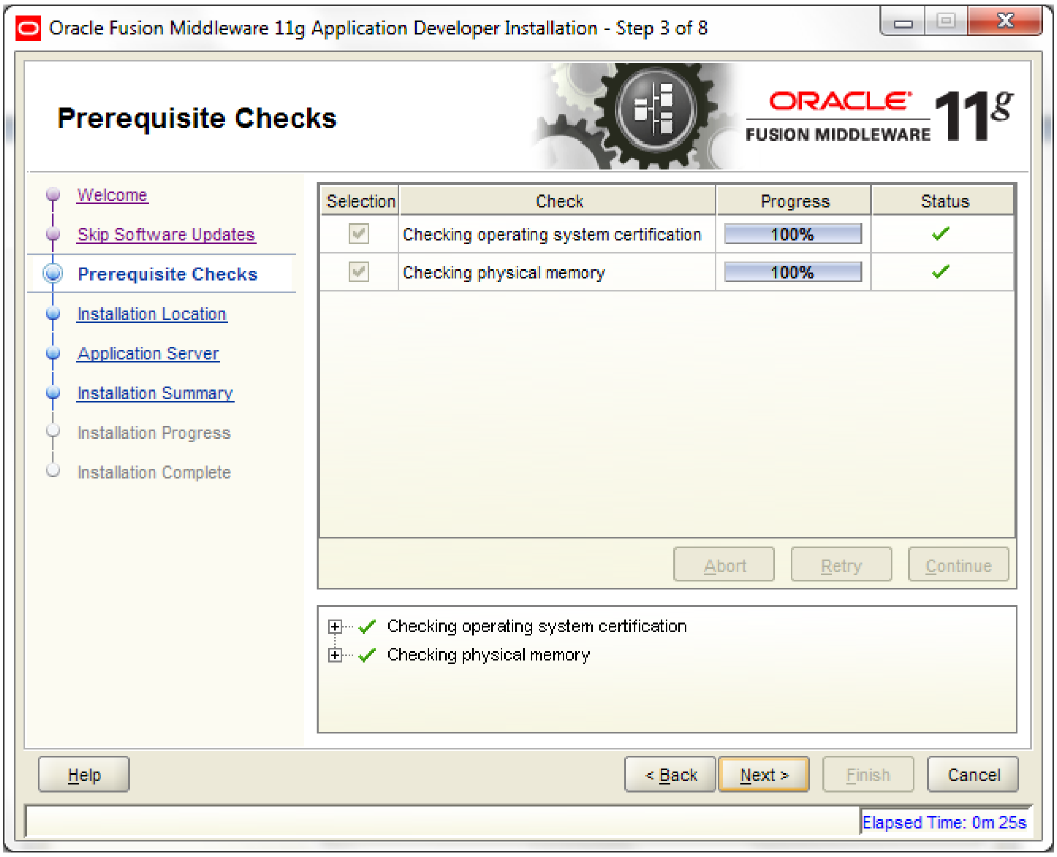
Password:

○ Search Local Directory for Updates

Local Directory:

Elapsed Time: 0m 15s

6. Select **Skip** Software **Updates** and click **Next**. The following window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 3 of 8

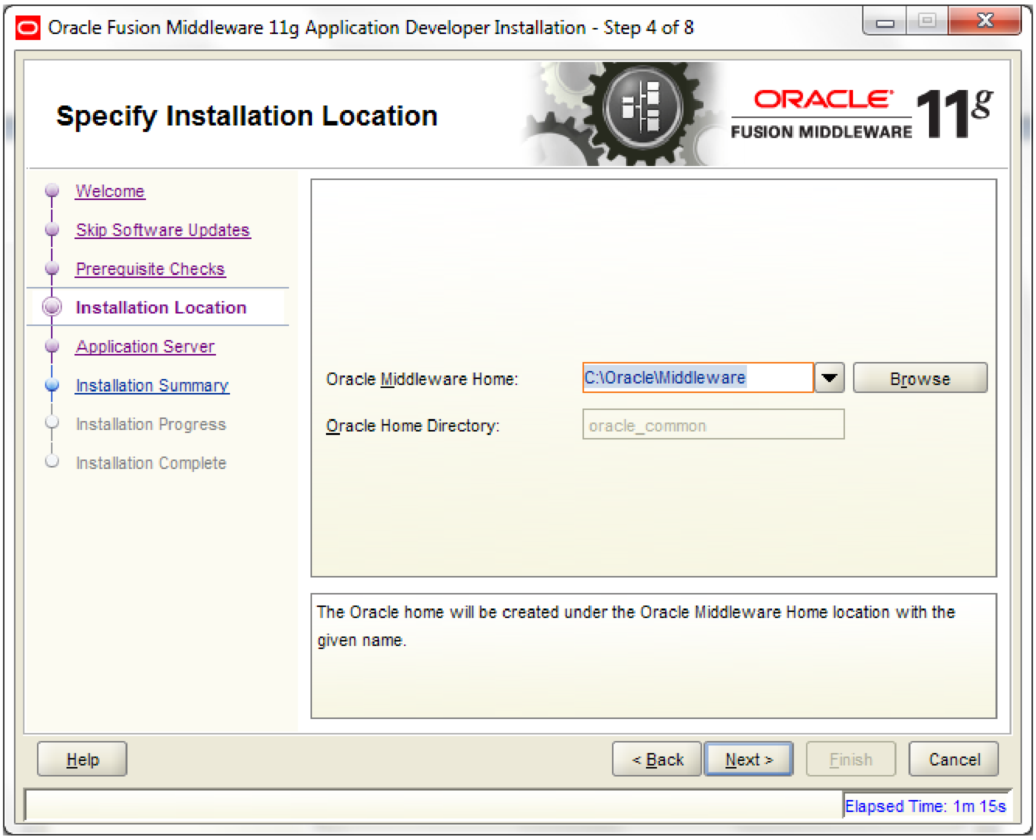
**Prerequisite Checks**

| Selection | Check | Progress | Status |
|---|---|---|---|
| ☑ | Checking operating system certification | 100% | ✓ |
| ☑ | Checking physical memory | 100% | ✓ |

⊞ ✓ Checking operating system certification
⊞ ✓ Checking physical memory

Elapsed Time: 0m 25s

7. Click Next. The following window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 4 of 8

**Specify Installation Location**

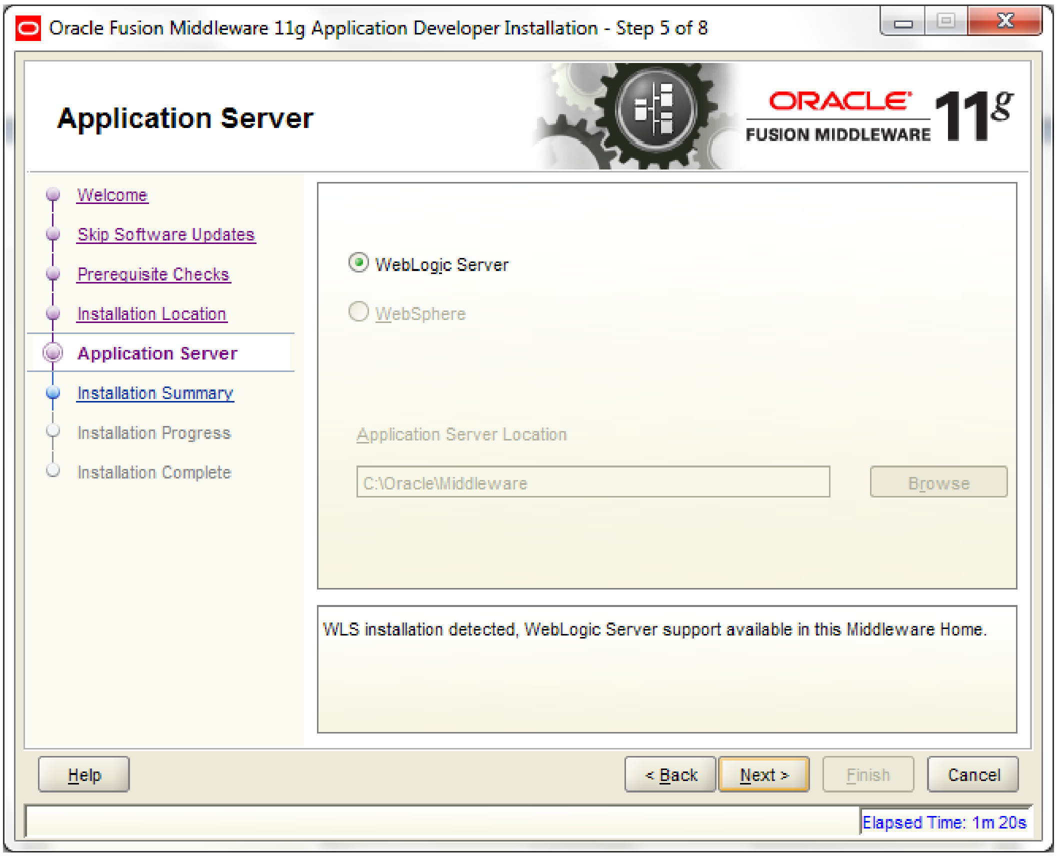
Oracle Middleware Home: C:\Oracle\Middleware

Oracle Home Directory: oracle_common

The Oracle home will be created under the Oracle Middleware Home location with the given name.

Elapsed Time: 1m 15s

8. Select Oracle **Middleware Home Path** as highlighted and click **Next**. The following window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 5 of 8

Application Server

● WebLogic Server

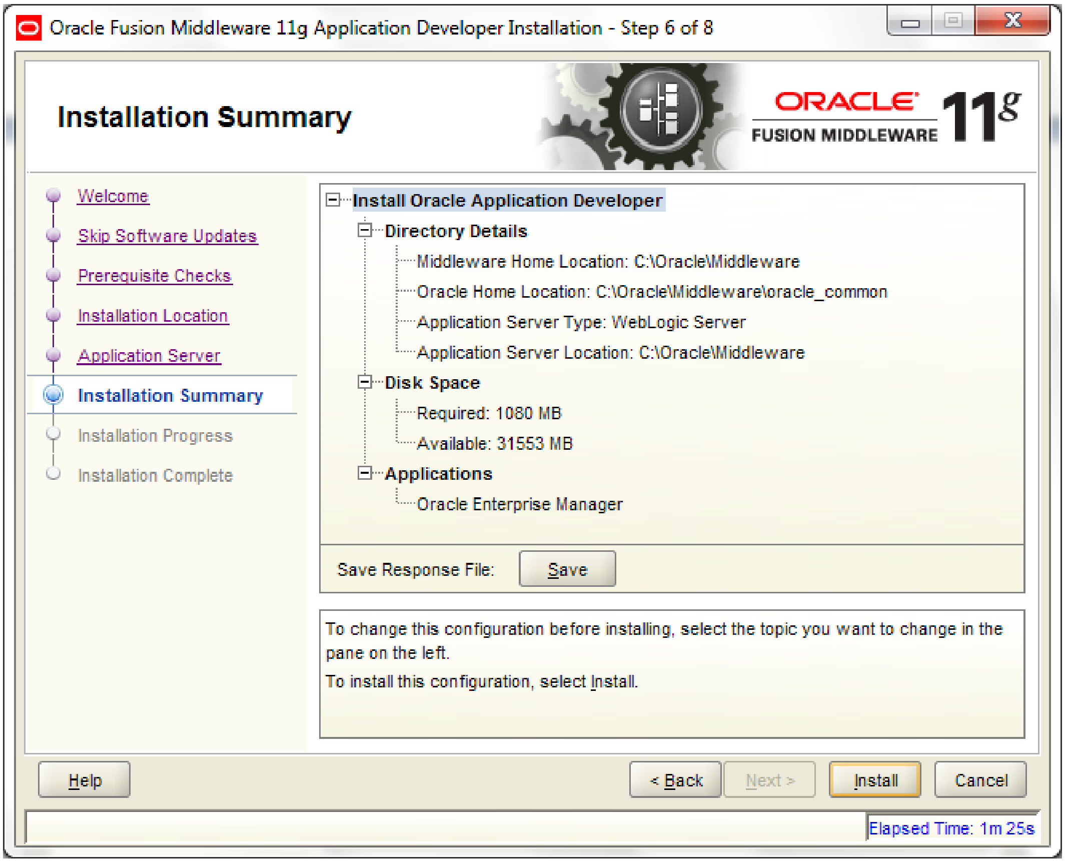
○ WebSphere

Application Server Location: C:\Oracle\Middleware

WLS installation detected, WebLogic Server support available in this Middleware Home.

Elapsed Time: 1m 20s

9. Select **WebLogic Server** and click **Next**. The following window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 6 of 8

Installation Summary

Install Oracle Application Developer
- Directory Details
  - Middleware Home Location: C:\Oracle\Middleware
  - Oracle Home Location: C:\Oracle\Middleware\oracle_common
  - Application Server Type: WebLogic Server
  - Application Server Location: C:\Oracle\Middleware
- Disk Space
  - Required: 1080 MB
  - Available: 31553 MB
- Applications
  - Oracle Enterprise Manager

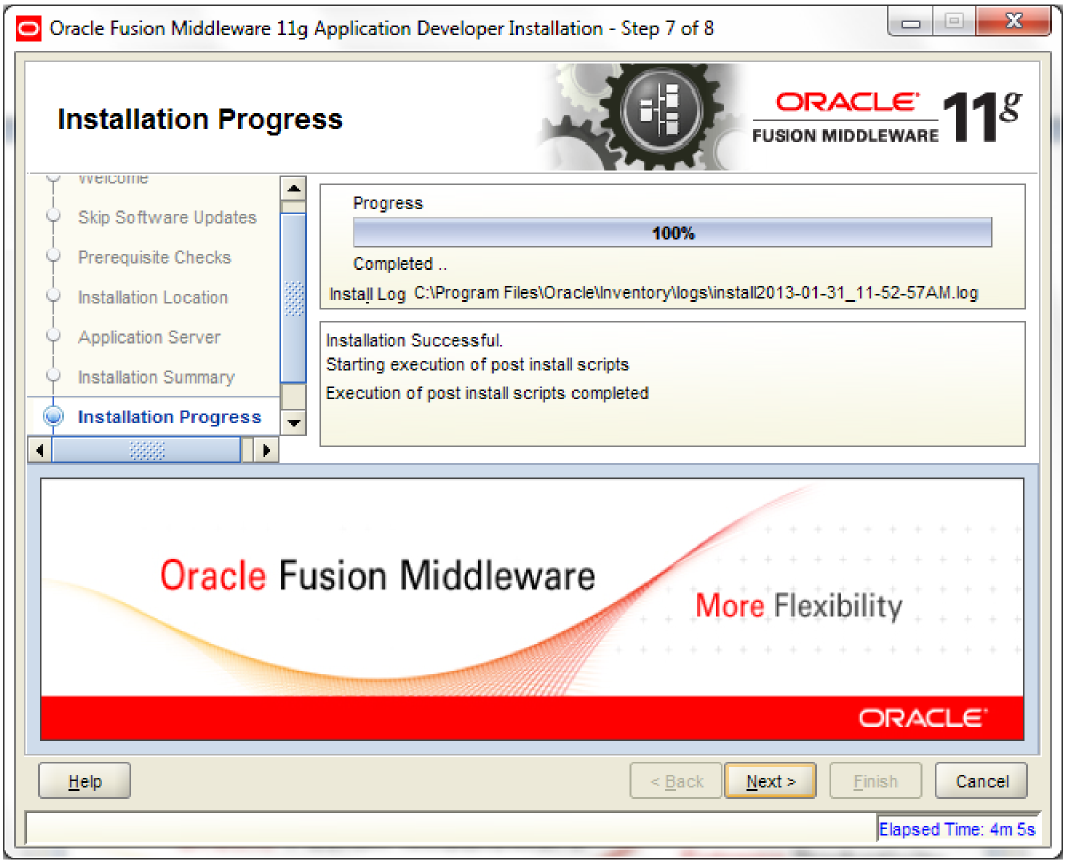
Save Response File: Save

To change this configuration before installing, select the topic you want to change in the pane on the left.

To install this configuration, select Install.

Elapsed Time: 1m 25s

10. Click **Install**. The following window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 7 of 8

Installation Progress

Progress

100%

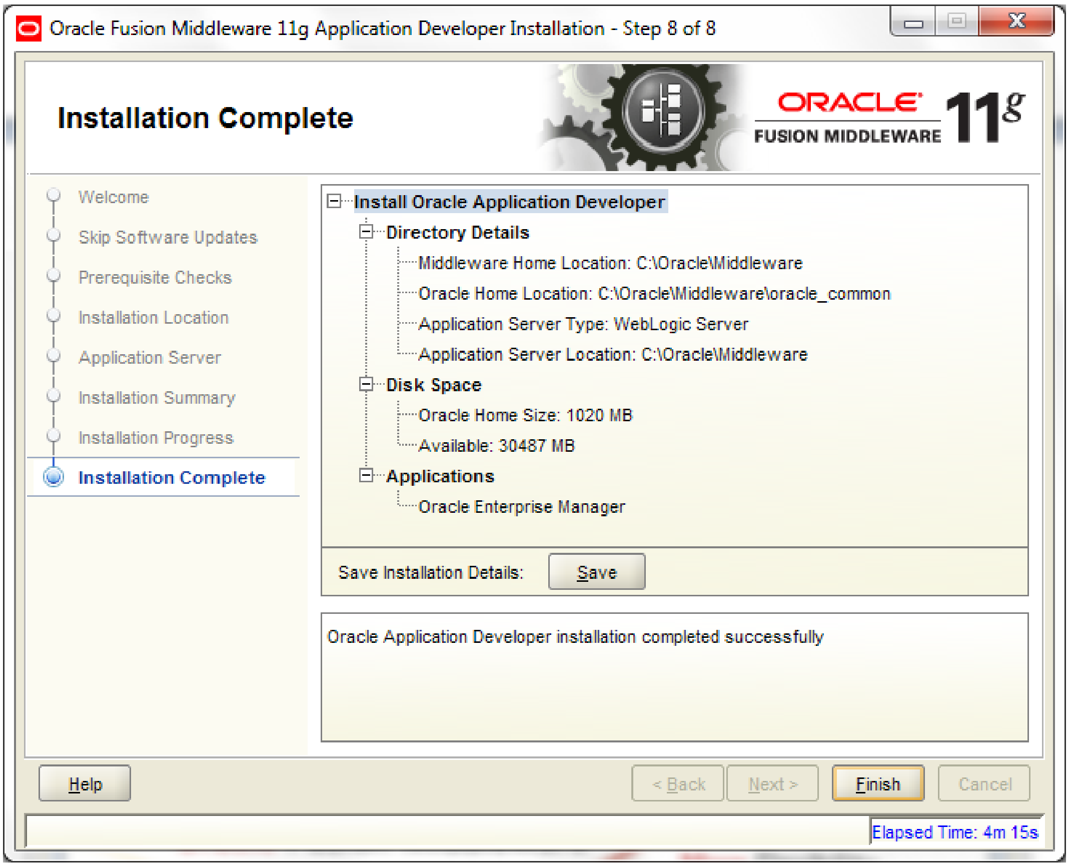
Completed ..

Install Log C:\Program Files\Oracle\Inventory\logs\install2013-01-31_11-52-57AM.log

```
Installation Successful.
Starting execution of post install scripts
Execution of post install scripts completed
```

Elapsed Time: 4m 5s

11. Once the installation is complete, click **Next**. The following window is displayed.



Oracle Fusion Middleware 11g Application Developer Installation - Step 8 of 8

## Installation Complete

- Install Oracle Application Developer
  - Directory Details
    - Middleware Home Location: C:\Oracle\Middleware
    - Oracle Home Location: C:\Oracle\Middleware\oracle_common
    - Application Server Type: WebLogic Server
    - Application Server Location: C:\Oracle\Middleware
  - Disk Space
    - Oracle Home Size: 1020 MB
    - Available: 30487 MB
  - Applications
    - Oracle Enterprise Manager

Save Installation Details: Save

Oracle Application Developer installation completed successfully

Elapsed Time: 4m 15s

12. Click Finish to close the window.

# 3. Creating Domains, Repositories, Data Sources

## 3.1 Creating Domain and Configuring Managed Server

1. In Unix/Linux machine, once the Oracle WebLogic Server is installed, navigate to the following path.

<WL_HOME>/wlserver_10.3/common/bin

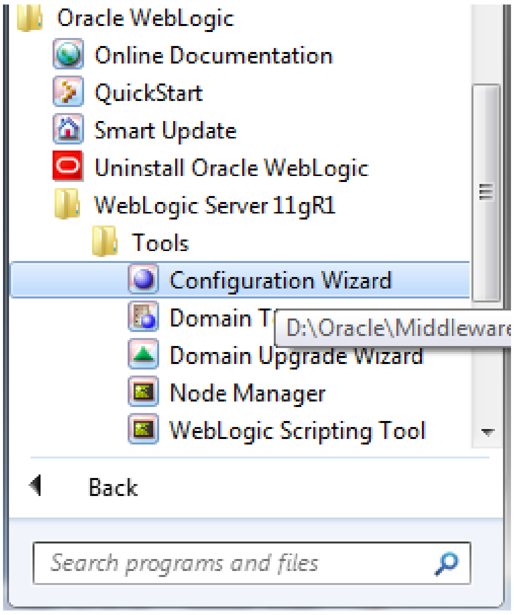
**Note**

Use XManager for remote UNIX/LINUX machine. Refer XManager Usage.

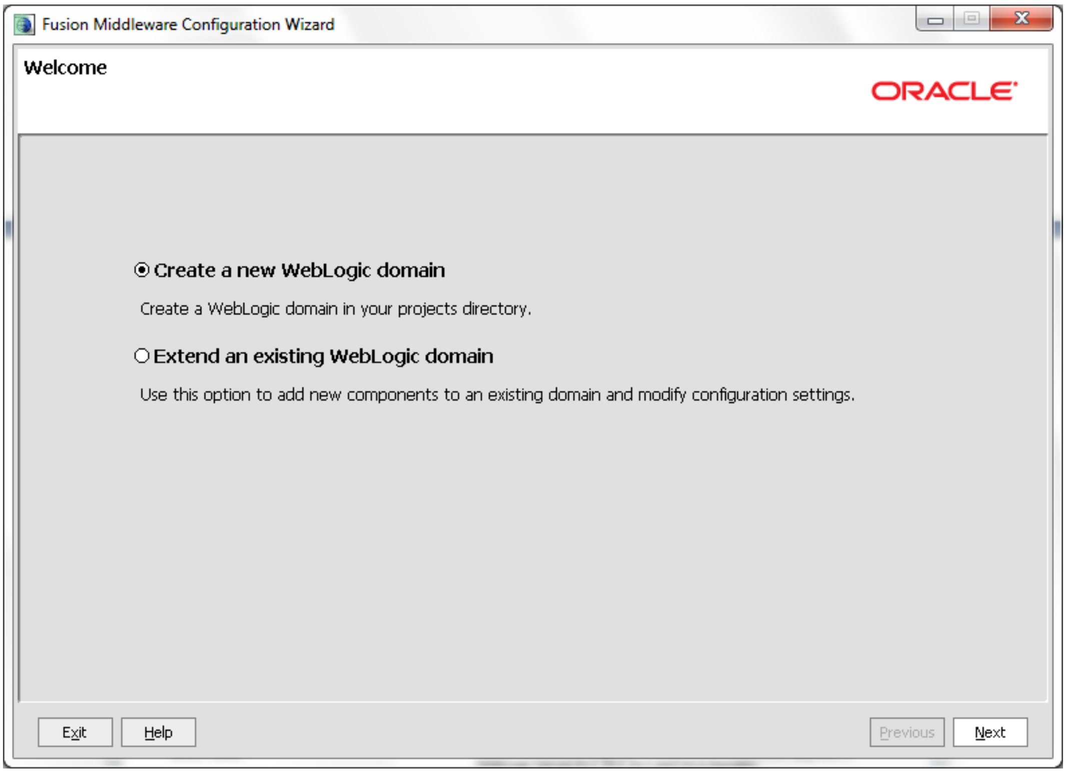
Here, WL_HOME is **/home/Oracle/Middleware**.

2. In Unix run **config.sh.**

   In Windows Go to Start Menu → All Programs → Oracle WebLogic → WebLogic Server 11gR1 → Tools,



3. Click Configuration Wizard icon.



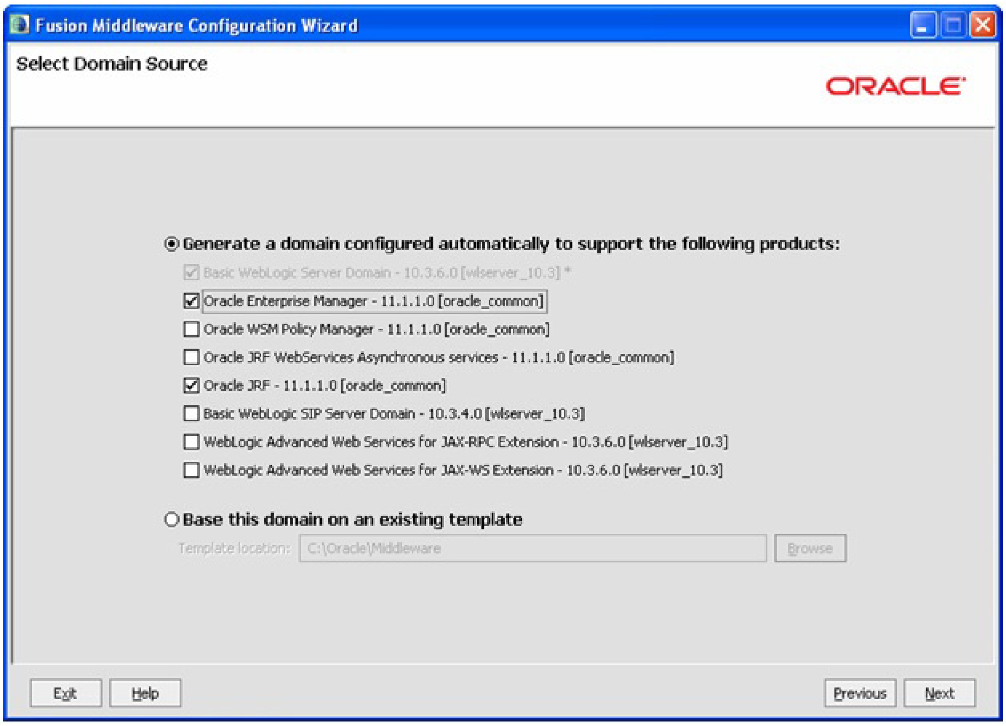
● Create a new WebLogic domain

Create a WebLogic domain in your projects directory.

○ Extend an existing WebLogic domain

Use this option to add new components to an existing domain and modify configuration settings.

4. Select **Create a new WebLogic domain** and click **Next**. The following window is displayed.



● Generate a domain configured automatically to support the following products:

- ☑ Basic WebLogic Server Domain - 10.3.6.0 [wlserver_10.3] *
- ☑ Oracle Enterprise Manager - 11.1.1.0 [oracle_common]
- □ Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]
- □ Oracle JRF WebServices Asynchronous services - 11.1.1.0 [oracle_common]
- ☑ Oracle JRF - 11.1.1.0 [oracle_common]
- □ Basic WebLogic SIP Server Domain - 10.3.4.0 [wlserver_10.3]
- □ WebLogic Advanced Web Services for JAX-RPC Extension - 10.3.6.0 [wlserver_10.3]
- □ WebLogic Advanced Web Services for JAX-WS Extension - 10.3.6.0 [wlserver_10.3]

○ Base this domain on an existing template

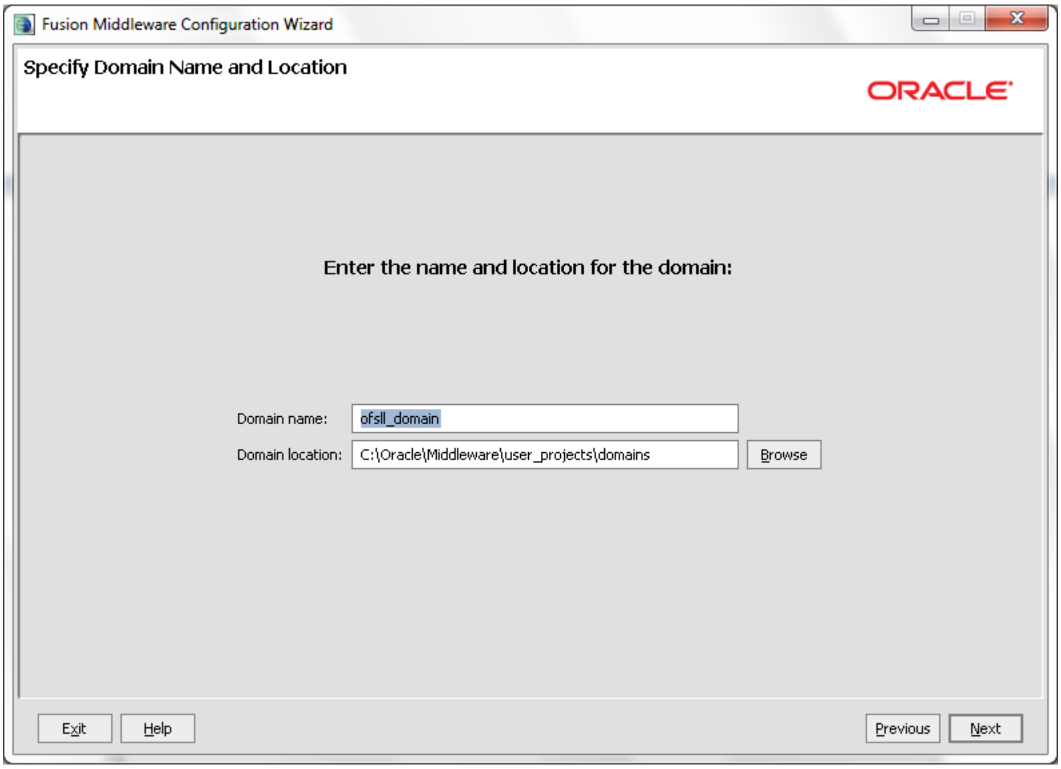
Template location: C:\Oracle\Middleware

5. Select **Generate a domain configured automatically to support the following products** option.

6. Select **Oracle Enterprise Manager - 11.1.1.0 [oracle_common]** check box.

7. Select **Oracle JRF - 11.1.1.0 [oracle_common]** check box.

8. Click **Next**. The following window is displayed.



Specify Domain Name and Location

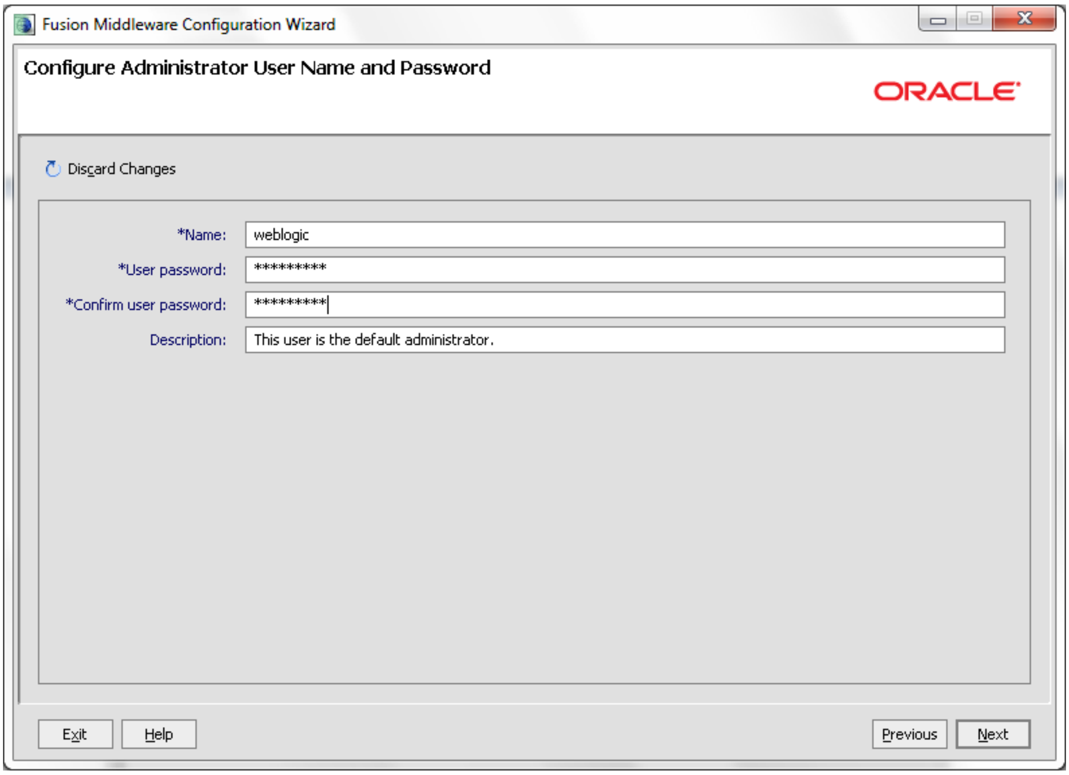
Enter the name and location for the domain:

Domain name: ofsll_domain

Domain location: C:\Oracle\Middleware\user_projects\domains

9. Enter **Domain** Name and click **Next**. The following window is displayed.

10. Edit Domain Location, if needed.



Configure Administrator User Name and Password

*Name: weblogic

*User password: *********

*Confirm user password: *********

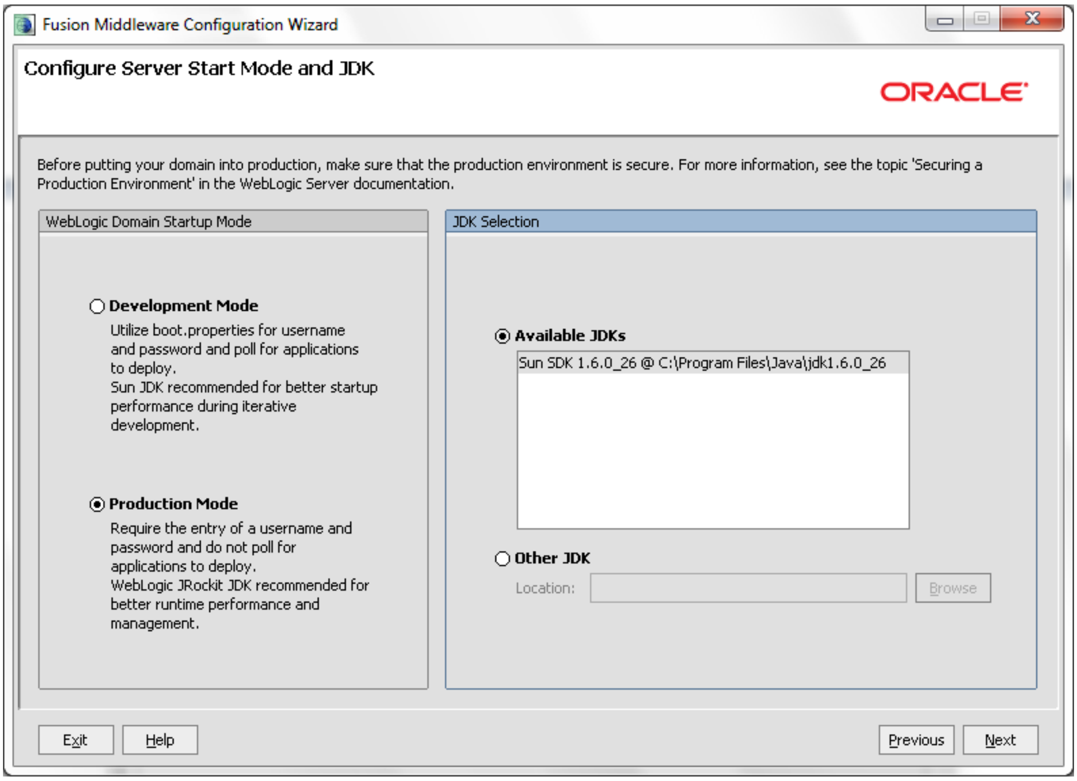
Description: This user is the default administrator.

11. Enter credentials for the following:

- Name
- User password

- Confirm user password
- Description

12. Click **Next**. The following window is displayed.



Fusion Middleware Configuration Wizard

Configure Server Start Mode and JDK

Before putting your domain into production, make sure that the production environment is secure. For more information, see the topic 'Securing a Production Environment' in the WebLogic Server documentation.

WebLogic Domain Startup Mode

○ **Development Mode**
Utilize boot.properties for username and password and poll for applications to deploy.
Sun JDK recommended for better startup performance during iterative development.

● **Production Mode**
Require the entry of a username and password and do not poll for applications to deploy.
WebLogic JRockit JDK recommended for better runtime performance and management.

JDK Selection

● **Available JDKs**
Sun SDK 1.6.0_26 @ C:\Program Files\Java\jdk1.6.0_26

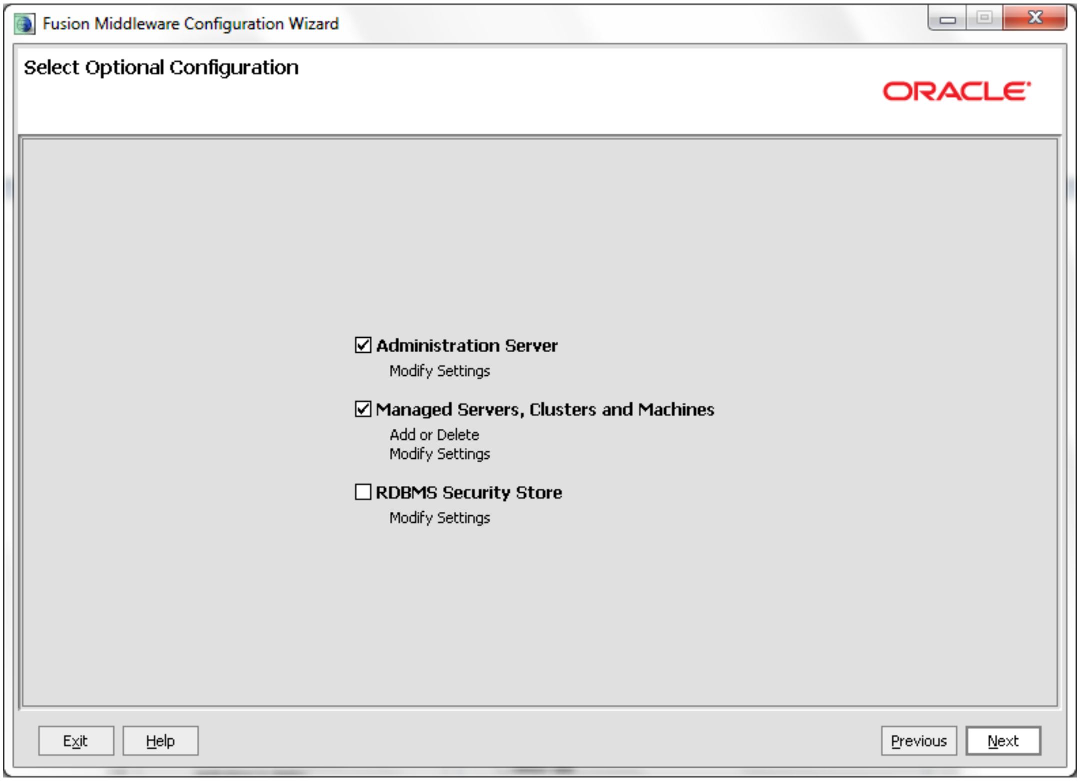
○ **Other JDK**
Location:

13. Select **Production Mode** and **JDK/JRockit** from **Available JDKs**

OR

Select **Other JDK** option to select any other JDK/JRockit .

14. Click **Next**. The following window is displayed.



Fusion Middleware Configuration Wizard

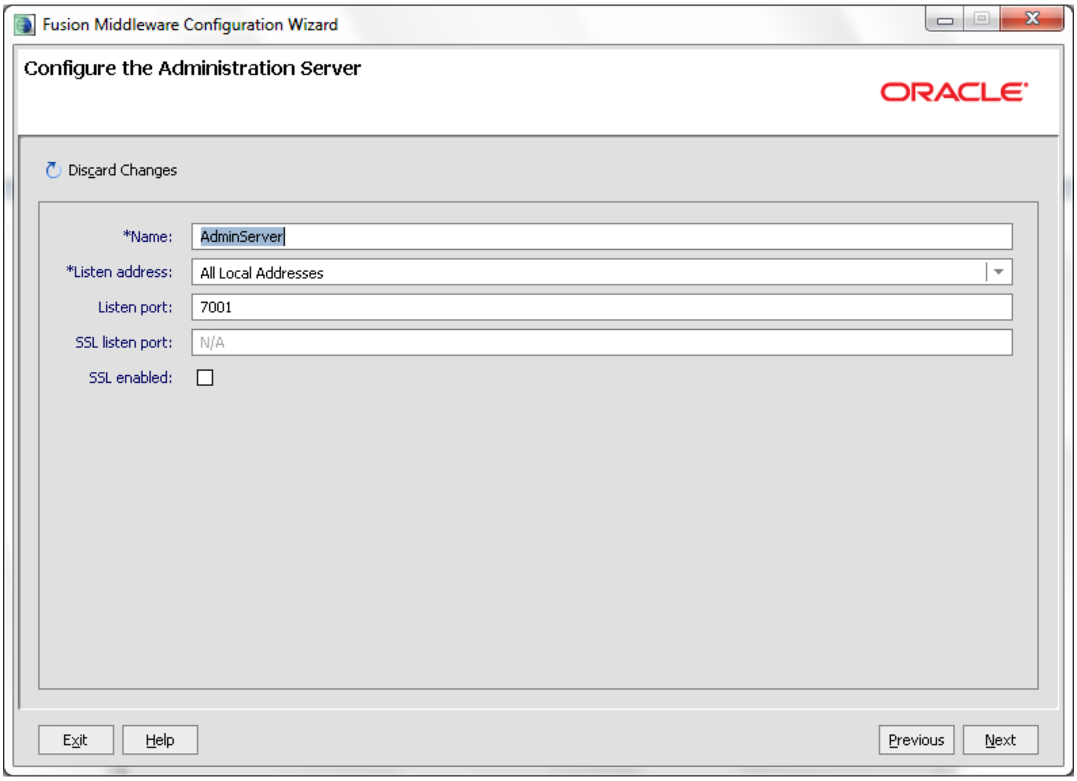
Select Optional Configuration

☑ **Administration Server**
Modify Settings

☑ **Managed Servers, Clusters and Machines**
Add or Delete
Modify Settings

☐ **RDBMS Security Store**
Modify Settings

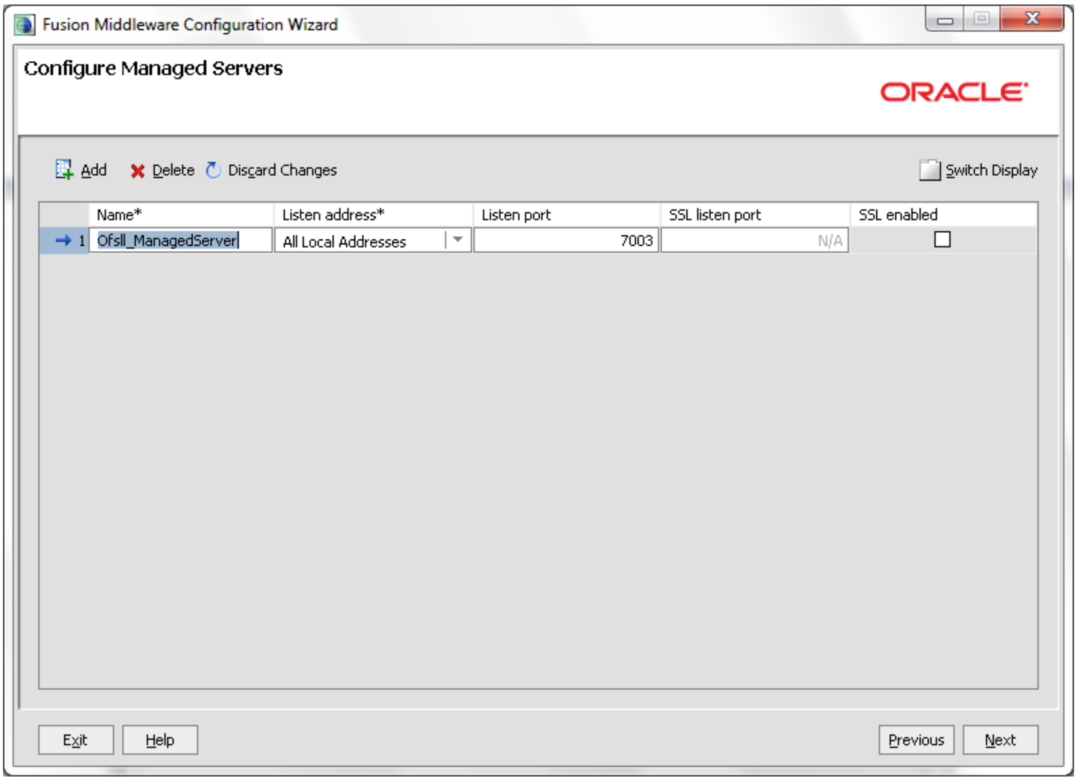
15. Select **Administration Server** and **Managed Servers, Clusters and Machines** and click **Next**. The following window is displayed.



Configure the Administration Server

|  |  |
|---|---|
| *Name: | AdminServer |
| *Listen address: | All Local Addresses |
| Listen port: | 7001 |
| SSL listen port: | N/A |
| SSL enabled: | □ |

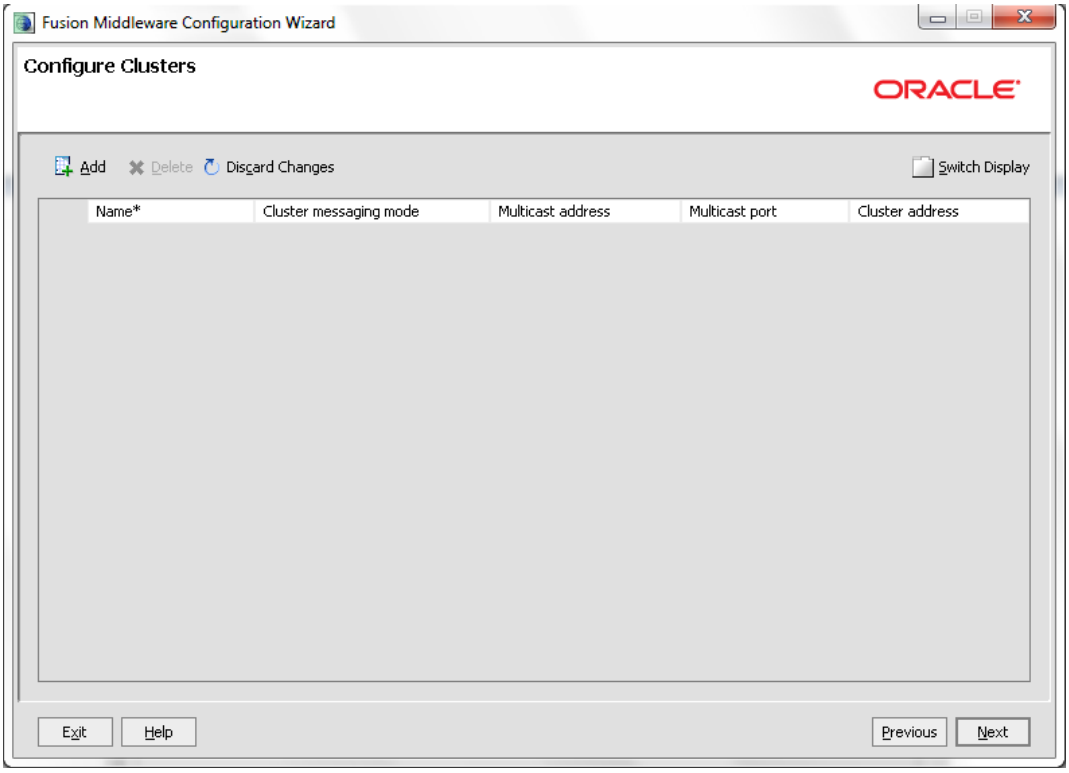
16. Enter Administration Server **Name** and **Listen Port** details and click **Next**. The following window is displayed.



Configure Managed Servers

|  | Name* | Listen address* | Listen port | SSL listen port | SSL enabled |
|---|---|---|---|---|---|
| 1 | Ofsll_ManagedServer | All Local Addresses | 7003 | N/A | □ |

17. Enter **Name** and **Listen Port** details in Configure Managed Servers window and click **Next**. The following window is displayed.

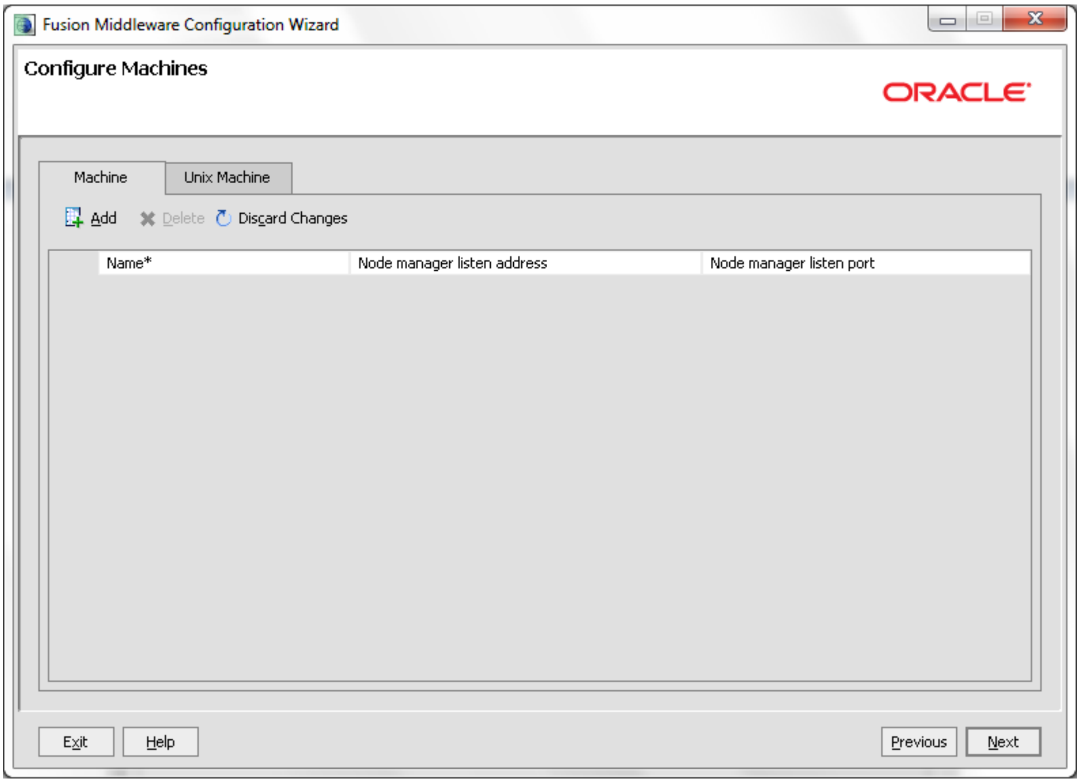


Fusion Middleware Configuration Wizard

Configure Clusters

| Name* | Cluster messaging mode | Multicast address | Multicast port | Cluster address |
|---|---|---|---|---|

18. Configure as required and click **Next**. The following window is displayed.

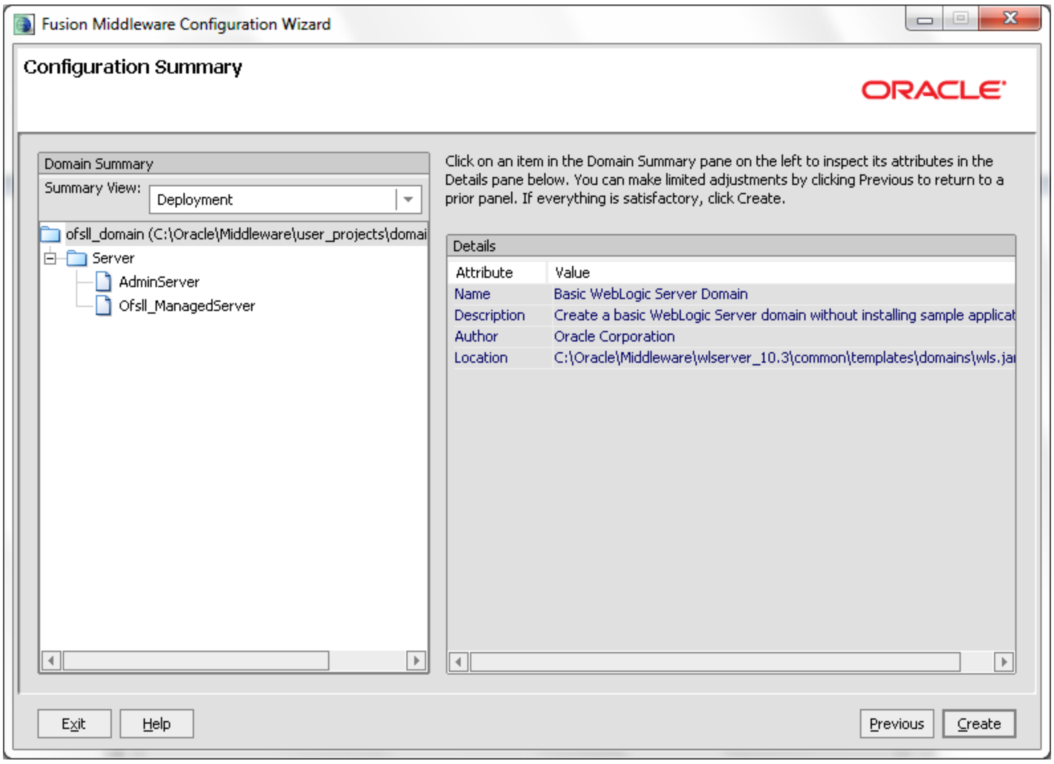


Fusion Middleware Configuration Wizard

Configure Machines

| Name* | Node manager listen address | Node manager listen port |
|---|---|---|

19. Configure as required and click **Next**. The following window is displayed.



Configuration Summary

Domain Summary

Summary View: Deployment

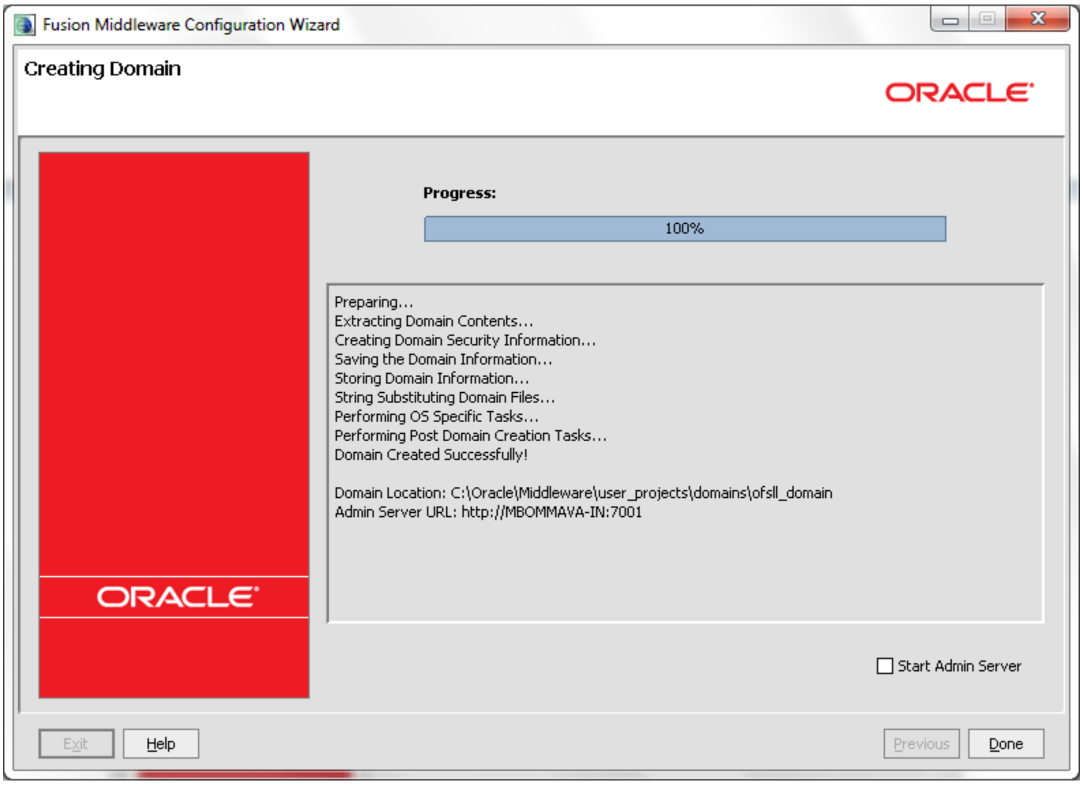
- ofsll_domain (C:\Oracle\Middleware\user_projects\domai
  - Server
    - AdminServer
    - Ofsll_ManagedServer

Click on an item in the Domain Summary pane on the left to inspect its attributes in the Details pane below. You can make limited adjustments by clicking Previous to return to a prior panel. If everything is satisfactory, click Create.

Details

| Attribute | Value |
|---|---|
| Name | Basic WebLogic Server Domain |
| Description | Create a basic WebLogic Server domain without installing sample applicat |
| Author | Oracle Corporation |
| Location | C:\Oracle\Middleware\wlserver_10.3\common\templates\domains\wls.ja |

20. Click **Create**. The following window is displayed.



Creating Domain

Progress: 100%

```
Preparing...
Extracting Domain Contents...
Creating Domain Security Information...
Saving the Domain Information...
Storing Domain Information...
String Substituting Domain Files...
Performing OS Specific Tasks...
Performing Post Domain Creation Tasks...
Domain Created Successfully!

Domain Location: C:\Oracle\Middleware\user_projects\domains\ofsll_domain
Admin Server URL: http://MBOMMAVA-IN:7001
```

□ Start Admin Server

21. Once the creation of the Domain is complete.

22. Click **Done** to close the window.

**Note**

The default Weblogic installation will be running JVM with 512MB, this has to be increased for the ADF managed server. Say, for a 2 CPU Quad Core with 16 GB it could have the JVM running at 8 GB as:

USER_MEM_ARGS="-Xms8192m –Xmx8192m -XX:PermSize=2048m -XX:MaxPermSize=2048m"

The above setting to be done by editing the setDomainEnv.sh or setDomainEnv.cmd file in $MW_HOME/user_projects/domains/mydomain/bin directory.

23. The "$MW_HOME/user_projects/domains/mydomain" directory contains a script that can be used to start the Admin server. Use the "&" if you want access to the command line to be returned.

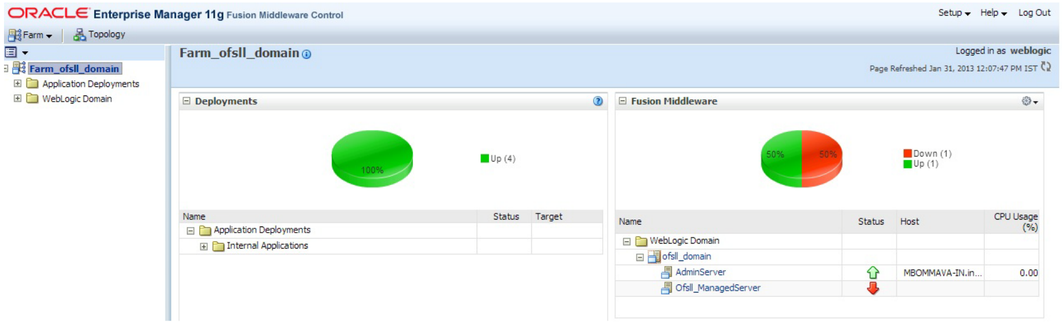
    ```
    $ cd $MW_HOME/user_projects/domains/mydomain
    $ ./startWebLogic.sh &
    ```

24. To Start Managed Server

    ```
    $ cd $MW_HOME/user_projects/domains/mydomain/bin
    $ $MW_HOME/user_projects/domains/mydomain/bin/startManagedWebLogic.sh {ManagedServer_name} {AdminServer URL} &
    ```

## 3.2 Applying the JRF Template

1. Start Oracle WebLogic Server
2. Login to Oracle Enterprise Manager 11g Console (http://hostname:port/em).



Farm_ofsll_domain

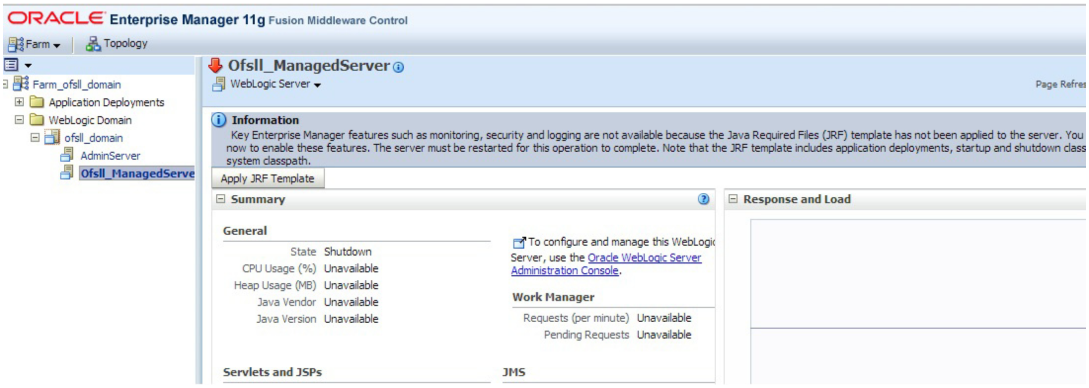
Logged in as weblogic

Page Refreshed Jan 31, 2013 12:07:47 PM IST

| Name | Status | Target |
|---|---|---|
| Application Deployments | | |
| Internal Applications | | |

| Name | Status | Host | CPU Usage (%) |
|---|---|---|---|
| WebLogic Domain | | | |
| ofsll_domain | | | |
| AdminServer | ⇧ | MBOMMAVA-IN.in... | 0.00 |
| Ofsll_ManagedServer | ⇩ | | |

3. On Left window panel, expand **WebLogic Domain → ofsll_domain** and click **Ofsll_ManagedServer** as shown below.



Ofsll_ManagedServer

**Information**

Key Enterprise Manager features such as monitoring, security and logging are not available because the Java Required Files (JRF) template has not been applied to the server. You now to enable these features. The server must be restarted for this operation to complete. Note that the JRF template includes application deployments, startup and shutdown class system classpath.

General

| | |
|---|---|
| State | Shutdown |
| CPU Usage (%) | Unavailable |
| Heap Usage (MB) | Unavailable |
| Java Vendor | Unavailable |
| Java Version | Unavailable |

To configure and manage this WebLogic Server, use the Oracle WebLogic Server Administration Console.

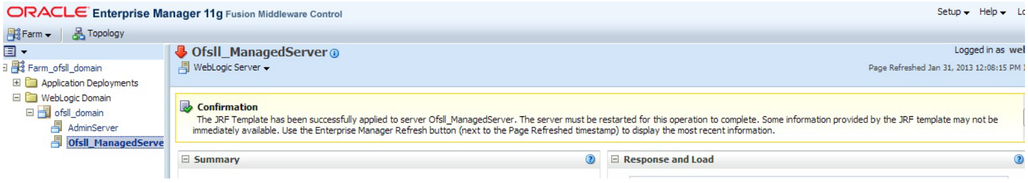
Work Manager

| | |
|---|---|
| Requests (per minute) | Unavailable |
| Pending Requests | Unavailable |

Servlets and JSPs

JMS

4. On right window panel, click **Apply JRF Template** Button. The confirmation message is displayed as shown below.



Confirmation

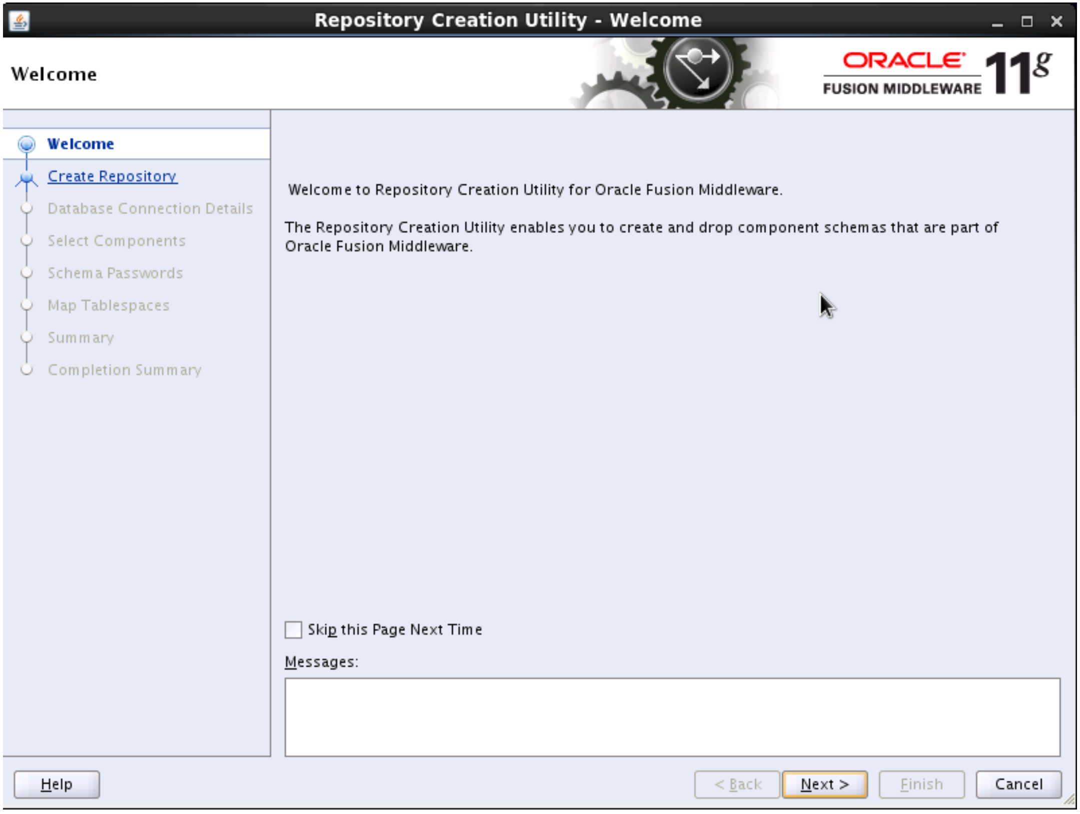
The JRF Template has been successfully applied to server Ofsll_ManagedServer. The server must be restarted for this operation to complete. Some information provided by the JRF template may not be immediately available. Use the Enterprise Manager Refresh button (next to the Page Refreshed timestamp) to display the most recent information.

## 3.3 Creating Schemas using Repository Creation Utility

1. Download Oracle Repository Creation Utility Tool (ofm_rcu_linux_11.1.1.6.0_disk1_1of1.zip) from the link mentioned in prerequisites.
2. Unzip the ofm_rcu_linux_11.1.1.6.0_disk1_1of1.zip to your local drive.
3. On windows, assume that it is unzipped to C:/oracle/rcuHome and set the value as RCU_HOME.

i.e. export RCU_HOME=C:/oracle/rcuHome

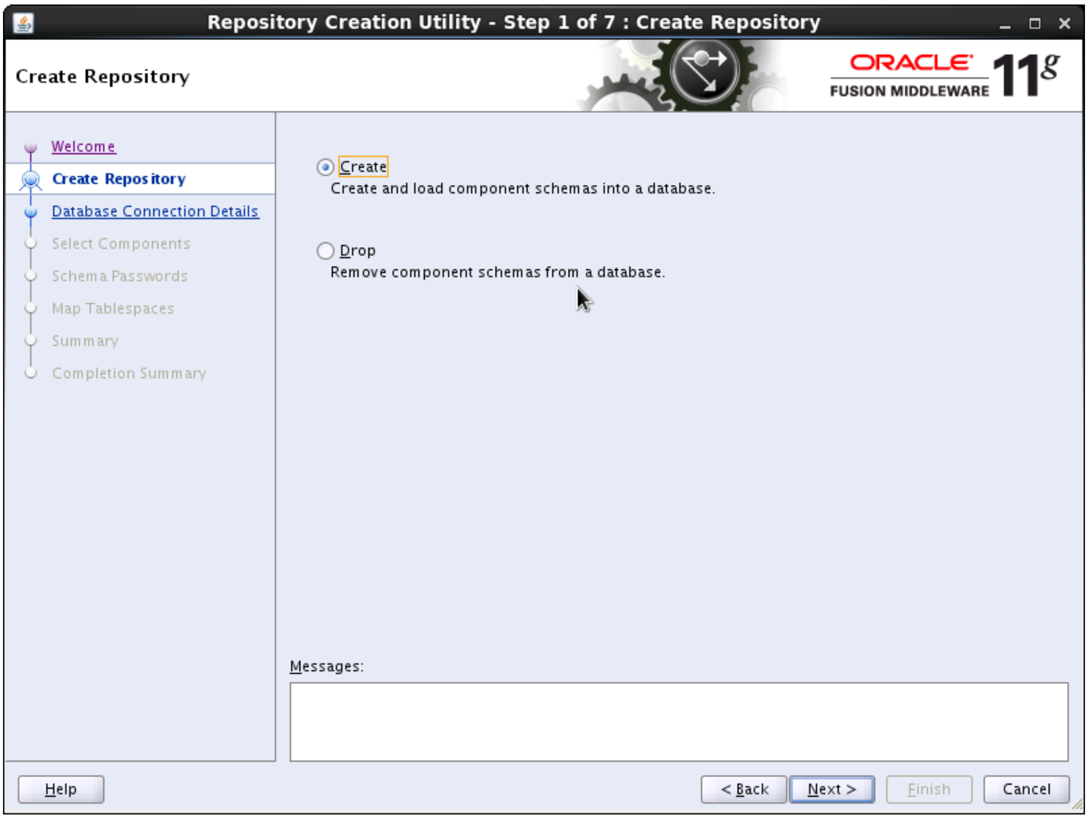
4. Open command prompt and browse to $RCU_HOME/bin and run **./rcu**
5. On Unix, /home/oracle/rcuHome/bin and run **./rcu**
6. The following window is displayed.



Welcome to Repository Creation Utility for Oracle Fusion Middleware.

The Repository Creation Utility enables you to create and drop component schemas that are part of Oracle Fusion Middleware.

7. Click Next. The following window is displayed.



Repository Creation Utility - Step 1 of 7 : Create Repository

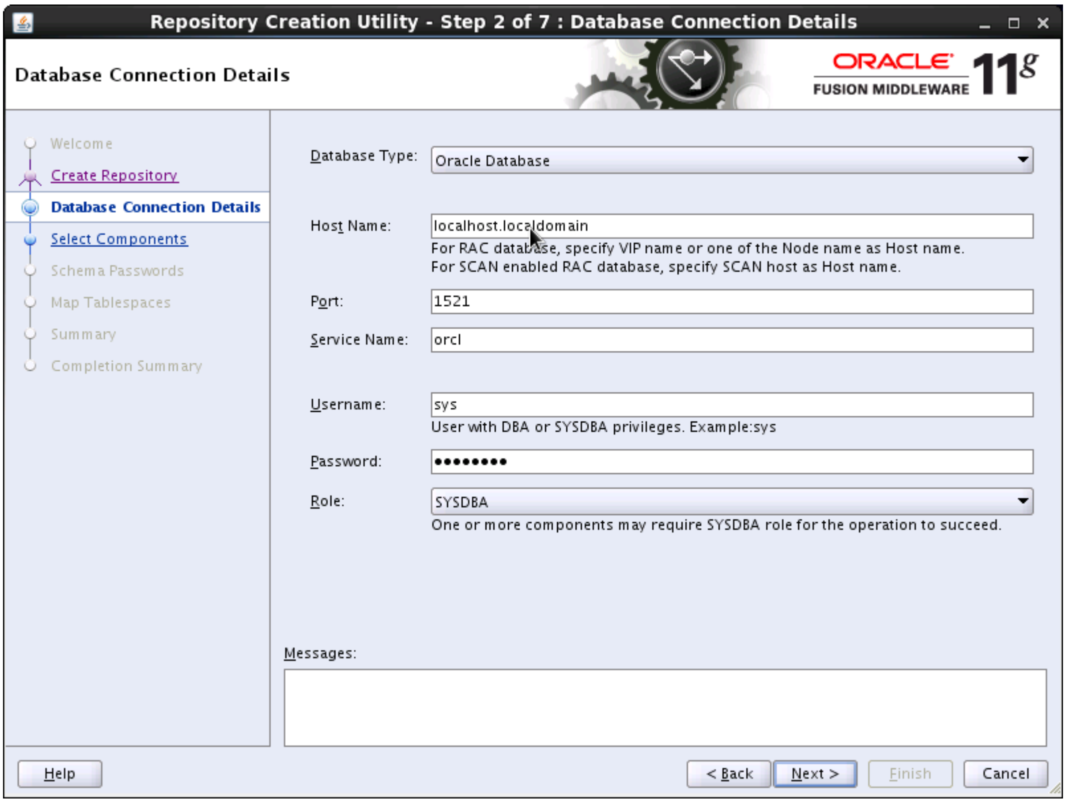
Create Repository

● Create
Create and load component schemas into a database.

○ Drop
Remove component schemas from a database.

Messages:

8. Select **Create** to create new schemas and click **Next**. The following window is displayed.



Repository Creation Utility - Step 2 of 7 : Database Connection Details

Database Connection Details

Database Type: Oracle Database

Host Name: localhost.localdomain
For RAC database, specify VIP name or one of the Node name as Host name.
For SCAN enabled RAC database, specify SCAN host as Host name.

Port: 1521

Service Name: orcl

Username: sys
User with DBA or SYSDBA privileges. Example:sys

Password: ••••••••

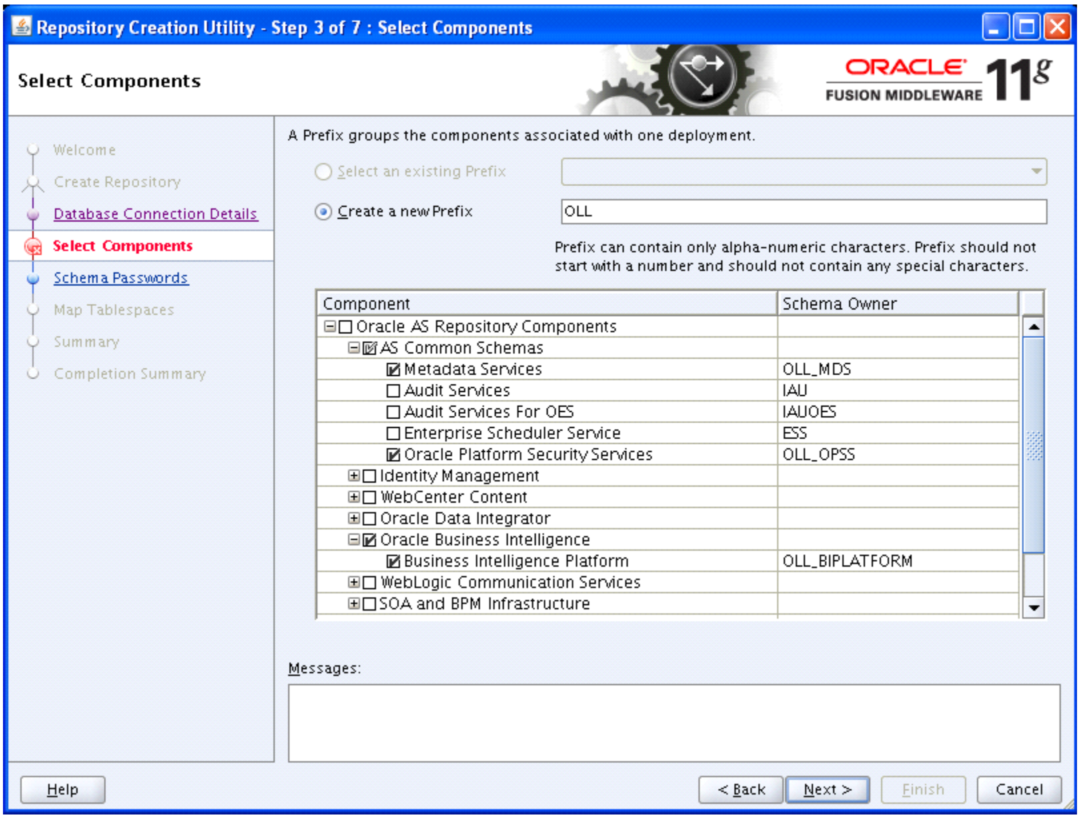
Role: SYSDBA
One or more components may require SYSDBA role for the operation to succeed.

Messages:

9. Provide database details where you want to create schemas, as shown in the above screen.

**Note**

You will require a user with SYSDBA role to create schemas.



Repository Creation Utility - Step 3 of 7 : Select Components

Select Components

A Prefix groups the components associated with one deployment.

○ Select an existing Prefix

● Create a new Prefix: OLL

Prefix can contain only alpha-numeric characters. Prefix should not start with a number and should not contain any special characters.

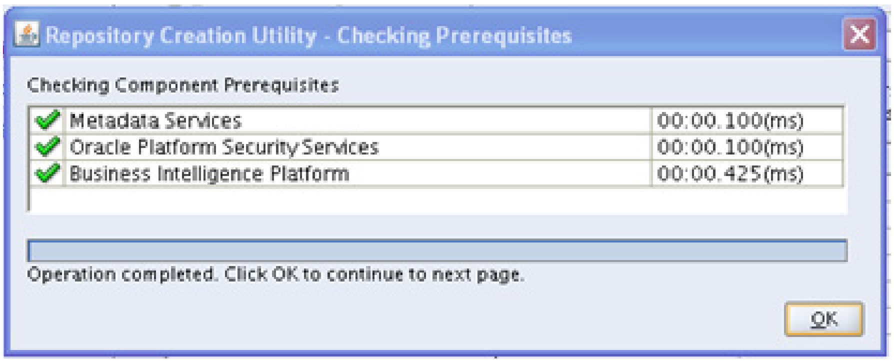
| Component | Schema Owner |
|---|---|
| ⊟ □ Oracle AS Repository Components | |
| ⊟ ☒ AS Common Schemas | |
| ☑ Metadata Services | OLL_MDS |
| □ Audit Services | IAU |
| □ Audit Services For OES | IAUOES |
| □ Enterprise Scheduler Service | ESS |
| ☑ Oracle Platform Security Services | OLL_OPSS |
| ⊞ □ Identity Management | |
| ⊞ □ WebCenter Content | |
| ⊞ □ Oracle Data Integrator | |
| ⊟ ☑ Oracle Business Intelligence | |
| ☑ Business Intelligence Platform | OLL_BIPLATFORM |
| ⊞ □ WebLogic Communication Services | |
| ⊞ □ SOA and BPM Infrastructure | |

Messages:

10. Select **Create a new Prefix** option and specify value. For example, OLL

11. Check **Metadata Services, Oracle Platform Security Services** and **Business Intelligence Platform** as shown in the above screen.

12. Click **Next**. The following window is displayed.



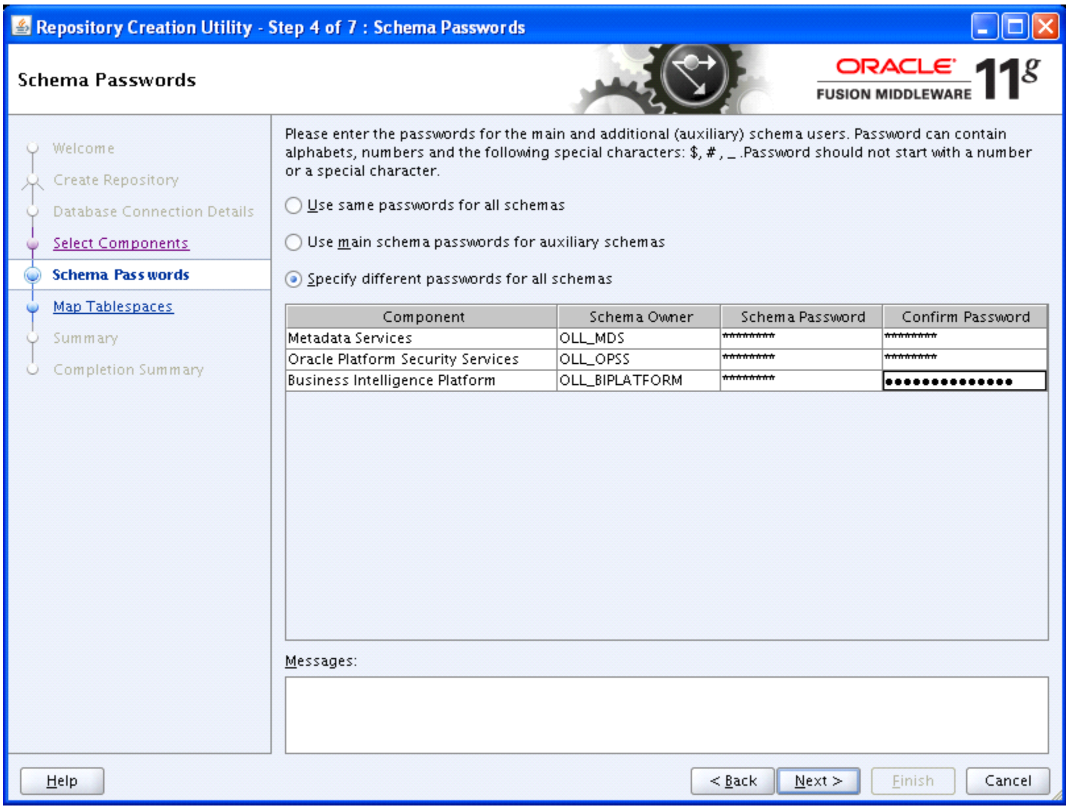
Repository Creation Utility - Checking Prerequisites

Checking Component Prerequisites

| | |
|---|---|
| ✓ Metadata Services | 00:00.100(ms) |
| ✓ Oracle Platform Security Services | 00:00.100(ms) |
| ✓ Business Intelligence Platform | 00:00.425(ms) |

Operation completed. Click OK to continue to next page.

13. Once the operation is complete, click **OK.** The following window is displayed.



Repository Creation Utility - Step 4 of 7 : Schema Passwords

Schema Passwords

Please enter the passwords for the main and additional (auxiliary) schema users. Password can contain alphabets, numbers and the following special characters: $, #, _. Password should not start with a number or a special character.

○ Use same passwords for all schemas

○ Use main schema passwords for auxiliary schemas

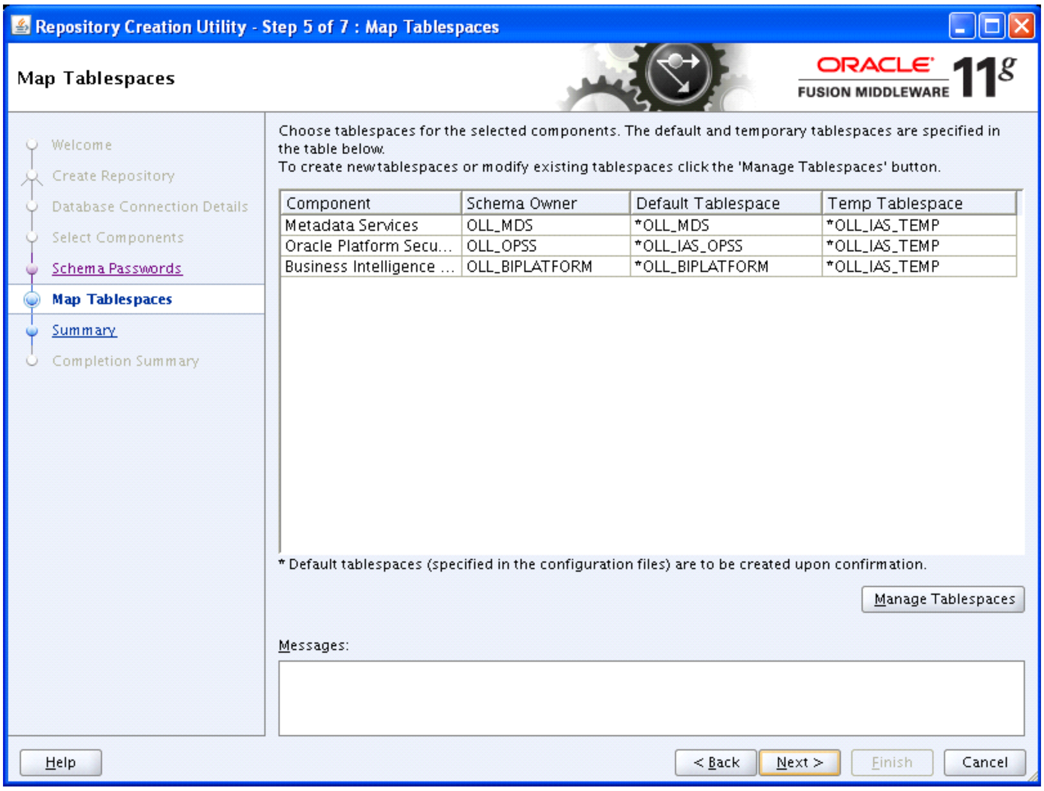
● Specify different passwords for all schemas

| Component | Schema Owner | Schema Password | Confirm Password |
|---|---|---|---|
| Metadata Services | OLL_MDS | ********** | ********** |
| Oracle Platform Security Services | OLL_OPSS | ********** | ********** |
| Business Intelligence Platform | OLL_BIPLATFORM | ********** | ●●●●●●●●●●●●●●● |

Messages:

14. Select **Specify different passwords for all schemas** and provide Schema Passwords for each server as shown above.

15. Click Next., The following window is displayed.



Repository Creation Utility - Step 5 of 7 : Map Tablespaces

Map Tablespaces

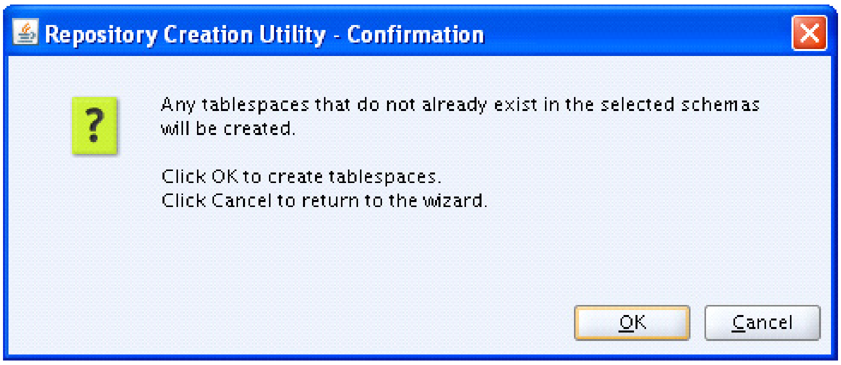
Choose tablespaces for the selected components. The default and temporary tablespaces are specified in the table below.
To create new tablespaces or modify existing tablespaces click the 'Manage Tablespaces' button.

| Component | Schema Owner | Default Tablespace | Temp Tablespace |
|---|---|---|---|
| Metadata Services | OLL_MDS | *OLL_MDS | *OLL_IAS_TEMP |
| Oracle Platform Secu... | OLL_OPSS | *OLL_IAS_OPSS | *OLL_IAS_TEMP |
| Business Intelligence ... | OLL_BIPLATFORM | *OLL_BIPLATFORM | *OLL_IAS_TEMP |

* Default tablespaces (specified in the configuration files) are to be created upon confirmation.

Messages:

16. Click **Next**. The following window is displayed.

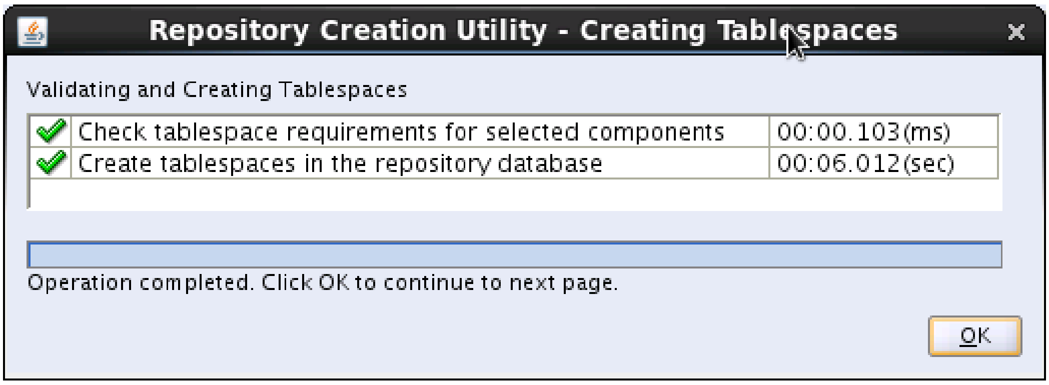


Repository Creation Utility - Confirmation

Any tablespaces that do not already exist in the selected schemas will be created.

Click OK to create tablespaces.
Click Cancel to return to the wizard.

17. Click **OK**. The following window is displayed.



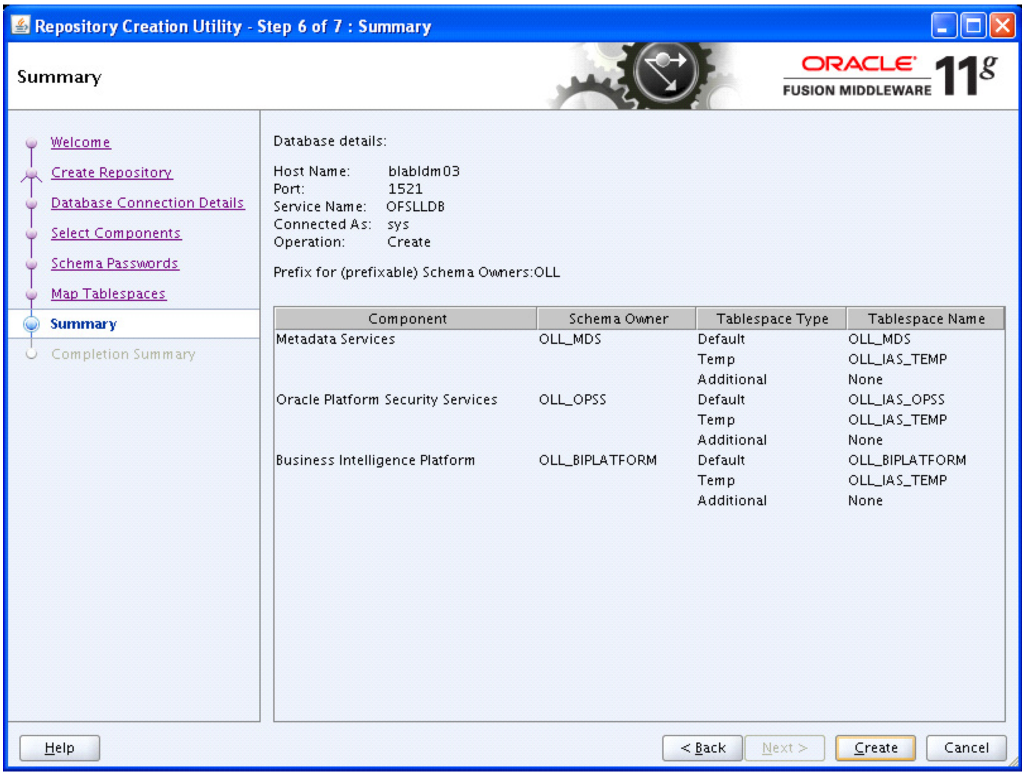
Repository Creation Utility - Creating Tablespaces

Validating and Creating Tablespaces

| | | |
|---|---|---|
| ✓ | Check tablespace requirements for selected components | 00:00.103(ms) |
| ✓ | Create tablespaces in the repository database | 00:06.012(sec) |

Operation completed. Click OK to continue to next page.

18. Click **OK** to continue to the next page. The following window is displayed.



Repository Creation Utility - Step 6 of 7 : Summary

Summary

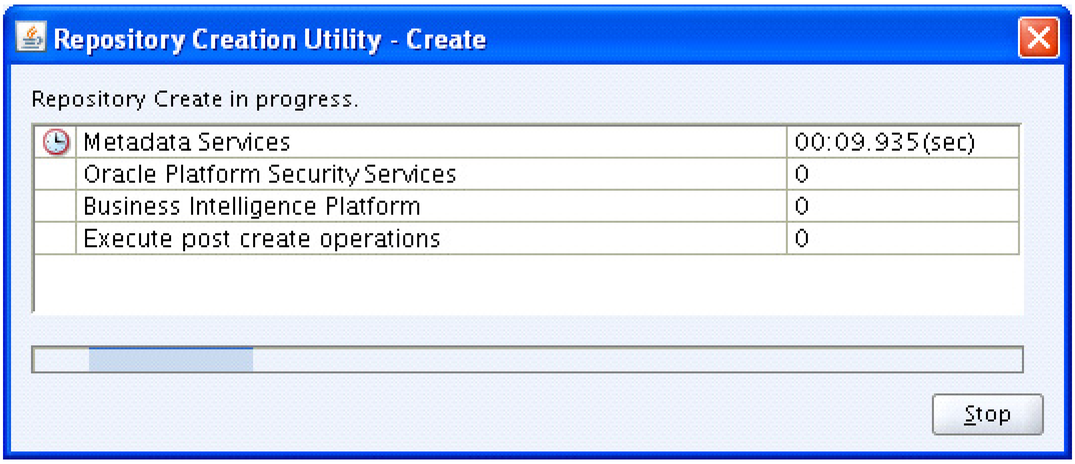
Database details:

Host Name: blabldm03
Port: 1521
Service Name: OFSLLDB
Connected As: sys
Operation: Create

Prefix for (prefixable) Schema Owners:OLL

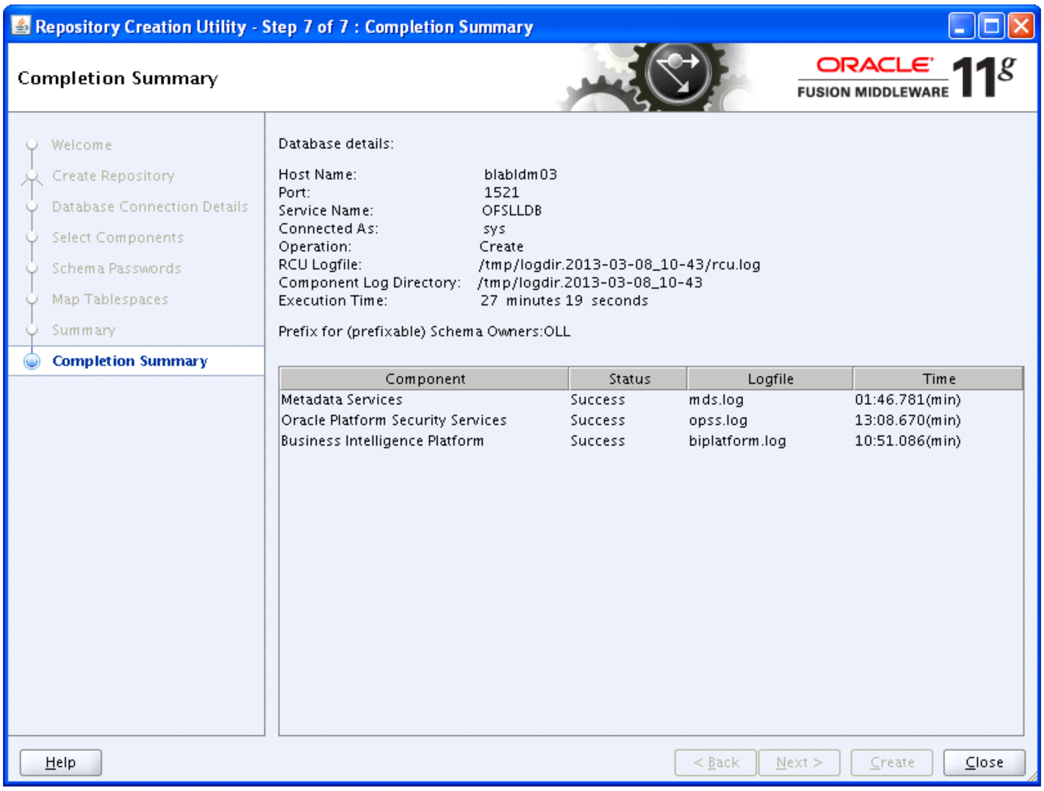
| Component | Schema Owner | Tablespace Type | Tablespace Name |
|---|---|---|---|
| Metadata Services | OLL_MDS | Default | OLL_MDS |
| | | Temp | OLL_IAS_TEMP |
| | | Additional | None |
| Oracle Platform Security Services | OLL_OPSS | Default | OLL_IAS_OPSS |
| | | Temp | OLL_IAS_TEMP |
| | | Additional | None |
| Business Intelligence Platform | OLL_BIPLATFORM | Default | OLL_BIPLATFORM |
| | | Temp | OLL_IAS_TEMP |
| | | Additional | None |

19. Click **Create.** The following windows are displayed.



Repository Create in progress.

| | | |
|---|---|---|
| 🕒 | Metadata Services | 00:09.935(sec) |
| | Oracle Platform Security Services | 0 |
| | Business Intelligence Platform | 0 |
| | Execute post create operations | 0 |



Repository Creation Utility - Step 7 of 7 : Completion Summary
Completion Summary
ORACLE FUSION MIDDLEWARE 11g
Welcome
Create Repository
Database Connection Details
Select Components
Schema Passwords
Map Tablespaces
Summary
Completion Summary

Database details:

Host Name: blabldm03
Port: 1521
Service Name: OFSLLDB
Connected As: sys
Operation: Create
RCU Logfile: /tmp/logdir.2013-03-08_10-43/rcu.log
Component Log Directory: /tmp/logdir.2013-03-08_10-43
Execution Time: 27 minutes 19 seconds

Prefix for (prefixable) Schema Owners:OLL

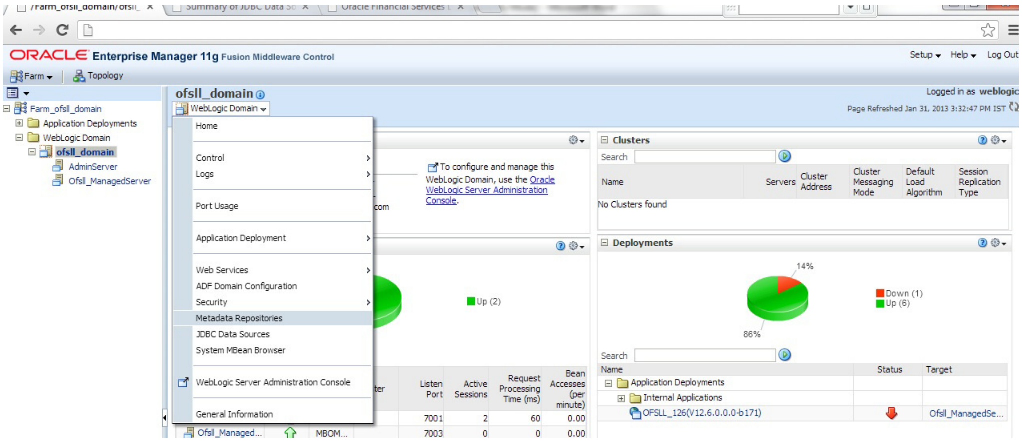
| Component | Status | Logfile | Time |
|---|---|---|---|
| Metadata Services | Success | mds.log | 01:46.781(min) |
| Oracle Platform Security Services | Success | opss.log | 13:08.670(min) |
| Business Intelligence Platform | Success | biplatform.log | 10:51.086(min) |

20. Click **Close** to close the window.

## 3.4 Creating Metadata Repository

Assuming that **DEV_MDS** schema is created using Oracle Repository Creation Utility (RCU) as mentioned in Creating Schemas using Repository Creation Utility section, follow the below steps to create the repository.

1. Login to Oracle Enterprise Manager 11g console (http://hostname:port/em).



Logged in as weblogic

Page Refreshed Jan 31, 2013 3:32:47 PM IST

To configure and manage this WebLogic Domain, use the Oracle WebLogic Server Administration Console.

| Name | Servers | Cluster Address | Cluster Messaging Mode | Default Load Algorithm | Session Replication Type |
|---|---|---|---|---|---|
| No Clusters found | | | | | |

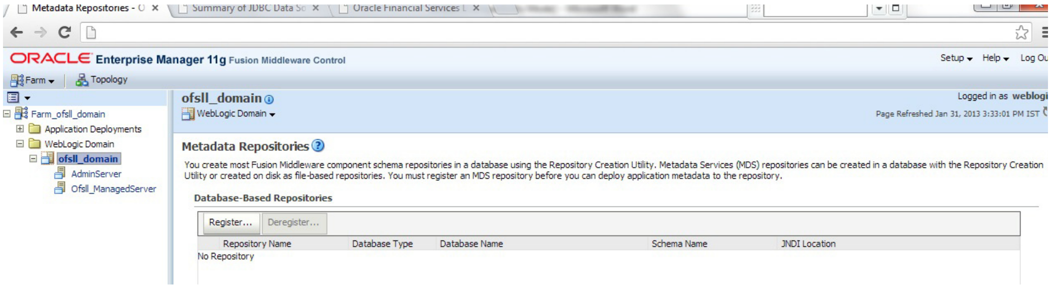
| Name | Status | Target |
|---|---|---|
| Application Deployments | | |
| Internal Applications | | |
| OFSLL_126(V12.6.0.0.0-b171) | | Ofsll_ManagedSe... |

| | Listen Port | Active Sessions | Request Processing Time (ms) | Bean Accesses (per minute) |
|---|---|---|---|---|
| | 7001 | 2 | 60 | 0.00 |
| Ofsll_Managed... | 7003 | 0 | 0 | 0.00 |

2. Click on domain name ofsll_domain on the left side panel.

3. Expand Weblogic Domain and click Metadata Repositories on right side panel, as shown above screen.

4. The following window is displayed.



ofsll_domain

Logged in as weblogi

Page Refreshed Jan 31, 2013 3:33:01 PM IST

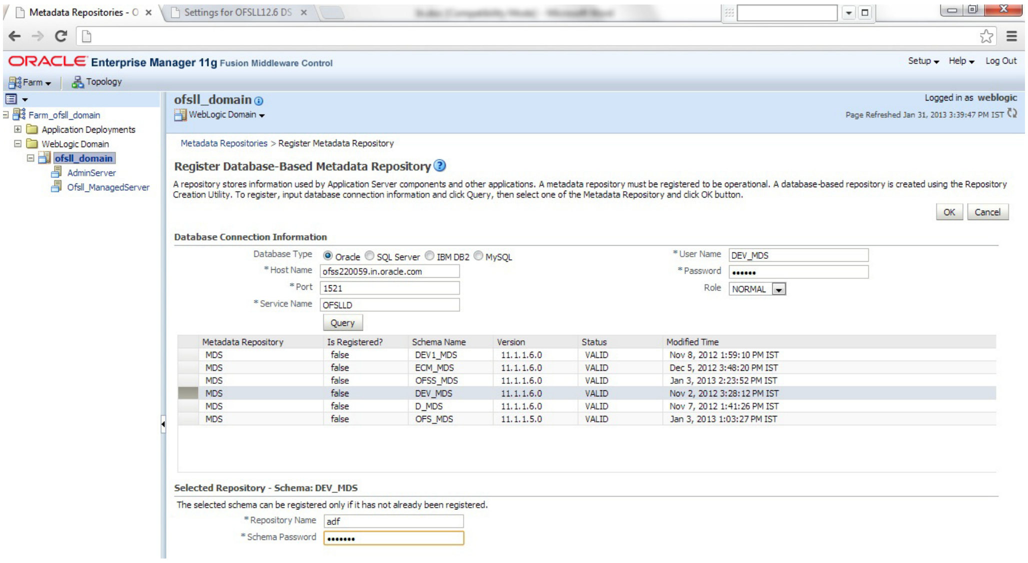
Metadata Repositories

You create most Fusion Middleware component schema repositories in a database using the Repository Creation Utility. Metadata Services (MDS) repositories can be created in a database with the Repository Creation Utility or created on disk as file-based repositories. You must register an MDS repository before you can deploy application metadata to the repository.

Database-Based Repositories

| Repository Name | Database Type | Database Name | Schema Name | JNDI Location |
|---|---|---|---|---|
| No Repository | | | | |

5. Click Register button. The following window is displayed.



ofsll_domain

Logged in as weblogic

Page Refreshed Jan 31, 2013 3:39:47 PM IST

Metadata Repositories > Register Metadata Repository

Register Database-Based Metadata Repository

A repository stores information used by Application Server components and other applications. A metadata repository must be registered to be operational. A database-based repository is created using the Repository Creation Utility. To register, input database connection information and click Query, then select one of the Metadata Repository and click OK button.

Database Connection Information

Database Type ● Oracle ○ SQL Server ○ IBM DB2 ○ MySQL

* Host Name ofss220059.in.oracle.com

* Port 1521

* Service Name OFSLLD

* User Name DEV_MDS

* Password ••••••

Role NORMAL

| Metadata Repository | Is Registered? | Schema Name | Version | Status | Modified Time |
|---|---|---|---|---|---|
| MDS | false | DEV1_MDS | 11.1.1.6.0 | VALID | Nov 8, 2012 1:59:10 PM IST |
| MDS | false | ECM_MDS | 11.1.1.6.0 | VALID | Dec 5, 2012 3:48:20 PM IST |
| MDS | false | OFSS_MDS | 11.1.1.6.0 | VALID | Jan 3, 2013 2:23:52 PM IST |
| MDS | false | DEV_MDS | 11.1.1.6.0 | VALID | Nov 2, 2012 3:28:12 PM IST |
| MDS | false | D_MDS | 11.1.1.6.0 | VALID | Nov 7, 2012 1:41:26 PM IST |
| MDS | false | OFS_MDS | 11.1.1.5.0 | VALID | Jan 3, 2013 1:03:27 PM IST |

Selected Repository - Schema: DEV_MDS

The selected schema can be registered only if it has not already been registered.

* Repository Name adf

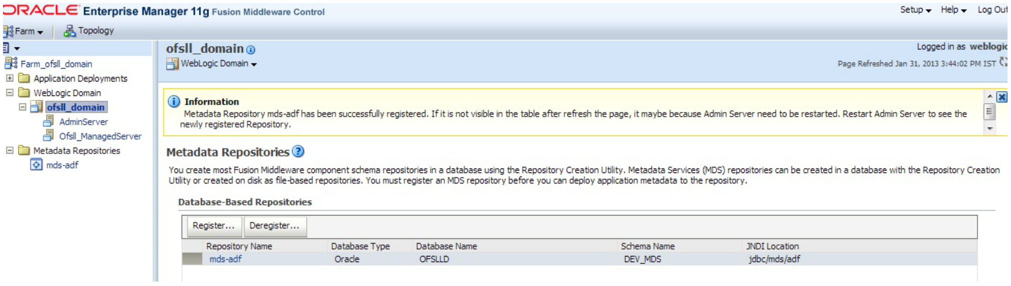
* Schema Password •••••••

6. Enter database instance details under Database Connection Information section and click **Query**.

7. All available schemas in the given database instance are listed.

8. Select the schema you require and enter **Repository Name (adf)** and the password under Selected Repository – Schema **DEV_MDS** section.

9. Click OK. The following window is displayed.



ofsll_domain

WebLogic Domain

Logged in as weblogic

Page Refreshed Jan 31, 2013 3:44:02 PM IST

**Information**
Metadata Repository mds-adf has been successfully registered. If it is not visible in the table after refresh the page, it maybe because Admin Server need to be restarted. Restart Admin Server to see the newly registered Repository.

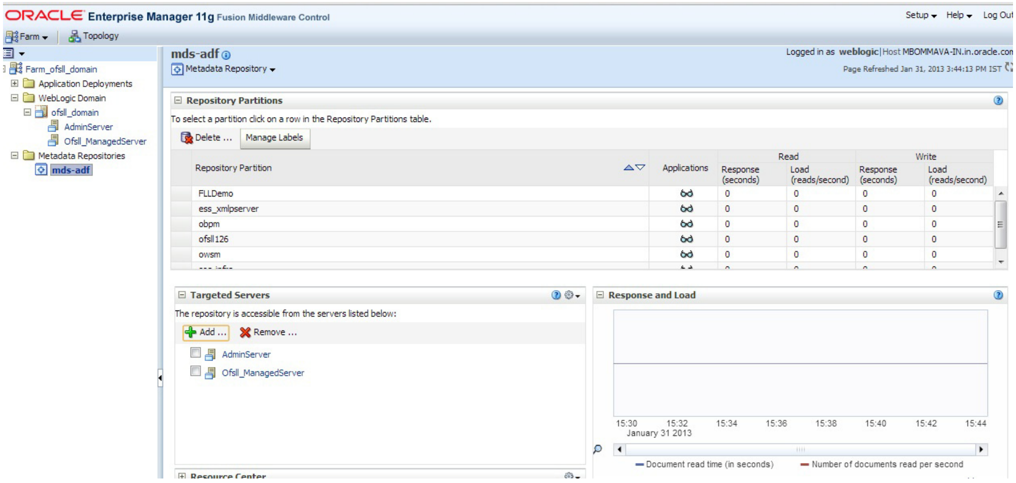
**Metadata Repositories**

You create most Fusion Middleware component schema repositories in a database using the Repository Creation Utility. Metadata Services (MDS) repositories can be created in a database with the Repository Creation Utility or created on disk as file-based repositories. You must register an MDS repository before you can deploy application metadata to the repository.

**Database-Based Repositories**

| Repository Name | Database Type | Database Name | Schema Name | JNDI Location |
|---|---|---|---|---|
| mds-adf | Oracle | OFSLLD | DEV_MDS | jdbc/mds/adf |

10. Click Repository name **mds-adf** on left panel. You can even select it from right panel.



mds-adf

Metadata Repository

Logged in as weblogic|Host MBOMMAVA-IN.in.oracle.com

Page Refreshed Jan 31, 2013 3:44:13 PM IST

**Repository Partitions**

To select a partition click on a row in the Repository Partitions table.

| | | Read | | Write | |
|---|---|---|---|---|---|
| Repository Partition | Applications | Response (seconds) | Load (reads/second) | Response (seconds) | Load (reads/second) |
| FLLDemo | 👓 | 0 | 0 | 0 | 0 |
| ess_xmlpserver | 👓 | 0 | 0 | 0 | 0 |
| obpm | 👓 | 0 | 0 | 0 | 0 |
| ofsll126 | 👓 | 0 | 0 | 0 | 0 |
| owsm | 👓 | 0 | 0 | 0 | 0 |

**Targeted Servers**

The repository is accessible from the servers listed below:

□ AdminServer

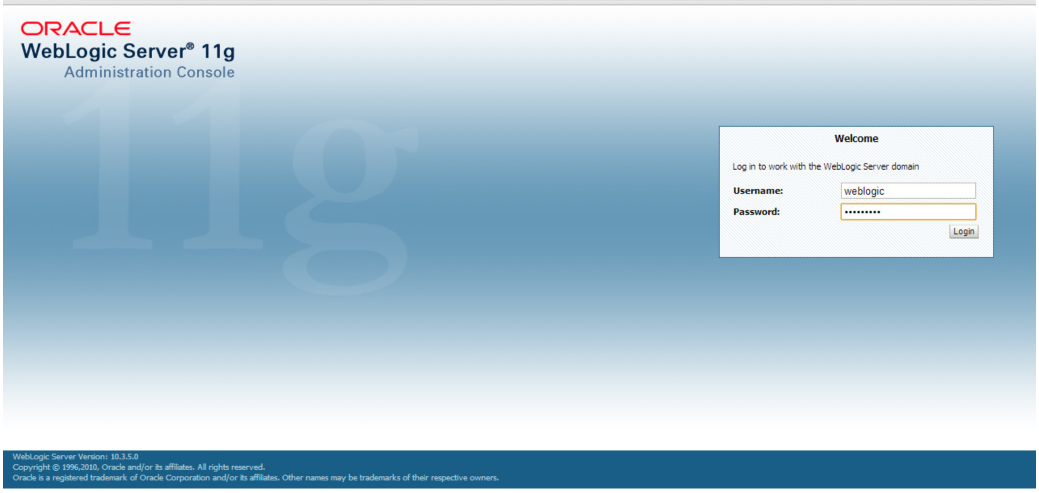
□ Ofsll_ManagedServer

**Response and Load**

11. And target to available servers as on right panel.

## 3.5 Creating Data Source

1. Login to WebLogic Server 11g console (http://hostname:port/console).



**Welcome**

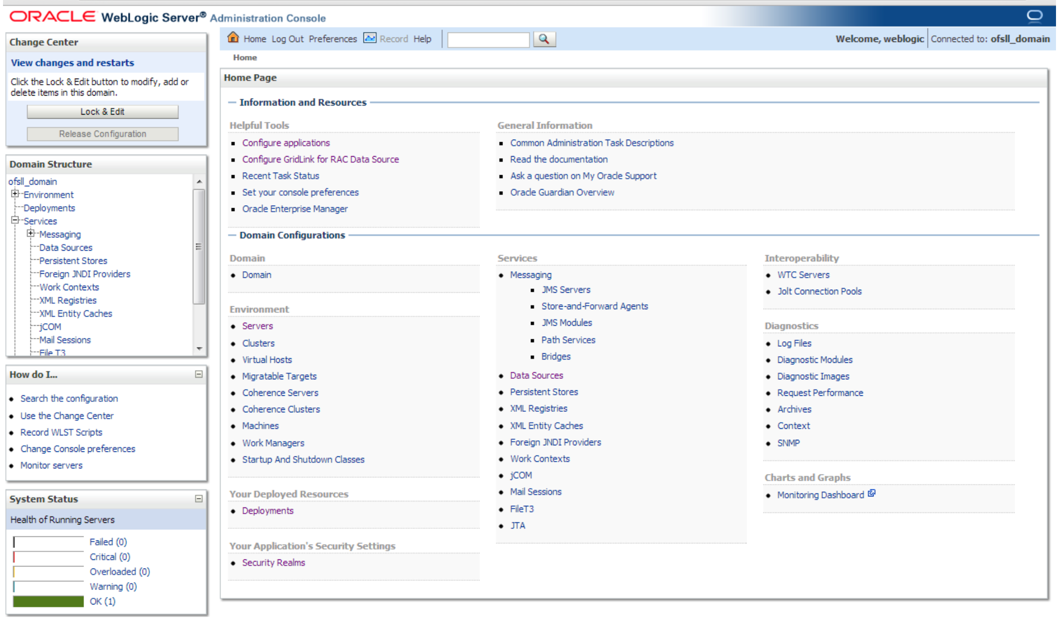
Log in to work with the WebLogic Server domain

Username: weblogic

Password: •••••••••

WebLogic Server Version: 10.3.5.0
Copyright © 1996,2010, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

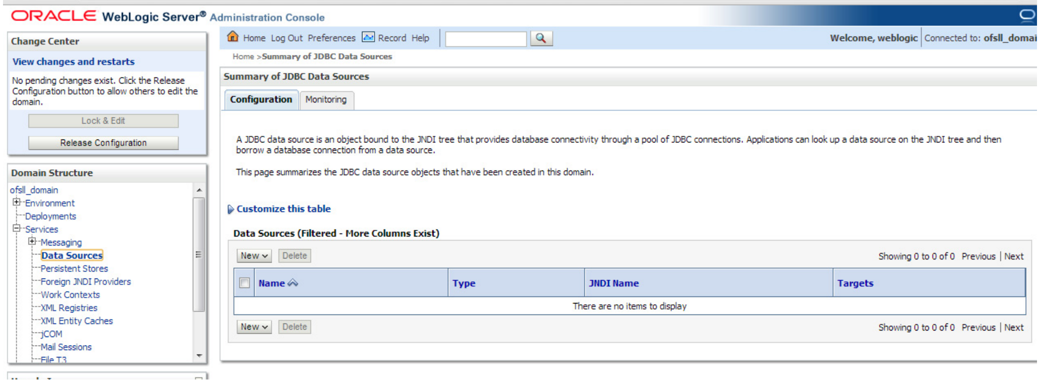
2. The following window is displayed.



Click the Lock & Edit button to modify, add or delete items in this domain.

3. Click Domain Name → Services → Data Sources.

4. The following window is displayed.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

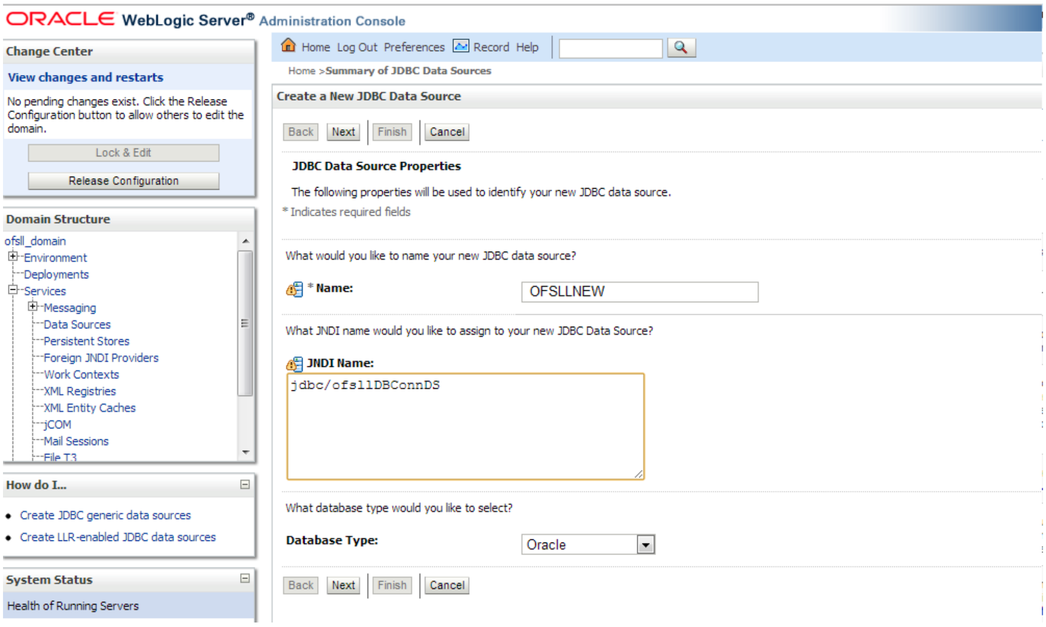
A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

Data Sources (Filtered - More Columns Exist)

| □ | Name | Type | JNDI Name | Targets |
|---|---|---|---|---|
| There are no items to display | | | | |

5. Click **Lock & Edit** button on the left panel. Click **New** on right panel and select **Generic Data Source**.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

JDBC Data Source Properties

The following properties will be used to identify your new JDBC data source.

* Indicates required fields

What would you like to name your new JDBC data source?

* Name: OFSLLNEW

What JNDI name would you like to assign to your new JDBC Data Source?

JNDI Name: jdbc/ofsllDBConnDS

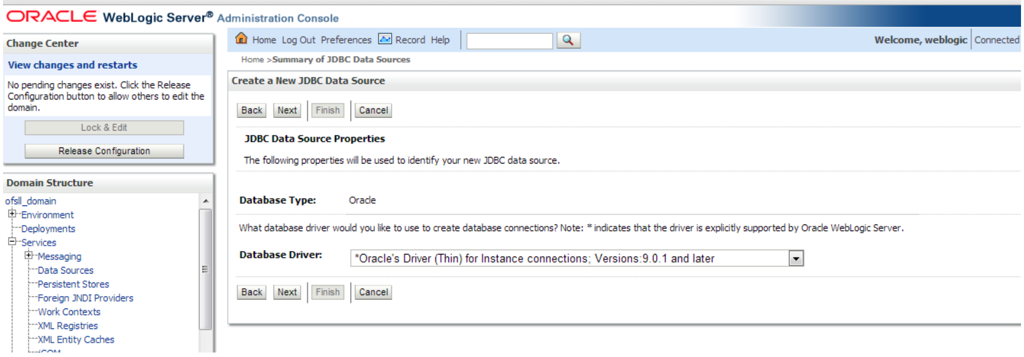
What database type would you like to select?

Database Type: Oracle

6. Enter Data source **Name**

7. Enter **JNDI Name** as **jdbc/ofsllDBConnDS**.

8. Select **Oracle** as **Database Type** and click **Next**. The following window is displayed.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Create a New JDBC Data Source

JDBC Data Source Properties

The following properties will be used to identify your new JDBC data source.

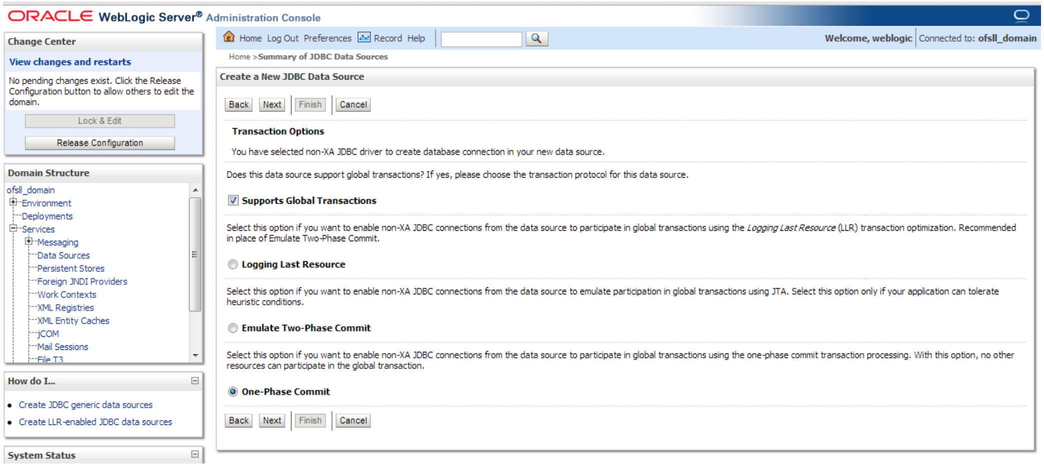
Database Type: Oracle

What database driver would you like to use to create database connections? Note: * indicates that the driver is explicitly supported by Oracle WebLogic Server.

Database Driver: *Oracle's Driver (Thin) for Instance connections; Versions:9.0.1 and later

9. Select the Database Driver (Thin) as shown above.

10. Click **Next**. The following window is displayed.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Create a New JDBC Data Source

Transaction Options

You have selected non-XA JDBC driver to create database connection in your new data source.

Does this data source support global transactions? If yes, please choose the transaction protocol for this data source.

☑ Supports Global Transactions

Select this option if you want to enable non-XA JDBC connections from the data source to participate in global transactions using the *Logging Last Resource* (LLR) transaction optimization. Recommended in place of Emulate Two-Phase Commit.

○ Logging Last Resource

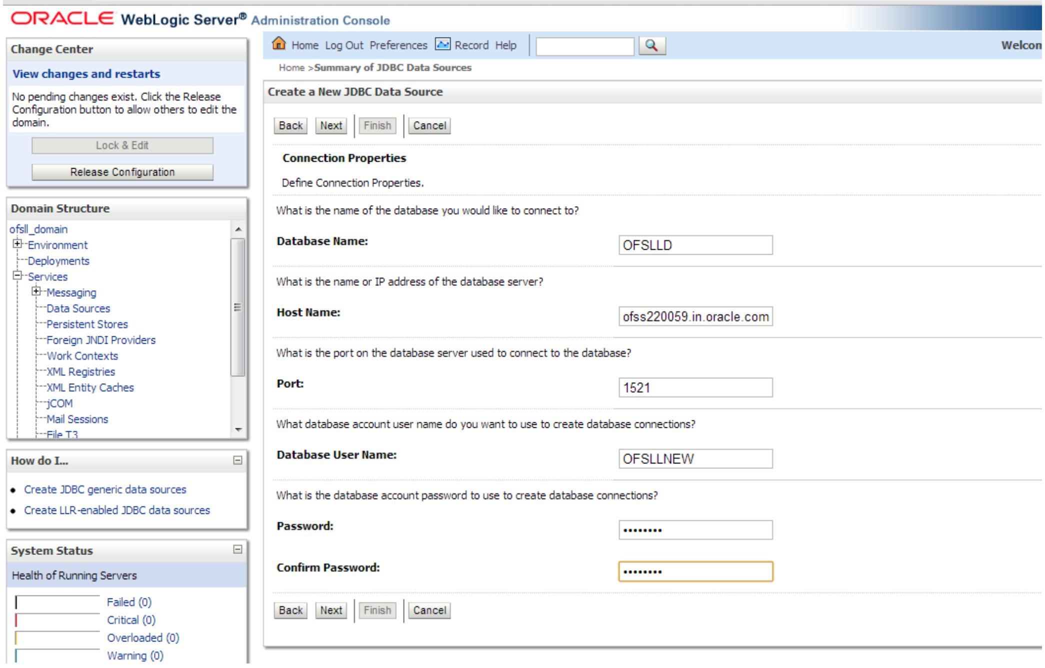
Select this option if you want to enable non-XA JDBC connections from the data source to emulate participation in global transactions using JTA. Select this option only if your application can tolerate heuristic conditions.

○ Emulate Two-Phase Commit

Select this option if you want to enable non-XA JDBC connections from the data source to participate in global transactions using the one-phase commit transaction processing. With this option, no other resources can participate in the global transaction.

● One-Phase Commit

11. Click **Next**. The following window is displayed.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Create a New JDBC Data Source

Connection Properties

Define Connection Properties.

What is the name of the database you would like to connect to?

Database Name: OFSLLD

What is the name or IP address of the database server?

Host Name: ofss220059.in.oracle.com

What is the port on the database server used to connect to the database?

Port: 1521

What database account user name do you want to use to create database connections?

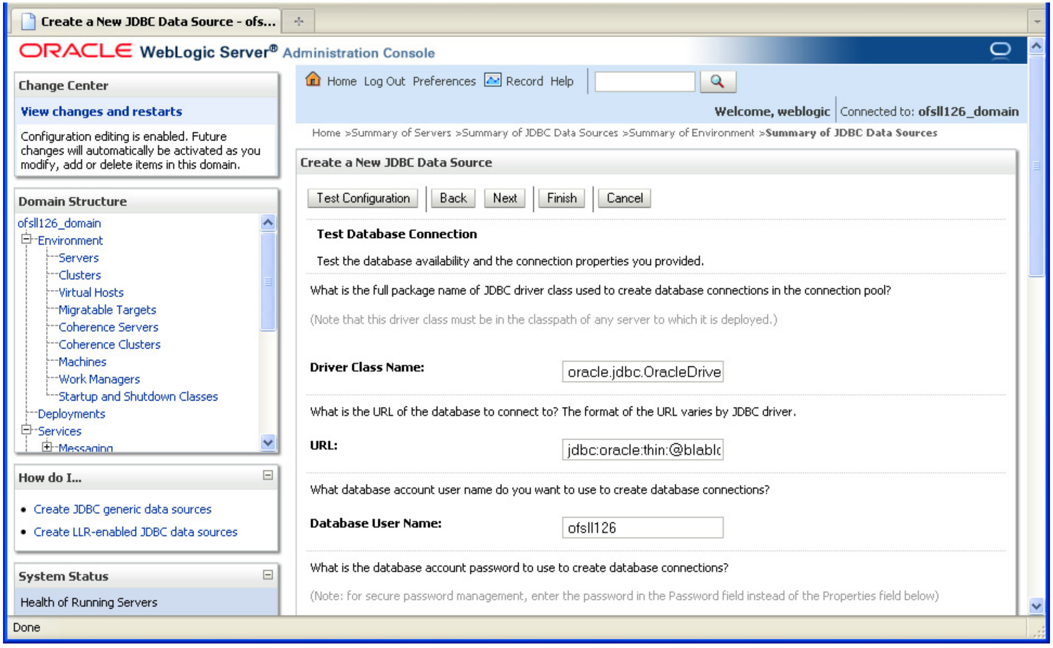
Database User Name: OFSLLNEW

What is the database account password to use to create database connections?

Password: ••••••••

Confirm Password: ••••••••

12. Enter Database details click **Next**. The following window is displayed.


Create a New JDBC Data Source - ofs...
ORACLE WebLogic Server® Administration Console
Home Log Out Preferences Record Help
Welcome, weblogic
Connected to: ofsll126_domain
Home >Summary of Servers >Summary of JDBC Data Sources >Summary of Environment >Summary of JDBC Data Sources
Change Center
View changes and restarts
Domain Structure
ofsll126_domain
Environment
Servers
Clusters
Virtual Hosts
Migratable Targets
Coherence Servers
Coherence Clusters
Machines
Work Managers
Startup and Shutdown Classes
Deployments
Services
Messaging
How do I...
Create JDBC generic data sources
Create LLR-enabled JDBC data sources
System Status
Health of Running Servers
Test Configuration
Back
Next
Finish
Cancel
Done

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Create a New JDBC Data Source

Test Database Connection

Test the database availability and the connection properties you provided.

What is the full package name of JDBC driver class used to create database connections in the connection pool?

(Note that this driver class must be in the classpath of any server to which it is deployed.)

Driver Class Name: oracle.jdbc.OracleDrive

What is the URL of the database to connect to? The format of the URL varies by JDBC driver.

URL: jdbc:oracle:thin:@blablc

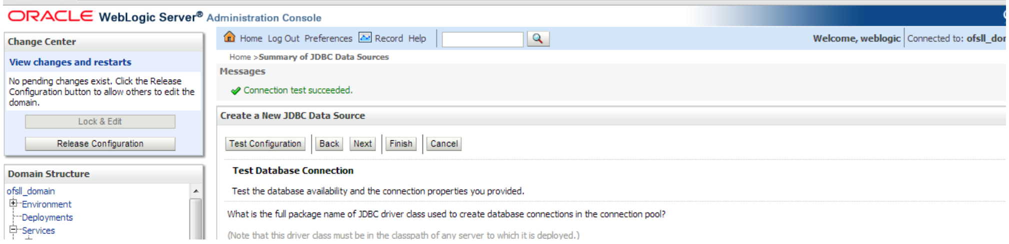
What database account user name do you want to use to create database connections?

Database User Name: ofsll126

What is the database account password to use to create database connections?

(Note: for secure password management, enter the password in the Password field instead of the Properties field below)

13. Click **Test Configuration.** The following window is displayed.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Messages

✓ Connection test succeeded.

Create a New JDBC Data Source

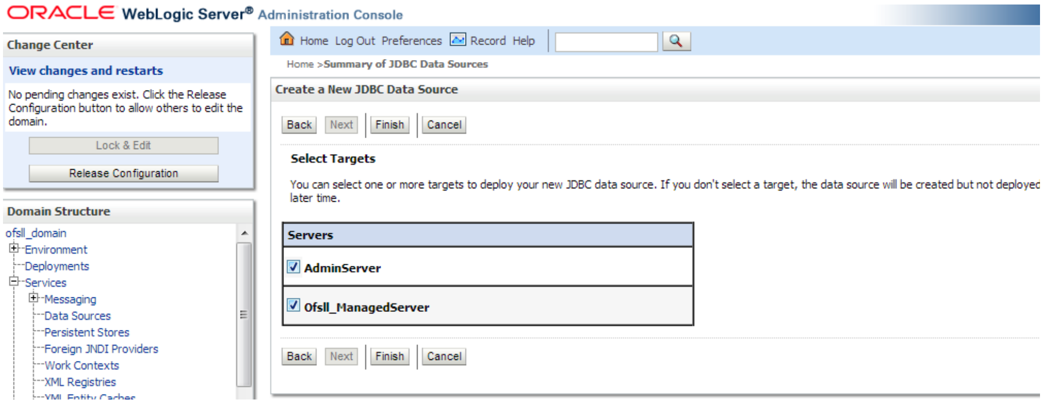
Test Database Connection

Test the database availability and the connection properties you provided.

What is the full package name of JDBC driver class used to create database connections in the connection pool?

(Note that this driver class must be in the classpath of any server to which it is deployed.)

14. Displays confirmation message as “Connection test succeeded”. Click **Next**. The following window is displayed.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

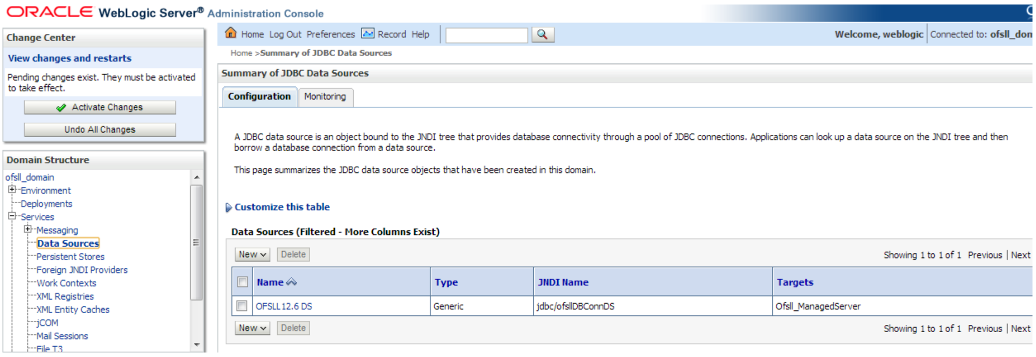
Create a New JDBC Data Source

Select Targets

You can select one or more targets to deploy your new JDBC data source. If you don't select a target, the data source will be created but not deployec later time.

| Servers |
|---|
| ☑ AdminServer |
| ☑ Ofsll_ManagedServer |

15. Select target Servers **AdminServer** and **Ofsll_ManagedServer** and click **Finish.** The following window is displayed.



Pending changes exist. They must be activated to take effect.

Summary of JDBC Data Sources

A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

Data Sources (Filtered - More Columns Exist)

| □ | Name | Type | JNDI Name | Targets |
|---|---|---|---|---|
| □ | OFSLL 12.6 DS | Generic | jdbc/ofsllDBConnDS | Ofsll_ManagedServer |

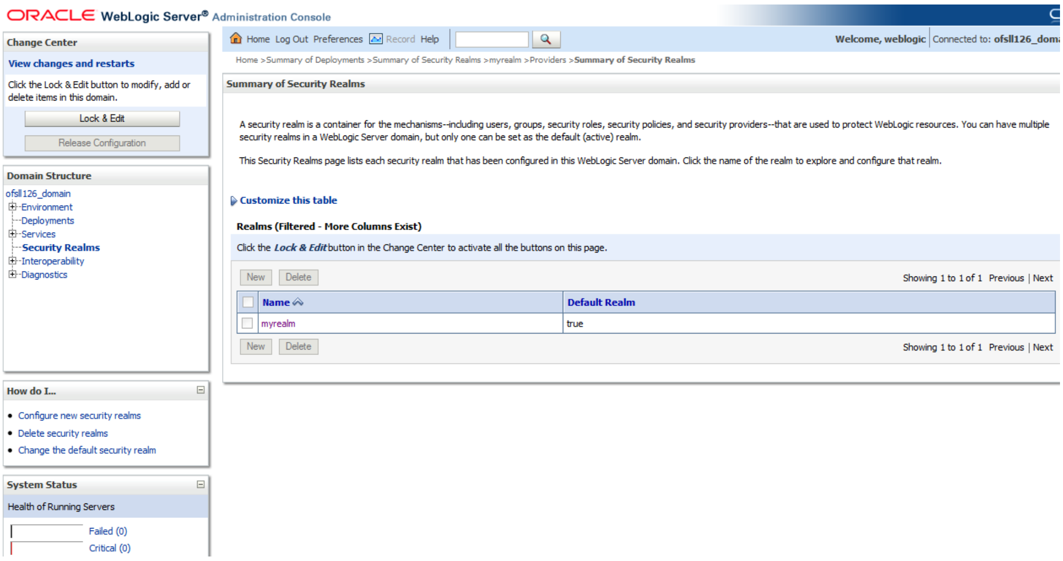
16. Click **Activate Changes**.

**Update the following parameters in JDBC data source connection pool:**

1. Select **Services**→**Data Sources**→**select the OFSLL data source**→**Connection Pool**.
2. Initial capacity and Maximum capacity is defaulted to 15, if the number of concurrent users are more this needs to be increased.
3. Click **Advanced** button and update the following:
   - Inactive Connection Timeout=900
   - Uncheck the "Wrap Data Types" parameter for better performance.
4. Click **Save**.

## 3.6 Creating SQL Authentication Provider

1. Login to WebLogic server administration console and click Security Realms in left panel. The following window is displayed..


ORACLE WebLogic Server® Administration Console
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: ofsll126_doma
Home >Summary of Deployments >Summary of Security Realms >myrealm >Providers >Summary of Security Realms
Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
ofsll126_domain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Configure new security realms
Delete security realms
Change the default security realm
System Status
Health of Running Servers
Failed (0)
Critical (0)
Customize this table
New
Delete
Showing 1 to 1 of 1 Previous | Next

Click the Lock & Edit button to modify, add or delete items in this domain.

Summary of Security Realms

A security realm is a container for the mechanisms--including users, groups, security roles, security policies, and security providers--that are used to protect WebLogic resources. You can have multiple security realms in a WebLogic Server domain, but only one can be set as the default (active) realm.

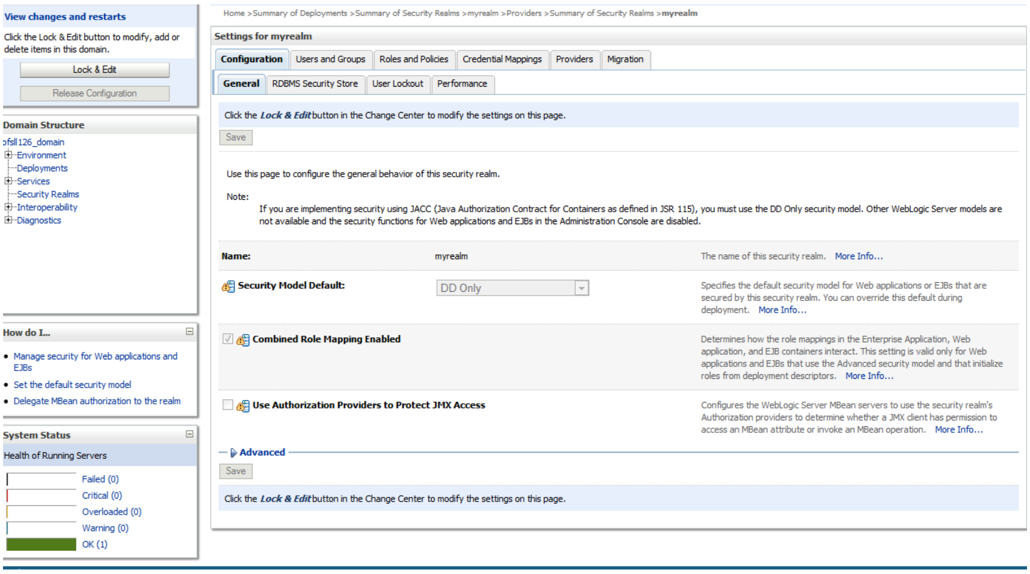
This Security Realms page lists each security realm that has been configured in this WebLogic Server domain. Click the name of the realm to explore and configure that realm.

Realms (Filtered - More Columns Exist)

Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

| □ | Name | Default Realm |
|---|---|---|
| □ | myrealm | true |

2. Click **myrealm** in the right panel. The following window is displayed.



View changes and restarts

Click the Lock & Edit button to modify, add or delete items in this domain.

Lock & Edit

Release Configuration

Domain Structure

ofsll126_domain
- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...

- Manage security for Web applications and EJBs
- Set the default security model
- Delegate MBean authorization to the realm

System Status

Health of Running Servers

Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Home >Summary of Deployments >Summary of Security Realms >myrealm >Providers >Summary of Security Realms >**myrealm**

Settings for myrealm

Configuration | Users and Groups | Roles and Policies | Credential Mappings | Providers | Migration

General | RDBMS Security Store | User Lockout | Performance

Click the ***Lock & Edit*** button in the Change Center to modify the settings on this page.

Save

Use this page to configure the general behavior of this security realm.

Note:

If you are implementing security using JACC (Java Authorization Contract for Containers as defined in JSR 115), you must use the DD Only security model. Other WebLogic Server models are not available and the security functions for Web applications and EJBs in the Administration Console are disabled.

**Name:** myrealm — The name of this security realm. More Info...

**Security Model Default:** DD Only — Specifies the default security model for Web applications or EJBs that are secured by this security realm. You can override this default during deployment. More Info...

☑ **Combined Role Mapping Enabled** — Determines how the role mappings in the Enterprise Application, Web application, and EJB containers interact. This setting is valid only for Web applications and EJBs that use the Advanced security model and that initialize roles from deployment descriptors. More Info...

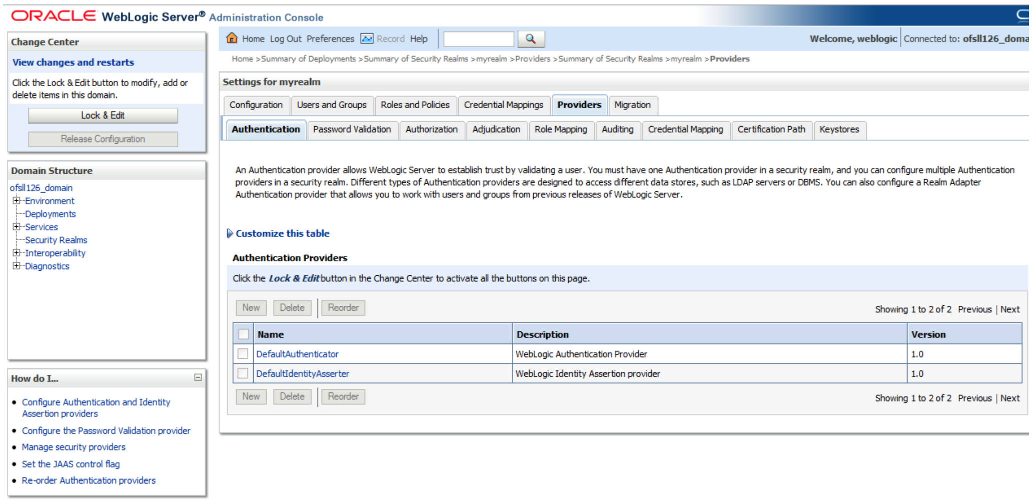
☐ **Use Authorization Providers to Protect JMX Access** — Configures the WebLogic Server MBean servers to use the security realm's Authorization providers to determine whether a JMX client has permission to access an MBean attribute or invoke an MBean operation. More Info...

Advanced

Save

Click the ***Lock & Edit*** button in the Change Center to modify the settings on this page.

3. Click on Providers tab. The following window is displayed.



ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help — Welcome, weblogic | Connected to: ofsll126_doma

Change Center

View changes and restarts

Click the Lock & Edit button to modify, add or delete items in this domain.

Lock & Edit

Release Configuration

Domain Structure

ofsll126_domain
- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...

- Configure Authentication and Identity Assertion providers
- Configure the Password Validation provider
- Manage security providers
- Set the JAAS control flag
- Re-order Authentication providers

Home >Summary of Deployments >Summary of Security Realms >myrealm >Providers >Summary of Security Realms >myrealm >**Providers**

Settings for myrealm

Configuration | Users and Groups | Roles and Policies | Credential Mappings | Providers | Migration

Authentication | Password Validation | Authorization | Adjudication | Role Mapping | Auditing | Credential Mapping | Certification Path | Keystores

An Authentication provider allows WebLogic Server to establish trust by validating a user. You must have one Authentication provider in a security realm, and you can configure multiple Authentication providers in a security realm. Different types of Authentication providers are designed to access different data stores, such as LDAP servers or DBMS. You can also configure a Realm Adapter Authentication provider that allows you to work with users and groups from previous releases of WebLogic Server.

Customize this table

**Authentication Providers**

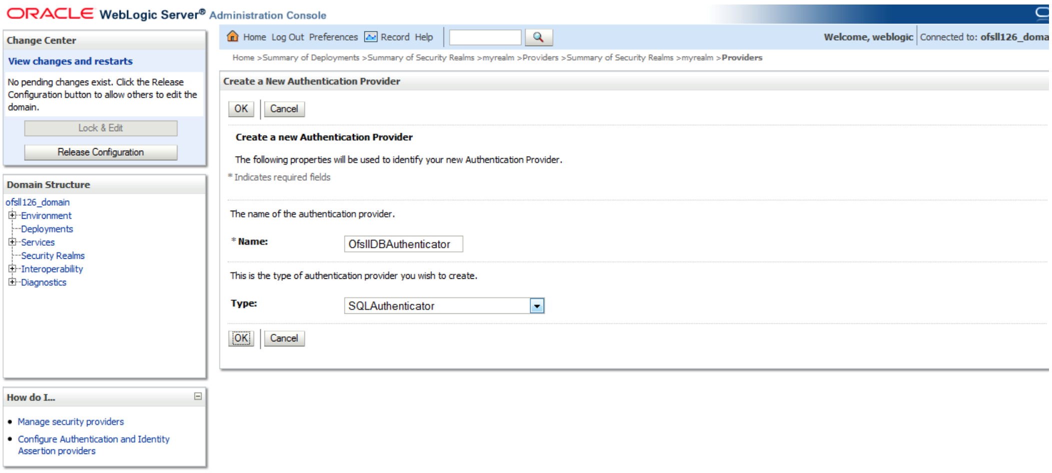
Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

New Delete Reorder — Showing 1 to 2 of 2 Previous | Next

| ☐ | Name | Description | Version |
|---|---|---|---|
| ☐ | DefaultAuthenticator | WebLogic Authentication Provider | 1.0 |
| ☐ | DefaultIdentityAsserter | WebLogic Identity Assertion provider | 1.0 |

New Delete Reorder — Showing 1 to 2 of 2 Previous | Next

4. Click **Lock & Edit** to unlock the screen and click **New** button in Authentication Providers sub tab. The following window is displayed.



ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help — Welcome, weblogic | Connected to: ofsll126_doma

Change Center

View changes and restarts

No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Lock & Edit

Release Configuration

Domain Structure

ofsll126_domain
- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...

- Manage security providers
- Configure Authentication and Identity Assertion providers

Home >Summary of Deployments >Summary of Security Realms >myrealm >Providers >Summary of Security Realms >myrealm >**Providers**

Create a New Authentication Provider

OK Cancel

**Create a new Authentication Provider**

The following properties will be used to identify your new Authentication Provider.

* Indicates required fields

The name of the authentication provider.

* **Name:** OfsllDBAuthenticator

This is the type of authentication provider you wish to create.

**Type:** SQLAuthenticator

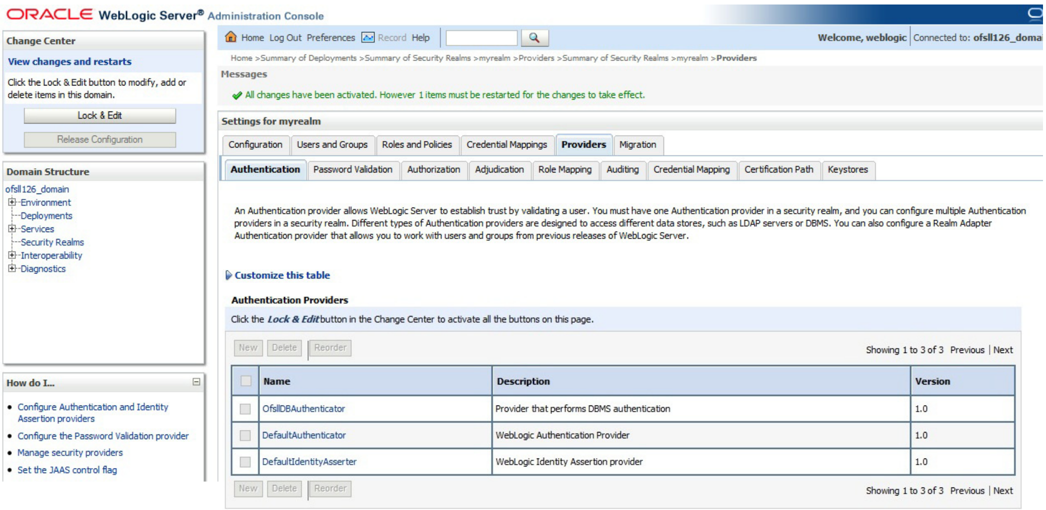
OK Cancel

5. Create Authentication provider with following values.

Name: **OfsllDBAuthenticator**

Type: **SQLAuthenticator**

6. Click OK button. The following window is displayed.


ORACLE WebLogic Server® Administration Console
Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
ofsll126_domain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Configure Authentication and Identity Assertion providers
Configure the Password Validation provider
Manage security providers
Set the JAAS control flag
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: ofsll126_doma
Home >Summary of Deployments >Summary of Security Realms >myrealm >Providers >Summary of Security Realms >myrealm >Providers
Messages
Settings for myrealm
Configuration Users and Groups Roles and Policies Credential Mappings Providers Migration
Authentication Password Validation Authorization Adjudication Role Mapping Auditing Credential Mapping Certification Path Keystores
Customize this table
New Delete Reorder
Showing 1 to 3 of 3 Previous | Next

Click the Lock & Edit button in the Change Center to modify, add or delete items in this domain.

✓ All changes have been activated. However 1 items must be restarted for the changes to take effect.

An Authentication provider allows WebLogic Server to establish trust by validating a user. You must have one Authentication provider in a security realm, and you can configure multiple Authentication providers in a security realm. Different types of Authentication providers are designed to access different data stores, such as LDAP servers or DBMS. You can also configure a Realm Adapter Authentication provider that allows you to work with users and groups from previous releases of WebLogic Server.

Authentication Providers

Click the *Lock & Edit* button in the Change Center to activate all the buttons on this page.

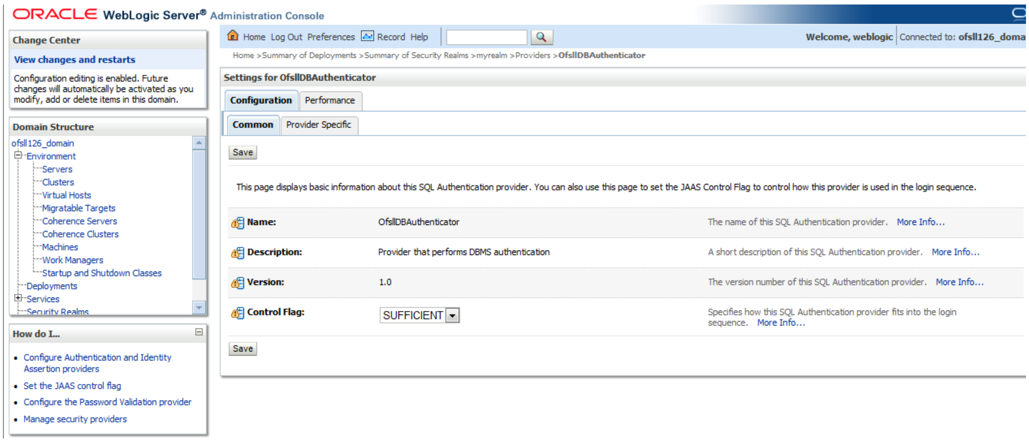
| □ | Name | Description | Version |
|---|---|---|---|
| □ | OfsllDBAuthenticator | Provider that performs DBMS authentication | 1.0 |
| □ | DefaultAuthenticator | WebLogic Authentication Provider | 1.0 |
| □ | DefaultIdentityAsserter | WebLogic Identity Assertion provider | 1.0 |

Authentication order should be maintained as mentioned in the above screen.

7. **OfsllDBAuthenticator** will be displayed as above.

8. Click on **OfsllDBAuthenticator**.

9. The following window is displayed.


ORACLE WebLogic Server® Administration Console
Change Center
View changes and restarts
Domain Structure
ofsll126_domain
Environment
Servers
Clusters
Virtual Hosts
Migratable Targets
Coherence Servers
Coherence Clusters
Machines
Work Managers
Startup and Shutdown Classes
Deployments
Services
Security Realms
How do I...
Configure Authentication and Identity Assertion providers
Set the JAAS control flag
Configure the Password Validation provider
Manage security providers
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: ofsll126_doma
Home >Summary of Deployments >Summary of Security Realms >myrealm >Providers >OfsllDBAuthenticator
Settings for OfsllDBAuthenticator
Configuration Performance
Common Provider Specific
Save

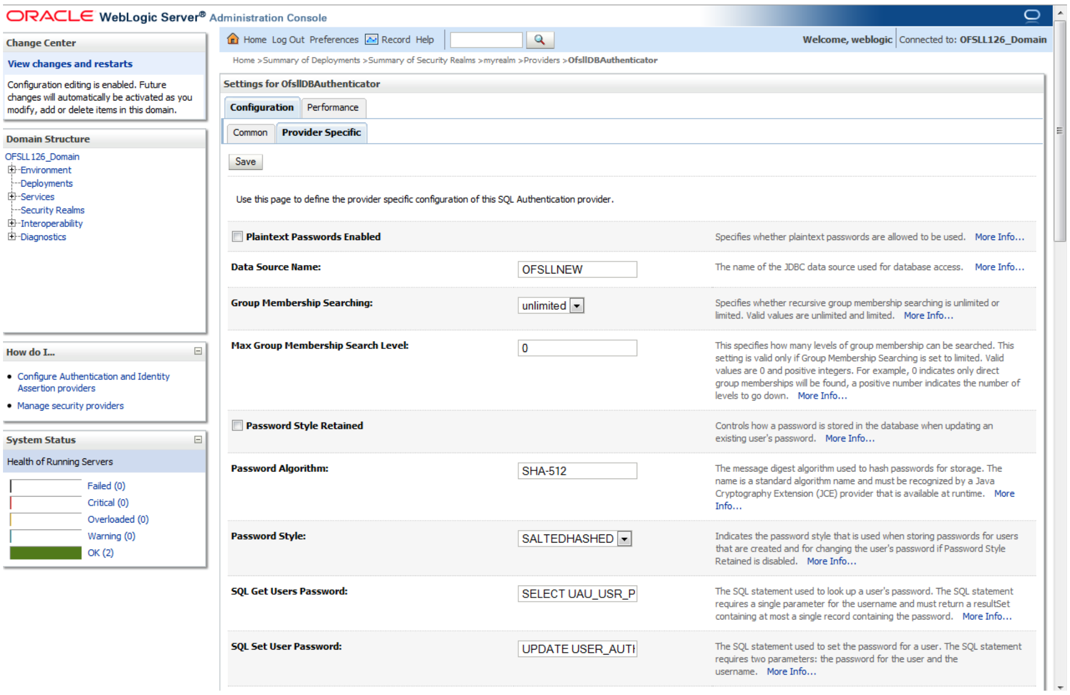
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

This page displays basic information about this SQL Authentication provider. You can also use this page to set the JAAS Control Flag to control how this provider is used in the login sequence.

|  |  |  |
|---|---|---|
| Name: | OfslIDBAuthenticator | The name of this SQL Authentication provider. More Info... |
| Description: | Provider that performs DBMS authentication | A short description of this SQL Authentication provider. More Info... |
| Version: | 1.0 | The version number of this SQL Authentication provider. More Info... |
| Control Flag: | SUFFICIENT | Specifies how this SQL Authentication provider fits into the login sequence. More Info... |

10. Select SUFFICIENT as the **Control Flag** and click Save.

11. Click Provider Specific sub tab under Configuration tab. The following window is displayed.


ORACLE WebLogic Server® Administration Console
Home Log Out Preferences Record Help
Welcome, weblogic
Connected to: OFSLL126_Domain
Change Center
View changes and restarts
Domain Structure
OFSLL126_Domain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Configure Authentication and Identity Assertion providers
Manage security providers
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home >Summary of Deployments >Summary of Security Realms >myrealm >Providers >OfsllDBAuthenticator
Configuration
Performance
Common
Provider Specific
Save

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Settings for OfsllDBAuthenticator

Use this page to define the provider specific configuration of this SQL Authentication provider.

| | | |
|---|---|---|
| □ Plaintext Passwords Enabled | | Specifies whether plaintext passwords are allowed to be used. More Info... |
| Data Source Name: | OFSLLNEW | The name of the JDBC data source used for database access. More Info... |
| Group Membership Searching: | unlimited | Specifies whether recursive group membership searching is unlimited or limited. Valid values are unlimited and limited. More Info... |
| Max Group Membership Search Level: | 0 | This specifies how many levels of group membership can be searched. This setting is valid only if Group Membership Searching is set to limited. Valid values are 0 and positive integers. For example, 0 indicates only direct group memberships will be found, a positive number indicates the number of levels to go down. More Info... |
| □ Password Style Retained | | Controls how a password is stored in the database when updating an existing user's password. More Info... |
| Password Algorithm: | SHA-512 | The message digest algorithm used to hash passwords for storage. The name is a standard algorithm name and must be recognized by a Java Cryptography Extension (JCE) provider that is available at runtime. More Info... |
| Password Style: | SALTEDHASHED | Indicates the password style that is used when storing passwords for users that are created and for changing the user's password if Password Style Retained is disabled. More Info... |
| SQL Get Users Password: | SELECT UAU_USR_P | The SQL statement used to look up a user's password. The SQL statement requires a single parameter for the username and must return a resultSet containing at most a single record containing the password. More Info... |
| SQL Set User Password: | UPDATE USER_AUTI | The SQL statement used to set the password for a user. The SQL statement requires two parameters: the password for the user and the username. More Info... |

12. Provide the following values in corresponding fields.

Data Source Name: **OFSLLNEW**

Password Style Retained: **Uncheck**

Password Algorithm: **SHA-512**

Password Style: **SALTEDHASHED**

Provide the SQL Queries from the column **Corresponding SQL Queries as per OFSLL Tables** as given below.

| **Operation** | **Default SQL Query from Weblogic** | **Corresponding SQL Queries as per our Tables** |
|---|---|---|
| SQL Get Users Password: | SELECT U_PASSWORD FROM USERS WHERE U_NAME = ? | SELECT UAU_USR_PASSWORD FROM USER_AUTHORISATIONS WHERE UAU_USR_CODE = ? |
| SQL Set User Password: | UPDATE USERS SET U_PASSWORD = ? WHERE U_NAME = ? | UPDATE USER_AUTHORISATIONS SET UAU_USR_PASSWORD = ? WHERE UAU_USR_CODE = ? |
| SQL User Exists: | SELECT U_NAME FROM USERS WHERE U_NAME = ? | SELECT UAU_USR_CODE FROM USER_AUTHORISATIONS WHERE UAU_USR_CODE = ? |

| **Operation** | **Default SQL Query from Weblogic** | **Corresponding SQL Queries as per our Tables** |
|---|---|---|
| SQL List Users: | SELECT U_NAME FROM USERS WHERE U_NAME LIKE ? | SELECT UAU_USR_CODE FROM USER_AUTHORISATIONS WHERE UAU_USR_CODE LIKE ? |
| SQL Create User: | INSERT INTO USERS VALUES ( ? , ? , ? ) | INSERT INTO USER_AUTHORISATIONS(UAU_USR_CODE, UAU_USR_PASSWORD,UAU_DESC) VALUES(?,?,?) |
| SQL Remove User: | DELETE FROM USERS WHERE U_NAME = ? | DELETE FROM USER_AUTHORISATIONS WHERE UAU_USR_CODE= ? |
| SQL List Groups: | SELECT G_NAME FROM GROUPS WHERE G_NAME LIKE ? | SELECT UGR_GROUP_CODE FROM USER_GROUPS WHERE UGR_GROUP_CODE LIKE ? |
| SQL Group Exists: | SELECT G_NAME FROM GROUPS WHERE G_NAME = ? | SELECT UGR_GROUP_CODE FROM USER_GROUPS WHERE UGR_GROUP_CODE = ? |
| SQL Create Group: | INSERT INTO GROUPS VALUES ( ? , ? ) | INSERT INTO USER_GROUPS(UGR_GROUP_CODE,UGR_GROUP_DESC) VALUES(?,?) |
| SQL Remove Group: | DELETE FROM GROUPS WHERE G_NAME = ? | DELETE FROM USER_GROUPS WHERE UGR_GROUP_CODE = ? |
| SQL Is Member: | SELECT G_MEMBER FROM GROUPMEMBERS WHERE G_NAME = ? AND G_MEMBER = ? | SELECT UGM_MEMBER_USR_CODE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_GROUP_CODE= ? AND UGM_MEMBER_USR_CODE = ? |
| SQL List Member Groups: | SELECT G_NAME FROM GROUPMEMBERS WHERE G_MEMBER = ? | SELECT UGM_MEMBER_GROUP_CODE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_USR_CODE= ? |

| **Operation** | **Default SQL Query from Weblogic** | **Corresponding SQL Queries as per our Tables** |
|---|---|---|
| SQL List Group Members: | SELECT G_MEMBER FROM GROUPMEMBERS WHERE G_NAME = ? AND G_MEMBER LIKE ? | SELECT UGM_MEMBER_USR_CODE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_GROUP_CODE= ? AND UGM_MEMBER_USR_CODE LIKE ? |
| SQL Remove Group Memberships: | DELETE FROM GROUPMEMBERS WHERE G_MEMBER = ? OR G_NAME = ? | DELETE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_USR_CODE= ? OR UGM_MEMBER_GROUP_CODE= ? |
| SQL Add Member To Group: | INSERT INTO GROUPMEMBERS VALUES( ?, ?) | INSERT INTO USER_GROUP_MEMBERS (UGM_MEMBER_GROUP_CODE,UGM_MEMBER_USR_CODE) VALUES(?,?) |
| SQL Remove Member From Group: | DELETE FROM GROUPMEMBERS WHERE G_NAME = ? AND G_MEMBER = ? | DELETE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_GROUP_CODE= ? AND UGM_MEMBER_USR_CODE= ? |
| SQL Remove Group Member: | DELETE FROM GROUPMEMBERS WHERE G_NAME = ? | DELETE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_GROUP_CODE= ? |
| SQL Get User Description: | SELECT U_DESCRIPTION FROM USERS WHERE U_NAME = ? | SELECT UAU_DESC FROM USER_AUTHORISATIONS WHERE UAU_USR_CODE = ? |
| SQLSet User Description: | UPDATE USERS SET U_DESCRIPTION = ? WHERE U_NAME = ? | UPDATE USER_AUTHORISATIONS SET UAU_DESC= ? WHERE UAU_USR_CODE= ? |
| SQL Get Group Description: | SELECT G_DESCRIPTION FROM GROUPS WHERE G_NAME = ? | SELECT UGR_GROUP_DESC FROM USER_GROUPS WHERE UGR_GROUP_CODE= ? |
| SQL Set Group Description: | UPDATE GROUPS SET G_DESCRIPTION = ? WHERE G_NAME = ? | UPDATE USER_GROUPS SET UGR_GROUP_DESC= ? WHERE UGR_GROUP_CODE= ? |
| Provider Name | **OfsllDBAuthenticator** | |

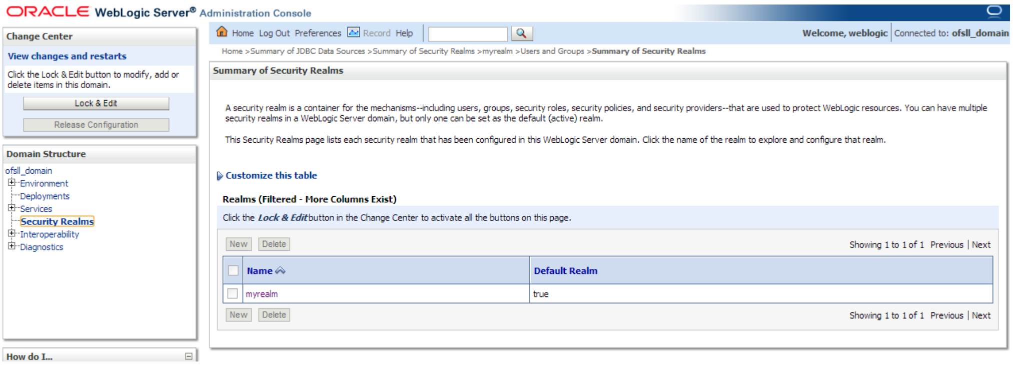
13. Click Save.

**Note**

Application server needs to be restarted for these changes to take effect.

# 3.7 Creating User Groups and Users

1. Login into WebLogic server console.
2. Click **Security Realms** on left panel.



Home >Summary of JDBC Data Sources >Summary of Security Realms >myrealm >Users and Groups >**Summary of Security Realms**

Click the Lock & Edit button to modify, add or delete items in this domain.

**Summary of Security Realms**

A security realm is a container for the mechanisms--including users, groups, security roles, security policies, and security providers--that are used to protect WebLogic resources. You can have multiple security realms in a WebLogic Server domain, but only one can be set as the default (active) realm.

This Security Realms page lists each security realm that has been configured in this WebLogic Server domain. Click the name of the realm to explore and configure that realm.

**Realms (Filtered - More Columns Exist)**

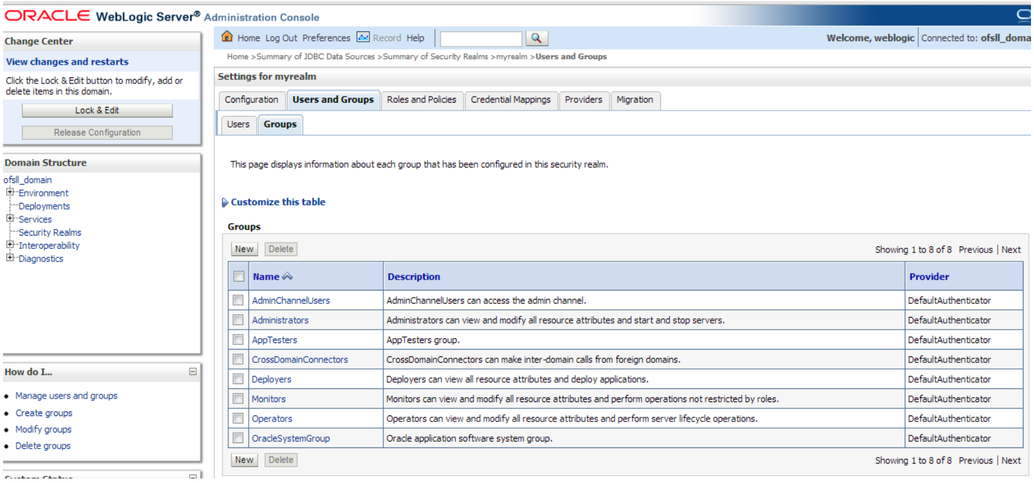
Click the *Lock & Edit* button in the Change Center to activate all the buttons on this page.

| □ | Name | Default Realm |
|---|---|---|
| □ | myrealm | true |

3. Click **myrealm** on right panel.

## 3.7.1 Creating User Groups

1. Select **Groups** tab under **Users and Groups.**



Home >Summary of JDBC Data Sources >Summary of Security Realms >myrealm >**Users and Groups**

Click the Lock & Edit button to modify, add or delete items in this domain.

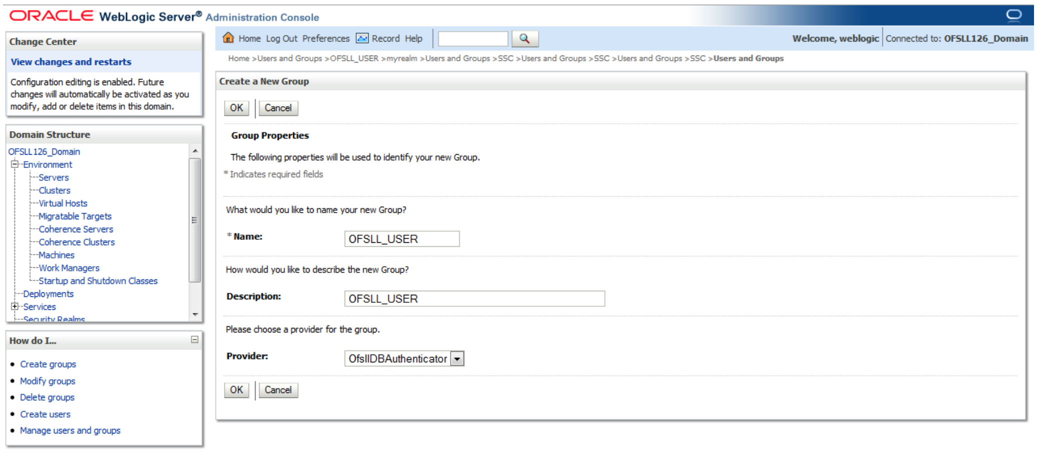
**Settings for myrealm**

This page displays information about each group that has been configured in this security realm.

**Groups**

| □ | Name | Description | Provider |
|---|---|---|---|
| □ | AdminChannelUsers | AdminChannelUsers can access the admin channel. | DefaultAuthenticator |
| □ | Administrators | Administrators can view and modify all resource attributes and start and stop servers. | DefaultAuthenticator |
| □ | AppTesters | AppTesters group. | DefaultAuthenticator |
| □ | CrossDomainConnectors | CrossDomainConnectors can make inter-domain calls from foreign domains. | DefaultAuthenticator |
| □ | Deployers | Deployers can view all resource attributes and deploy applications. | DefaultAuthenticator |
| □ | Monitors | Monitors can view and modify all resource attributes and perform operations not restricted by roles. | DefaultAuthenticator |
| □ | Operators | Operators can view and modify all resource attributes and perform server lifecycle operations. | DefaultAuthenticator |
| □ | OracleSystemGroup | Oracle application software system group. | DefaultAuthenticator |

2. Click **New**. The following window is displayed.



Home >Users and Groups >OFSLL_USER >myrealm >Users and Groups >SSC >Users and Groups >SSC >Users and Groups >SSC >**Users and Groups**

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

**Create a New Group**

**Group Properties**

The following properties will be used to identify your new Group.

* Indicates required fields

What would you like to name your new Group?

* **Name:** OFSLL_USER

How would you like to describe the new Group?

**Description:** OFSLL_USER

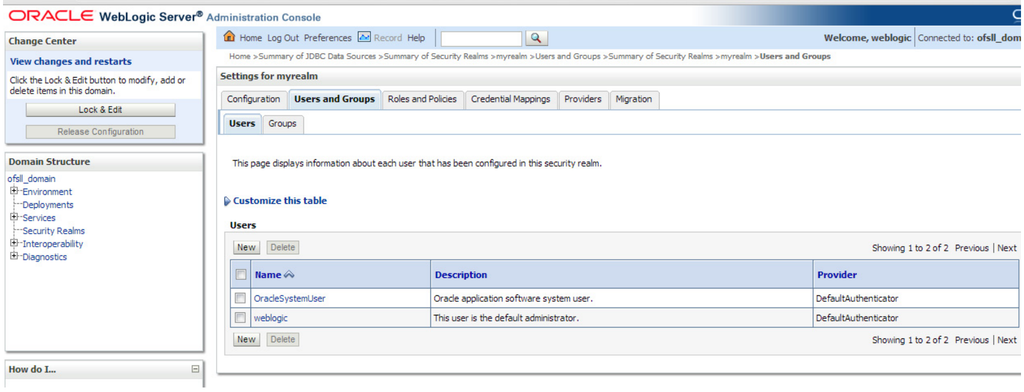
Please choose a provider for the group.

**Provider:** OfslIDBAuthenticator

3. Provide details for Name, Description and Provider as per your requirement.
4. Click OK.
5. This completes the group user creation.

### 3.7.2 Creating Users

1. Select **Users** tab under main **Users and Groups.**



Click the Lock & Edit button to modify, add or delete items in this domain.

Home >Summary of JDBC Data Sources >Summary of Security Realms >myrealm >Users and Groups >Summary of Security Realms >myrealm >**Users and Groups**

**Settings for myrealm**

This page displays information about each user that has been configured in this security realm.

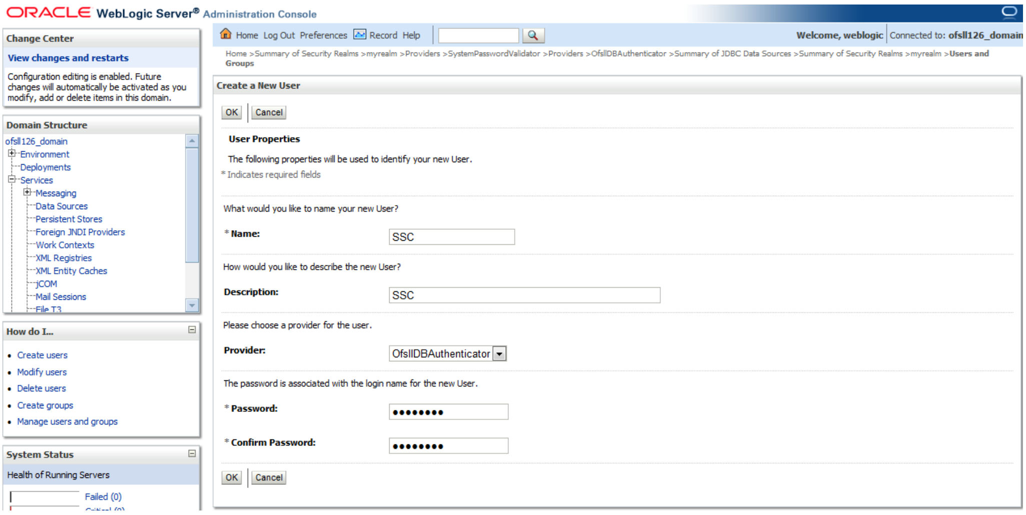
**Users**

Showing 1 to 2 of 2

| □ | Name | Description | Provider |
|---|---|---|---|
| □ | OracleSystemUser | Oracle application software system user. | DefaultAuthenticator |
| □ | weblogic | This user is the default administrator. | DefaultAuthenticator |

Showing 1 to 2 of 2

2. Click **New**. The following window is displayed.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Home >Summary of Security Realms >myrealm >Providers >SystemPasswordValidator >Providers >OfsllDBAuthenticator >Summary of JDBC Data Sources >Summary of Security Realms >myrealm >**Users and Groups**

**Create a New User**

**User Properties**

The following properties will be used to identify your new User.

* Indicates required fields

What would you like to name your new User?

* **Name:** SSC

How would you like to describe the new User?

**Description:** SSC

Please choose a provider for the user.

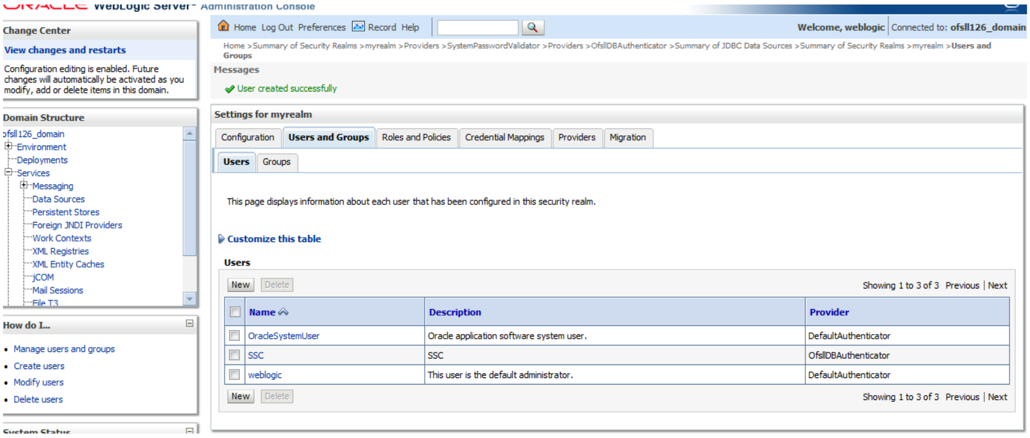
**Provider:** OfslIDBAuthenticator

The password is associated with the login name for the new User.

* **Password:** ••••••••

* **Confirm Password:** ••••••••

3. Provide details for Name, Description, Provider and Password as per your requirement. The following window is displayed.
4. Click **OK.**



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Home >Summary of Security Realms >myrealm >Providers >SystemPasswordValidator >Providers >OfsllDBAuthenticator >Summary of JDBC Data Sources >Summary of Security Realms >myrealm >**Users and Groups**

Messages

✓ User created successfully

**Settings for myrealm**

This page displays information about each user that has been configured in this security realm.

**Users**

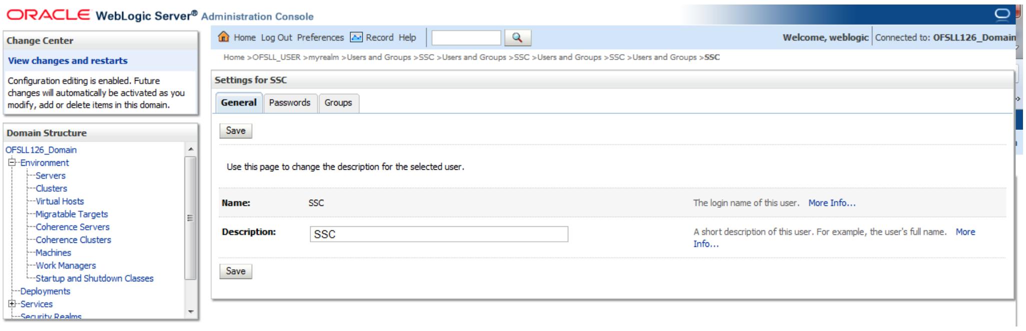
Showing 1 to 3 of 3

| □ | Name | Description | Provider |
|---|---|---|---|
| □ | OracleSystemUser | Oracle application software system user. | DefaultAuthenticator |
| □ | SSC | SSC | OfsllDBAuthenticator |
| □ | weblogic | This user is the default administrator. | DefaultAuthenticator |

Showing 1 to 3 of 3

### 3.7.3 Assigning Users to Groups

1. Click on User. The following window is displayed..



ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic | Connected to: OFSLL126_Domain

Home >OFSLL_USER >myrealm >Users and Groups >SSC >Users and Groups >SSC >Users and Groups >SSC >Users and Groups >SSC

Change Center

View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

OFSLL126_Domain
- Environment
  - Servers
  - Clusters
  - Virtual Hosts
  - Migratable Targets
  - Coherence Servers
  - Coherence Clusters
  - Machines
  - Work Managers
  - Startup and Shutdown Classes
- Deployments
- Services
- Security Realms

Settings for SSC

General | Passwords | Groups

Save

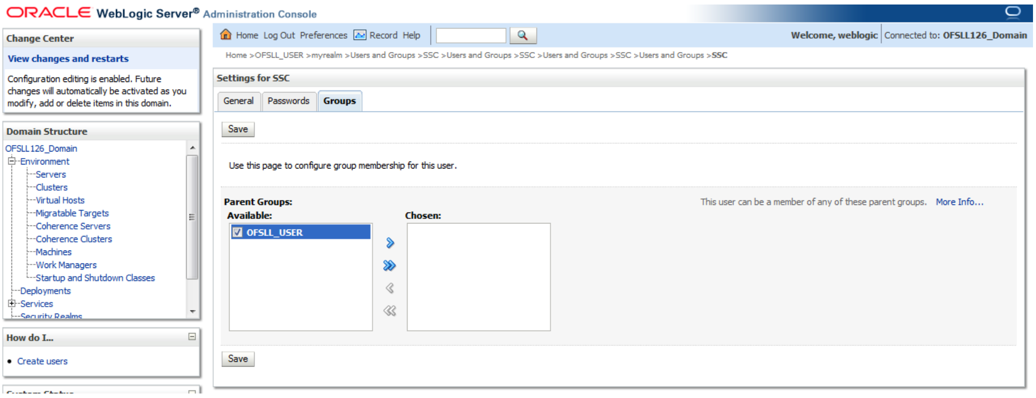
Use this page to change the description for the selected user.

Name: SSC — The login name of this user. More Info...

Description: SSC — A short description of this user. For example, the user's full name. More Info...

Save

2. Click on **Groups** Tab. The following window is displayed.



ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic | Connected to: OFSLL126_Domain

Home >OFSLL_USER >myrealm >Users and Groups >SSC >Users and Groups >SSC >Users and Groups >SSC >Users and Groups >SSC

Settings for SSC

General | Passwords | Groups

Save

Use this page to configure group membership for this user.

Parent Groups: — This user can be a member of any of these parent groups. More Info...

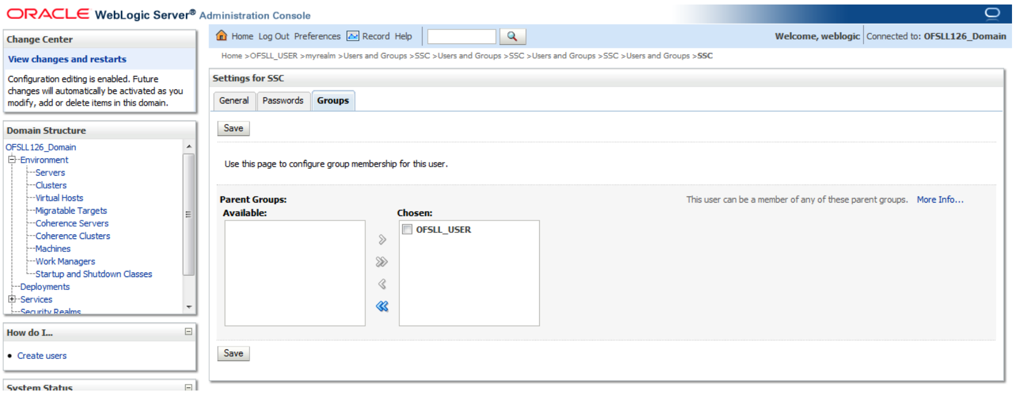
Available: ☑ OFSLL_USER

Chosen:

Save

How do I...
- Create users

3. Select the assign the Group in Available section.



ORACLE WebLogic Server® Administration Console

Settings for SSC

General | Passwords | Groups

Save

Use this page to configure group membership for this user.

Parent Groups: — This user can be a member of any of these parent groups. More Info...

Available:

Chosen: □ OFSLL_USER

Save

How do I...
- Create users

System Status

4. Click Save.

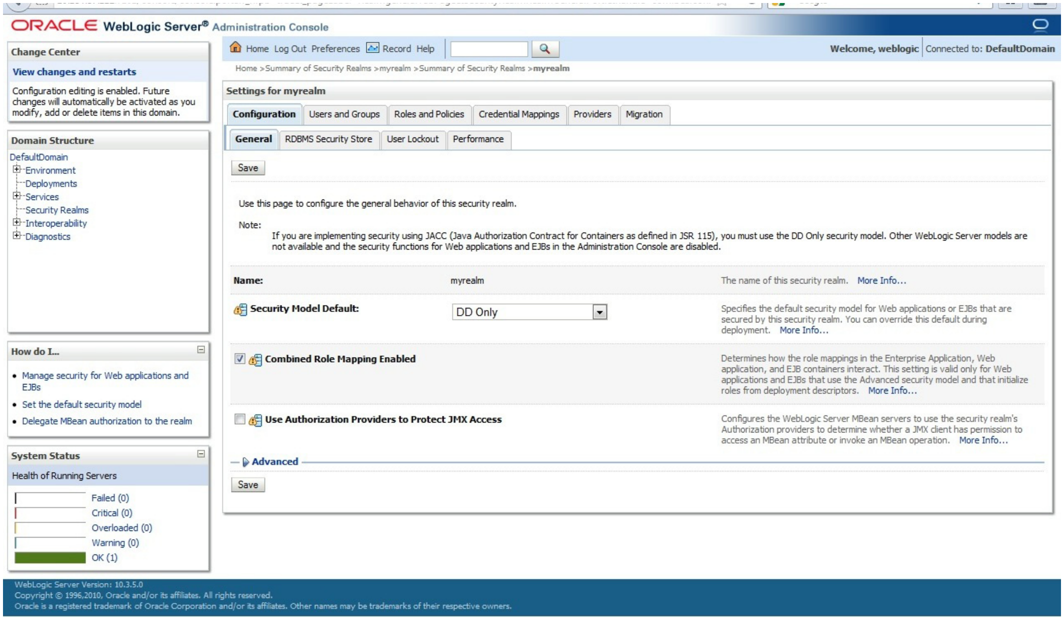
5. The user is now mapped to the group.

## 3.8 Implementing JMX Policy for Change Password

1. Login to Oracle WebLogic Server 11g console (http://hostname:port/console)

> **Note**
>
> The Change Password feature uses the JMX Policy configured on the domain. Hence, the AdminServer is required to be up and running to enable this.

2. Click **Domain** → **Security** → **myrealm** → **Configuration**



ORACLE WebLogic Server® Administration Console
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: DefaultDomain
Home >Summary of Security Realms >myrealm >Summary of Security Realms >myrealm
Change Center
View changes and restarts
Domain Structure
DefaultDomain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Manage security for Web applications and EJBs
Set the default security model
Delegate MBean authorization to the realm
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)
Settings for myrealm
Configuration
Users and Groups
Roles and Policies
Credential Mappings
Providers
Migration
General
RDBMS Security Store
User Lockout
Performance
Save
Advanced
Save

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Use this page to configure the general behavior of this security realm.

Note:

If you are implementing security using JACC (Java Authorization Contract for Containers as defined in JSR 115), you must use the DD Only security model. Other WebLogic Server models are not available and the security functions for Web applications and EJBs in the Administration Console are disabled.

Name: myrealm — The name of this security realm. More Info...

Security Model Default: DD Only — Specifies the default security model for Web applications or EJBs that are secured by this security realm. You can override this default during deployment. More Info...

☑ Combined Role Mapping Enabled — Determines how the role mappings in the Enterprise Application, Web application, and EJB containers interact. This setting is valid only for Web applications and EJBs that use the Advanced security model and that initialize roles from deployment descriptors. More Info...

☐ Use Authorization Providers to Protect JMX Access — Configures the WebLogic Server MBean servers to use the security realm's Authorization providers to determine whether a JMX client has permission to access an MBean attribute or invoke an MBean operation. More Info...

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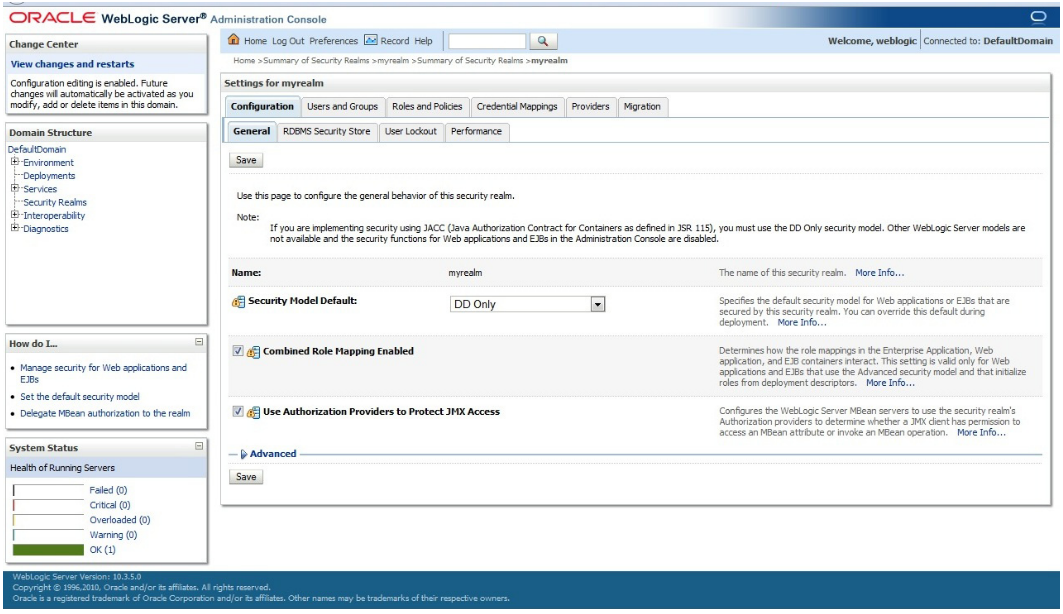
3. To enable JMX policy select the "Use Authorization Providers to Protect JMX Access" check box on the right panel



ORACLE WebLogic Server® Administration Console
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: DefaultDomain
Home >Summary of Security Realms >myrealm >Summary of Security Realms >myrealm
Change Center
View changes and restarts
Domain Structure
DefaultDomain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Manage security for Web applications and EJBs
Set the default security model
Delegate MBean authorization to the realm
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)
Settings for myrealm
Configuration
Users and Groups
Roles and Policies
Credential Mappings
Providers
Migration
General
RDBMS Security Store
User Lockout
Performance
Save
Advanced
Save

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Use this page to configure the general behavior of this security realm.

Note:

If you are implementing security using JACC (Java Authorization Contract for Containers as defined in JSR 115), you must use the DD Only security model. Other WebLogic Server models are not available and the security functions for Web applications and EJBs in the Administration Console are disabled.

Name: myrealm — The name of this security realm. More Info...

Security Model Default: DD Only — Specifies the default security model for Web applications or EJBs that are secured by this security realm. You can override this default during deployment. More Info...

☑ Combined Role Mapping Enabled — Determines how the role mappings in the Enterprise Application, Web application, and EJB containers interact. This setting is valid only for Web applications and EJBs that use the Advanced security model and that initialize roles from deployment descriptors. More Info...

☑ Use Authorization Providers to Protect JMX Access — Configures the WebLogic Server MBean servers to use the security realm's Authorization providers to determine whether a JMX client has permission to access an MBean attribute or invoke an MBean operation. More Info...

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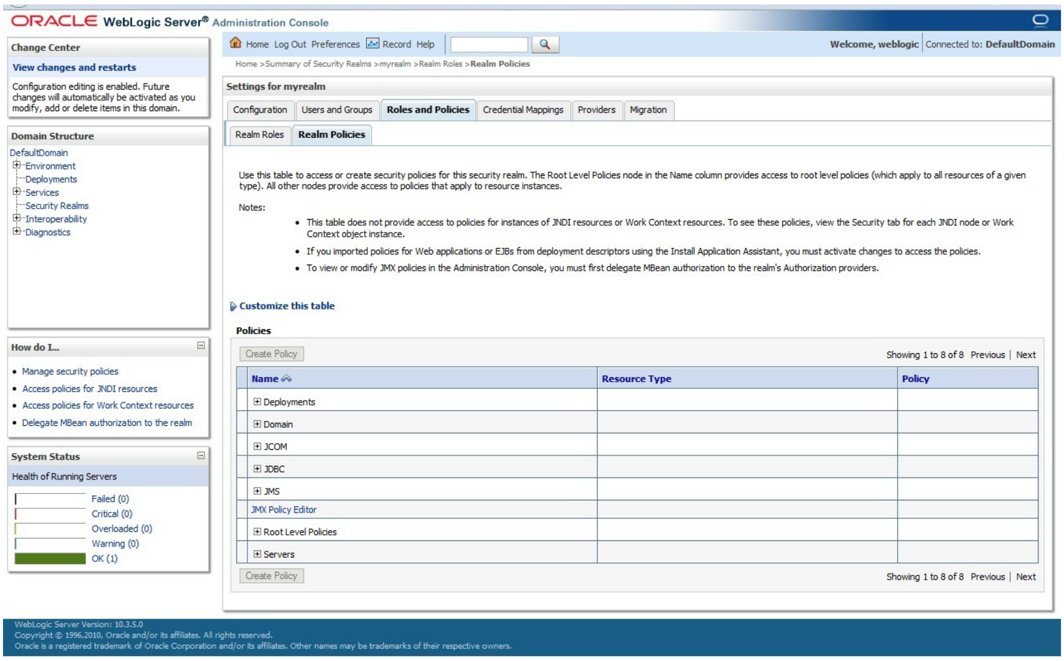
4. Click **Save** and restart the server.

5. Re-login to console.

6. Click **Domain** → **Security** → **myrealm** → **Roles and Policies**→**Realm Policies**

**Note**

If server is not restarted, JMX Policy Editor option will not appear



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Home >Summary of Security Realms >myrealm >Realm Roles >Realm Policies

Settings for myrealm

Use this table to access or create security policies for this security realm. The Root Level Policies node in the Name column provides access to root level policies (which apply to all resources of a given type). All other nodes provide access to policies that apply to resource instances.

Notes:

- This table does not provide access to policies for instances of JNDI resources or Work Context resources. To see these policies, view the Security tab for each JNDI node or Work Context object instance.
- If you imported policies for Web applications or EJBs from deployment descriptors using the Install Application Assistant, you must activate changes to access the policies.
- To view or modify JMX policies in the Administration Console, you must first delegate MBean authorization to the realm's Authorization providers.

Policies

| Name | Resource Type | Policy |
|---|---|---|
| ⊞ Deployments | | |
| ⊞ Domain | | |
| ⊞ JCOM | | |
| ⊞ JDBC | | |
| ⊞ JMS | | |
| JMX Policy Editor | | |
| ⊞ Root Level Policies | | |
| ⊞ Servers | | |

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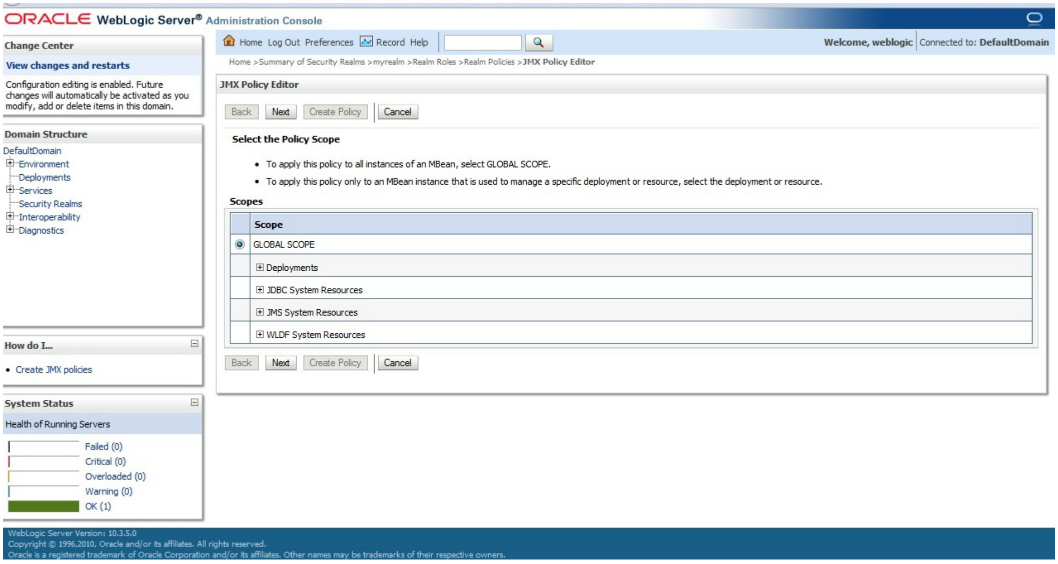
7. Click on JMX Policy Editor to configure



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Home >Summary of Security Realms >myrealm >Realm Roles >Realm Policies >JMX Policy Editor

JMX Policy Editor

Select the Policy Scope

- To apply this policy to all instances of an MBean, select GLOBAL SCOPE.
- To apply this policy only to an MBean instance that is used to manage a specific deployment or resource, select the deployment or resource.

Scopes

| | Scope |
|---|---|
| ● | GLOBAL SCOPE |
| | ⊞ Deployments |
| | ⊞ JDBC System Resources |
| | ⊞ JMS System Resources |
| | ⊞ WLDF System Resources |

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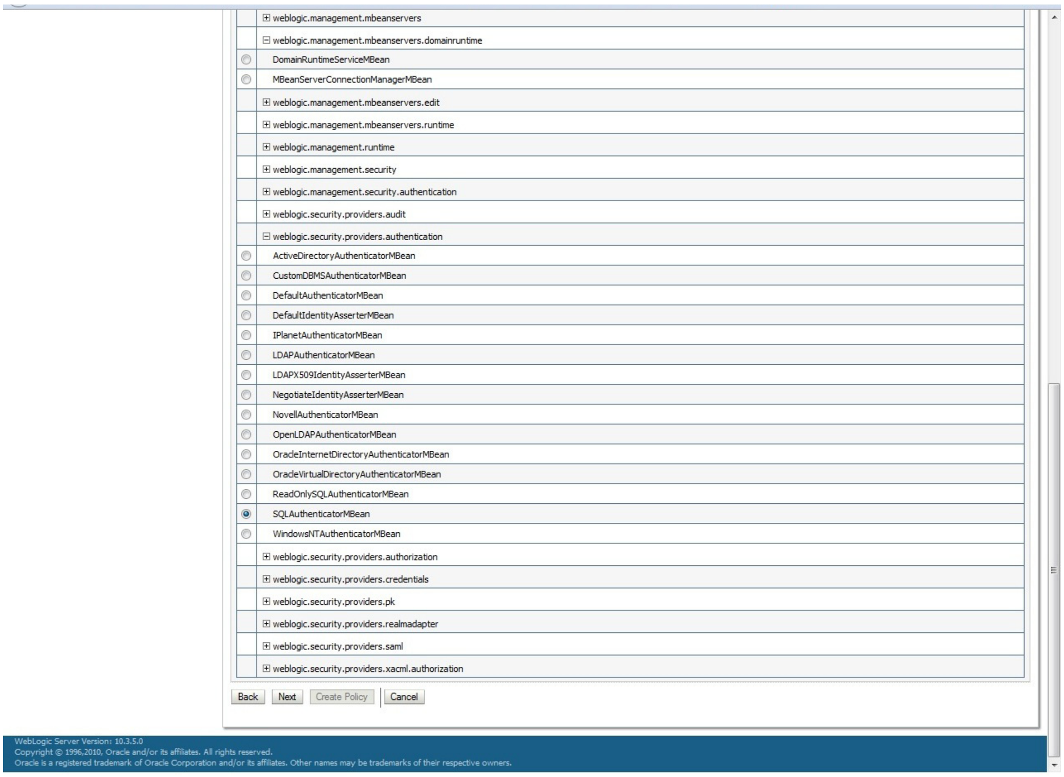
8. Select GLOBAL SCOPE

9. Click Next



|  |  |
|---|---|
|  | ⊞ weblogic.management.mbeanservers |
|  | ⊟ weblogic.management.mbeanservers.domainruntime |
| ○ | DomainRuntimeServiceMBean |
| ○ | MBeanServerConnectionManagerMBean |
|  | ⊞ weblogic.management.mbeanservers.edit |
|  | ⊞ weblogic.management.mbeanservers.runtime |
|  | ⊞ weblogic.management.runtime |
|  | ⊞ weblogic.management.security |
|  | ⊞ weblogic.management.security.authentication |
|  | ⊞ weblogic.security.providers.audit |
|  | ⊟ weblogic.security.providers.authentication |
| ○ | ActiveDirectoryAuthenticatorMBean |
| ○ | CustomDBMSAuthenticatorMBean |
| ○ | DefaultAuthenticatorMBean |
| ○ | DefaultIdentityAsserterMBean |
| ○ | IPlanetAuthenticatorMBean |
| ○ | LDAPAuthenticatorMBean |
| ○ | LDAPX509IdentityAsserterMBean |
| ○ | NegotiateIdentityAsserterMBean |
| ○ | NovellAuthenticatorMBean |
| ○ | OpenLDAPAuthenticatorMBean |
| ○ | OracleInternetDirectoryAuthenticatorMBean |
| ○ | OracleVirtualDirectoryAuthenticatorMBean |
| ○ | ReadOnlySQLAuthenticatorMBean |
| ● | SQLAuthenticatorMBean |
| ○ | WindowsNTAuthenticatorMBean |
|  | ⊞ weblogic.security.providers.authorization |
|  | ⊞ weblogic.security.providers.credentials |
|  | ⊞ weblogic.security.providers.pk |
|  | ⊞ weblogic.security.providers.realmadapter |
|  | ⊞ weblogic.security.providers.saml |
|  | ⊞ weblogic.security.providers.xacml.authorization |

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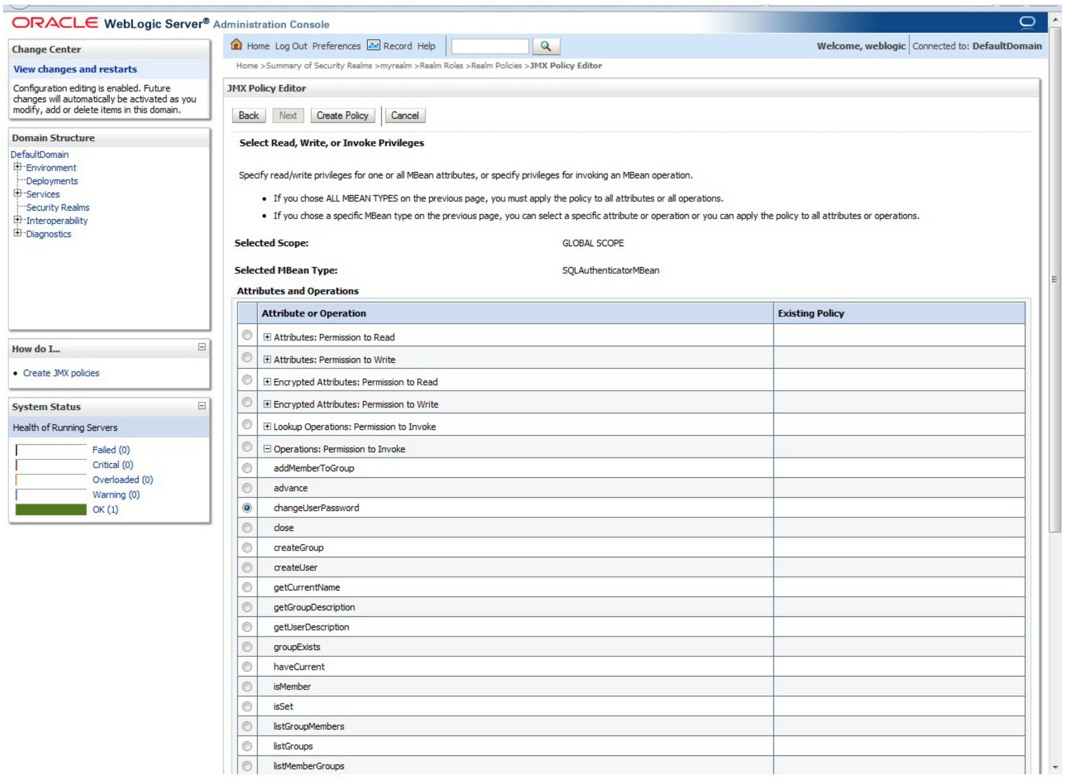
10. Select weblogic.security.providers.authentication

11. Select "SQLAuthenticatorMBean". Click **Next**.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Home >Summary of Security Realms >myrealm >Realm Roles >Realm Policies >JMX Policy Editor

JMX Policy Editor

Select Read, Write, or Invoke Privileges

Specify read/write privileges for one or all MBean attributes, or specify privileges for invoking an MBean operation.

- If you chose ALL MBEAN TYPES on the previous page, you must apply the policy to all attributes or all operations.
- If you chose a specific MBean type on the previous page, you can select a specific attribute or operation or you can apply the policy to all attributes or operations.

Selected Scope: GLOBAL SCOPE

Selected MBean Type: SQLAuthenticatorMBean

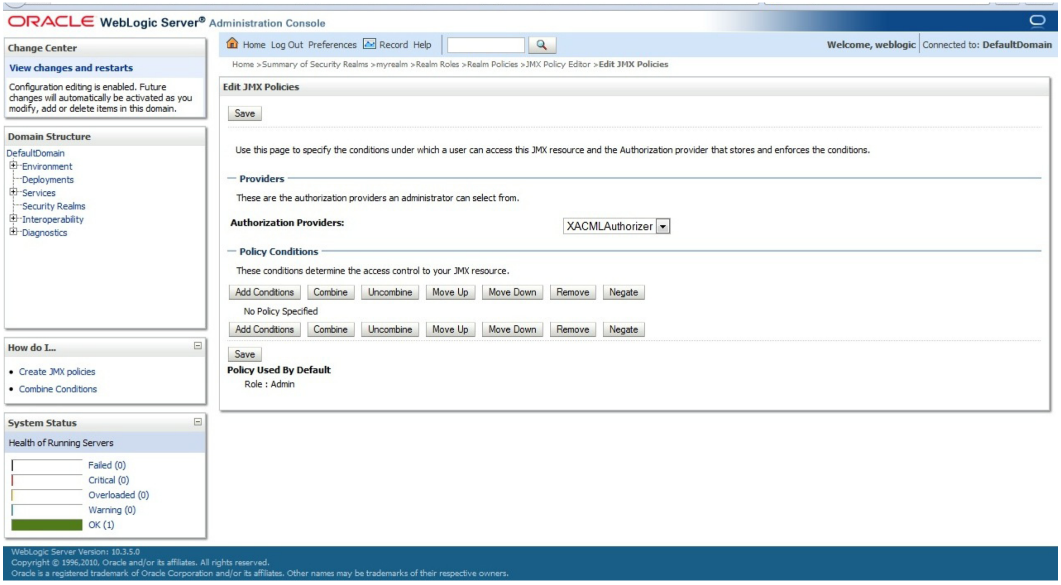
Attributes and Operations

|  | Attribute or Operation | Existing Policy |
|---|---|---|
| ○ | ⊞ Attributes: Permission to Read |  |
| ○ | ⊞ Attributes: Permission to Write |  |
| ○ | ⊞ Encrypted Attributes: Permission to Read |  |
| ○ | ⊞ Encrypted Attributes: Permission to Write |  |
| ○ | ⊞ Lookup Operations: Permission to Invoke |  |
| ○ | ⊟ Operations: Permission to Invoke |  |
| ○ | addMemberToGroup |  |
| ○ | advance |  |
| ● | changeUserPassword |  |
| ○ | close |  |
| ○ | createGroup |  |
| ○ | createUser |  |
| ○ | getCurrentName |  |
| ○ | getGroupDescription |  |
| ○ | getUserDescription |  |
| ○ | groupExists |  |
| ○ | haveCurrent |  |
| ○ | isMember |  |
| ○ | isSet |  |
| ○ | listGroupMembers |  |
| ○ | listGroups |  |
| ○ | listMemberGroups |  |

12. Expand "**Operations: Permissions to Invoke**" and select "**ChangePassword**"

13. Click "Create Policy"

14. It opens the below screen for Authorization providers where you can add conditions to setup the policy.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Edit JMX Policies

Use this page to specify the conditions under which a user can access this JMX resource and the Authorization provider that stores and enforces the conditions.

Providers

These are the authorization providers an administrator can select from.

Authorization Providers: XACMLAuthorizer

Policy Conditions

These conditions determine the access control to your JMX resource.

No Policy Specified

Policy Used By Default

Role : Admin

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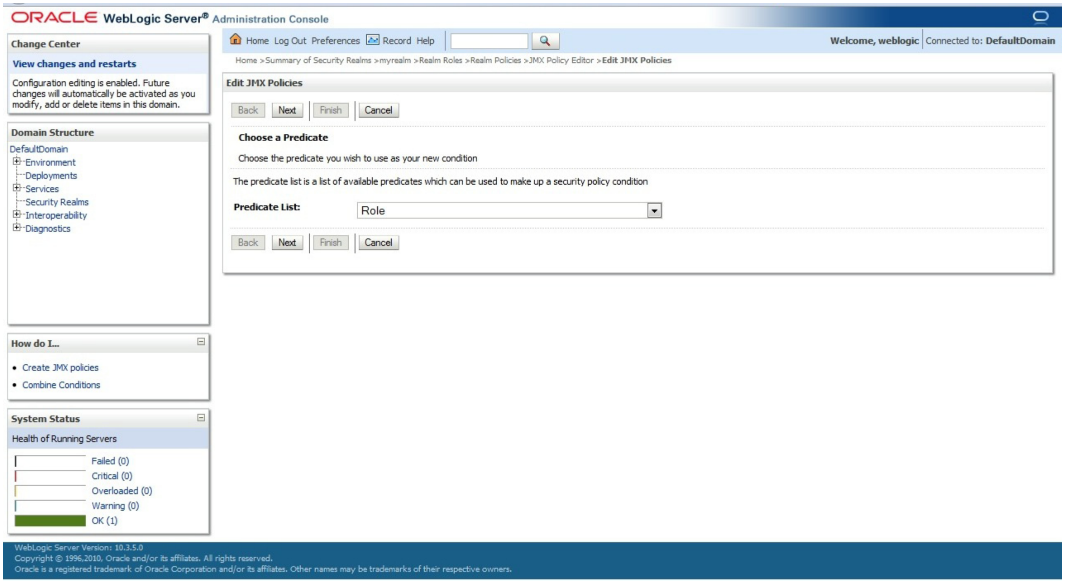
15. Click **Add Condition**. The below screen will be displayed.


ORACLE WebLogic Server® Administration Console
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: DefaultDomain
Home >Summary of Security Realms >myrealm >Realm Roles >Realm Policies >JMX Policy Editor >Edit JMX Policies
Change Center
View changes and restarts
Domain Structure
DefaultDomain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Create JMX policies
Combine Conditions
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)
Back
Next
Finish
Cancel

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Edit JMX Policies

Choose a Predicate

Choose the predicate you wish to use as your new condition

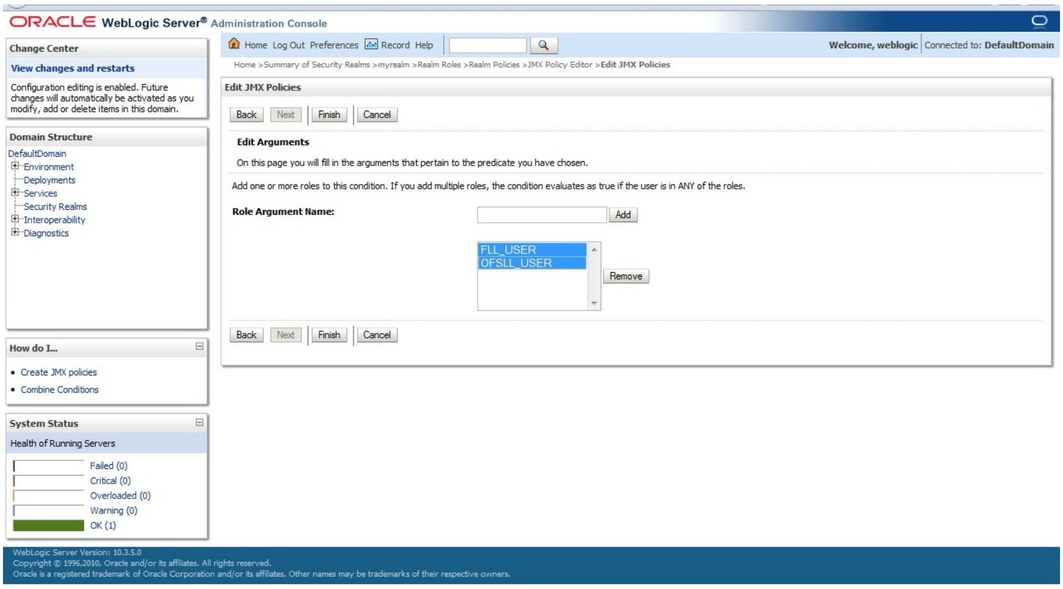
The predicate list is a list of available predicates which can be used to make up a security policy condition

Predicate List: Role

WebLogic Server Version: 10.3.5.0
Copyright © 1996,2010, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

16. For **Predicate List**, select **Group/Role** for configuration.

17. Click Next.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

**Edit Arguments**

On this page you will fill in the arguments that pertain to the predicate you have chosen.

Add one or more roles to this condition. If you add multiple roles, the condition evaluates as true if the user is in ANY of the roles.

**Role Argument Name:**

FLL_USER
OFSLL_USER

WebLogic Server Version: 10.3.5.0
Copyright © 1996,2010, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

18. Select user roles for application.

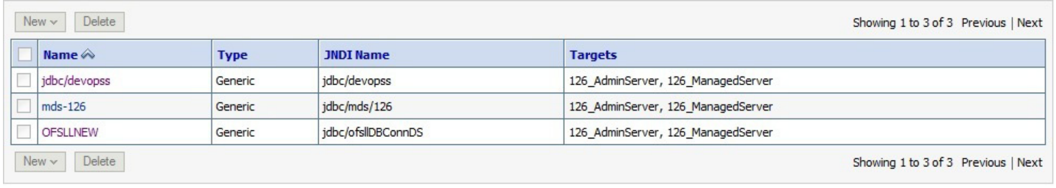
19. Click Finish to complete the configuration.

## 3.9 Migrating Policy from File to Database

For the scalability and manageability of the policy, you must migrate them from a file to database.

**To migrate policy from File to Database:**

1. Create a data source for OPSS schema with non XA and non global transaction.



| □ | Name | Type | JNDI Name | Targets |
|---|---|---|---|---|
| □ | jdbc/devopss | Generic | jdbc/devopss | 126_AdminServer, 126_ManagedServer |
| □ | mds-126 | Generic | jdbc/mds/126 | 126_AdminServer, 126_ManagedServer |
| □ | OFSLLNEW | Generic | jdbc/ofsllDBConnDS | 126_AdminServer, 126_ManagedServer |

*For data source creation refer Creating Data Source section of this chapter.*

2. Go to $MW_Home/oracle_common/common/bin.

3. Run /setWlstEnv.sh

4. Run /wlst.sh.

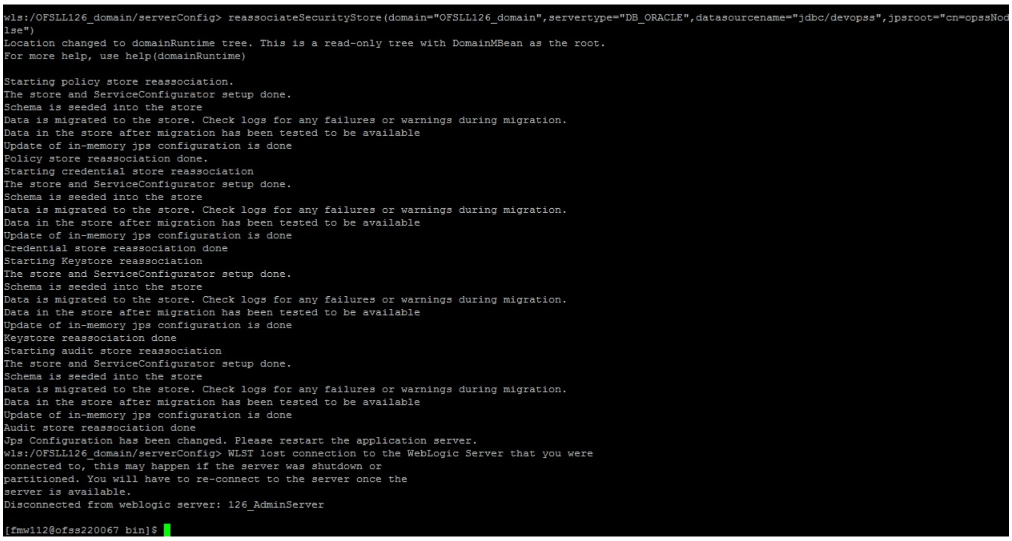
5. When prompted, enter **connect( )**

6. Enter Username, Password and Server URL

7. Run the below command:

```
reassociateSecurityStore(domain="OFSLL126_domain",servertype="DB_ORA-
CLE",datasourcename="jdbc/devopss",jpsroot="cn=opssNode",join="false")
```

datasourcename is the data source created in Step 1.



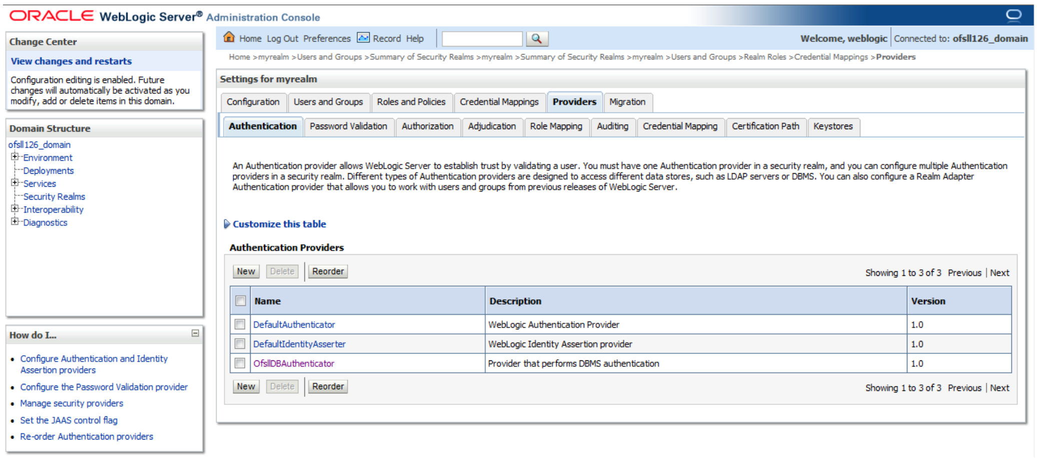
```
wls:/OFSLL126_domain/serverConfig> reassociateSecurityStore(domain="OFSLL126_domain",servertype="DB_ORACLE",datasourcename="jdbc/devopss",jpsroot="cn=opssNod
lse")
Location changed to domainRuntime tree. This is a read-only tree with DomainMBean as the root.
For more help, use help(domainRuntime)

Starting policy store reassociation.
The store and ServiceConfigurator setup done.
Schema is seeded into the store
Data is migrated to the store. Check logs for any failures or warnings during migration.
Data in the store after migration has been tested to be available
Update of in-memory jps configuration is done
Policy store reassociation done.
Starting credential store reassociation
The store and ServiceConfigurator setup done.
Schema is seeded into the store
Data is migrated to the store. Check logs for any failures or warnings during migration.
Data in the store after migration has been tested to be available
Update of in-memory jps configuration is done
Credential store reassociation done
Starting Keystore reassociation
The store and ServiceConfigurator setup done.
Schema is seeded into the store
Data is migrated to the store. Check logs for any failures or warnings during migration.
Data in the store after migration has been tested to be available
Update of in-memory jps configuration is done
Keystore reassociation done
Starting audit store reassociation
The store and ServiceConfigurator setup done.
Schema is seeded into the store
Data is migrated to the store. Check logs for any failures or warnings during migration.
Data in the store after migration has been tested to be available
Update of in-memory jps configuration is done
Audit store reassociation done
Jps Configuration has been changed. Please restart the application server.
wls:/OFSLL126_domain/serverConfig> WLST lost connection to the WebLogic Server that you were
connected to, this may happen if the server was shutdown or
partitioned. You will have to re-connect to the server once the
server is available.
Disconnected from weblogic server: 126_AdminServer

[fmw112@ofss220067 bin]$
```

8. The policy gets migrated from file to Database.
9. Restart the server for the changes to take effect.

# 4. Configuring Policies

## 4.1 Configuring Password Policy for SQL Authenticator

1. Login to the WebLogic server administration console with user login credentials.
2. Browse to **Security Realms →myRealm→ Providers** as shown below. The following window is displayed



Home >myrealm >Users and Groups >Summary of Security Realms >myrealm >Summary of Security Realms >myrealm >Users and Groups >Realm Roles >Credential Mappings >**Providers**

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

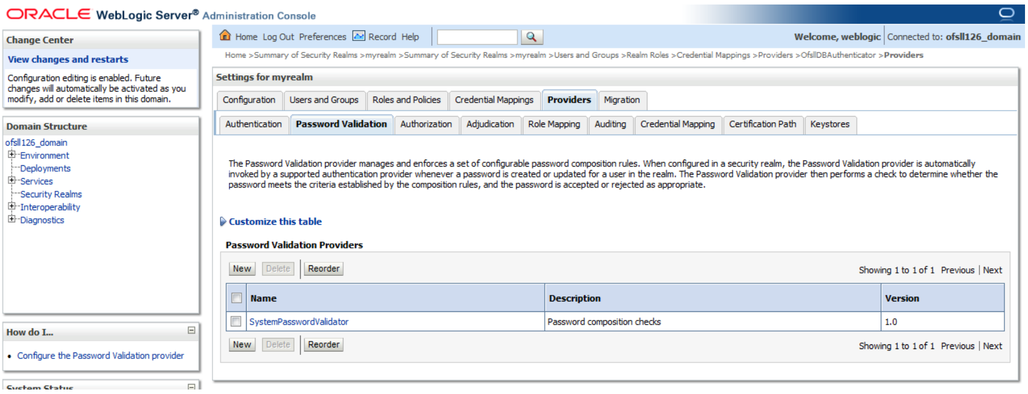
**Settings for myrealm**

An Authentication provider allows WebLogic Server to establish trust by validating a user. You must have one Authentication provider in a security realm, and you can configure multiple Authentication providers in a security realm. Different types of Authentication providers are designed to access different data stores, such as LDAP servers or DBMS. You can also configure a Realm Adapter Authentication provider that allows you to work with users and groups from previous releases of WebLogic Server.

**Authentication Providers**

| □ | Name | Description | Version |
|---|---|---|---|
| □ | DefaultAuthenticator | WebLogic Authentication Provider | 1.0 |
| □ | DefaultIdentityAsserter | WebLogic Identity Assertion provider | 1.0 |
| □ | OfsllDBAuthenticator | Provider that performs DBMS authentication | 1.0 |

3. Click **Password Validation** tab. The following window is displayed



Home >Summary of Security Realms >myrealm >Summary of Security Realms >myrealm >Users and Groups >Realm Roles >Credential Mappings >Providers >OfsllDBAuthenticator >**Providers**

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

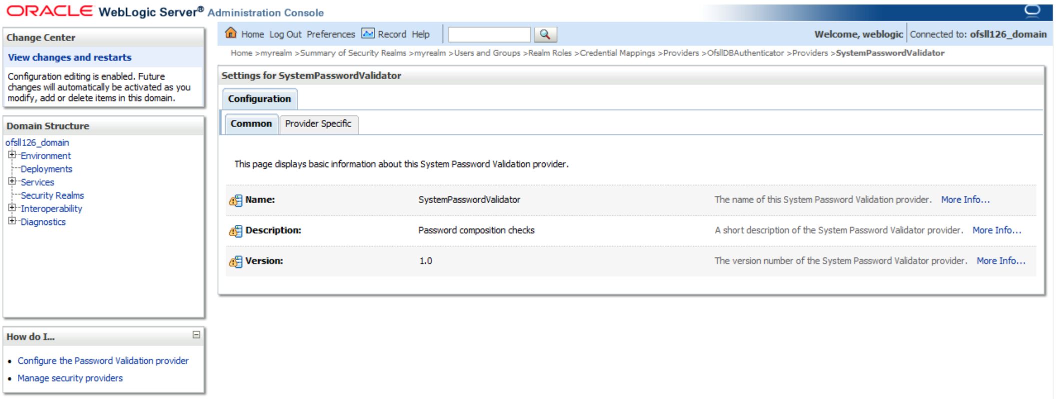
**Settings for myrealm**

The Password Validation provider manages and enforces a set of configurable password composition rules. When configured in a security realm, the Password Validation provider is automatically invoked by a supported authentication provider whenever a password is created or updated for a user in the realm. The Password Validation provider then performs a check to determine whether the password meets the criteria established by the composition rules, and the password is accepted or rejected as appropriate.

**Password Validation Providers**

| □ | Name | Description | Version |
|---|---|---|---|
| □ | SystemPasswordValidator | Password composition checks | 1.0 |

4. Click **SystemPasswordValidator** link. The following window is displayed


ORACLE WebLogic Server® Administration Console
Home Log Out Preferences Record Help
Welcome, weblogic
Connected to: ofsll126_domain
Change Center
View changes and restarts
Domain Structure
ofsll126_domain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Configure the Password Validation provider
Manage security providers
Configuration
Common
Provider Specific

Home >myrealm >Summary of Security Realms >myrealm >Users and Groups >Realm Roles >Credential Mappings >Providers >OfsllDBAuthenticator >Providers >**SystemPasswordValidator**

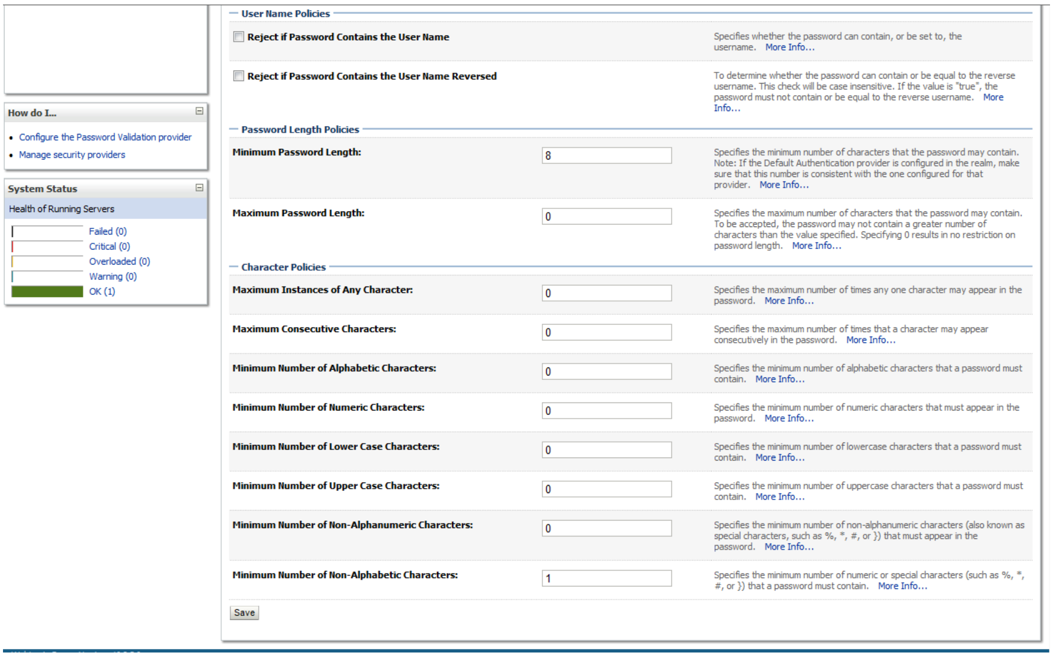
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

**Settings for SystemPasswordValidator**

This page displays basic information about this System Password Validation provider.

| | | |
|---|---|---|
| **Name:** | SystemPasswordValidator | The name of this System Password Validation provider. More Info... |
| **Description:** | Password composition checks | A short description of the System Password Validator provider. More Info... |
| **Version:** | 1.0 | The version number of the System Password Validator provider. More Info... |

5. Click **Provider Specific** Tab. The following window is displayed



How do I...

- Configure the Password Validation provider
- Manage security providers

System Status

Health of Running Servers

Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

User Name Policies

| | | |
|---|---|---|
| □ Reject if Password Contains the User Name | | Specifies whether the password can contain, or be set to, the username. More Info... |
| □ Reject if Password Contains the User Name Reversed | | To determine whether the password can contain or be equal to the reverse username. This check will be case insensitive. If the value is "true", the password must not contain or be equal to the reverse username. More Info... |

Password Length Policies

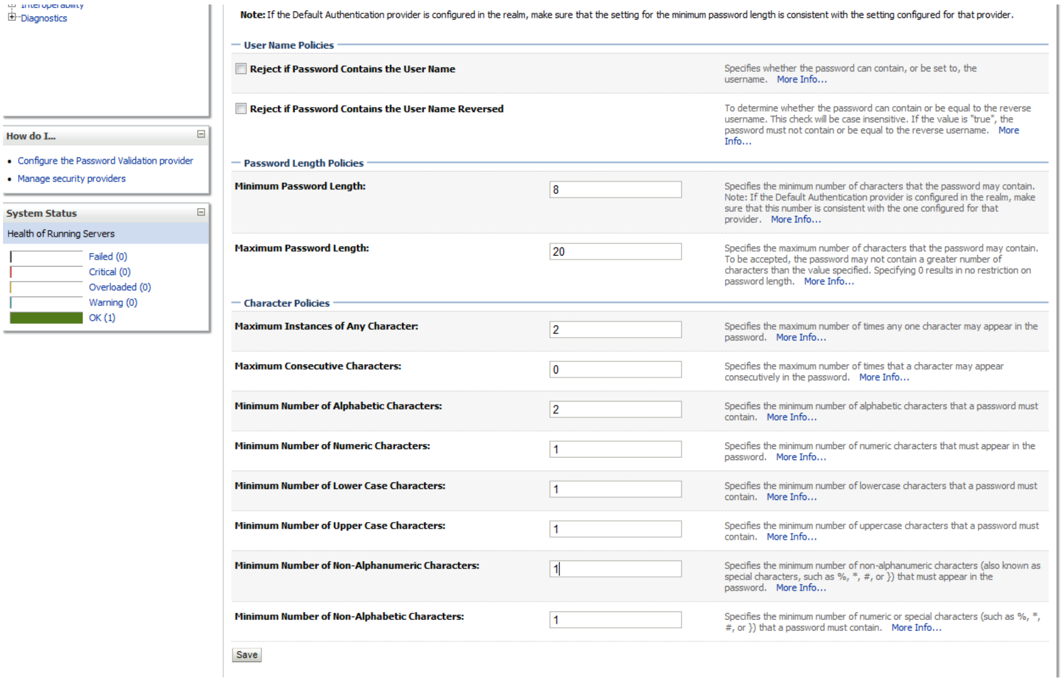
| | | |
|---|---|---|
| Minimum Password Length: | 8 | Specifies the minimum number of characters that the password may contain. Note: If the Default Authentication provider is configured in the realm, make sure that this number is consistent with the one configured for that provider. More Info... |
| Maximum Password Length: | 0 | Specifies the maximum number of characters that the password may contain. To be accepted, the password may not contain a greater number of characters than the value specified. Specifying 0 results in no restriction on password length. More Info... |

Character Policies

| | | |
|---|---|---|
| Maximum Instances of Any Character: | 0 | Specifies the maximum number of times any one character may appear in the password. More Info... |
| Maximum Consecutive Characters: | 0 | Specifies the maximum number of times that a character may appear consecutively in the password. More Info... |
| Minimum Number of Alphabetic Characters: | 0 | Specifies the minimum number of alphabetic characters that a password must contain. More Info... |
| Minimum Number of Numeric Characters: | 0 | Specifies the minimum number of numeric characters that must appear in the password. More Info... |
| Minimum Number of Lower Case Characters: | 0 | Specifies the minimum number of lowercase characters that a password must contain. More Info... |
| Minimum Number of Upper Case Characters: | 0 | Specifies the minimum number of uppercase characters that a password must contain. More Info... |
| Minimum Number of Non-Alphanumeric Characters: | 0 | Specifies the minimum number of non-alphanumeric characters (also known as special characters, such as %, *, #, or }) that must appear in the password. More Info... |
| Minimum Number of Non-Alphabetic Characters: | 1 | Specifies the minimum number of numeric or special characters (such as %, *, #, or }) that a password must contain. More Info... |

Save

6. Configure the password policy as per the requirement. An example is provided below.



Interoperability
Diagnostics

**Note:** If the Default Authentication provider is configured in the realm, make sure that the setting for the minimum password length is consistent with the setting configured for that provider.

How do I...

- Configure the Password Validation provider
- Manage security providers

System Status

Health of Running Servers

Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

User Name Policies

| | | |
|---|---|---|
| □ Reject if Password Contains the User Name | | Specifies whether the password can contain, or be set to, the username. More Info... |
| □ Reject if Password Contains the User Name Reversed | | To determine whether the password can contain or be equal to the reverse username. This check will be case insensitive. If the value is "true", the password must not contain or be equal to the reverse username. More Info... |

Password Length Policies

| | | |
|---|---|---|
| Minimum Password Length: | 8 | Specifies the minimum number of characters that the password may contain. Note: If the Default Authentication provider is configured in the realm, make sure that this number is consistent with the one configured for that provider. More Info... |
| Maximum Password Length: | 20 | Specifies the maximum number of characters that the password may contain. To be accepted, the password may not contain a greater number of characters than the value specified. Specifying 0 results in no restriction on password length. More Info... |

Character Policies

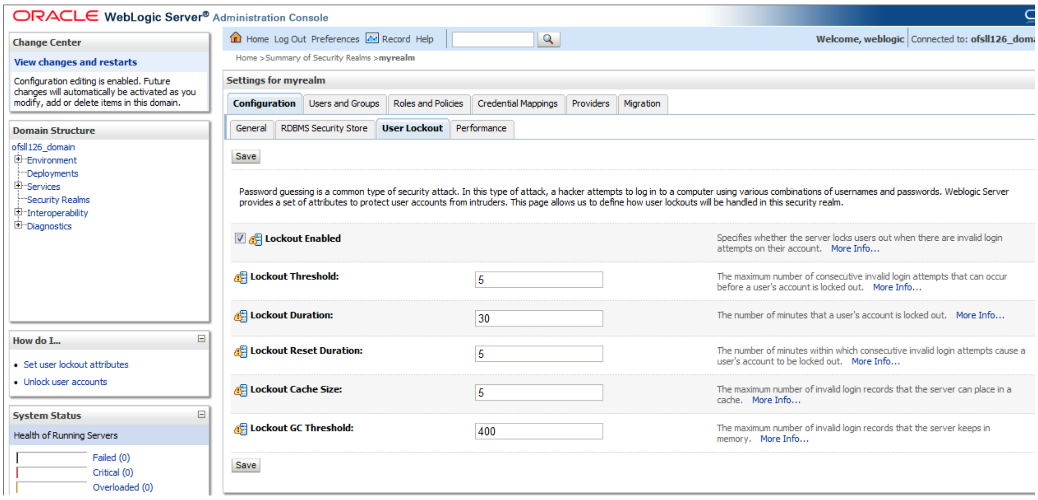
| | | |
|---|---|---|
| Maximum Instances of Any Character: | 2 | Specifies the maximum number of times any one character may appear in the password. More Info... |
| Maximum Consecutive Characters: | 0 | Specifies the maximum number of times that a character may appear consecutively in the password. More Info... |
| Minimum Number of Alphabetic Characters: | 2 | Specifies the minimum number of alphabetic characters that a password must contain. More Info... |
| Minimum Number of Numeric Characters: | 1 | Specifies the minimum number of numeric characters that must appear in the password. More Info... |
| Minimum Number of Lower Case Characters: | 1 | Specifies the minimum number of lowercase characters that a password must contain. More Info... |
| Minimum Number of Upper Case Characters: | 1 | Specifies the minimum number of uppercase characters that a password must contain. More Info... |
| Minimum Number of Non-Alphanumeric Characters: | 1 | Specifies the minimum number of non-alphanumeric characters (also known as special characters, such as %, *, #, or }) that must appear in the password. More Info... |
| Minimum Number of Non-Alphabetic Characters: | 1 | Specifies the minimum number of numeric or special characters (such as %, *, #, or }) that a password must contain. More Info... |

Save

7. Click Save.

## 4.2 Configuring User Lockout Policy

1. To Change User lockout policy, browse to **Security Realms →** **→Configuration** Tab → **User Lockout** Tab. The following window is displayed



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Password guessing is a common type of security attack. In this type of attack, a hacker attempts to log in to a computer using various combinations of usernames and passwords. Weblogic Server provides a set of attributes to protect user accounts from intruders. This page allows us to define how user lockouts will be handled in this security realm.

| | | |
|---|---|---|
| ☑ Lockout Enabled | | Specifies whether the server locks users out when there are invalid login attempts on their account. More Info... |
| Lockout Threshold: | 5 | The maximum number of consecutive invalid login attempts that can occur before a user's account is locked out. More Info... |
| Lockout Duration: | 30 | The number of minutes that a user's account is locked out. More Info... |
| Lockout Reset Duration: | 5 | The number of minutes within which consecutive invalid login attempts cause a user's account to be locked out. More Info... |
| Lockout Cache Size: | 5 | The maximum number of invalid login records that the server can place in a cache. More Info... |
| Lockout GC Threshold: | 400 | The maximum number of invalid login records that the server keeps in memory. More Info... |

2. Configure the User Lockout details as per the requirement. An example is provided above.

# 5. Configuring Oracle BI Publisher for Application

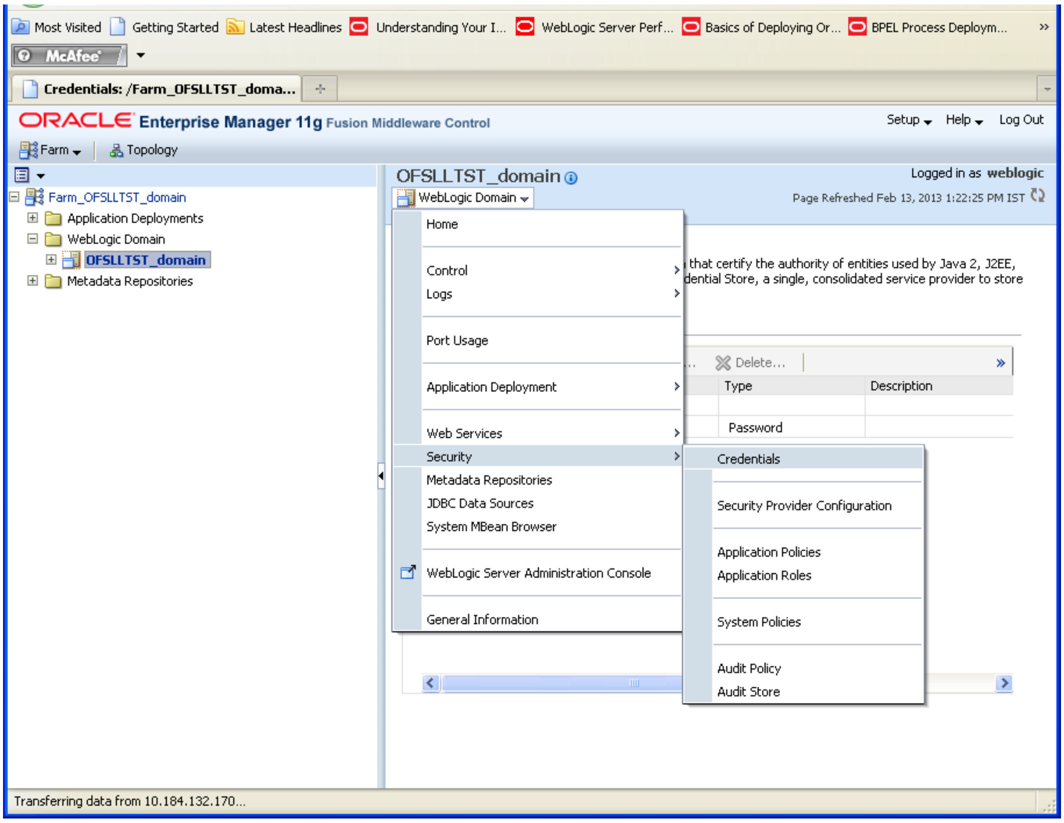
1. Copy the OfsllCommonCSF.jar from /WEB-INF/lib available in the staging area to $DOMAIN_HOME/lib
2. Update the setDomainEnv.sh file ($MW_HOME/user_projects/domains/mydomain/bin directory) by appending the above jar file path –

**EXTRA_JAVA_PROPERTIES="……..** ${EXTRA_JAVA_PROPERTIES} -Dofsll.csf.path=${DOMAIN_HOME}"

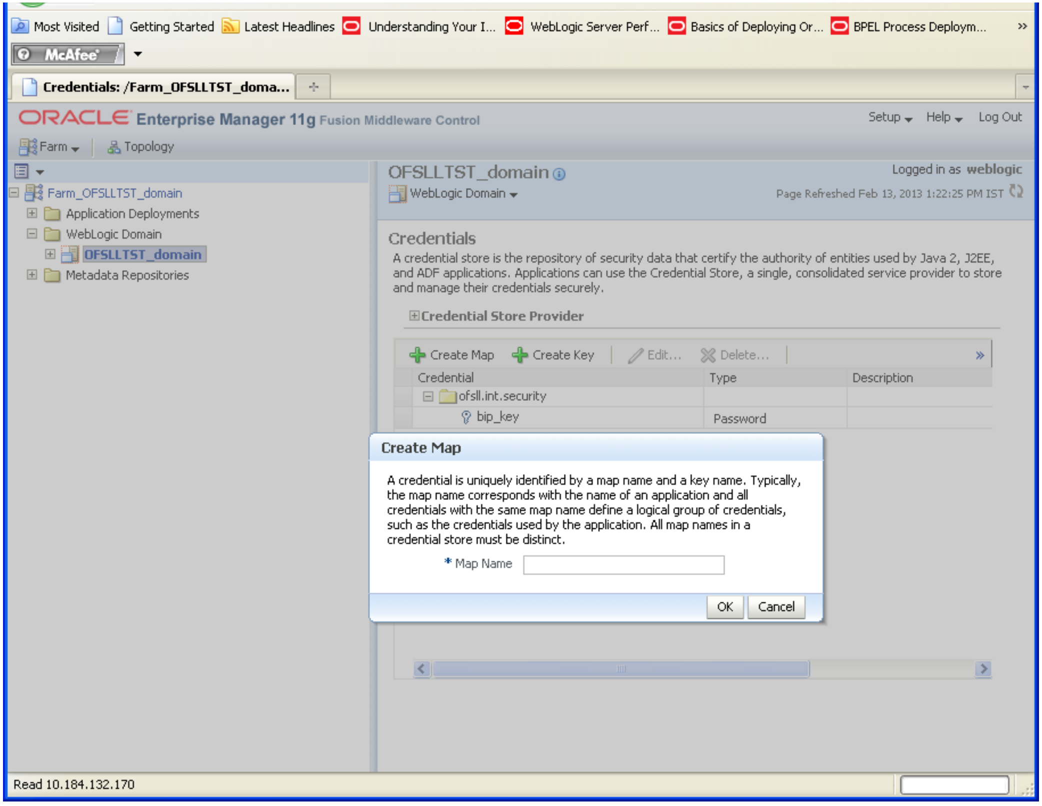
3. Configure Security via EMconsole

**Note**

It is assumed that BI Publisher is installed and configured. Refer BI Publisher Guide for further details.



4. Click WebLogic Domain on the right panel. Select Security -> Credentials. Click ‘Create Map’. The following window is displayed.



Credentials

A credential store is the repository of security data that certify the authority of entities used by Java 2, J2EE, and ADF applications. Applications can use the Credential Store, a single, consolidated service provider to store and manage their credentials securely.

| Credential | Type | Description |
|---|---|---|
| ofsll.int.security | | |
| bip_key | Password | |

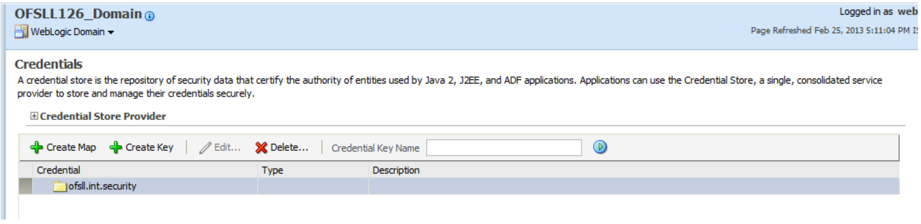
Create Map

A credential is uniquely identified by a map name and a key name. Typically, the map name corresponds with the name of an application and all credentials with the same map name define a logical group of credentials, such as the credentials used by the application. All map names in a credential store must be distinct.

* Map Name

5. Enter the Map Name: ofsll.int.security

6. Click OK. The following window is displayed..



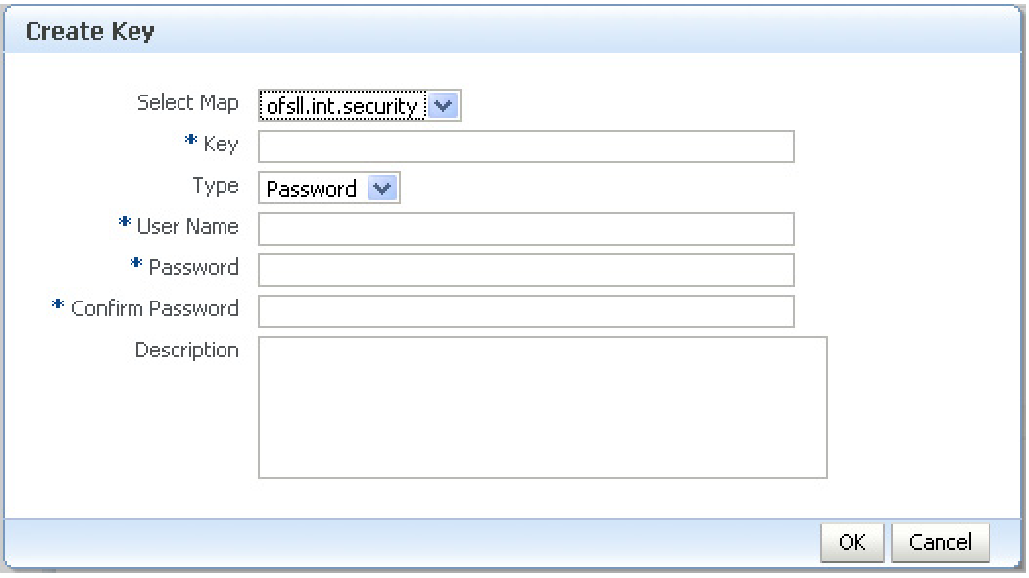
Credentials

A credential store is the repository of security data that certify the authority of entities used by Java 2, J2EE, and ADF applications. Applications can use the Credential Store, a single, consolidated service provider to store and manage their credentials securely.

| Credential | Type | Description |
|---|---|---|
| ofsll.int.security | | |

7. Click **Create Key** Button.

The following window is displayed.



Create Key

Select Map: ofsll.int.security

* Key:

Type: Password

* User Name:

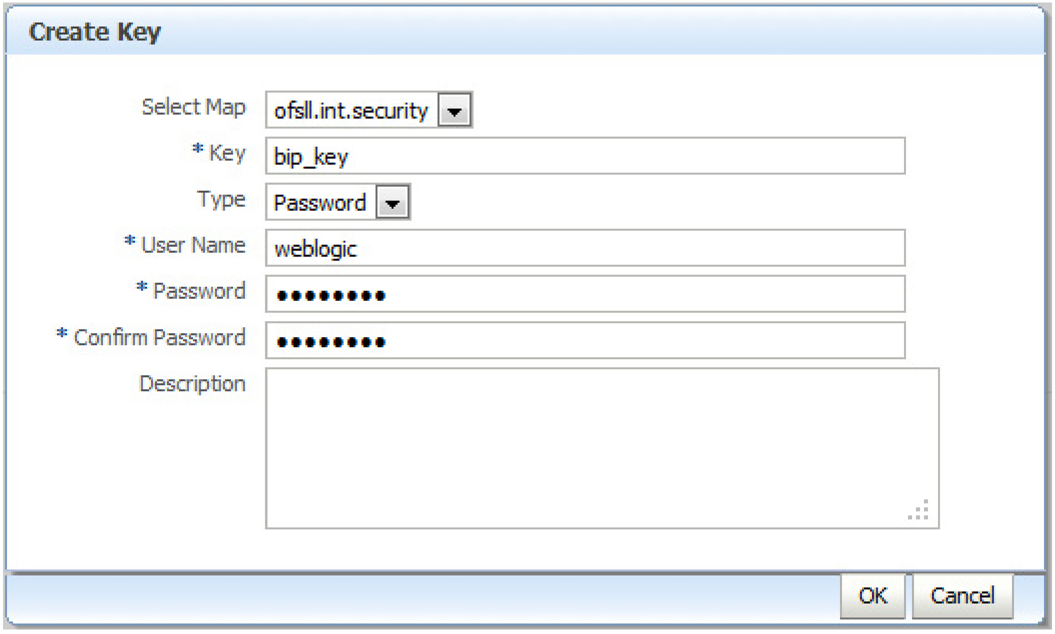
* Password:

* Confirm Password:

Description:

8. Enter the details as per your requirement.

9. And provide User Name and Password of BI Publisher ~~domain~~console.



Create Key

Select Map: ofsll.int.security

* Key: bip_key

Type: Password

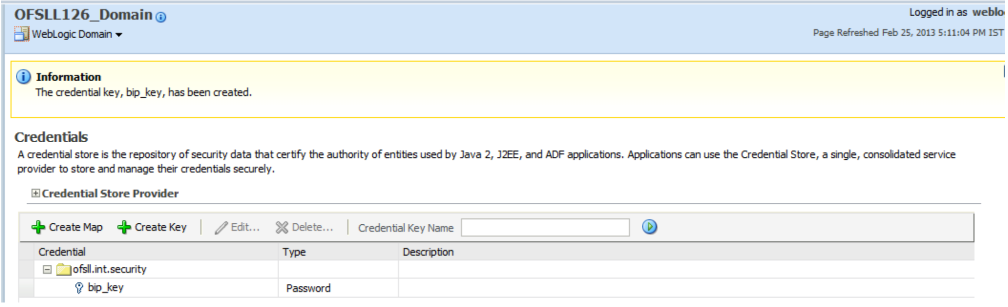
* User Name: weblogic

* Password: ●●●●●●●●

* Confirm Password: ●●●●●●●●

Description:

10. Click **OK**. The following window is displayed.



OFSLL126_Domain

WebLogic Domain

Logged in as weblo

Page Refreshed Feb 25, 2013 5:11:04 PM IST

Information

The credential key, bip_key, has been created.

Credentials

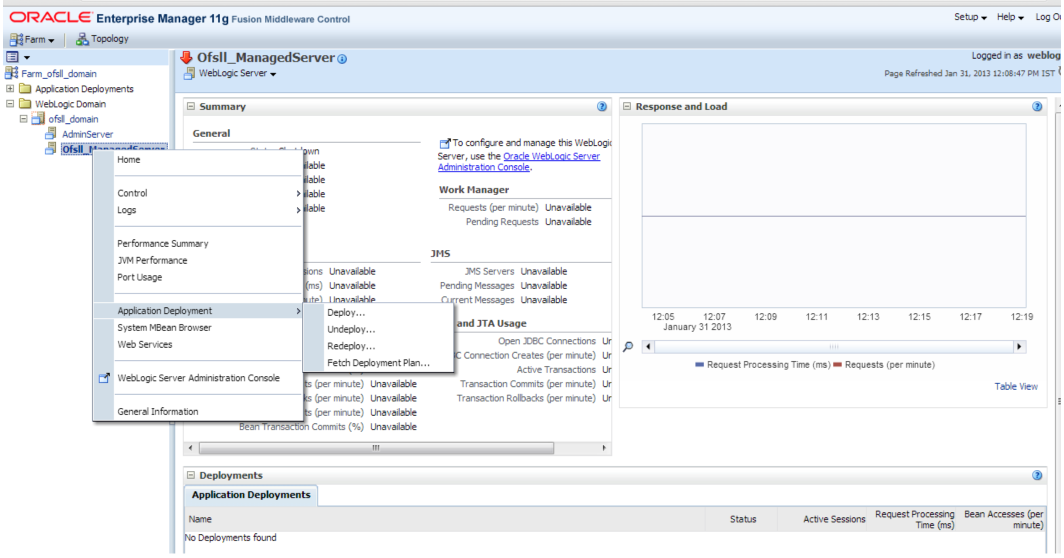
A credential store is the repository of security data that certify the authority of entities used by Java 2, J2EE, and ADF applications. Applications can use the Credential Store, a single, consolidated service provider to store and manage their credentials securely.

⊞ Credential Store Provider

| Credential | Type | Description |
|---|---|---|
| ⊟ ofsll.int.security | | |
| bip_key | Password | |

## 6.1 Deploying Application

1. Login to the Oracle Enterprise Manager 11g console with user credentials. (i.e. http://hostname:port/em)



Logged in as weblog

Page Refreshed Jan 31, 2013 12:08:47 PM IST

To configure and manage this WebLogic Server, use the Oracle WebLogic Server Administration Console.

Requests (per minute) Unavailable

Pending Requests Unavailable

JMS Servers Unavailable

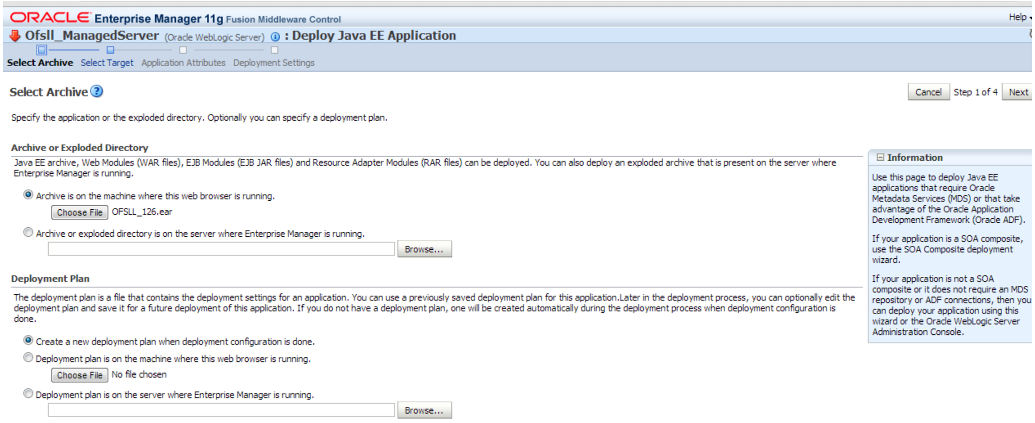
Pending Messages Unavailable

Current Messages Unavailable

Bean Transaction Commits (%) Unavailable

No Deployments found

2. Right click on **Ofsll_ManagedServer** in left panel, select **Application Deployment** → **Deploy**. The following window is displayed.


ORACLE Enterprise Manager 11g Fusion Middleware Control
Help
Ofsll_ManagedServer (Oracle WebLogic Server) : Deploy Java EE Application
Select Archive
Select Target
Application Attributes
Deployment Settings
Cancel
Step 1 of 4
Next
Choose File
Browse...

Select Archive

Specify the application or the exploded directory. Optionally you can specify a deployment plan.

Archive or Exploded Directory

Java EE archive, Web Modules (WAR files), EJB Modules (EJB JAR files) and Resource Adapter Modules (RAR files) can be deployed. You can also deploy an exploded archive that is present on the server where Enterprise Manager is running.

● Archive is on the machine where this web browser is running.

Choose File OFSLL_126.ear

○ Archive or exploded directory is on the server where Enterprise Manager is running.

Deployment Plan

The deployment plan is a file that contains the deployment settings for an application. You can use a previously saved deployment plan for this application.Later in the deployment process, you can optionally edit the deployment plan and save it for a future deployment of this application. If you do not have a deployment plan, one will be created automatically during the deployment process when deployment configuration is done.

● Create a new deployment plan when deployment configuration is done.

○ Deployment plan is on the machine where this web browser is running.

Choose File No file chosen

○ Deployment plan is on the server where Enterprise Manager is running.

Information

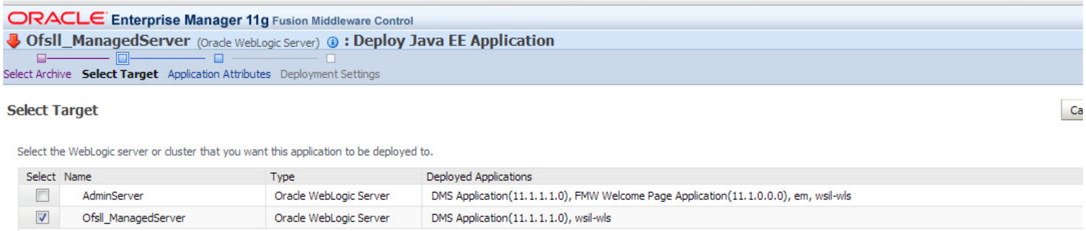
Use this page to deploy Java EE applications that require Oracle Metadata Services (MDS) or that take advantage of the Oracle Application Development Framework (Oracle ADF).

If your application is a SOA composite, use the SOA Composite deployment wizard.

If your application is not a SOA composite or it does not require an MDS repository or ADF connections, then you can deploy your application using this wizard or the Oracle WebLogic Server Administration Console.

3. Click Choose File button and select OFSLL application archive file i.e. **OFSLL_140.ear**

4. Click **Next**. The following window is displayed


ORACLE Enterprise Manager 11g Fusion Middleware Control
Ofsll_ManagedServer (Oracle WebLogic Server) : Deploy Java EE Application
Select Archive
Select Target
Application Attributes
Deployment Settings
Ca

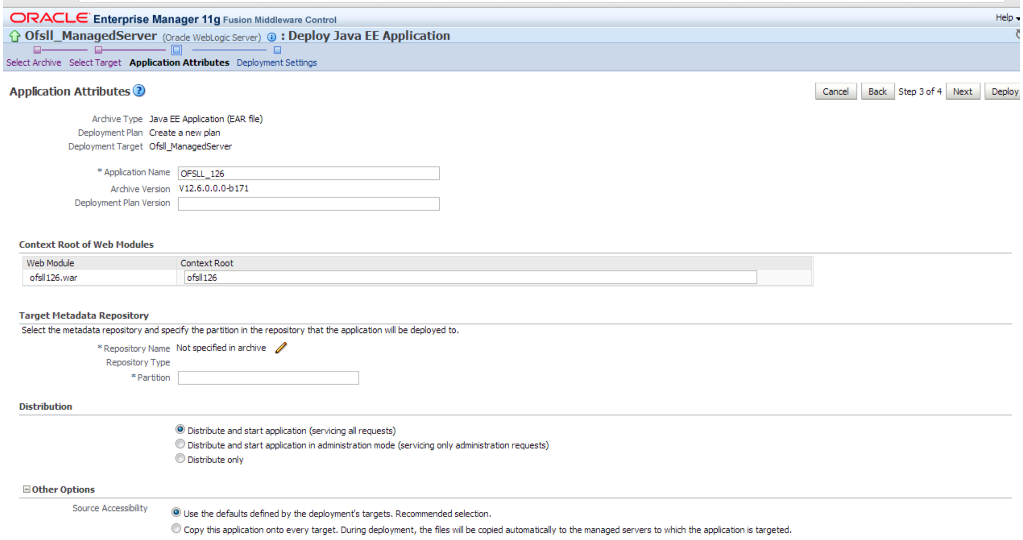
Select Target

Select the WebLogic server or cluster that you want this application to be deployed to.

| Select | Name | Type | Deployed Applications |
|---|---|---|---|
| ☐ | AdminServer | Oracle WebLogic Server | DMS Application(11.1.1.1.0), FMW Welcome Page Application(11.1.0.0.0), em, wsil-wls |
| ☑ | Ofsll_ManagedServer | Oracle WebLogic Server | DMS Application(11.1.1.1.0), wsil-wls |

5. Check target server as per the requirement **Ofsll_ManagedServer** and click **Next**.

6. The following window is displayed.



ORACLE Enterprise Manager 11g Fusion Middleware Control
Help
Ofsll_ManagedServer (Oracle WebLogic Server) : Deploy Java EE Application
Select Archive
Select Target
Application Attributes
Deployment Settings
Cancel
Back
Step 3 of 4
Next
Deploy

Application Attributes

Archive Type Java EE Application (EAR file)
Deployment Plan Create a new plan
Deployment Target Ofsll_ManagedServer

* Application Name OFSLL_126
Archive Version V12.6.0.0.0-b171
Deployment Plan Version

Context Root of Web Modules

| Web Module | Context Root |
|---|---|
| ofsll126.war | ofsll126 |

Target Metadata Repository

Select the metadata repository and specify the partition in the repository that the application will be deployed to.

* Repository Name Not specified in archive
Repository Type
* Partition

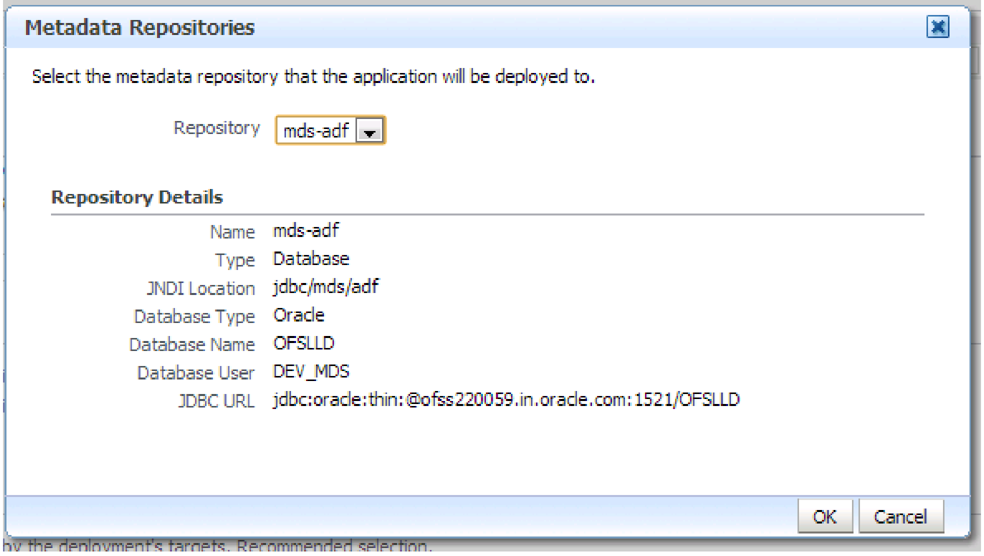
Distribution

● Distribute and start application (servicing all requests)
○ Distribute and start application in administration mode (servicing only administration requests)
○ Distribute only

Other Options

Source Accessibility
● Use the defaults defined by the deployment's targets. Recommended selection.
○ Copy this application onto every target. During deployment, the files will be copied automatically to the managed servers to which the application is targeted.

7. Click button to select Repository Name. The following window is displayed.



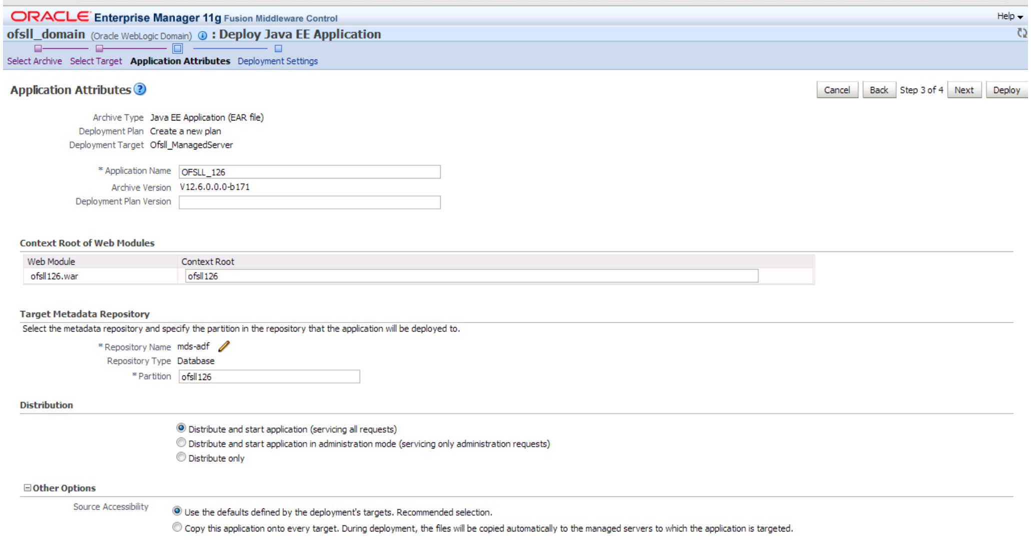
Select the metadata repository that the application will be deployed to.

Repository mds-adf

Repository Details

Name mds-adf
Type Database
JNDI Location jdbc/mds/adf
Database Type Oracle
Database Name OFSLLD
Database User DEV_MDS
JDBC URL jdbc:oracle:thin:@ofss220059.in.oracle.com:1521/OFSLLD

8. Select Repository as per requirement and click **OK**.



ofsll_domain (Oracle WebLogic Domain) : Deploy Java EE Application

Application Attributes

Archive Type: Java EE Application (EAR file)
Deployment Plan: Create a new plan
Deployment Target: Ofsll_ManagedServer

* Application Name: OFSLL_126
Archive Version: V12.6.0.0.0-b171
Deployment Plan Version:

Context Root of Web Modules

| Web Module | Context Root |
|---|---|
| ofsll126.war | ofsll126 |

Target Metadata Repository

Select the metadata repository and specify the partition in the repository that the application will be deployed to.

* Repository Name: mds-adf
Repository Type: Database
* Partition: ofsll126

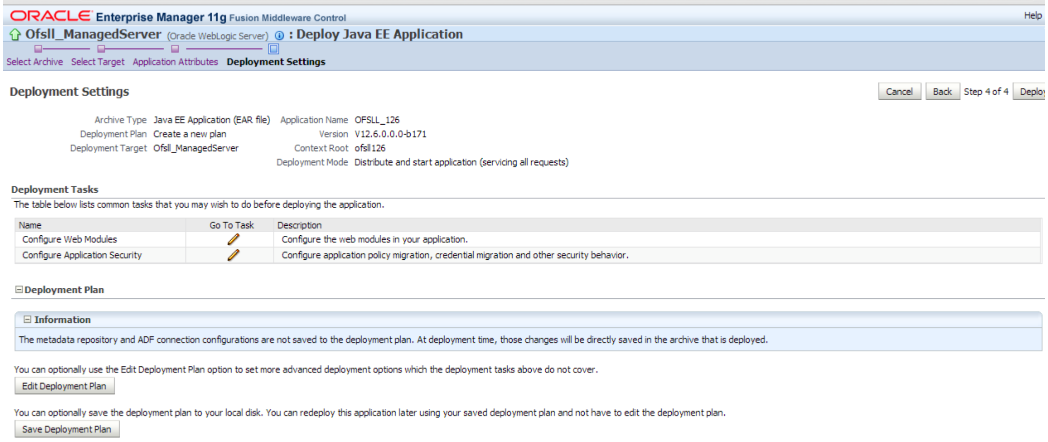
Distribution

● Distribute and start application (servicing all requests)
○ Distribute and start application in administration mode (servicing only administration requests)
○ Distribute only

⊟ Other Options

Source Accessibility
● Use the defaults defined by the deployment's targets. Recommended selection.
○ Copy this application onto every target. During deployment, the files will be copied automatically to the managed servers to which the application is targeted.

9. Enter Partition name as per the requirement and click **Next**.



Ofsll_ManagedServer (Oracle WebLogic Server) : Deploy Java EE Application

Deployment Settings

Archive Type: Java EE Application (EAR file)
Deployment Plan: Create a new plan
Deployment Target: Ofsll_ManagedServer
Application Name: OFSLL_126
Version: V12.6.0.0.0-b171
Context Root: ofsll126
Deployment Mode: Distribute and start application (servicing all requests)

Deployment Tasks

The table below lists common tasks that you may wish to do before deploying the application.

| Name | Go To Task | Description |
|---|---|---|
| Configure Web Modules | ✎ | Configure the web modules in your application. |
| Configure Application Security | ✎ | Configure application policy migration, credential migration and other security behavior. |

⊟ Deployment Plan

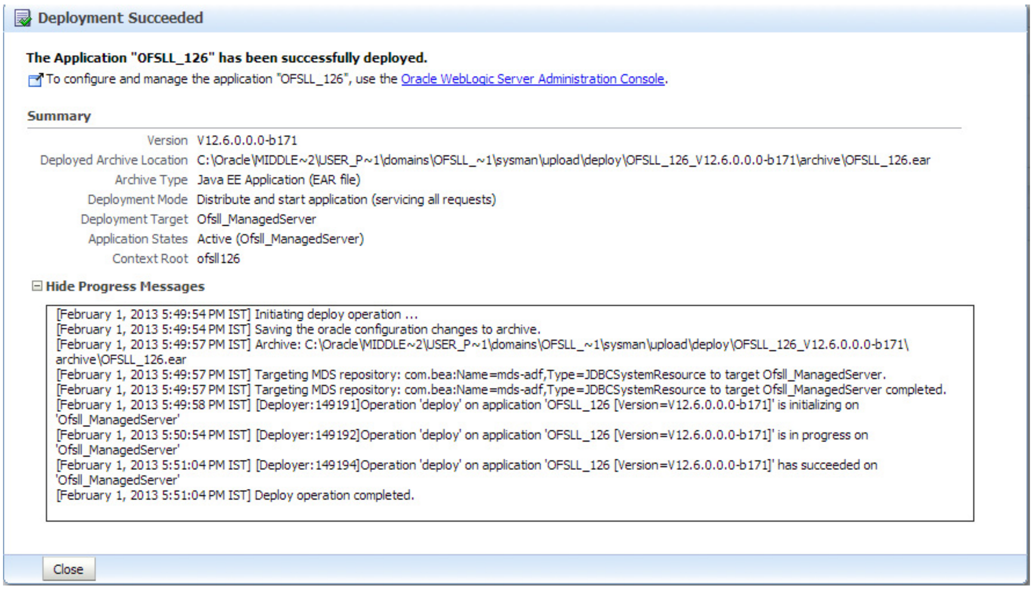
⊟ Information

The metadata repository and ADF connection configurations are not saved to the deployment plan. At deployment time, those changes will be directly saved in the archive that is deployed.

You can optionally use the Edit Deployment Plan option to set more advanced deployment options which the deployment tasks above do not cover.

You can optionally save the deployment plan to your local disk. You can redeploy this application later using your saved deployment plan and not have to edit the deployment plan.

10. Click **Deploy**. The following window is displayed



Deployment Succeeded

The Application "OFSLL_126" has been successfully deployed.

To configure and manage the application "OFSLL_126", use the Oracle WebLogic Server Administration Console.

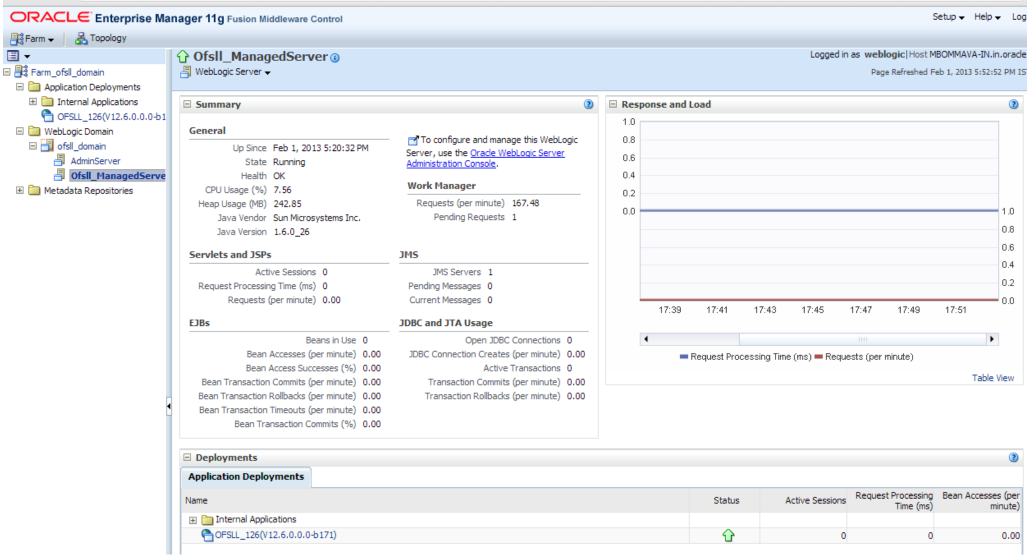
Summary

Version: V12.6.0.0.0-b171
Deployed Archive Location: C:\Oracle\MIDDLE~2\USER_P~1\domains\OFSLL_~1\sysman\upload\deploy\OFSLL_126_V12.6.0.0.0-b171\archive\OFSLL_126.ear
Archive Type: Java EE Application (EAR file)
Deployment Mode: Distribute and start application (servicing all requests)
Deployment Target: Ofsll_ManagedServer
Application States: Active (Ofsll_ManagedServer)
Context Root: ofsll126

⊟ Hide Progress Messages

```
[February 1, 2013 5:49:54 PM IST] Initiating deploy operation ...
[February 1, 2013 5:49:54 PM IST] Saving the oracle configuration changes to archive.
[February 1, 2013 5:49:57 PM IST] Archive: C:\Oracle\MIDDLE~2\USER_P~1\domains\OFSLL_~1\sysman\upload\deploy\OFSLL_126_V12.6.0.0.0-b171\
archive\OFSLL_126.ear
[February 1, 2013 5:49:57 PM IST] Targeting MDS repository: com.bea:Name=mds-adf,Type=JDBCSystemResource to target Ofsll_ManagedServer.
[February 1, 2013 5:49:57 PM IST] Targeting MDS repository: com.bea:Name=mds-adf,Type=JDBCSystemResource to target Ofsll_ManagedServer completed.
[February 1, 2013 5:49:58 PM IST] [Deployer:149191]Operation 'deploy' on application 'OFSLL_126 [Version=V12.6.0.0.0-b171]' is initializing on
'Ofsll_ManagedServer'
[February 1, 2013 5:50:54 PM IST] [Deployer:149192]Operation 'deploy' on application 'OFSLL_126 [Version=V12.6.0.0.0-b171]' is in progress on
'Ofsll_ManagedServer'
[February 1, 2013 5:51:04 PM IST] [Deployer:149194]Operation 'deploy' on application 'OFSLL_126 [Version=V12.6.0.0.0-b171]' has succeeded on
'Ofsll_ManagedServer'
[February 1, 2013 5:51:04 PM IST] Deploy operation completed.
```

11. Click Close once the message “Deploy operation completed” is displayed.The following window is displayed with Application deployment status



Ofsll_ManagedServer

WebLogic Server

Logged in as **weblogic**|Host MBOMMAVA-IN.in.oracle

Page Refreshed Feb 1, 2013 5:52:52 PM IS

**Summary**

**General**

| | |
|---|---|
| Up Since | Feb 1, 2013 5:20:32 PM |
| State | Running |
| Health | OK |
| CPU Usage (%) | 7.56 |
| Heap Usage (MB) | 242.85 |
| Java Vendor | Sun Microsystems Inc. |
| Java Version | 1.6.0_26 |

To configure and manage this WebLogic Server, use the Oracle WebLogic Server Administration Console.

**Work Manager**

| | |
|---|---|
| Requests (per minute) | 167.48 |
| Pending Requests | 1 |

**Servlets and JSPs**

| | |
|---|---|
| Active Sessions | 0 |
| Request Processing Time (ms) | 0 |
| Requests (per minute) | 0.00 |

**JMS**

| | |
|---|---|
| JMS Servers | 1 |
| Pending Messages | 0 |
| Current Messages | 0 |

**EJBs**

| | |
|---|---|
| Beans in Use | 0 |
| Bean Accesses (per minute) | 0.00 |
| Bean Access Successes (%) | 0.00 |
| Bean Transaction Commits (per minute) | 0.00 |
| Bean Transaction Rollbacks (per minute) | 0.00 |
| Bean Transaction Timeouts (per minute) | 0.00 |
| Bean Transaction Commits (%) | 0.00 |

**JDBC and JTA Usage**

| | |
|---|---|
| Open JDBC Connections | 0 |
| JDBC Connection Creates (per minute) | 0.00 |
| Active Transactions | 0 |
| Transaction Commits (per minute) | 0.00 |
| Transaction Rollbacks (per minute) | 0.00 |

**Response and Load**

**Deployments**

**Application Deployments**

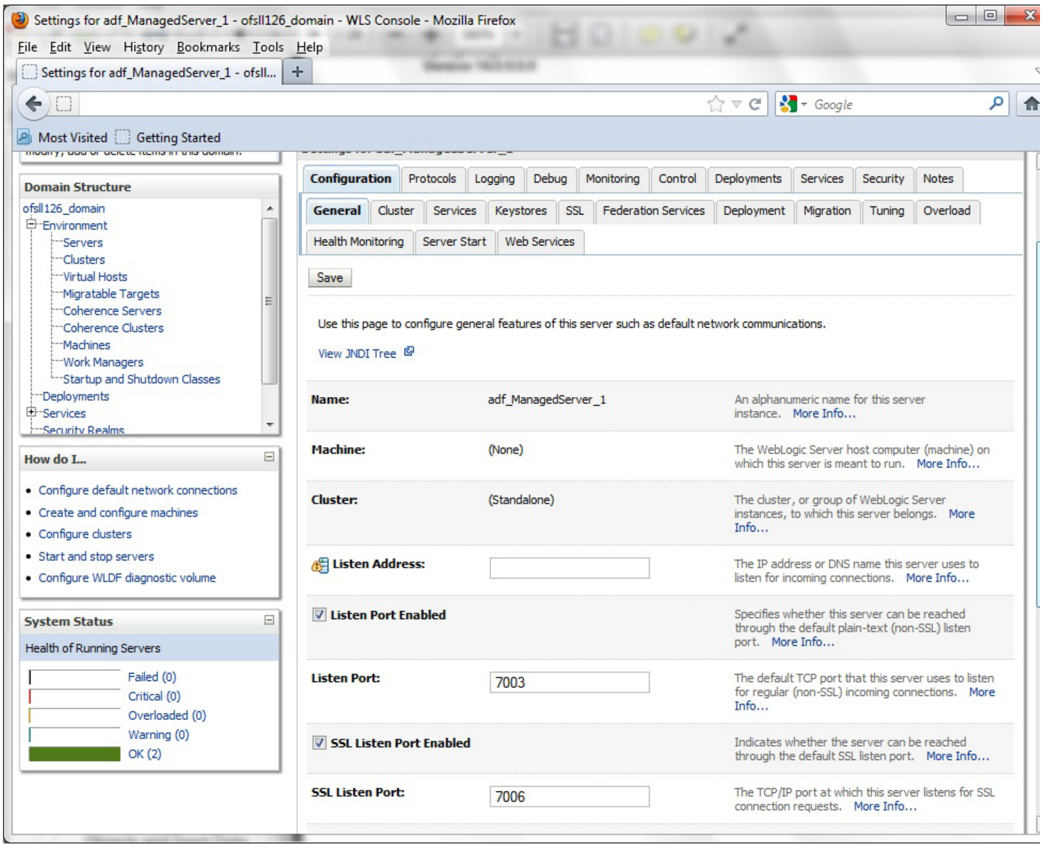
| Name | Status | Active Sessions | Request Processing Time (ms) | Bean Accesses (per minute) |
|---|---|---|---|---|
| Internal Applications | | | | |
| OFSLL_126(V12.6.0.0.0-b171) | ⇧ | 0 | 0 | 0.00 |

# 7. Enabling SSL

The application is accessible only via https protocol; hence, after the deployment of the application, you need to enable SSL.

**To enable SSL:**

1. Login to console.
2. **$Domain_Home→Servers→Manage Servers→Configuration→General**. The below screen is displayed.



Use this page to configure general features of this server such as default network communications.

| | | |
|---|---|---|
| **Name:** | adf_ManagedServer_1 | An alphanumeric name for this server instance. More Info... |
| **Machine:** | (None) | The WebLogic Server host computer (machine) on which this server is meant to run. More Info... |
| **Cluster:** | (Standalone) | The cluster, or group of WebLogic Server instances, to which this server belongs. More Info... |
| **Listen Address:** | | The IP address or DNS name this server uses to listen for incoming connections. More Info... |
| ☑ **Listen Port Enabled** | | Specifies whether this server can be reached through the default plain-text (non-SSL) listen port. More Info... |
| **Listen Port:** | 7003 | The default TCP port that this server uses to listen for regular (non-SSL) incoming connections. More Info... |
| ☑ **SSL Listen Port Enabled** | | Indicates whether the server can be reached through the default SSL listen port. More Info... |
| **SSL Listen Port:** | 7006 | The TCP/IP port at which this server listens for SSL connection requests. More Info... |

3. Check the ‘SSL Listen Port Enabled’ check box.
4. Specify the port for ‘SSL Listen Port’.

**Note**

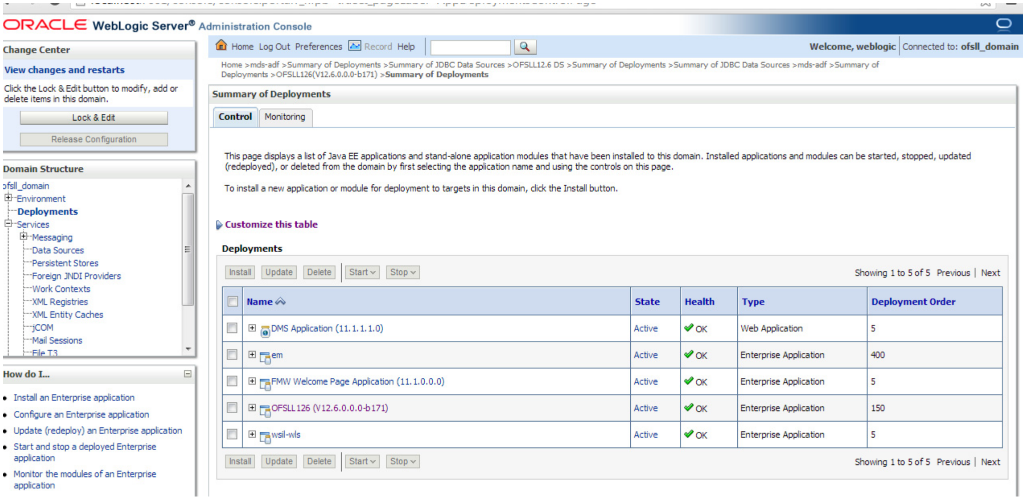
It is recommended to disable http protocol.

# 8. Launching Application

After you enable SSL you can launch the application via https:\\ protocol.

## To launch application

1. Verify if the deployed OFSLL application is **Active**.



ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help — Welcome, weblogic | Connected to: ofsll_domain

Home >mds-adf >Summary of Deployments >Summary of JDBC Data Sources >OFSLL12.6 DS >Summary of Deployments >Summary of JDBC Data Sources >mds-adf >Summary of Deployments >OFSLL126(V12.6.0.0.0-b171) >**Summary of Deployments**

**Change Center**

**View changes and restarts**

Click the Lock & Edit button to modify, add or delete items in this domain.

Lock & Edit

Release Configuration

**Domain Structure**

ofsll_domain
- Environment
- Deployments
- Services
  - Messaging
  - Data Sources
  - Persistent Stores
  - Foreign JNDI Providers
  - Work Contexts
  - XML Registries
  - XML Entity Caches
  - jCOM
  - Mail Sessions
  - File T3

**How do I...**

- Install an Enterprise application
- Configure an Enterprise application
- Update (redeploy) an Enterprise application
- Start and stop a deployed Enterprise application
- Monitor the modules of an Enterprise application

**Summary of Deployments**

Control | Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.

To install a new application or module for deployment to targets in this domain, click the Install button.

Customize this table

**Deployments**

Install Update Delete Start Stop — Showing 1 to 5 of 5 Previous | Next

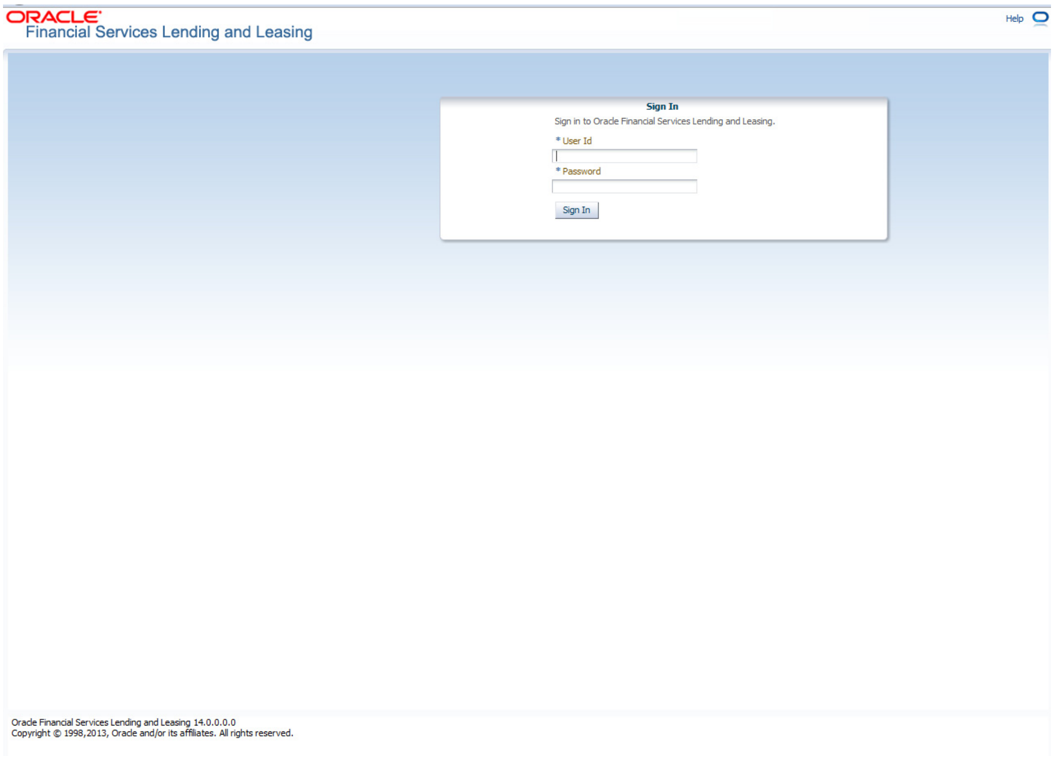
| □ | Name | State | Health | Type | Deployment Order |
|---|---|---|---|---|---|
| □ | DMS Application (11.1.1.1.0) | Active | ✓ OK | Web Application | 5 |
| □ | em | Active | ✓ OK | Enterprise Application | 400 |
| □ | FMW Welcome Page Application (11.1.0.0.0) | Active | ✓ OK | Enterprise Application | 5 |
| □ | OFSLL126 (V12.6.0.0.0-b171) | Active | ✓ OK | Enterprise Application | 150 |
| □ | wsil-wls | Active | ✓ OK | Enterprise Application | 5 |

Install Update Delete Start Stop — Showing 1 to 5 of 5 Previous | Next

2. The URL of the OFSLL application will be

https://<hostname>:<Port>/<ContextName>/faces/pages/OfsllSignIn.jspx

(eg. https://localhost:7003/ofsll140/faces/pages/OfsllSignIn.jspx)



ORACLE Financial Services Lending and Leasing

Help

**Sign In**

Sign in to Oracle Financial Services Lending and Leasing.

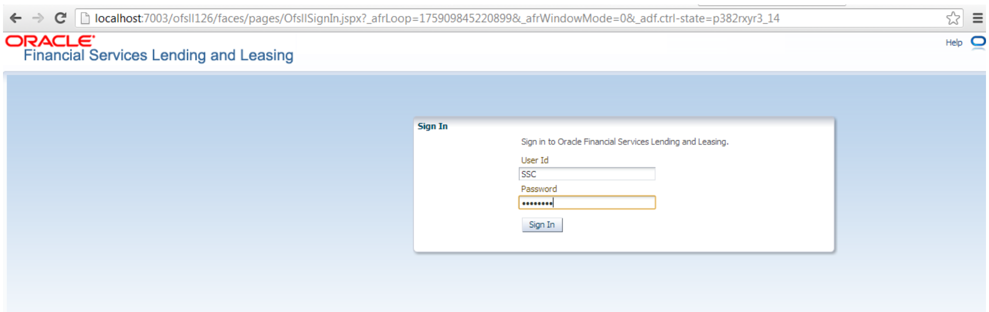
* User Id

* Password

Sign In

Oracle Financial Services Lending and Leasing 14.0.0.0.0
Copyright © 1998,2013, Oracle and/or its affiliates. All rights reserved.

3. Login with the user credentials that was created in Users Creation.



localhost:7003/ofsll126/faces/pages/OfslISignIn.jspx?_afrLoop=175909845220899&_afrWindowMode=0&_adf.ctrl-state=p382rxyr3_14

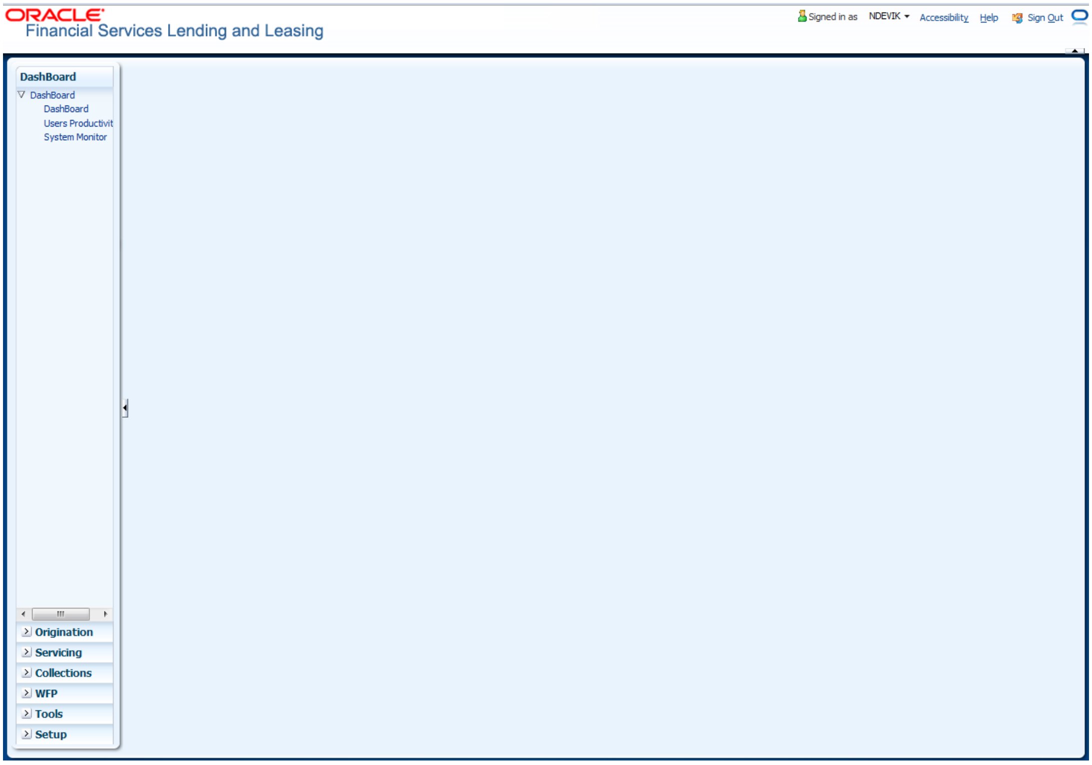
Sign In

Sign in to Oracle Financial Services Lending and Leasing.

User Id: SSC

Password: ••••••••

4. After successful login, the following screen is displayed

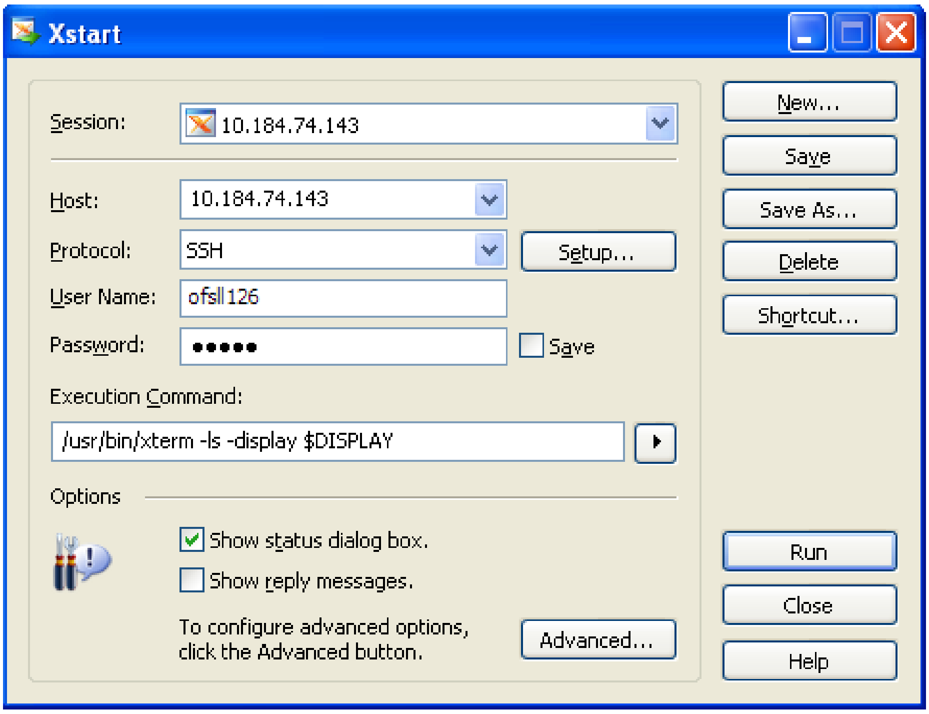


Signed in as NDEVIK

# 9. Appendix

## 9.1 XManager Usage

To run any installer on remote non window machine user should have XManager software.



Session: 10.184.74.143

Host: 10.184.74.143

Protocol: SSH

User Name: ofsll126

Password: ●●●●● □ Save

Execution Command:

```
/usr/bin/xterm -ls -display $DISPLAY
```

Options

☑ Show status dialog box.

□ Show reply messages.

To configure advanced options, click the Advanced button.

Give the following details

**Session name:**Give session name.

**Host name:**Give the UNIX machine address.

**Protocol:**This value depends on the operating system.

For ExampleE.g.:

**Oracle Enterprise Linux:** SSH

**IBM AIX:** TELNET

**Solaris:** SSH

**UNIX:** SSH

**User Name:**Give the UNIX user name.

**Password:**Give the password.

**Execution Command:** This value depends on the operating system.

E.g.:

**Oracle Enterprise Linux:** /usr/bin/xterm -ls -display $DISPLAY

**IBM AIX:** /usr/dt/bin/dtterm -ls -display $DISPLAY

**Solaris:** /usr/openwin/bin/xterm -ls -display $DISPLAY

**UNIX:** /usr/bin/X11/xterm -ls -display $DISPLAY

Application Installation Guide
April [2013]
Version 14.0.0.0.0

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