

Application Installation Guide

Oracle Financial Services Lending and Leasing

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Application Installation Guide
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Table of Contents

1. Preface	1-1
1.1 Prerequisites.....	1-1
1.2 Audience.....	1-2
1.3 Conventions Used	1-2
2. Installing Software	2-1
2.1 Installing Oracle WebLogic Server 12c	2-1
3. Creating Domains, Repositories, Data Sources	3-1
3.1 Creating Schemas using Repository Creation Utility	3-1
3.2 Creating Domain and Servers	3-9
3.3 Creating Metadata Repository	3-19
3.4 Creating Data Source	3-22
3.5 Creating SQL Authentication Provider.....	3-27
3.6 Creating User Groups and Users	3-34
3.6.1 <i>Creating Users</i>	3-34
3.6.2 <i>Creating User Groups</i>	3-35
3.6.3 <i>Assigning Users to Groups</i>	3-36
3.6.4 <i>Resetting password via weblogic console</i>	3-36
3.7 Implementing JMX Policy for Change Password.....	3-37
4. Configuring Policies	4-1
4.1 Configuring Password Policy for SQL Authenticator	4-1
4.2 Configuring User Lockout Policy	4-2
5. Deploying Application	5-1
5.1 Deploying Application	5-1
6. Enabling SSL	6-1
7. Mapping Enterprise Group with Application Role	7-1
8. Configuring JNDI name for HTTP Listener	8-1
9. Configure AQ-JMS Bridge	9-1
9.1 Create Data Sources for AQ-JMS Bridge.....	9-1
9.2 Configure MDB Flow	9-7
9.3 AQ-JMS Topic Setup.....	9-13
9.3.1 <i>Create AQ-JMS Topic Bridge</i>	9-14
9.4 Create Credentials and System Policies	9-17
9.5 JMS Queue Configuration	9-23
9.5.1 <i>Create JMS Server</i>	9-23
9.5.2 <i>Create JMS Module</i>	9-26
9.5.3 <i>Subdeployment</i>	9-27
9.5.4 <i>Create JMS Queue</i>	9-28
9.5.5 <i>Create JMS Connection Factory</i>	9-30
9.6 Deploy MDB EJB.....	9-34
10. Configuring Oracle BI Publisher for Application	10-1
11. Launching Application	11-1
12. Installing Upgrade	12-1

1. Preface

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.

For recommendations on security configuration, refer Security Configuration Guide.

It is assumed that anyone installing Oracle Financial Services Lending and Leasing will have a thorough knowledge and understanding of Oracle Weblogic Server 12c, Oracle BI Publisher 12c.

Application installation consists of following steps.

- [Installing Software](#)
- [Creating Domains, Repositories, Data Sources](#)
- [Configuring Policies](#)
- [Deploying Application](#)
- [Enabling SSL](#)
- [Mapping Enterprise Group with Application Role](#)
- [Configuring JNDI name for HTTP Listener](#)
- [Configure AQ-JMS Bridge](#)
- [Configuring Oracle BI Publisher for Application](#)
- [Launching Application](#)
- [Installing Upgrade](#)

1.1 Prerequisites

The following software are required to install Oracle Financial Services Lending and Leasing application and they are available from the following sources:

- Oracle Software Delivery Cloud (<http://edelivery.oracle.com/>)
 - Oracle Technology Network (OTN)
1. Sun JDK Version 1.8.0_66 or above <http://www.oracle.com/technetwork/java/javase/downloads/index.html>
 2. Oracle WebLogic Server 12c Version 12.2.1.0.0 (<http://www.oracle.com/technetwork/middleware/weblogic/downloads/index.html>)
Navigate to Fusion Middleware Infrastructure Installer.
 3. JVM/JDK are to be downloaded and installed prior to installing the Weblogic Server.

Note

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

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. Installing Software

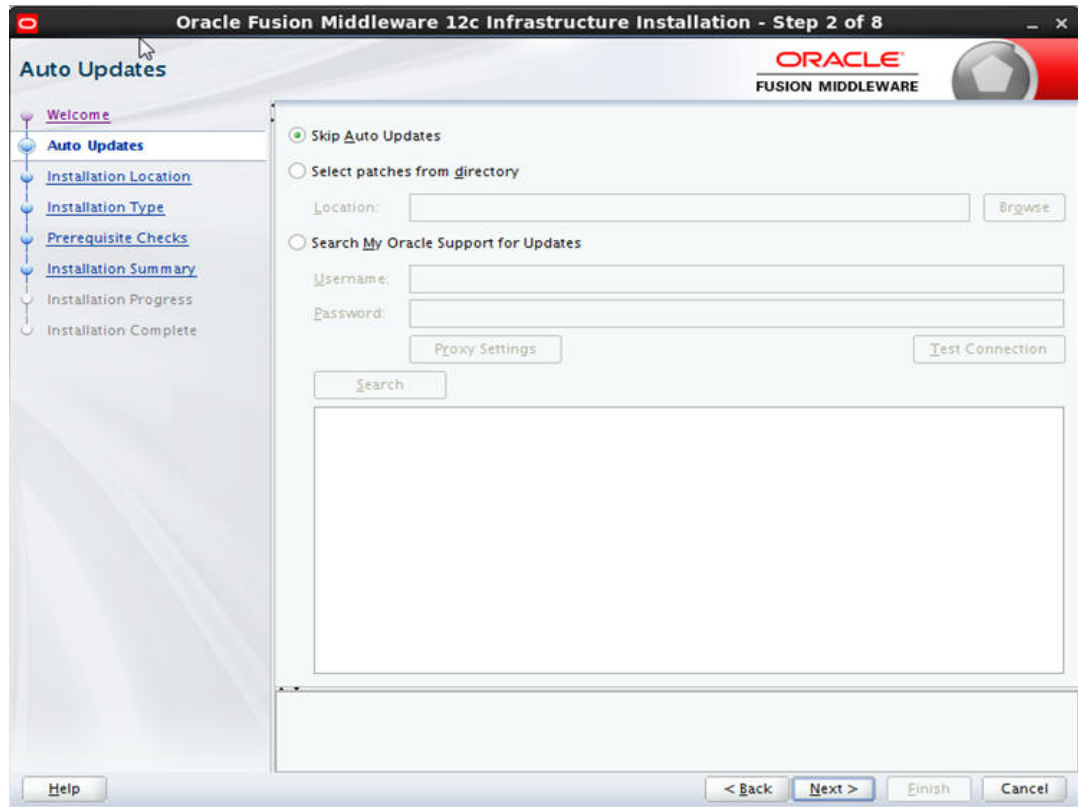
2.1 Installing Oracle WebLogic Server 12c

To install using generic Weblogic installer

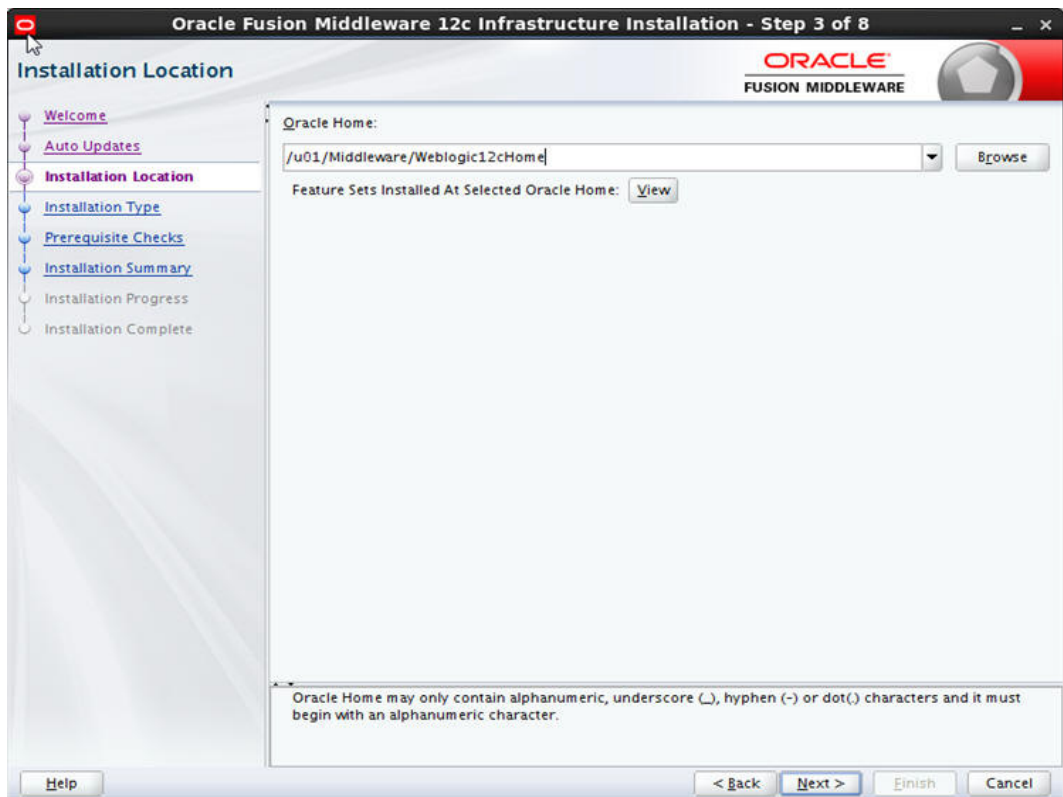
1. Run the command > java -jar fmw_12.2.1.0.0_infrastructure.jar
2. Welcome screen is displayed as shown below. Click Next.



3. The following window is displayed.

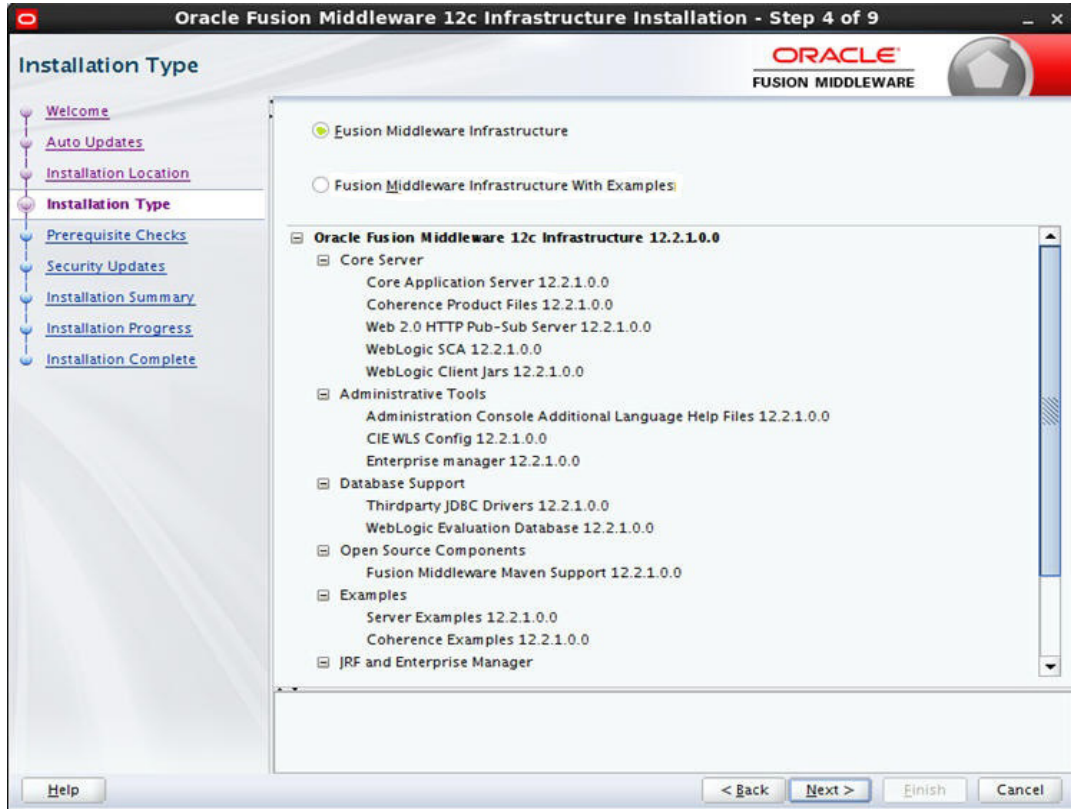


4. Select 'Skip Auto Updates' and Click 'Next'.

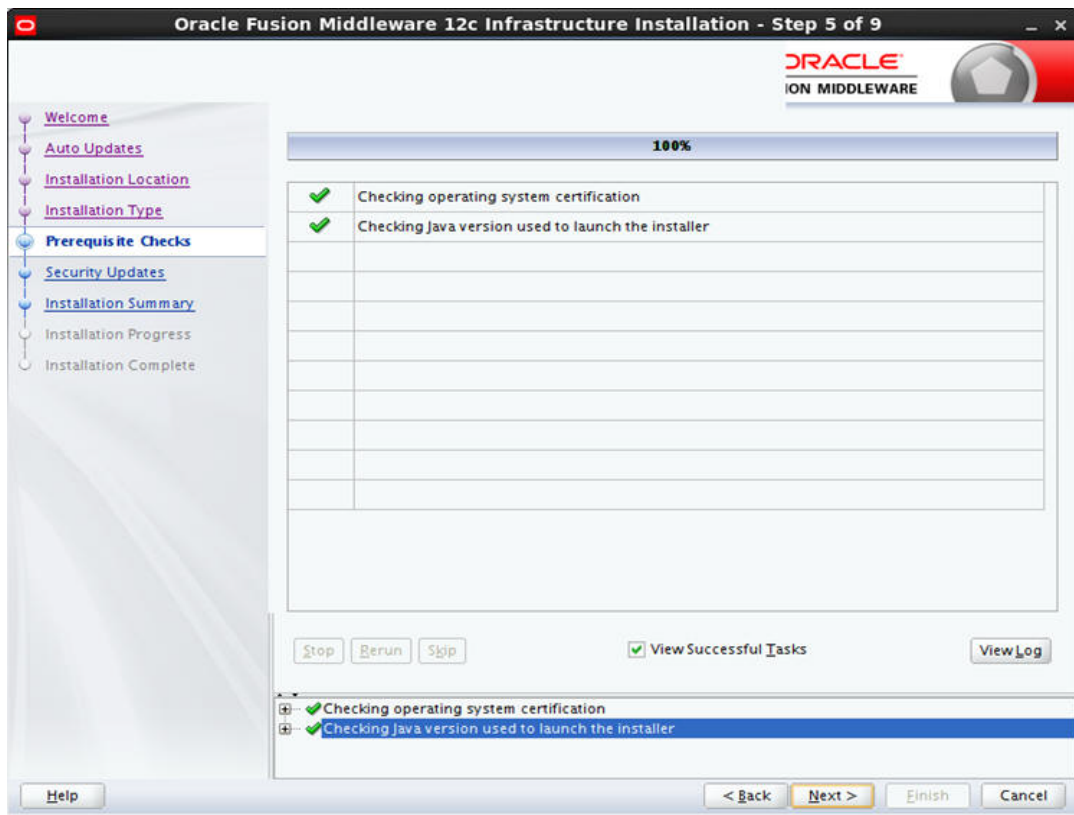


5. Specify the path for Middleware Home Directory.

6. Click 'Next'. The following window is displayed.



7. Select the option 'Fusion Middleware Infrastructure'. Click 'Next'.

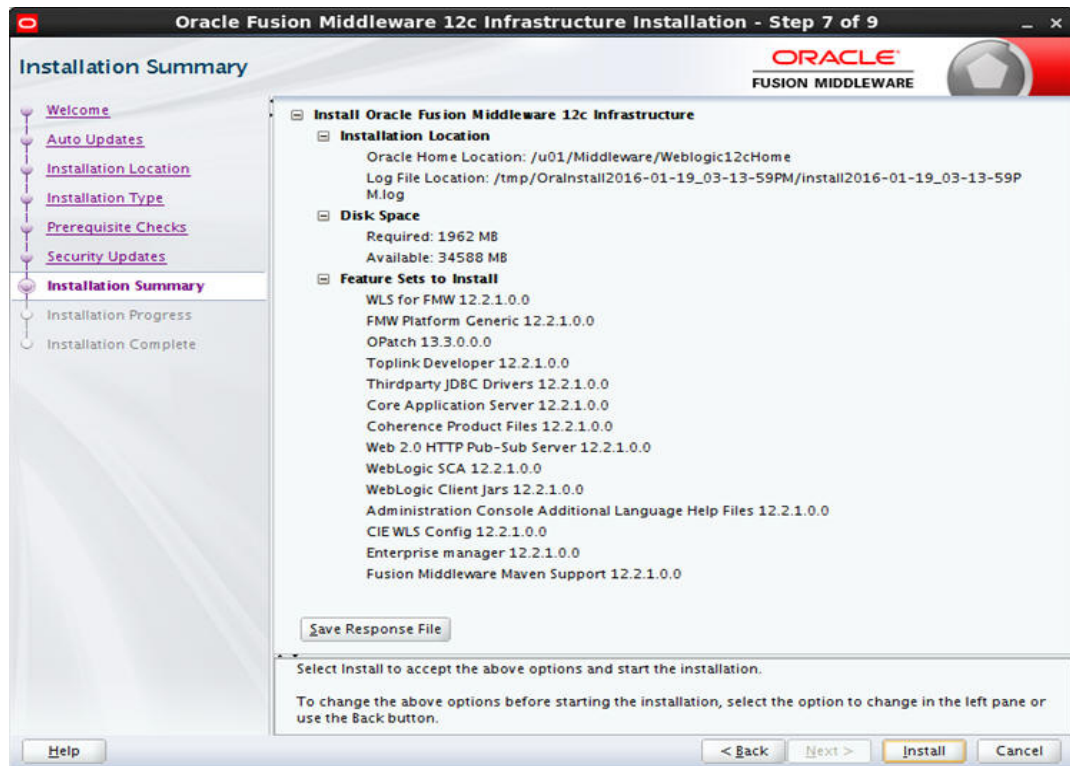


8. Click 'Next'. The following window is displayed.

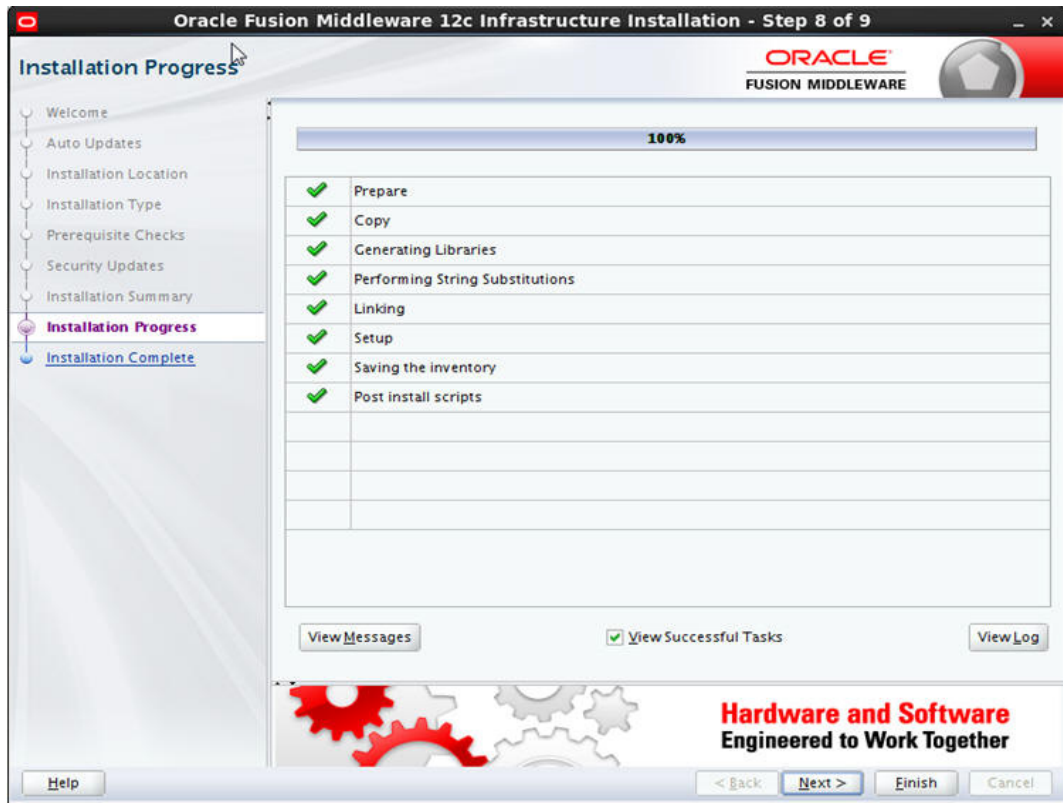


9. Deselect the check box as in the above screen and click 'Next'. Click on 'Yes' in the confirmation dialog displayed.

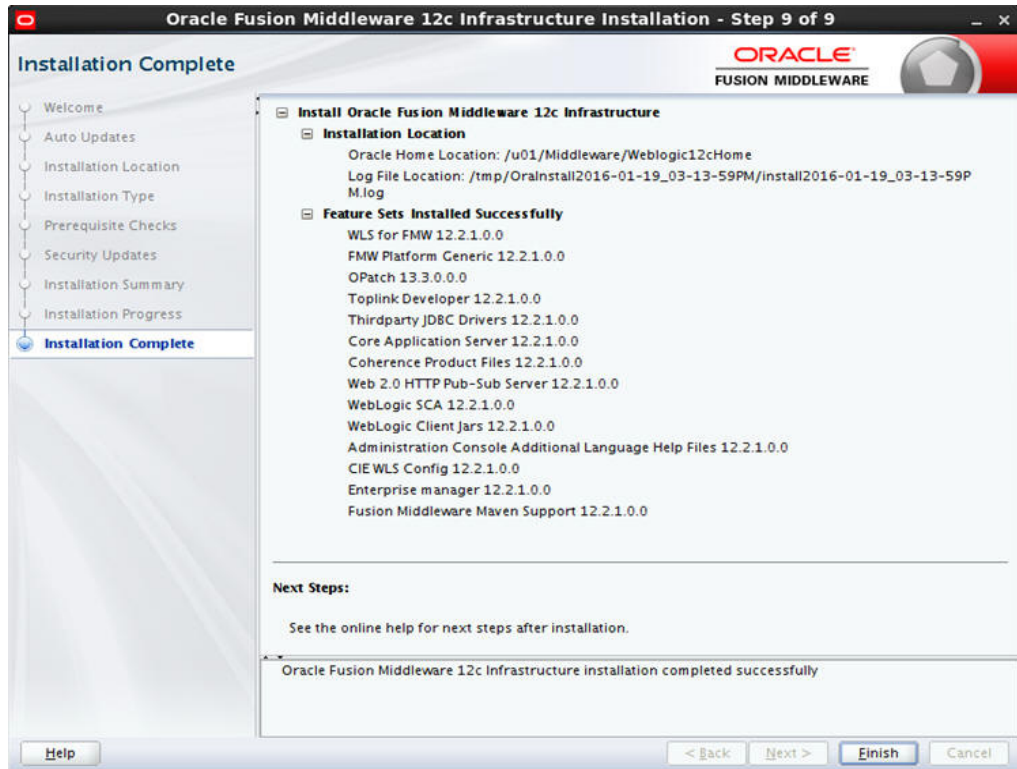
10. Click 'Next'. The following window is displayed.



11. Click 'Install'. The weblogic installation starts. Once done, the following window is displayed.



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

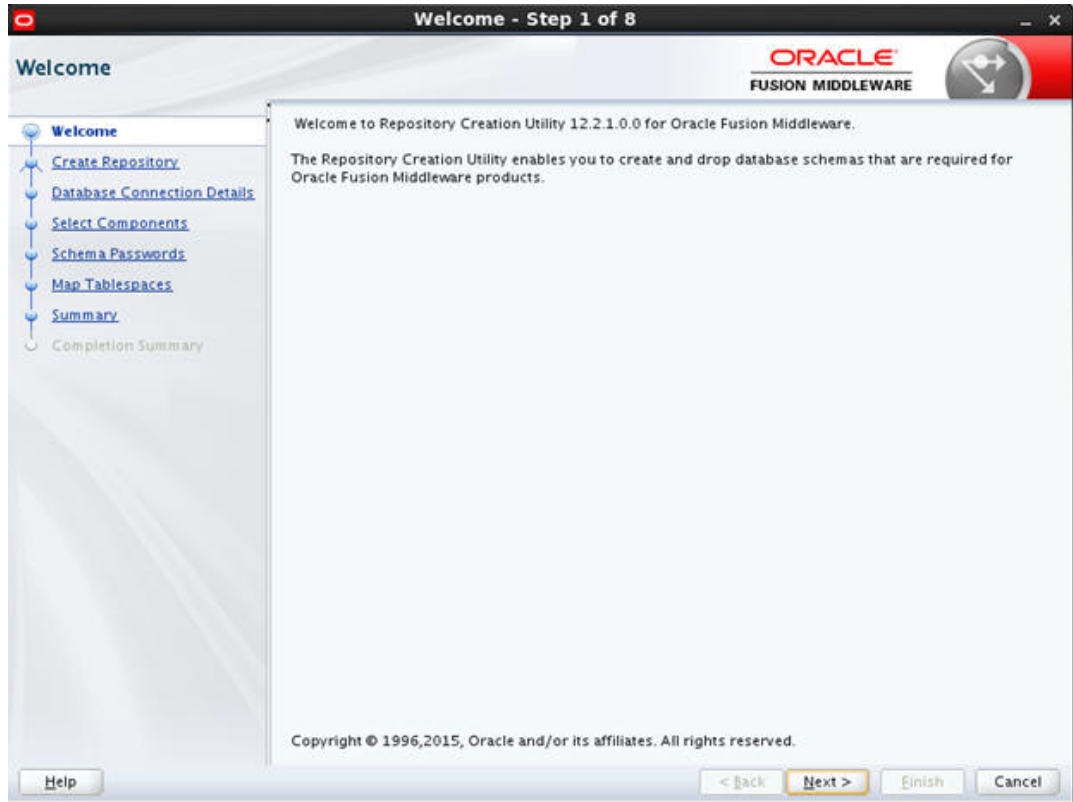


13. Click 'Finish' to close the window.

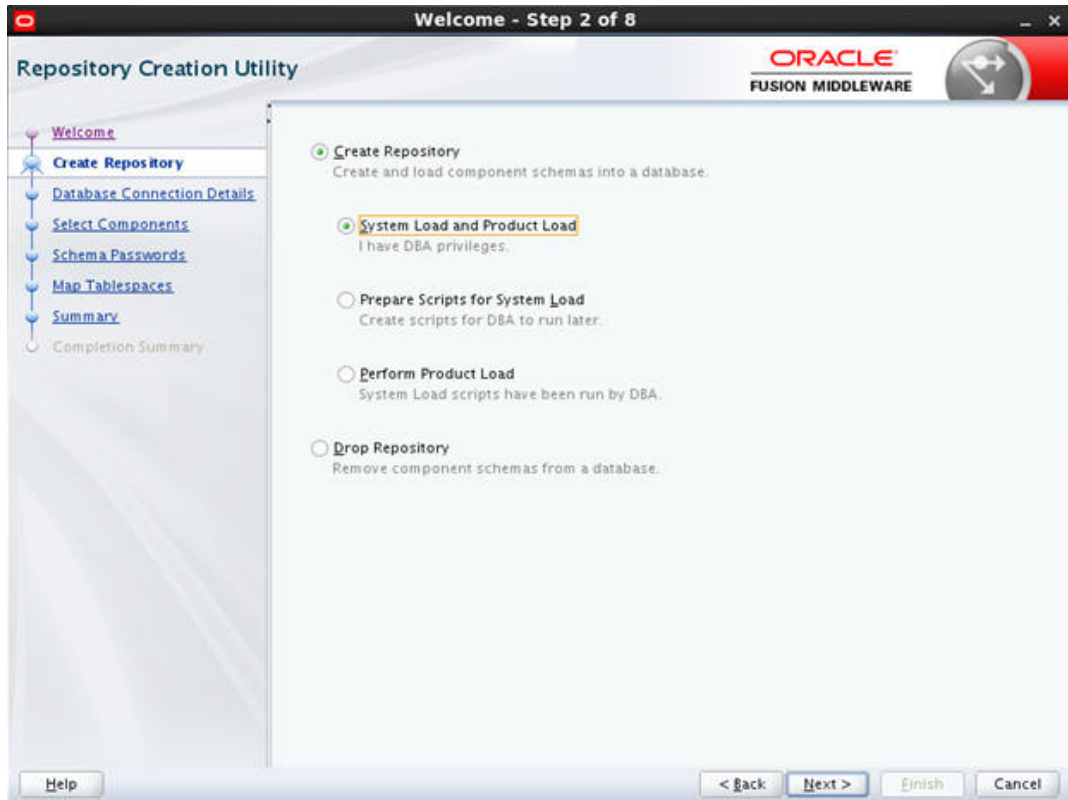
3. Creating Domains, Repositories, Data Sources

3.1 Creating Schemas using Repository Creation Utility

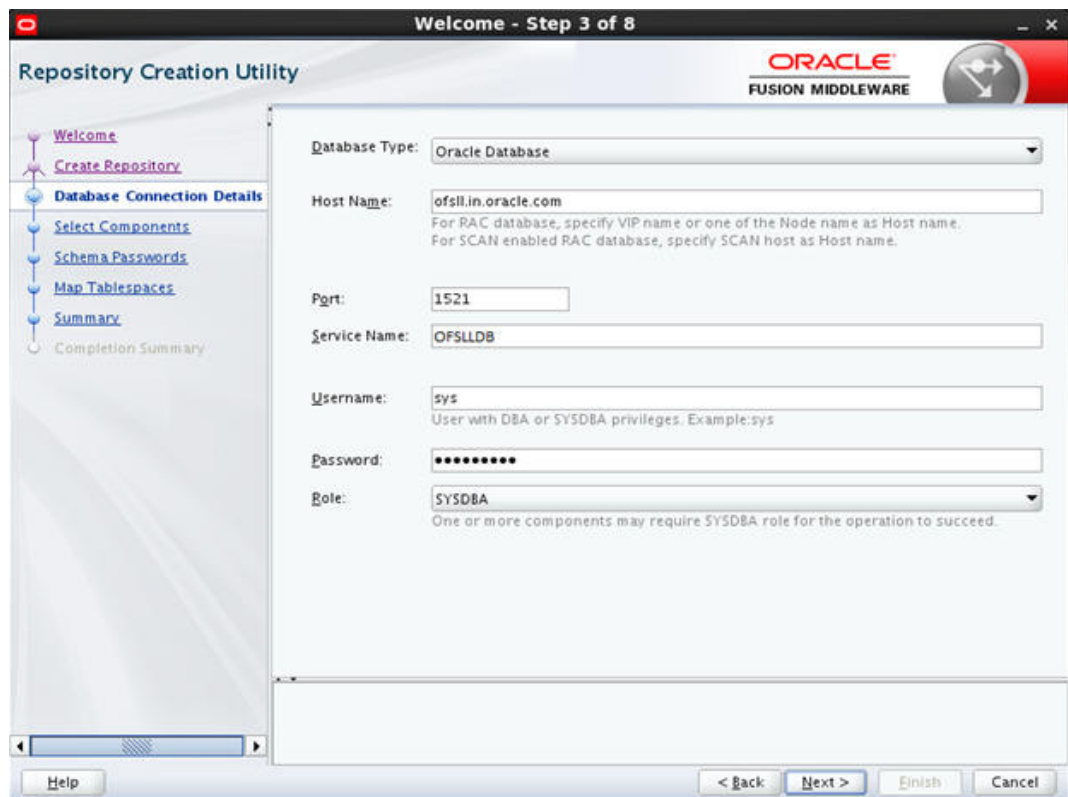
1. Open command prompt on Unix and browse to <WL_HOME>/oracle_common/bin and run ./rcu. The following window is displayed.



2. Click 'Next'. The following window is displayed.



3. Select 'Create Repository' and select 'System Load and Product Load'. Click 'Next'. The following window is displayed.

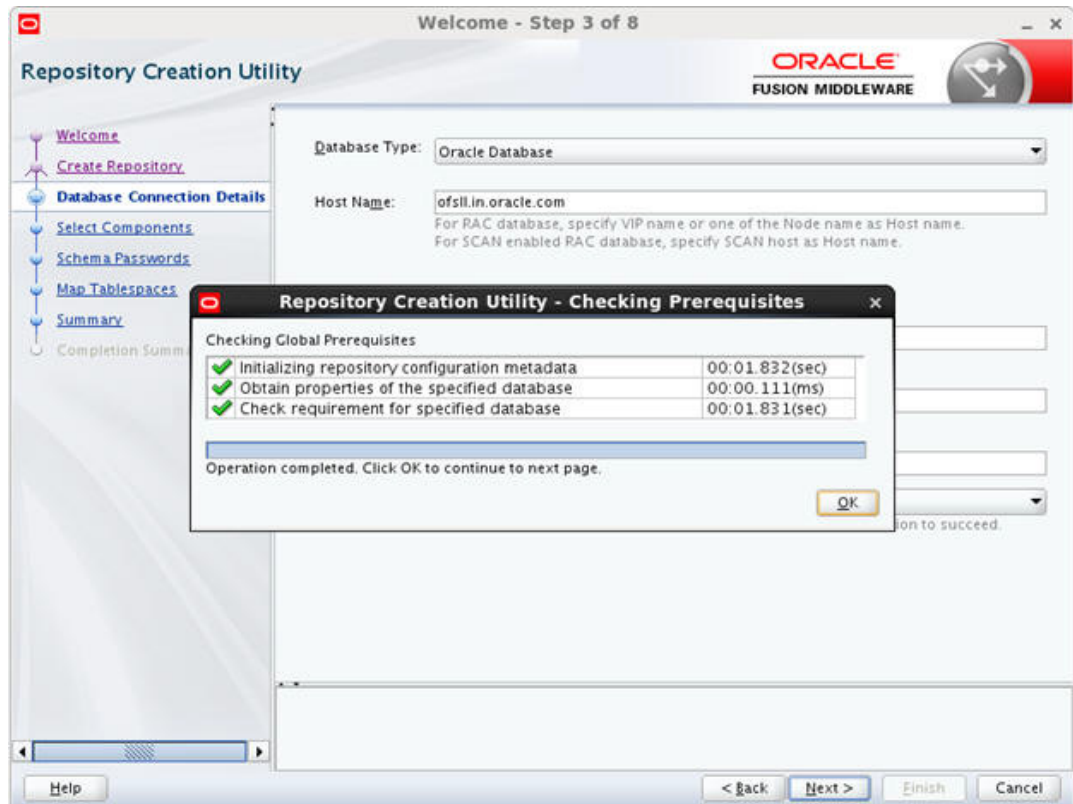


4. Provide database details where you want to create schemas, as shown in the above screen.

Note

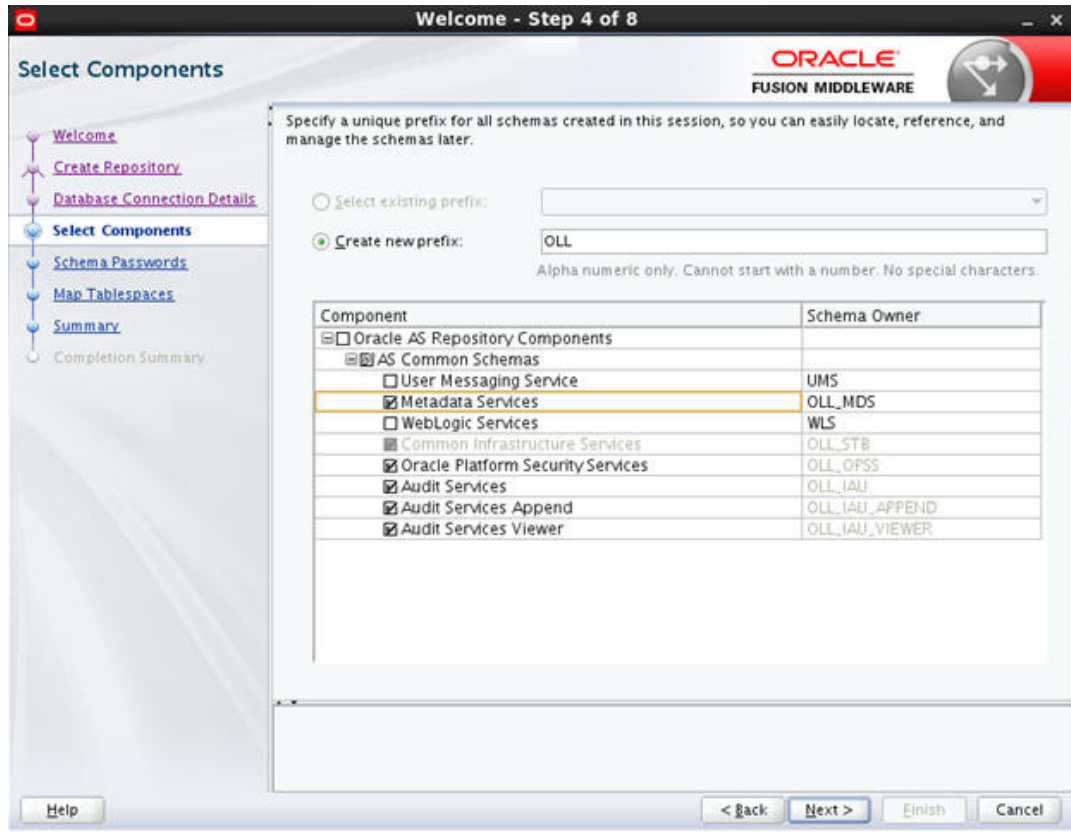
You will require a user with SYSDBA role to create schemas.

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



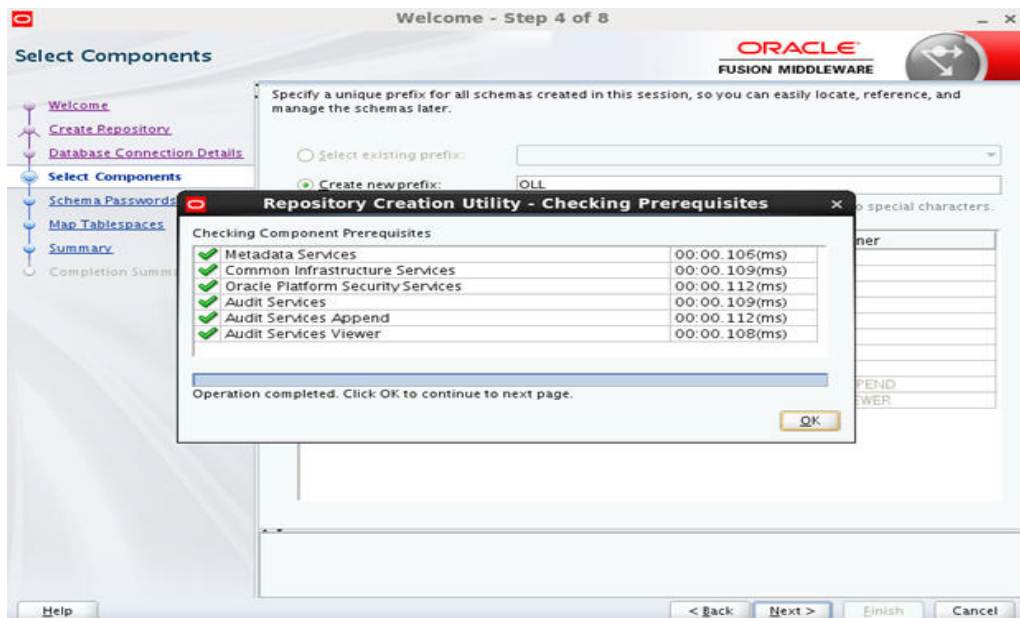
6. Click 'OK' in the confirmation dialog.

7. Click 'Next' the following window is displayed.

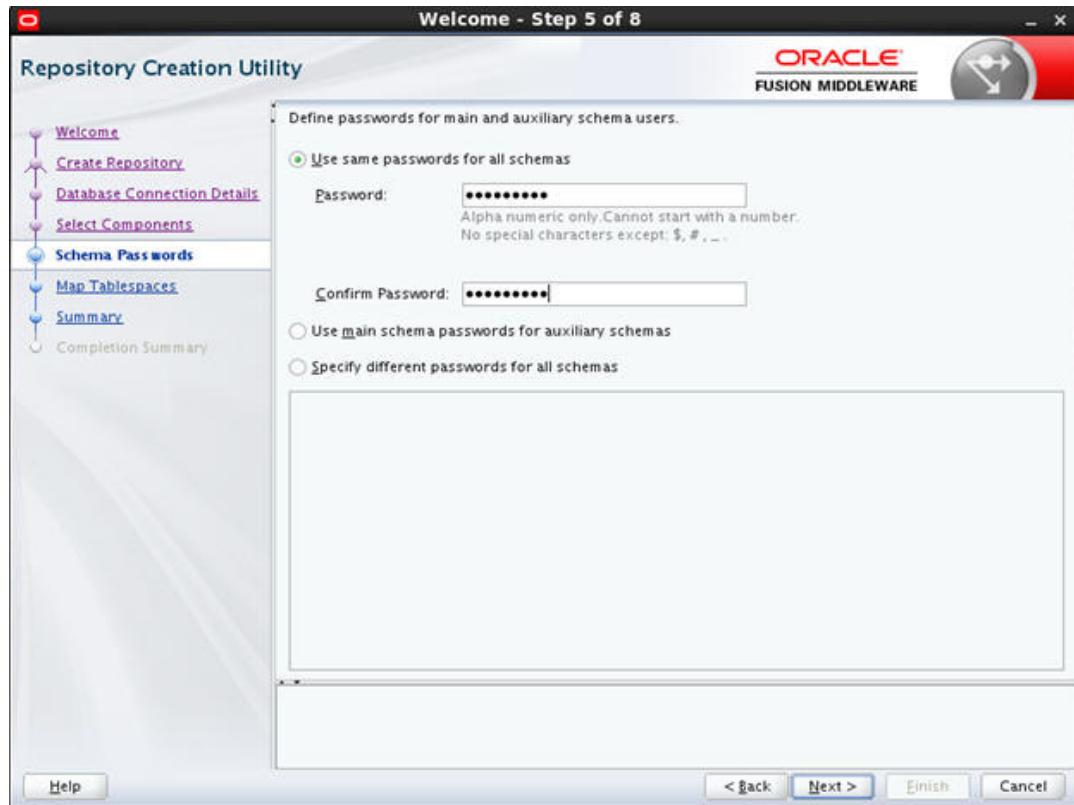


8. Select 'Create new Prefix' option and specify the value. For example, OLL.

9. Select the options 'Metadata Services' and 'Oracle Platform Security Services' as shown in the above screen. Click 'Next'. The following window is displayed.



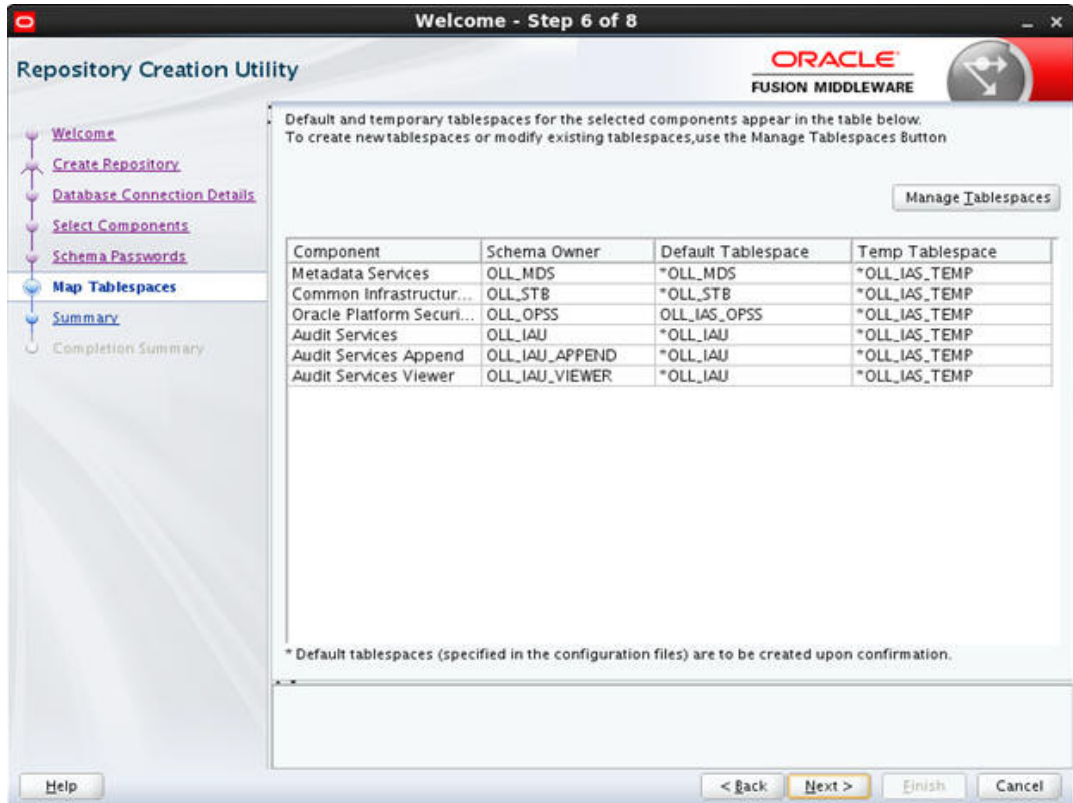
10. Click 'Next'. The following window is displayed.



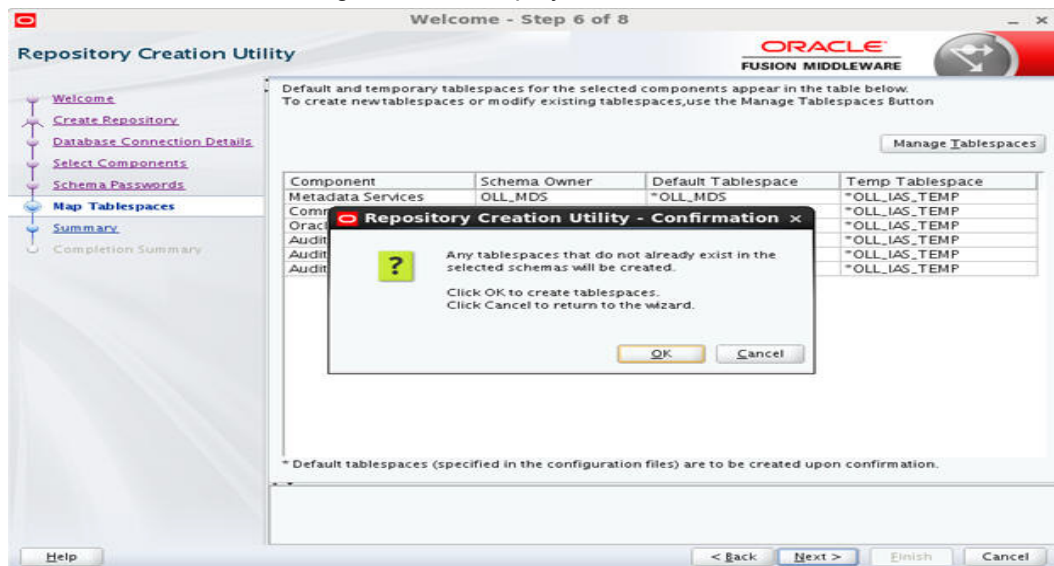
11. You can select one of the following:

- Select 'Use same password for all schemas' and specify the password.
- Select 'Specify different passwords for all schemas' and specify Schema Passwords for each server.

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

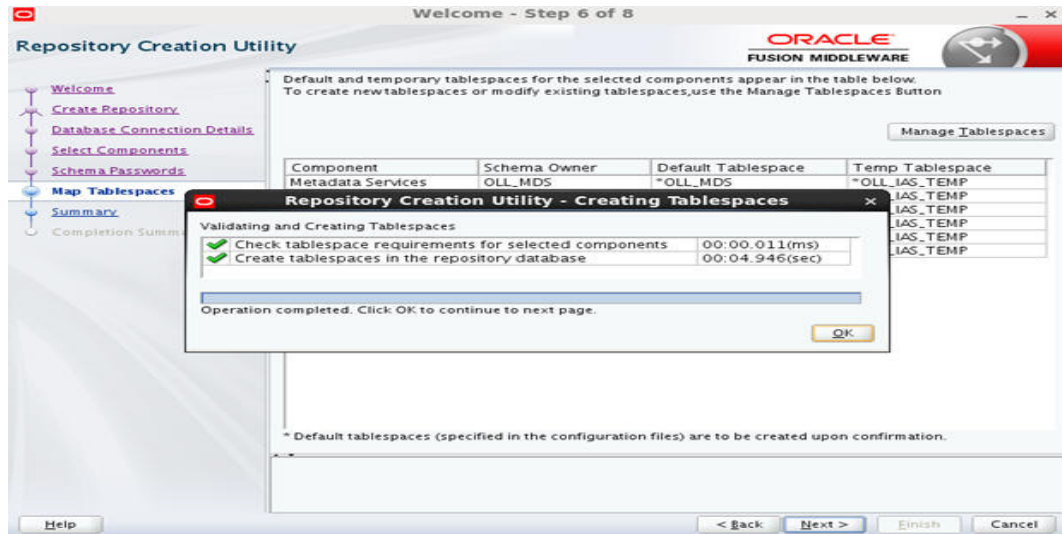


13. Click 'Next'. The following window is displayed.

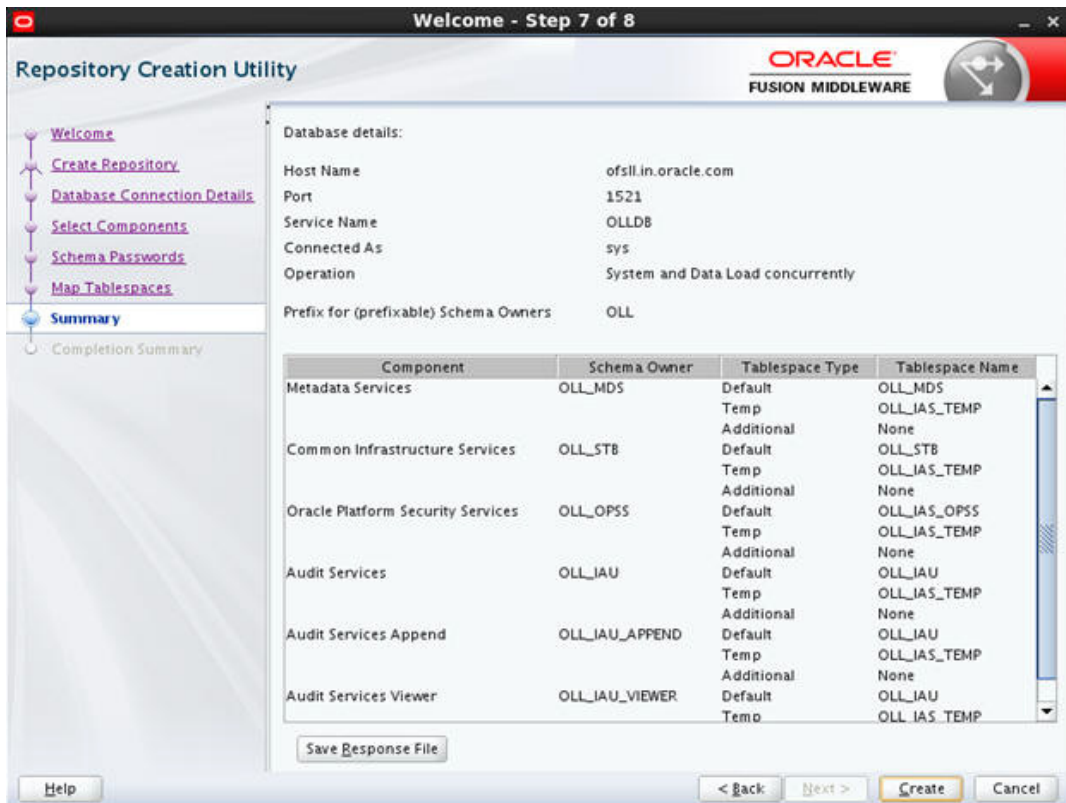


14. Click 'OK' in the confirmation dialog.

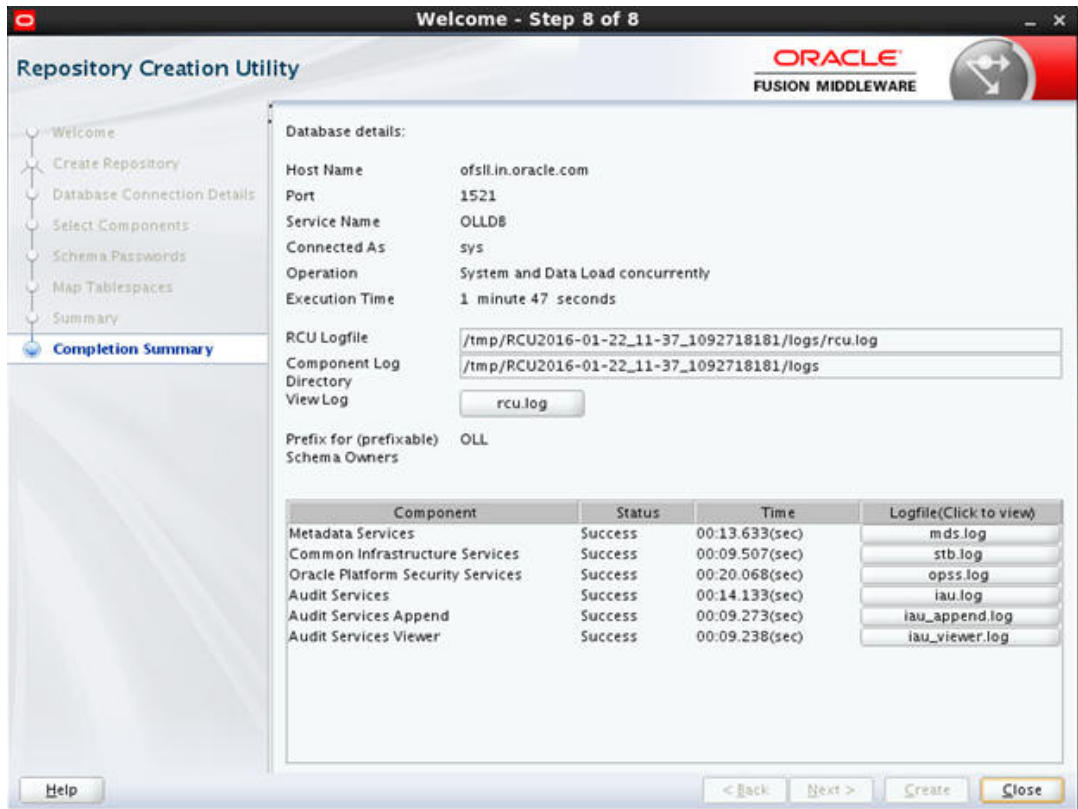
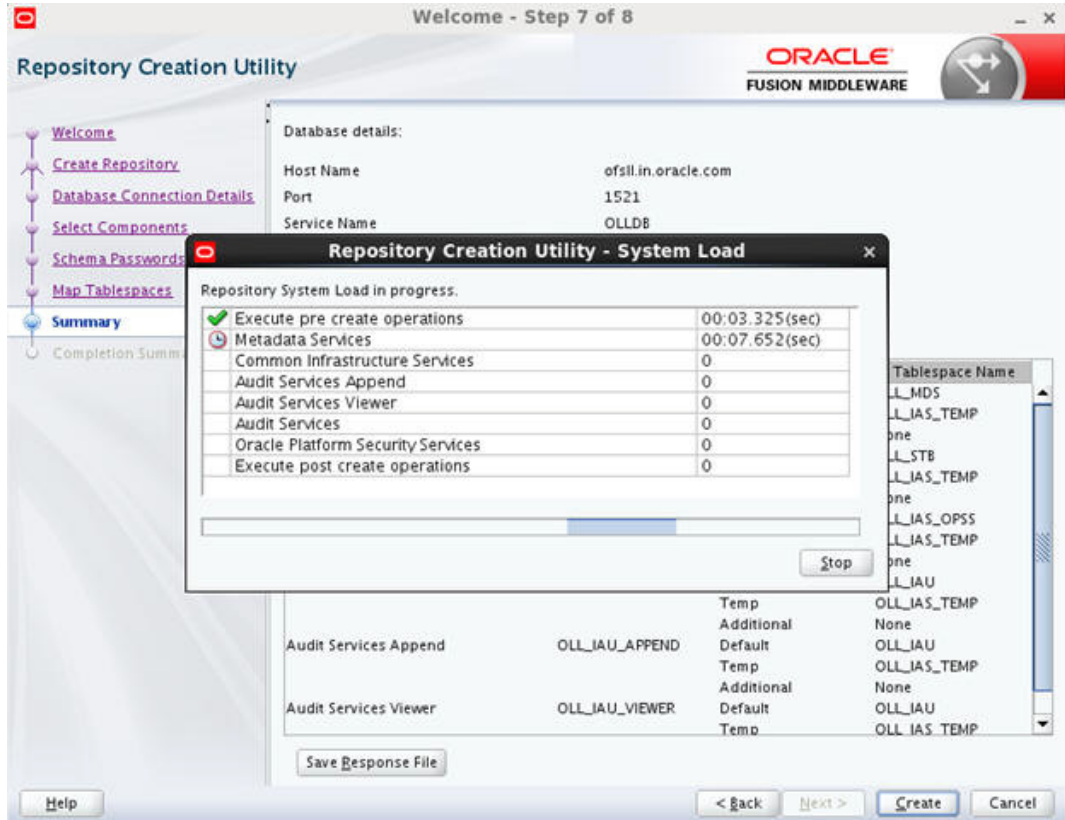
15. Click 'Next'. The following window is displayed.



16. Click 'OK' in the confirmation dialog. The following window is displayed.



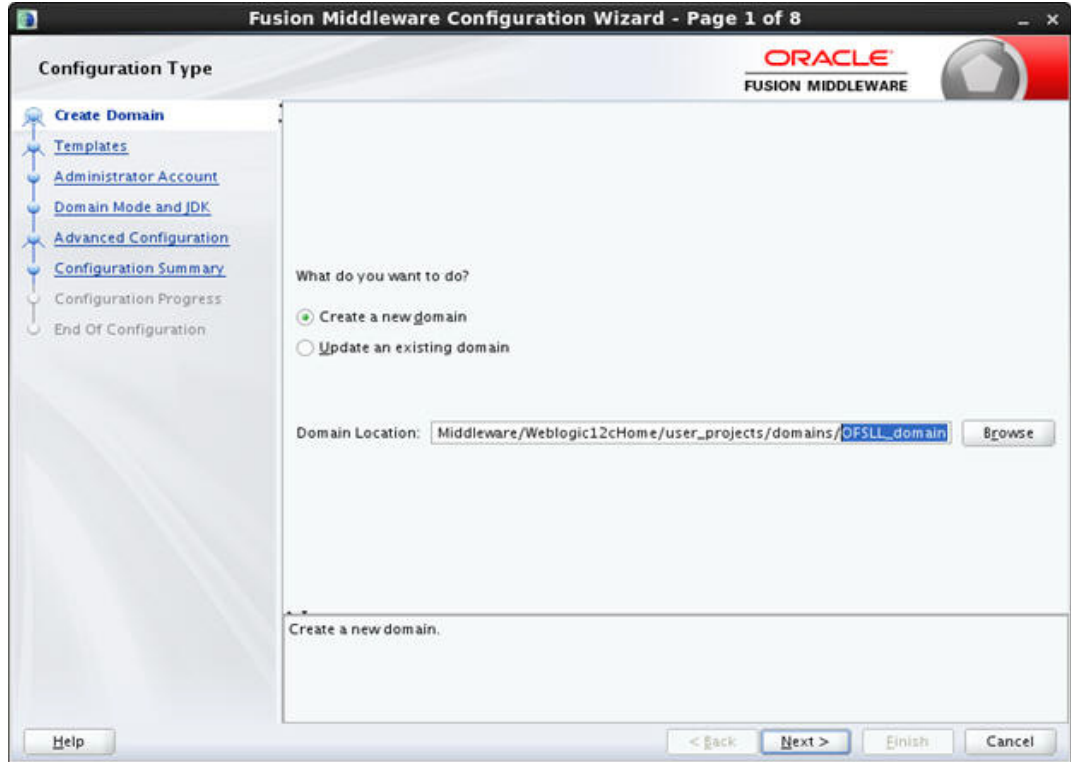
17. Click 'Create'. The following windows are displayed.



18. Click 'Close' to close the window.

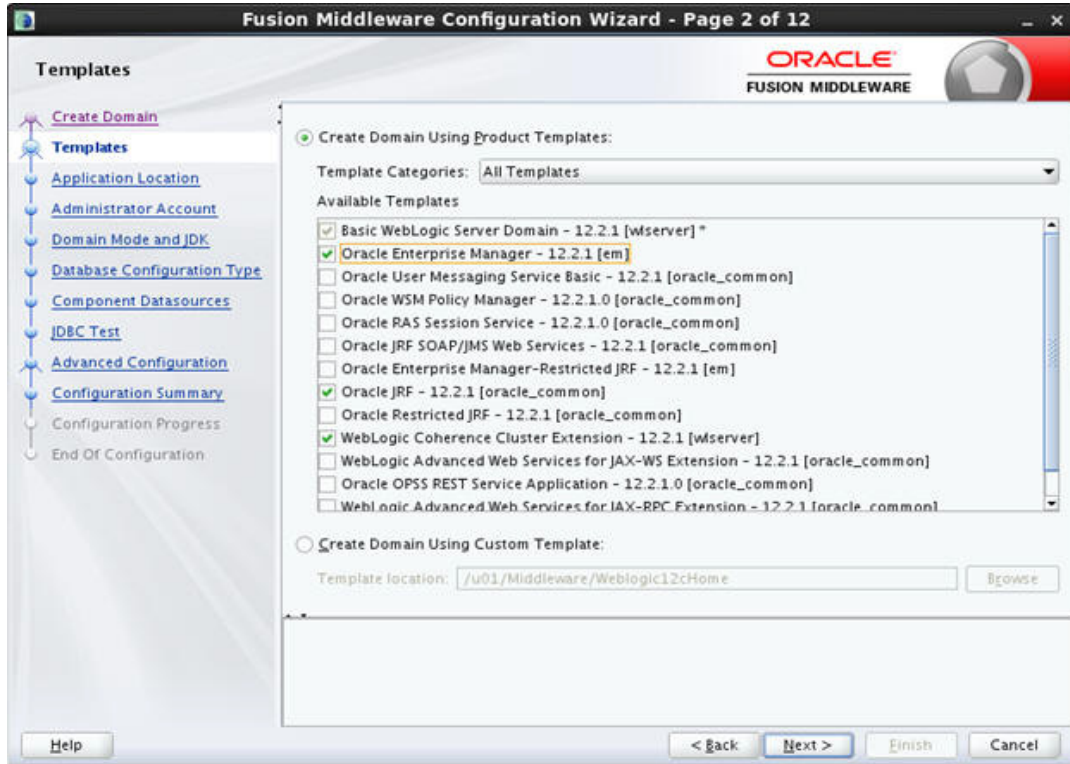
3.2 Creating Domain and Servers

1. In Unix/Linux machine, once the Oracle WebLogic Server is installed, navigate to the following path - <WL_HOME>/wlserver/common/bin (Here, WL_HOME is /home/Oracle/Middleware).
2. In Unix, run 'config.sh'



3. Select 'Create a new domain' and specify the Domain Location.

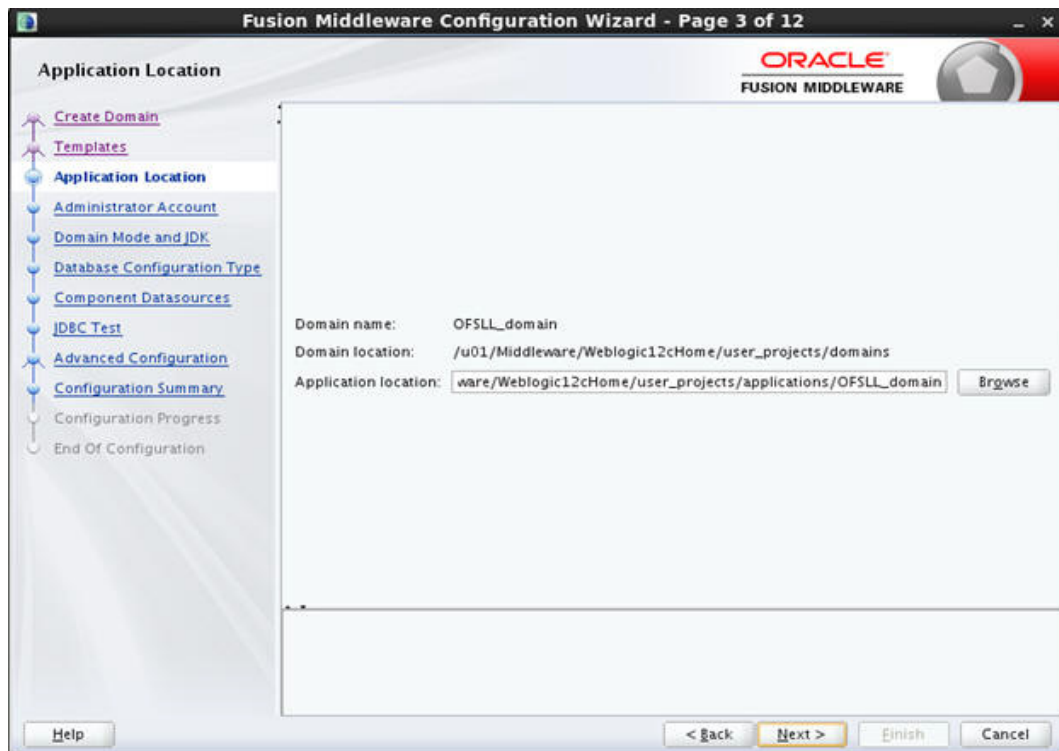
4. Click 'Next'. The following window is displayed.



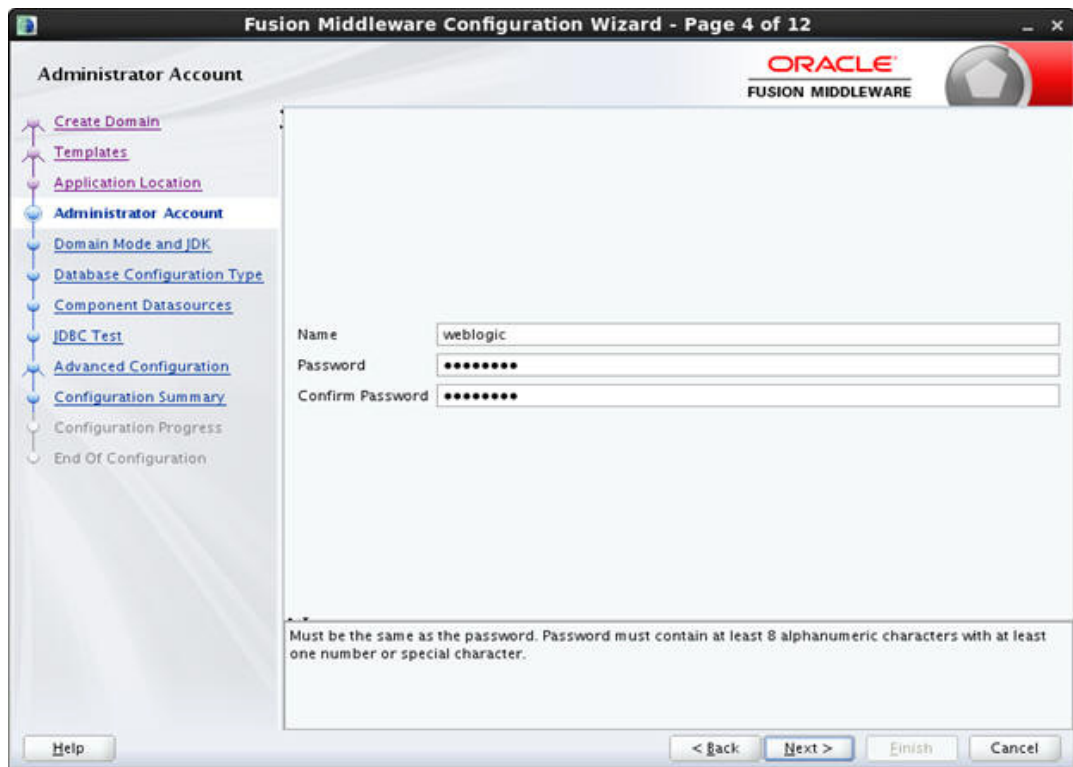
5. Select the option 'Create Domain Using Product Templates' and select the following options in the list of available templates:

- Oracle Enterprise Manager - 12.2.1 [em]
- Oracle JRF - 12.2.1 [oracle_common]

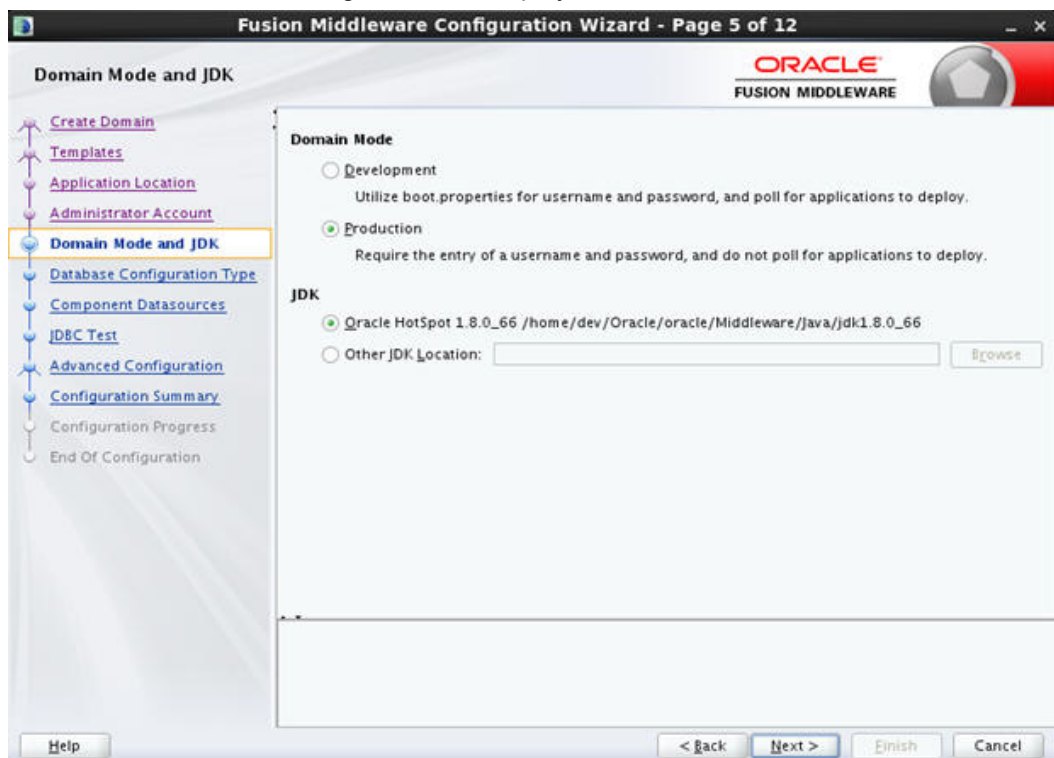
6. Click 'Next'. The following window is displayed.



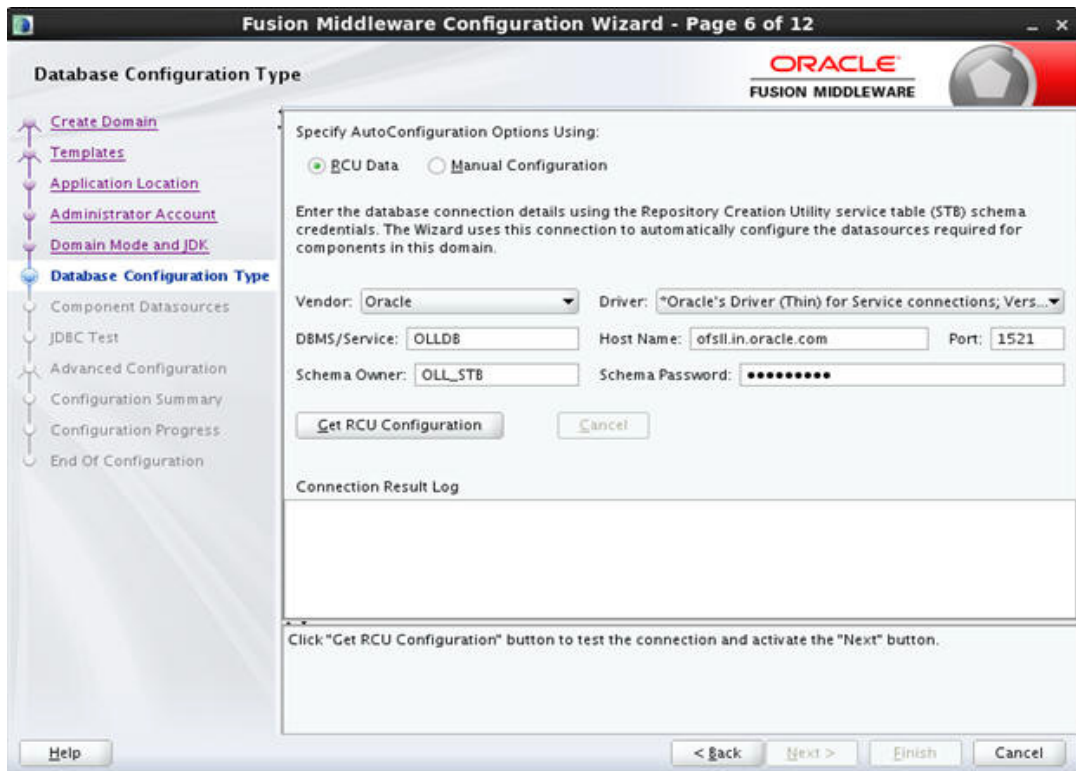
7. Enter 'Domain' Name. Edit Domain Location, if needed and click 'Next'. The following window is displayed.



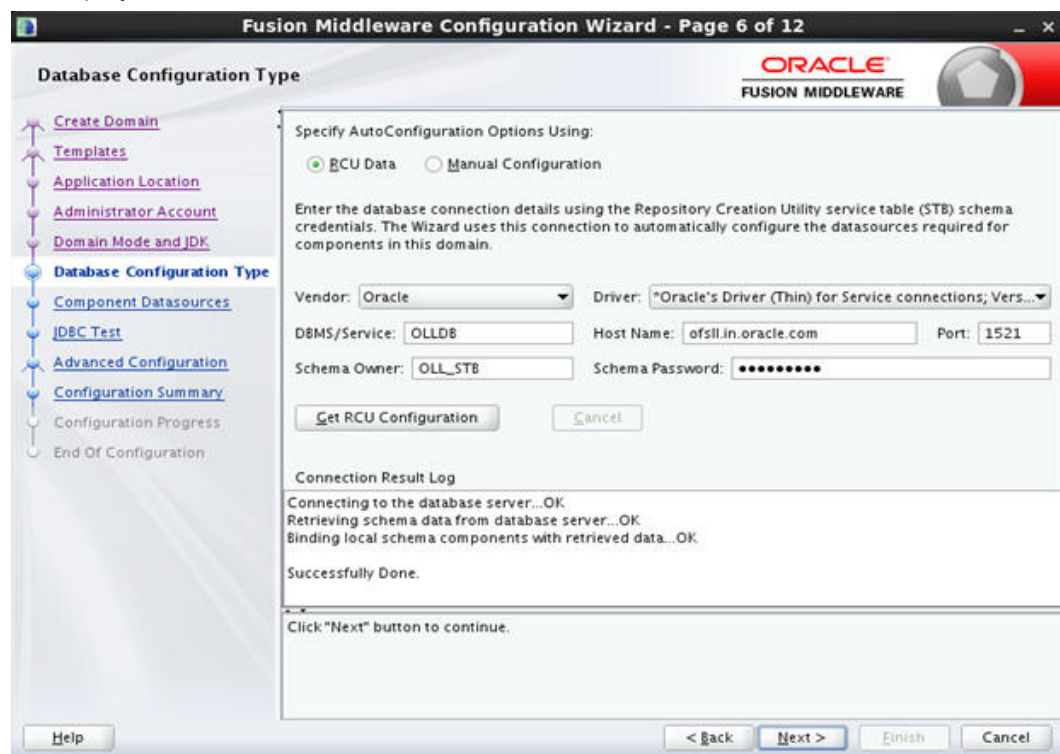
8. Enter credentials for the following:
 - Name
 - Password
 - Confirm Password
9. Click 'Next'. The following window is displayed.



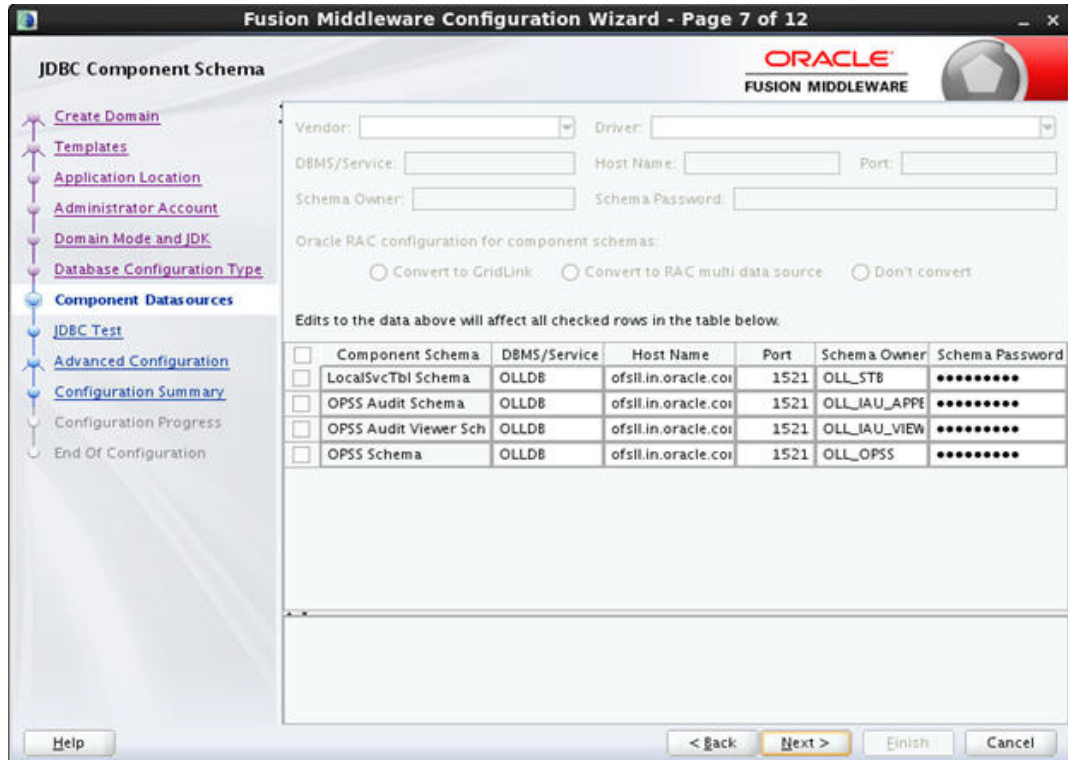
10. Select the Domain Mode as 'Production' and 'JDK' from Available JDKs. You can also select any other JDK by selecting 'Other JDK Location' option.
11. Click 'Next'. The following window is displayed.



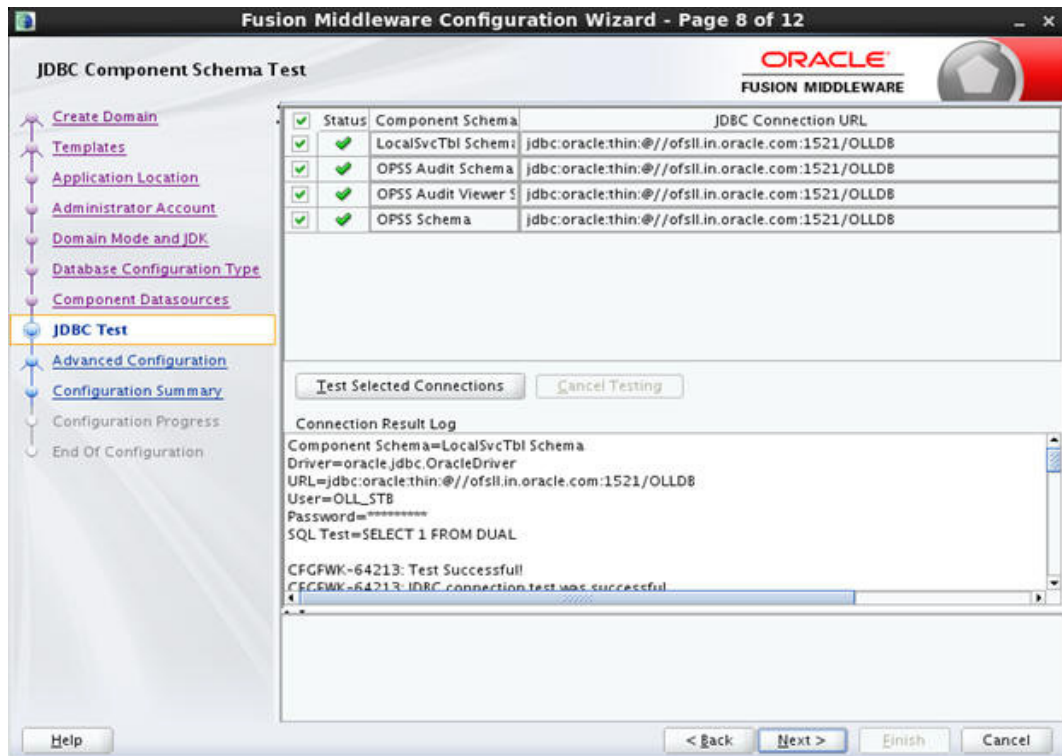
12. Specify the RCU data and click on 'Get RCU Configuration'. The following window is displayed.



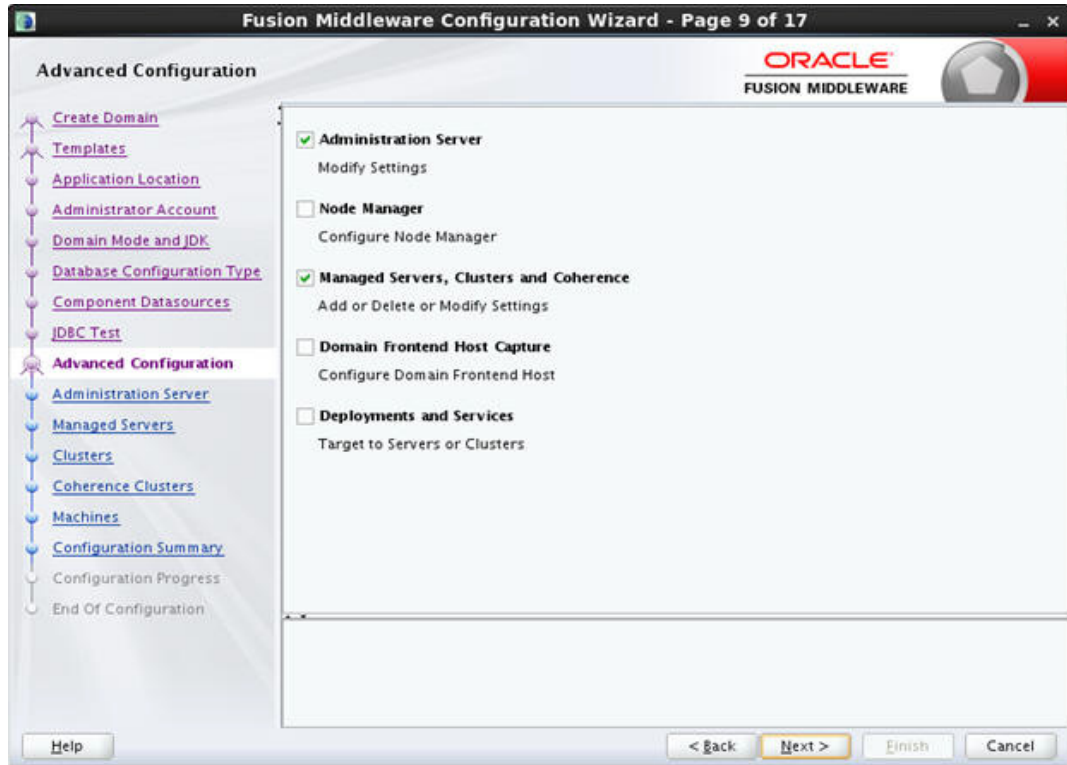
13. Click 'Next'. The following window is displayed.



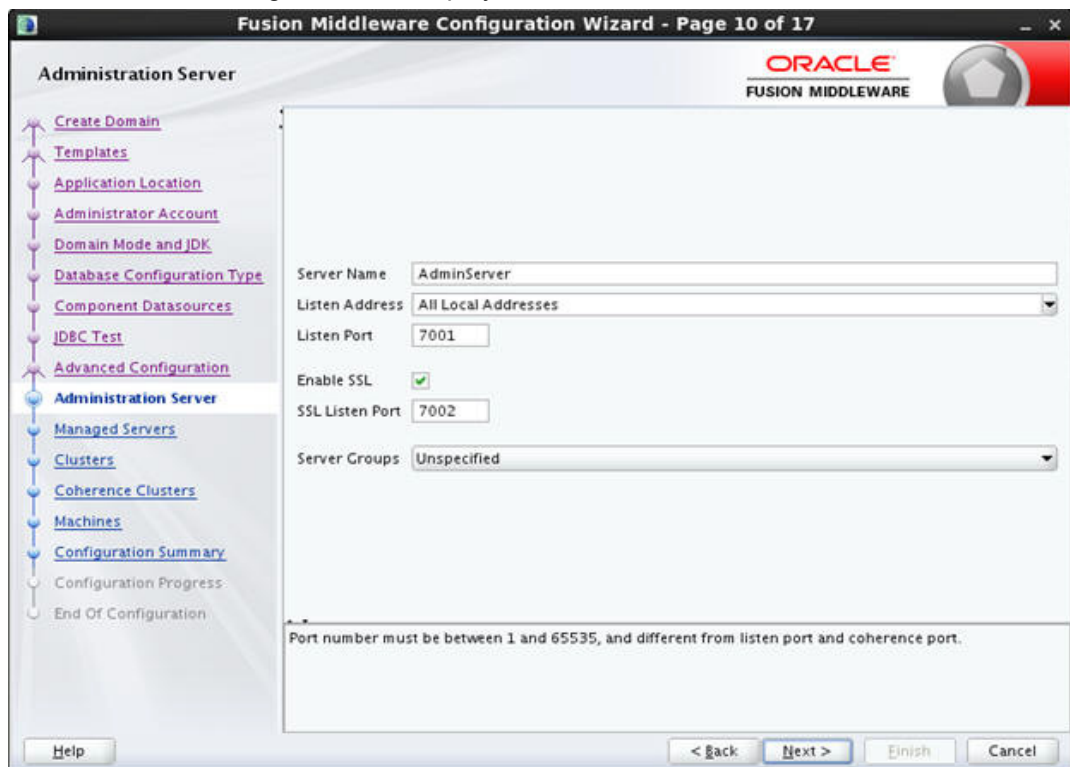
14. . Click 'Next'. The following window is displayed.



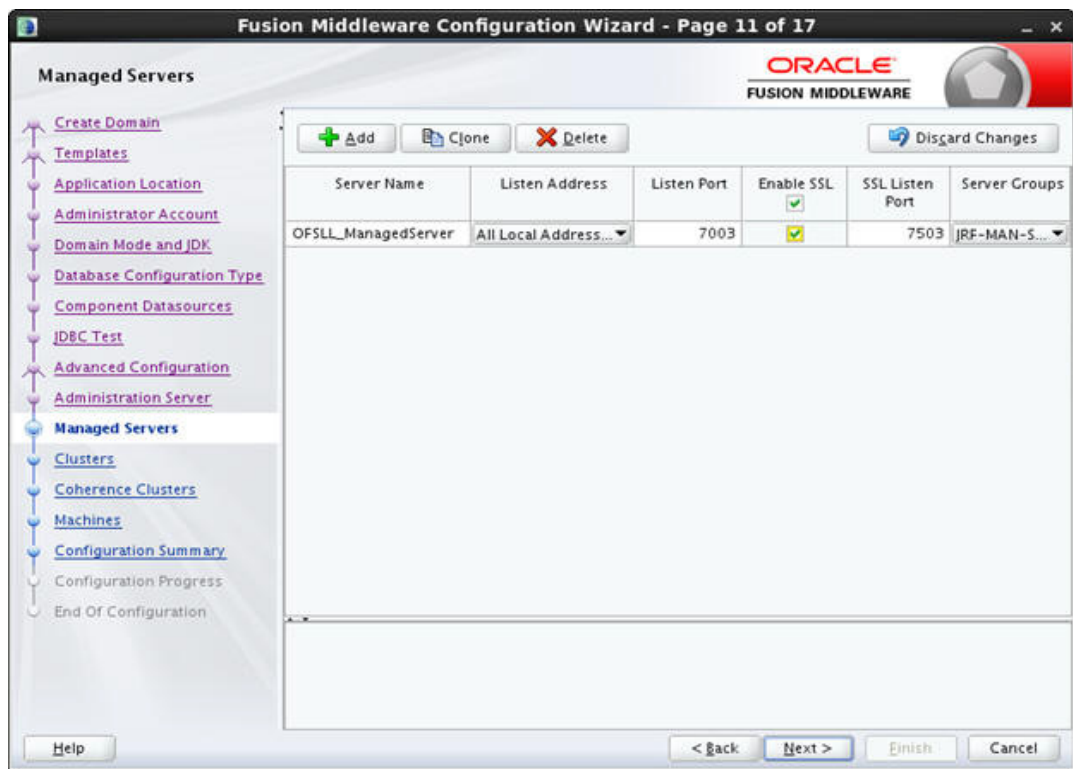
15. Click 'Next'. The following window is displayed.



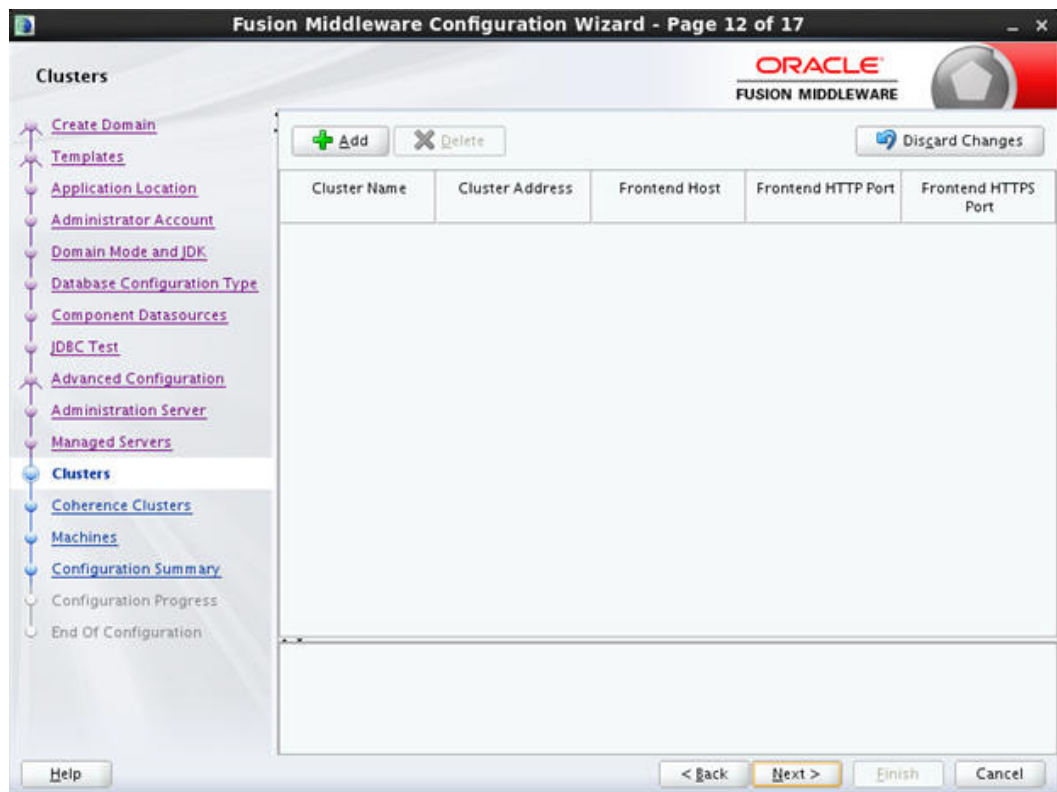
16. Select 'Administration Server' and 'Managed Servers, Clusters and Machines' and click 'Next'. The following window is displayed.



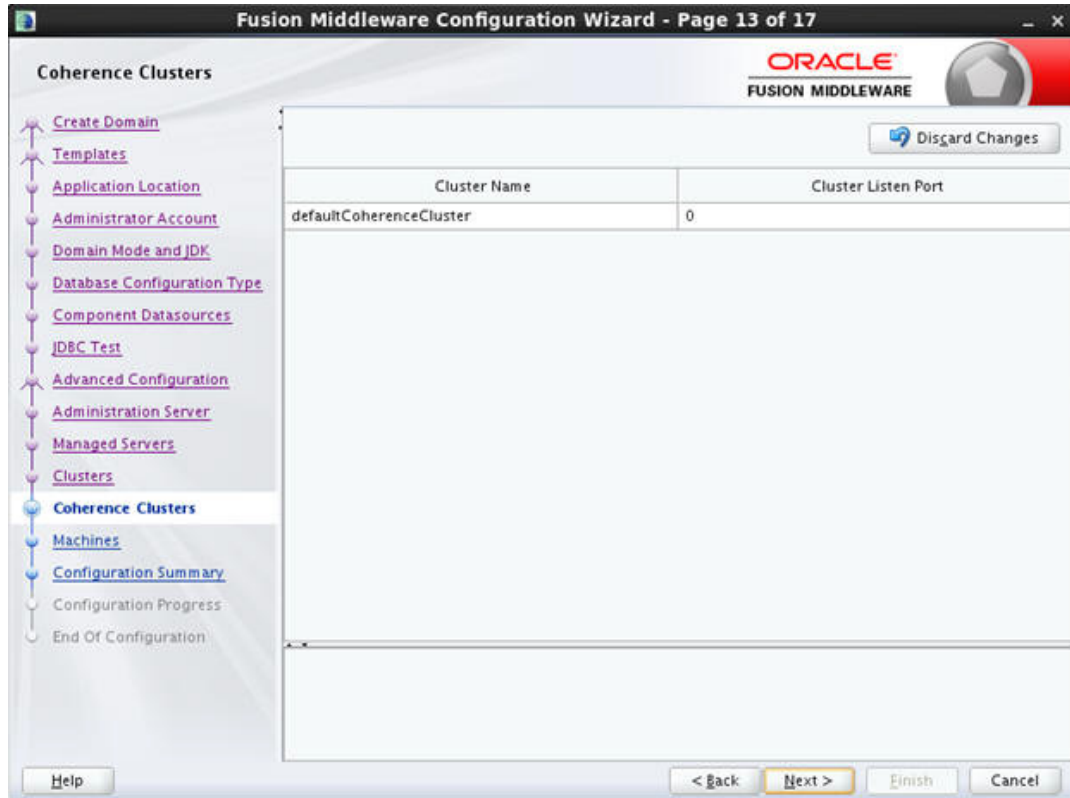
- Enter Administration 'Server Name' and 'Listen Port' details. Check the SSL port and click 'Next'. The following window is displayed.



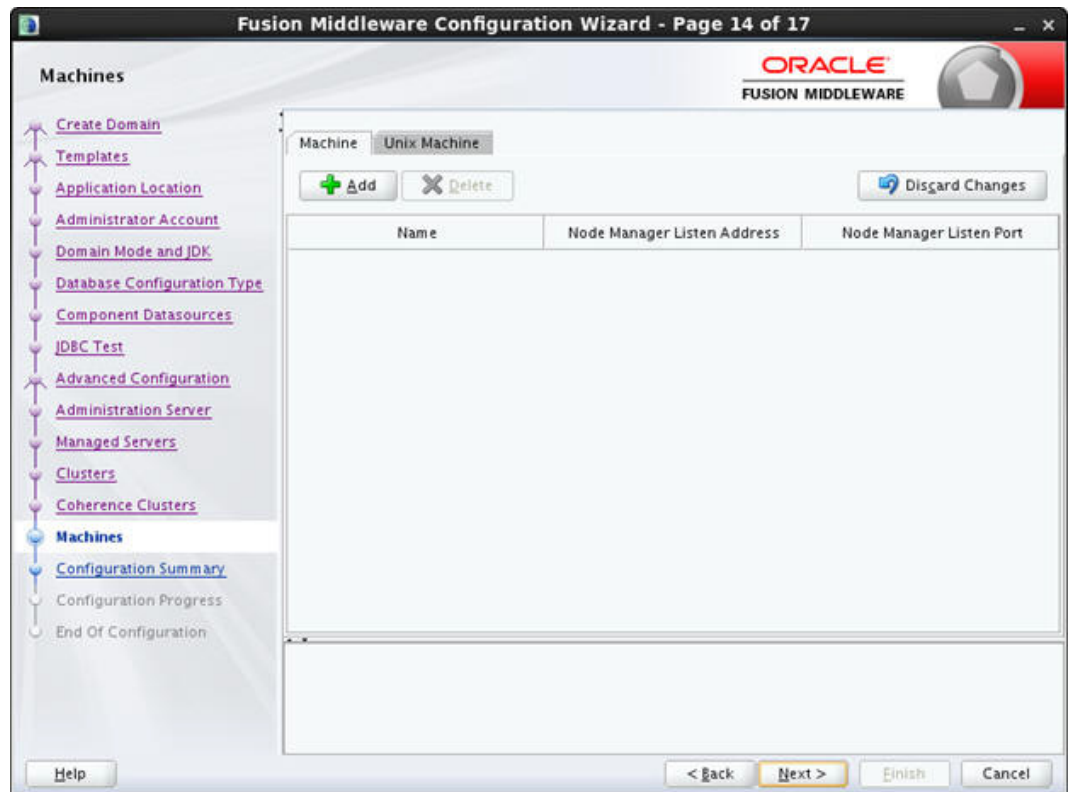
- Click Add button. In the Configure Managed Servers window, enter 'Name' and 'Listen Port' details. Check the SSL port and click 'Next'. The following window is displayed.



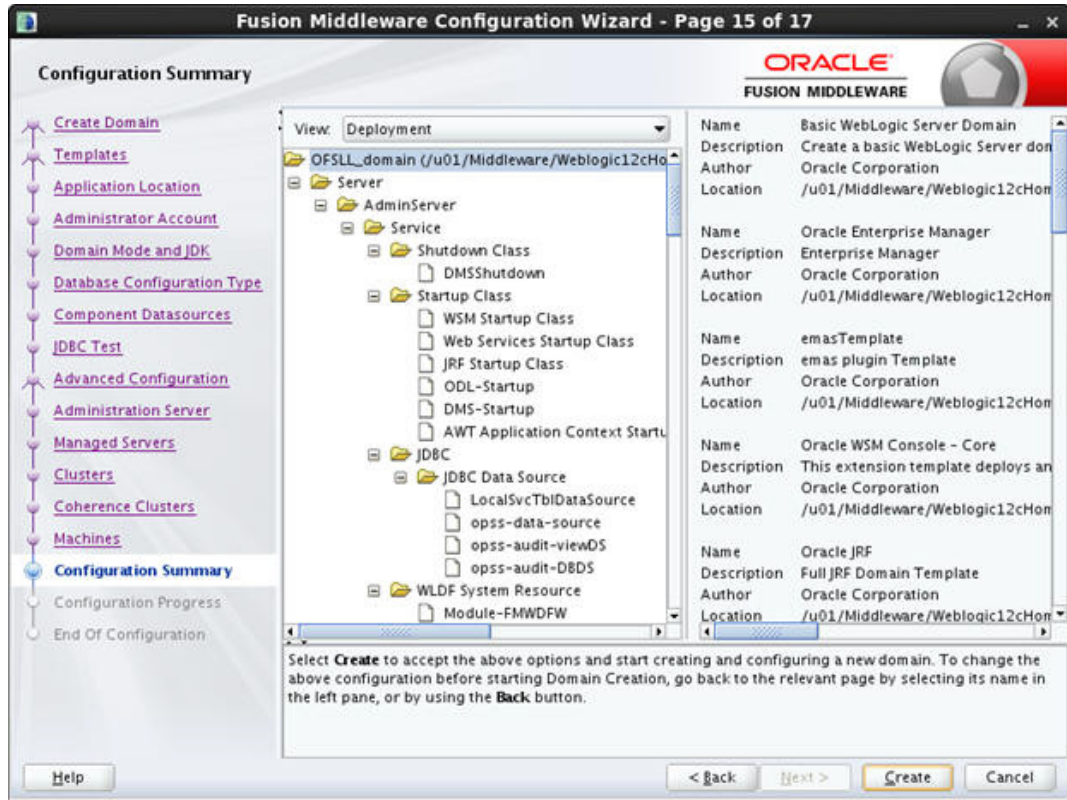
19. Configure as required and click 'Next'. The following window is displayed.



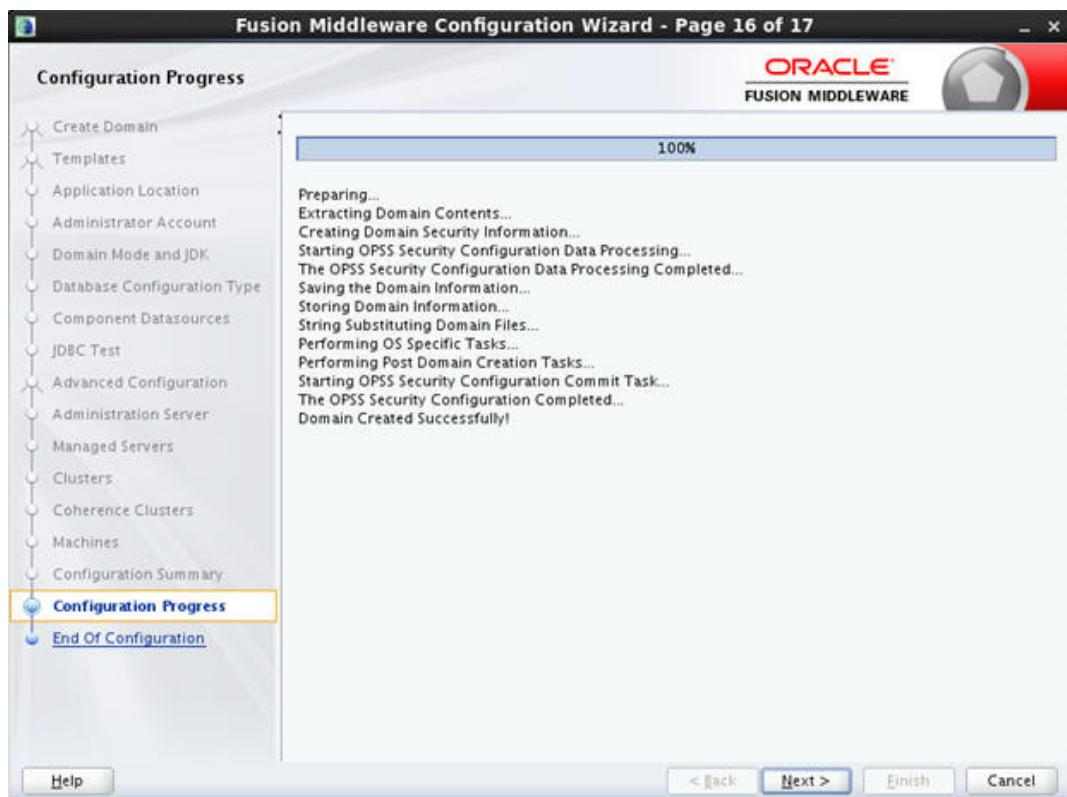
20. Configure as required and click 'Next'. The following window is displayed.



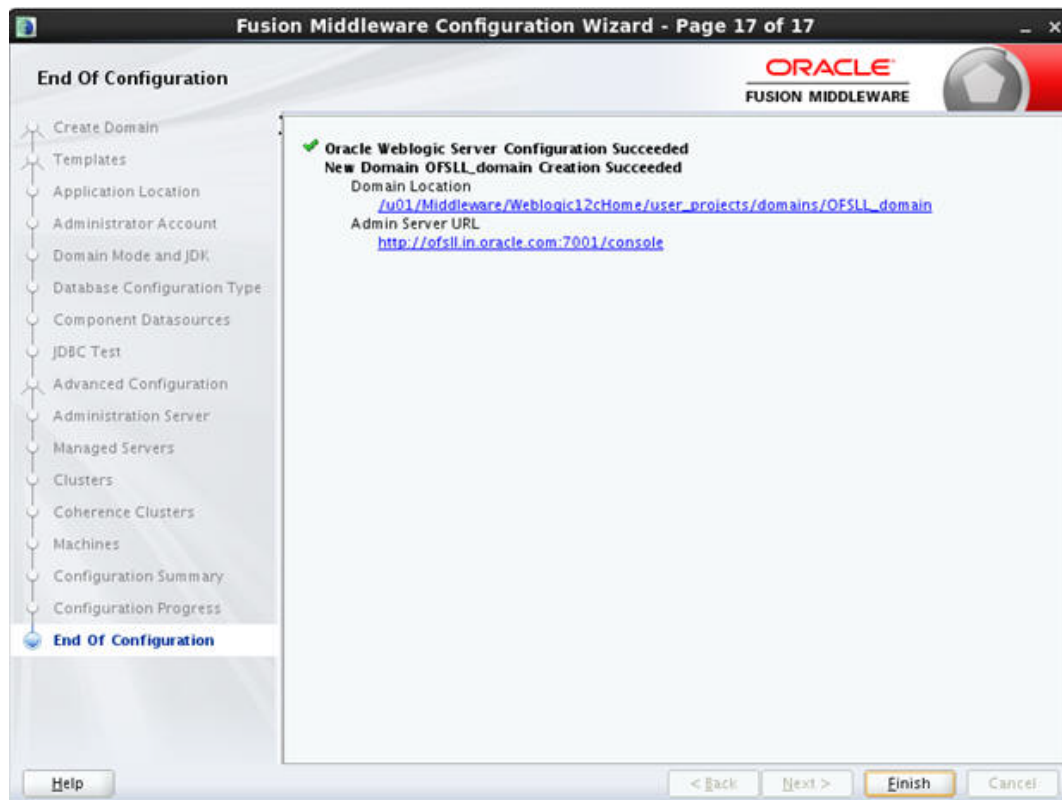
21. Configure as required and click 'Next'. The following window is displayed.



22. Click 'Create'. The following window is displayed.



23. Click 'Next'. The following window is displayed.



24. Once the creation of the Domain is complete, click 'Finish' 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:Max-PermSize=2048m"
```

25. The "\$MW_HOME/user_projects/domains/<mydomain>" directory contains a script that can be used to start the Admin server.

- \$ cd \$MW_HOME/user_projects/domains/<mydomain>/bin
- \$./startWebLogic.sh

If the server is required to be running and access to command line needs to be returned use "nohup" and "&"

```
$ nohup ./startWebLogic.sh &
```

26. To Start Managed Server

- \$ cd \$MW_HOME/user_projects/domains/<mydomain>/bin
- \$./startManagedWebLogic.sh {ManagedServer_name} {AdminServer URL}

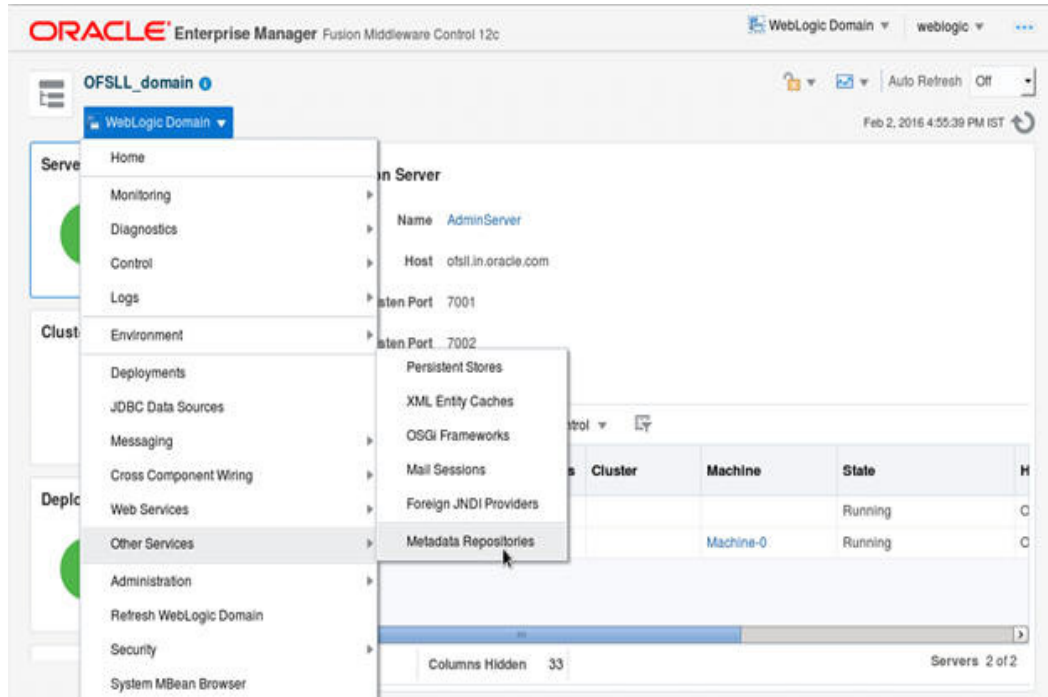
If the server is required to be running and access to command line needs to be returned use "nohup" and "&".

```
$ nohup ./startManagedWebLogic.sh {ManagedServer_name} {AdminServer URL} &
```

3.3 Creating Metadata Repository

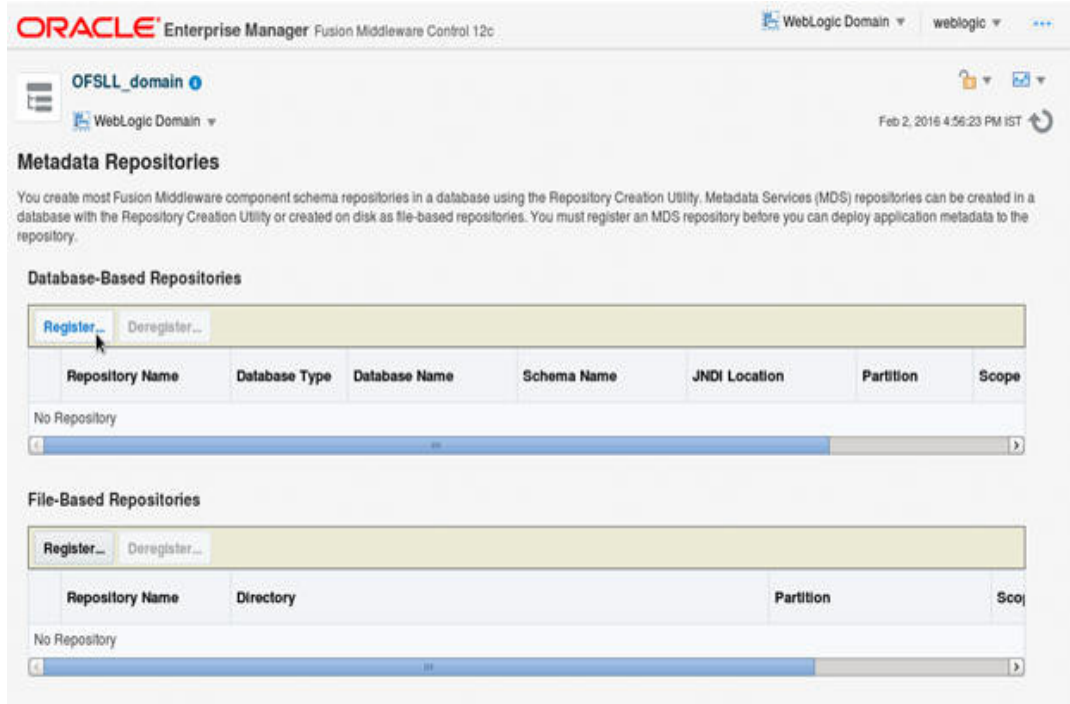
Assuming that **OLL_MDS** schema is created using Oracle Repository Creation Utility (RCU) as mentioned in [Creating Schemas using Repository Creation Utility](#) section, follow the below steps to create the repository.

1. Login to Oracle Enterprise Manager 12c console (<http://hostname:port/em>).

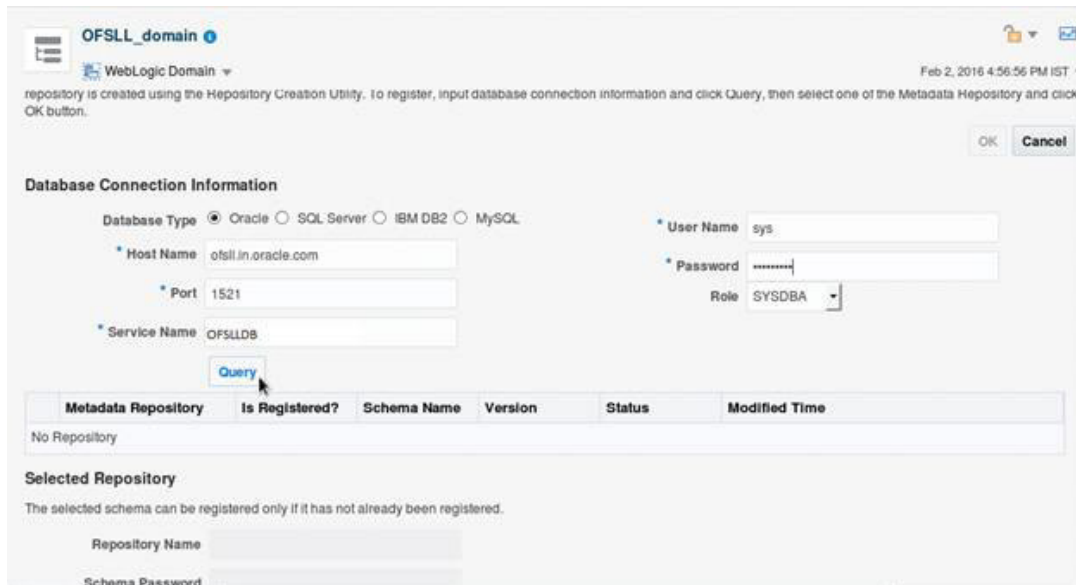


2. Click on domain name OFSLL_domain on the left side panel.
3. Expand Weblogic domain OFSLL_domain and click 'Metadata Repositories' option, as shown in the above screen.

- The following window is displayed.



- Click 'Register' button. The following window is displayed.



- Enter database instance details under Database Connection Information section and click 'Query'. All available schemas in the given database instance are listed.
- Select the schema you require and in the Selected Repository – Schema OLL_MDS section, enter 'Repository Name' (adf) and the password.

8. Click 'OK'. The following window is displayed.

Metadata Repository	Is Registered?	Schema Name	Version	Status	Modified Time
MDS	false	OLL_MDS	12.2.1.0.0	VALID	Jan 22, 2016 6:53:57 PM IST

Selected Repository - Schema: OLL_MDS
 The selected schema can be registered only if it has not already been registered.

* Repository Name: adf
 * Schema Password: [masked]

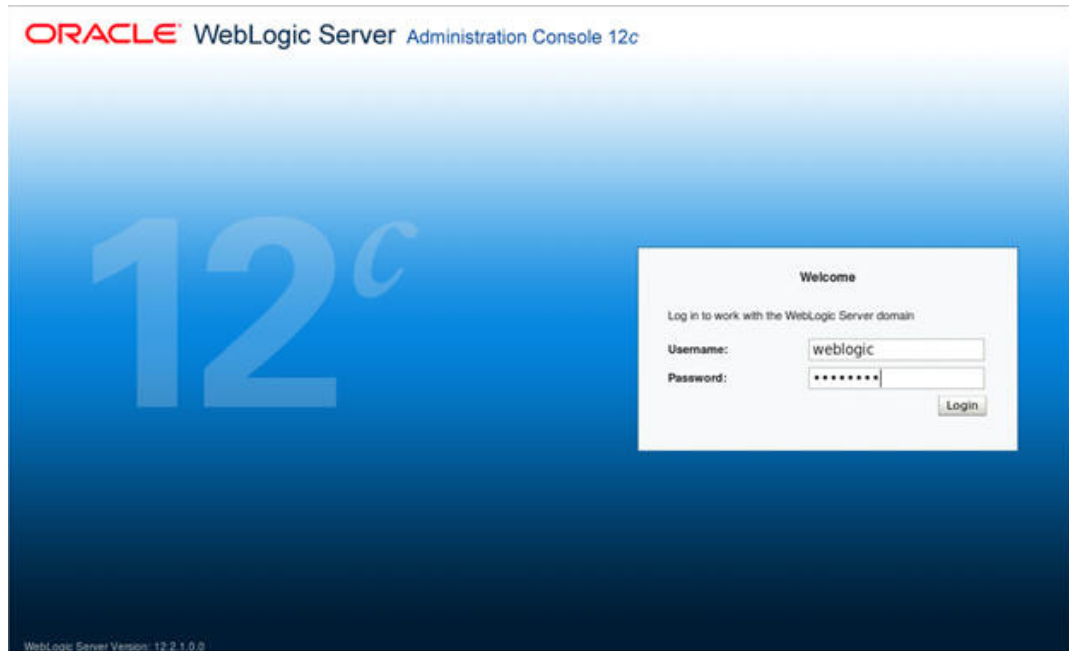
9. Click Repository name 'mds-adf' on left panel. You can even select it from right panel.

Repository Name	Database Type	Database Name	Schema Name	JNDI Location	Partition	Scope
mds-adf	Oracle	OLLDB	OLL_MDS	jdbc/mds/adf	Global	Global

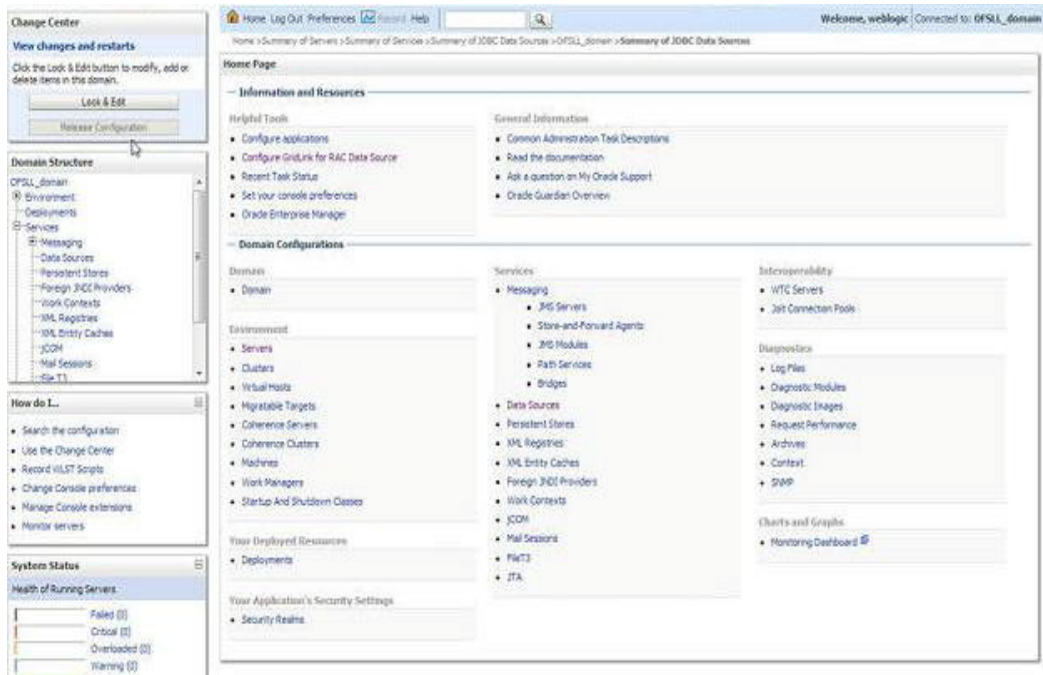
10. Click 'Add' and target to OFSLL_AdminSever and OFSLL_ManagedServer as on right panel.

3.4 Creating Data Source

1. Login to WebLogic Server 12c console (<http://hostname:port/console>).



2. The following window is displayed.



3. Click Domain Name > Services > Data Sources.

4. The following window is displayed.

ORACLE WebLogic Server Administration Console 12c

Home > Summary of JDBC Data Sources

Summary of JDBC Data Sources

Configuration | Monitoring

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.

Customize this table

Data Sources (Filtered - More Columns Exist)

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

Name	Type	JNDI Name	Targets	Scope	Domain Partitions
LocalSvcTbDataSource	Generic	jdbc/LocalSvcTbDataSource	AdminServer	Global	
ops-suit-DBDS	Generic	jdbc/AuditAppendDataSource	AdminServer, OFSLL_ManagedServer	Global	
ops-suit-viewDS	Generic	jdbc/AuditViewDataSource	AdminServer, OFSLL_ManagedServer	Global	
ops-data-source	Generic	jdbc/OpssDataSource	AdminServer, OFSLL_ManagedServer	Global	

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

Configuration button to allow others to edit the domain.

Lock & Edit

Release Configuration

Domain Structure

OFSLL_domain

- Domain Partitions
- Environment
- Deployments
- Services
 - Messaging
 - Data Sources
 - Persistent Stores
 - Foreign JNDI Providers
 - Work Contexts
 - XML Registries
 - XML Entity Caches
 - JCOM
 - Mail Sessions

How do I...

- Create JDBC generic data sources
- Create JDBC GridLink data sources
- Create JDBC multi data sources
- Create UCP data sources

System Status

Health of Running Servers

- Failed (0)
- Critical (0)
- Overloaded (0)

Back Next Finish Cancel

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: OFSLL

What scope do you want to create your data source in?

Scope: Global

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

JNDI Name: jdbc/ofsllDBConnDS

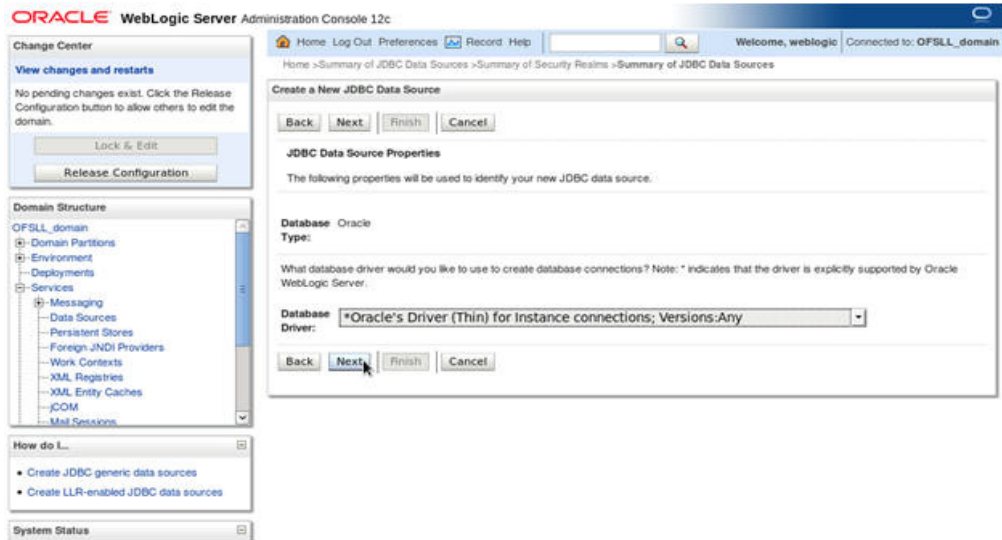
What database type would you like to select?

Database Type: Oracle

Back Next Finish Cancel

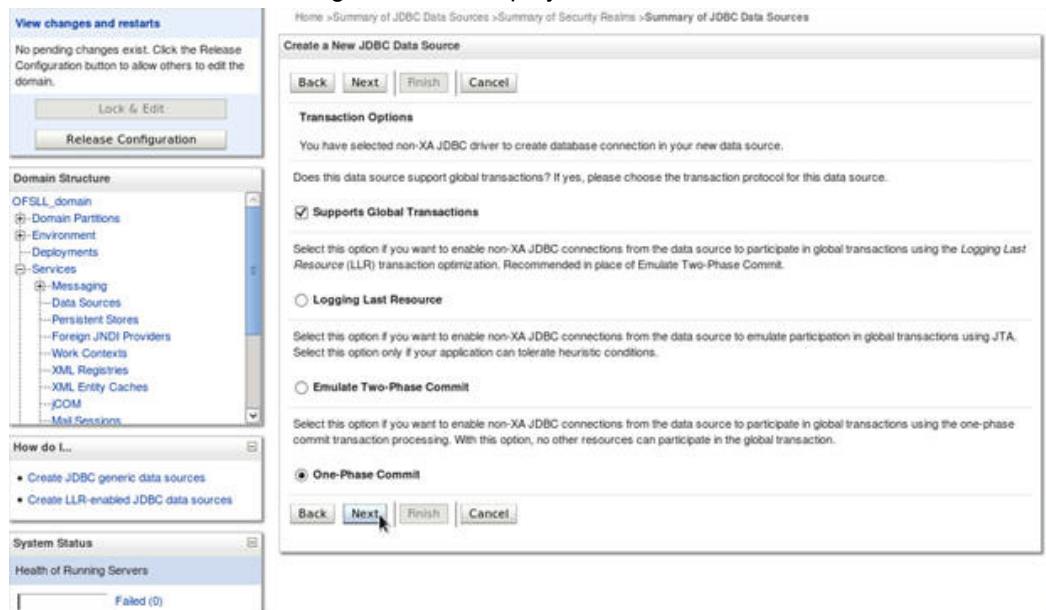
6. Enter Data source 'Name', JNDI Name as 'jdbc/ofsllDBConnDS' and select 'Oracle' as Database Type.

7. Click 'Next'. The following window is displayed.



8. Select the Database Driver 'Oracle's Driver(Thin) for Instance connections; Versions:Any' as shown above.

9. Click 'Next'. The following window is displayed.



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

Release Configuration

Define Connection Properties.

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

Database Name:

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

Host Name:

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

Port:

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

Database User Name:

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

Password:

Confirm Password:

Additional Connection Properties:

oracle.jdbc.DRCPConnectionClass:

Back Next Finish Cancel

11. Enter Database details click 'Next'. The following window is displayed.

ORACLE WebLogic Server Administration Console 12c

Home Log Out Preferences Record Help Welcome, weblogic Connected to: OFSLL_domain

Home > Summary of JDBC Data Sources > Summary of Security Realms > Summary of JDBC Data Sources

Create a New JDBC Data Source

Test Configuration Back Next Finish Cancel

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:

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

URL:

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

Database User Name:

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)

Password:

12. Click 'Test Configuration'. The following window is displayed.

Messages
✔ Connection test succeeded.

Create a New JDBC Data Source

Test Configuration | Back | Next | Finish | Cancel

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.OracleDriver

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

URL: jdbc:oracle:thin:@ofssl.in.oracle.com:1521:OFSSLDB

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

Database User Name: OFSSL1431

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)

Password:

Confirm Password:

What are the properties to pass to the JDBC driver when creating database connections?

Properties:
user=OFSSL1431

13. Displays confirmation message as 'Connection test succeeded'. Click 'Next'. The following window is displayed.

ORACLE WebLogic Server Administration Console 12c

Home Log Out Preferences Record Help Welcome, weblogic Connected to: OFSSL_domain

Home > Summary of JDBC Data Sources > Summary of Security Realms > Summary of JDBC Data Sources

Create a New JDBC Data Source

Back Next Finish Cancel

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 deployed. You will need to deploy the data source at a later time.

Servers

- AdminServer
- OFSSL_ManagedServer

Back Next Finish Cancel

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
OFSSL_domain
- Domain Partitions
- Environment
- Deployments
- Services
- Messaging
- Data Sources
- Persistent Stores
- Foreign JNDI Providers
- Work Contexts
- XML Registries
- XML Entity Caches
- JCOM
- Mail Sessions

How do I...
- Create JDBC generic data sources
- Create LLR-enabled JDBC data sources

System Status

- Select target Servers 'AdminServer' and 'ManagedServer' and click 'Finish'. The following window is displayed.



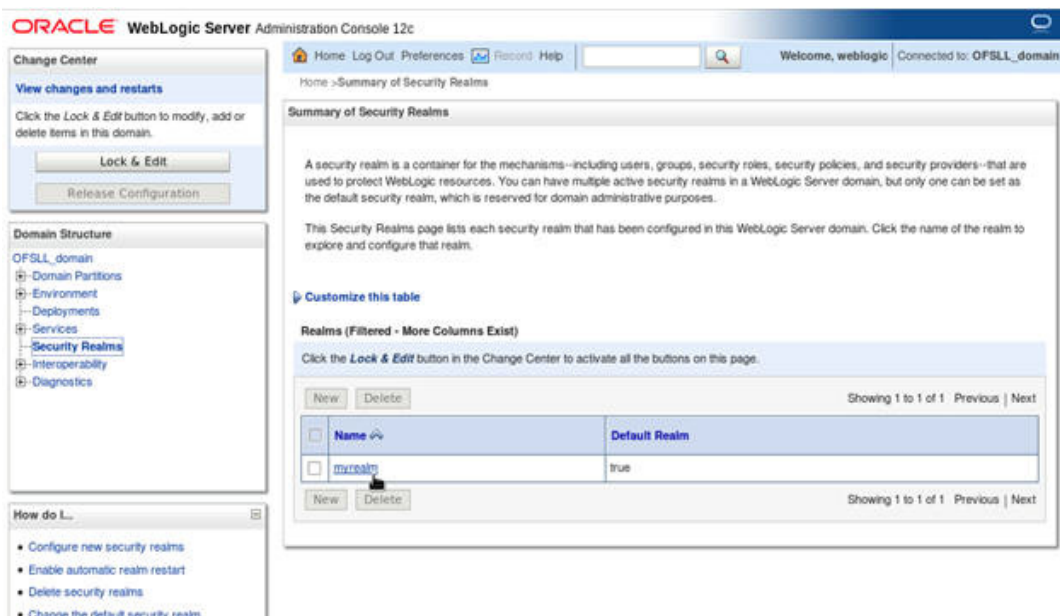
- Click 'Activate Changes' on the left panel.

Update the following parameters in JDBC data source connection pool:

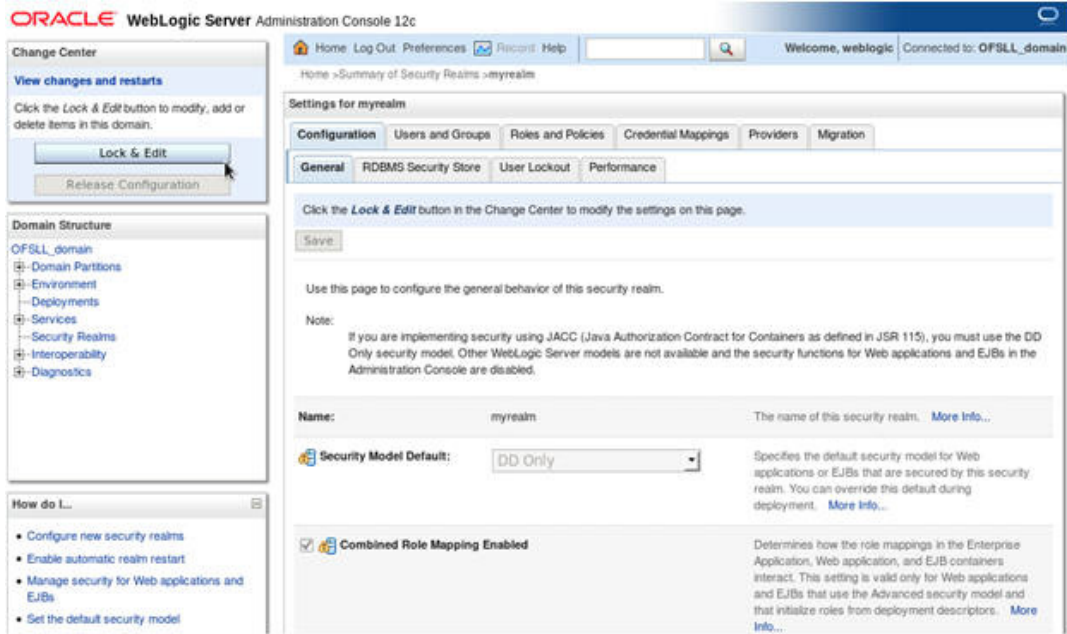
- Select Services > Data Sources > select the OFSLL data source > Connection Pool.
- Initial capacity and Maximum capacity is defaulted to 15, if the number of concurrent users are more this needs to be increased.
- Click Advanced button and update the following:
 - Inactive Connection Timeout=900
 -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

3.5 Creating SQL Authentication Provider

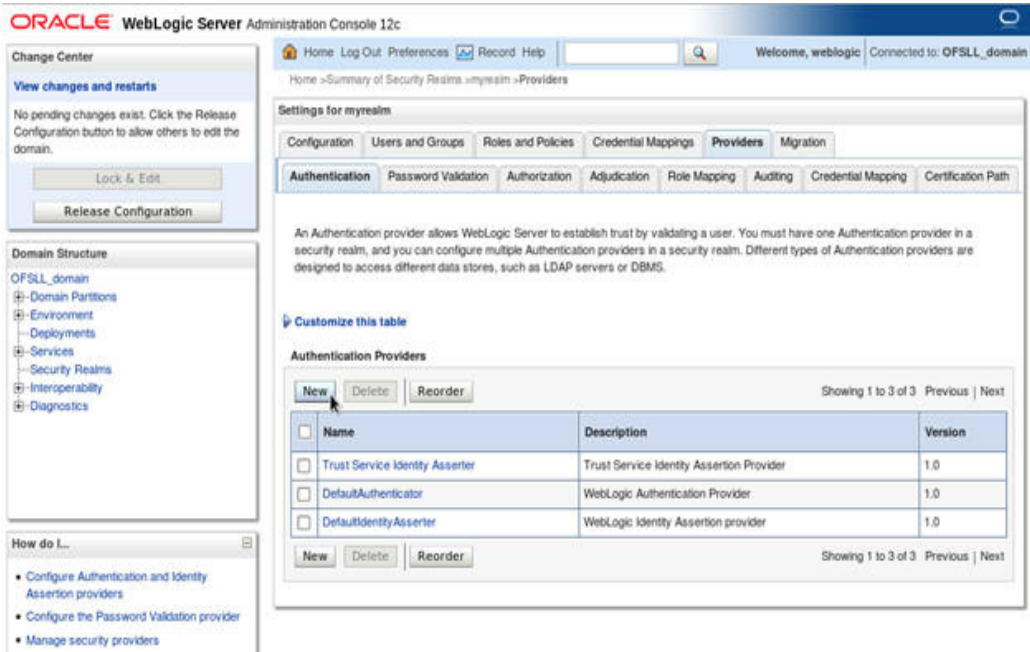
- Login to WebLogic server administration console and click 'Security Realms' in left panel. The following window is displayed.



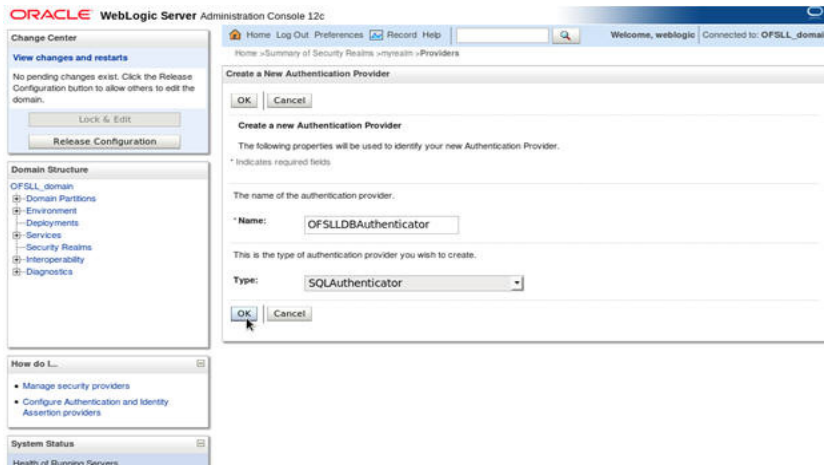
2. Click 'myrealm' on right panel. The following window is displayed.



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



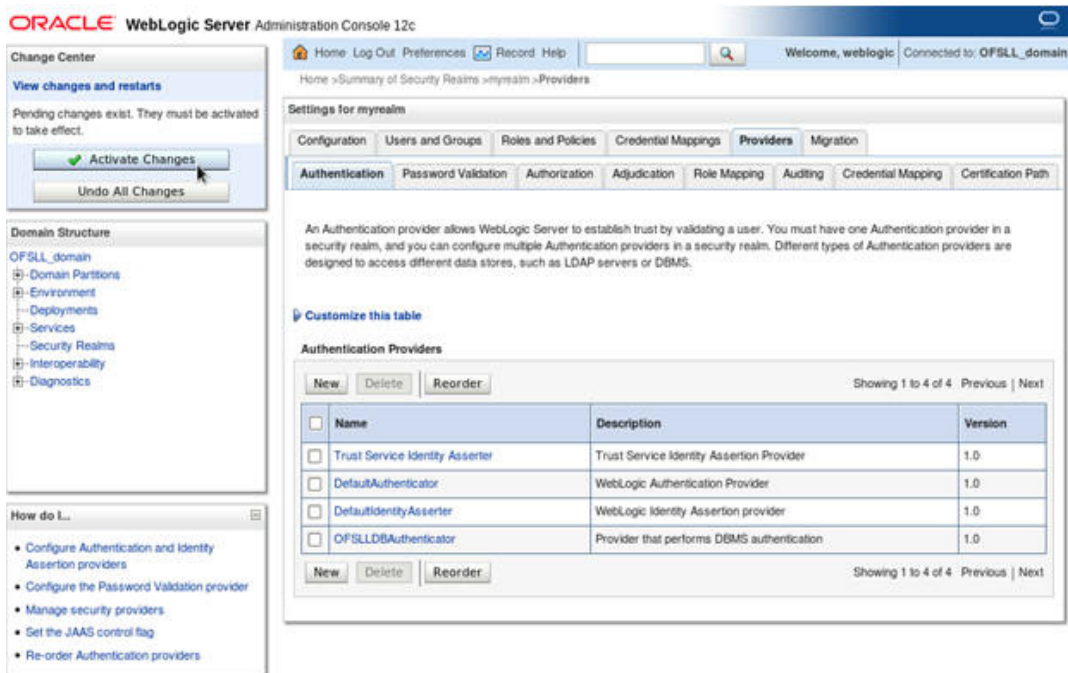
- Click 'Lock & Edit' to unlock the screen and click 'New' button in Authentication Providers sub tab. The following window is displayed.



- Create Authentication provider with following values:

- Name: OFSLDDBAuthenticator
- Type: SQLAuthenticator

- Click 'OK'. The following window is displayed.



7. Click on 'Activate Changes'. The following window is displayed.

The screenshot shows the Oracle WebLogic Server Administration Console 12c interface. On the left, the 'Change Center' panel displays 'View changes and restarts' and a message: 'Pending changes exist. They must be activated to take effect.' Below this, there is a green 'Activate Changes' button and an 'Undo All Changes' button. The 'Domain Structure' panel shows a tree view with 'OFSLL_domain' expanded to 'Security Realms'. The 'How do I...' panel lists tasks like 'Configure Authentication and Identity Assertion providers' and 'Configure the Password Validation provider'.

The main content area is titled 'Settings for myrealm' and includes tabs for 'Configuration', 'Users and Groups', 'Roles and Policies', 'Credential Mappings', 'Providers', and 'Migration'. Under the 'Providers' tab, there are sub-tabs for 'Authentication', 'Password Validation', 'Authorization', 'Adjudication', 'Role Mapping', 'Auditing', 'Credential Mapping', and 'Certification Path'. A descriptive text explains that an authentication provider allows WebLogic Server to establish trust by validating a user. Below this, there is a 'Customize this table' link and a table of 'Authentication Providers'.

Name	Description	Version
<input type="checkbox"/> OFSLDDBAuthenticator	Provider that performs DBMS authentication	1.0
<input type="checkbox"/> DefaultAuthenticator	WebLogic Authentication Provider	1.0
<input type="checkbox"/> DefaultIdentityAsserter	WebLogic Identity Assertion provider	1.0
<input type="checkbox"/> Trust Service Identity Asserter	Trust Service Identity Assertion Provider	1.0

Authentication order should be maintained as mentioned in the above screen. 'OFSLLDDBAuthenticator' will be displayed as above.

8. Click on 'OFSLLDDBAuthenticator'. The following window is displayed.

The screenshot shows the 'Settings for OFSLDDBAuthenticator' configuration page. The left sidebar is similar to the previous screenshot, but the 'How do I...' panel now includes 'Set the JAAS control flag' and 'Manage security providers'. The main content area has tabs for 'Configuration' and 'Performance', with 'Configuration' selected. There are sub-tabs for 'Common' and 'Provider Specific'. A 'Save' button is visible at the top left of the configuration area.

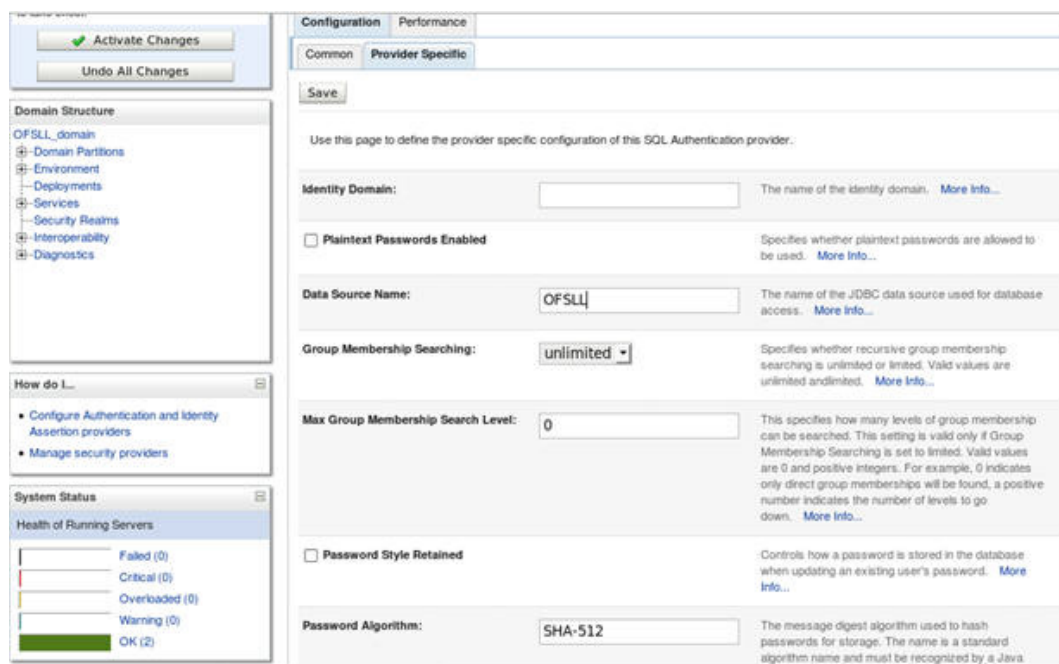
The configuration details are as follows:

- Name:** OFSLDDBAuthenticator. 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...](#)

A 'Save' button is located at the bottom left of the configuration area.

9. Select 'SUFFICIENT' as the Control Flag and click 'Save'.

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



11. Specify the following values in corresponding fields:

- Data Source Name: OFSLL
- 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_PASS- WORD 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 = ?
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_AUTHORISA- TIONS(UAU_USR_CODE, UAU_USR_- PASSWORD,UAU_DESC) VALUES(?,?,?)

Operation	Default SQL Query from Webllogic	Corresponding SQL Queries as per our Tables
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,U GR_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 GROUPEMEMBERS 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 GROUPEMEMBERS WHERE G_MEMBER = ?	SELECT UGM_MEMBER_GROUP_CODE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_USR_CODE= ?
SQL List Group Members:	SELECT G_MEMBER FROM GROUPEMEMBERS 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 GROUPEMEMBERS 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 GROUPEMEMBERS VALUES(?, ?)	INSERT INTO USER_GROUP_MEMBERS (UGM_MEMBER_GROUP_CODE,UGM_MEMBER_USR_CODE) VALUES(?,?)
SQL Remove Member From Group:	DELETE FROM GROUPEMEMBERS 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 GROUPEMEMBERS WHERE G_NAME = ?	DELETE FROM USER_GROUP_MEMBERS WHERE UGM_MEMBER_GROUP_CODE= ?

Operation	Default SQL Query from Weblogic	Corresponding SQL Queries as per our Tables
SQL Get User Description:	SELECT U_DESCRIPTION FROM USERS WHERE U_NAME = ?	SELECT UAU_DESC FROM USER_AUTHORISATIONS WHERE UAU_USR_CODE = ?
SQL Set 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	

The screenshot shows a configuration page with the following sections:

- SQL Remove Group Member:** Input field: MEMBER_GROUP_CODE= ?
- Descriptions Supported**
- SQL Get User Description:** Input field: WHERE UAU_USR_CODE = ?
- SQL Set User Description:** Input field: WHERE UAU_USR_CODE= ?
- SQL Get Group Description:** Input field: WHERE UGR_GROUP_CODE= ?
- SQL Set Group Description:** Input field: WHERE UGR_GROUP_CODE= ?
- Save** button

12. Click 'Save'.

Note

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

3.6 Creating User Groups and Users

3.6.1 Creating Users

Create an OFSLL application super user to login to the application.

A script is provided in the distribution media in the dba_utils folder to create an user.

Note

By default there are no users created to login to OFSLL application.

Run the script 'crt_app_user.sql script' as a OFSLL application owner user.

```
SQL*Plus: Release 12.1.0.2.0 Production on Thu Feb 4 12:47:05 2016
Copyright (c) 1982, 2014, Oracle. All rights reserved.

Enter user-name: OFSLL1431
Enter password:
Last Successful login time: Thu Feb 04 2016 12:02:37 +05:30

Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, OLAP, Advanced Analytics and Real Application Testing opt
ions

SQL> @/home/dev/Desktop/crt_app_user.sql;
Enter the name of the OFSLL App user Id you
Want to create user: DEMOSUPR
Enter the First Name for this user: DEMO
Enter the Last Name for this user: SUPR
Enter the Phone Number for this user: 9999777321
Enter the Fax Number for this user: 9999888321

1 row created.

1 row created.

1 row created.

SQL> █
```

1. Login into WebLogic server console.
2. Click 'Security Realms' on the left panel.
3. Click 'myrealm' on the right panel..

The screenshot shows the Oracle WebLogic Server Administration Console 12c interface. The main content area displays the 'Summary of Security Realms' page. On the left, the 'Domain Structure' tree shows 'OFSLL_domain' expanded to 'Security Realms'. The main panel shows a table of security realms with 'myrealm' selected as the 'Default Realm'.

Name	Default Realm
myrealm	true

4. Select 'Users' tab under Users and Groups.

- If SQLAuthenticator is configured as a Security Provider for the OFSLL application, the Users are automatically created in weblogic when created through an application.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled 'Settings for myrealm' and has tabs for 'Configuration', 'Users and Groups', 'Roles and Policies', 'Credential Mappings', 'Providers', and 'Migration'. The 'Users and Groups' tab is active, and the 'Users' sub-tab is selected. Below the navigation tabs, there is a message: 'This page displays information about each user that has been configured in this security realm.' A 'Customize this table' link is present. The main content is a table of users with columns for 'Name', 'Description', and 'Provider'. The table shows five users: DEMOSUPR, LCMUser, OracleSystemUser, TESTUSER, and weblogic. The 'weblogic' user is highlighted with a mouse cursor.

Name	Description	Provider
DEMOSUPR	DEMO SUPR	OFSLLDBAuthenticator
LCMUser	This is the default service account for WebLogic Server Lifecycle Manager configuration updates.	DefaultAuthenticator
OracleSystemUser	Oracle application software system user.	DefaultAuthenticator
TESTUSER	TEST USER	OFSLLDBAuthenticator
weblogic	This user is the default administrator.	DefaultAuthenticator

3.6.2 Creating User Groups

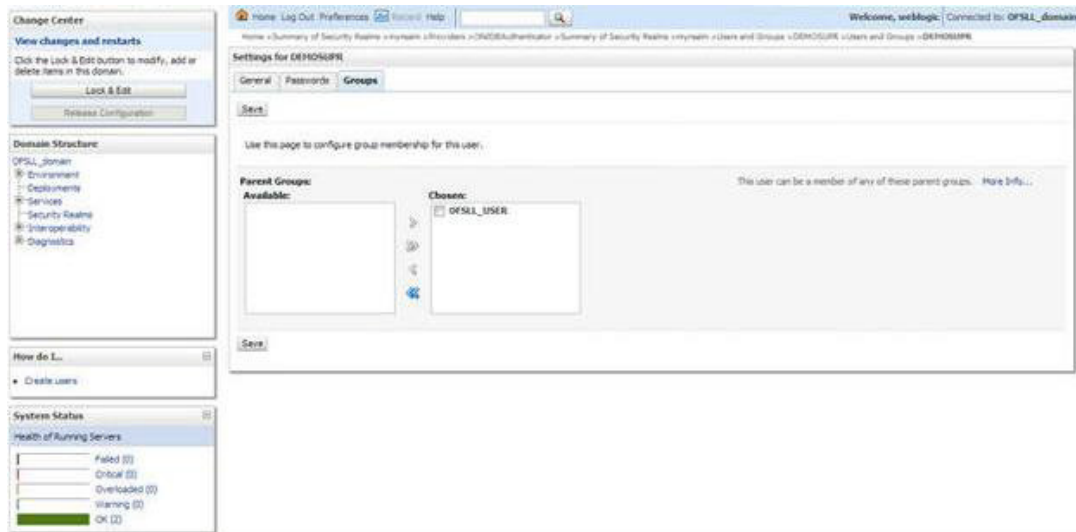
- Select 'Groups' tab under Users and Groups.
- If SQLAuthenticator is configured as a Security Provider for the OFSLL application, the Groups are automatically created in weblogic when created through an application.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled 'Settings for myrealm' and has tabs for 'Configuration', 'Users and Groups', 'Roles and Policies', 'Credential Mappings', 'Providers', and 'Migration'. The 'Users and Groups' tab is active, and the 'Groups' sub-tab is selected. Below the navigation tabs, there is a message: 'This page displays information about each group that has been configured in this security realm.' A 'Customize this table' link is present. The main content is a table of groups with columns for 'Name', 'Description', and 'Provider'. The table shows nine groups: AdminChannelUsers, Administrators, AppTesters, CrossDomainConnectors, Deployers, Monitors, OFSLL_USER, Operators, and OracleSystemGroup. The 'OFSLL_USER' group is highlighted with a mouse cursor.

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
OFSLL_USER	OFSLL USER GROUP	OFSLLDBAuthenticator
Operators	Operators can view and modify all resource attributes and perform server lifecycle operations.	DefaultAuthenticator
OracleSystemGroup	Oracle application software system group.	DefaultAuthenticator

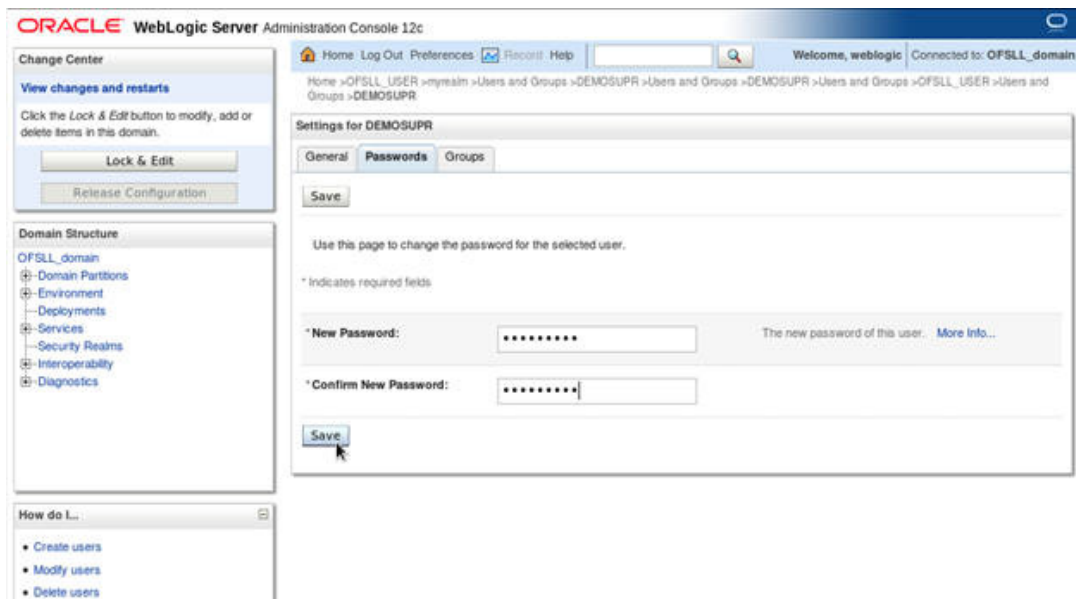
3.6.3 Assigning Users to Groups

The USERS are automatically mapped to default application group - OFSLL_USER.

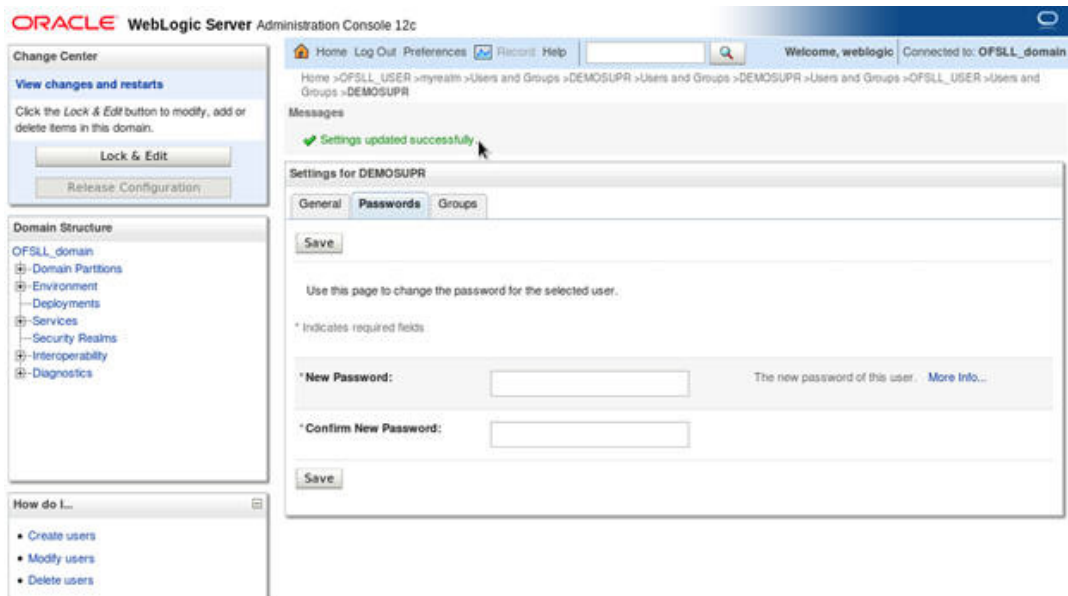


3.6.4 Resetting password via weblogic console

1. Click on 'User'. Select Passwords tab and enter new password and confirm password.



2. Click 'Save'. The following window displayed.



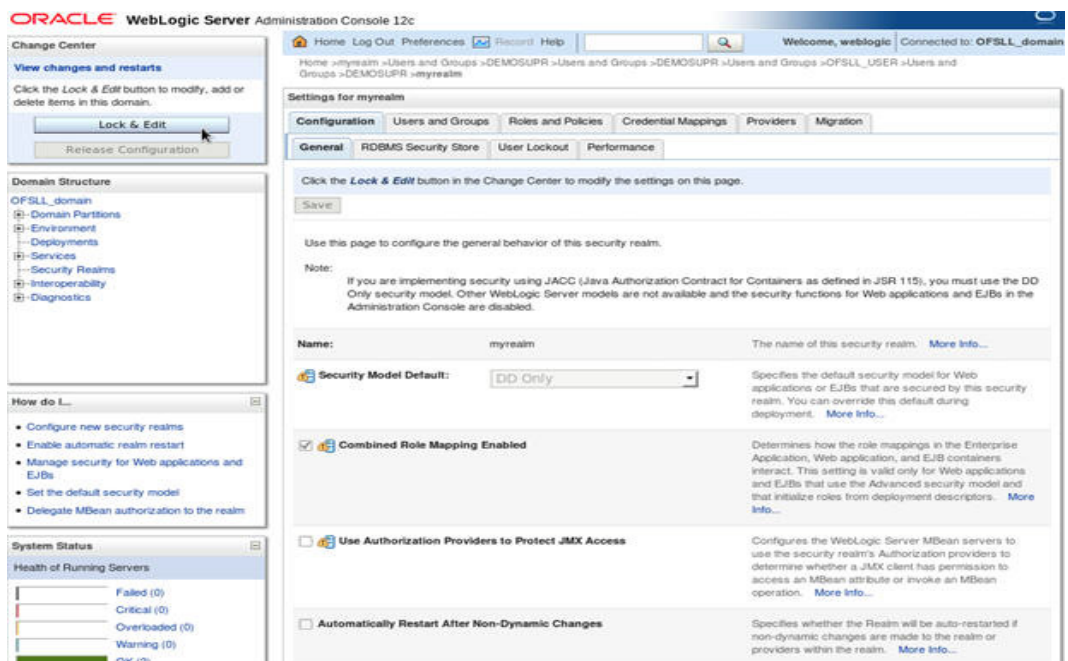
3.7 Implementing JMX Policy for Change Password

1. Login to Oracle WebLogic Server 12c console (<http://hostname:port/console>)

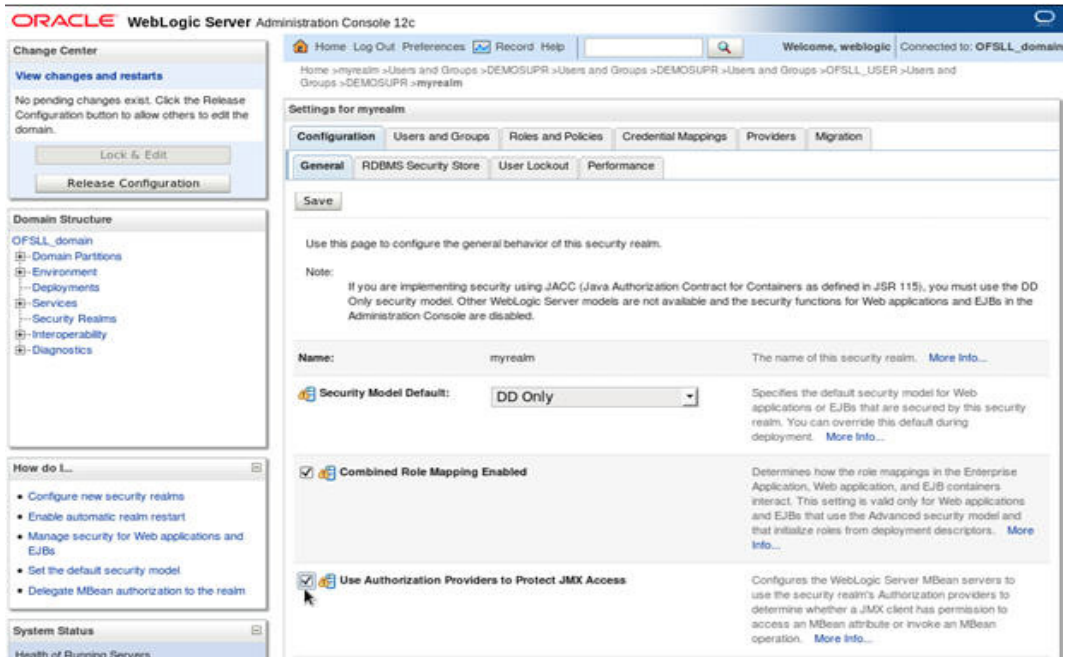
Note

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**



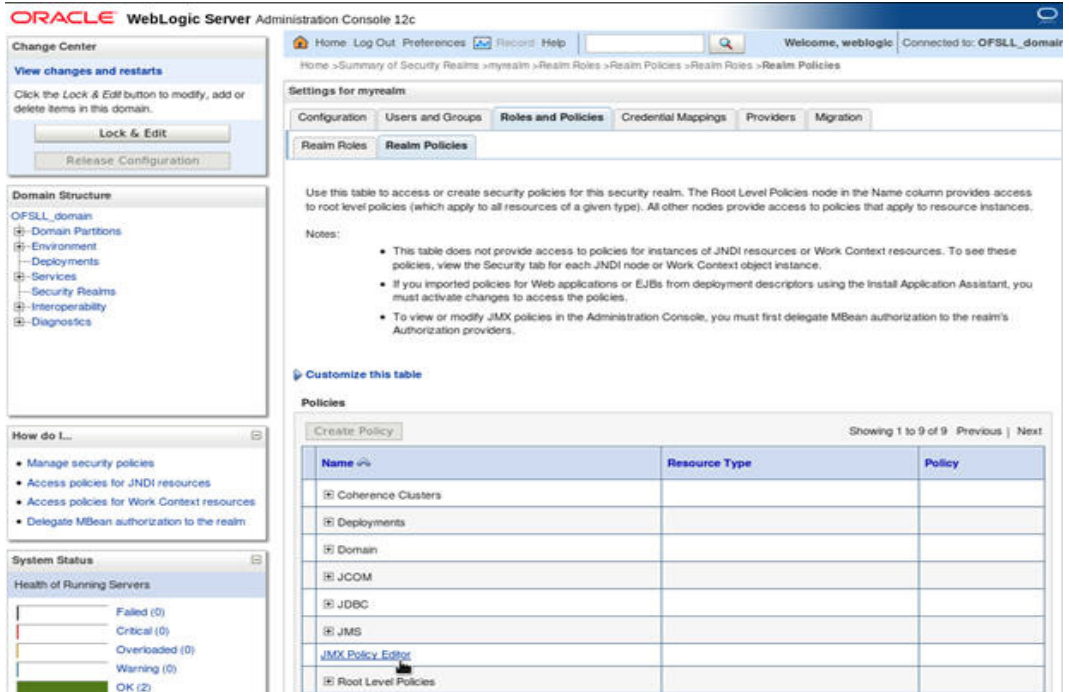
- To enable JMX policy select the 'Use Authorization Providers to Protect JMX Access' check box on the right panel



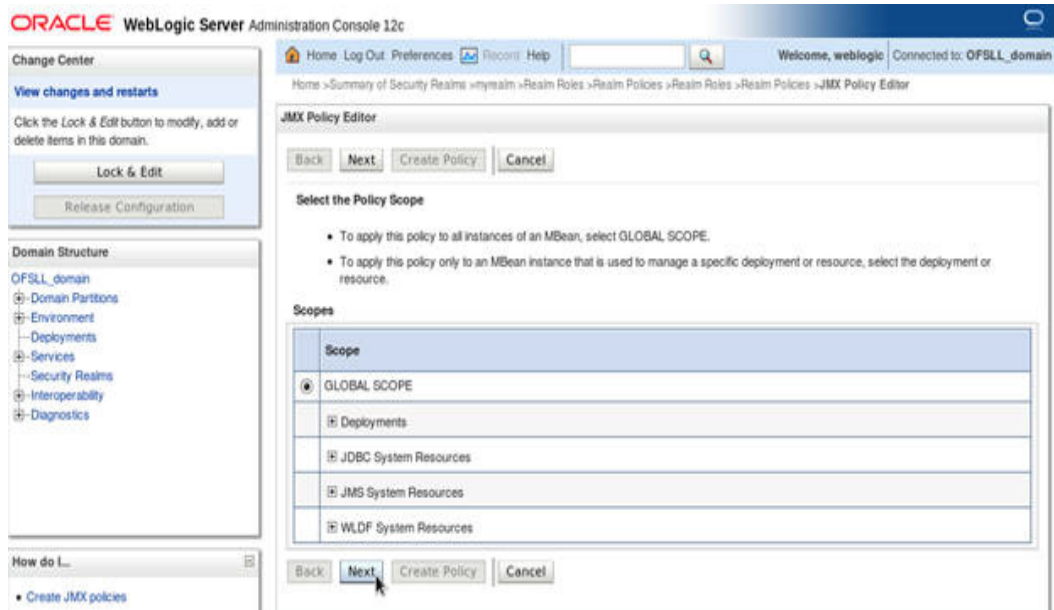
- Click 'Save' and restart the server.
- Re-login to console.
- Click Domain > Security > myrealm > Roles and Policies > Realm Policies

Note

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



7. Click on JMX Policy Editor to configure

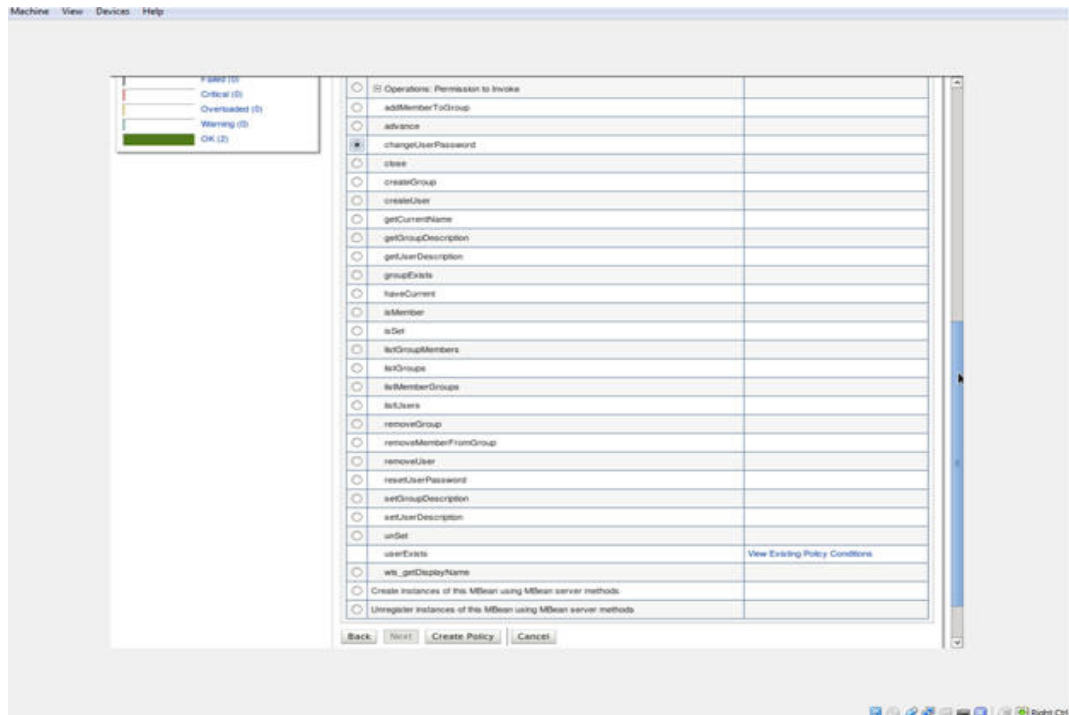


8. Select 'GLOBAL SCOPE' and click 'Next'.



9. Select weblogic.security.providers.authentication.

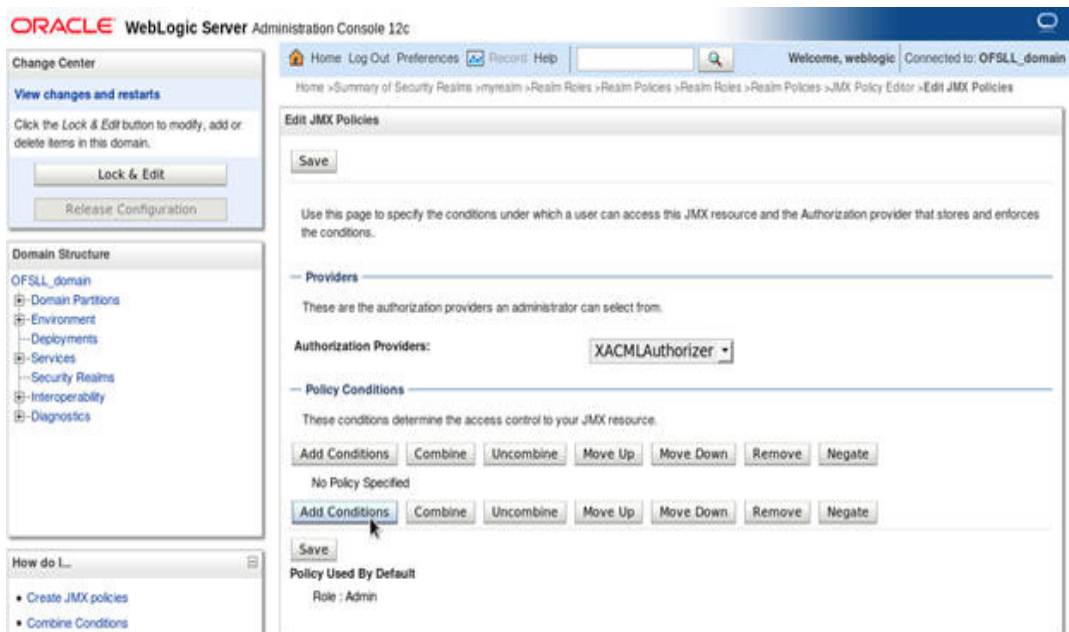
10. Select 'SQLAuthenticatorMBean'. Click 'Next'.



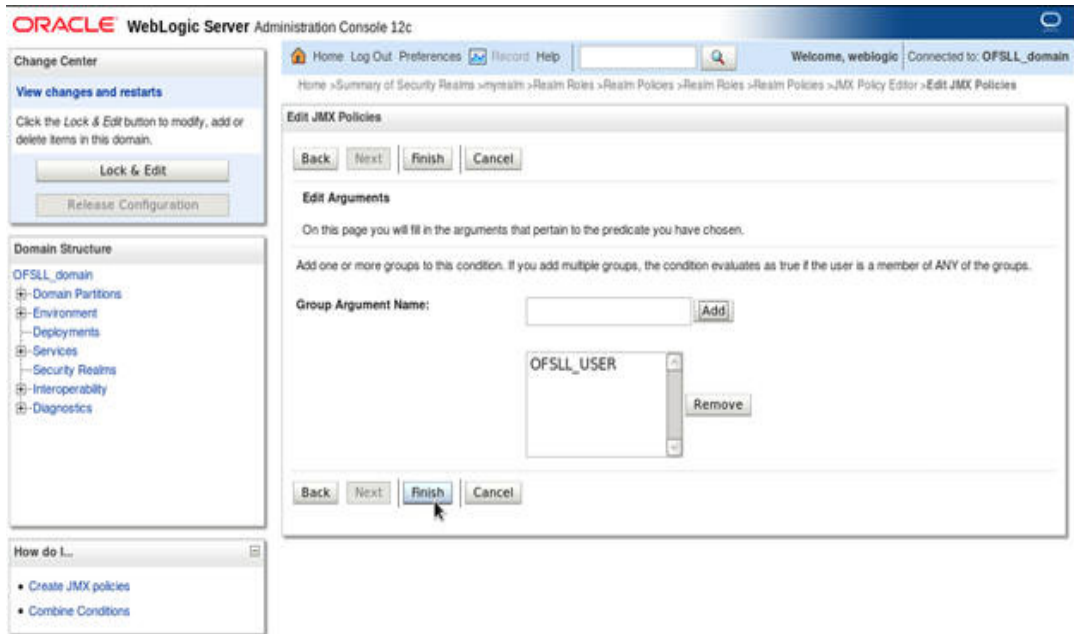
11. Expand 'Operations: Permissions to Invoke' and select 'ChangeUserPassword'.

12. Click 'Create Policy'. The following window is displayed for Authorization providers where you can add conditions to setup the policy.

13. Click 'Add Condition'. The below screen will be displayed.

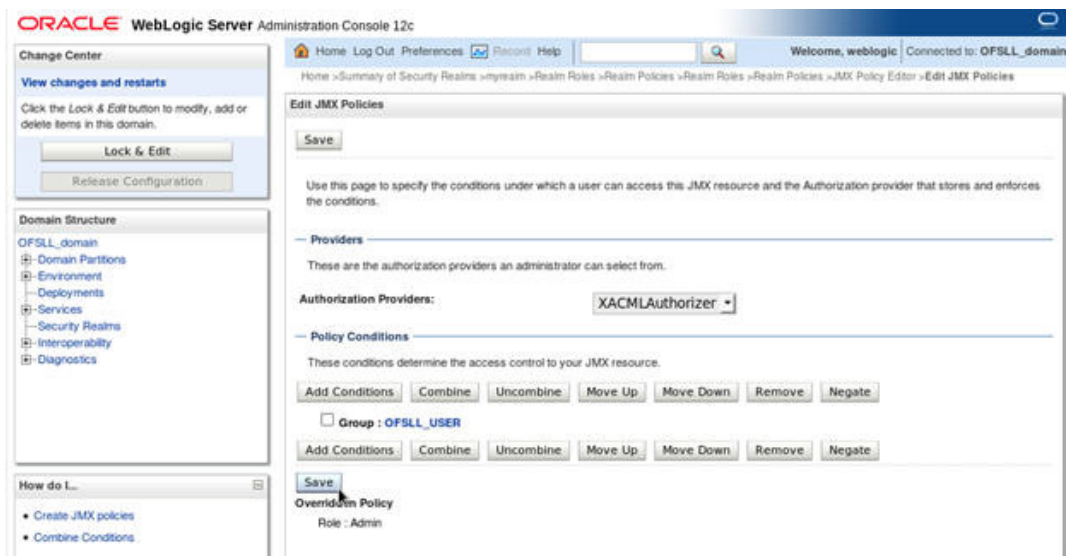


14. For Predicate List, select Group for configuration. Click 'Next'.



15. Select user roles for application.

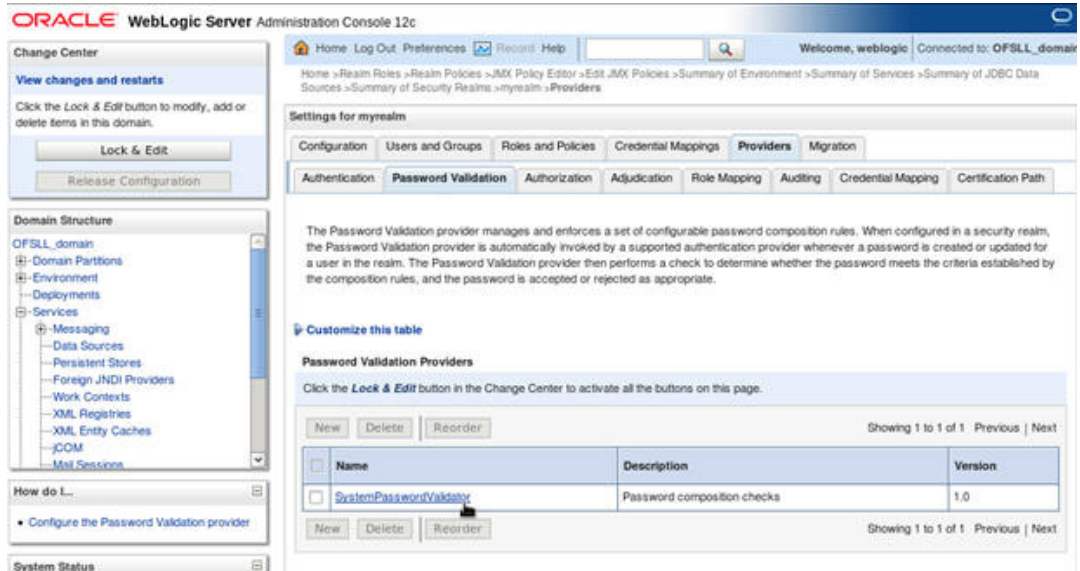
16. Click 'Finish'. Click 'Save' to complete the configuration. The following window will be displayed.



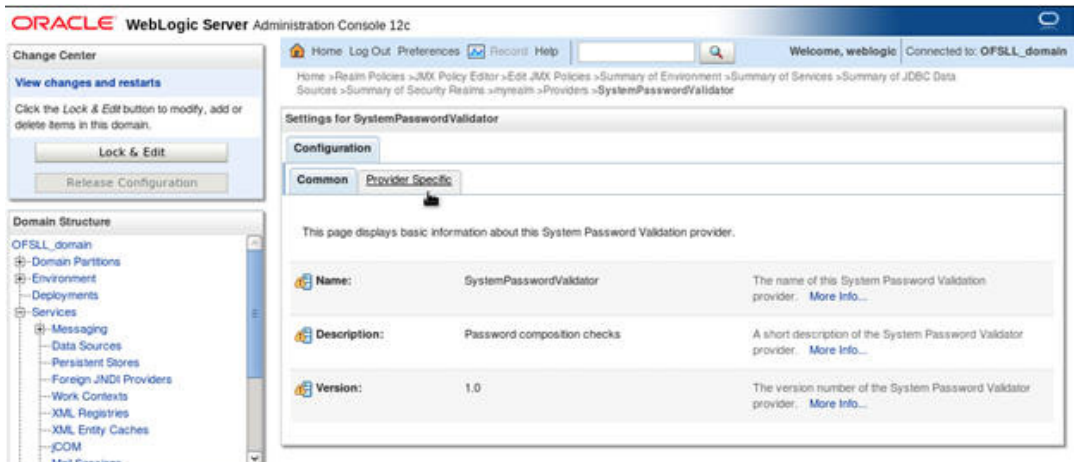
4. Configuring Policies

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 > Password Validation as shown below. The following window is displayed



3. Click 'SystemPasswordValidator' link. The following window is displayed.



4. Click **Provider Specific** Tab.

- Configure the password policy as per the requirement. An example is provided in the following window.

- Click 'Save'.

4.2 Configuring User Lockout Policy

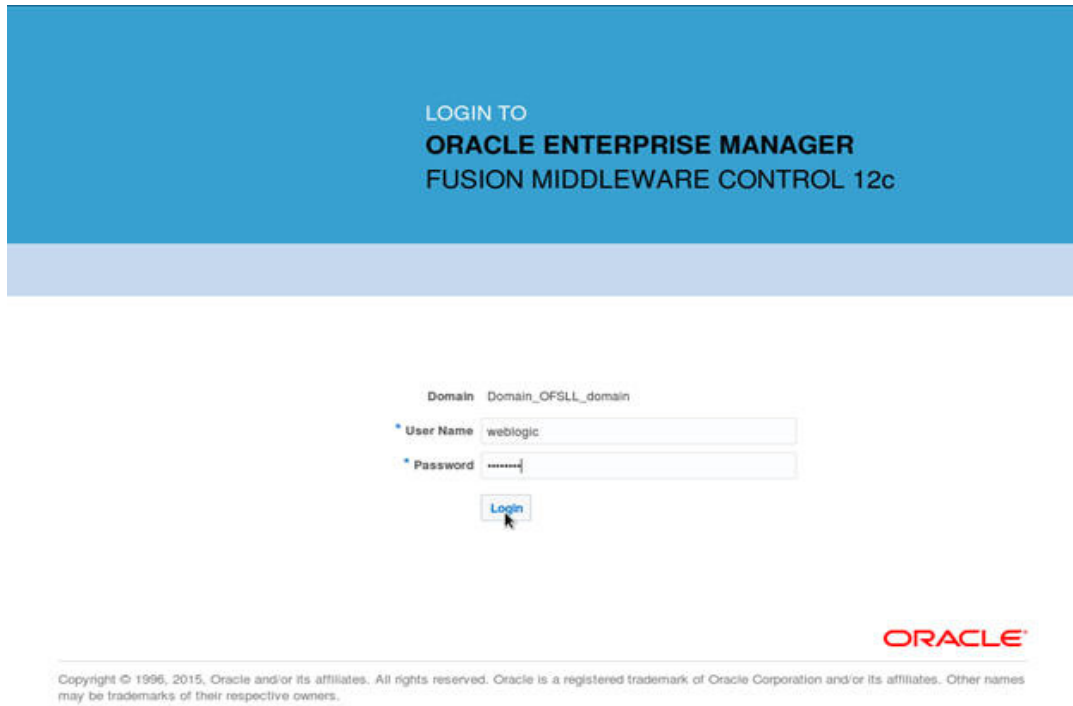
- To Change User lockout policy, browse to **Security Realms > myrealm > Configuration Tab > User Lockout Tab**. The following window is displayed

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

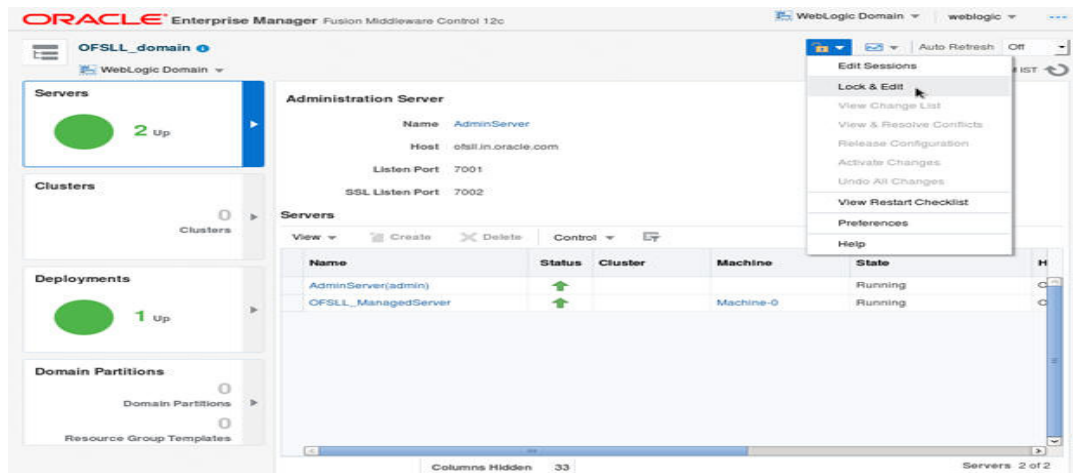
5. Deploying Application

5.1 Deploying Application

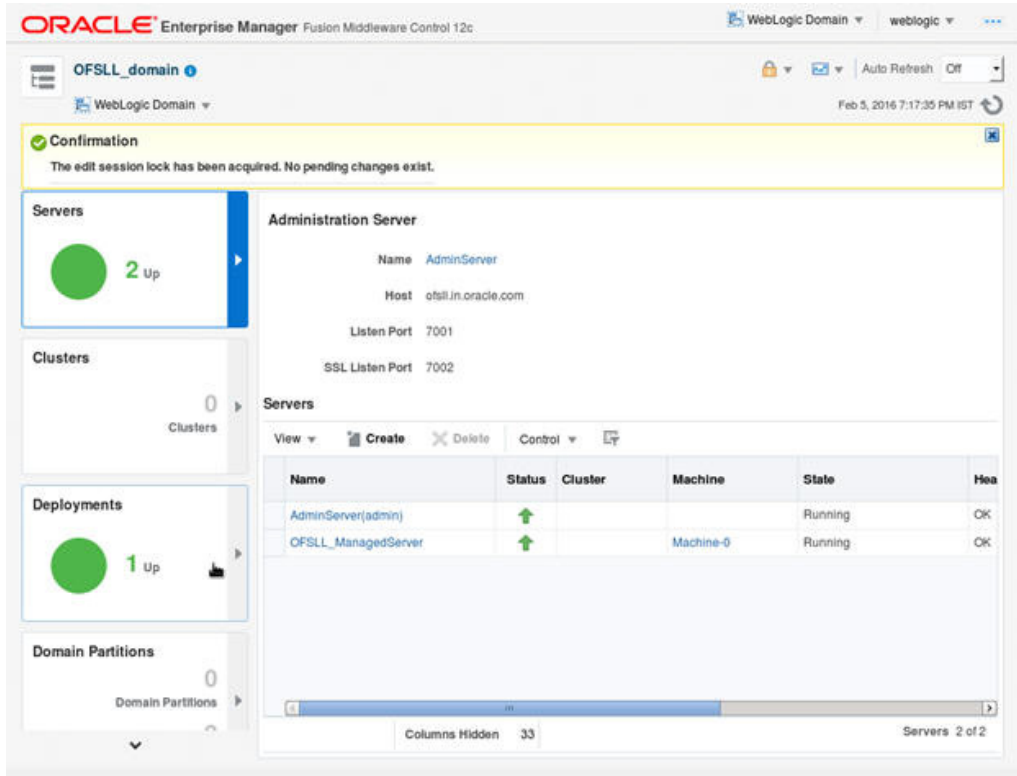
1. Login to the Oracle Enterprise Manager 12c console . (i.e. <http://hostname:port/em>)



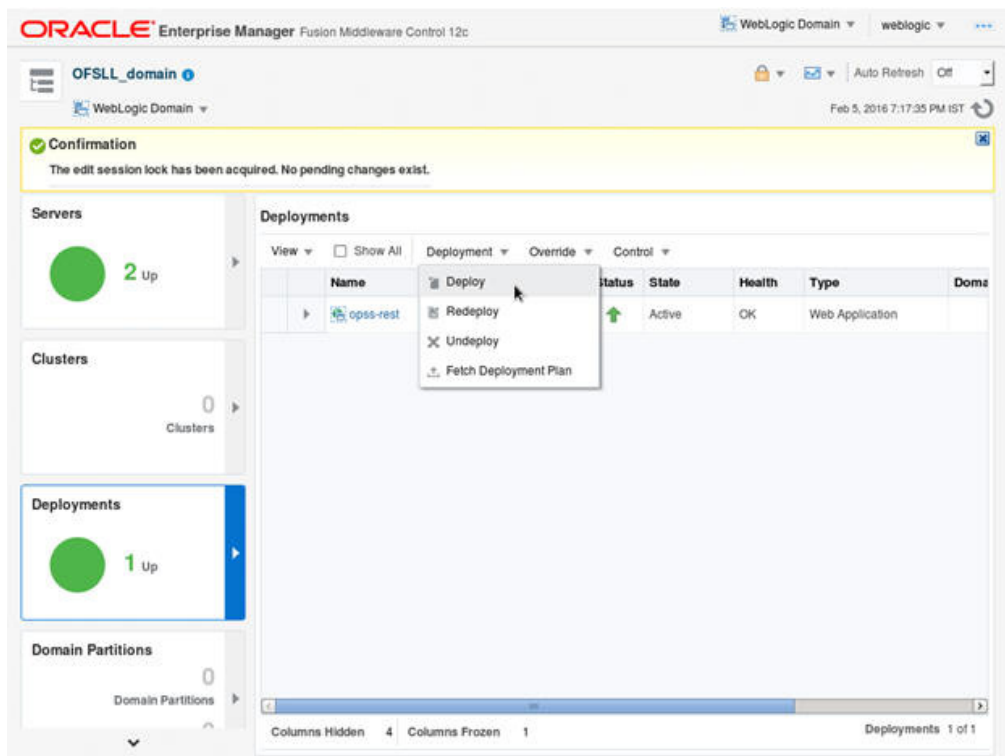
2. Click on 'Lock and Edit' as shown below.



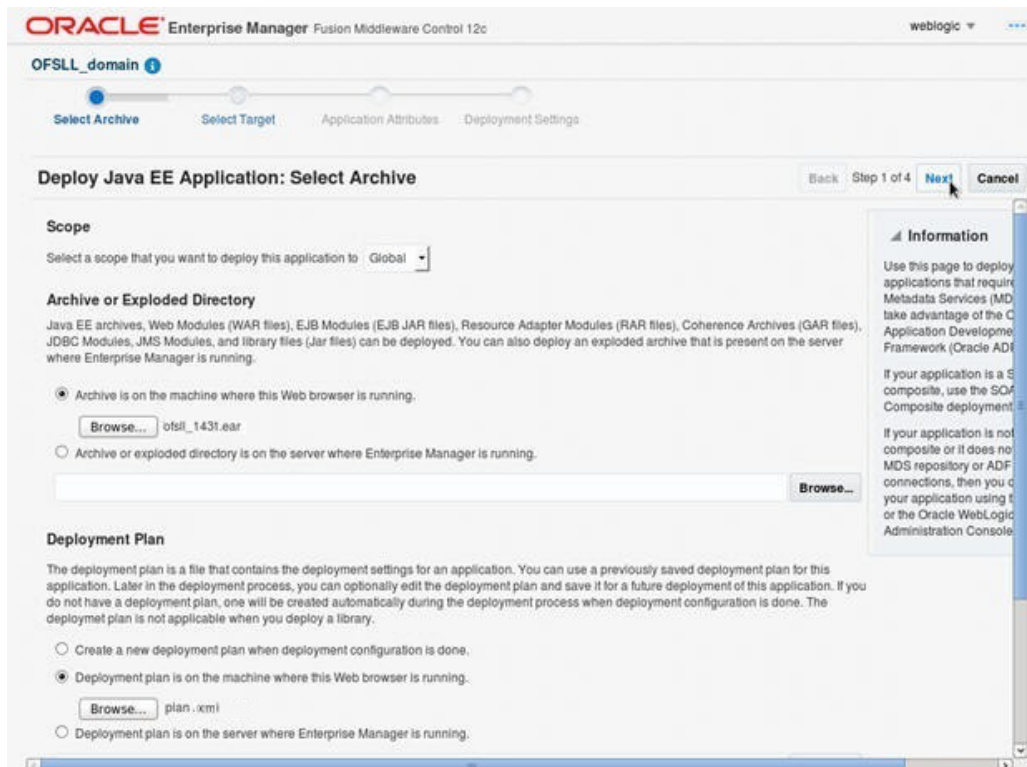
3. The following window is displayed.



4. Click on Deployments in the left panel. To deploy go to Deployments option in the menu as shown below.



- Click 'Choose File' button and select OFSLL application archive file i.e. ofsl_1431.ear. Choose the 'Deployment Plan' (if any).



Note

A deployment plan can be used to easily change an application's WebLogic Server configuration for a specific environment without modifying existing deployment descriptors.

Sample plan.xml

```
<deployment-plan xmlns="http://xmlns.oracle.com/weblogic/deployment-plan"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://xmlns.oracle.com/weblogic/deployment-pla
http://xmlns.oracle.com/weblogic/deployment-plan/1.0/deployment-plan.xsd">
  <application-name>ofssl_143</application-name>
  <variable-definition>
    <variable>
      <name>NewSessionValue</name>
      <value>30</value>
    </variable>
    <variable>
      <name>ofssl_DS_JNDIName</name>
      <value>jdbc/ofsslDBConnDS</value>
    </variable>
  </variable-definition>
  <module-override>
    <module-name>ofssl143.war</module-name>
    <module-type>war</module-type>
    <module-descriptor external="false">
      <root-element>weblogic-web-app</root-element>
      <uri>WEB-INF/weblogic.xml</uri>
      <variable-assignment>
        <name>ofssl_DS_JNDIName</name>
        <xpath>/weblogic-web-app/resource-description/[res-ref-name="jdbc/ofsslDBConnDS"]/jndi-name</xpath>
        <origin>planbased</origin>
      </variable-assignment>
    </module-descriptor>
    <module-descriptor external="false">
      <root-element>web-app</root-element>
      <uri>WEB-INF/web.xml</uri>
      <variable-assignment>
        <name>NewSessionValue</name>
        <xpath>/web-app/session-config/session-timeout</xpath>
      </variable-assignment>
    </module-descriptor>
  </module-override>
  <config-root>D:\temp</config-root>
</deployment-plan>
```

6. Click 'Next'. The following window is displayed.

ORACLE Enterprise Manager Fusion Middleware Control 12c

OFSSL_domain

Select Archive Select Target Application Attributes Deployment Settings

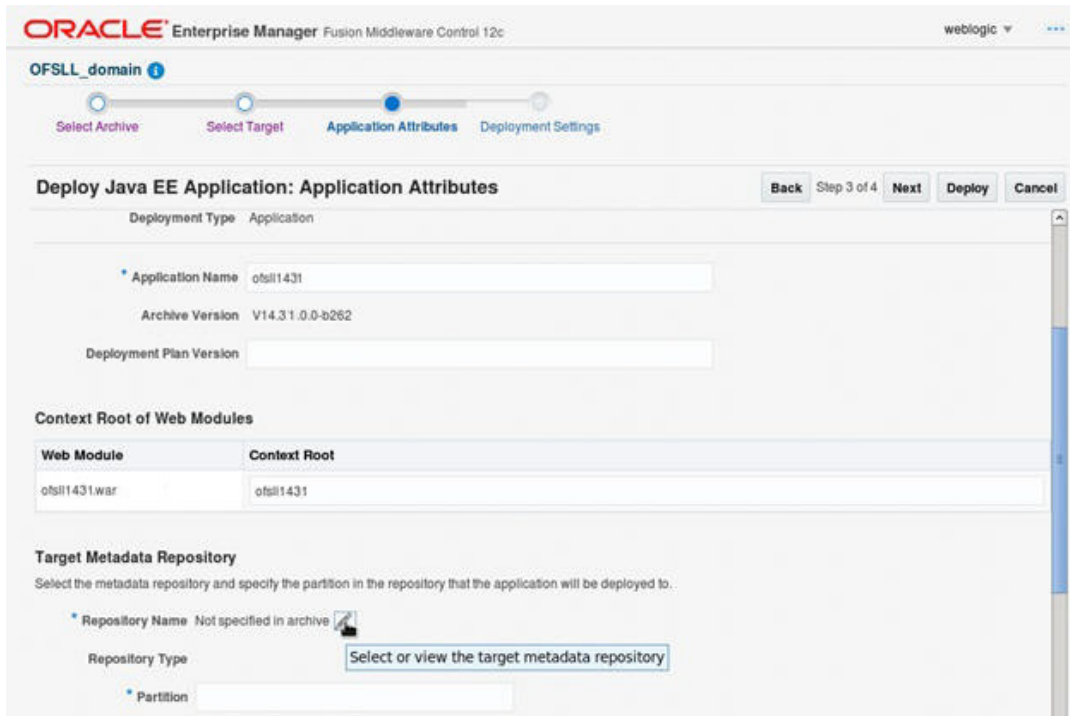
Deploy Java EE Application: Select Target

Back Step 2 of 4 Next Cancel

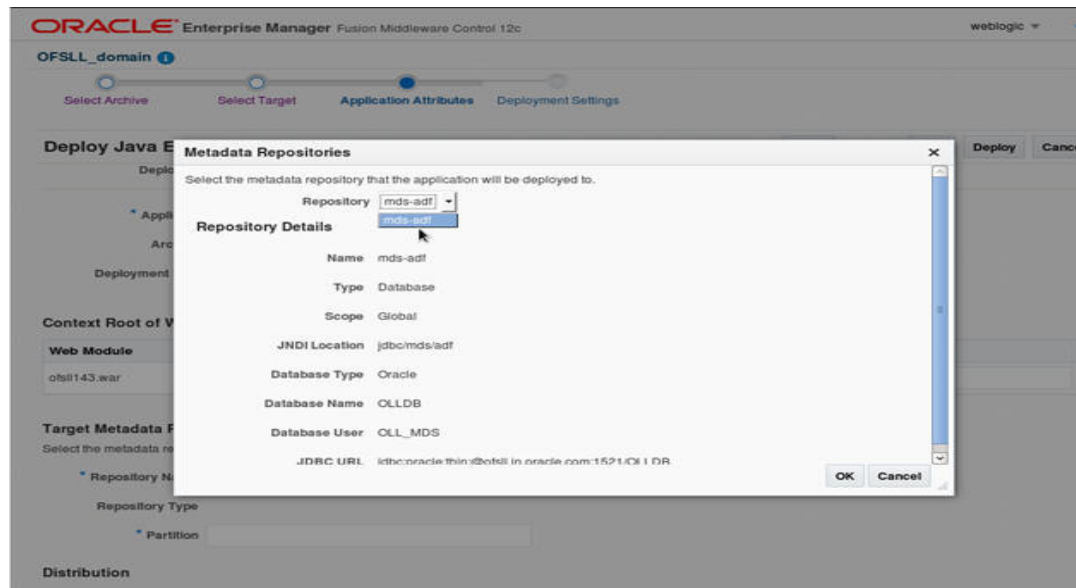
Select the WebLogic server or cluster that you want this application to be deployed to.

Select	Name	Type	Deployed Applications
<input type="checkbox"/>	AdminServer	Oracle WebLogic Server	...
<input checked="" type="checkbox"/>	OFSSL_ManagedServer	Oracle WebLogic Server	...

7. Check target server as per the requirement 'OFSSL_ManagedServer' and click 'Next'. The following window is displayed.



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



9. Select Repository as per requirement and click 'OK'.

ORACLE Enterprise Manager Fusion Middleware Control 12c

OFSLL_domain

Select Archive Select Target **Application Attributes** Deployment Settings

Deploy Java EE Application: Application Attributes

Archive Version V14.3.1.0.0-b262

Deployment Plan Version

Context Root of Web Modules

Web Module	Context Root
otssl1431.war	otssl1431

Target Metadata Repository

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

* Repository Name mds-adj

Repository Type Database

* Partition otssl1431

Distribution

Install and start application (servicing all requests)

Install and start application in administration mode (servicing only administration requests)

Install only. Do not start.

10. Enter Partition name as per the requirement and click 'Next'.

ORACLE Enterprise Manager Fusion Middleware Control 12c

OFSLL_domain

Select Archive Select Target Application Attributes **Deployment Settings**

Deploy Java EE Application: Deployment Settings

Hide Deployment Summary

Archive Type Java EE Application (EAR file)

Deployment Plan Create a new plan

Deployment Target OFSLL_ManagedServer

Scope Global

Deployment Type Application

Application Name otssl1431

Version V14.3.1.0.0-b262

Context Root otssl1431

Deployment Mode Install 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.

11. Click 'Deploy'. The following window is displayed



12. Click Close once the message 'Deploy operation completed' is displayed.

6. 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.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area displays the 'Settings for OFSSL_ManagedServer' page, specifically the 'General' tab. The 'SSL Listen Port Enabled' checkbox is checked, and the 'SSL Listen Port' is set to 7002. The 'Listen Port' is set to 7003. The 'Machine' is set to Machine-0 and the 'Cluster' is set to (Stand-Alone). The 'Name' is OFSSL_ManagedServer. The 'Template' is (No value specified). The 'Listen Address' is empty. The 'SSL Listen Port' is 7002. The 'Listen Port' is 7003. The 'Machine' is Machine-0. The 'Cluster' is (Stand-Alone). The 'Name' is OFSSL_ManagedServer. The 'Template' is (No value specified). The 'Listen Address' is empty. The 'SSL Listen Port Enabled' checkbox is checked. The 'Listen Port' is 7003. The 'SSL Listen Port' is 7002.

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

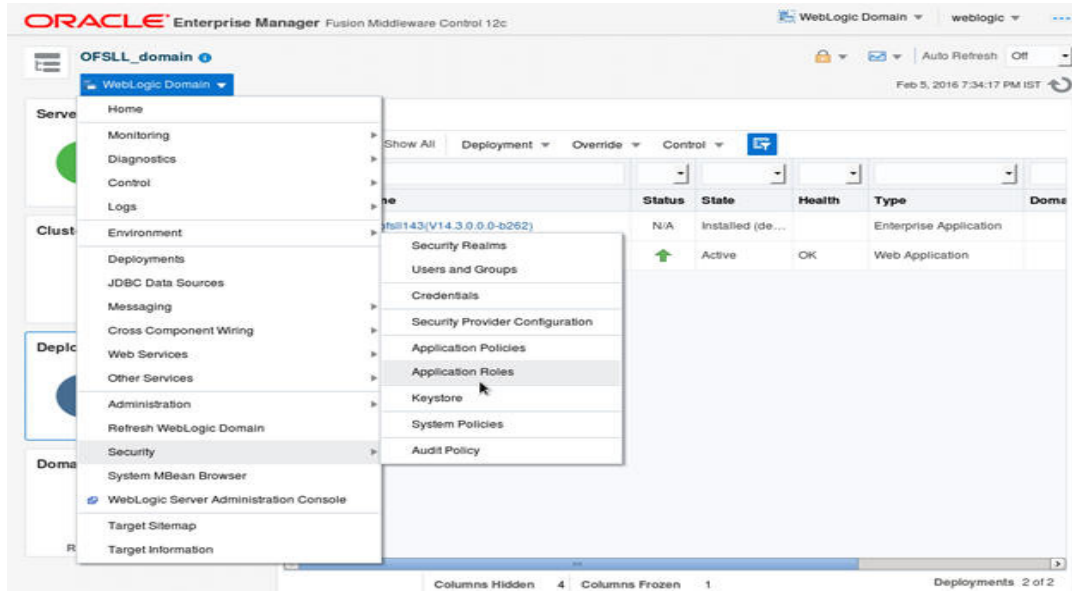
Note

It is recommended to disable http protocol.

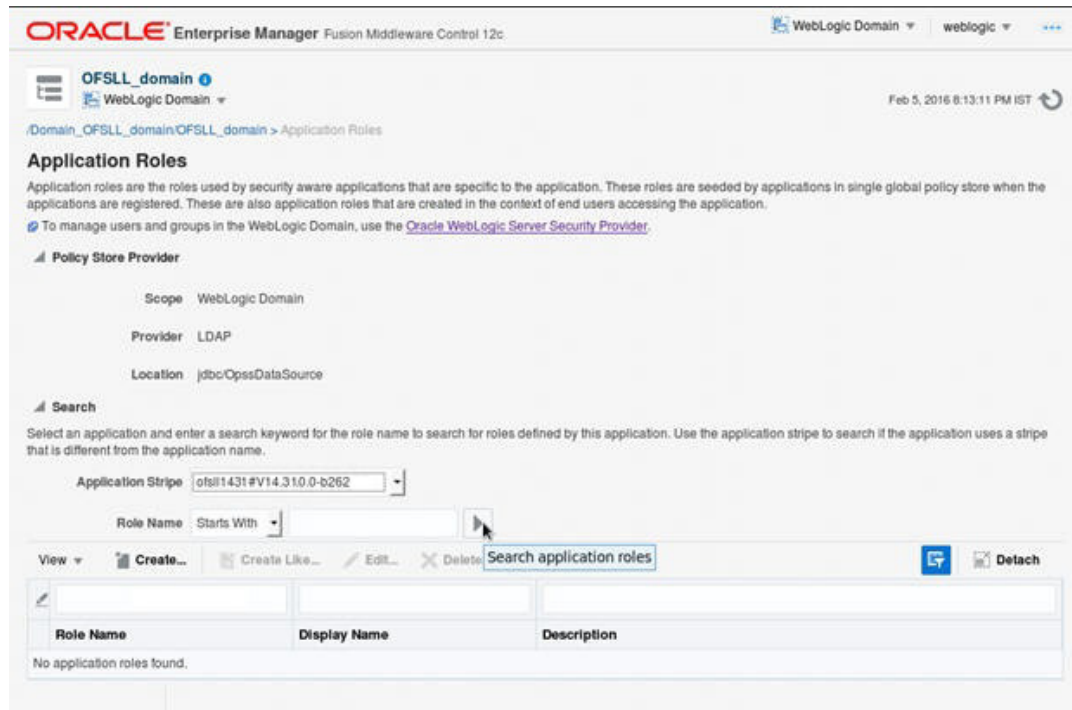
7. Mapping Enterprise Group with Application Role

Follow the below steps to add a user to the group

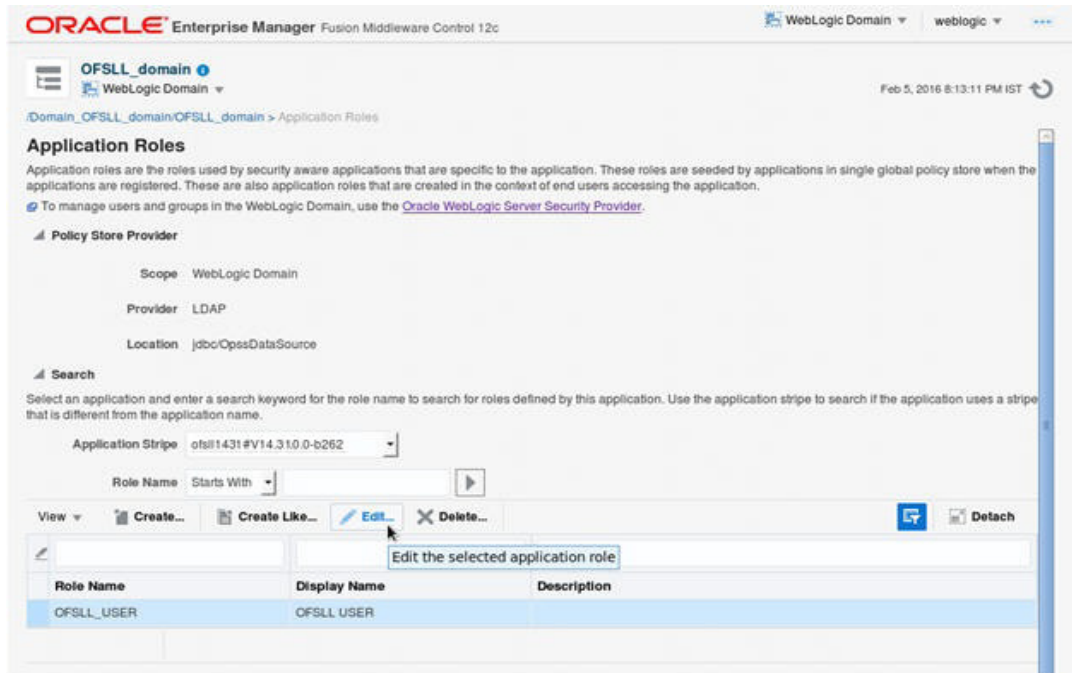
1. Login to Oracle Enterprise Manager 12c console (<http://hostname:port/em>).
2. Click WebLogic Domain > Security > Application Roles on the right panel.



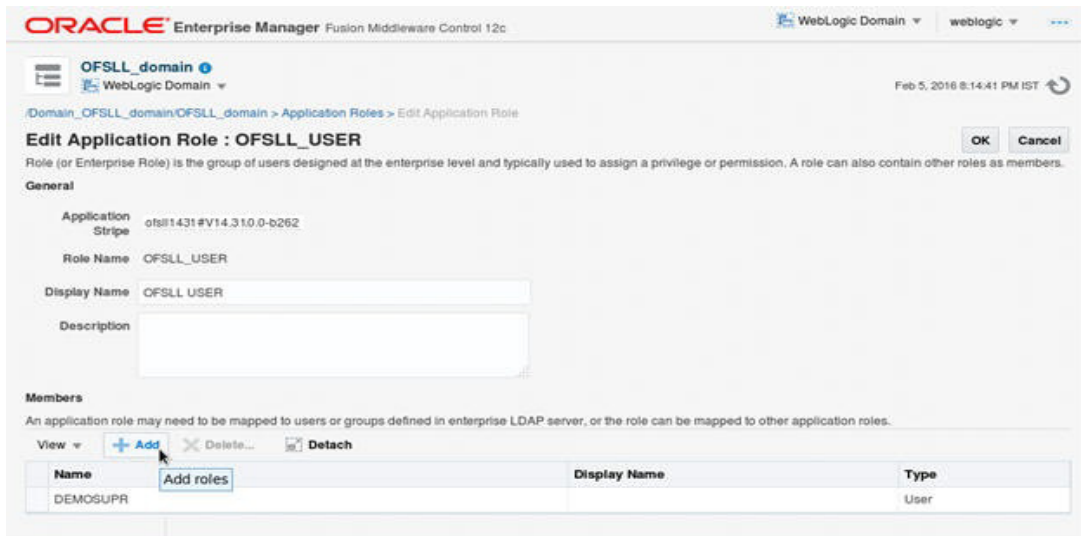
3. Select Application Stripe from the drop-down menu.
4. Click the arrow head button. Details of the existing Roles are displayed below:



- Select the 'Role Name'. Membership details of the selected Role Name are displayed under Membership for "role_name"..

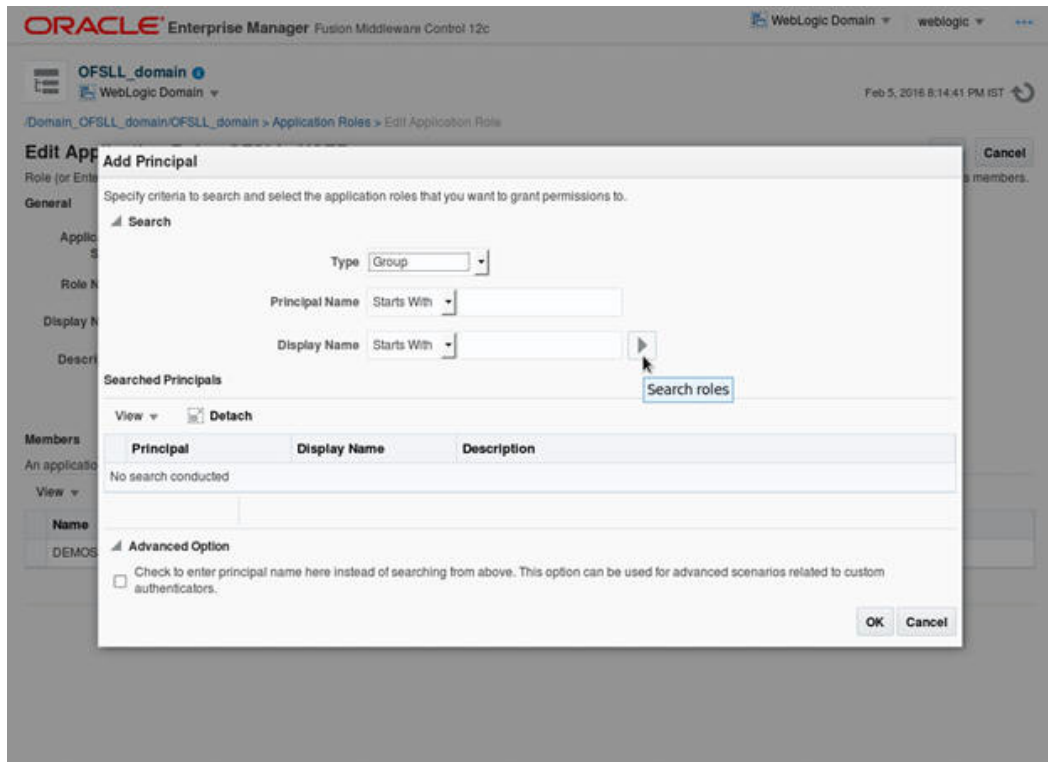


- Click 'Edit'. The following window is displayed.

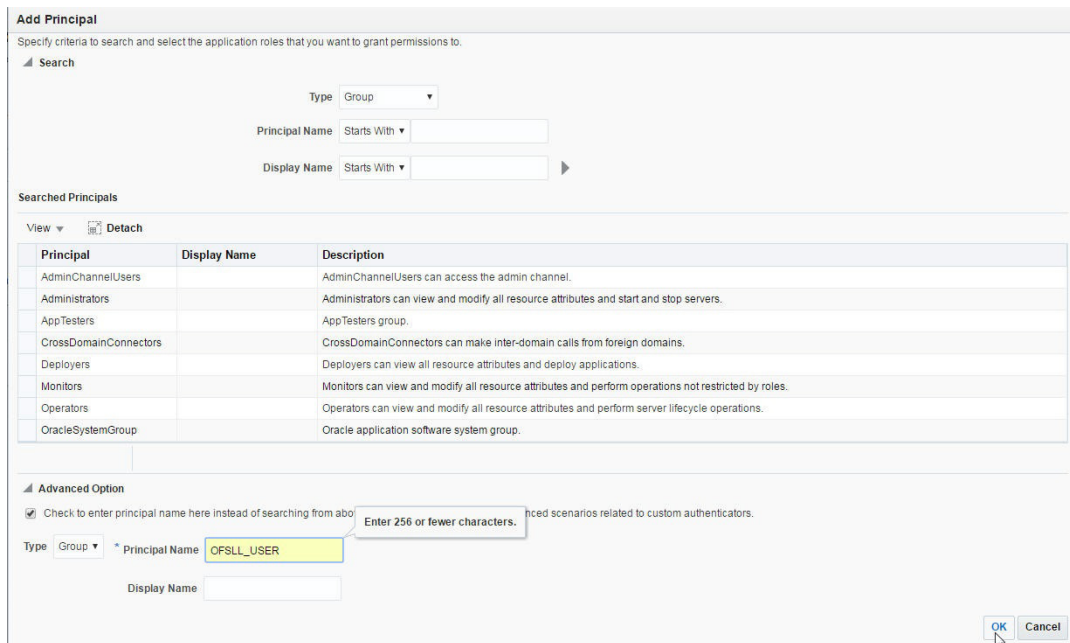


- Click 'Add'. Select type as Group. Click on the arrow head button.

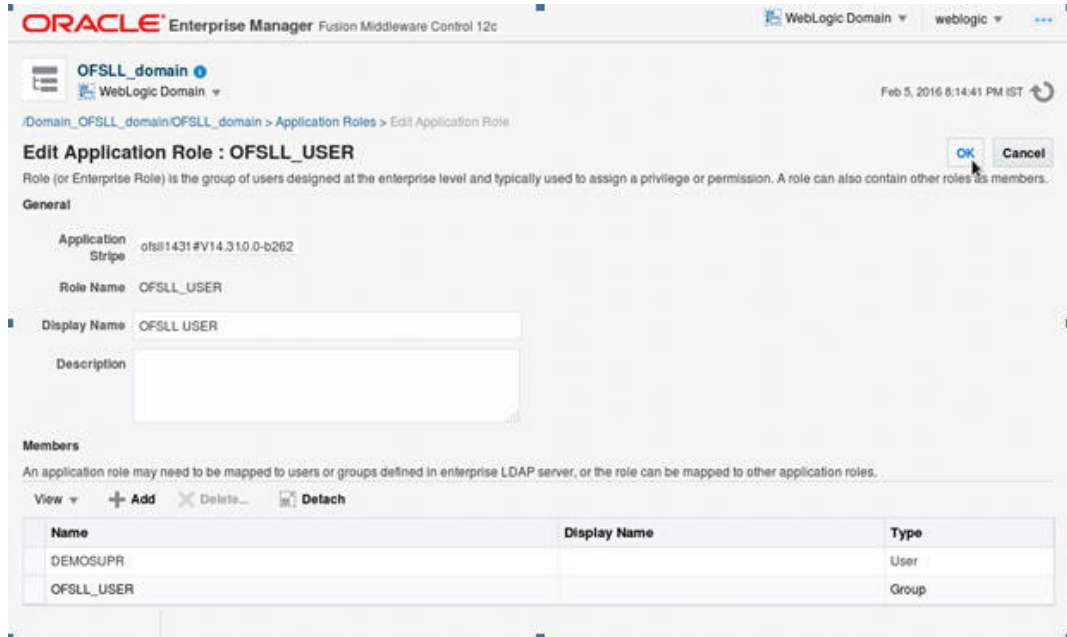
- Follow the given steps to select the Principal 'OFSSL_USER' to add and click OK. The following window is displayed.



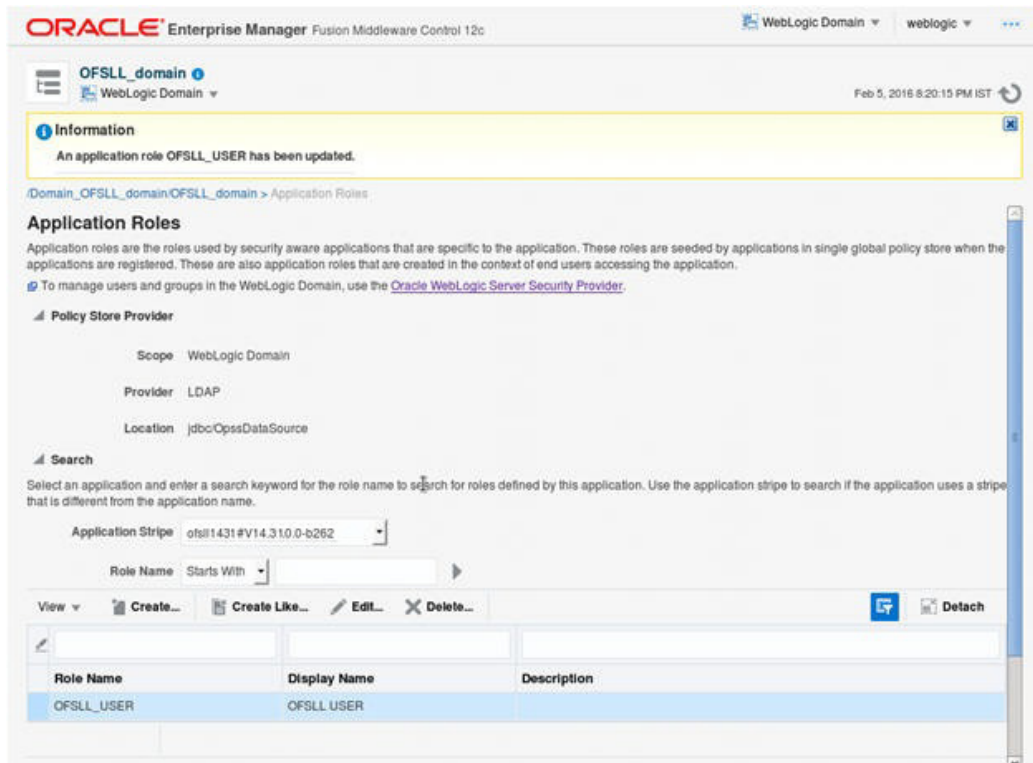
- Check the check box in Advanced options. Enter the name of Group manually.



10. Click 'OK'.

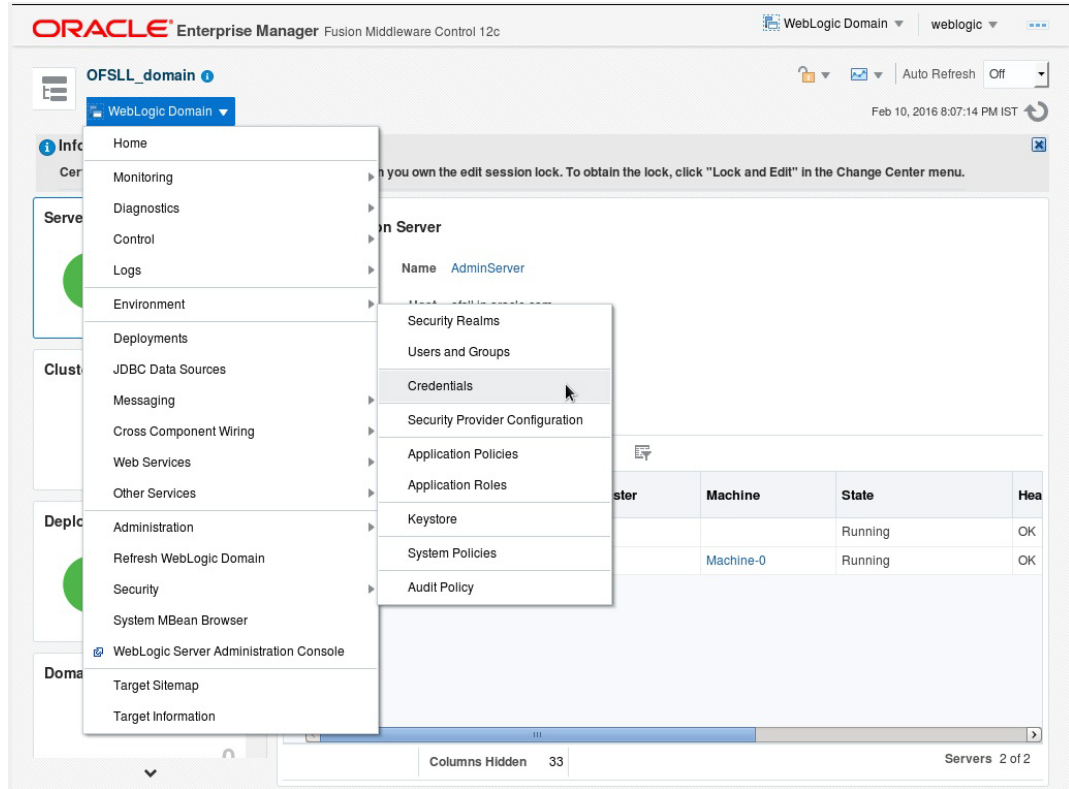


11. The following window is displayed with the confirmation message as 'The Application role of 'group_name' has been updated'.

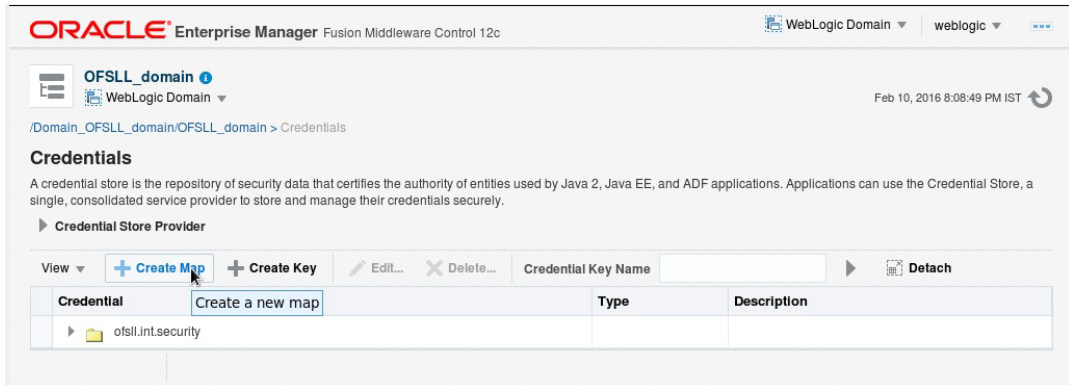


8. Configuring JNDI name for HTTP Listener

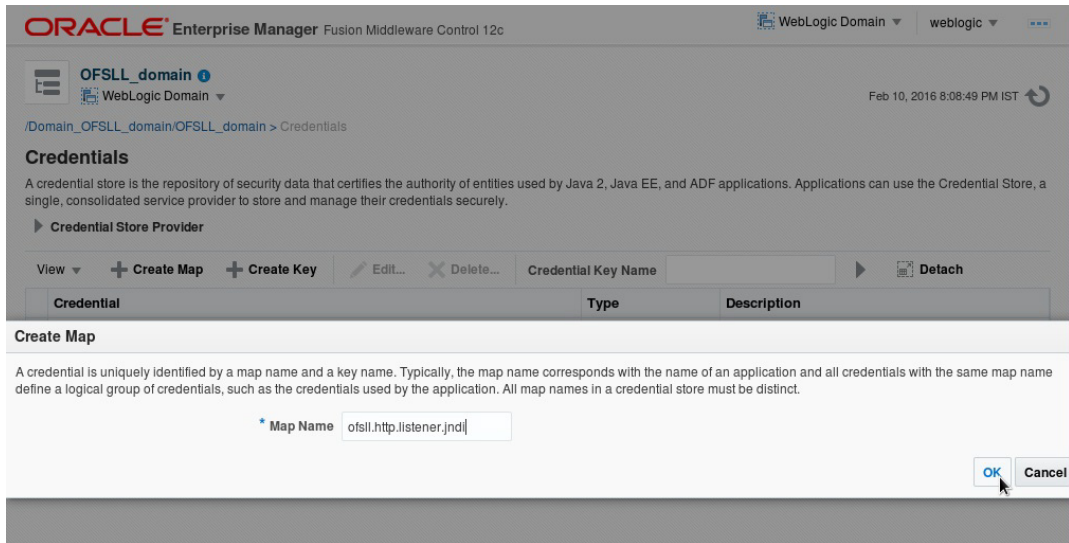
1. Click 'WebLogic Domain' on the right panel. Select Security > Credentials.



2. Click 'Credentials'. The following window is displayed.

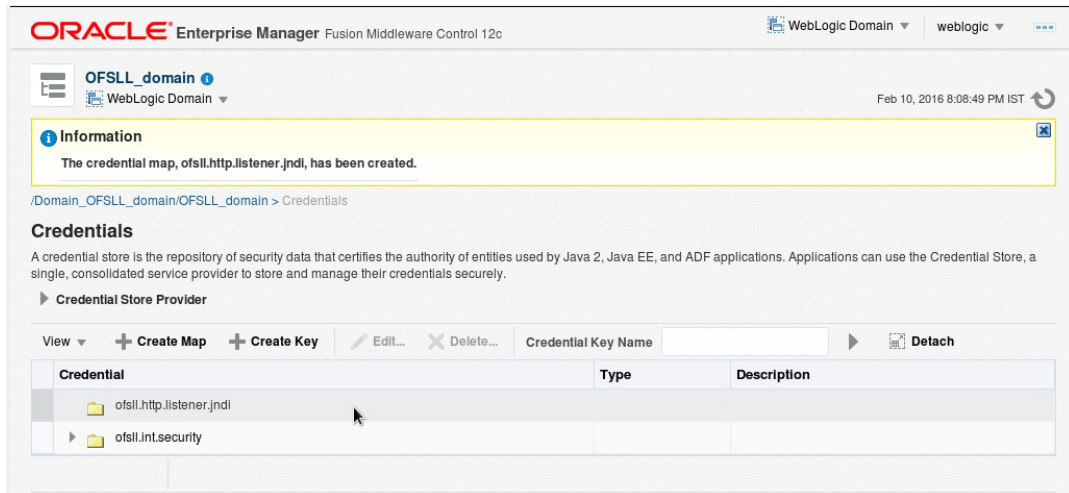


3. Click 'Create Map'. The following window is displayed.

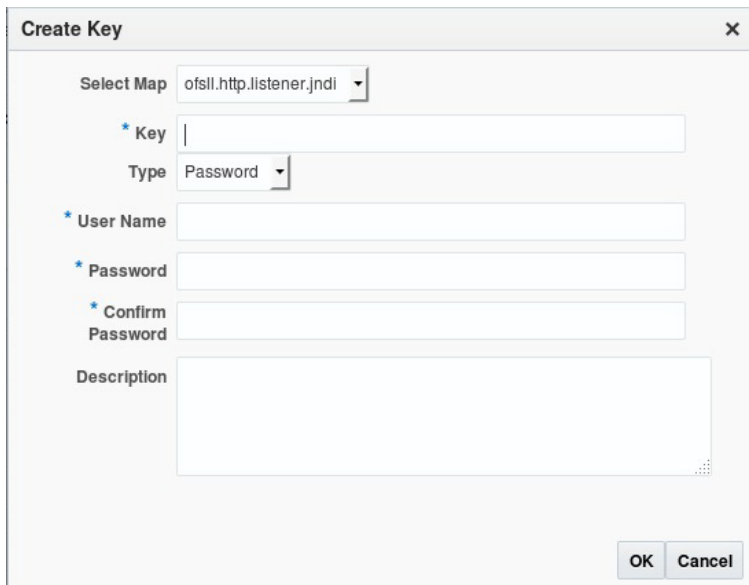


4. Enter Map name as 'ofsll.http.listener.jndi'.

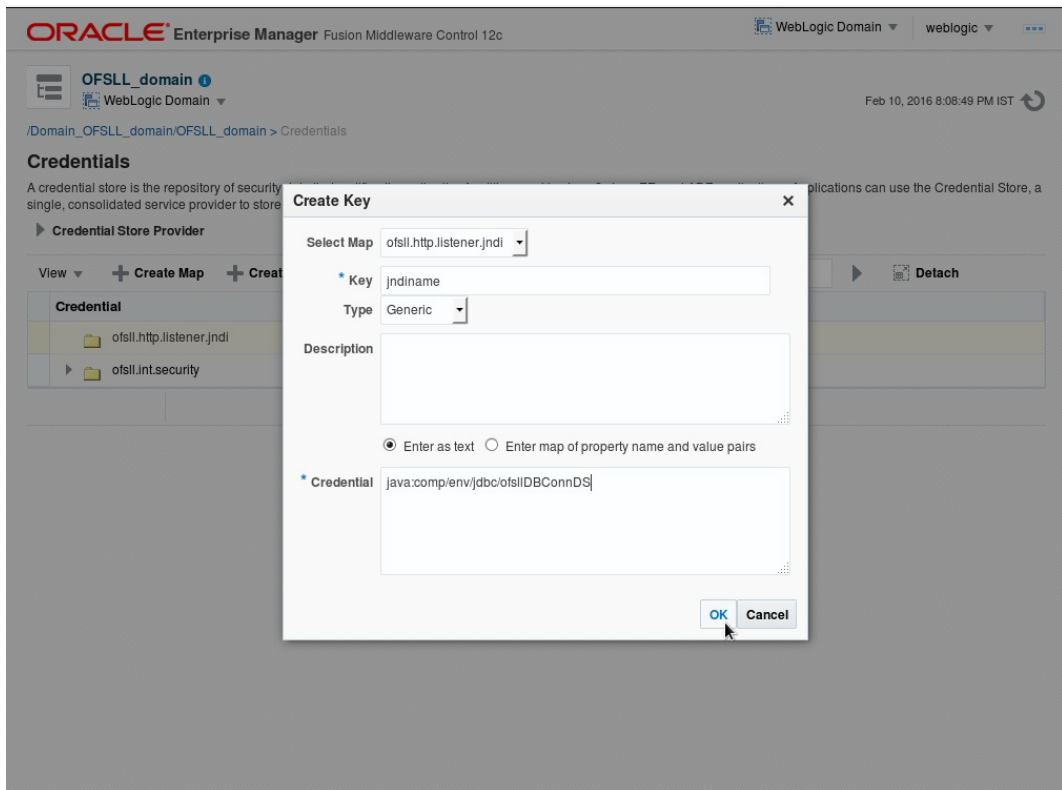
5. Click 'OK'. The following window is displayed.



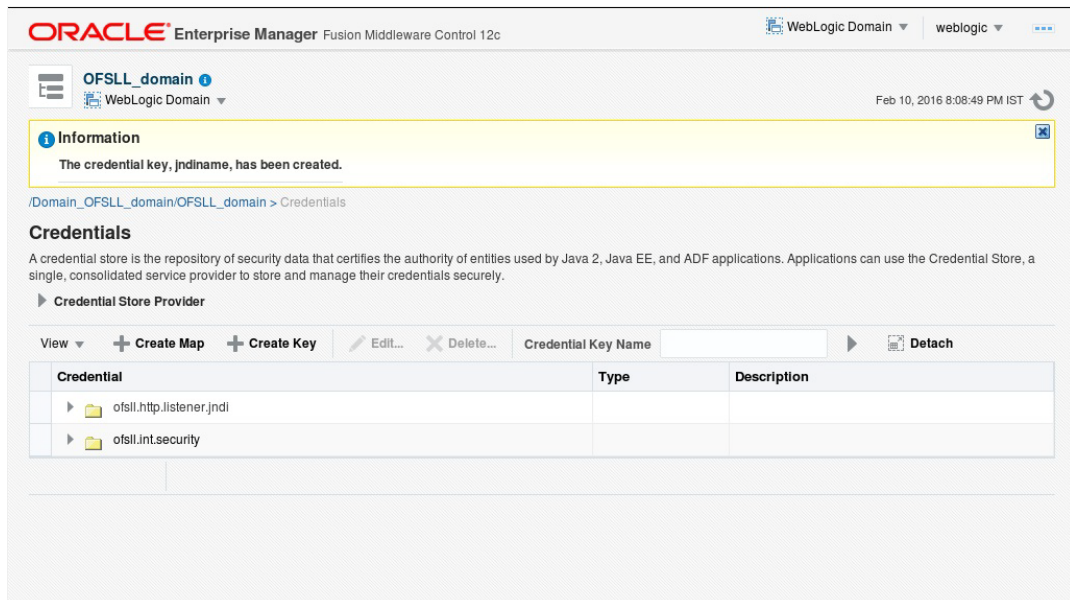
6. Click 'Create Key' Button. The following window is displayed.



7. Enter the following details as per your requirement.
 - Key: jndiname
 - Credential: java:comp/env/jdbc/ofslIDBConnDS
 - Type:Generic



8. Click 'OK'. The following window is displayed.



9. Configure AQ-JMS Bridge

The following steps are to be performed to configure the AQ-JMS Bridge through the WebLogic Console:

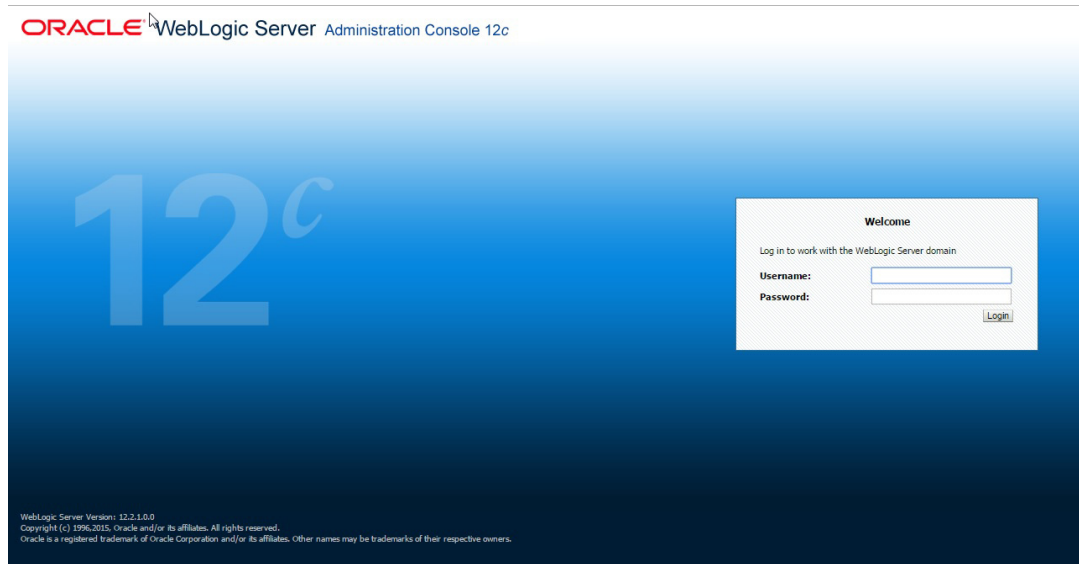
- Create Data Sources for AQ-JMS Bridge
- Configure MDB Flow
- AQ-JMS Topic Setup
- Create Credentials and System Policies
- Deploy MDB EJB

Note

Ensure that MDB EJB is not configured and deployed (i.e. OfstlAppQueue.ear deployment) on the same server on which the other WebServices are deployed.

9.1 Create Data Sources for AQ-JMS Bridge

1. Login to Oracle Weblogic 12c console (<http://hostname:port/console>).



2. On successful login, the following window is displayed.

3. Click Domain Name > Services > Data Sources. The following window is displayed.

Name	Type	JNDI Name	Targets	Scope	Domain Partitions
LocalSvcTbDataSource	Generic	jdbc/LocalSvcTbDataSource	AdminServer	Global	
OFSL	Generic	jdbc/ofslDBConnDS	AdminServer, OFSLREL_ManagedServer	Global	
opss-audit-DBDS	Generic	jdbc/AuditAppendDataSource	AdminServer, OFSLREL_ManagedServer	Global	
opss-audit-viewDS	Generic	jdbc/AuditViewDataSource	AdminServer, OFSLREL_ManagedServer	Global	
opss-data-source	Generic	jdbc/OpasDataSource	AdminServer, OFSLREL_ManagedServer	Global	

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

Oracle WebLogic Server Administration Console 12c

Home > Summary of Services > Summary of JDBC Data Sources

Welcome, weblogic | Connected to: OFSLREL_domain

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
OFSLREL_domain
Domain Partitions
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics

How do I...?

- Create JDBC generic data sources
- Create JDBC GridLink data sources
- Create JDBC multi data sources
- Create UCP data sources
- Create Proxy data sources

System Status
Health of Running Servers

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

Summary of JDBC Data Sources
Configuration | Monitoring

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.

Customize this table
Data Sources (Filtered - More Columns Exist)

Type	JNDI Name	Targets	Scope	Domain Partitions
Generic	jdbc/LocalSvcTbiDataSource	AdminServer	Global	
Generic	jdbc/ofallDBConnDS	AdminServer, OFSLREL_ManagedServer	Global	
Generic	jdbc/AuditAppendDataSource	AdminServer, OFSLREL_ManagedServer	Global	
Generic	jdbc/AuditViewDataSource	AdminServer, OFSLREL_ManagedServer	Global	
Generic	jdbc/OpsdsDataSource	AdminServer, OFSLREL_ManagedServer	Global	

Showing 1 to 5 of 5 Previous | Next

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- The following window is displayed.

Create a New JDBC Data Source

Back | Next | Finish | Cancel

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:

What scope do you want to create your data source in ?

Scope:

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

JNDI Name:

What database type would you like to select?

Database Type:

Back | Next | Finish | Cancel

- Specify the following details:
 - Enter Data source Name
 - Enter the JNDI Name as 'jdbc/aqjmsdb'.

Note

If required, you can specify any other JNDI name, but however ensure to use the same JNDI name during other configuration steps.

- Select 'Oracle' as Database Type.

7. Click 'Next'. The following window is displayed.

The screenshot shows a dialog box titled "Create a New JDBC Data Source" with a "JDBC Data Source Properties" tab. At the top, there are four buttons: "Back", "Next", "Finish", and "Cancel". Below the title bar, the text reads: "JDBC Data Source Properties" and "The following properties will be used to identify your new JDBC data source." Underneath, the "Database Type:" is set to "Oracle". A question follows: "What database driver would you like to use to create database connections? Note: * indicates that the driver is explicitly supported by Oracle WebLogic Server." The "Database Driver:" dropdown menu is set to "*Oracle's Driver (Thin XA) for Service connections; Versions:Any". At the bottom, there are four buttons: "Back", "Next", "Finish", and "Cancel".

8. Select the Database Driver 'Oracle's Driver(Thin XA) for Services connections;Versions:Any'.

9. Click 'Next'. The following window is displayed.

The screenshot shows a dialog box titled "Create a New JDBC Data Source" with a "Transaction Options" tab. At the top, there are four buttons: "Back", "Next", "Finish", and "Cancel". Below the title bar, the text reads: "Transaction Options" and "You have selected an XA JDBC driver to use to create database connection in your new data source. The data source will support global transactions and use the 'Two-Phase Commit' global transaction protocol. No other transaction configuration options are available." At the bottom, there are four buttons: "Back", "Next", "Finish", and "Cancel".

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

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:

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

Host Name:

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

Port:

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

Database User Name:

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

Password:

Confirm Password:

Additional Connection Properties:

oracle.jdbc.DRCPConnectionClass:

11. Enter the Database details.

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

The screenshot shows the 'Create a New JDBC Data Source' dialog box, specifically the 'Test Database Connection' step. The dialog has a title bar and a set of navigation buttons: 'Test Configuration', 'Back', 'Next', 'Finish', and 'Cancel'. The main content area contains the following text and fields:

- 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.xa.client.OracleXADataSource
- What is the URL of the database to connect to? The format of the URL varies by JDBC driver.
URL: jdbc:oracle:thin:@//ofssl.oracle.com:1521/OFSLLDDB
- What database account user name do you want to use to create database connections?
Database User Name: OFSLREL
- 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)
Password: [Masked with dots]
- Confirm Password:** [Masked with dots]
- What are the properties to pass to the JDBC driver when creating database connections?
Properties:
user=OFSLREL

13. Click 'Test Configuration'. On completion, displays a confirmation message as 'Connection test succeeded'.

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

The screenshot shows the 'Create a New JDBC Data Source' dialog box, specifically the 'Select Targets' step. The dialog has a title bar and a set of navigation buttons: 'Back', 'Next', 'Finish', and 'Cancel'. The main content area contains the following text and table:

- 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 deployed. You will need to deploy the data source at a later time.
- Servers**

<input type="checkbox"/> AdminServer
<input checked="" type="checkbox"/> OFSLREL_ManagedServer
<input type="checkbox"/> WebService_ManagedServer
- Navigation buttons: 'Back', 'Next', 'Finish', 'Cancel'

15. Select target Server as 'OFSLREL_ManagedServer'.

16. Click 'Finish' to activate the changes.

Update the following parameters in JDBC data source connection pool:

1. Select Services > Data Sources > select the AQ_JMS_DB data source > Connection Pool.
2. Initial capacity and Maximum capacity is defaulted to 30, if the number of concurrent users are more this needs to be increased.

9.2 Configure MDB Flow

To configure the MDB Flow from Weblogic Console, do the following:

1. Login to Oracle Weblogic 12c console (<http://hostname:port/console>).
2. On the left pane, click 'Services'.
3. In Messaging tree click 'JMS Modules'. The following window is displayed.

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main content area is titled "Summary of JMS Modules" and contains the following elements:

- Change Center:** A panel on the left with "View changes and restarts" and "Release Configuration" buttons.
- Domain Structure:** A tree view on the left showing the hierarchy: OFSLRREL_domain > Domain Partitions > Environment > Deployments > Services > Messaging > JMS Modules.
- System Status:** A panel at the bottom left showing the health of running servers: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (2).
- Summary of JMS Modules:** The main content area with a "Customize this table" link and a table titled "JMS Modules".

The "JMS Modules" table is currently empty, displaying "Showing 0 to 0 of 0" and "There are no items to display".

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4. Click 'New'. The following screen is displayed.

Create JMS System Module

Back Next Finish Cancel

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

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources.

* Indicates required fields

What would you like to name your System Module?

* Name:

Would you like this new JMS System Module to be restricted to a specific resource group template or resource group ?

Scope:

What would you like to name the descriptor file name? If you do not provide a name, a default will be assigned.

Descriptor File Name:

Where would like to place the descriptor for this System Module, relative to the jms configuration sub-directory of your domain?

Location In Domain:

Back Next Finish Cancel

5. Specify the following details:

- Name: AQJMSModule
- Descriptor File Name: AQJMSModule

6. Click 'Next'. The following window is displayed.

Create JMS System Module

Back Next Finish Cancel

The following properties will be used to target your new JMS system module.

Use this page to select the server or cluster on which you would like to deploy this JMS system module. You can reconfigure targets later if you wish.

Targets :

Servers
<input type="checkbox"/> AdminServer
<input checked="" type="checkbox"/> OFSLLREL_ManagedServer
<input type="checkbox"/> WebService_ManagedServer

Back Next Finish Cancel

7. Select target servers as 'OFSLLREL_ManagedServer'.

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

Create JMS System Module

Back Next **Finish** Cancel

Add resources to this JMS system module

Use this page to indicate whether you want to immediately add resources to this JMS system module after it is created. JMS resources include queues, topics, connection factories, etc.

Would you like to add resources to this JMS system module?

Back Next **Finish** Cancel

9. Click 'Finish' to activate the changes. The following window is displayed.

Summary of JMS Modules

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources.

This page summarizes the JMS system modules that have been created for this domain.

[Customize this table](#)

JMS Modules

New Delete Showing 1 to 1 of 1 Previous | Next

<input type="checkbox"/>	Name ↕	Type	Scope	Domain Partitions
<input type="checkbox"/>	AQJMSModule	JMSSystemResource	Global	

New Delete Showing 1 to 1 of 1 Previous | Next

10. Click on the JMS Module that you created. The following window is displayed.

Settings for AQJMSModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: AQJMSModule The name of this JMS system module. [More Info...](#)

Scope: Global Specifies if the JMS system module is accessible within the domain, a partition, or a resource group template. [More Info...](#)

Descriptor File Name: AQJMSModule-jms.xml The name of the JMS module descriptor file. [More Info...](#)

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.

[Customize this table](#)

Summary of Resources

New Delete Showing 0 to 0 of 0 Previous | Next

<input type="checkbox"/>	Name ↕	Type	JNDI Name	Subdeployment	Targets
There are no items to display					

New Delete Showing 0 to 0 of 0 Previous | Next

11. Click 'New' in 'Summary of Resources' section. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

Choose the type of resource you want to create.

Use these pages to create resources in a JMS system module, such as queues, topics, templates, and connection factories.

Depending on the type of resource you select, you are prompted to enter basic information for creating the resource. For targetable resources, like stand-alone queues and topics, connection factories, distributed queues and topics, foreign servers, and JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You can also associate targetable resources with subdeployments, which is an advanced mechanism for grouping JMS module resources and the members to server resources.

<input type="radio"/> Connection Factory	Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info...
<input type="radio"/> Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info...
<input type="radio"/> Topic	Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info...
<input type="radio"/> Distributed Queue	Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info...
<input type="radio"/> Distributed Topic	Defines a set of topics that are distributed on multiple JMS servers, but which are accessible as a single, logical topic to JMS clients. More Info...
<input checked="" type="radio"/> Foreign Server	Defines foreign messaging providers or remote WebLogic Server instances that are not part of the current domain. More Info...

12. Select 'Foreign Server' as the option for type of resource to be created and click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

Foreign Server Properties

The following properties will be used to identify your new foreign server. The current module is AQJMSModule.

* Indicates required fields

* **Name:**

Back Next Finish Cancel

13. Specify the name of the Foreign Server as 'AQForeignServer' and click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish **Advanced Targeting** Cancel

The following properties will be used to target your new JMS system module resource

Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then click **Advanced Targeting** to use the subdeployment mechanism for targeting this resource.

The following JMS module targets will be used as the default targets for your new JMS system module resource. If the module's targets are changed, this resource will also be retargeted appropriately.

Targets :

Servers
<input checked="" type="checkbox"/> OFSLREL_ManagedServer

Back Next Finish **Advanced Targeting** Cancel

14. Click 'Finish' and activate the changes. The following window is displayed.

Settings for AQJMSModule

Configuration | Subdeployments | Targets | Security | Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: AQJMSModule
The name of this JMS system module. [More Info...](#)

Scope: Global
Specifies if the JMS system module is accessible within the domain, a partition, or a resource group template. [More Info...](#)

Descriptor File Name: AQJMSModule-jms.xml
The name of the JMS module descriptor file. [More Info...](#)

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.

[Customize this table](#)

Summary of Resources

New Delete Showing 1 to 1 of 1 Previous | Next

<input type="checkbox"/>	Name ↕	Type	JNDI Name	Subdeployment	Targets
<input type="checkbox"/>	AQForeignServer	Foreign Server	N/A	Default Targeting	OFSLLREL_ManagedServer

New Delete Showing 1 to 1 of 1 Previous | Next

15. Click on the Foreign Server that you created. The following window is displayed.

Settings for AQForeignServer

Configuration Subdeployment Notes

General Destinations Connection Factories

Save

A foreign server represents a JNDI provider that resides outside a WebLogic Server. It contains information that allows WebLogic Server to reach the remote JNDI provider. This way, a number of connection factory and destination objects (queues or topics) can be defined on one JNDI directory. Use this page to configure a foreign server.

Name: AQForeignServer The name of this foreign server. [More Info...](#)

JNDI Initial Context Factory: oracle.jms.AQjmsInitialContextFactory The name of the class that must be instantiated to access the JNDI provider. This class name depends on the JNDI provider and the vendor that are being used. [More Info...](#)

JNDI Connection URL: The URL that WebLogic Server will use to contact the JNDI provider. The syntax of this URL depends on which JNDI provider is being used. For WebLogic JMS, leave this field blank if you are referencing WebLogic JMS objects within the same cluster. [More Info...](#)

JNDI Properties Credential: Any Credentials that must be set for the JNDI provider. These Credentials will be part of the properties will be passed directly to the constructor for the JNDI provider's InitialContext class. Note: For secure credential management, use the Credential field. Using the Properties field results in the credential being stored and displayed as originally entered [More Info...](#)

Confirm JNDI Properties Credential:

JNDI Properties: Any additional properties that must be set for the JNDI provider. These properties will be passed directly to the constructor for the JNDI provider's InitialContext class. [More Info...](#)

datasource=jdbc/aqjmsdb

Default Targeting Enabled Specifies whether this JMS resource defaults to the parent module's targeting or uses the subdeployment targeting mechanism. [More Info...](#)

Save

16. Specify the following details:

- Enter JNDI Initial Context Factory as 'oracle.jms.AQjmsInitialContextFactory'.
- JNDI Properties as 'datasource=jdbc/aqjmsdb'.
- Ensure 'Default Targeting Enabled' option is selected.

17. Click 'Save'.

18. Select 'Destinations' Tab and click 'New' to create new destination. The following window is displayed.

Create a New Foreign JMS Destination

OK Cancel

Foreign Destination Properties

The following properties will be used to identify your new foreign destination.

* Indicates required fields

* Name: AQJMSQueue

Local JNDI Name: /jms/aq/OfsllQueue

Remote JNDI Name: Queues/OFSLL_OUTBOUND_Q x

OK Cancel

19. Specify the following details:

- Name: AQJMSQueue
- LocalJNDI Name: /jms/aq/OfsllQueue
- Remote JNDI Name: Queues/OFSLL_OUTBOUND_Q

20. Click 'OK' and save the changes.

21. Select 'Connection Factories' Tab and click 'New' to add new connection factory. The following window is displayed.

Create a New Foreign JMS Connection Factory

OK Cancel

Foreign Connection Factory Properties

The following properties will be used to identify your new foreign connection factory.

* Indicates required fields

* Name: AQofsllCF x

Local JNDI Name: /jms/aq/OfsllCF

Remote JNDI Name: XAQueueConnectionFactory

OK Cancel

22. Specify the following details:

- Name: AQofsllCF
- Local JNDI Name: /jms/aq/OfsllCF
- Remote JNDI Name: XAQueueConnectionFactory

23. Click 'OK' and save the changes.

9.3 AQ-JMS Topic Setup

AQ-JMS Topic Bridge facilitates for group publishing to set of subscribed users. In a configured setup, a published message is sent to all the interested subscribers. Accordingly zero to many subscribers will receive a copy of the same message.

9.3.1 Create AQ-JMS Topic Bridge

To configure the AQ JMS Topic from Weblogic console, do the following:

1. Login to Oracle Weblogic 12c console (<http://hostname:port/console>).
2. On the left pane, select Services > Messaging > JMS Modules. The following window is displayed.

Summary of JMS Modules

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources.

This page summarizes the JMS system modules that have been created for this domain.

[Customize this table](#)

JMS Modules

New Delete Showing 1 to 2 of 2 Previous | Next

<input type="checkbox"/>	Name ↕	Type	Scope	Domain Partitions
<input type="checkbox"/>	AQJMSModule	JMSSystemResource	Global	

New Delete Showing 1 to 2 of 2 Previous | Next

3. Click 'AQJMSModule'. The following window is displayed.

Settings for AQJMSModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: AQJMSModule The name of this JMS system module

Scope: Global Specifies if the JMS system module is resource group template. [More Inf](#)

Descriptor File Name: jms/aqjmsmodule-jms.xml The name of the JMS module descrip

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templa distributed destinations, foreign servers, and store-and-forward parameters.

[Customize this table](#)

Summary of Resources

New Delete

<input type="checkbox"/>	Name ↕	Type	JNDI Name	Subdeployment
<input type="checkbox"/>	AQForeignServer	Foreign Server	N/A	Default Targeting

- In the Summary of Resources section, click 'New'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

Choose the type of resource you want to create.

Use these pages to create resources in a JMS system module, such as queues, topics, templates, and connection factories.

Depending on the type of resource you select, you are prompted to enter basic information for creating the resource. For targetable resources, like stand-alone queues and topics, connection factories, distributed queues and topics, foreign servers, and JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You can also associate targetable resources with subdeployments, which is an advanced mechanism for grouping JMS module resources and the members to server resources.

<input type="radio"/> Connection Factory	Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info...
<input type="radio"/> Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info...
<input type="radio"/> Topic	Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info...
<input type="radio"/> Distributed Queue	Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info...
<input type="radio"/> Distributed Topic	Defines a set of topics that are distributed on multiple JMS servers, but which are accessible as a single, logical topic to JMS clients. More Info...
<input checked="" type="radio"/> Foreign Server	Defines foreign messaging providers or remote WebLogic Server instances that are not part of the current domain. More Info...

- Select 'Foreign Server' as the option for type of resource to be created and click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

Foreign Server Properties

The following properties will be used to identify your new foreign server. The current module is AQJMSModule.

* Indicates required fields

* **Name:**

Back Next Finish Cancel

- Specify the name of the Foreign Server as 'OfsllTopicFS' and click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Advanced Targeting Cancel

The following properties will be used to target your new JMS system module resource

Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then click **Advanced Targeting** to use the subdeployment mechanism for targeting this resource.

The following JMS module targets will be used as the default targets for your new JMS system module resource. If the module's targets are changed, this resource will also be retargeted appropriately.

Targets :

Servers
<input checked="" type="checkbox"/> OFSLLREL_ManagedServer

Back Next Finish Advanced Targeting Cancel

7. Click 'Finish' and activate the changes. Once done, the following window is displayed.

Settings for AQJMSModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: AQJMSModule The name of this JMS system module. [More Info...](#)

Scope: Global Specifies if the JMS system module is accessible within the domain, a partition, or a resource group template. [More Info...](#)

Descriptor File Name: AQJMSModule-jms.xml The name of the JMS module descriptor file. [More Info...](#)

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.

[Customize this table](#)

Summary of Resources

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

New Delete Showing 1 to 2 of 2 Previous | Next

Name	Type	JNDI Name	Subdeployment	Targets
AQForeignServer	Foreign Server	N/A	Default Targeting	OFSSLREL_ManagedServer
OfsllTopicFS	Foreign Server	N/A	Default Targeting	OFSSLREL_ManagedServer

New Delete Showing 1 to 2 of 2 Previous | Next

8. Click on the Foreign Server that you created. The following window is displayed.

Settings for OfsllTopicFS

Configuration Subdeployment Notes

General Destinations Connection Factories

Save

A foreign server represents a JNDI provider that resides outside a WebLogic Server. It contains information that allows WebLogic Server to reach the remote JNDI provider. This way, a number of connection factory and destination objects (queues or topics) can be defined on one JNDI directory. Use this page to configure a foreign server.

Name: OfsllTopicFS The name of this foreign server. [More Info...](#)

JNDI Initial Context Factory: oracle.jms.AQjmsInitialC The name of the class that must be instantiated to access the JNDI provider. This class name depends on the JNDI provider and the vendor that are being used. [More Info...](#)

JNDI Connection URL: The URL that WebLogic Server will use to contact the JNDI provider. The syntax of this URL depends on which JNDI provider is being used. For WebLogic JMS, leave this field blank if you are referencing WebLogic JMS objects within the same cluster. [More Info...](#)

JNDI Properties Credential: Any Credentials that must be set for the JNDI provider. These Credentials will be part of the properties will be passed directly to the constructor for the JNDI provider's InitialContext class. Note: For secure credential management, use the Credential field. Using the Properties field results in the credential being stored and displayed as originally entered. [More Info...](#)

Confirm JNDI Properties Credential:

JNDI Properties: Any additional properties that must be set for the JNDI provider. These properties will be passed directly to the constructor for the JNDI provider's InitialContext class. [More Info...](#)

`datasource=jdbc/aqjmsdb`

Default Targeting Enabled Specifies whether this JMS resource defaults to the parent module's targeting or uses the subdeployment targeting mechanism. [More Info...](#)

Save

9. Specify the following details and click 'Save'.

- Enter JNDI Initial Context Factory as 'oracle.jms.AQjmsInitialContextFactory'.
- JNDI Properties as 'datasource=jdbc/aqjmsdb'.
- Ensure 'Default Targeting Enabled' checkbox is selected.

10. Select 'Destinations' tab and click 'New' to create new destination. The following window is displayed.

The screenshot shows a dialog box titled "Create a New Foreign JMS Destination". It has "OK" and "Cancel" buttons at the top left. Below the title bar is a section titled "Foreign Destination Properties". A note states: "The following properties will be used to identify your new foreign destination." Below this is a note: "* Indicates required fields". There are three input fields: "* Name:" with the value "AQJMSTopic", "Local JNDI Name:" with the value "/jms/aq/OfsllTopic", and "Remote JNDI Name:" with the value "Topics/OFSLL_OUTBOUND_TOPIC". At the bottom left, there are "OK" and "Cancel" buttons.

11. Specify the following details and click 'OK' to save the changes.
 - Name: AQJMSTopic
 - LocalJNDI Name: /jms/aq/OfsllTopic
 - Remote JNDI Name: Topics/OFSLL_OUTBOUND_TOPIC
12. Select 'Connection Factories' tab and click 'New' to add new connection factory. The following window is displayed.

The screenshot shows a dialog box titled "Create a New Foreign JMS Connection Factory". It has "OK" and "Cancel" buttons at the top left. Below the title bar is a section titled "Foreign Connection Factory Properties". A note states: "The following properties will be used to identify your new foreign connection factory." Below this is a note: "* Indicates required fields". There are three input fields: "* Name:" with the value "AQJMSTopicCF", "Local JNDI Name:" with the value "/jms/aq/OfsllTopicCF", and "Remote JNDI Name:" with the value "XATopicConnectionFactory". At the bottom left, there are "OK" and "Cancel" buttons.

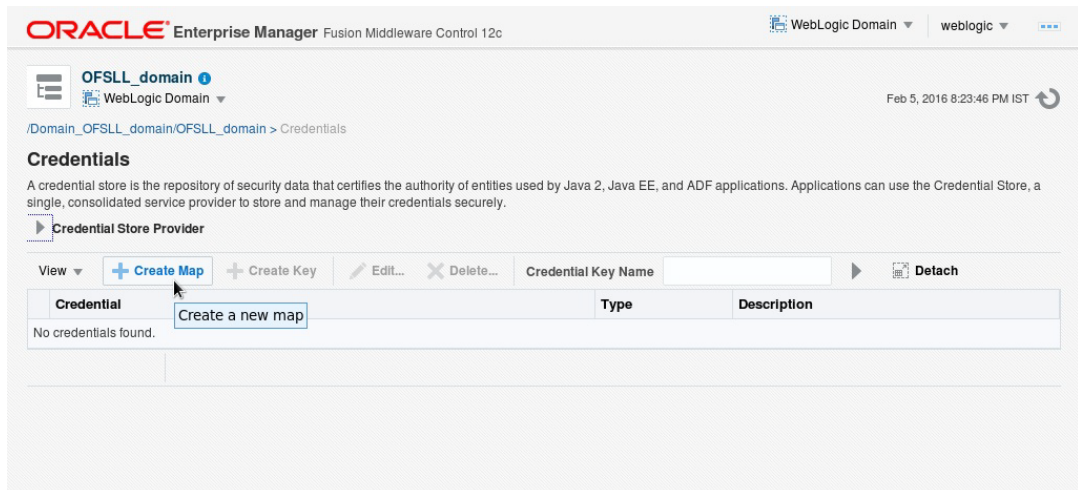
13. Specify the following details and Click 'OK' to save the changes.
 - Name: AQJMSTopicCF
 - Local JNDI Name: /jms/aq/OfsllTopicCF
 - Remote JNDI Name: XATopicConnectionFactory

9.4 Create Credentials and System Policies

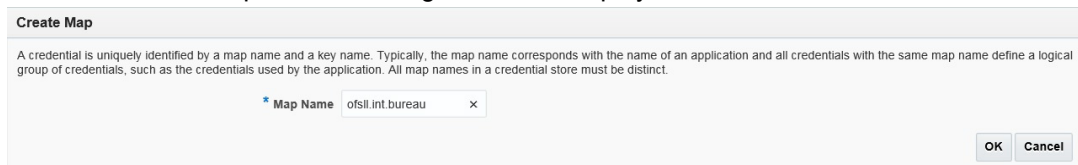
In order Configure MDB flow, you need to create credentials and system policies. The credentials are accessed through CSF framework which is managed by Oracle Weblogic Server. The keys are managed by Maps and Maps need to be given with Permissions.

1. Login to Oracle Enterprise Manager (<http://hostname:port/em>).

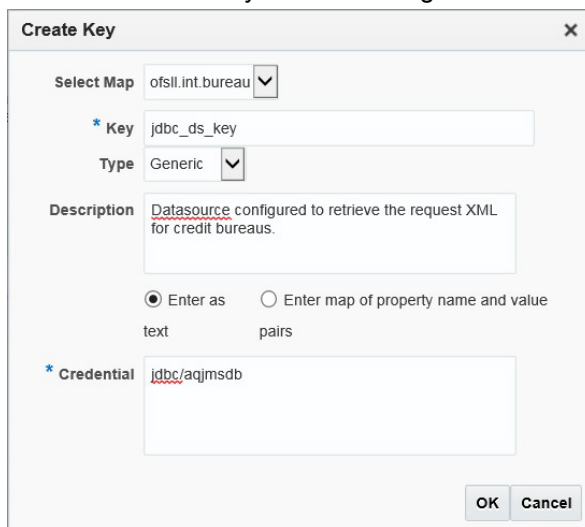
- On the left panel, right click on OFSSL_domain and select Security > System Policies > Credentials. The following window is displayed.



- Click 'Create Map'. The following window is displayed.



- Enter Map Name as 'ofssl.int.bureau' and click 'OK'.
- Click 'Create Key'. The following window is displayed.



- Specify the following details:
 - Select Map as 'ofssl.int.bureau' from the drop down list.
 - Specify Key as 'jdbc_ds_key'
 - Select Type as 'Generic' from the drop down list.
 - Specify the Credential as 'jdbc/ajjmsdb'.
- Click 'OK'.

8. Similarly you need to create the following Maps and corresponding keys as indicated in following table.

Maps	Keys	Description
ofssl.int.bureau		This map is used to setup keys for all credit bureau interfaces
	ProxyServer	Name of the proxyServer to be configured
	ProxyPort	Port to which ProxyServer is running.
	ExpEcalsURL	The Experian Connection URL to be configured.
	ExpDirectExperianEnabled	If you set value as true, then you would be setting ecals response URL. Else, the Ecals request URL
	ExpCertPath	The location of .jks file which contains the valid certificate for Experian Credit Bureau.
	ExpBusUserNamePassword	Login Credentials to be configured for Experian Business reports.
	ExpConUserNamePassword	Login Credentials to be configured for Experian Consumer reports.
	EfxURL	The Equifax Connection URL to be configured.
	EfxCertPath	The location of .jks file which contains the valid certificate for Equifax Credit Bureau.
	EfxUserNamePassword	Login credentials to be configured for accessing Equifax Reports.
	TucCertPath	The location of .p12 file which contains valid certificate for Transunion Bureau .
	TucCertPassword	The password that requires to read the valid .p12 certificate for the Transunion Bureau.
	TucUserNamePassword	Login credentials to be configured for accessing Transunion reports
	TucConnectionURL	The Transunion URL to be configured.
	jdbc_ds_key	Datasource configured to retrieve data for bureau.
	source	Configured as EXTERNAL for actual call.
ofssl.int.outbound		This map is used to setup keys for the RouteOne and Dealer track call back from OFSLL.
	roUserNamePassword	Login Credentials used at the time of call back from OFSLL to RouteOne Interface.
	dtUsernamePassword	Login Credentials used at the time of Call back from OFSLL to Dealer Track Interface.

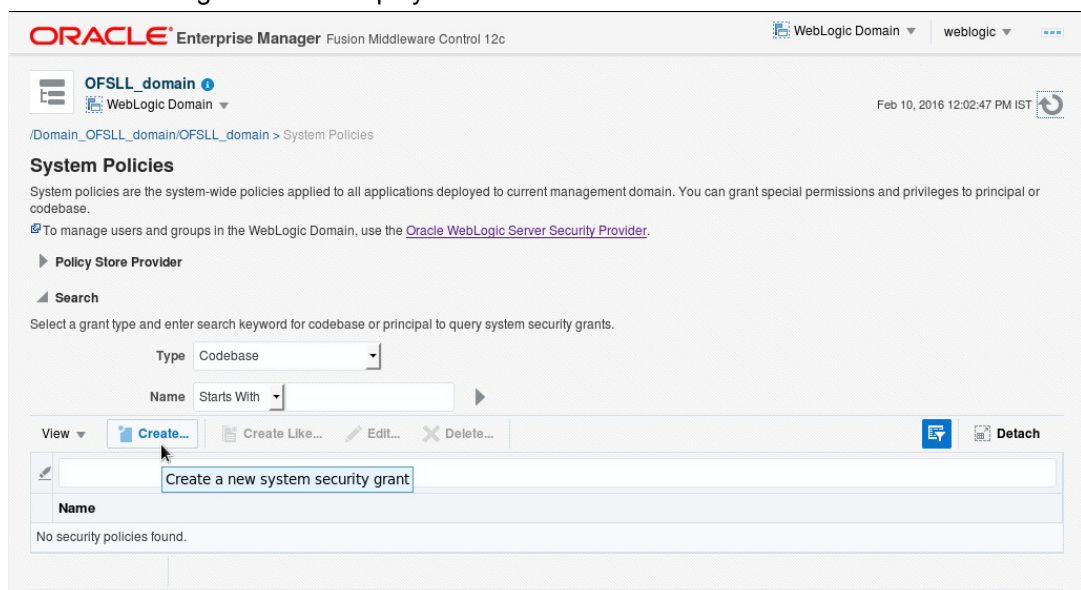
Maps	Keys	Description
	jdbc_ds_key	Datasource configured to retrieve data for out-bound Resources.
ofssl.int.bip		This Map is used to setup all the Keys required to setup interface with BIP to generate reports.
	local_top_dir	Define the path of the local BIP server where you would like place the generated BIP reports.
	email_from_addr	Define the From Email address to be used while sending email for the generated BIP reports.
	emailBodyContentPath	The path for 'file.properties' file that contains the content of the subject and body required while sending letter, report or correspondence as mail to the applicant or producer. For example; /tmp/file.properties *Refer to note below for details on 'file.properties' file creation for email configuration.
	fax_server	Configure the name of Fax server to be used to fax the generated BIP reports.
	jdbc_ds_key	Datasource configured to retrieve data for BIP.
ofssl.int.file transfer		This map is used to setup keys for all credit bureau interfaces
	sftp_key	Credentials to login to SFTP server(Username/ Password)
	sftp_top_dir	Top root directory for SFTP server
	sftp_servers	SFTP server names
ofssl.int.se curity	bip_key	This is BIP login credentials
ofssl.int.gri	GriURL	GRI web service URL to be configured.
	GriAPIKey	GRI API key to be configured
	ProxySet	System Level Proxy Enabled/Disabled. Value can be either true or false. True= proxy required False = proxy not required
	ProxyHost	Name of the proxyServer to be configured. Set only if ProxySet =true.
	ProxyPort	Port on which ProxyServer is running. Set only if ProxySet =true.

Maps	Keys	Description
	jdbc_ds_key	Datasource configured to retrieve the request XML for GRI.
	GriCertPath	The location of .jks file which contains the valid certificate for GRI. Configure only when a valid certificate is available.
ofssl.int.common		This map is used to setup keys for common JMS Queue
	OfsslJMSQueueJNDI	The JMS queue JNDI name to be configured
	OfsslJMSQueueCF	The JMS queue connection factory to be configured
	OfsslJMSServerURL	The JMS server url to be configured. Ex: t3://<JMS server host>:<JMS server port>

* A new file(file.properties) needs to be created and copied to the application server in the same path as mentioned in the value corresponding to the key 'emailBodyContentPath' under the map 'ofssl.int.bip'. The file should have the following contents:

- letter_subject='Text that is configurable and would be the subject of the mail'
- letter_body='Text that is configurable and would be the body of the mail'
- correspondence_subject='Text that is configurable and would be the subject of the mail'
- correspondence_body='Text that is configurable and would be the body of the mail'
- report_subject='Text that is configurable and would be the subject of the mail'
- report_body='Text that is configurable and would be the body of the mail'

9. On the left panel, right click on OFSLL_domain and select Security > System Policies. The following window is displayed.



The screenshot shows the Oracle Enterprise Manager interface for the OFSLL_domain. The breadcrumb path is /Domain_OFSLL_domain/OFSLL_domain > System Policies. The page title is 'System Policies'. Below the title, there is a search section with a 'Type' dropdown set to 'Codebase' and a 'Name' dropdown set to 'Starts With'. A 'Create...' button is highlighted. Below the search section, there is a table with the following content:

Name
Create a new system security grant

Below the table, it says 'No security policies found.'

10. Click 'Create'. The following window is displayed.

11. Enter the codebase as 'file:\${domain.home}/lib/OfsllCommonCSF.jar'

12. Click 'Add'. The following window is displayed.

13. Select the check box 'Select here to enter details for a new permission'.

14. Specify the following details as the first permission class.

Permission Class	Resource Name	Permission Actions
oracle.security.jps.service.credstore.CredentialAccessPermission	context=SYSTEM,mapName=ofsll.int.bureau,keyName=*	read
oracle.security.jps.service.credstore.CredentialAccessPermission	context=SYSTEM,mapName=ofsll.int.filetransfer,keyName=*	read
oracle.security.jps.service.credstore.CredentialAccessPermission	context=SYSTEM,mapName=ofsll.int.outbound,keyName=*	read
oracle.security.jps.service.credstore.CredentialAccessPermission	context=SYSTEM,mapName=ofsll.int.bip,keyName=*	read
oracle.security.jps.service.credstore.CredentialAccessPermission	context=SYSTEM,mapName=ofsll.int.gri,keyName=*	read
oracle.security.jps.service.credstore.CredentialAccessPermission	context=SYSTEM,mapName=ofsll.int.common,keyName=*	read
oracle.security.jps.service.credstore.CredentialAccessPermission	context=SYSTEM,mapName=ofsll.int.http.listener.jndi,keyName=*	read

15. Click 'OK'.

9.5 JMS Queue Configuration

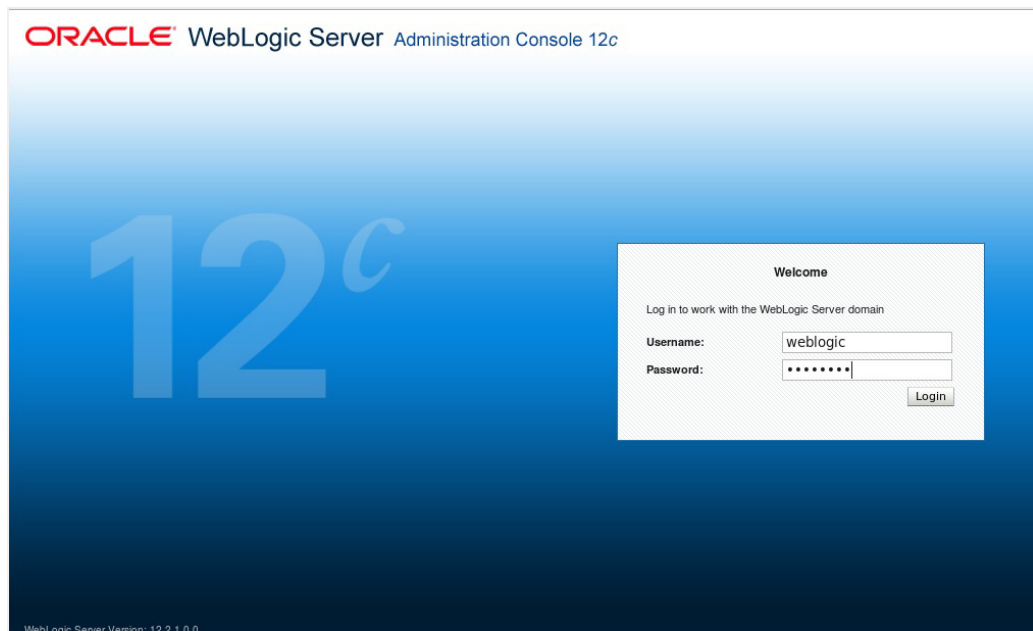
JMS queue is used to hold webservice invocation exception messages. It provides a mechanism for third parties to handle communication related failures.

Perform the following steps to configure JMS queue in application server.

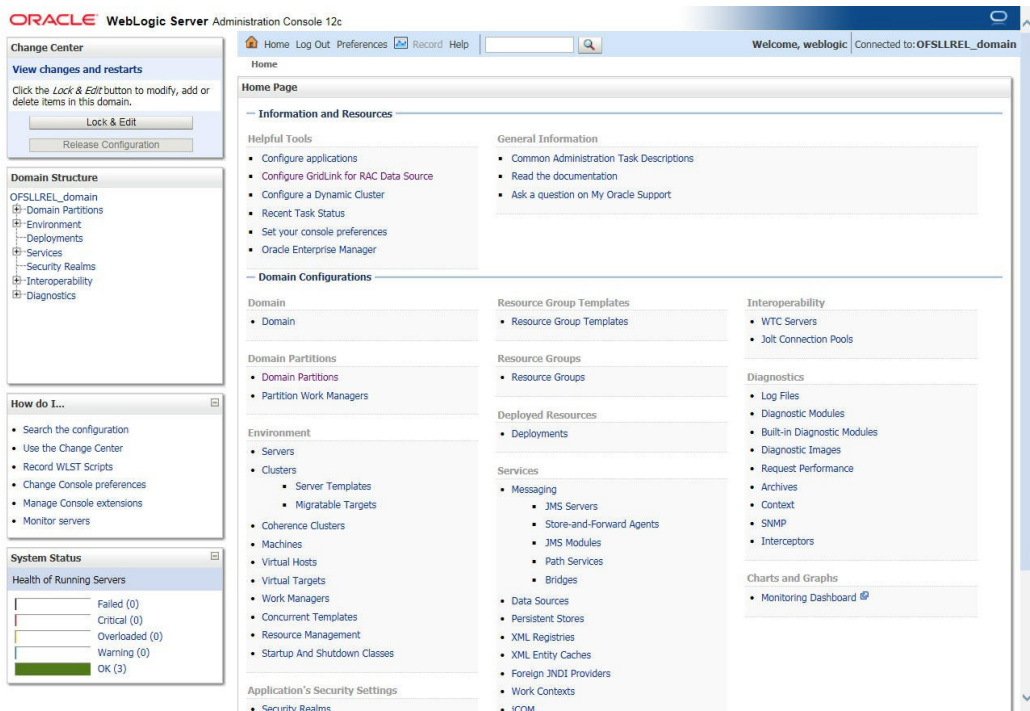
- Create JMS Server
- Create JMS Modules
- Subdeployment
- Create JMS Queue
- Create JMS Connection Factory

9.5.1 Create JMS Server

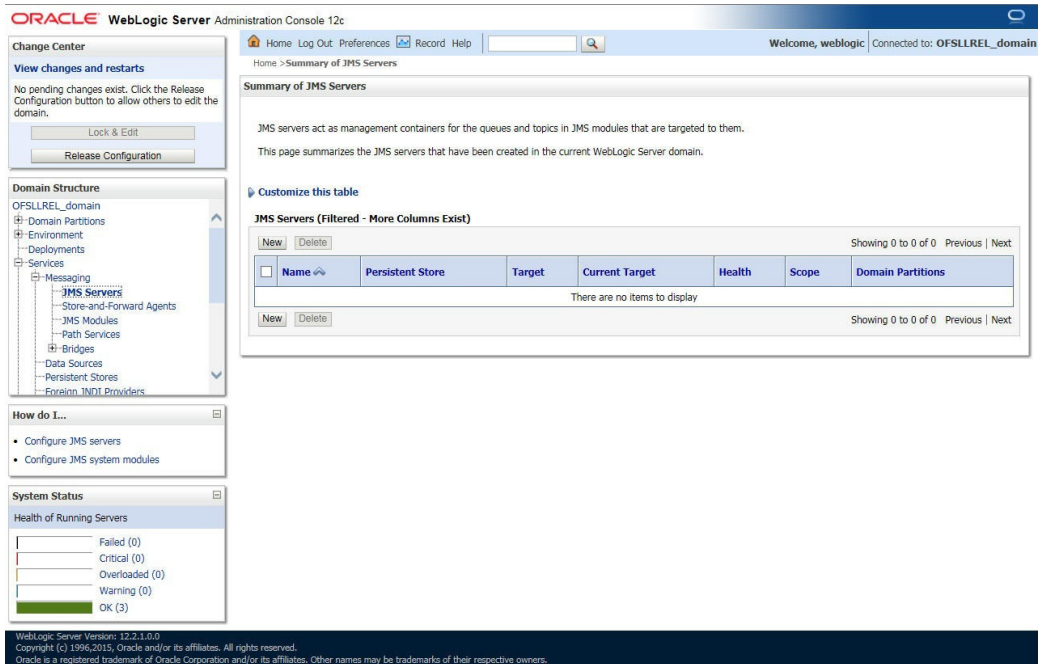
1. Login to WebLogic Server 12c console (<http://hostname:port/console>). The following screen is displayed.



- Specify the Weblogic administrator user name and password and click 'Log In'. The Oracle Weblogic home page is displayed.



- Click Domain Name > Services > Messaging > JMS Server.
- In the main window, click 'Lock & Edit'. The following window is displayed.



- Click 'New'. The following window is displayed.

Create a New JMS Server

Back Next Finish Cancel

JMS Server Properties

The following properties will be used to identify your new JMS Server.
* Indicates required fields

What would you like to name your new JMS Server?

Name: OfslIJMServer

Would you like this new JMS Bridge Destination to be restricted to a specific resource group template or resource group ?

Scope: Global

Back Next Finish Cancel

- Specify the JMS Server Name as 'OfslIJMServer'. Click 'Next', the following window is displayed.

Create a New JMS Server

Back Next Finish Cancel

Select Persistent Store

Specify Persistent Store for the new JMS Server.

Persistent Store: (none) Create a New Store

Back Next Finish Cancel

- Select 'None' as the Persistent Store type. Click 'Next', the following window is displayed.

Create a New JMS Server

Back Next Finish Cancel

Select targets

Select the server instance or migratable target on which you would like to deploy this JMS Server.

Target: (none)

Back Next Finish Cancel

- Select the target managed server and click 'Finish'.

Create a New JMS Server

Back Next Finish Cancel

Select targets

Select the server instance or migratable target on which you would like to deploy this JMS server.

Target: OFSLLREL_ManagedServer

Back Next Finish Cancel

- Click 'Activate Changes' under Change Center. Once done, the following window is displayed:

Home Log Out Preferences Record Help Welcome, weblogic Connected to: OFSLLREL_domain

Home > Summary of JMS Servers

Messages

- All changes have been activated. No restarts are necessary.
- JMS server created successfully

Summary of JMS Servers

JMS servers act as management containers for the queues and topics in JMS modules that are targeted to them.
This page summarizes the JMS servers that have been created in the current WebLogic Server domain.

Customize this table

JMS Servers (Filtered - More Columns Exist)

New Delete Showing 1 to 1 of 1 Previous Next

<input type="checkbox"/>	Name	Persistent Store	Target	Current Target	Health	Scope	Domain Partitions
<input type="checkbox"/>	OfslExceptionJMS		OFSLLREL_ManagedServer	OFSLLREL_ManagedServer	OK	Global	

New Delete Showing 1 to 1 of 1 Previous Next

9.5.2 Create JMS Module

1. Login to WebLogic Server 12c console (<http://hostname:port/console>) by specifying the Weblogic administrator user name and password.
2. Click Domain Name > Services > Messaging > JMS Modules. The following window is displayed.

ORACLE WebLogic Server Administration Console 12c

Home Log Out Preferences Record Help Welcome, weblogic Connected to: OFSLLREL_domain

Home > Summary of JMS Modules

Summary of JMS Modules

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources.

This page summarizes the JMS system modules that have been created for this domain.

Customize this table

JMS Modules

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

New Delete Showing 1 to 1 of 1 Previous | Next

Name	Type	Scope	Domain Partitions
AQJMSModule	JMSSystemResource	Global	

New Delete Showing 1 to 1 of 1 Previous | Next

WebLogic Server Version: 12.2.1.0.0
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3. Click 'New'. The following screen is displayed.

Create JMS System Module

Back Next Finish Cancel

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

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources.

* Indicates required fields

What would you like to name your System Module?

* Name:

Would you like this new JMS System Module to be restricted to a specific resource group template or resource group ?

Scope:

What would you like to name the descriptor file name? If you do not provide a name, a default will be assigned.

Descriptor File Name:

Where would like to place the descriptor for this System Module, relative to the jms configuration sub-directory of your domain?

Location In Domain:

Back Next Finish Cancel

4. Specify the following details:
 - Enter the System Module Name as 'OfsIJMSModule'
 - Enter the Description File Name as 'OfsIJMSModule'

- Click 'Next'. The following screen is displayed.

Create JMS System Module

Back Next Finish Cancel

The following properties will be used to target your new JMS system module.

Use this page to select the server or cluster on which you would like to deploy this JMS system module. You can reconfigure targets later if you wish.

Targets :

Servers
<input type="checkbox"/> AdminServer
<input checked="" type="checkbox"/> OFSLLREL_ManagedServer
<input type="checkbox"/> WebService_ManagedServer

Back Next Finish Cancel

- Select the target server and click 'Next'. The following window is displayed.

Create JMS System Module

Back Next Finish Cancel

Add resources to this JMS system module

Use this page to indicate whether you want to immediately add resources to this JMS system module after it is created. JMS resources include queues, topics, connection factories, and such.

Would you like to add resources to this JMS system module?

Back Next Finish Cancel

- Click 'Finish' to save and activate the changes. Once done, the following window is displayed.

Home Log Out Preferences Record Help Welcome, weblogic Connected to: OFSLLREL_domain

Home > Summary of JMS Servers > Summary of JMS Modules

Messages

- All changes have been activated. No restarts are necessary.
- The JMS module was created successfully.

Summary of JMS Modules

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources.

This page summarizes the JMS system modules that have been created for this domain.

Customize this table

JMS Modules

Name	Type	Scope	Domain Partitions
AQJMSModule	JMSSystemResource	Global	
OfsllJMSModule	JMSSystemResource	Global	

9.5.3 Subdeployment

- Login to WebLogic Server 12c console (<http://hostname:port/console>) by specifying the Weblogic administrator user name and password.
- Click Domain Name > Services > Messaging > JMS Modules. The main window displays the list of JMS modules available.

3. Select the created JMS module 'OfsllJMSModule' and click 'Subdeployments' tab. The following window is displayed.

Settings for OfslJMSModule

Configuration **Subdeployments** Targets Security Notes

This page displays subdeployments created for a JMS system module. A subdeployment is a mechanism by which JMS module resources (such as queues, topics, and connection factories) are grouped and targeted to a server resource (such as JMS servers, server instances, or cluster).

Customize this table

Subdeployments

New Delete Showing 0 to 0 of 0 Previous Next

Name	Resources	Targets
There are no items to display		

New Delete Showing 0 to 0 of 0 Previous Next

4. Click 'New'. The following screen is displayed.

Create a New Subdeployment

Back Next Finish Cancel

Subdeployment Properties

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

* Indicates required fields

* **Subdeployment Name:** OfslJMSDD

Back Next Finish Cancel

5. Specify the Subdeployment Name as 'OfsllJMSDD'. Click 'Next', the following window is displayed.

Create a New Subdeployment

Back Next Finish Cancel

Targets

Please select targets for the Subdeployment

Servers
<input type="checkbox"/> OFSLJREL_ManagedServer

JMS Servers
<input checked="" type="checkbox"/> OfslJMSServer

Back Next Finish Cancel

6. Select the check box against the newly created JMS Server and click 'Finish'. Once done, the following window is displayed.

Settings for OfslJMSModule

Configuration **Subdeployments** Targets Security Notes

This page displays subdeployments created for a JMS system module. A subdeployment is a mechanism by which JMS module resources (such as queues, topics, and connection factories) are grouped and targeted to a server resource (such as JMS servers, server instances, or cluster).

Customize this table

Subdeployments

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

New Delete Showing 1 to 1 of 1 Previous Next

Name	Resources	Targets
OfslJMSDD		OfslJMSServer

New Delete Showing 1 to 1 of 1 Previous Next

9.5.4 Create JMS Queue

1. Login to WebLogic Server 12c console (http://hostname:port/console) by specifying the Weblogic administrator user name and password.
2. Click Domain Name > Services > Messaging > JMS Modules. The main window displays the list of JMS modules available.

- Select the newly created JMS module 'OfsIIJMSModule'. The following window is displayed.

Settings for OfslIJSModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: OfslIJSModule The name of this JMS system module. [More Info...](#)

Scope: Global Specifies if the JMS system module is accessible within the domain, a partition, or a resource group template. [More Info...](#)

Descriptor File Name: OfslIJSModule-jms.xml The name of the JMS module descriptor file. [More Info...](#)

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.

[Customize this table](#)

Summary of Resources

New Delete Showing 0 to 0 of 0 Previous | Next

<input type="checkbox"/>	Name	Type	JNDI Name	Subdeployment	Targets
There are no items to display					

New Delete Showing 0 to 0 of 0 Previous | Next

- Click 'New'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

Choose the type of resource you want to create.

Use these pages to create resources in a JMS system module, such as queues, topics, templates, and connection factories.

Depending on the type of resource you select, you are prompted to enter basic information for creating the resource. For targetable resources, like stand-alone queues and topics, connection factories, distributed queues and topics, foreign servers, and JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You can also associate targetable resources with subdeployments, which is an advanced mechanism for grouping JMS module resources and the members to server resources.

Connection Factory Defines a set of connection configuration parameters that are used to create connections for JMS clients. [More Info...](#)

Queue Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. [More Info...](#)

Topic Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. [More Info...](#)

Distributed Queue Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. [More Info...](#)

- Select the 'Queue' option and click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

JMS Destination Properties

The following properties will be used to identify your new Queue. The current module is OfslIJSModule.

* Indicates required fields

* **Name:** OfslIJSQueue

JNDI Name: jms/OfslIJSQueue

Template: None

Back Next Finish Cancel

- Specify the following details while creating new JMS System Module Resources:

- Enter the Name of the Queue as 'OfslIJSQueue'
- Enter the JNDI Name as 'jms/OfslIJSQueue'
- Select the Template as 'None'

- Click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

The following properties will be used to target your new JMS system module resource

Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, cluster, or SAF agent. If necessary, you can create a new subdeployment by clicking the **Create a New Subdeployment** button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.

Select the subdeployment you want to use. If you select (none), no targeting will occur.

Subdeployments: OfslJMSSD Create a New Subdeployment

What targets do you want to assign to this subdeployment?

Targets :

JMS Servers
<input checked="" type="radio"/> OfslJMSServer

Back Next Finish Cancel

- Click 'Finish' to save and activate the changes. Once done, the following window is displayed.

Settings for OfslJMSModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name:	OfslJMSModule	The name of this JMS system module. More Info...
Scope:	Global	Specifies if the JMS system module is accessible within the domain, a partition, or a resource group template. More Info...
Descriptor File Name:	OfslJMSModule-jms.xml	The name of the JMS module descriptor file. More Info...

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.

[Customize this table](#)

Summary of Resources

New Delete Showing 1 to 1 of 1 Previous Next

<input type="checkbox"/>	Name	Type	JNDI Name	Subdeployment	Targets
<input type="checkbox"/>	OfslJMSQueue	Queue	jms/OfslJMSQueue	OfslJMSSD	OfslJMSServer

New Delete Showing 1 to 1 of 1 Previous Next

You can further click 'New 'to create more Queues and repeat the steps explained above.

9.5.5 Create JMS Connection Factory

- Login to WebLogic Server 12c console (<http://hostname:port/console>) by specifying the Weblogic administrator user name and password.
- Click Domain Name > Services > Messaging > JMS Modules. The main window displays the list of JMS modules available.

- Select the newly created JMS module 'OfsllJMSModule'. The following window is displayed.

Summary of JMS Modules

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources.

This page summarizes the JMS system modules that have been created for this domain.

[Customize this table](#)

JMS Modules

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

New Delete Showing 1 to 2 of 2 Previous Next

Name	Type	Scope	Domain Partitions
AQJMSModule	JMSSystemResource	Global	
OfsllJMSModule	JMSSystemResource	Global	

New Delete Showing 1 to 2 of 2 Previous Next

- Click 'New'. The following window is displayed.

Settings for OfsslJMSModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: OfsslJMSModule The name of this JMS system module. [More Info...](#)

Scope: Global Specifies if the JMS system module is accessible within the domain, a partition, or a resource group template. [More Info...](#)

Descriptor File Name: OfsslJMSModule-jms.xml The name of the JMS module descriptor file. [More Info...](#)

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.

[Customize this table](#)

Summary of Resources

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

New Delete Showing 1 to 1 of 1 Previous Next

Name	Type	JNDI Name	Subdeployment	Targets
OfsslJMSQueue	Queue	jms/OfsslJMSQueue	OfsslJMSSD	OfsslJMSServer

New Delete Showing 1 to 1 of 1 Previous Next

- Click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

Choose the type of resource you want to create.

Use these pages to create resources in a JMS system module, such as queues, topics, templates, and connection factories.

Depending on the type of resource you select, you are prompted to enter basic information for creating the resource. For targetable resources, like stand-alone queues and topics, connection factories, distributed queues and topics, foreign servers, and JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You can also associate targetable resources with subdeployments, which is an advanced mechanism for grouping JMS module resources and the members to server resources.

Connection Factory Defines a set of connection configuration parameters that are used to create connections for JMS clients. [More Info...](#)

Queue Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. [More Info...](#)

6. Select 'Connection Factory' option and click 'Next'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

Connection Factory Properties

The following properties will be used to identify your new connection factory. The current module is OfslIJMSModule.
* Indicates required fields

What would you like to name your new connection factory?

* Name: OfslIJMSCF

What JNDI Name would you like to use to look up your new connection factory?

JNDI Name: jms/OfslIJMSCF

The Connection Factory Subscription Sharing Policy Subscribers can be used to control which subscribers can access new subscriptions. Should subscriptions created using this factory be sharable?

Subscription Sharing Policy: Exclusive

The Client ID Policy indicates whether more than one JMS connection can use the same Client ID. Oracle recommends setting the Client ID policy to Unrestricted if sharing durable subscribers. Subscriptions created with different Client ID policies are always treated as independent subscriptions. What Client ID Policy would you like to use?

Client ID Policy: Restricted

A connection factory can limit the number of messages that can be queued for an asynchronous session. Should this connection factory impose a limit?

Maximum Messages per Session: 10

Should this connection factory create sessions that are JTA aware, and create XA queues and XA topics?

XA Connection Factory Enabled

Back Next Finish Cancel

7. Specify the following details:

- Enter the Name of the Connection Factory as 'OfslIJMSCF'
- Enter the JNDI Name as 'jms/OfslIJMSCF'
- Select the check box 'XA Connection Factory Enabled'

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

Create a New JMS System Module Resource

Back Next Finish Advanced Targeting Cancel

The following properties will be used to target your new JMS system module resource

Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then click **Advanced Targeting** to use the subdeployment mechanism for targeting this resource.

The following JMS module targets will be used as the default targets for your new JMS system module resource. If the module's targets are changed, this resource will also be retargeted appropriately.

Targets :

Servers
<input checked="" type="checkbox"/> OFSLIREL_ManagedServer

Back Next Finish Advanced Targeting Cancel

- Click 'Advanced Targeting'. The following window is displayed.

Create a New JMS System Module Resource

Back Next Finish Cancel

The following properties will be used to target your new JMS system module resource

Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, cluster, or SAF agent. If necessary, you can create a new subdeployment by clicking the **Create a New Subdeployment** button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.

Select the subdeployment you want to use. If you select (none), no targeting will occur.

Subdeployments: OfslJMSSD Create a New Subdeployment

What targets do you want to assign to this subdeployment?

Targets :

Servers
<input type="checkbox"/> OFSLREL_ManagedServer

JMS Servers
<input checked="" type="checkbox"/> OfslJMSServer

Back Next Finish Cancel

- Select the Subdeployments as 'OfslJMSSD' from the drop down list.
- Under JMS Servers, select the check box against 'OfslJMSServer'.
- Click 'Finish' to save and activate the changes. Once done, the following window is displayed.

Settings for OfslJMSModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: OfslJMSModule The name of this JMS system module. [More Info...](#)

Scope: Global Specifies if the JMS system module is accessible within the domain, a partition, or a resource group template. [More Info...](#)

Descriptor File Name: OfslJMSModule-jms.xml The name of the JMS module descriptor file. [More Info...](#)

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.

Customize this table

Summary of Resources

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

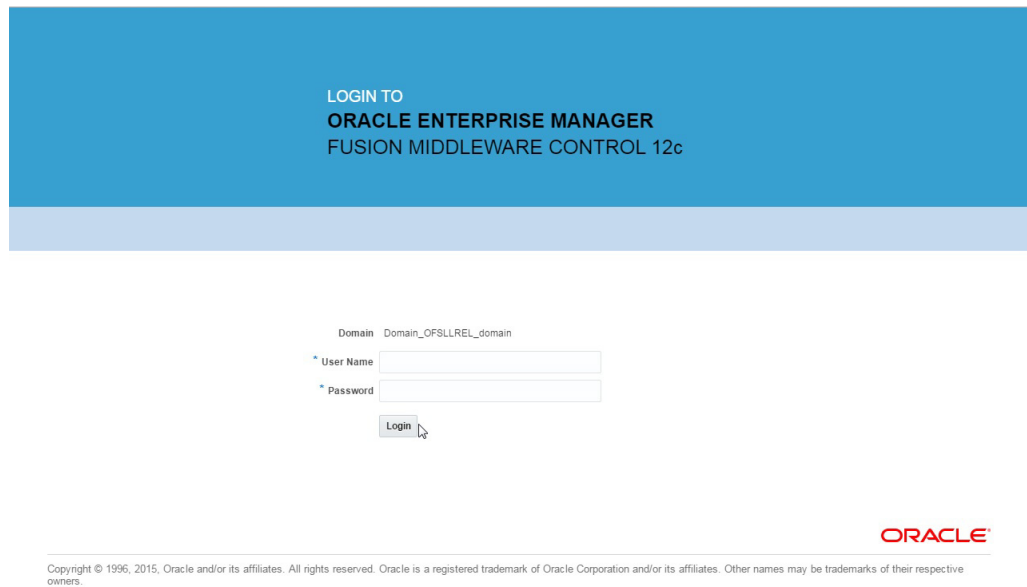
New Delete Showing 1 to 2 of 2 Previous Next

Name	Type	JNDI Name	Subdeployment	Targets
OfslJMSSCF	Connection Factory	jms/OfslJMSSCF	OfslJMSSD	OfslJMSServer
OfslJMSSQueue	Queue	jms/OfslJMSSQueue	OfslJMSSD	OfslJMSServer

New Delete Showing 1 to 2 of 2 Previous Next

9.6 Deploy MDB EJB

1. Login to Web Logic application server enterprise manager (e.g.:<http://hostname:port/em>)



Domain: Domain_OFSSLREL_domain

* User Name:

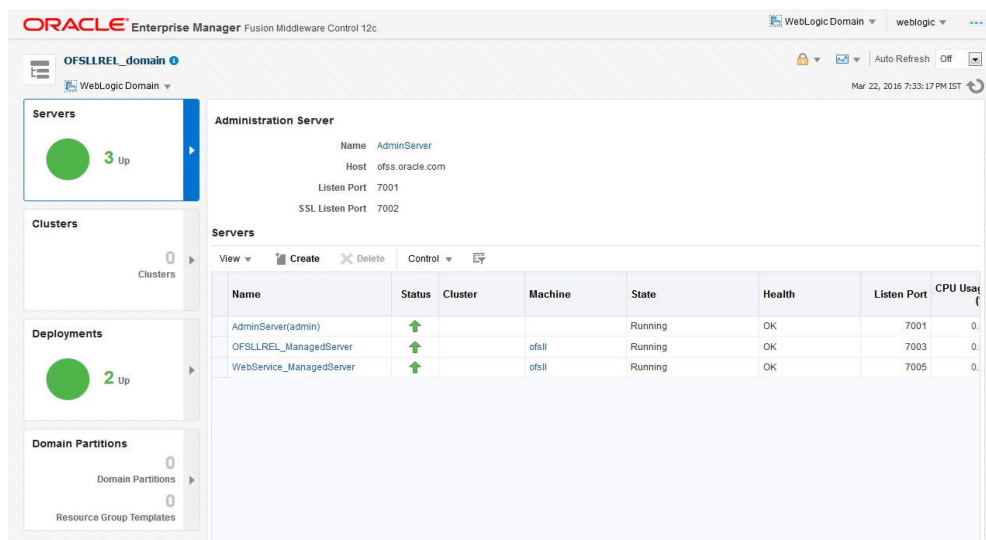
* Password:

Login

ORACLE

Copyright © 1996, 2015, 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. Enter valid login credentials. The following window is displayed.



ORACLE Enterprise Manager Fusion Middleware Control 12c

WebLogic Domain | weblogic

OFSSLREL_domain

WebLogic Domain

Mar 22, 2016 7:33:17 PM IST

Servers 3 Up

Administration Server

Name: AdminServer
Host: ofss.oracle.com
Listen Port: 7001
SSL Listen Port: 7002

Servers

Name	Status	Cluster	Machine	State	Health	Listen Port	CPU Usage
AdminServer(admin)	↑			Running	OK	7001	0.0
OFSSLREL_ManagedServer	↑		ofsll	Running	OK	7003	0.0
WebService_ManagedServer	↑		ofsll	Running	OK	7005	0.0

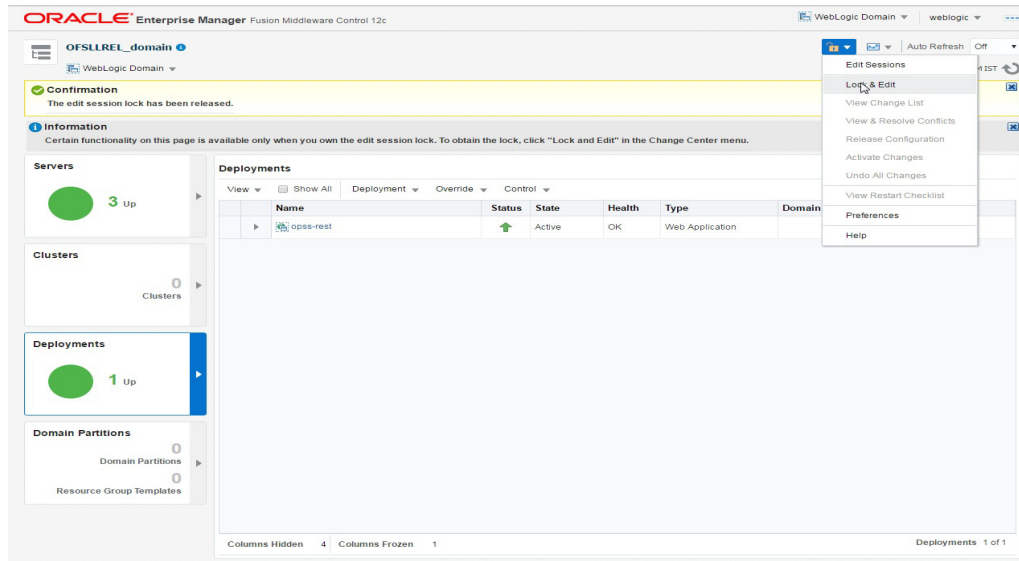
Deployments 2 Up

Domain Partitions 0

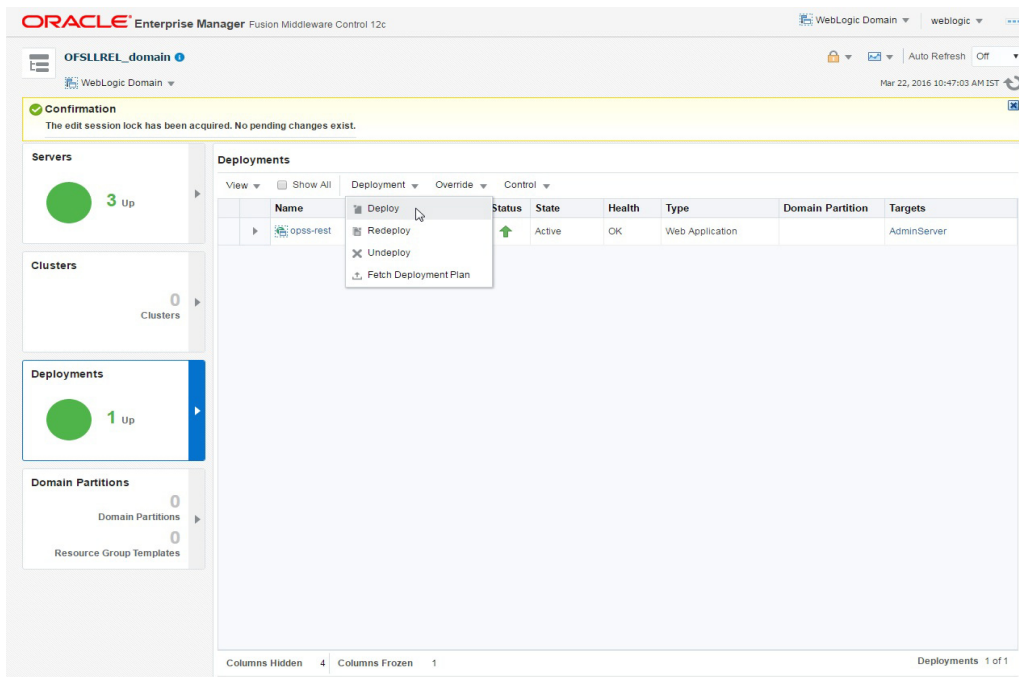
Domain Partitions: 0
Resource Group Templates: 0

3. Click 'Deployment' in the left panel.

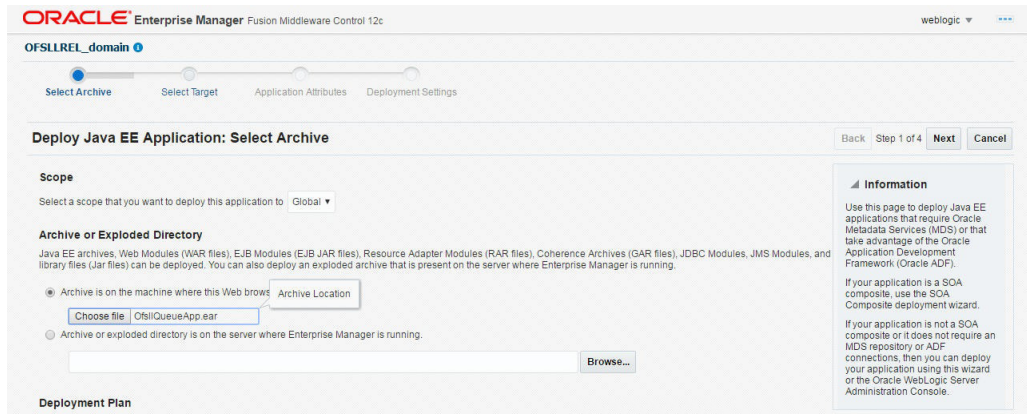
- Select 'Lock & Edit' option in the lock drop-down list available in the header. The following window is displayed.



- Select 'Deploy' from the Deployment drop-down list. The following window is displayed.

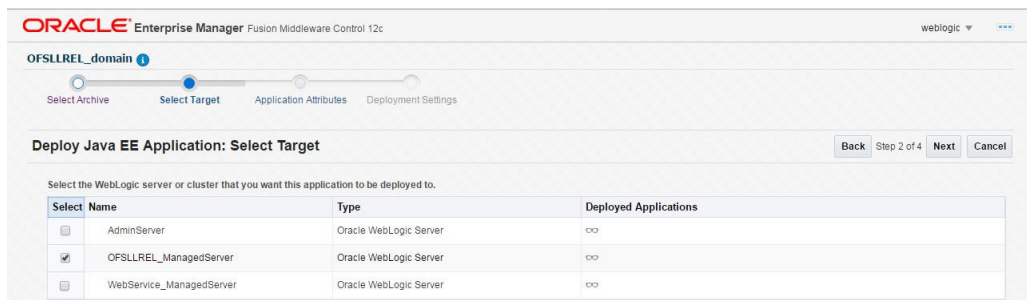


6. The following window is displayed.



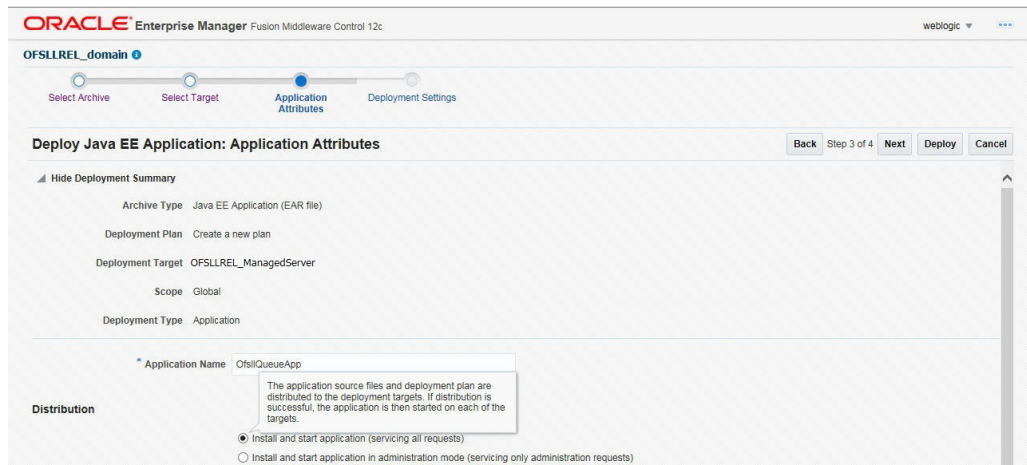
7. Browse to the folder containing the MDB EJB. Eg: C:/OfsllQueueApp.ear

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



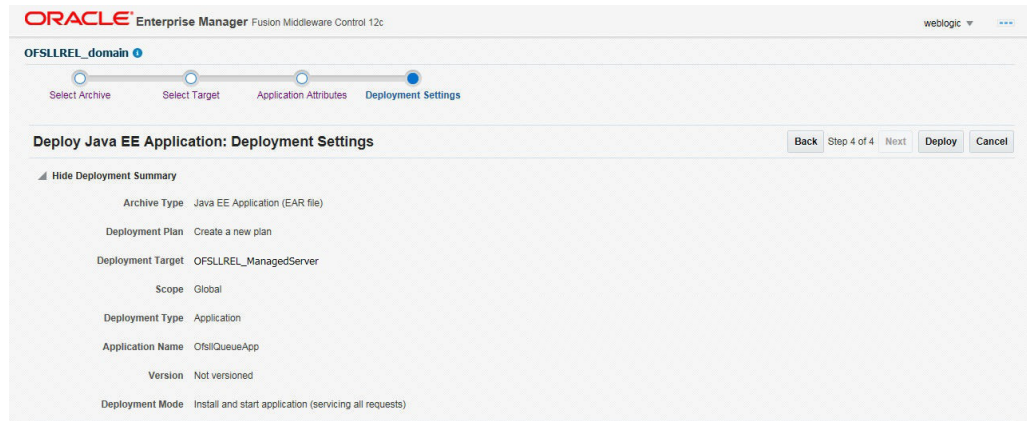
9. Select the server on which the MDB EJB needs to be deployed.

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

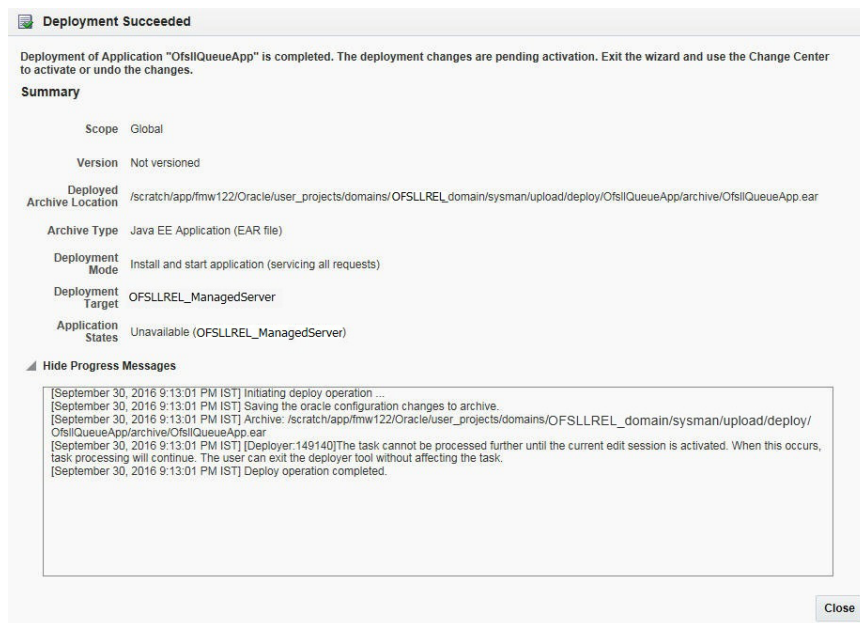


11. Select the option 'Install and start application (servicing all requests)'.

12. Check the context root and click 'Next'. The following window is displayed.



13. Click 'Deploy'. On successful deployment, the following window is displayed.



14. Click 'Close'. Post deployment, you need to activate the changes by selecting 'Active Changes' option from 'Edit Session' drop-down list as indicated in step 4 above.

Note

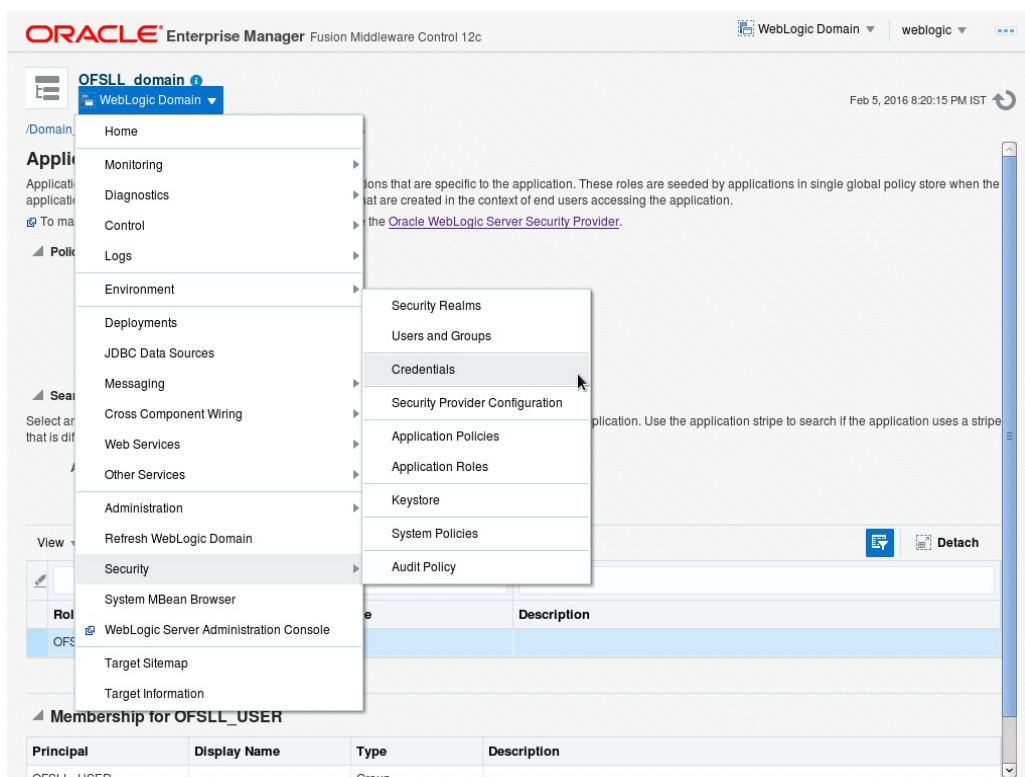
While starting the 'OFSLLREL_ManagedServer', always start with option '-DUseSun-HttpHandler=true' to enforce the weblogic server to uses SUN SSL implementation.

10. Configuring Oracle BI Publisher for Application

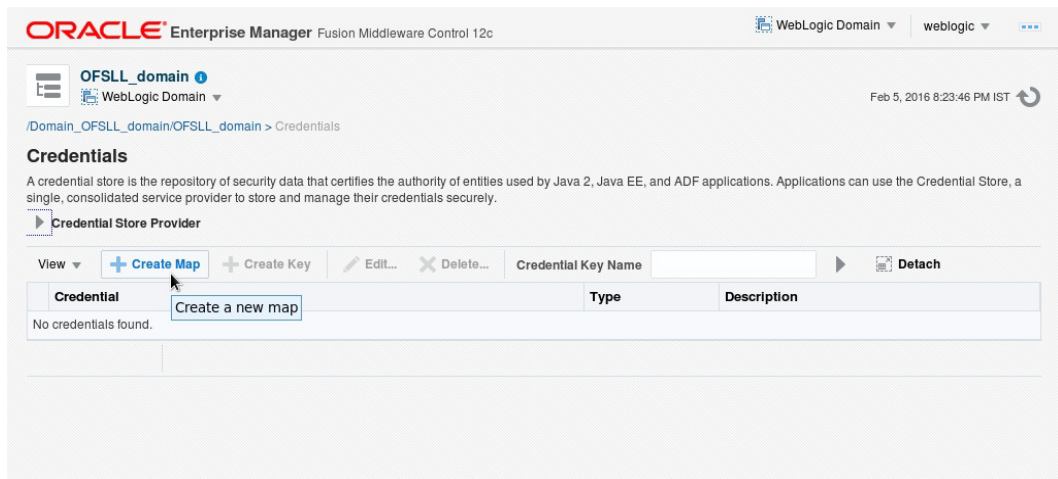
1. Copy the OfsslCommonCSF.jar from /WEB-INF/lib available in the staging area to \$DOMAIN_HOME/lib
2. Update the setDomainEnv.sh file (\$MW_HOME/user_projects/domains/mydomain/bin directory) by appending the above jar file path – EXTRA_JAVA_PROPERTIES="..... \${EXTRA_JAVA_PROPERTIES} -Dofssl.csf.path=\${DOMAIN_HOME}"
3. Configure Security via EMconsole

Note

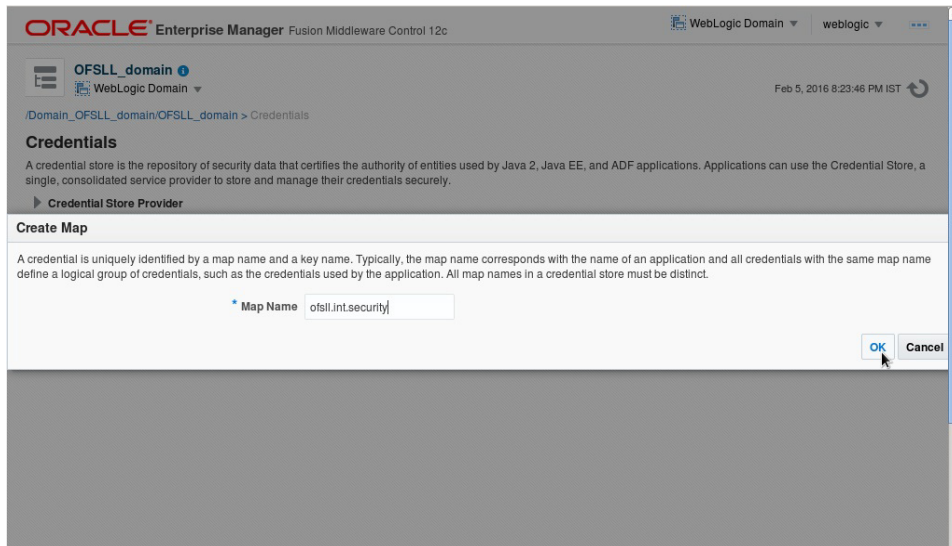
It is assumed that BI Publisher is installed and configured. Refer BI Publisher Guide for further details.



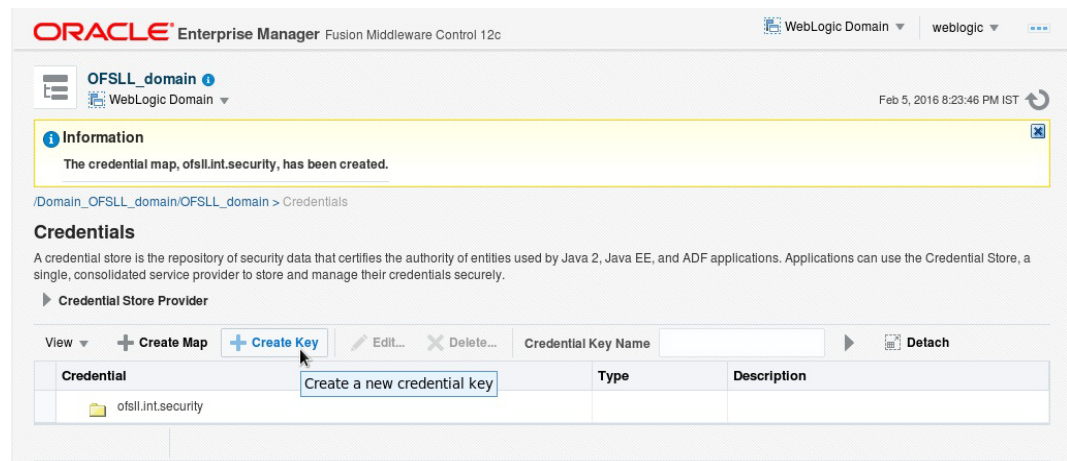
- Click WebLogic Domain on the right panel. Select Security > Credentials. Click 'Create Map'.



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

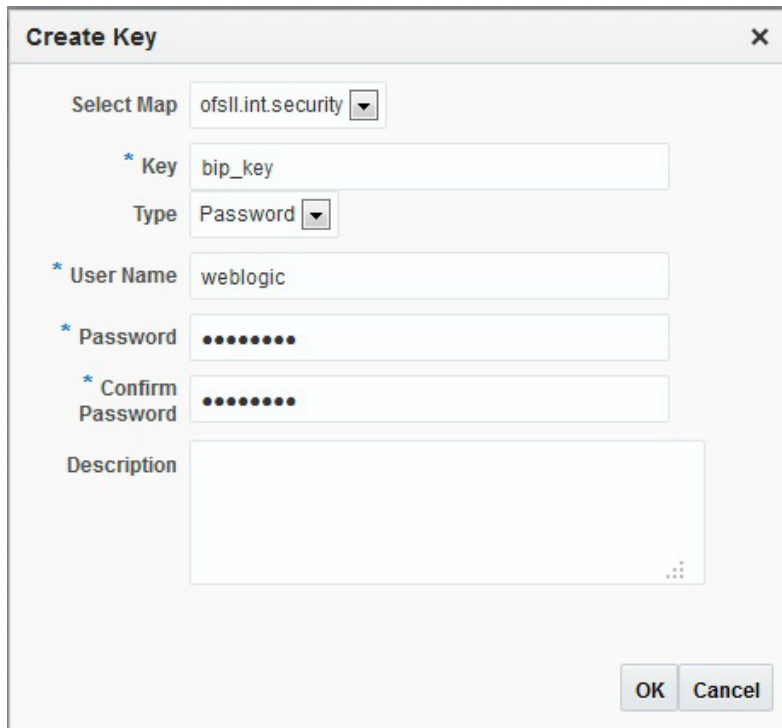


- Click 'OK'.



- Click 'Create Key' Button.

8. Enter the details as per your requirement. Specify 'User Name' and 'Password' of BI Publisher console.

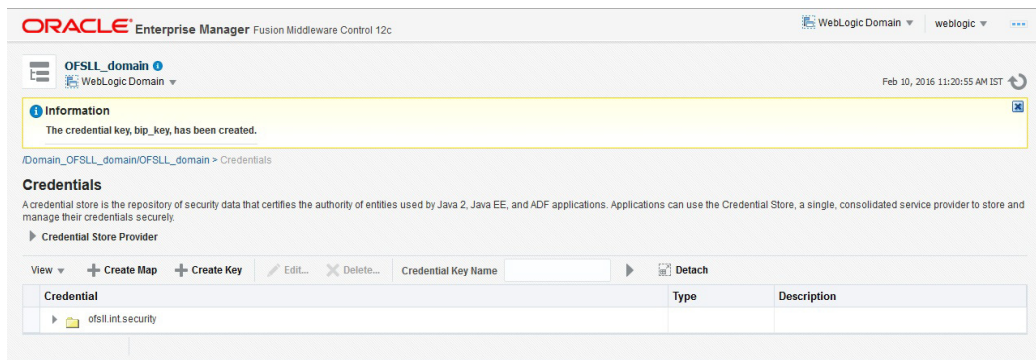


The 'Create Key' dialog box is shown with the following fields:

- Select Map: ofssl.int.security
- * Key: bip_key
- Type: Password
- * User Name: weblogic
- * Password: [masked]
- * Confirm Password: [masked]
- Description: [empty text area]

Buttons: OK, Cancel

9. Click 'OK'. The following window is displayed.

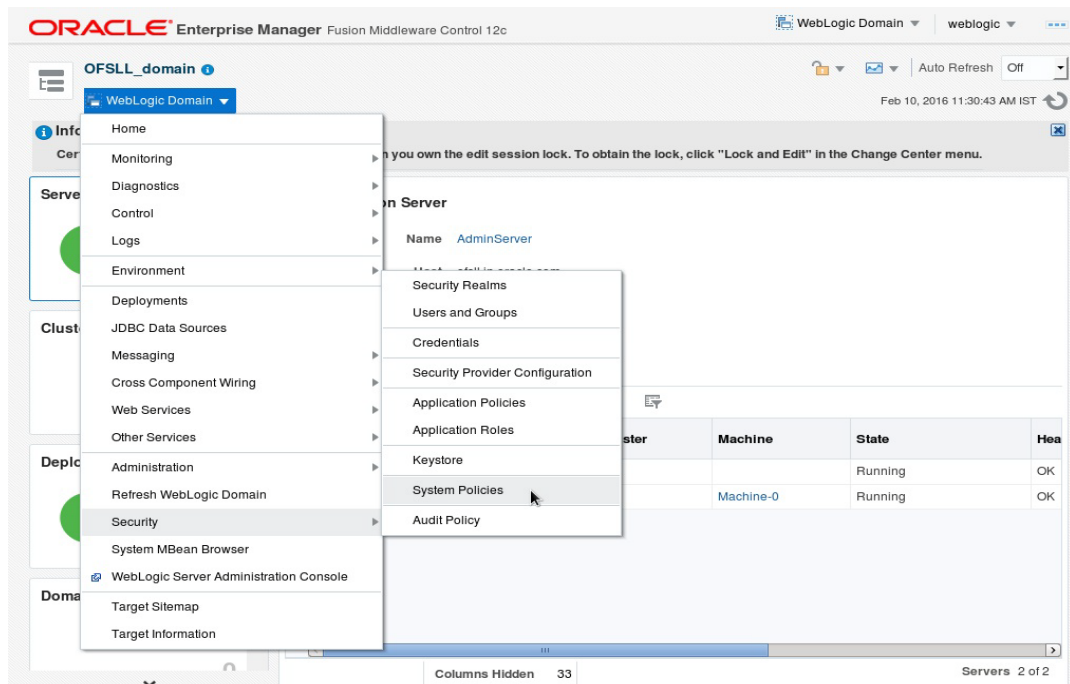


The screenshot shows the Oracle Enterprise Manager console with the following elements:

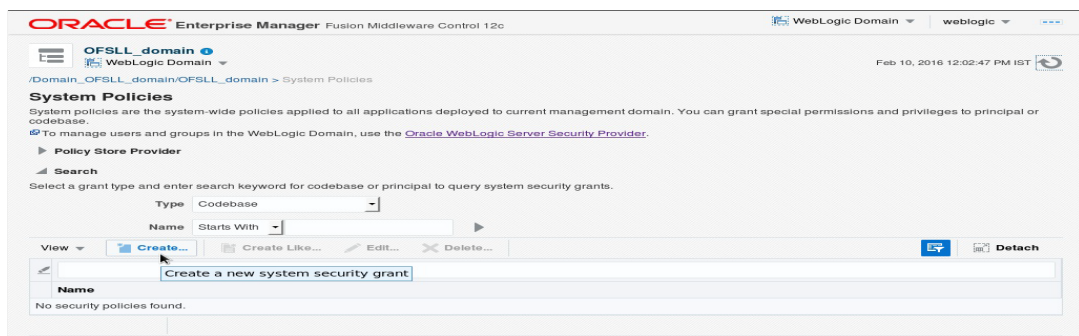
- Header: ORACLE Enterprise Manager Fusion Middleware Control 12c
- Domain: OFSSL_domain (WebLogic Domain)
- Message: Information - The credential key, bip_key, has been created.
- Section: Credentials
- Sub-section: Credential Store Provider
- Toolbar: View, Create Map, Create Key, Edit..., Delete..., Credential Key Name, Detach
- Table:

Credential	Type	Description
ofssl.int.security		

- On the left panel, right click on the domain OFSLL_domain > Security > System Policies. The following window is displayed.



- Click 'Create'.



- The following window is displayed. Enter the codebase as 'file:\${ofsl.csf.path}/lib/OfsllCommonCSF.jar' and click 'Add'.



- The following window is displayed. Select the checkbox 'Select here to enter details for a new permission' and enter the following details as the first permission class.

- Permission Class: oracle.security.jps.service.credstore.CredentialAccessPermission
- Resource Name: context=SYSTEM,mapName=ofsl.int.security,keyName=*

- Permission Actions: read

Configuring JNDI Name for http Listener

1. Similarly, click Add to add the second permission class. Select the check box 'Select here to enter details for a new permission' and enter the following details as the second permission class.
 - Permission Class: oracle.security.jps.service.credstore.CredentialAccessPermission
 - Resource Name: context=SYSTEM,mapName=ofssl.http.listener.jndi,keyName=*
 - Permission Actions: read
2. Click 'OK'. The following window is displayed.

3. Click 'OK'. The following window is displayed.

ORACLE Enterprise Manager Fusion Middleware Control 12c WebLogic Domain ▾ weblogic ▾ ...

OFSLL_domain WebLogic Domain ▾ Feb 10, 2016 8:02:50 PM IST ↻

Information
A new security grant has been added successfully.

[/Domain_OFSLL_domain/OFSLL_domain > System Policies](#)

System Policies

System policies are the system-wide policies applied to all applications deployed to current management domain. You can grant special permissions and privileges to principal or codebase.

[To manage users and groups in the WebLogic Domain, use the Oracle WebLogic Server Security Provider.](#)

Policy Store Provider

Search

Select a grant type and enter search keyword for codebase or principal to query system security grants.

Type:

Name:

View ▾ **Create...** Create Like... Edit... Delete... **Detach**

Name
No security policies found.

11. Launching Application

Verifying Successful Application Deployment and Launching Application

Successful Application deployment can be verified by following:

- Making sure that the state is ACTIVE and health in OK in the Weblogic.
- Access and log into the 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 12c

Home Log Out Preferences Record Help

Welcome, weblogic Connected to: OFSLLREL_domain

Summary of Deployments

Configuration Control Monitoring

This page displays the list of Java EE applications and standalone application modules installed to this domain. You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page. To install a new application or module for deployment to targets in this domain, click **Install**.

Customize this table

Deployments

Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
adf.oracle.businesseditor(1.0,12.2.1.0.0)	Active		Library	AdminServer, OFSLLREL_ManagedServer, WebService_ManagedServer	Global		100
adf.oracle.domain(1.0,12.2.1.0.0)	Active		Library	AdminServer, OFSLLREL_ManagedServer, WebService_ManagedServer	Global		100
adf.oracle.domain.webapp(1.0,12.2.1.0.0)	Active		Library	AdminServer, OFSLLREL_ManagedServer, WebService_ManagedServer	Global		100
coherence-transaction-rar	Active	OK	Resource Adapter	AdminServer, OFSLLREL_ManagedServer, WebService_ManagedServer	Global		100
ofssl1431(V14.3.1.0.0-b248)	Active	OK	Enterprise Application	OFSLLREL_ManagedServer,	Global		100
DMS Application (12.2.1.0.0)	Active	OK	Web Application	AdminServer, OFSLLREL_ManagedServer, WebService_ManagedServer	Global		5
em	Active	OK	Enterprise Application	AdminServer	Global		400
emagentsdkimplpriv_jar(12.4,12.1.0.4.0)	Active		Library	AdminServer	Global		100
emagentsdkimpl_jar(12.4,12.1.0.4.0)	Active		Library	AdminServer	Global		100
emagentsdk_jar(12.4,12.1.0.4.0)	Active		Library	AdminServer	Global		100

2. The URL of the OFSLL application will be of the format - https://<hostname>:<Port>/<ContextName>/faces/pages/OfsllSignIn.jsf (Example: https://localhost:7003/ofssl/faces/pages/OfsllSignIn.jsf)

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

The screenshot shows the Oracle Financial Services Lending and Leasing application window. The title bar reads "ORACLE Financial Services Lending and Leasing". The main content area features a "Sign In" form with the following elements:

- Sign In** header
- Instruction: "Please enter userid and password"
- * User Id input field
- * Password input field
- Sign In button

4. After successful login, the following screen is displayed

The screenshot shows the Oracle Financial Services Lending and Leasing application window after a successful login. The title bar reads "ORACLE Financial Services Lending and Leasing" and includes a user welcome message "Welcome, DEMOSUPR", an "Accessibility" link, and a "Sign Out" button. The main content area features a "SEARCH MENU" and a "DashBoard" section with the following items:

- Dashboard
 - Dashboard
 - Users Productivity
 - System Monitor
 - Producer Analysis
 - Process Files
- Origination
- Servicing
- Collections
- WFP
- Tools
- Setup

12. Installing Upgrade

There is an infrastructure upgrade required (from 11g fusion middleware to 12c fusion middleware) when upgrading from OFSLL 14.2.0.0.0 to OFSLL 14.3.1.0.0.

Hence, it is recommended to install a new 12c fusion middleware infrastructure and deploy the 14.3.1.0.0 OFSLL application.