FLEXCUBE UBS Oracle GL Adapter EJB Deployment
Installation Oracle FLEXCUBE Universal Banking
Release 12.2.0.0.0

[May] [2016]

Table of Contents

Installation Steps

1.1 Prerequisite

✓ Ensure that the basic KERNEL Environment Setup is done.

[Please refer ADOGL_Installation.doc.]

1.2 Steps

Follow the steps given below only if the Oracle10g Application Server is to be configured with ***Oracle10gAS JMS***.

Refer OC4J_ADOGL_OracleASJMS_Queue_Installation.doc to create the OC4J JMS Destinations and Connection Factories.

A. Modify ejb-jar.xml

Edit <KERNEL_INSTALL_DIR>\ADOGL_EJB\config\ejb-jar.xml**.**

The Queue and the Queue Connection Factory need to be specified in the ejb-jar.xml as mentioned below in the <session> tag:

- MDBQCF is the name of the XA Queue Connection Factory.
- MDB_QUEUE is the name of the Queue

```
<resource-ref>
        <description>Queue connection factory for MDB Gateway</description>
        <res-ref-name>MDBQCF</res-ref-name>
        <res-type>javax.jms.XAQueueConnectionFactory</res-type>
        <res-auth>Container</res-auth>
```

```
</resource-ref>
<resource-env-ref>
        <description>Queue to put the message</description>
        <resource-env-ref-name>MDB_QUEUE</resource-env-ref-name>
        <resource-env-ref-type>javax.jms.Queue</resource-env-ref-type>
</resource-env-ref>
```

B. Configure FLEXCUBE UBS ADOGL EJB Properties

Edit ***<KERNEL_INSTALL_DIR>\ADOGL_EJB\config\ADOGL_EJB_Prop.properties*** file to give appropriate values for the properties as described below,

1. DTD_PATH: This property specifies the path where the GLHANDOFF.DTD is stored.

   E.g. <KERNEL_INSTALL_DIR>/ADOGL_EJB/DTD/

   [NOTE: Give DTD file path with forward slash (/) as file separator and remember to give a slash at the end.]

2. OGL_ADAPTER_DTD: This property specifies the name of the DTD against which the incoming messages are validated.

   E.g.:GLHANDOFF.DTD .

3. XSL_PATH: This property specifies the path where the XSL is stored.It should be <KERNEL_INSTALL_DIR>/ADOGL_EJB/XSL/

   [NOTE: Give XSD file path with forward slash (/) as file separator and remember to give a slash at the end.]

4. OGL_ADAPTER_XSL: This property specifies the name of the XSL against which the incoming messages are validated.

   E.g.:OGL_ADAPTER_XSL.

5. ADOGL_EJB_JMS_QCF: This property is the Adapter Queue Connection Factory name.

   E.g.: MDBQCF

6. ADOGL_EJB_JMS_QUEUE_NAME: This property is the Adapter Queue name.

   E.g.: MDB_QUEUE

7. LOGGER_PATH: This property specifies the path of the logger property file located at <KERNEL_INSTALL_DIR>\ADOGL_EJB\config

   E.g.: D:/Kernel7.2/ADOGL_EJB/config/adogl_ejb_logger.cfg

   [NOTE: Give the logger path with forward slash (/).]

The ADOGL_EJB_Prop.properties will look as given below.

DTD_PATH=**D:/Kernel7.2/ADOGL_EJB/DTD/**

OGL_ADAPTER_DTD=**GLHANDOFF.DTD**

XSL_PATH=**D:/Kernel7.2/ADOGL_EJB/XSL/**

OGL_ADAPTER_XSL=**OGL_ADAPTER_XSL.xsl**

ADOGL_EJB_JMS_QCF=**MDBQCF**

ADOGL_EJB_JMS_QUEUE_NAME=**MDB_QUEUE**

ADOGL_EJB_JMS_Q_ACKNOWLEDGE=**AUTO_ACKNOWLEDGE**

ADOGL_EJB_JMS_Q_TRANSACTION=**false**

ADOGL_EJB_JMS_Q_DELIVERY_OPT=**2**

ADOGL_EJB_JMS_Q_TIME_TO_LIVE=**500000**

LOGGER_PATH=**D:/Kernel7.2/ADOGL_EJB/config/adogl_ejb_logger.cfg**

C. Configure logger parameters

Edit <KERNEL_INSTALL_DIR>\ADOGL_EJB\config\adogl_ejb_logger.cfg file to change the value of the property "AD.LOGGER.FPATH" to KERNEL_INSTALL_DIR>/ADOGL_EJB/log/.

E.g. If the value of your <KERNEL_INSTALL_DIR> is D:\Kernel7.2, then the entry for this property will be,

AD.LOGGER.FPATH= D:/Kernel7.2/ADOGL_EJB/log/

[NOTE: Give AD.LOGGER.FPATH with forward slash (/) as file separator and remember to give a slash (/) at the end.]

D. Run the build file

- ✓ For Windows
  - Go to the folder <KERNEL_INSTALL_DIR>\setup in the command prompt, type **"set_env"** and press enter.
  - Change directory to <KERNEL_INSTALL_DIR>\ADOGL_EJB\setup\OC4J in the command prompt, type **"ant"** and press enter.
- ✓ For UNIX
  - Go to the folder <KERNEL_INSTALL_DIR>/setup in the shell prompt, type **"set_env.sh"** and press enter.
  - Change directory to <KERNEL_INSTALL_DIR>/ADOGL_EJB/setup/OC4J in the shell prompt, type **"ant"** and press enter.

[NOTE: Please make sure that you get a message BUILD SUCCESSFUL after compilation.]

E. Deploy the EJB in Oracle 10g Application Server

1. Stop the application server.

If the application server is already running, then stop the application server as follows:

✓ For WINDOWS

- Set JAVA_HOME and ORACLE_HOME with the paths in your machine

  e.g.

  set ORACLE_HOME=D:\Oracle10gAS

  set JAVA_HOME=%ORACLE_HOME%\jdk

- Go to the <APP_SERVER_HOME>/bin directory in the command prompt

  e.g. cd %APP_SERVER_HOME%\bin

- Type **oc4j –shutdown –port 23791 –password <admin_password>**

  e.g. oc4j –shutdown –port 23791 –password oc4jadmin

  This will stop the server.

✓ For UNIX

- Set JAVA_HOME and ORACLE_HOME with the paths in your machine

  e.g.

  export ORACLE_HOME=/home/Oracle10gAS

  export JAVA_HOME=${ORACLE_HOME}/jdk

- Go to the <APP_SERVER_HOME>/bin directory in the command prompt

e.g. cd ${APP_SERVER_HOME]/bin

- Type **oc4j –shutdown –port 23791 –password <admin_password>**

e.g. oc4j –shutdown –port 23791 –password oc4jadmin

This will stop the server.

2. **Start the application server**.

✓ For WINDOWS

- Set JAVA_HOME and ORACLE_HOME with the paths in your machine.

e.g.

set ORACLE_HOME=D:\Oracle10gAS

set JAVA_HOME=%ORACLE_HOME%\jdk

- Go to the <APP_SERVER_HOME>/bin directory in the command prompt

E.g. cd %APP_SERVER_HOME%\bin

- Type **oc4j –start**

This will start the server. Ensure that you get no error during start up.

✓ For UNIX

- Set JAVA_HOME and ORACLE_HOME with the paths in your machine.

e.g.

export ORACLE_HOME=/home/Oracle10gAS

export JAVA_HOME=${ORACLE_HOME}/jdk

- Go to the <APP_SERVER_HOME>/bin directory in the command prompt

  E.g. cd ${APP_SERVER_HOME}/bin

- Type **oc4j –start**

  This will start the server. Ensure that you get no error during start up.

3. **Open the Administrative Console of Oracle Enterprise Manager**

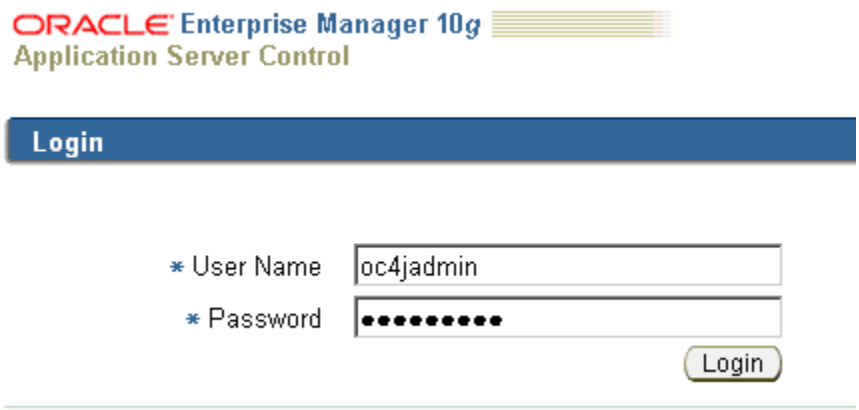
✓ Open an internet browser and type the OC4J Admin Console URL Address of the server.

e.g. http://10.80.4.116:8888/em

where, 10.80.4.116 is the machine IP Address on which OC4J is running.

✓ Login to Administrative Console

Enter OC4J administrator username/password and press **Login**.

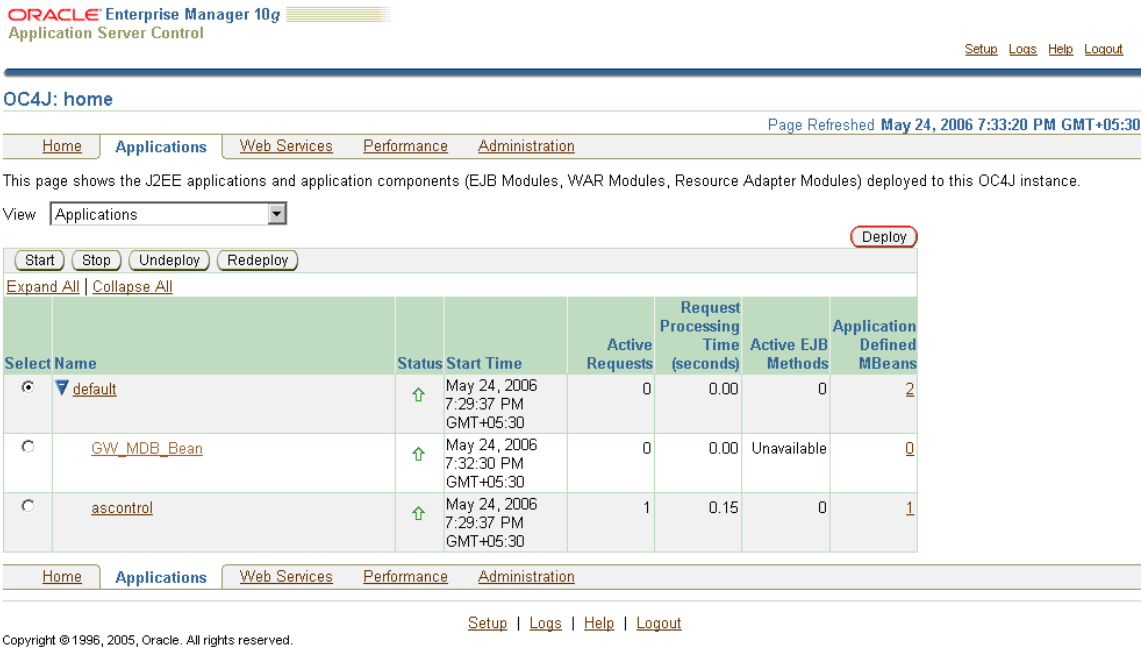


4. **Create OracleASJMS Queues and Queue Connection Factories in Oracle 10g Application Server (specific to ADOGL_EJB)**

   [**Refer:** OC4J_ADOGL_OracleASJMS_Queue_Installation.doc]

5. *Deploy ADOGL_EJB_FACADE_Bean.ear*

   ✓ Click on Applications -> Deploy.



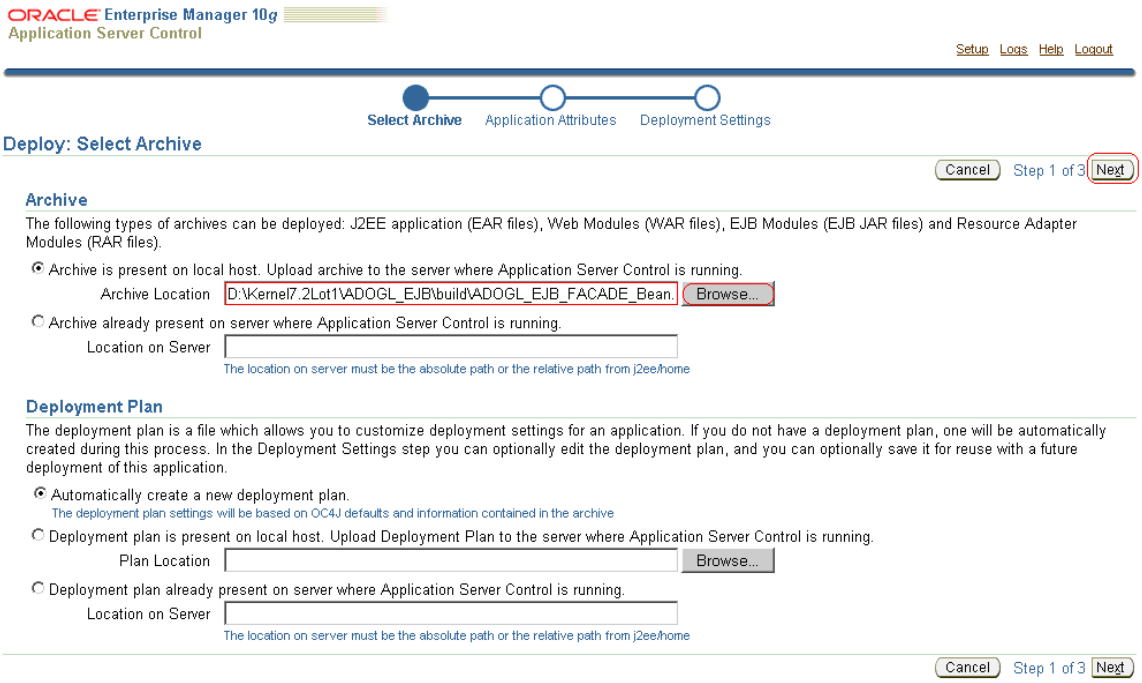
6. ***The following screen is displayed.***

   ✓ Click **Browse**

   ✓ Specify the local path of the enterprise archive file:

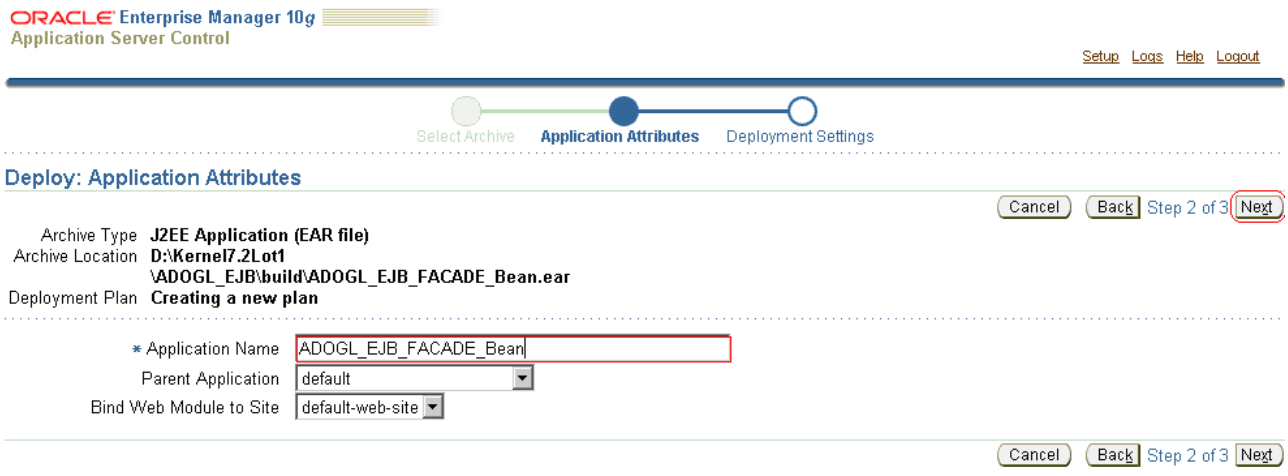
   <KERNEL_INSTALL_DIR>/ADOGL_EJB/build/ADOGL_EJB_FACADE_Bean.ear

   ✓ ***Click** Next.*



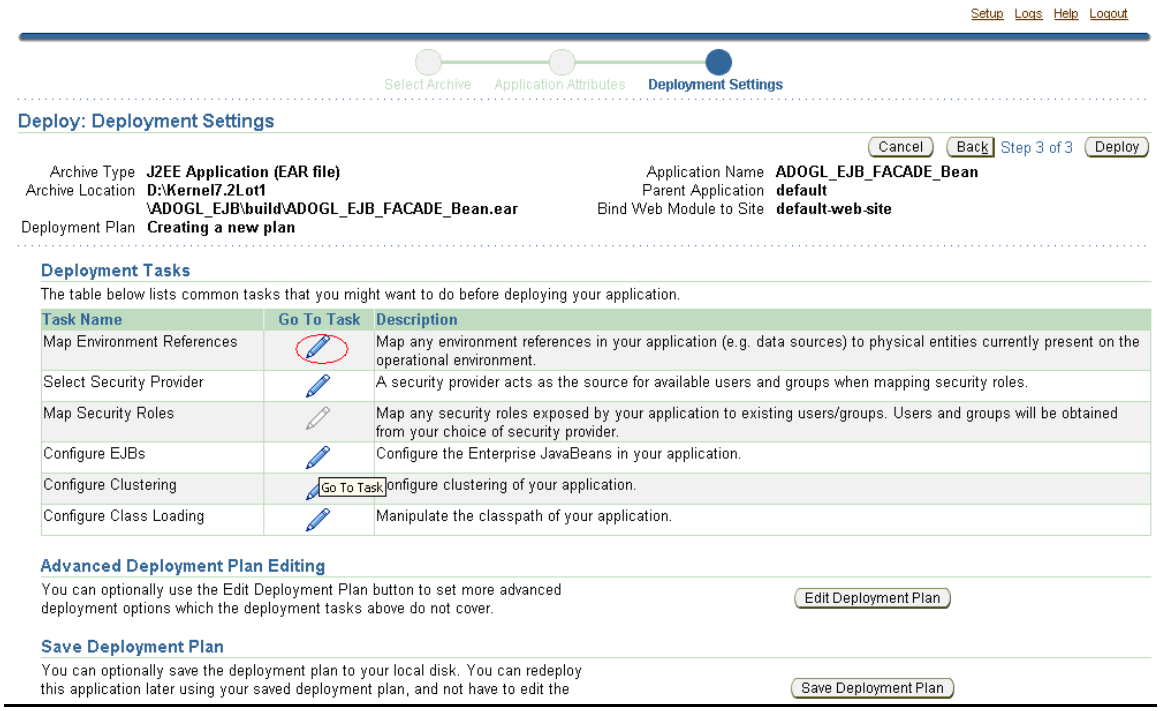
7. ***The following screen is displayed.***

   ✓ ***Click** Next.*



8. ***The following screen is displayed.***

- ✓ Click**" Map Environment References"**

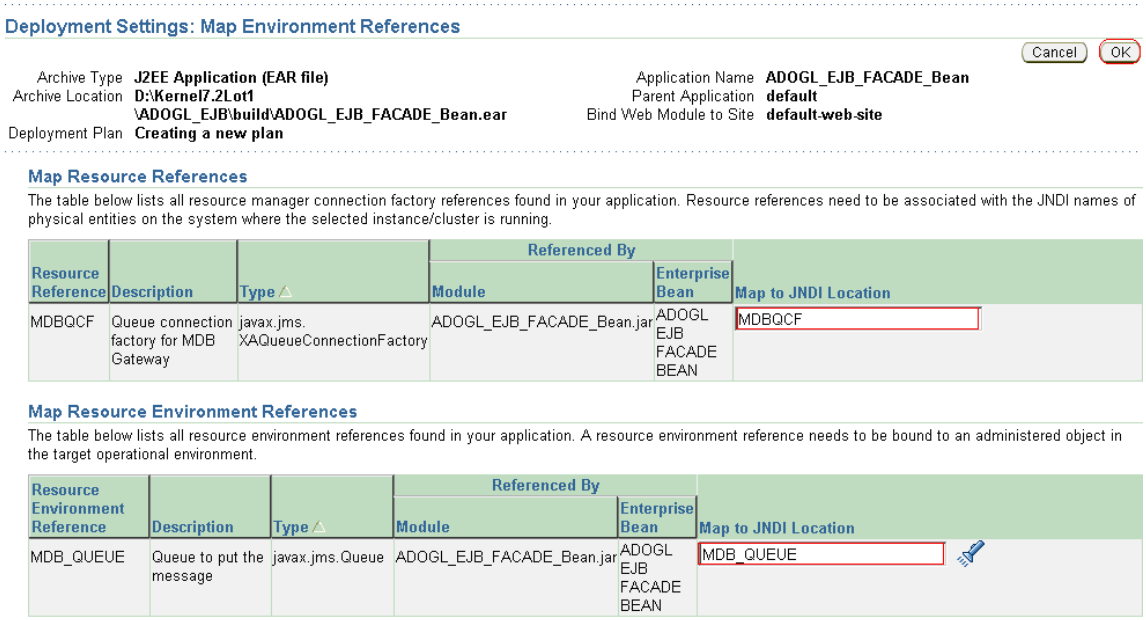


9. ***The following screen is displayed.***

- ✓ Map to JNDI Location for XAQueueConnectionFactory – Enter **MDBQCF**

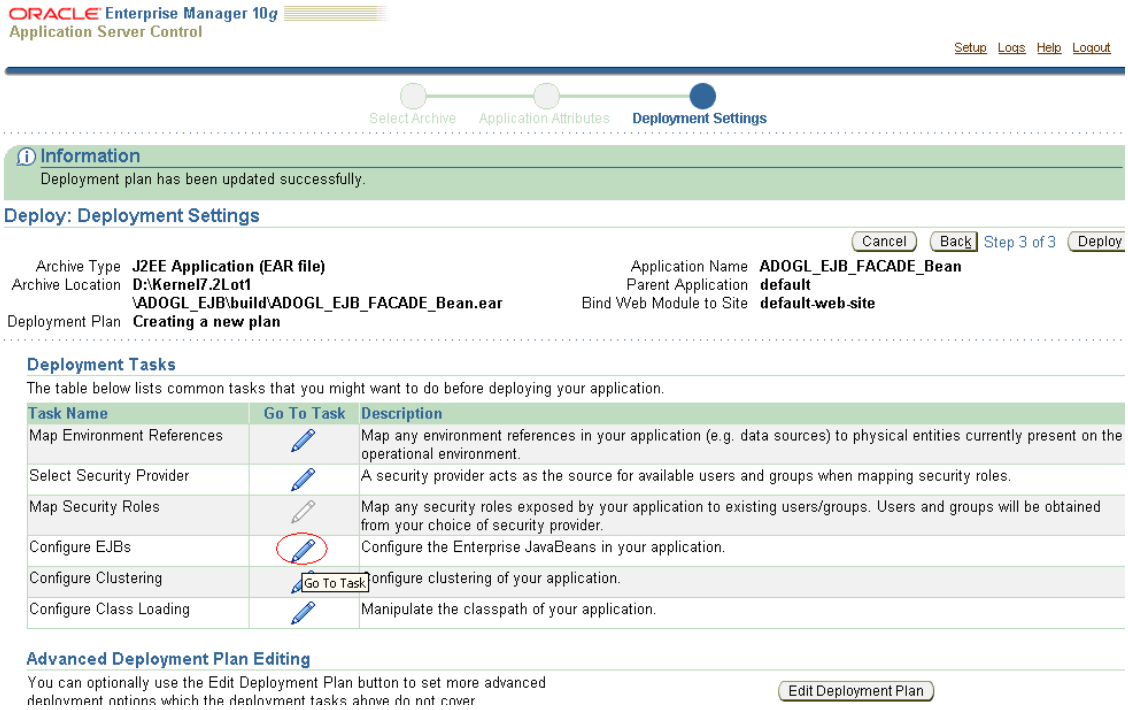
- ✓ Map to JNDI Location for Queue – Enter **MDB_QUEUE**

- ✓ Click **OK**



10. ***The following screen is displayed.***

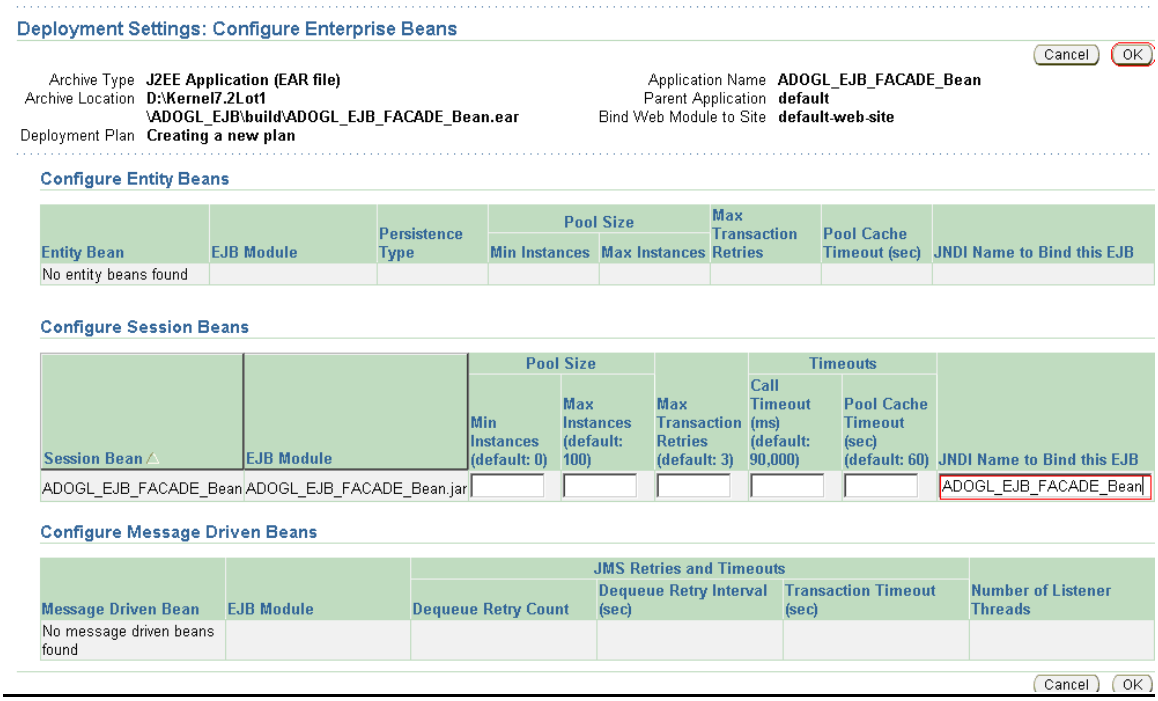
    ✓ ***Go to** "Configure EJBs" **Task**.*



11. ***The following screen is displayed***

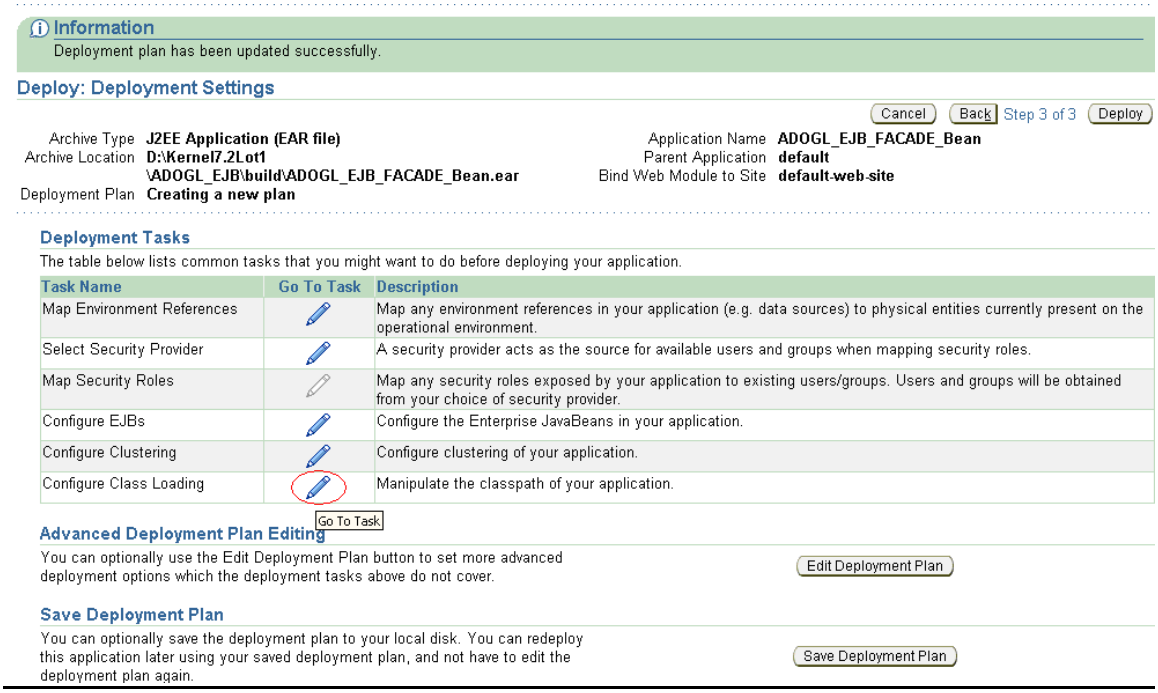
- ✓ ***JNDI Name to Bind EJB – Enter*** *ADOGL_EJB_FACADE_Bean*

- ✓ ***Click*** *OK*



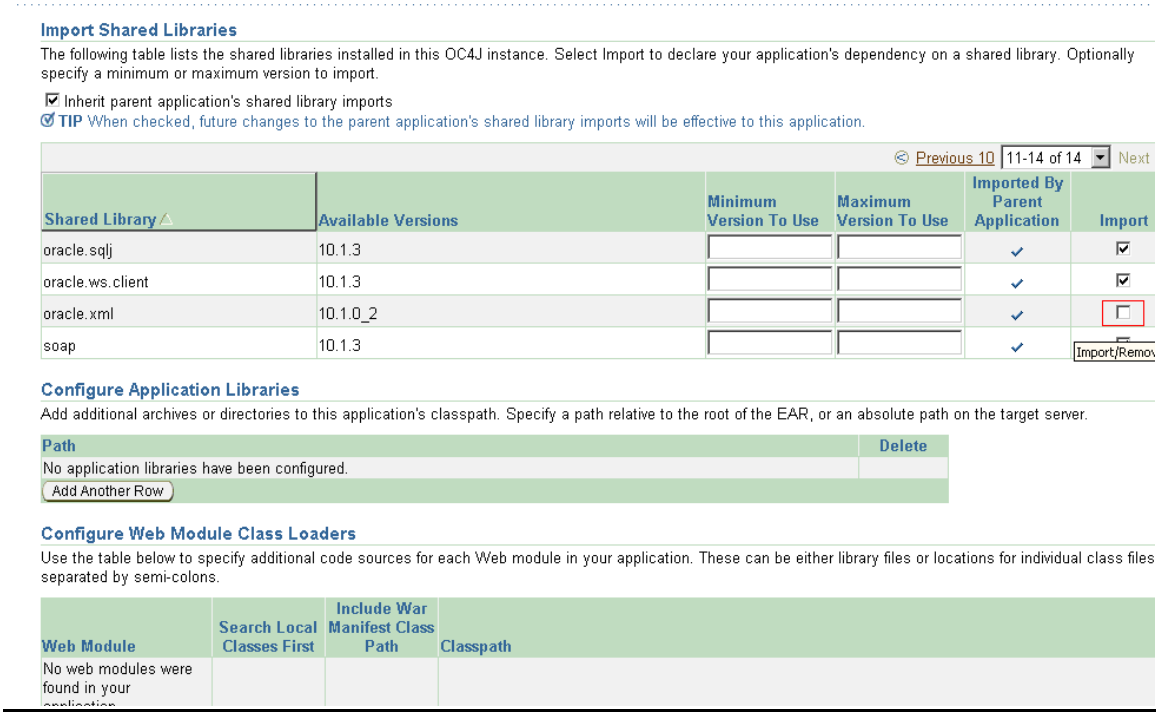
12. ***The following screen is displayed***

- ✓ ***Go to** "Configure Class Loading" **Task**.*



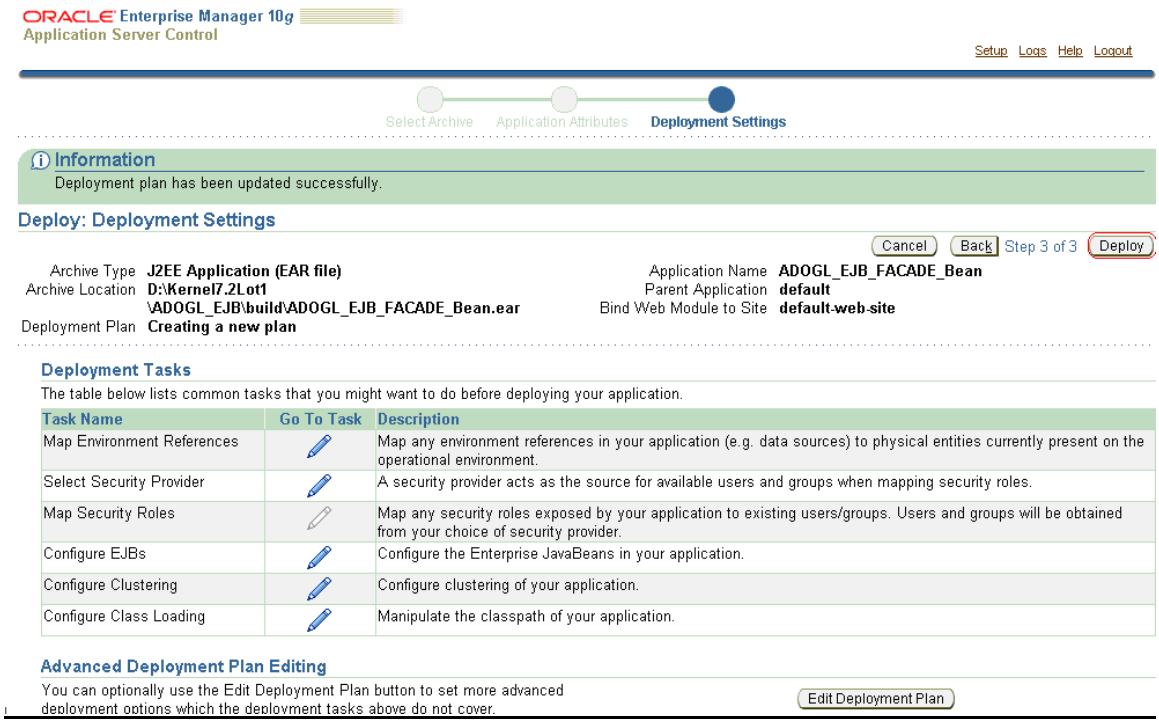
13. ***The following screen is displayed.***

- ✓ *Uncheck oracle.xml*
- ✓ ***Click** OK*



14. ***The following screen is displayed.***

- ✓ ***Click** Deploy*



15. ***The following screen is displayed.***

[Please ensure the ADOGL_EJB_FACADE_Bean has been successfully deployed.]

✓ *Click Return*


ORACLE Enterprise Manager 10g
Application Server Control
Setup Logs Help Logout
Confirmation
Return
The Application "ADOGL_EJB_FACADE_Bean" has been successfully deployed.
Progress Messages
[May 24, 2006 7:40:30 PM] Application Deployer for ADOGL_EJB_FACADE_Bean STARTS.
[May 24, 2006 7:40:30 PM] Copy the archive to D:\Oracle10gAS\j2ee\home\applications\ADOGL_EJB_FACADE_Bean.ear
[May 24, 2006 7:40:30 PM] Initialize D:\Oracle10gAS\j2ee\home\applications\ADOGL_EJB_FACADE_Bean.ear begins...
[May 24, 2006 7:40:30 PM] Unpacking ADOGL_EJB_FACADE_Bean.ear
[May 24, 2006 7:40:30 PM] Done unpacking ADOGL_EJB_FACADE_Bean.ear
[May 24, 2006 7:40:30 PM] Initialize D:\Oracle10gAS\j2ee\home\applications\ADOGL_EJB_FACADE_Bean.ear ends...
[May 24, 2006 7:40:30 PM] Starting application : ADOGL_EJB_FACADE_Bean
[May 24, 2006 7:40:30 PM] Initializing ClassLoader(s)
[May 24, 2006 7:40:30 PM] Initializing EJB container
[May 24, 2006 7:40:30 PM] Loading connector(s)
[May 24, 2006 7:40:30 PM] Starting up resource adapters
[May 24, 2006 7:40:30 PM] Processing EJB module: ADOGL_EJB_FACADE_Bean.jar
[May 24, 2006 7:40:31 PM] Compiling EJB generated code
[May 24, 2006 7:40:35 PM] Initializing EJB sessions
[May 24, 2006 7:40:35 PM] Committing ClassLoader(s)
[May 24, 2006 7:40:35 PM] Started application : ADOGL_EJB_FACADE_Bean
[May 24, 2006 7:40:35 PM] Binding web application(s) to site default-web-site begins...
[May 24, 2006 7:40:35 PM] Binding web application(s) to site default-web-site ends...
[May 24, 2006 7:40:35 PM] Application Deployer for ADOGL_EJB_FACADE_Bean COMPLETES. Operation time: 5032 msecs
Return
Setup | Logs | Help | Logout
Copyright © 1996, 2005, Oracle. All rights reserved.

Appendix

1.1 Configuring ADOGL EJB with IBM WebSphere MQ

Follow the steps given below only if the Oracle10g Application Server is to be configured with ***IBM WebSphere MQ*** .

Before going ahead with the steps given below, please ensure the IBM WebSphere MQ Destinations, Connection Factories and their Bindings are created.

[Note: The path of the .bindings files needs to be specified in orion-application.xml]

Please refer to WAS_ADOGL_WebSphereMQ_Installation.doc ***Section 1.4*** to create them.

The Resource Adapter (used to connect to IBM WebSphere MQ) related files are as given below and are located at

<KERNEL_INSTALL_DIR>\ADOGL_MDB\config\OC4J

- ✓ oc4j-connectors.xml
- ✓ oc4j-ra.xml
- ✓ orion-application.xml
- ✓ orion-ejb-jar.xml
- ✓ ra.xml

1. Modify oc4j-connectors.xml

Specify all the Queues involved as given below:

```
<adminobject-config location="MDB_QUEUE">
        <adminobject-class>oracle.j2ee.ra.jms.generic.AdminObjectQueueImpl</adminobject-class>
        <config-property name="jndiName" value="MDB_QUEUE"/>
        <config-property name="resourceProviderName" value="WebSphereMQRP"/>
</adminobject-config>
```

2. **Modify oc4j-ra.xml**

Specify the Queue Connection Factories involved as given below:

```
<connector-factory location="MDBQCF" connector-name="WebSphereMQC">
      <connectionfactory-interface>
                javax.jms.XAQueueConnectionFactory
      </connectionfactory-interface>
      <config-property name="jndiLocation" value="MDBQCF"/>
 </connector-factory>
```

3. **Modify orion-application.xml**

Define the Resource Provider to be used by the Notify MDB.

[Note: Ensure the .bindings file is located in the correct path given below as value of the property name, java.naming.provider.url]

```
<resource-provider
    class="com.evermind.server.deployment.ContextScanningResourceProvider"
    name="WebSphereMQRP">
     <description>WebSphere MQ Resource Provider</description>
     <property name="java.naming.factory.initial"
                value="com.sun.jndi.fscontext.RefFSContextFactory"/>

     <property name="java.naming.provider.url" value="file:/D:/Kernel7.2/Bindings"/>
```

```
</resource-provider>
```

4. **Modify orion-ejb-jar.xml**

Mention the Resource references as shown below.

```
<session-deployment name="ADOGL_EJB_FACADE_Bean"
            location="ADOGL_EJB_FACADE_Bean"
            local-location="ADOGL_EJB_FACADE_Bean_ADOGL_EJB_FACADE_BeanLocal"
            local-wrapper-name="ADOGLEjbFacadeLocal_StatelessSessionBeanWrapper8"
            remote-wrapper-name="ADOGLEjbFacadeRemote_StatelessSessionBeanWrapper10"
            persistence-filename="ADOGL_EJB_FACADE_Bean"
            wrapper="ADOGLEjbFacadeRemoteHome_StatelessSessionHomeWrapper11"
            local-wrapper="ADOGLEjbFacadeLocalHome_StatelessSessionHomeWrapper9">

        <!-- Resource Ref mappings -->
        <resource-ref-mapping name="MDBQCF" location="MDBQCF"/>

        <!-- Resource Ref Environment mappings -->
        <resource-env-ref-mapping name="MDB_QUEUE" location="MDB_QUEUE"/>

</session-deployment>
```

5. **Modify ra.xml**

Specify the Queues and the Queue Connection Factory involved as given below:

```
<!-- Queue admin object -->

<adminobject>
        <adminobject-interface>javax.jms.Queue</adminobject-interface>
        <adminobject-class>oracle.j2ee.ra.jms.generic.AdminObjectQueueImpl</adminobject-class>
        <config-property>
           <config-property-name>jndiName</config-property-name>
           <config-property-type>java.lang.String</config-property-type>
           <config-property-value>MDB_QUEUE</config-property-value>
        </config-property>
        <config-property>
           <config-property-name>resourceProviderName</config-property-name>
           <config-property-type>java.lang.String</config-property-type>
           <config-property-value>WebSphereMQRP</config-property-value>
        </config-property>
</adminobject>

<outbound-resourceadapter>
    <connection-definition>
           <managedconnectionfactory-class>
                      oracle.j2ee.ra.jms.generic.ManagedXAQueueConnectionFactoryImpl
            </managedconnectionfactory-class>
           <connectionfactory-interface>
                       javax.jms.XAQueueConnectionFactory
           </connectionfactory-interface>
           <connectionfactory-impl-class>
```

```
                    oracle.j2ee.ra.jms.generic.XAQueueConnectionFactoryWrapper
        </connectionfactory-impl-class>

        <connection-interface>javax.jms.XAConnection</connection-interface>
        <connection-impl-class>
                oracle.j2ee.ra.jms.generic.ConnectionWrapper</connection-impl-class>
        <config-property>
                <config-property-name>jndiLocation</config-property-name>
                <config-property-type>java.lang.String</config-property-type>
                <config-property-value>MDBQCF</config-property-value>
        </config-property>
</connection-definition>
```

FLEXCUBE UBS Oracle GL Adapter Data Source Creation Installation
[May] [2016]
Version 12.2.0.0.0

Oracle Financial Services Software Limited
Oracle Park
Off Western Express Highway
Goregaon (East)
Mumbai, Maharashtra 400 063
India

Worldwide Inquiries:
Phone: +91 22 6718 3000
Fax:+91 22 6718 3001
www.oracle.com/financialservices/