Setting up Plug-Ins
Oracle FLEXCUBE Investor Servicing
Release 14.6.0.0.0
[May] [2022]

ORACLE
FINANCIAL SERVICES

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1. Setting_up_Plugins

1.1 Introduction

You need to carry out certain tasks manually before Oracle FLEXCUBE deployment. This document details out the pre-deployment tasks based on the on the selected plug-ins.

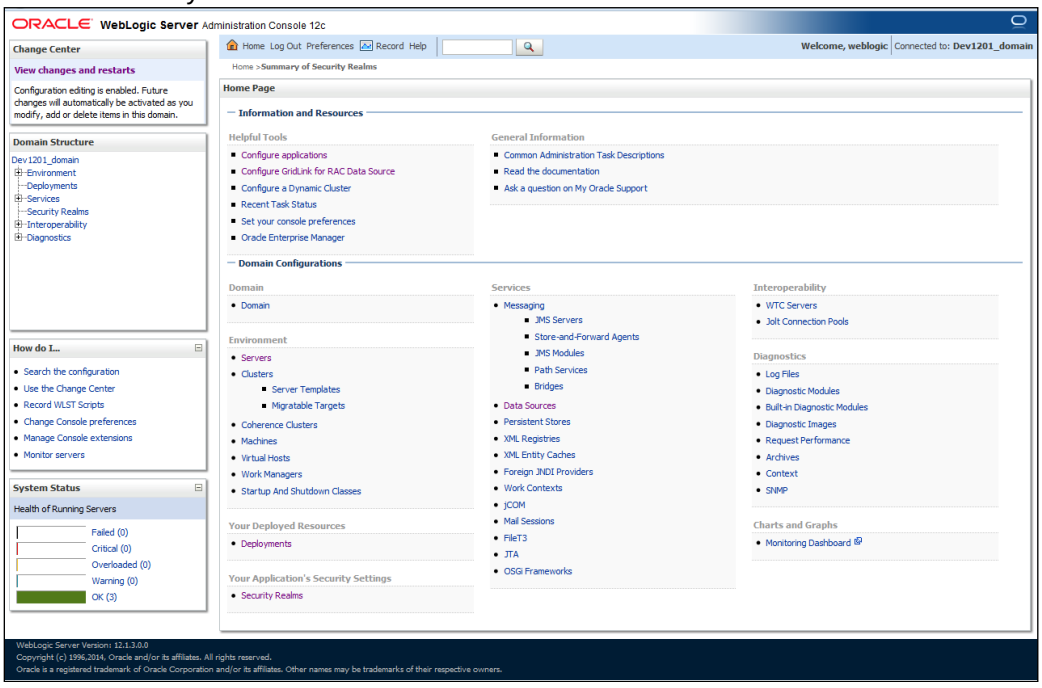
1.2 Integrating Oracle FLEXCUBE IS and BPEL

If you have created the EAR file with BPEL as a plug-in, then along with the Oracle FLEXCUBE IS EAR file, the Installer creates 'FCBPELCIS.jar' file. You need to complete the following tasks before deploying Oracle FLEXCUBE IS EAR file.

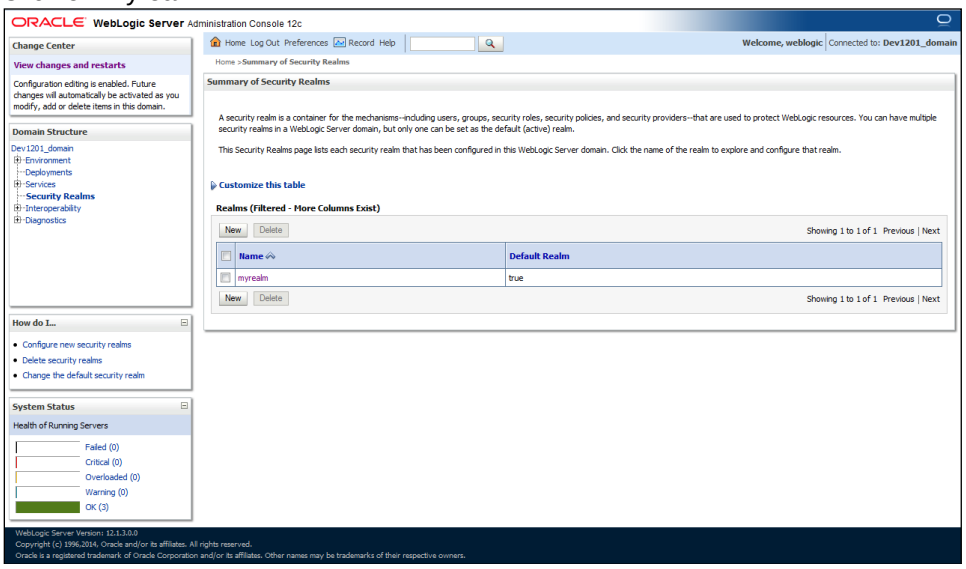
1.2.1 Custom Provider Configuration

Custom Authenticator Provider configuration has to be done from the weblogic console of SOA or manually update the config.xml of the SOA domain. Below steps needs to be followed to setup Custom Authentication Provider:

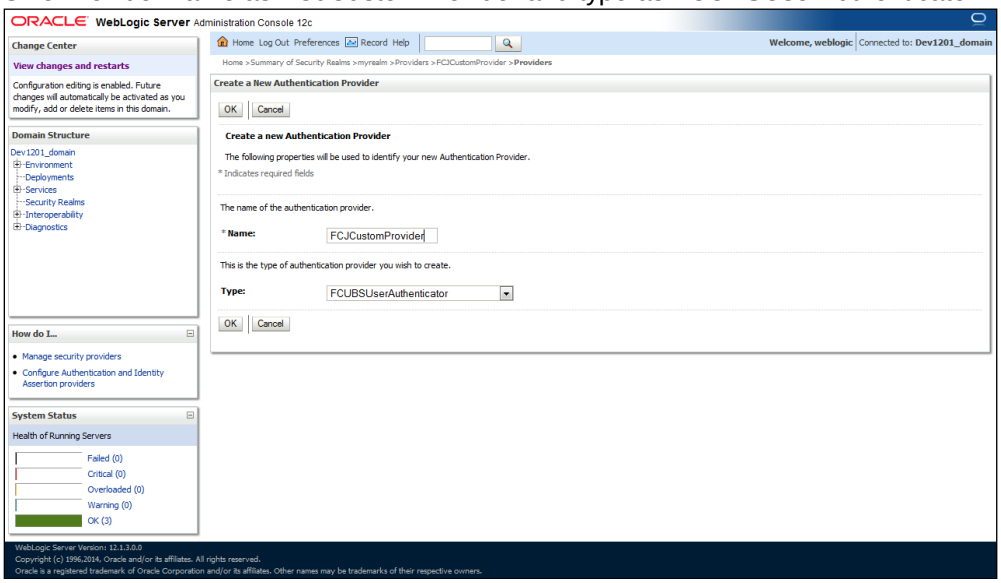
1. Along with FCIS Ear file, Installer creates FCUBSAuthenticationProvider.jar file. Copy this files to <ORACLE_HOME>\wlserver\server\lib\mbeantypes
2. Restart the Admin Server
3. Login to the Console
4. Click on Security Realms.



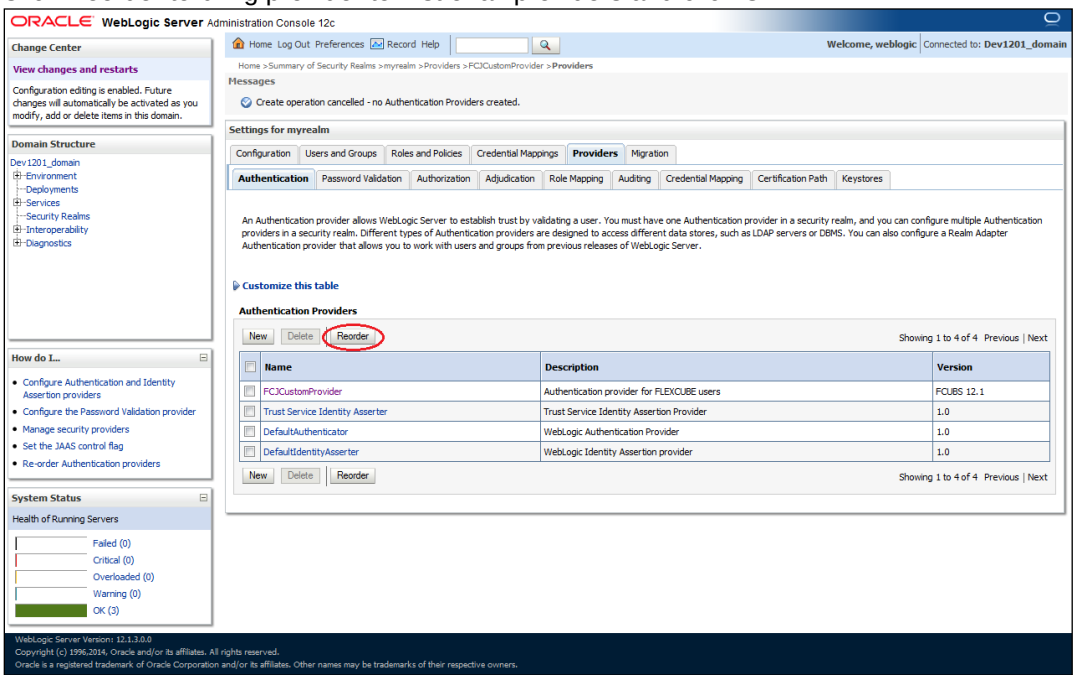
5. Click on myrealm.

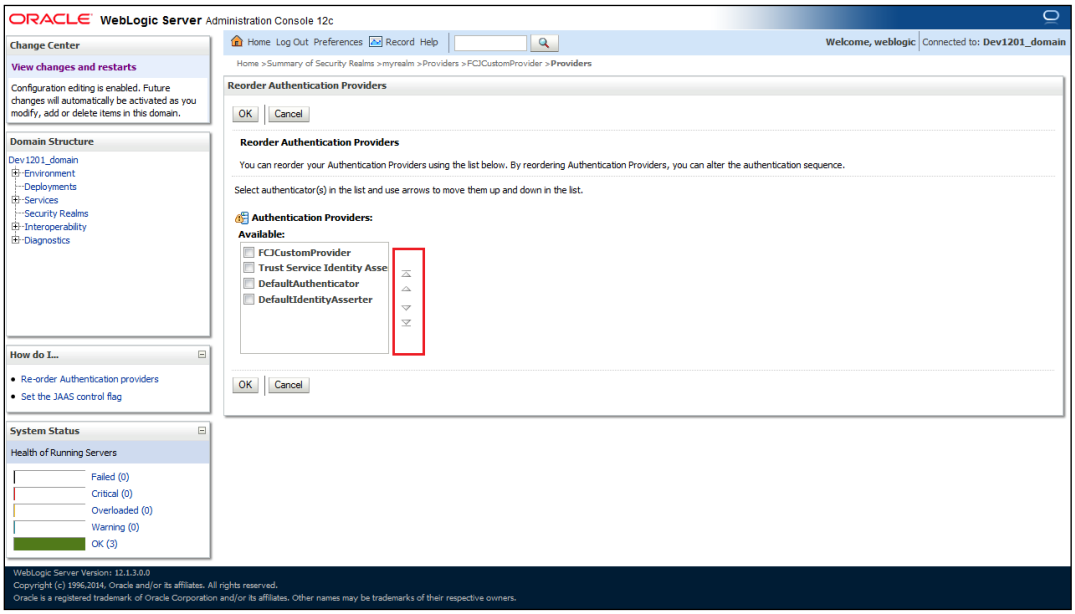


6. Click on Providers tab and click on new button to create new authentication provider.
7. Give Provider name as FCJCustomProvider and type as FCUBSUserAuthenticator.

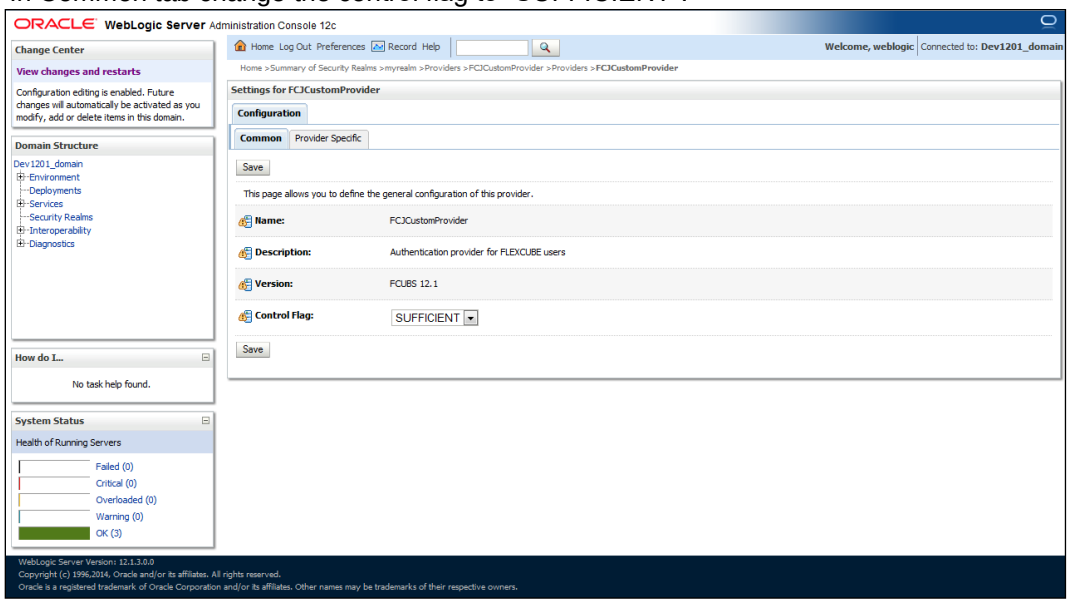


8. Click Reorder to bring provider to first of all providers and click OK.

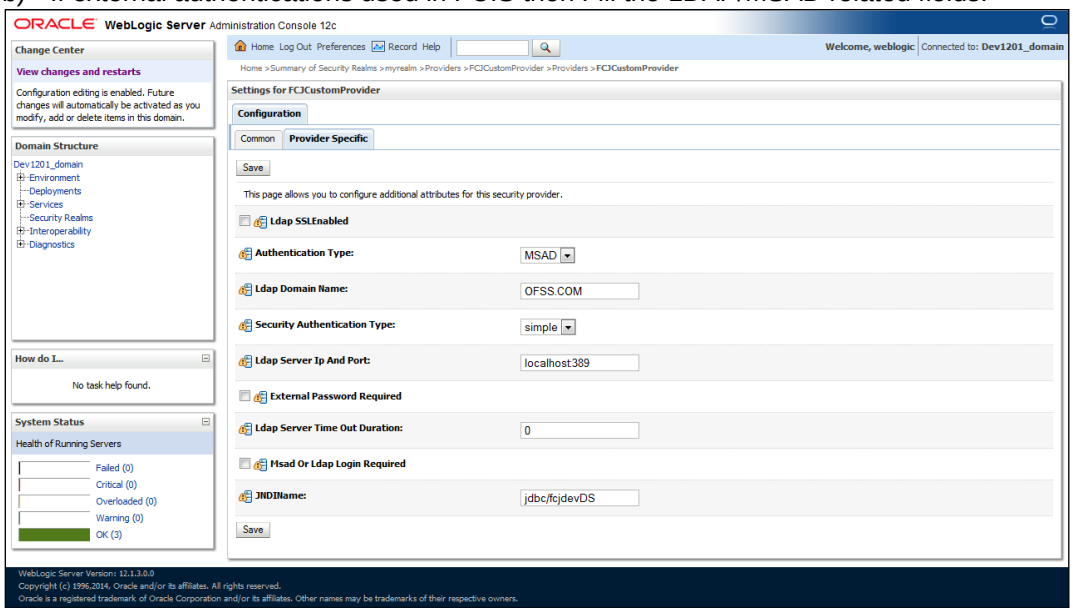




9. Click on FCJCustomProvider.
10. In Common tab change the control flag to “SUFFICIENT”.



11. In Provider Specific tab
    a) Set JNDIName as Flexcube JNDI Name.
    b) If external authentications used in FCIS then Fill the LDAP/MSAD related fields.



12. For manually editing the config.xml go to <ORACLE_HOME>\Middleware\user_projects\domains\base_domain\config\ path. Open config.xml file. The following codes need to be added at proper locations in the config.xml.
a) Search for < realm> tag and add the following code between <realm> and </ realm> tags.This should be the first child of the realm Node.

```
<sec:authentication-provider xmlns:n1="http://fcubs.ofss.com/security" xsi:type="n1:fcubs-user-authenticatorType">
    <sec:name>FCJCustomProvider</sec:name>
    <sec:control-flag>SUFFICIENT</sec:control-flag>
    <n1:msad-or-ldap-login-required>true</n1:msad-or-ldap-login-required>
    <n1:external-password-required>true</n1:external-password-required>
    <n1:authentication-type>MSAD</n1:authentication-type>
    <n1:ldap-server-ip-and-port>LDAP://localhost:389</n1:ldap-server-ip-and-port>
    <n1:ldap-ssl-enabled>true</n1:ldap-ssl-enabled>
    <n1:security-authentication-type>simple</n1:security-authentication-type>
    <n1:ldap-domain-name>OFSS.COM</n1:ldap-domain-name>
    <n1:ldap-server-time-out-duration>0</n1:ldap-server-time-out-duration>
</sec:authentication-provider>
```

b) Make sure tag values matches the value given during Property file creation.

1.2.2 Configuring libovd for Single Entity

You need to configure the libovd details. Follow the steps given below:

1. Along with the Oracle FLEXCUBE IS EAR file, the Installer creates 'FCBPELCIS.jar' file.
2. Create a folder by name 'classes' at the location '<MIDDLEWARE_HOME>soa\soa\modules\oracle.soa.ext_11.1.x'.
3. Extract the file 'FCBPELCIS.jar' and copy the content of the folder 'com' to: '<MIDDLEWARE_HOME>soa\soa\modules\oracle.soa.ext_11.1.x\classes'.
4. Navigate to the location '<MIDDLEWARE_HOME>soa\soa\modules\oracle.soa.ext_11.1.x\classes\com\ofss\fcc\bpel\cac'. Edit the properties file 'CISProperties.properties' and update 'JNDI.name' with the JNDI name defined in the properties file 'fcubs.properties'.
5. Copy 'FCBPELCIS.jar' to '<MIDDLEWARE_HOME>/user_projects/domains/<domain_name>/config/fmwconfig/ovd/plugins/lib.Create the directory structure if it does not exists.
6. Copy the fcubs_adapter.xml to '<MIDDLEWARE_HOME>/oracle_common/modules/oracle.ovd/templates/

fcubs_adapter.xml

7. Search for <FCUBSDATASOURCE> in fcubs_adapter.xml and update it with fcubs Datasource name.

8. Execute “libovdadapterconfig” script which is present in ‘<MIDDLEWARE_HOME>/oracle_common/bin’ with below parameters.Update the admin server host name or ip ,admin server port ,weblogic user id,domain home and fcubs datasource

   libovdadapterconfig.sh -adapterName fcubsAdapter -adapterTemplate fcubs_adapter.xml -host <ADMIN_SERVER_HOST> -port <ADMIN_PORT> -userName <WEBLOGIC_USERID> -domainPath <DOMAIN_HOME> -dataStore DB -root ou=fcubs,dc=oracle,dc=com -contextName default -dataSourceJNDIName <FCUBSDATASOURCE>

9. Once the above steps are completed, restart the server.

1.2.3 Configuring libovd for MultiEntity

1. Continue step 1 to step5 from 1.2.2 section.
2. In the following steps replace the <EntityId> tag with the proper Entity name.
3. Copy the fcubs_adapter_<EntityId>.xml to ‘<MIDDLEWARE_HOME>/oracle_common/modules/oracle.ovd/templates/

   fcubs_adapter_ EntityId.xml

4. Search for <FCUBSDATASOURCE> in fcubs_adapter_< EntityId>.xml and update it with fcubs Datasource with the mapped Datasource for the entity in the property file.

   Ex:<param name="DataSource" value="<FCUBSDATASOURCE>"/>

5. Search for UserIdPattern Parameter and Update the value for OU to the entity name.

   EX: <param name="UserIdPattern" value="cn=%USERID%,ou=< EntityId>,dc=oracle,dc=com"/>

6. Search for MultiEntityEnabled element and update the value to true.

   EX: <param name="MultiEntityEnabled" value="true"/>

7. Search for EntityId element and update the value with the entity name which we have created.

   EX:<param name="EntityId" value=" < EntityId >"/>

8. Execute “libovdadapterconfig” script which is present in ‘<MIDDLEWARE_HOME>/oracle_common/bin’ with below parameters.Update the admin server host name or ip ,admin server port ,weblogic user id,domain home ,root and fcubs datasource

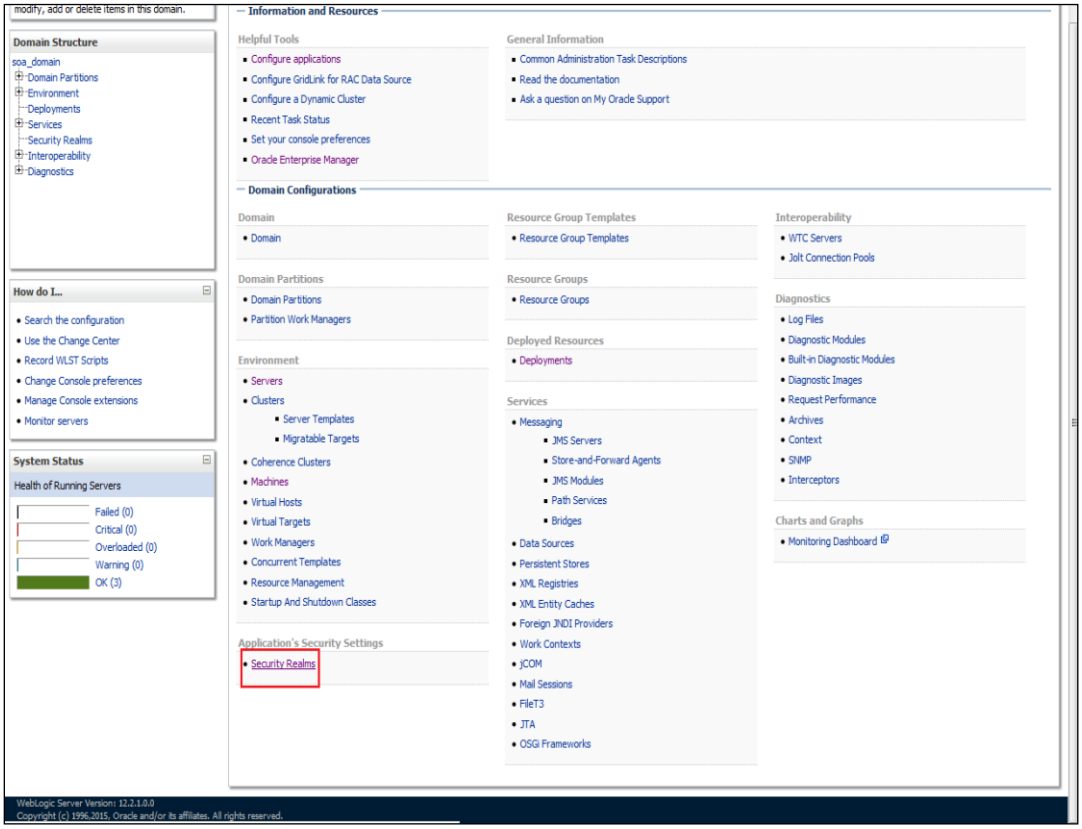
   libovdadapterconfig.sh -adapterName fcubsAdapter -adapterTemplate fcubs_adapter_< EntityId >.xml -host <ADMIN_SERVER_HOST> -port <ADMIN_PORT> -userName <WEBLOGIC_USERID> -domainPath <DOMAIN_HOME> -dataStore DB -root ou=<EntityId>,dc=oracle,dc=com -contextName default -dataSourceJNDIName <FCUBSDATASOURCE name which we mapped in step4>

9. Repeat from step2 to step7for each entity creation

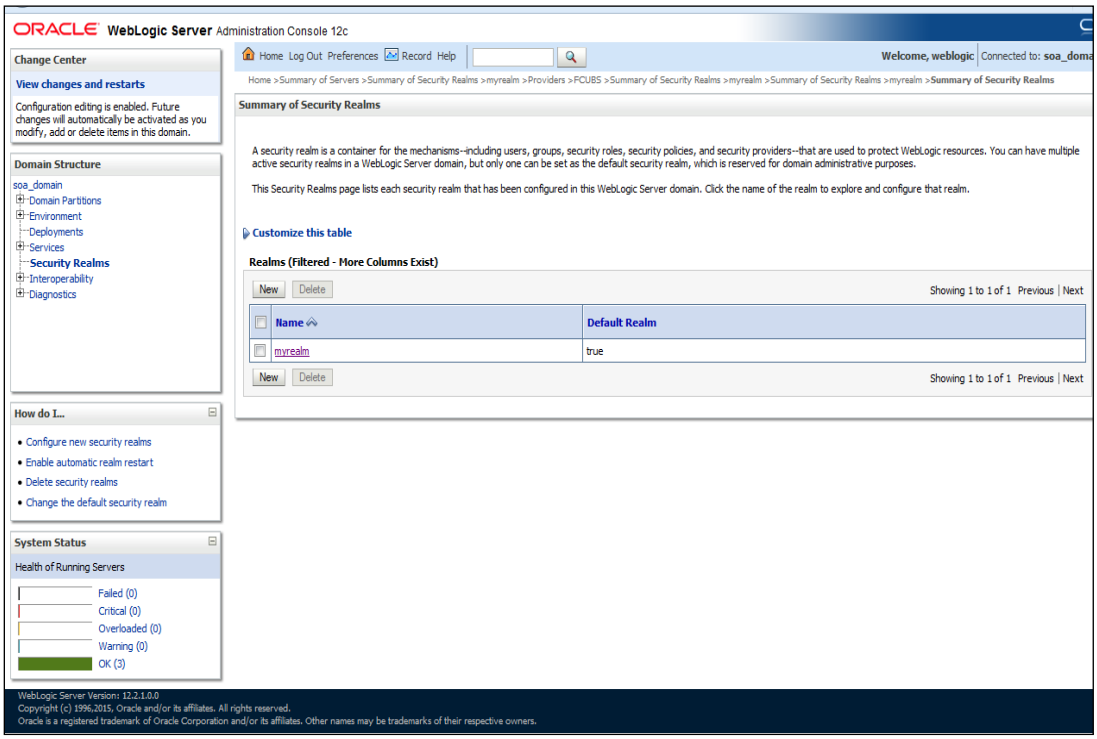
10. Once the above steps are completed, restart the server.

1.2.4 Configuring for Multiple Providers for Multiple Entities

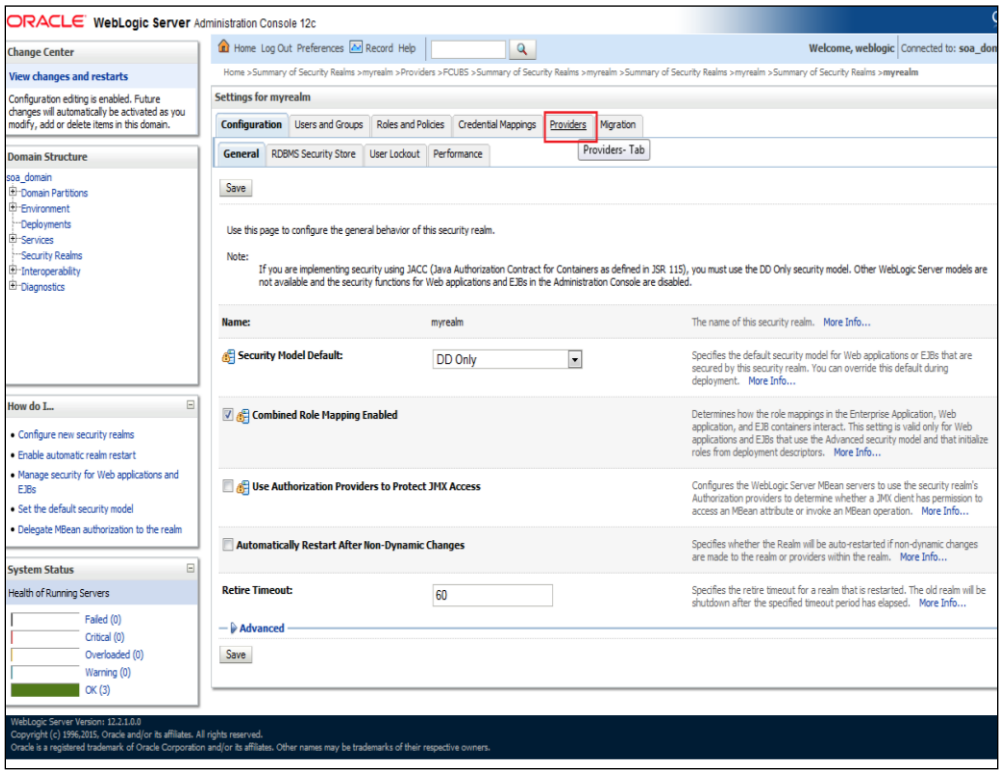
1. Login to the Adminserver.
2. Click on security Realms.



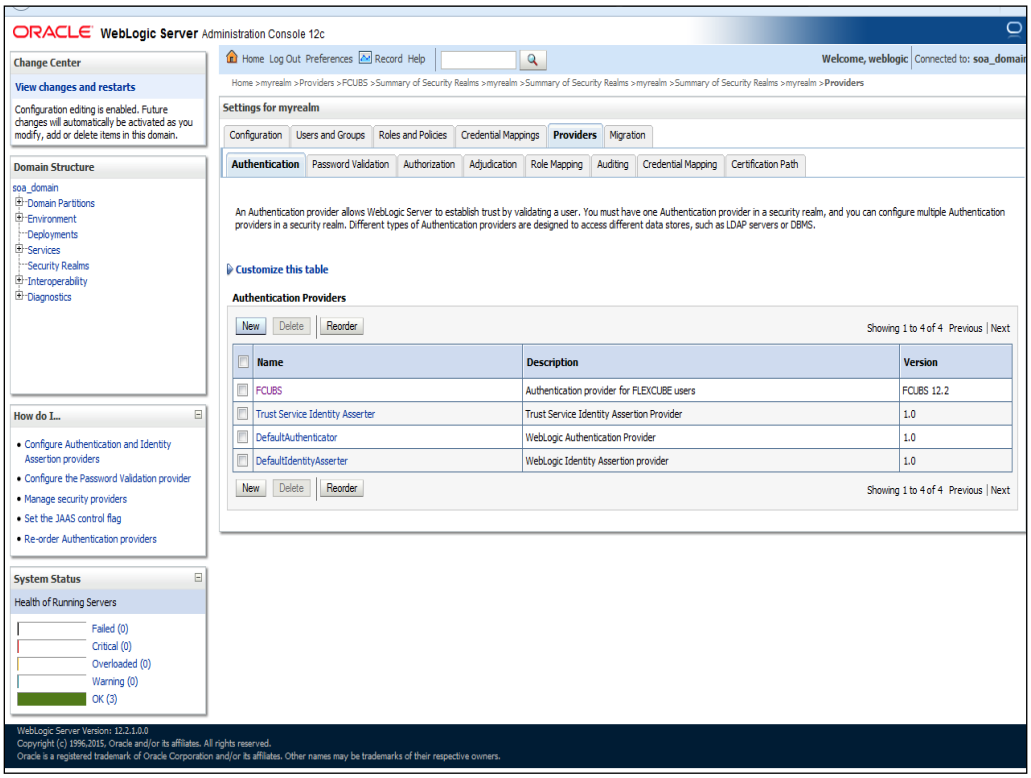
3. Click on myrealms.



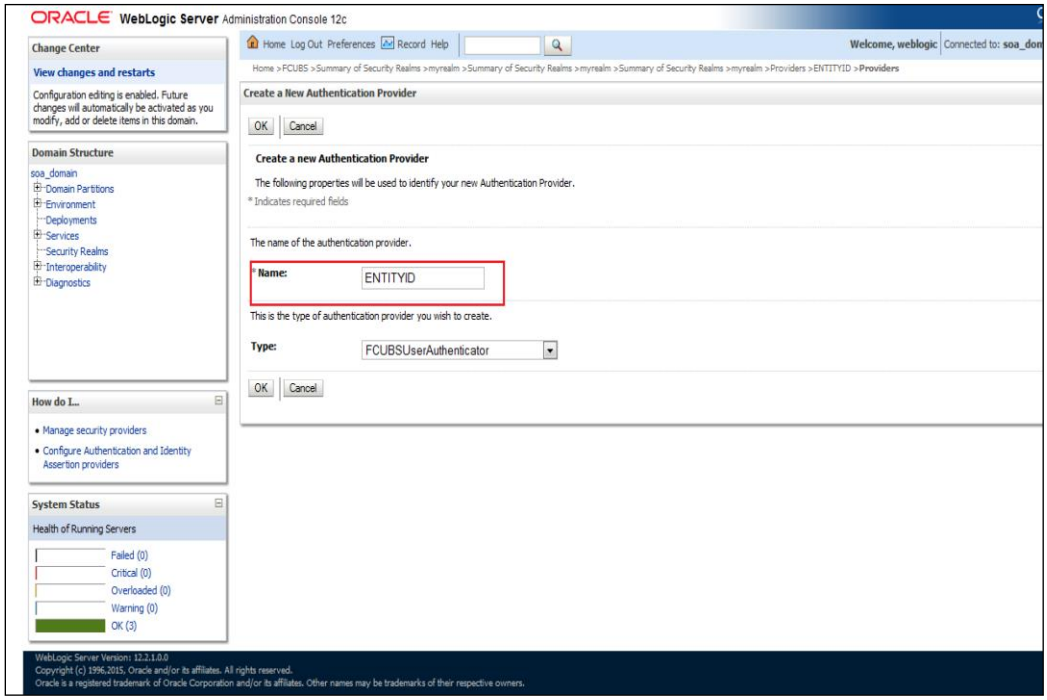
4. Click on Providers.



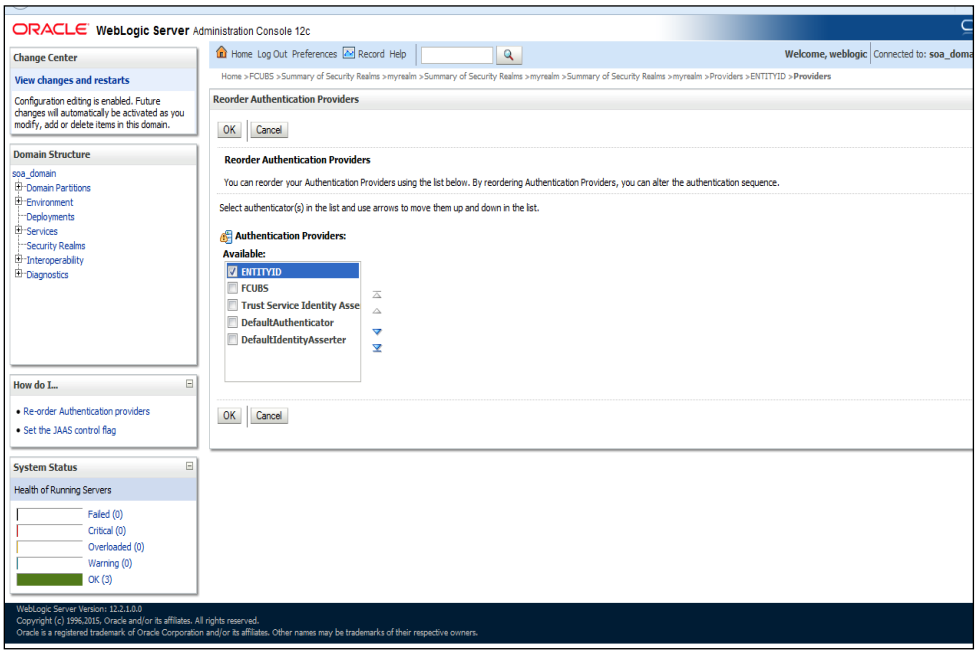
5. Click on New



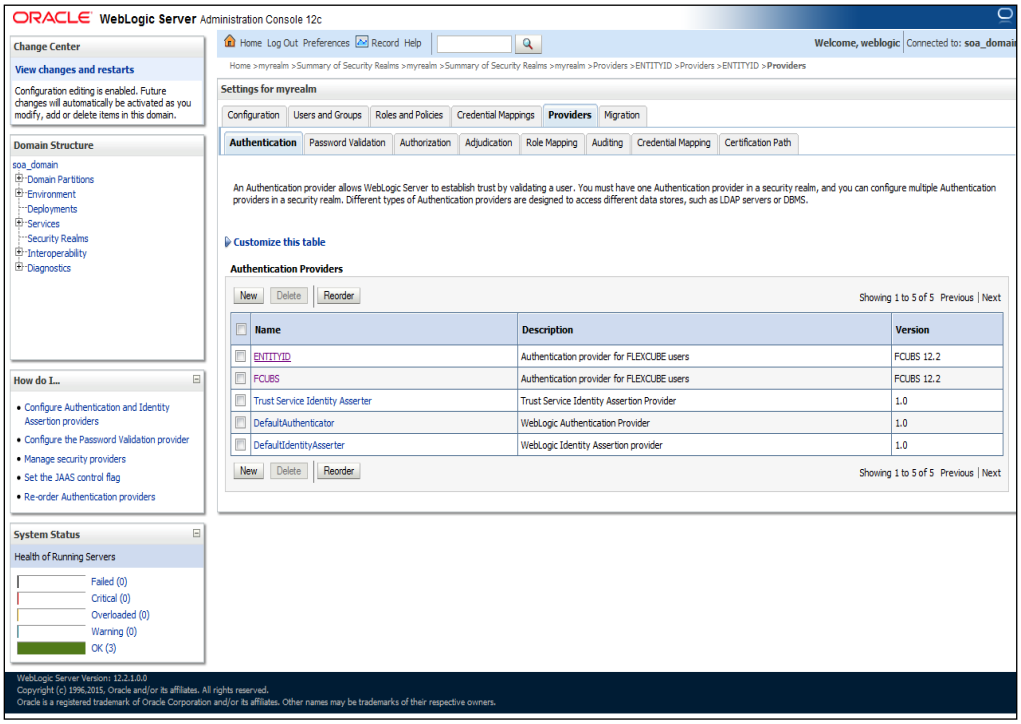
6. Enter the Name with proper Entity Name (entity name we mapped in propertyfile) and select the type as FCUBSUserAuthenticator



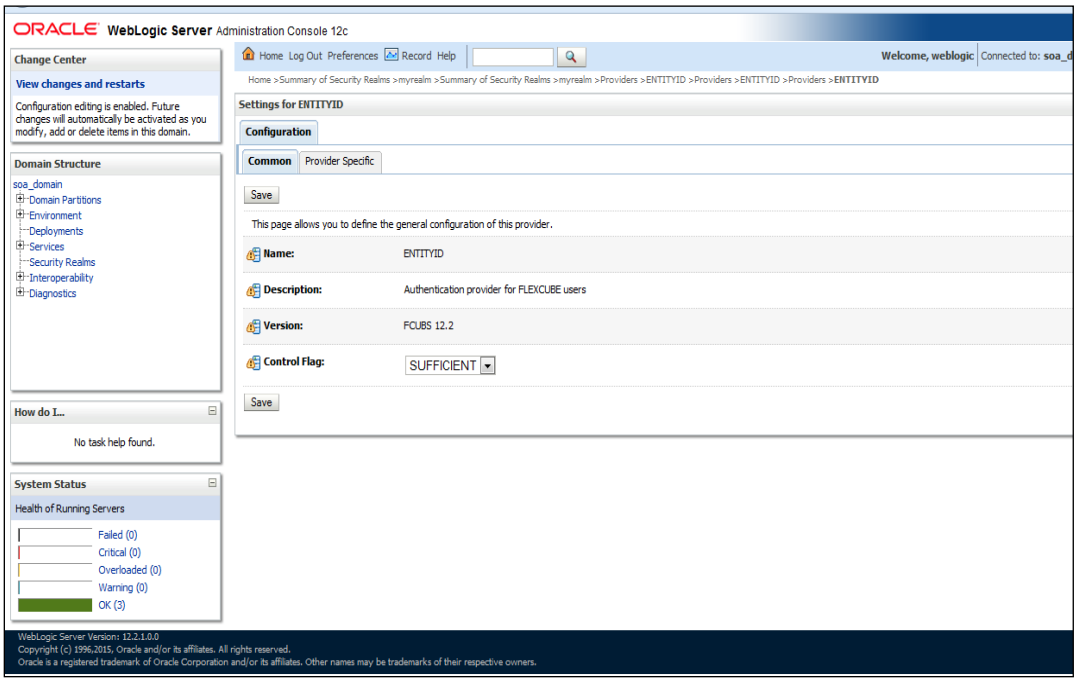
7. Click ‘Reorder. Authentication Providers. Select the required option in ‘Available’ field and click Ok.



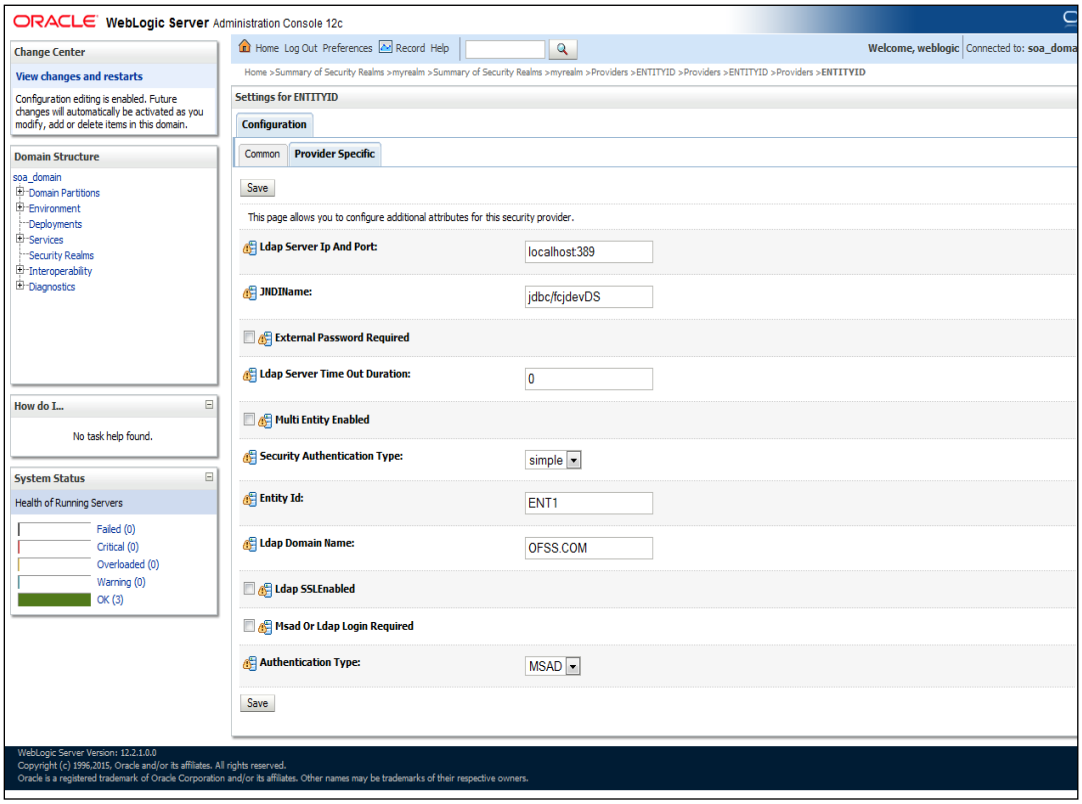
8. Click the Provider that we have created.



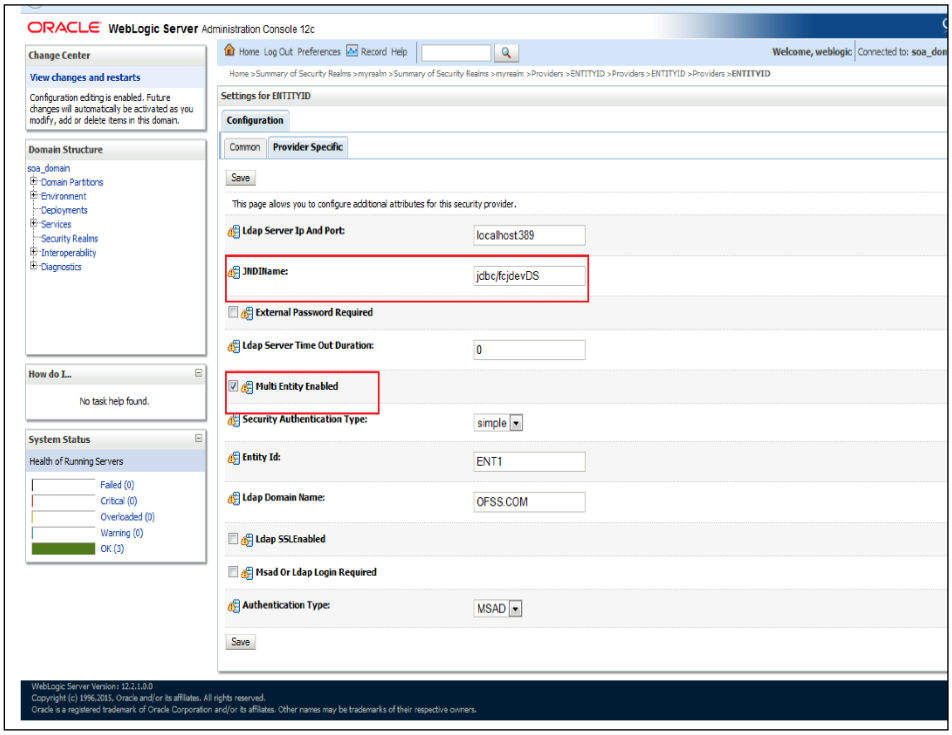
9. In Common tab, select the control flag as SUFFICENT from the list and click Save.



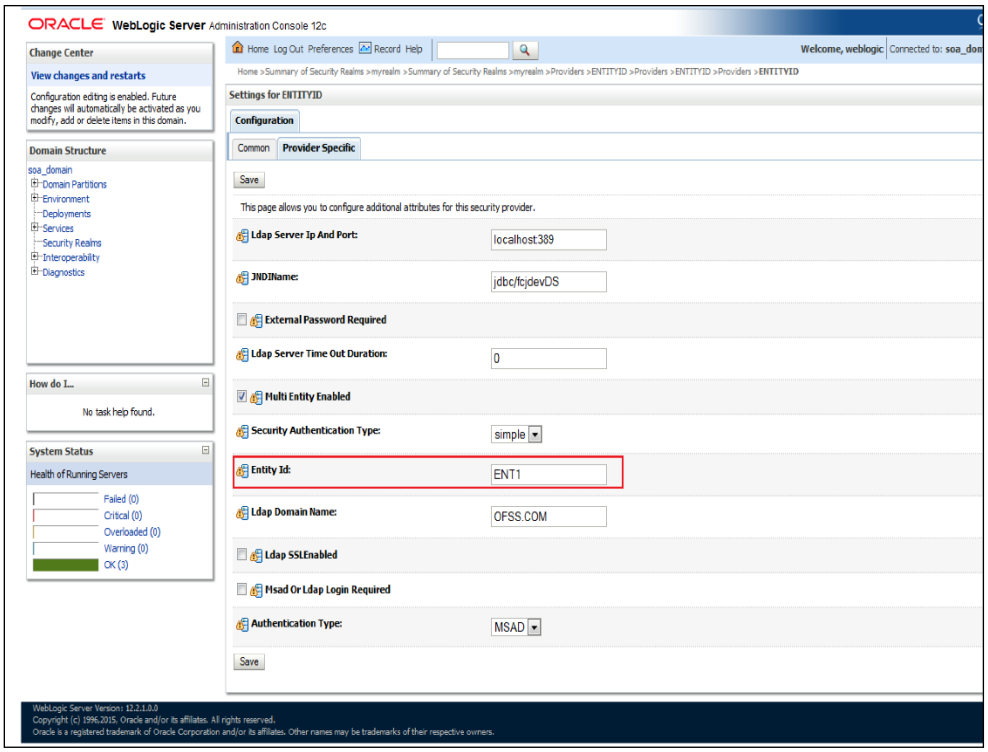
10. Select the provider Specific tab.



11. Change the JNDI name to the Datasource JNDI name which have mapped to the entity in the property file level and check the multi entity enabled checkbox.



12. Enter the Entity ID with the Entity name which we created in the property file level and click Save

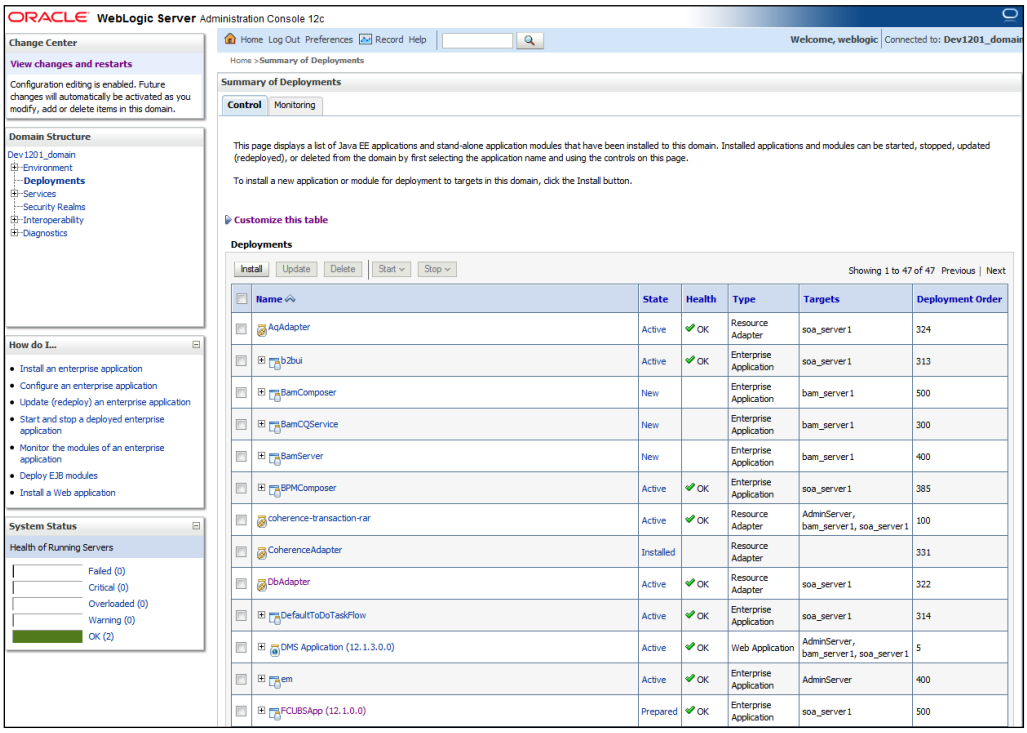


13. Create the new datasource for each entity with the JNDI name which we mapped in the property file.
14. Restart the Admin server
15. Continue the step1 to step15 for each provider creation in multi entity scenario.

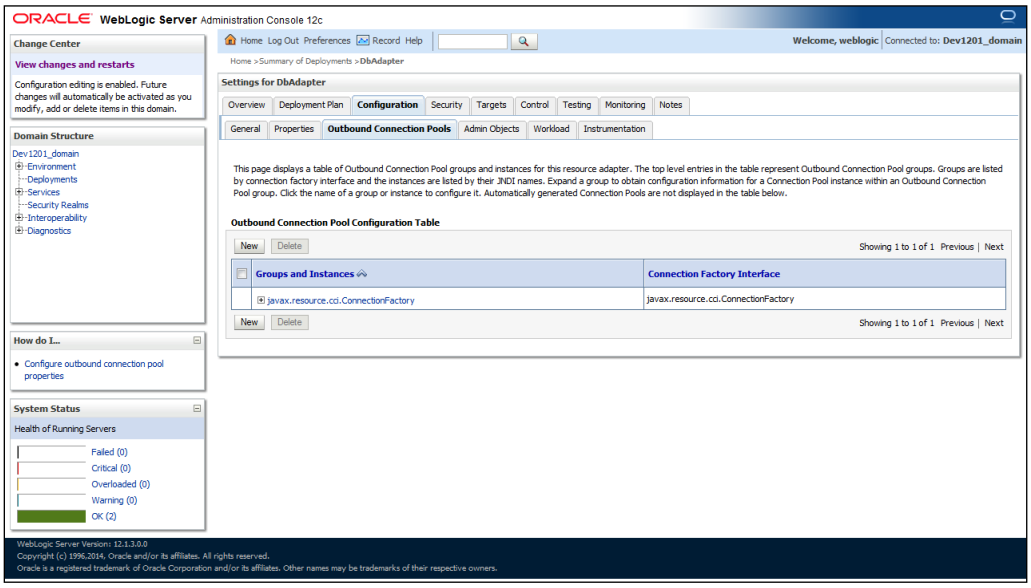
1.2.5 Configuring DBAdapter

In order to configure DBAdapter, follow the steps given below.

1. Log in to 'Weblogic Console' and click 'Deployment' under 'Domain Structure'.



2. In the Deployments table, select ‘DbAdapter’. You will be navigated to ‘Settings for DbAdapter’.

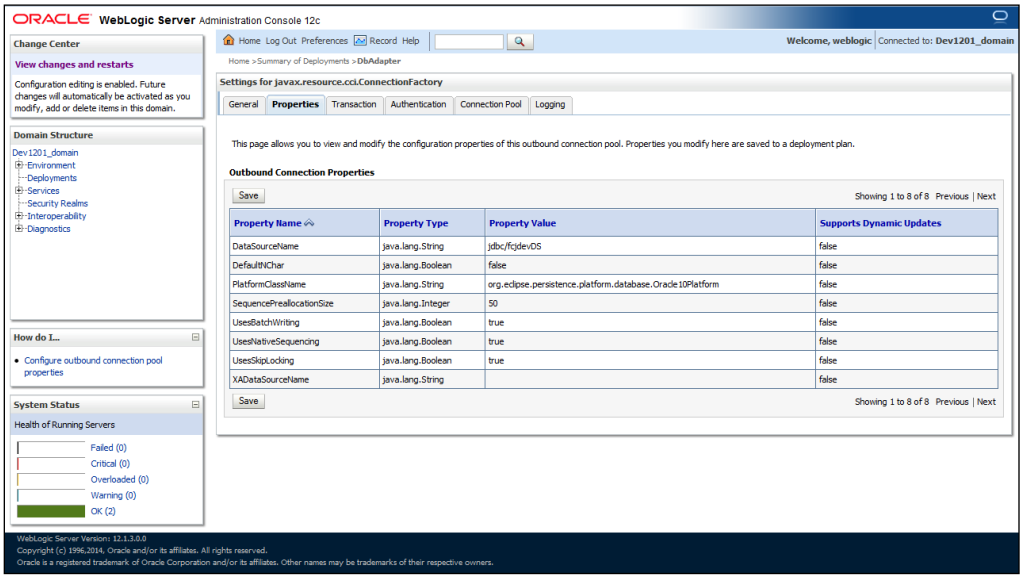


3. Click ‘Configuration’ tab and select ‘Outbound Connection Pools’ under it.
4. Under ‘Groups and Instances’, click and expand ‘javax.resource.cci.ConnectionFactory’.
5. Click ‘New’ and select ‘javax.resource.cci.ConnectionFactory' in Outbound Connection Group.
6. Define ‘JNDI Name’ as ‘eis/DB/FCCDEV’ and click on ‘Finish’.

STOP The ‘jndi name’ should be the same as the one in ‘Dbutility sub-process’.

7. Click ‘DbAdapter’ again. The new JNDI name is listed.

8. Click on the hyperlink ‘eis/DB/FCCDEV’.

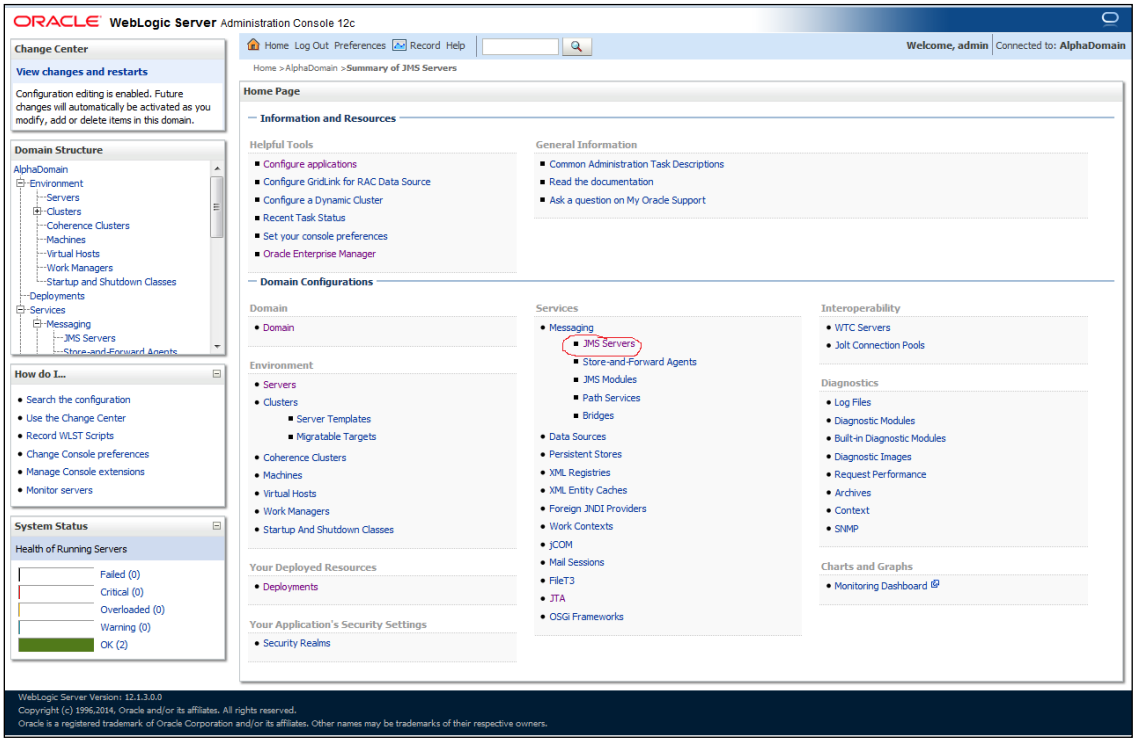


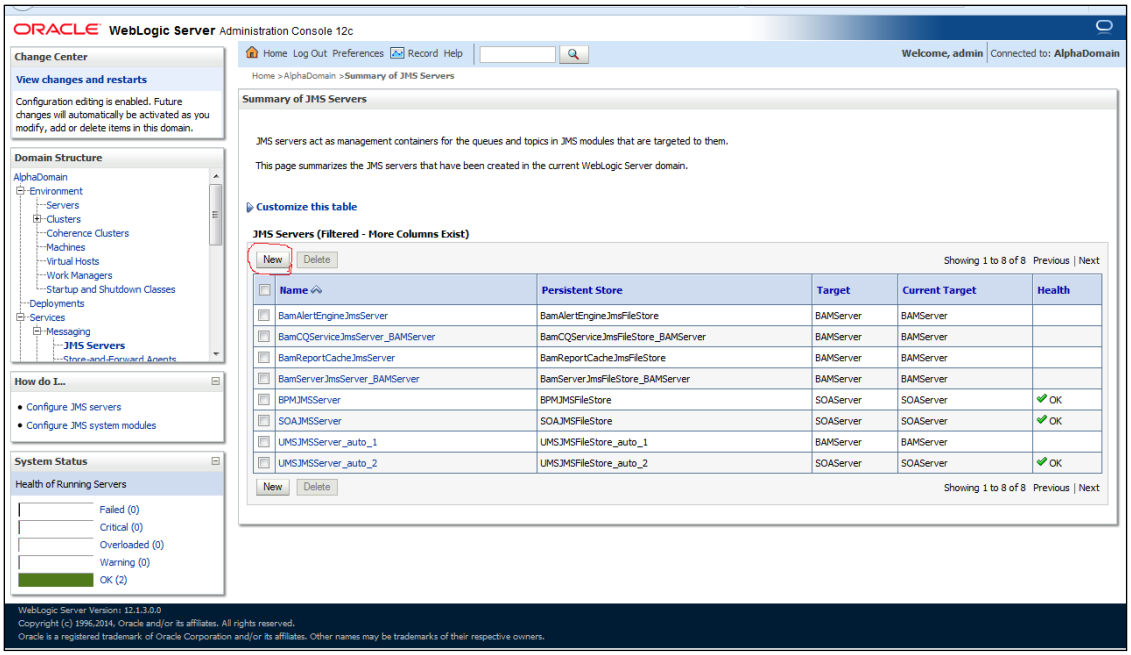
9. Click the ‘Property Value’ field for the ‘DataSourceName’ and update the application JNDI reference (given in ‘fcubs.properties’ file) and then press ‘Enter’ key.

10. Save and restart the Adminserver.

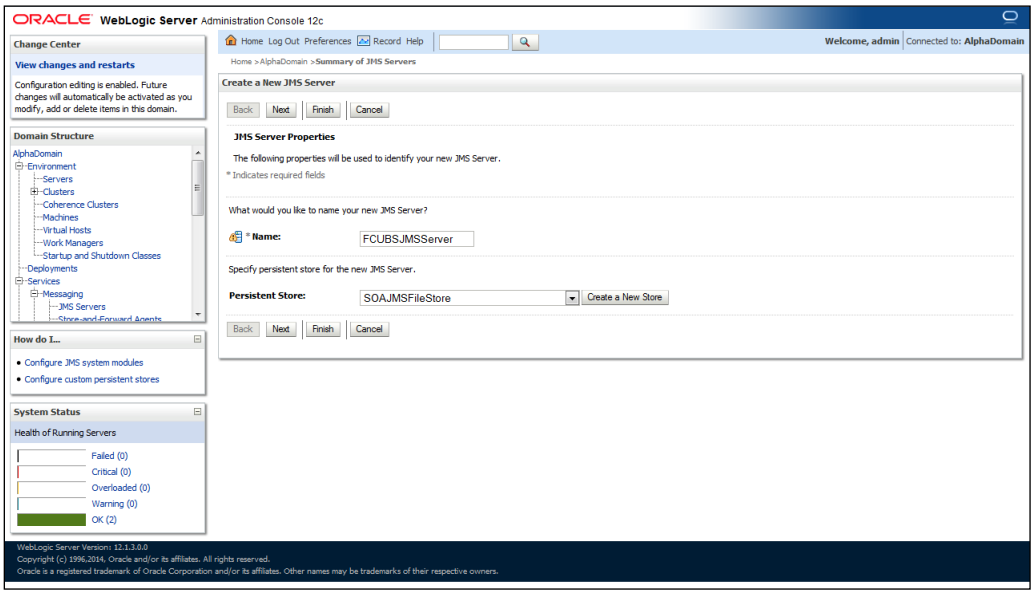
1.2.6 Configuring JMS Adapter

Login in to console → Click on JMS Servers→New

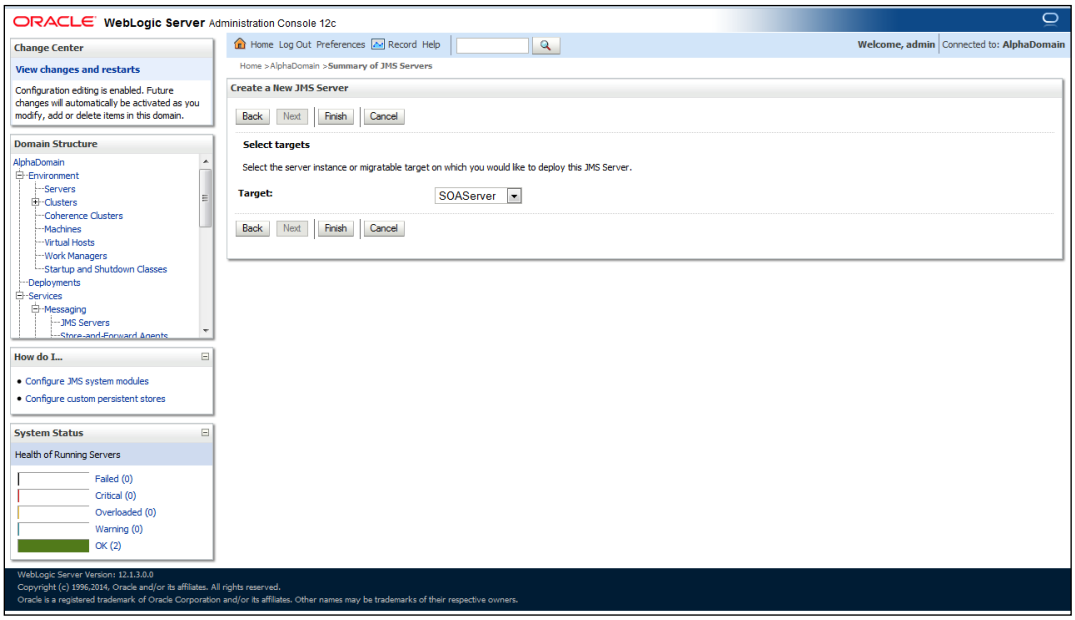


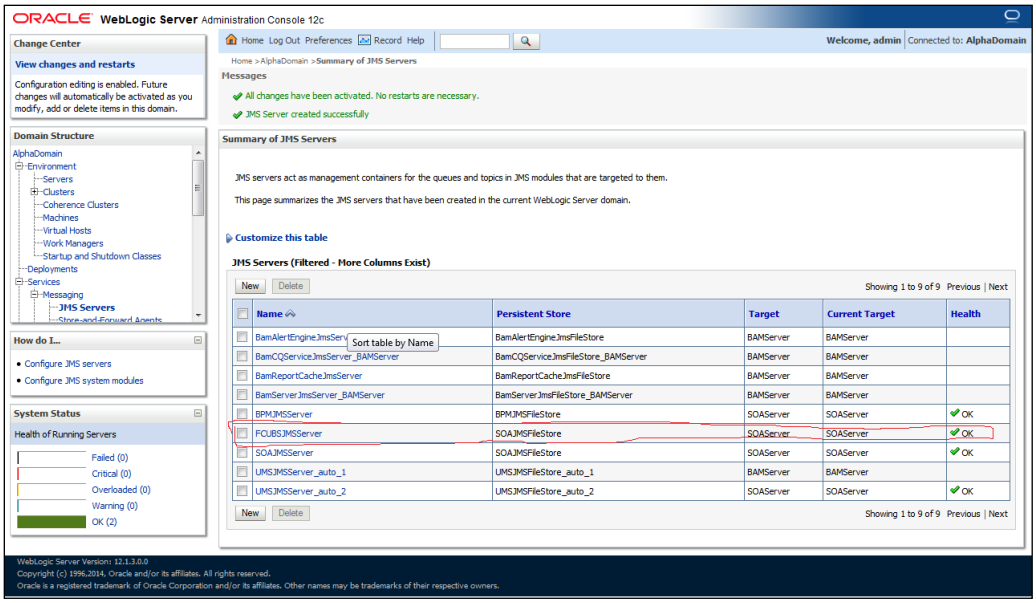


11. Please provide the below Name for JMS Server and select the file persistent store as below→Next

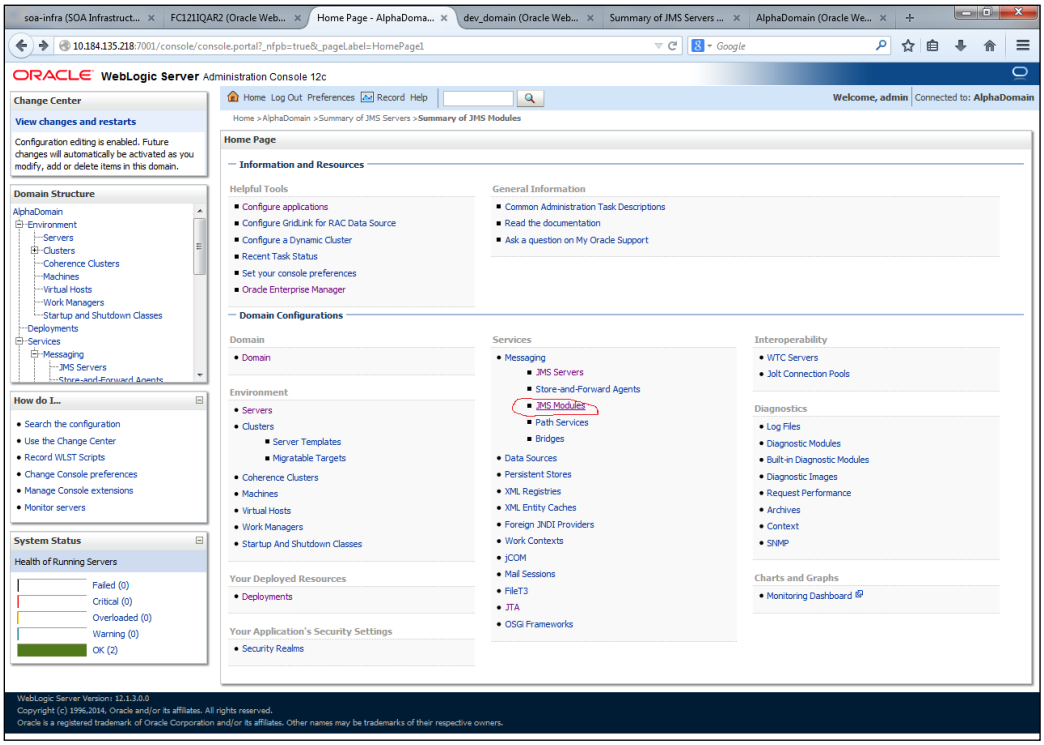


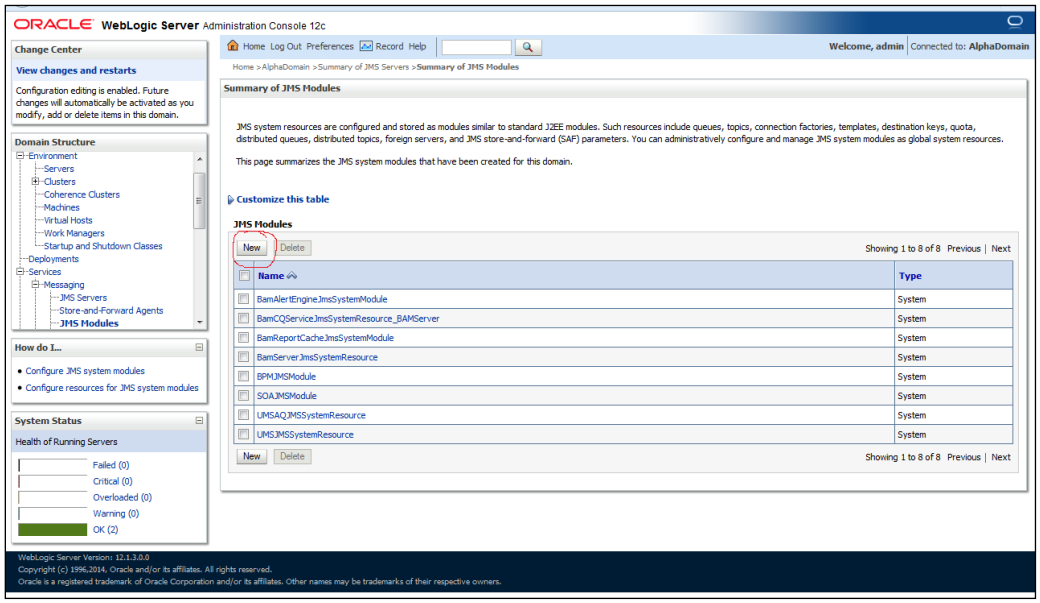
12. Select the target as SOA Server →Finish



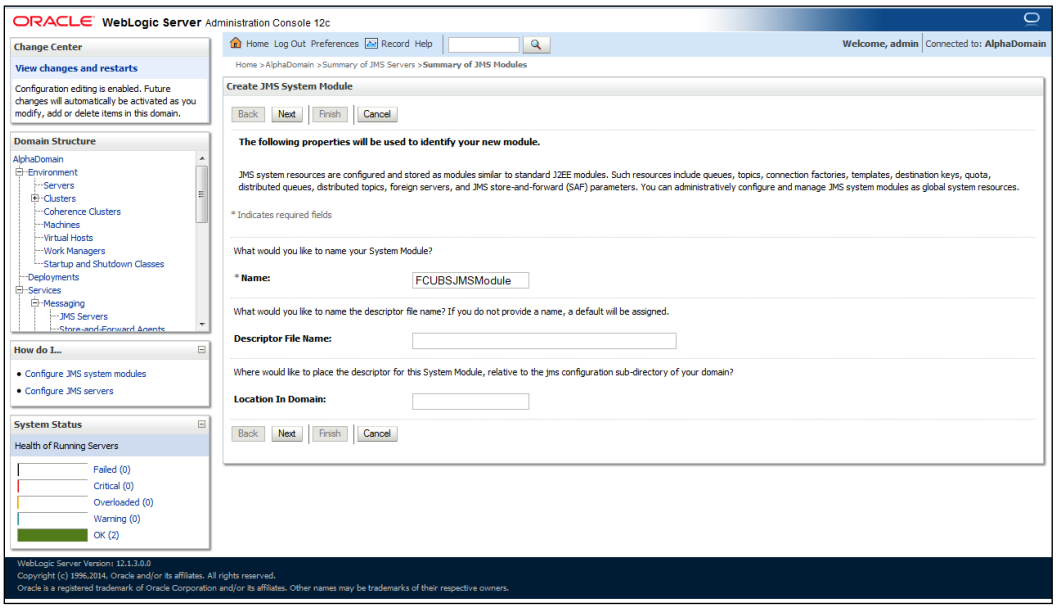


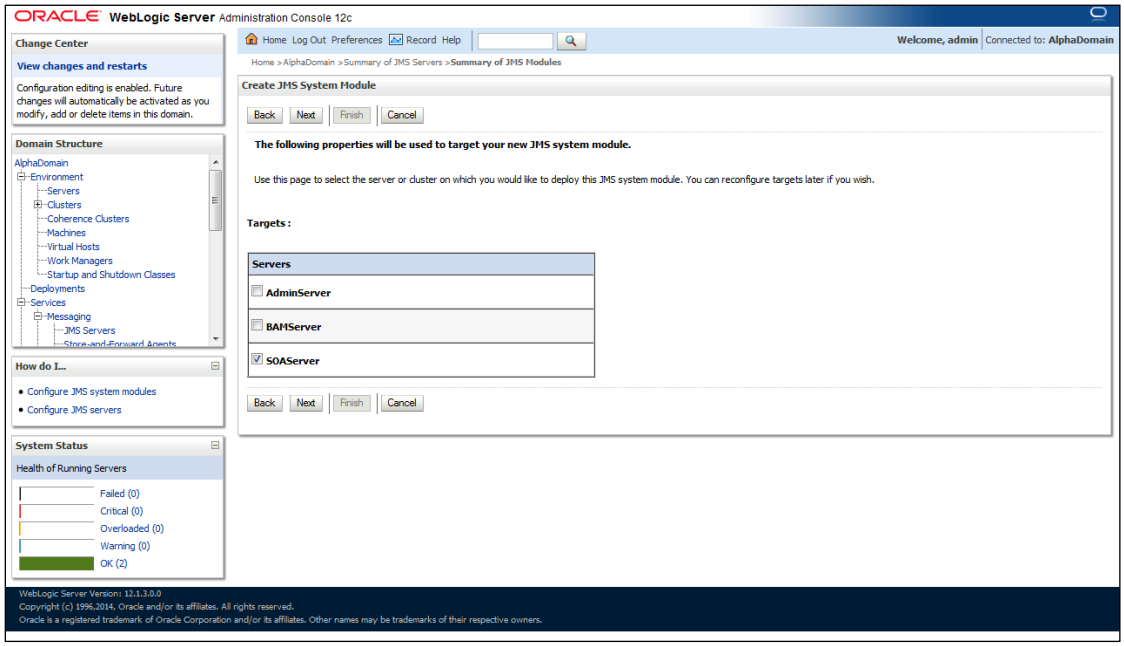
4. Go back to Console →JMS Modules→New

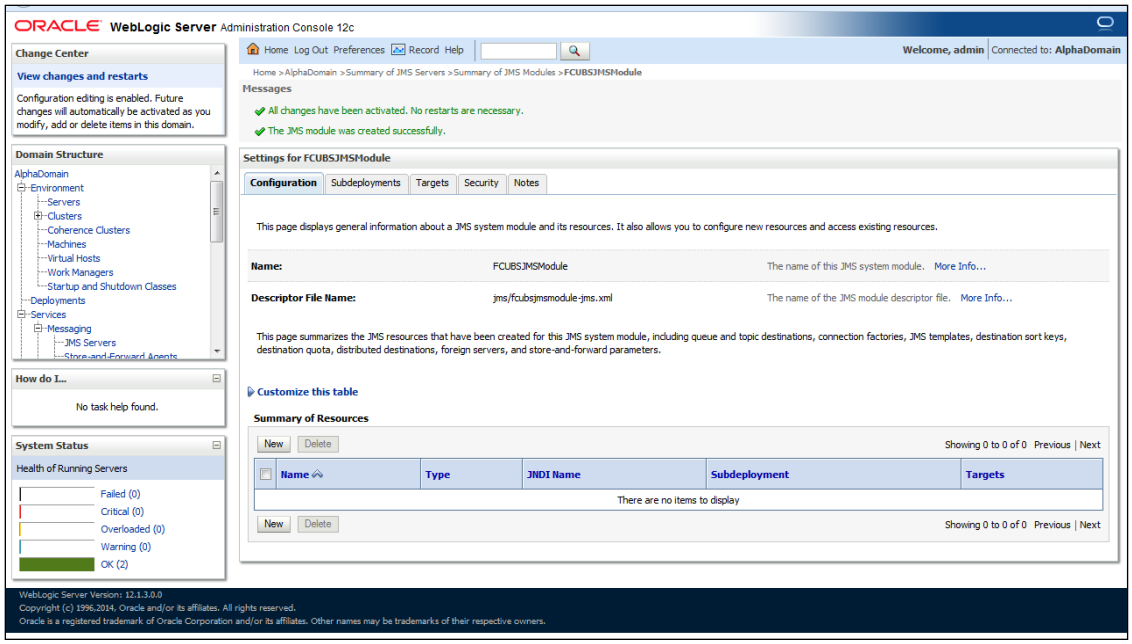




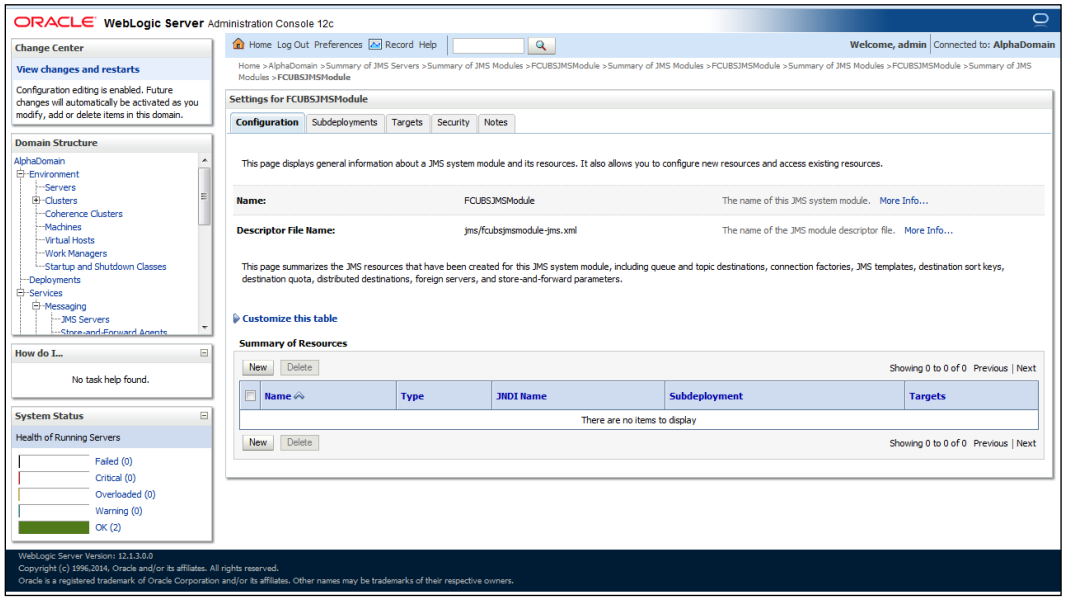
5. Create a JMS Module with the below Name→Next→Select the target as SOA Server→Finish



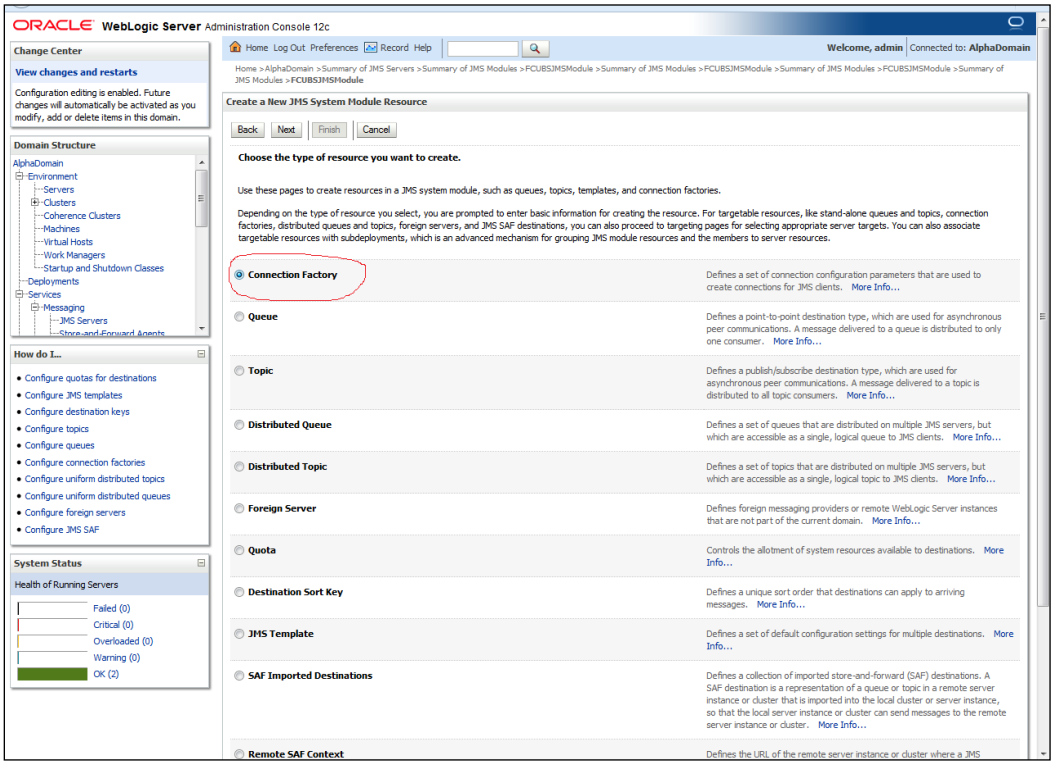


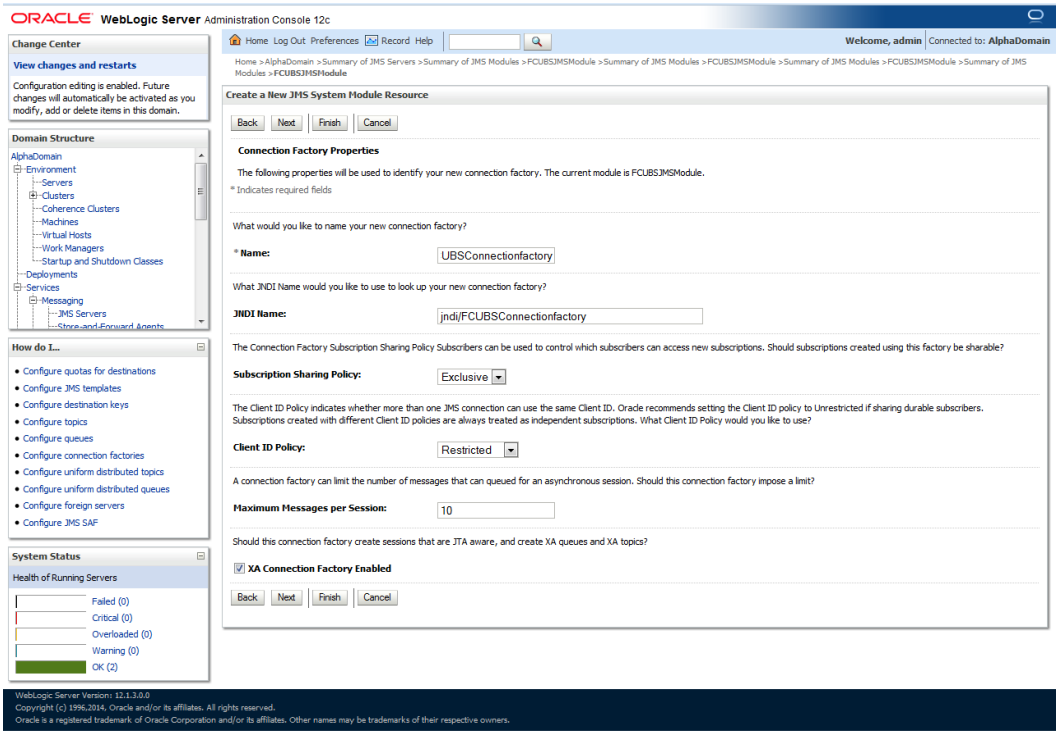


1. Go back to JMS Modules→FCUBSJMSModule→New

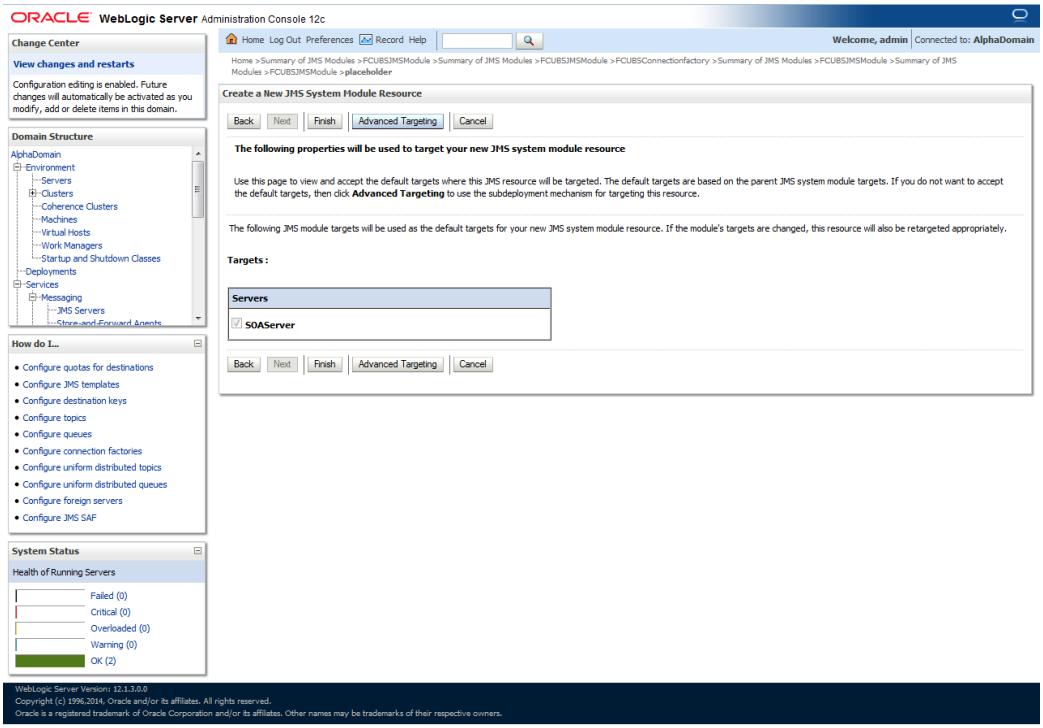


2. Click on Connection Factory→ next→Create the connection Factory with the below Names→Next





3. Select Advanced targeting→create New Sub Deployment with the below Name→Select the target as JMS server which we have created on top→Finish


ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
AlphaDomain
Environment
Servers
Clusters
Coherence Clusters
Machines
Virtual Hosts
Work Managers
Startup and Shutdown Classes
Deployments
Services
Messaging
JMS Servers
How do I...
Configure quotas for destinations
Configure JMS templates
Configure destination keys
Configure topics
Configure queues
Configure connection factories
Configure uniform distributed topics
Configure uniform distributed queues
Configure foreign servers
Configure JMS SAF
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin Connected to: AlphaDomain
Home >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >FCUBSConnectionfactory >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >placeholder
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
SOAServer
Back Next Finish Advanced Targeting Cancel
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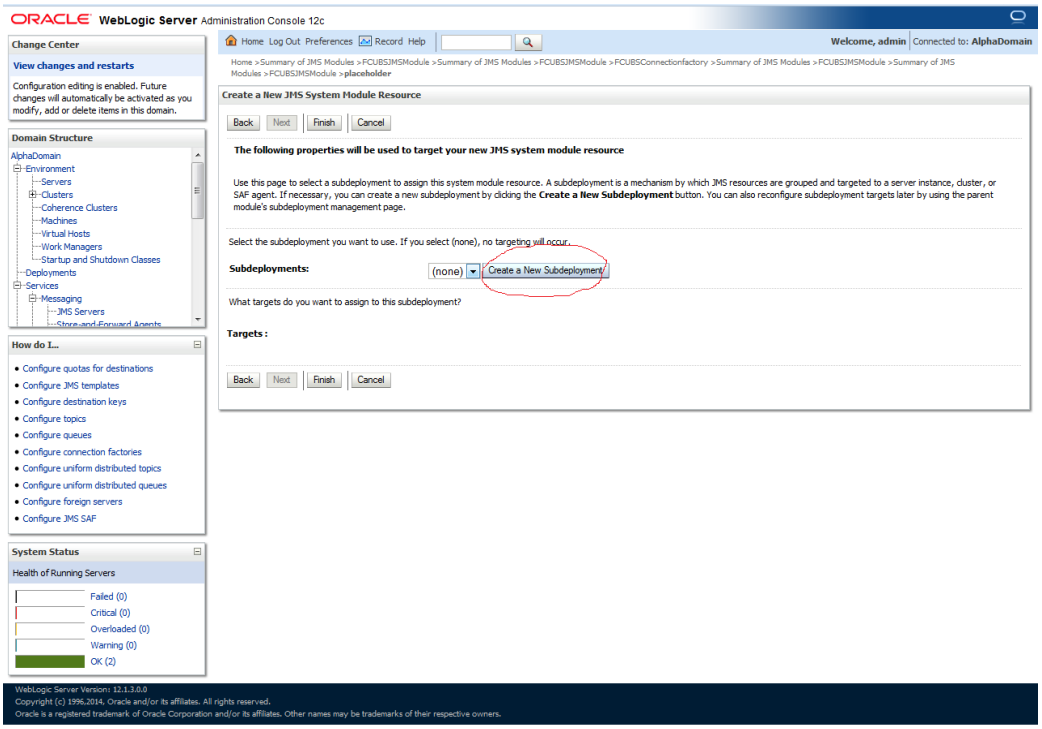
ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
AlphaDomain
Environment
Servers
Clusters
Coherence Clusters
Machines
Virtual Hosts
Work Managers
Startup and Shutdown Classes
Deployments
Services
Messaging
JMS Servers
How do I...
Configure quotas for destinations
Configure JMS templates
Configure destination keys
Configure topics
Configure queues
Configure connection factories
Configure uniform distributed topics
Configure uniform distributed queues
Configure foreign servers
Configure JMS SAF
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin Connected to: AlphaDomain
Home >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >FCUBSConnectionfactory >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >placeholder
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:
(none)
Create a New Subdeployment
What targets do you want to assign to this subdeployment?
Targets :
Back Next Finish Cancel
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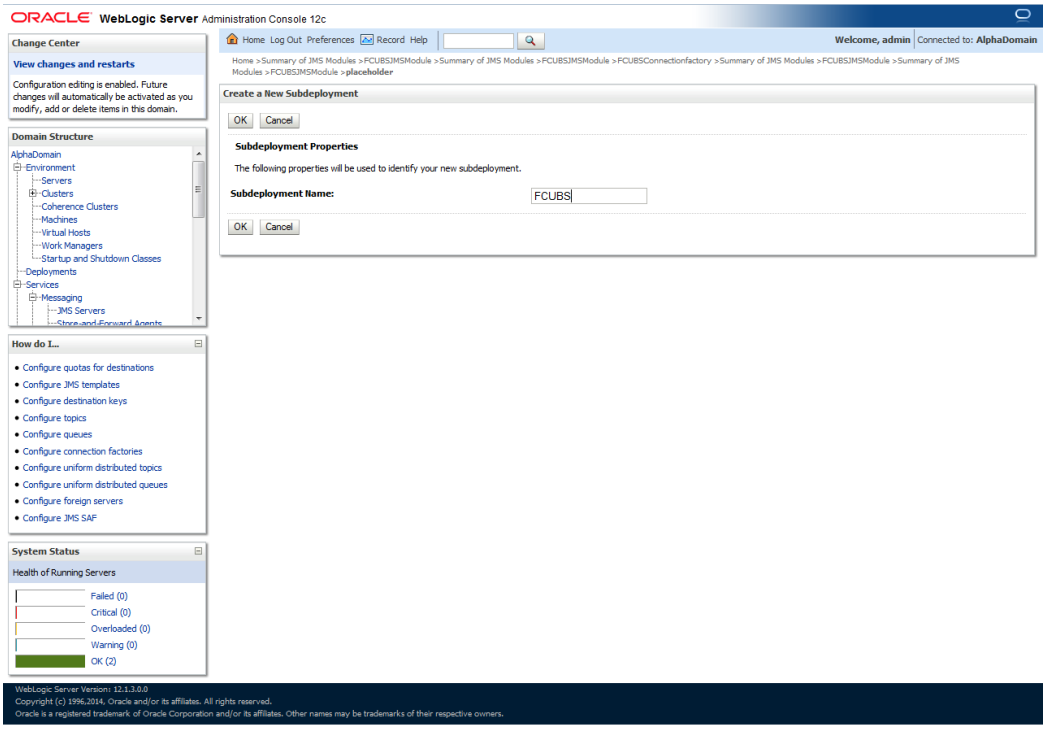
ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
AlphaDomain
Environment
Servers
Clusters
Coherence Clusters
Machines
Virtual Hosts
Work Managers
Startup and Shutdown Classes
Deployments
Services
Messaging
JMS Servers
How do I...
Configure quotas for destinations
Configure JMS templates
Configure destination keys
Configure topics
Configure queues
Configure connection factories
Configure uniform distributed topics
Configure uniform distributed queues
Configure foreign servers
Configure JMS SAF
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin Connected to: AlphaDomain
Home >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >FCUBSConnectionfactory >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >placeholder
Create a New Subdeployment
OK Cancel
Subdeployment Properties
The following properties will be used to identify your new subdeployment.
Subdeployment Name: FCUBS
OK Cancel
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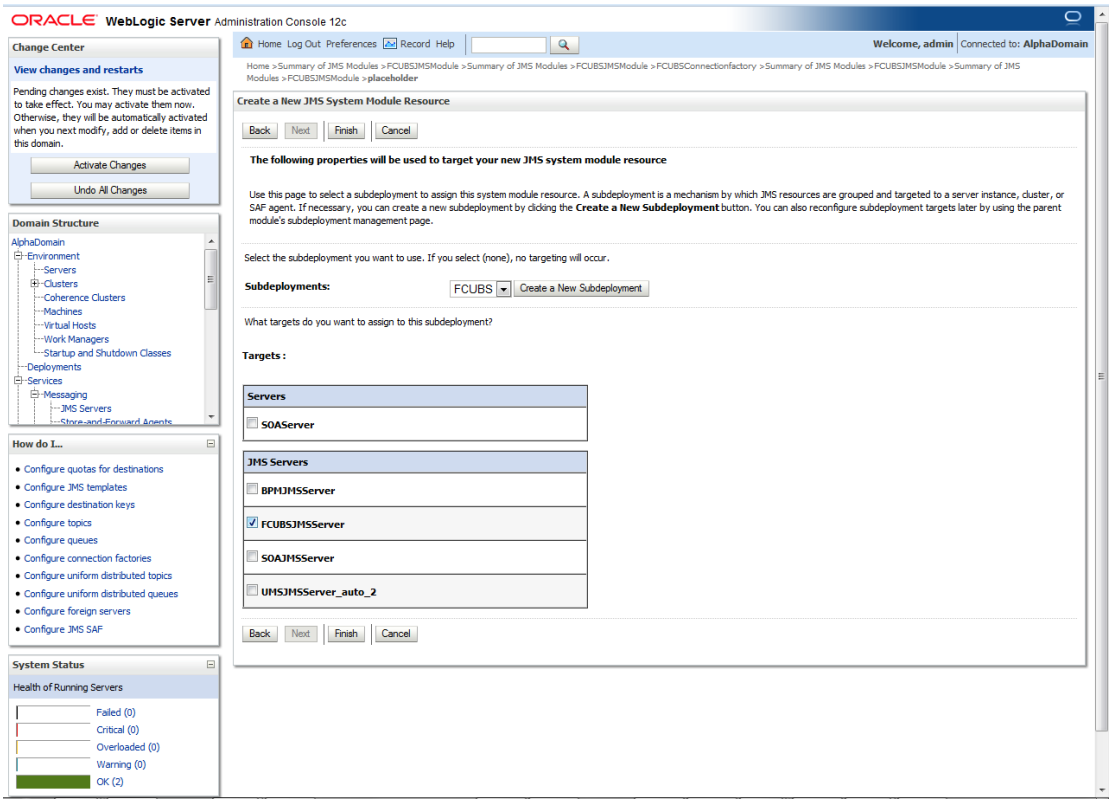
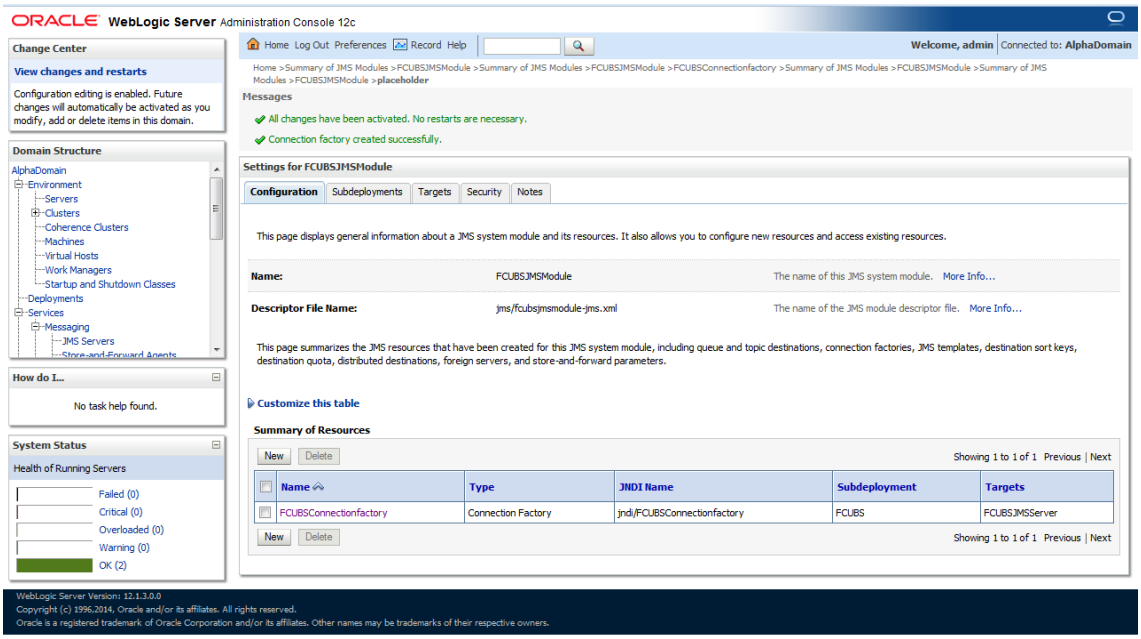

ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Pending changes exist. They must be activated to take effect. You may activate them now. Otherwise, they will be automatically activated when you next modify, add or delete items in this domain.
Activate Changes
Undo All Changes
Domain Structure
AlphaDomain
Environment
Servers
Clusters
Coherence Clusters
Machines
Virtual Hosts
Work Managers
Startup and Shutdown Classes
Deployments
Services
Messaging
JMS Servers
How do I...
Configure quotas for destinations
Configure JMS templates
Configure destination keys
Configure topics
Configure queues
Configure connection factories
Configure uniform distributed topics
Configure uniform distributed queues
Configure foreign servers
Configure JMS SAF
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin Connected to: AlphaDomain
Home >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >FCUBSConnectionfactory >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >placeholder
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: FCUBS Create a New Subdeployment
What targets do you want to assign to this subdeployment?
Targets :
Servers
SOAServer
JMS Servers
BPMJMSServer
FCUBSJMSServer
SOAJMSServer
UMSJMSServer_auto_2
Back Next Finish Cancel


ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
AlphaDomain
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Coherence Clusters
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Work Managers
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Deployments
Services
Messaging
JMS Servers
How do I...
No task help found.
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin Connected to: AlphaDomain
Home >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >FCUBSConnectionfactory >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >placeholder
Messages
All changes have been activated. No restarts are necessary.
Connection factory created successfully.
Settings for FCUBSJMSModule
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: FCUBSJMSModule The name of this JMS system module. More Info...
Descriptor File Name: jms/fcubsjmsmodule-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
Name Type JNDI Name Subdeployment Targets
FCUBSConnectionfactory Connection Factory jndi/FCUBSConnectionfactory FCUBS FCUBSJMSServer
New Delete
Showing 1 to 1 of 1 Previous | Next
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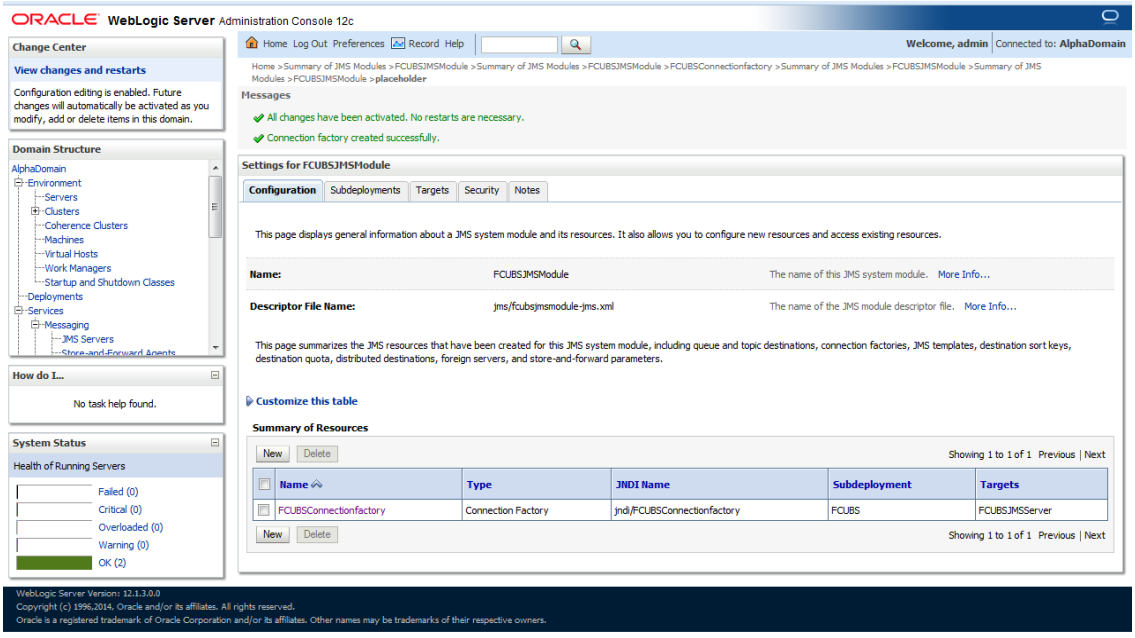
ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
AlphaDomain
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Coherence Clusters
Machines
Virtual Hosts
Work Managers
Startup and Shutdown Classes
Deployments
Services
Messaging
JMS Servers
How do I...
No task help found.
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin Connected to: AlphaDomain
Home >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >FCUBSConnectionfactory >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >placeholder
Messages
All changes have been activated. No restarts are necessary.
Connection factory created successfully.
Settings for FCUBSJMSModule
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: FCUBSJMSModule The name of this JMS system module. More Info...
Descriptor File Name: jms/fcubsjmsmodule-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
Name Type JNDI Name Subdeployment Targets
FCUBSConnectionfactory Connection Factory jndi/FCUBSConnectionfactory FCUBS FCUBSJMSServer
New Delete
Showing 1 to 1 of 1 Previous | Next
WebLogic Server Version: 12.1.3.0.0
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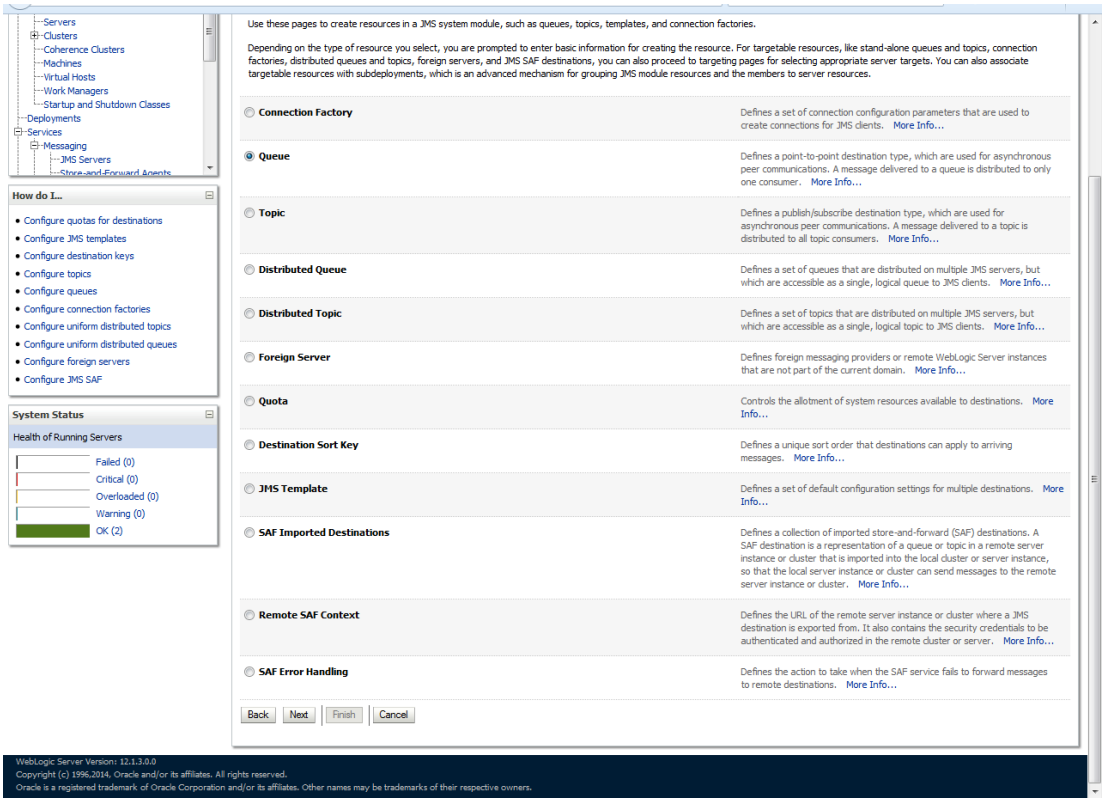
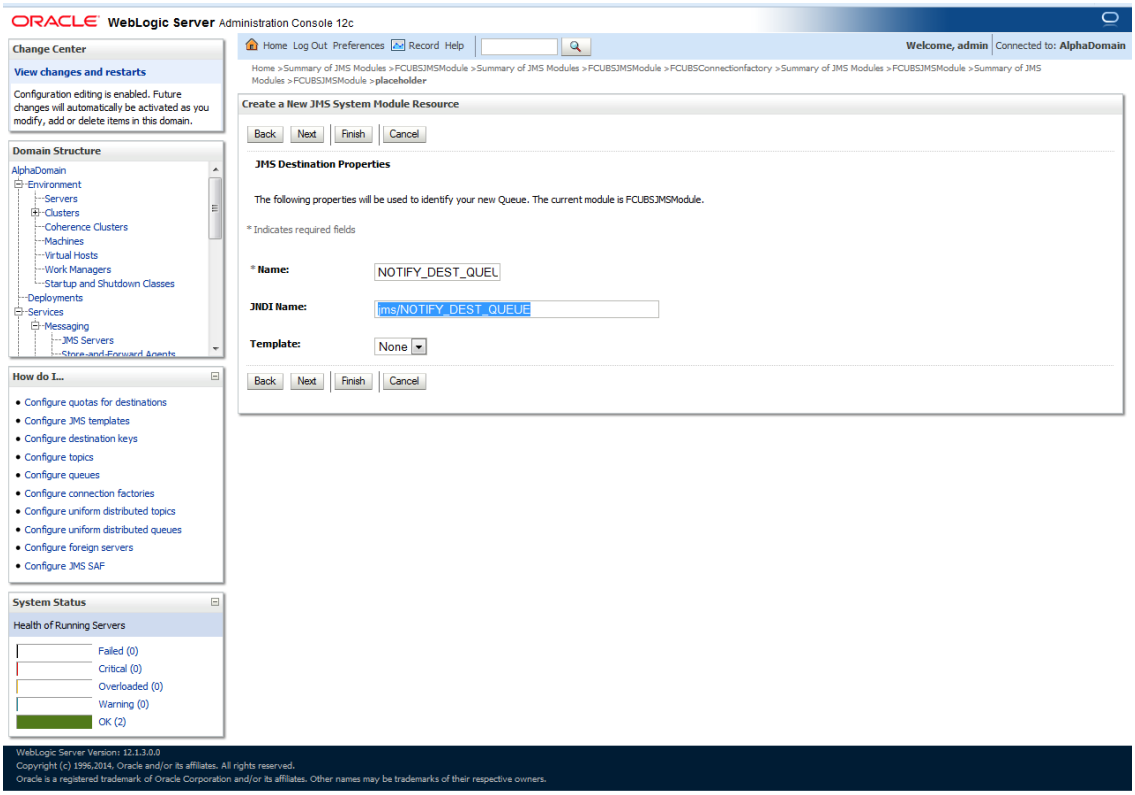
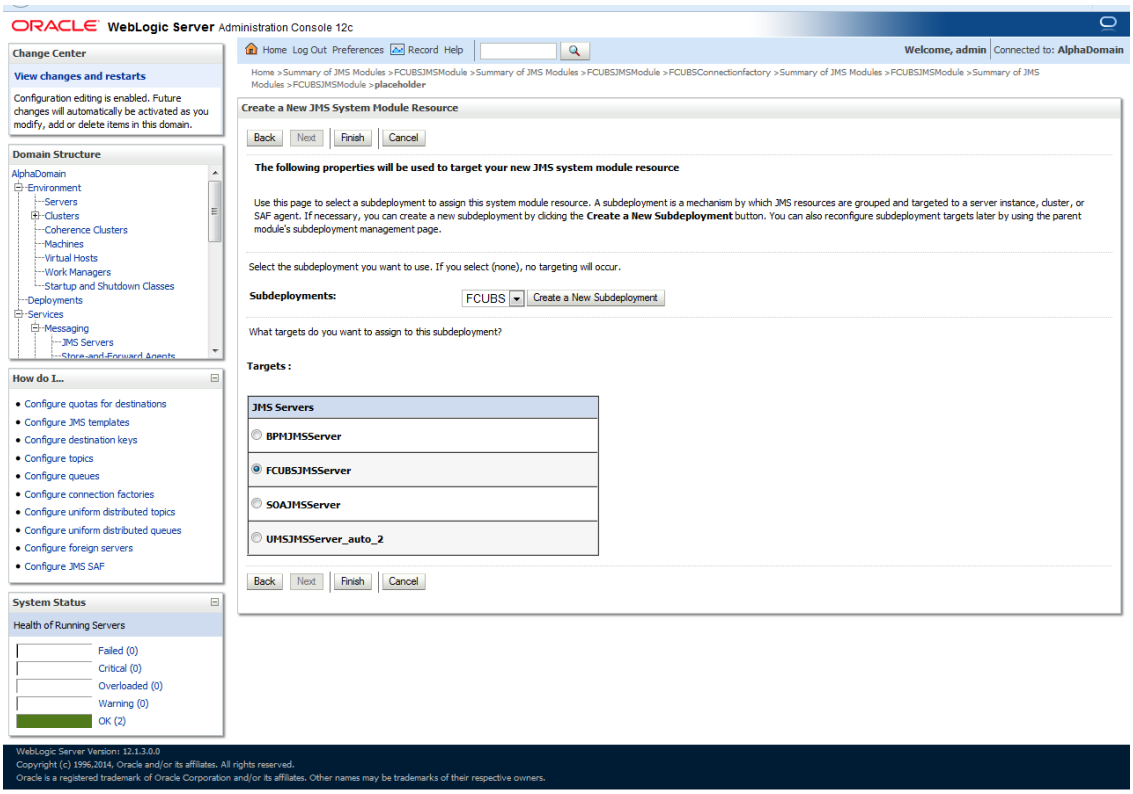
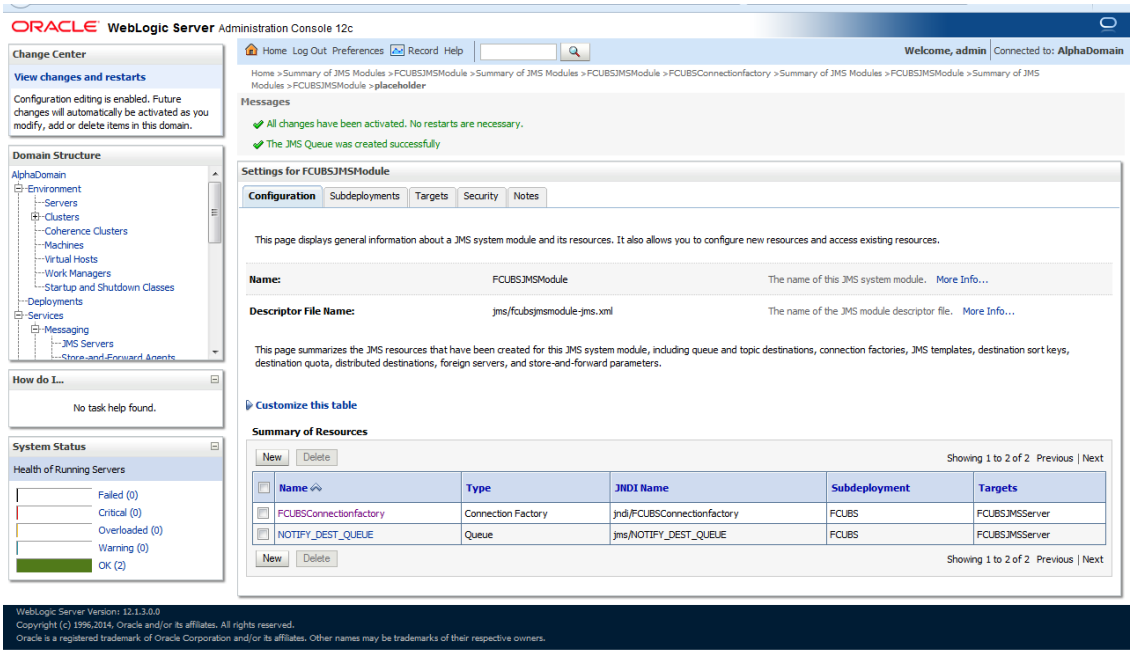
4. Go back to console →Click on JMS Modules →New → check on Queue→next



5. Create Queue with Name NOTIFY_DEST_QUEUE and JNDI name as jms/NOTIFY_DEST_QUEUE→select the sub deployment which we have created earlier →Next→Finish

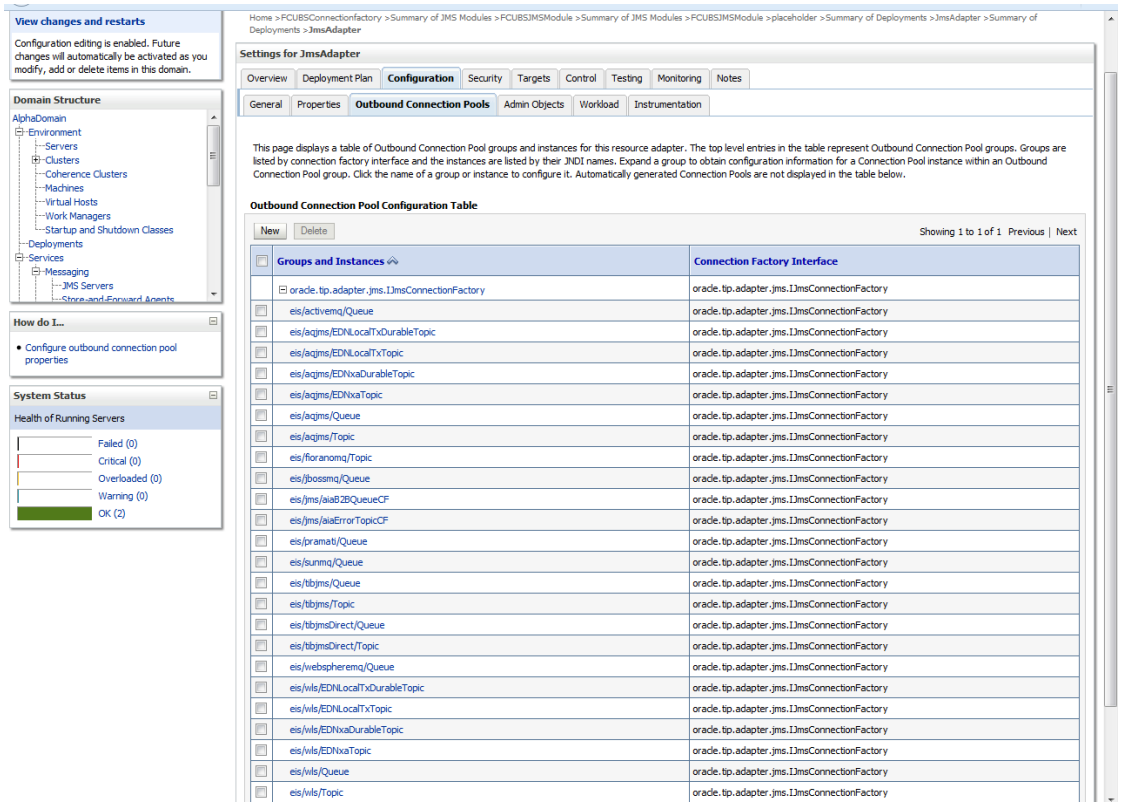


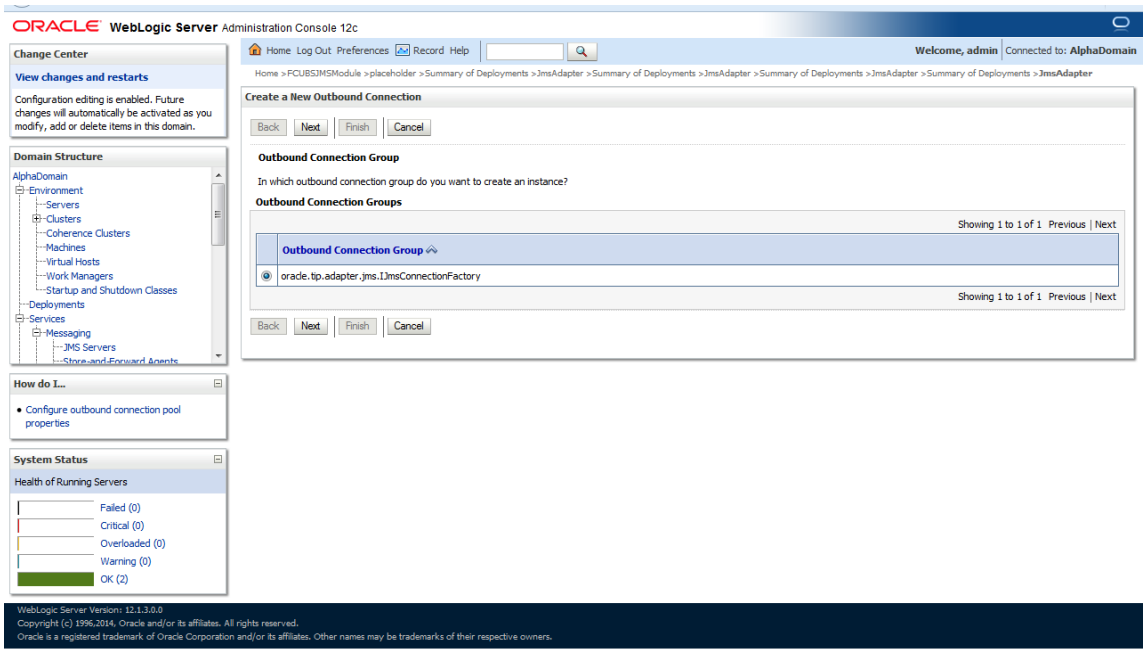




11. Please create the **MDB_QUEUE_RESPONSE**, **eis/jms/ORGateway**, **FAULT_QUEUE_RESPONSE** Queues as above in console with in **FCUBSJMSModule**.(Follow step 9-10 in 1.2.7)

12. Go to Console→Deployment→JMS Adapter →Configuration→outbound connection pool→New→ next→Finish


View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
AlphaDomain
Environment
Servers
Clusters
Coherence Clusters
Machines
Virtual Hosts
Work Managers
Startup and Shutdown Classes
Deployments
Services
Messaging
JMS Servers
How do I...
Configure outbound connection pool properties
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home >FCUBSConnectionfactory >Summary of JMS Modules >FCUBSJMSModule >Summary of JMS Modules >FCUBSJMSModule >placeholder >Summary of Deployments >JmsAdapter >Summary of Deployments >JmsAdapter
Settings for JmsAdapter
Overview
Deployment Plan
Configuration
Security
Targets
Control
Testing
Monitoring
Notes
General
Properties
Outbound Connection Pools
Admin Objects
Workload
Instrumentation
This page displays a table of Outbound Connection Pool groups and instances for this resource adapter. The top level entries in the table represent Outbound Connection Pool groups. Groups are listed by connection factory interface and the instances are listed by their JNDI names. Expand a group to obtain configuration information for a Connection Pool instance within an Outbound Connection Pool group. Click the name of a group or instance to configure it. Automatically generated Connection Pools are not displayed in the table below.
Outbound Connection Pool Configuration Table
New
Delete
Showing 1 to 1 of 1 Previous | Next
Groups and Instances
Connection Factory Interface
oracle.tip.adapter.jms.IJmsConnectionFactory
eis/activemq/Queue
eis/aqjms/EDNLocalTxDurableTopic
eis/aqjms/EDNLocalTxTopic
eis/aqjms/EDNxaDurableTopic
eis/aqjms/EDNxaTopic
eis/aqjms/Queue
eis/aqjms/Topic
eis/fioranomq/Topic
eis/jbossmq/Queue
eis/jms/aiaB2BQueueCF
eis/jms/aiaErrorTopicCF
eis/pramati/Queue
eis/sunmq/Queue
eis/tibjms/Queue
eis/tibjms/Topic
eis/tibjmsDirect/Queue
eis/tibjmsDirect/Topic
eis/webspheremq/Queue
eis/wls/EDNLocalTxDurableTopic
eis/wls/EDNLocalTxTopic
eis/wls/EDNxaDurableTopic
eis/wls/EDNxaTopic
eis/wls/Queue
eis/wls/Topic


ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
AlphaDomain
Environment
Servers
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Coherence Clusters
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Messaging
JMS Servers
How do I...
Configure outbound connection pool properties
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin
Connected to: AlphaDomain
Home >FCUBSJMSModule >placeholder >Summary of Deployments >JmsAdapter >Summary of Deployments >JmsAdapter >Summary of Deployments >JmsAdapter >Summary of Deployments >JmsAdapter
Create a New Outbound Connection
Back
Next
Finish
Cancel
Outbound Connection Group
In which outbound connection group do you want to create an instance?
Outbound Connection Groups
Showing 1 to 1 of 1 Previous | Next
Outbound Connection Group
oracle.tip.adapter.jms.IJmsConnectionFactory
Showing 1 to 1 of 1 Previous | Next
Back
Next
Finish
Cancel
WebLogic Server Version: 12.1.3.0.0
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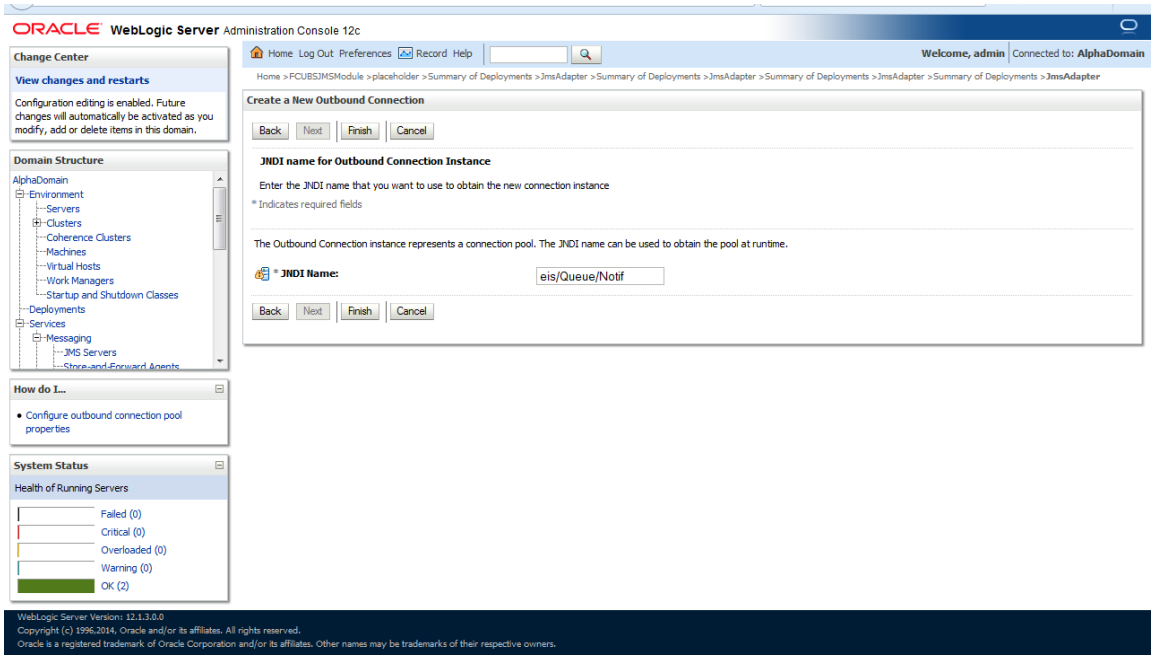
ORACLE WebLogic Server Administration Console 12c
Change Center
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Domain Structure
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How do I...
Configure outbound connection pool properties
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (2)
Home Log Out Preferences Record Help
Welcome, admin Connected to: AlphaDomain
Home >FCUBSJMSModule >placeholder >Summary of Deployments >JmsAdapter >Summary of Deployments >JmsAdapter >Summary of Deployments >JmsAdapter >Summary of Deployments >JmsAdapter
Create a New Outbound Connection
Back Next Finish Cancel
JNDI name for Outbound Connection Instance
Enter the JNDI name that you want to use to obtain the new connection instance
* Indicates required fields
The Outbound Connection instance represents a connection pool. The JNDI name can be used to obtain the pool at runtime.
* JNDI Name:
eis/Queue/Notif
Back Next Finish Cancel
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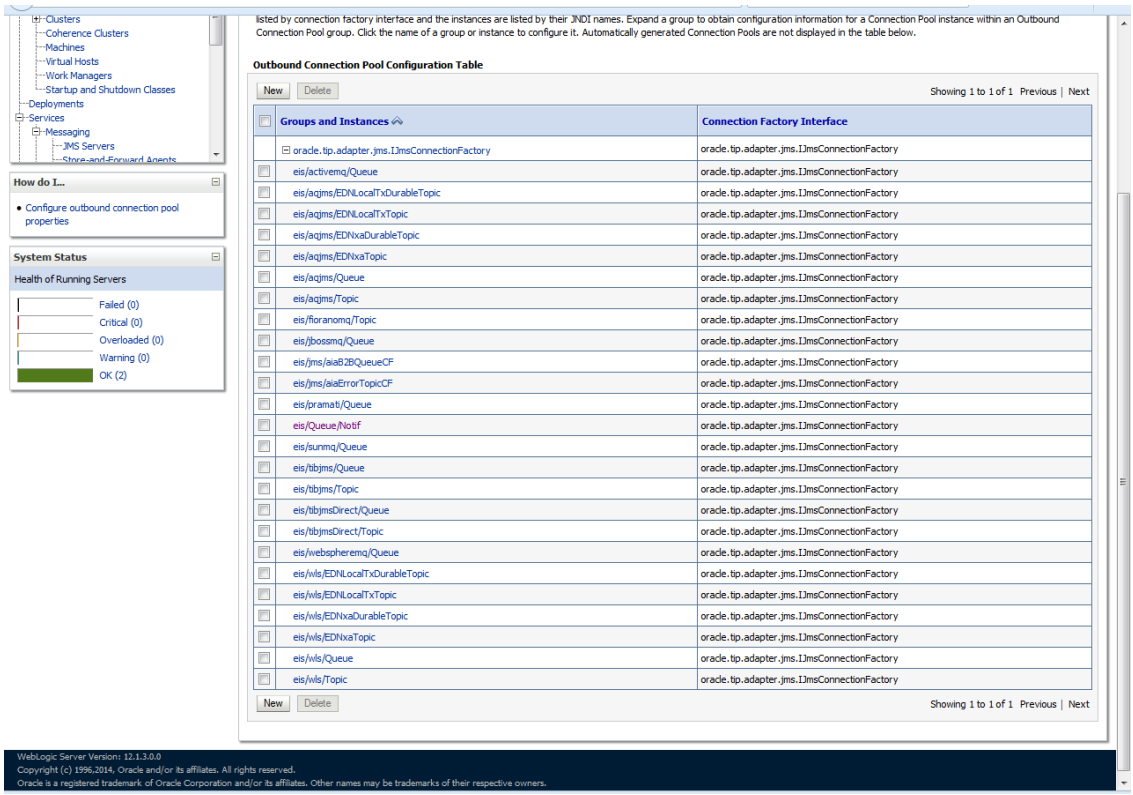
listed by connection factory interface and the instances are listed by their JNDI names. Expand a group to obtain configuration information for a Connection Pool instance within an Outbound Connection Pool group. Click the name of a group or instance to configure it. Automatically generated Connection Pools are not displayed in the table below.
Outbound Connection Pool Configuration Table
New Delete
Showing 1 to 1 of 1 Previous | Next
Groups and Instances
Connection Factory Interface
oracle.tip.adapter.jms.IJmsConnectionFactory
eis/activemq/Queue
eis/aqjms/EDNLocalTxDurableTopic
eis/aqjms/EDNLocalTxTopic
eis/aqjms/EDNxaDurableTopic
eis/aqjms/EDNxaTopic
eis/aqjms/Queue
eis/aqjms/Topic
eis/fioranomq/Topic
eis/jbossmq/Queue
eis/jms/aiaB2BQueueCF
eis/jms/aiaErrorTopicCF
eis/pramati/Queue
eis/Queue/Notif
eis/sunmq/Queue
eis/tibjms/Queue
eis/tibjms/Topic
eis/tibjmsDirect/Queue
eis/tibjmsDirect/Topic
eis/websphereMQ/Queue
eis/wls/EDNLocalTxDurableTopic
eis/wls/EDNLocalTxTopic
eis/wls/EDNxaDurableTopic
eis/wls/EDNxaTopic
eis/wls/Queue
eis/wls/Topic
New Delete
Showing 1 to 1 of 1 Previous | Next
WebLogic Server Version: 12.1.3.0.0
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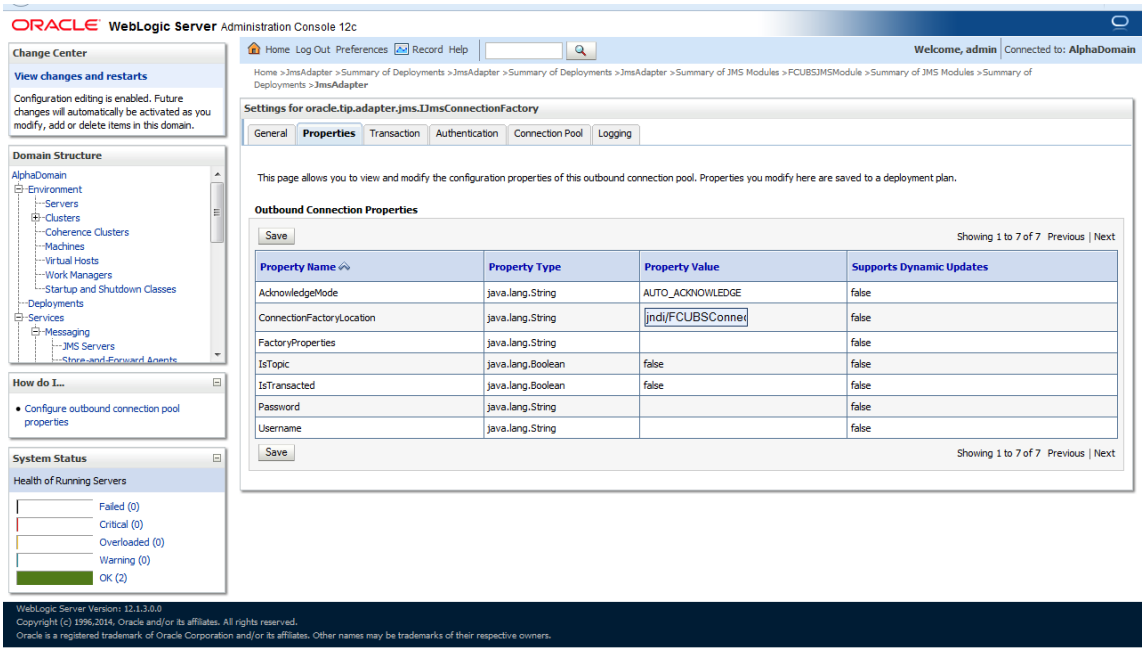
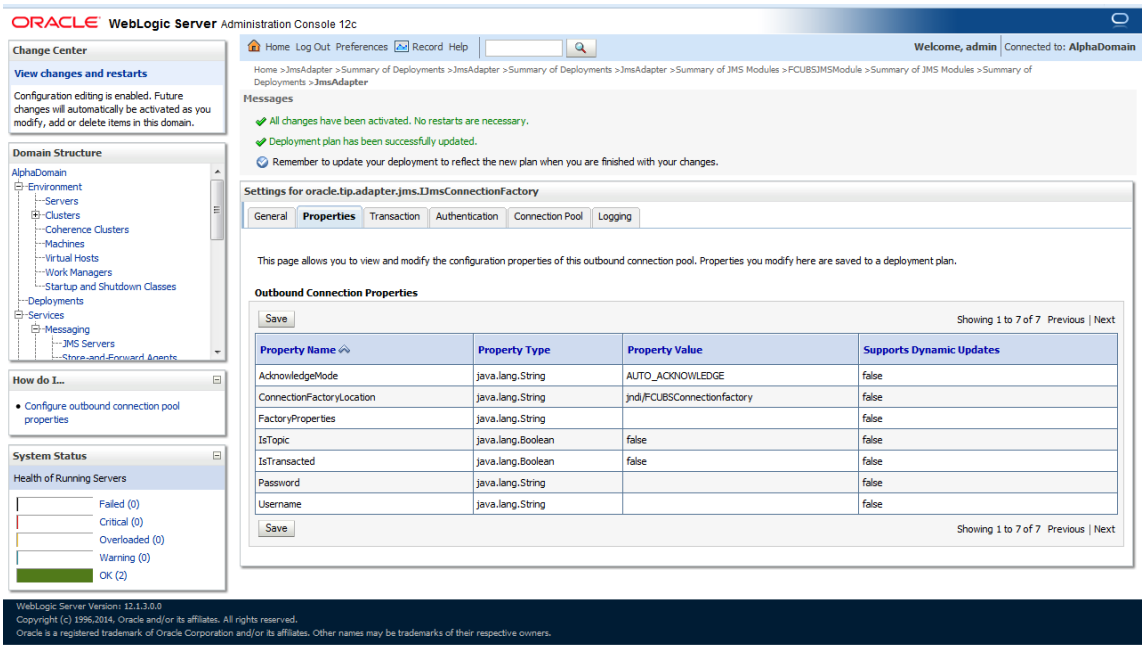
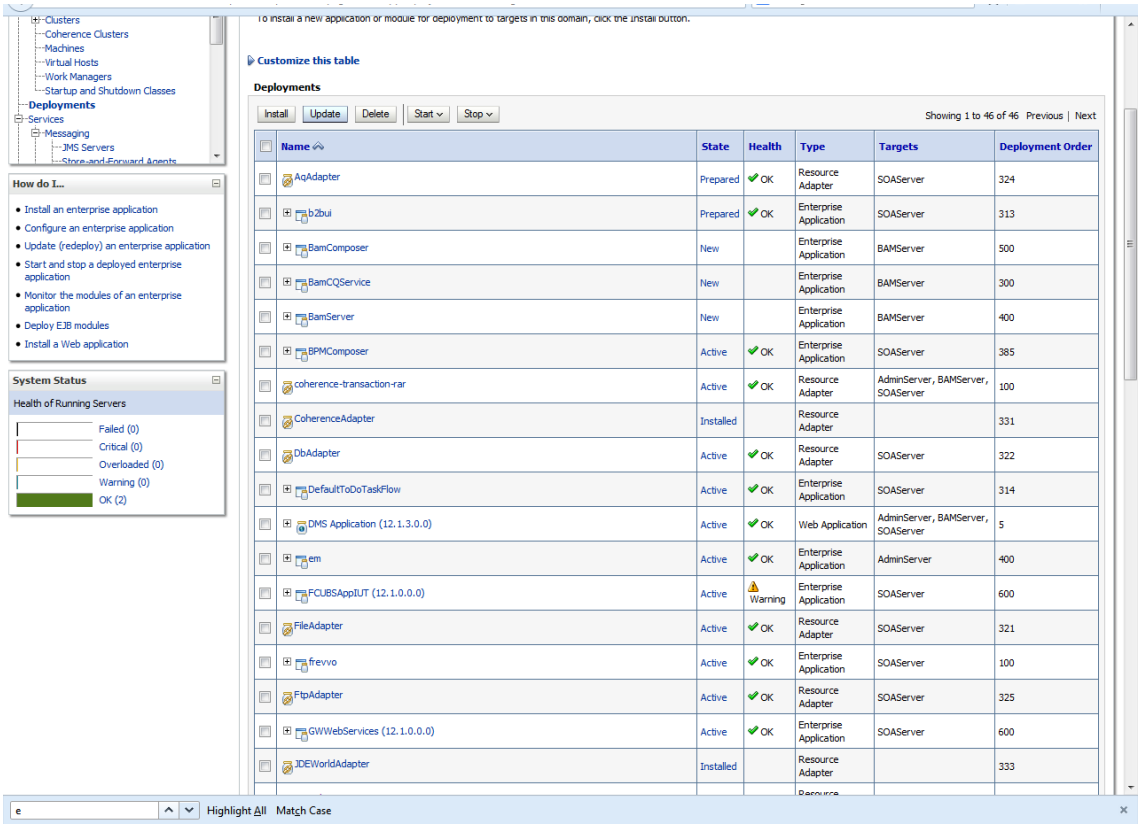
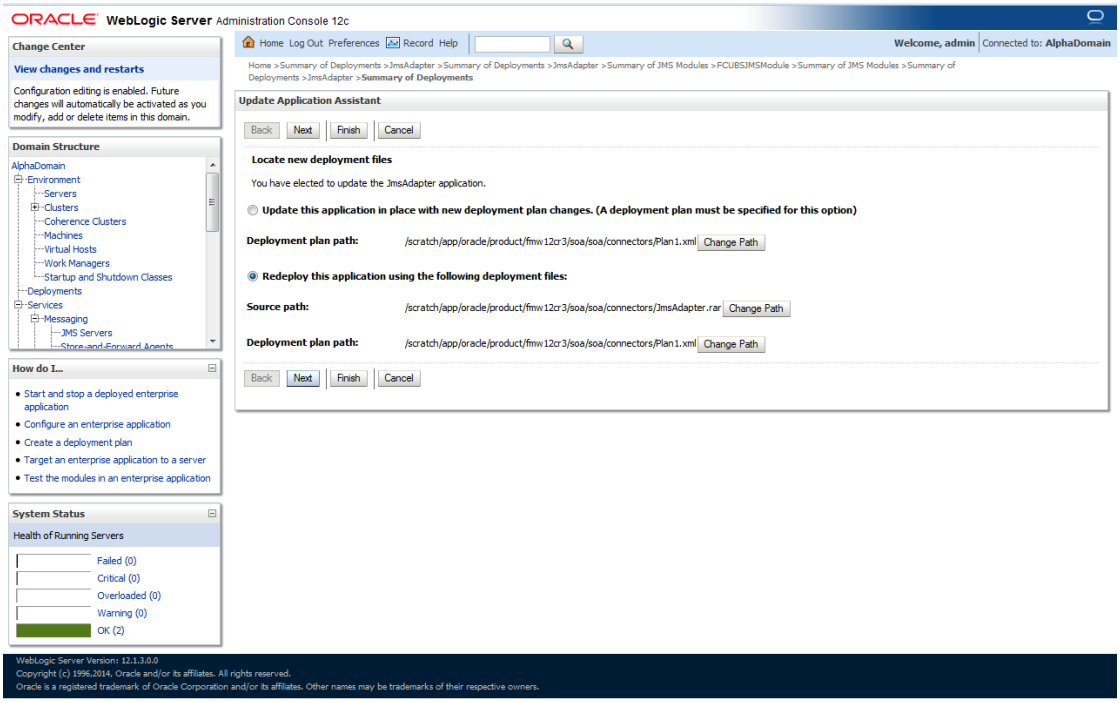
6. Click on the Outbound connection pool with **eis/Queue/Notif** and enter the connection factory location as **jndi/FCUBSConnectionfactory→**press Enter and Save

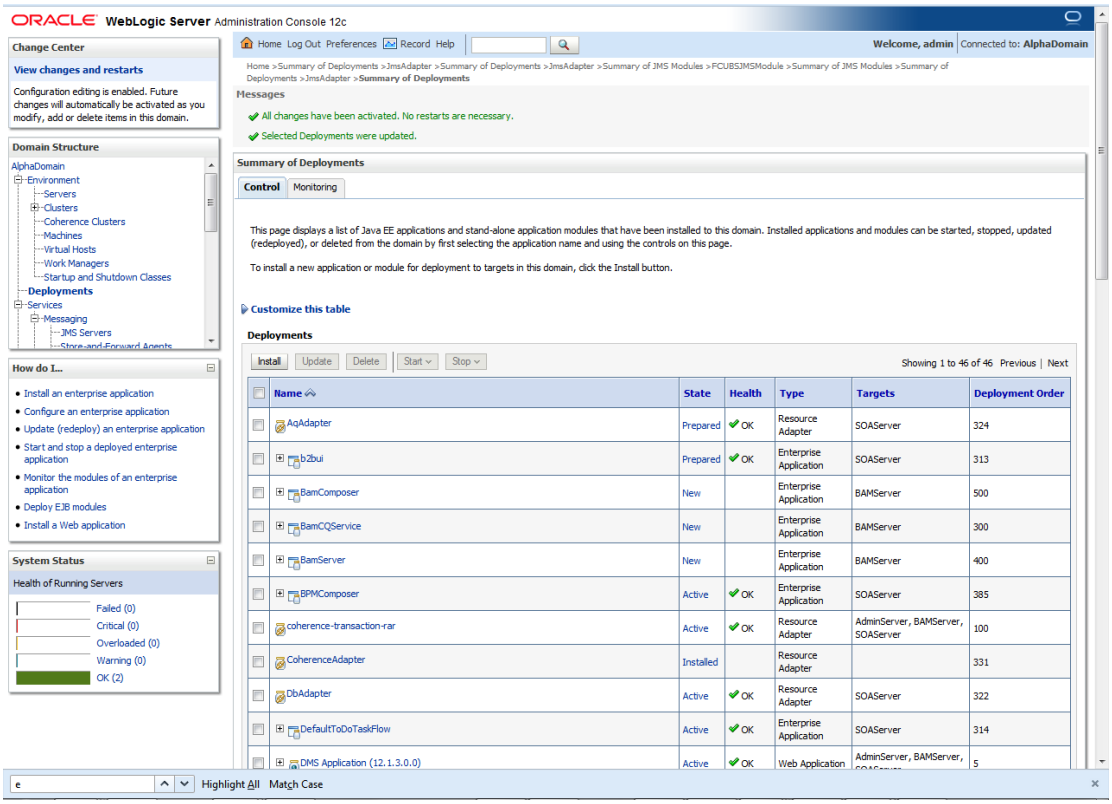




15. Go to console →Deployments→JMS adapter→Update→Next→ Next →Finish



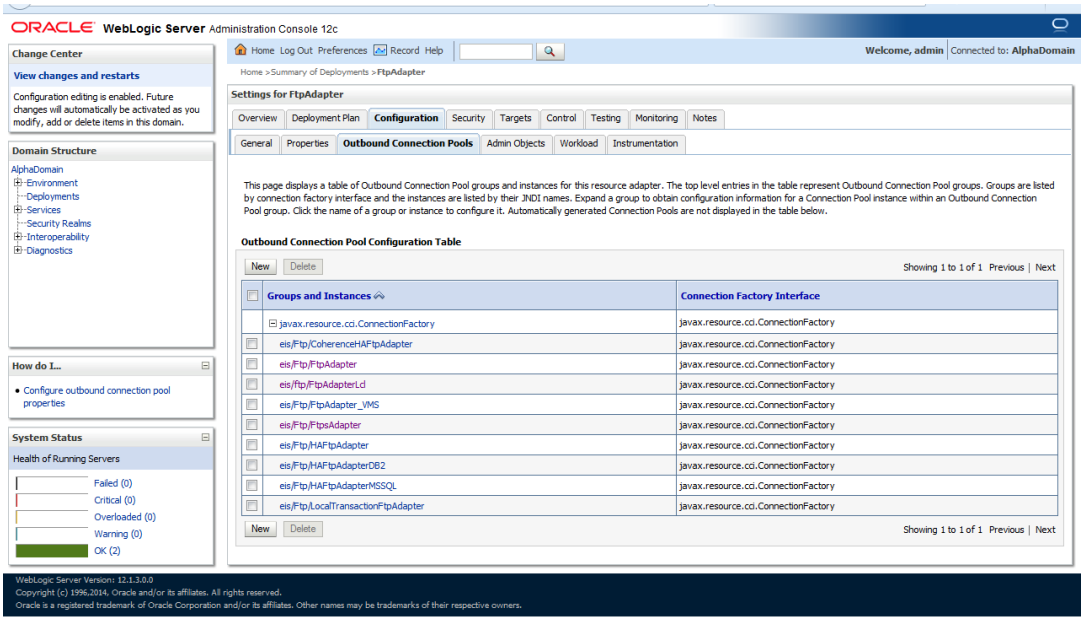


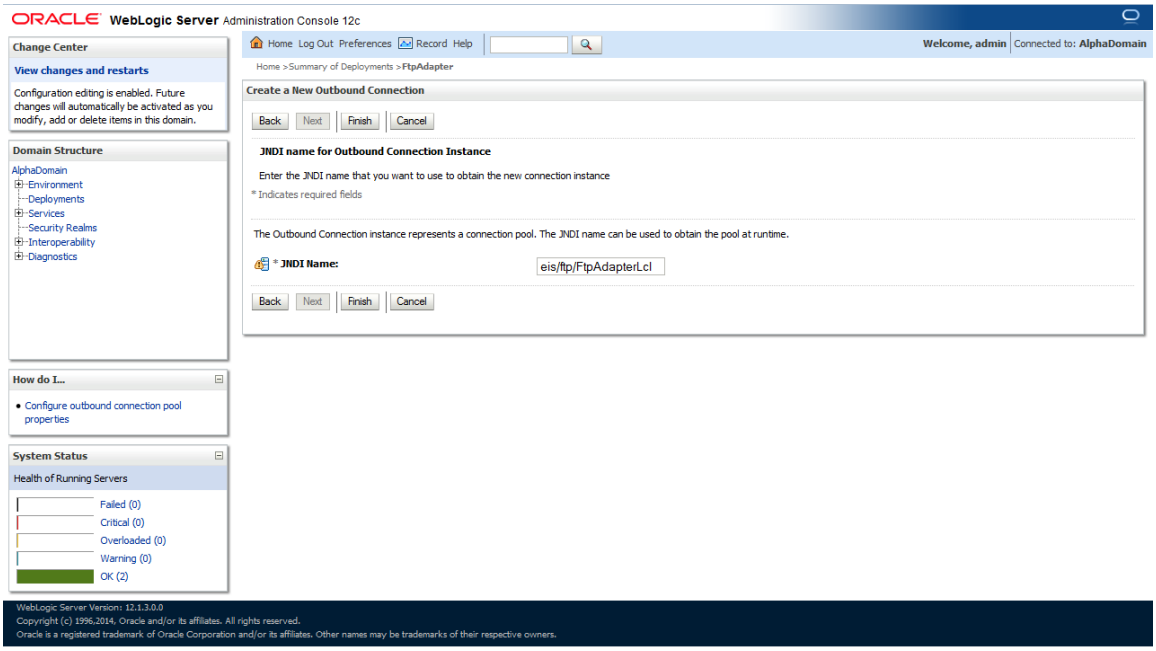


16. Create the out bound connection pool with the **eis/wls/Queue** name in the Deployments using connection factory jndi/FCUBSConnectionfactory.

1.2.7 Configuring FTP Adapter

1. Login to console→Deployments→ FTP Adapter→Configuration→Outbound Connection Pool→New





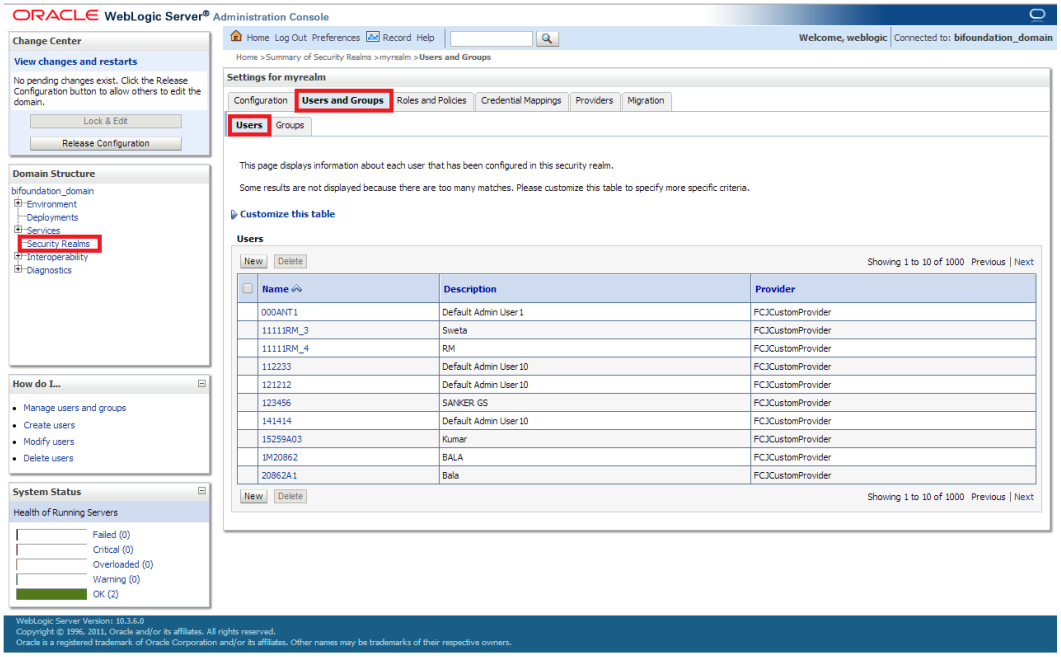
2)Click finish and save.

1.2.8 BIP Interactive reports configuration

1) Login to the BIP domain console, http/s:<hostname>:<port>/console.

2) Follow the step 1.2.1 to add the “FCJCustomProvider”.

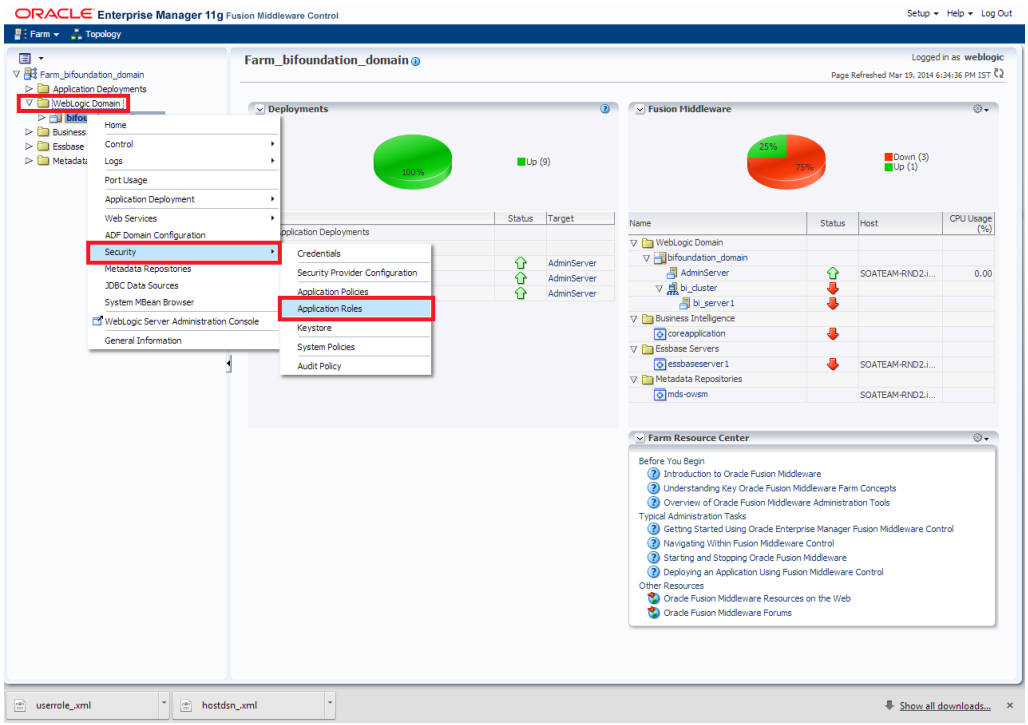
After adding, Navigate to security realms >myrealm > Users and Groups and check if the users from the schema are displayed in Users tab, and Roles from the schema are displayed under the Groups Tab.



3) Login to the Enterprise Manager (em) http/s:<hostname>:<port>/em

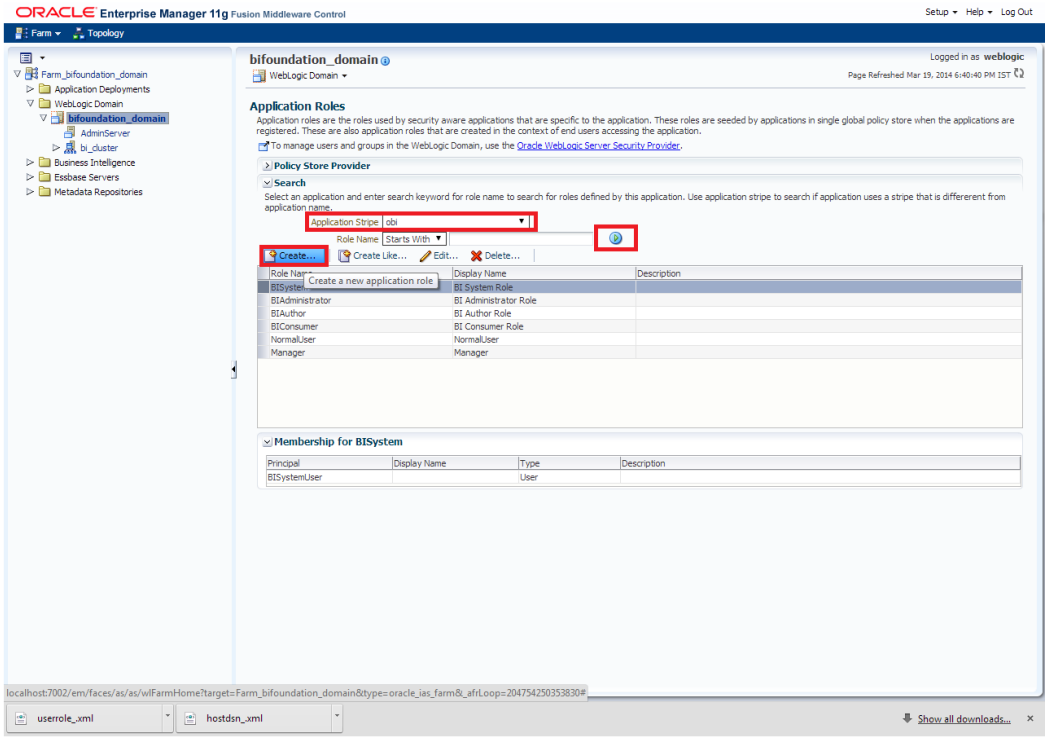
- Right click on the domain(in which BI suite is installed) under the weblogic domain

- Go to security and then navigate to application roles



4) After navigating to next screen as in below screenshot,

- Select application stripe as obi
- Click on the search button
- Click on create button to add a role



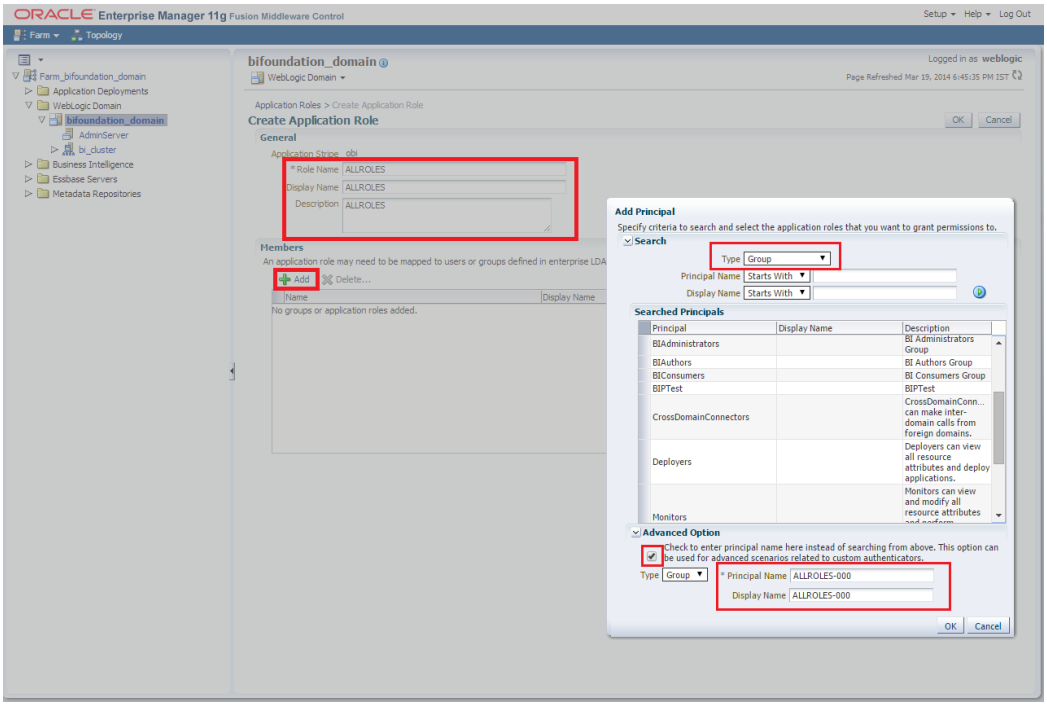
5) After navigating to next screen as in below screenshot,

- Enter the role name(mandatory), display name(optional), description(optional)
- Click on the Add button
- In the Add Principal pop up select type as “Group”
- In the advanced option check the checkbox and again select the type as “Group” below
  - Click on the Search button, if the roles are listed then select the roles like ALLROLES-000, ADMINROLE-000 from the list.

    or

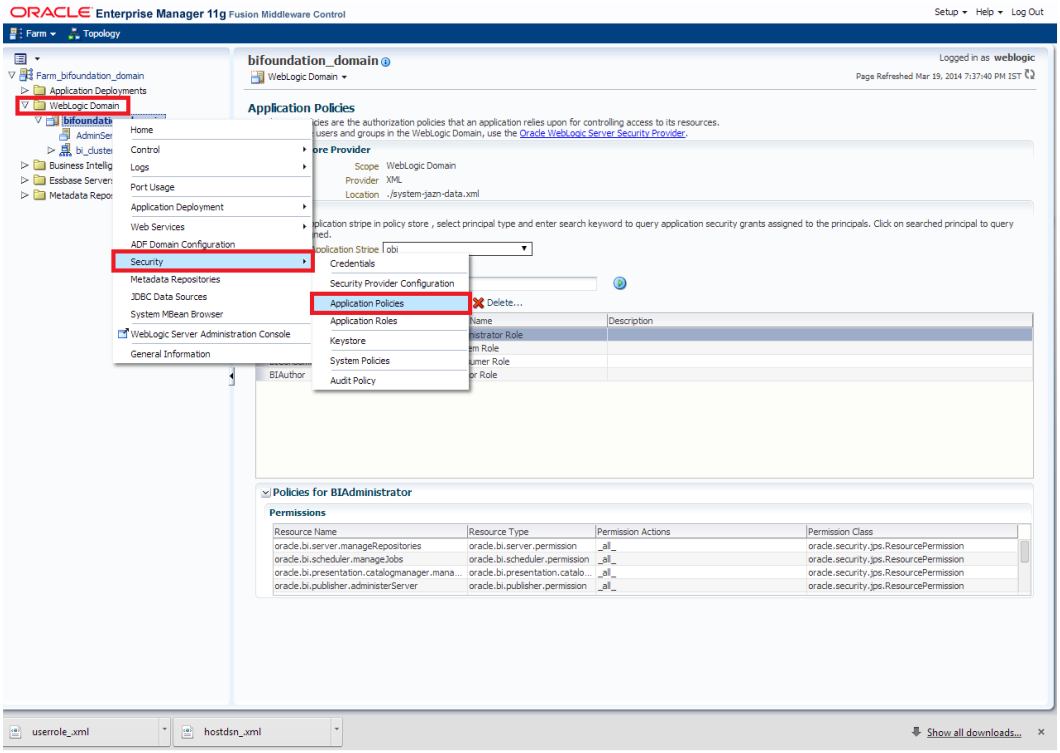
  - Enter the Principal Name (mandatory), which is actually the role present in the FCUBS (ex: ALLROLES-000, ADMINROLE-000), Display Name (optional).

- After completing click on OK button in pop up window and also in the screen.



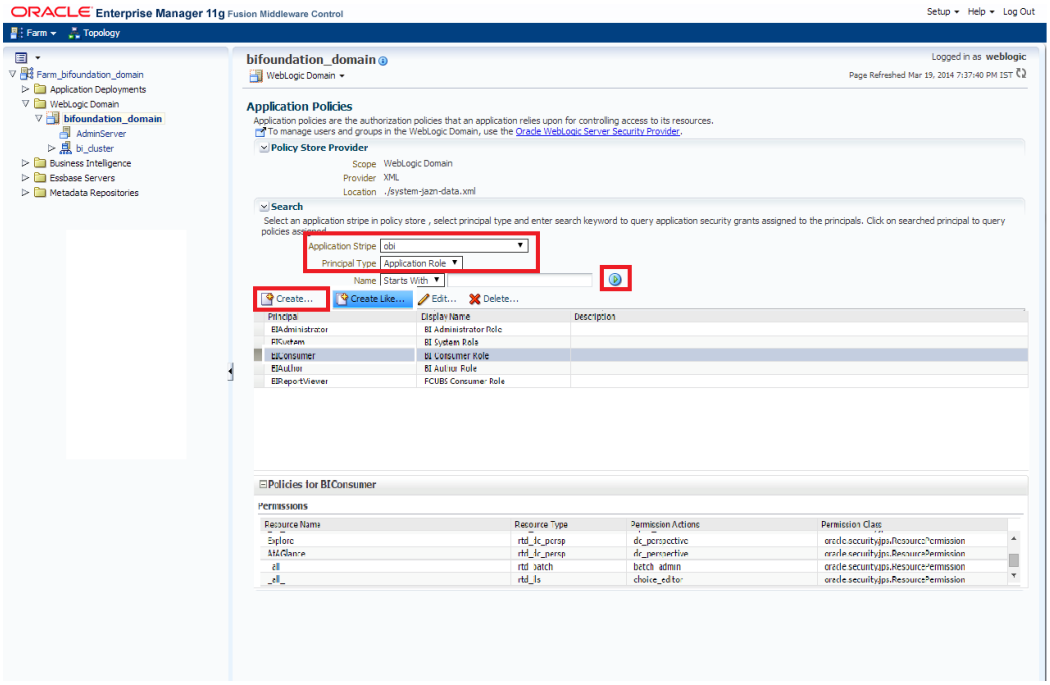
6) After getting information message like “A new role added successfully”, then again

- Right click on the domain(in which BI suite is installed) under the weblogic domain
- Go to security and then navigate to application polices



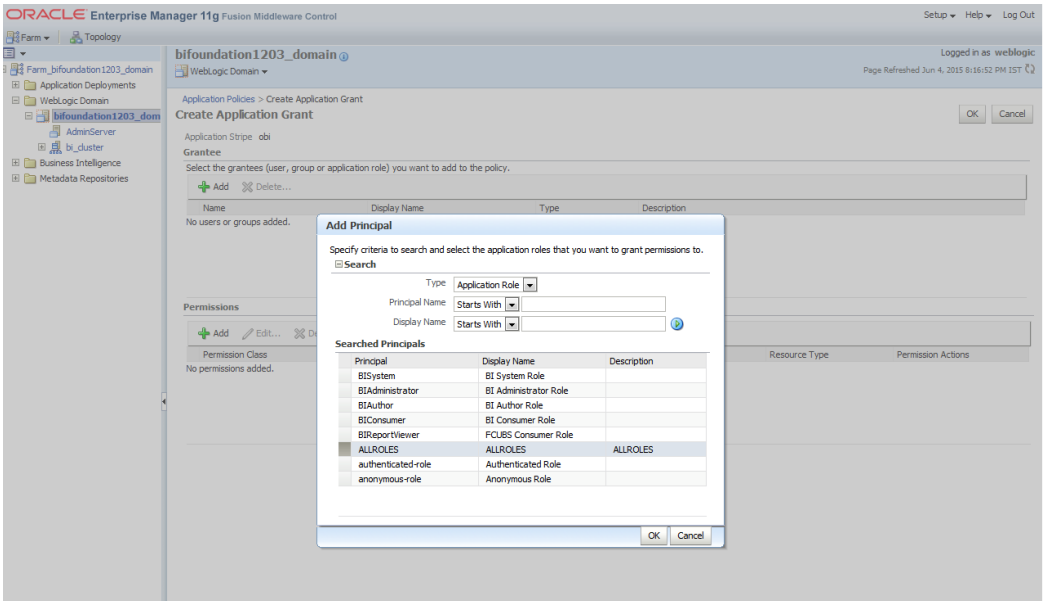
7) After navigating to next screen as per screen shot,

- Select the application stripe as obi, principal type as “Application Role”
- Click on the search button
- Select BIConsumer(it should be highlighted) from the list and click on the create like button.

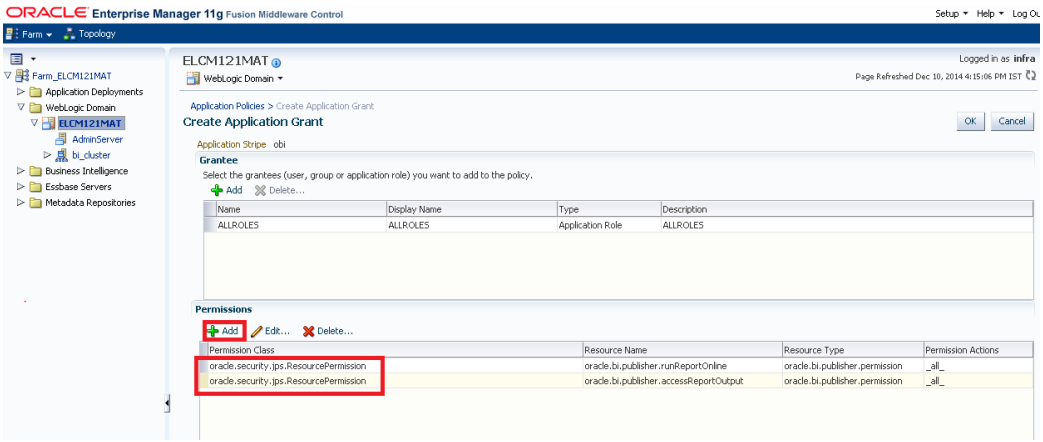


8) After navigating to next screen as per the screen shot,

- Click on Add button , a new window “Add Principal” will be launched.
- Select Type as “Application Role” and click on the search button
- From the list select the role that has been created earlier in application role screen and click on OK button in pop up window and screen.

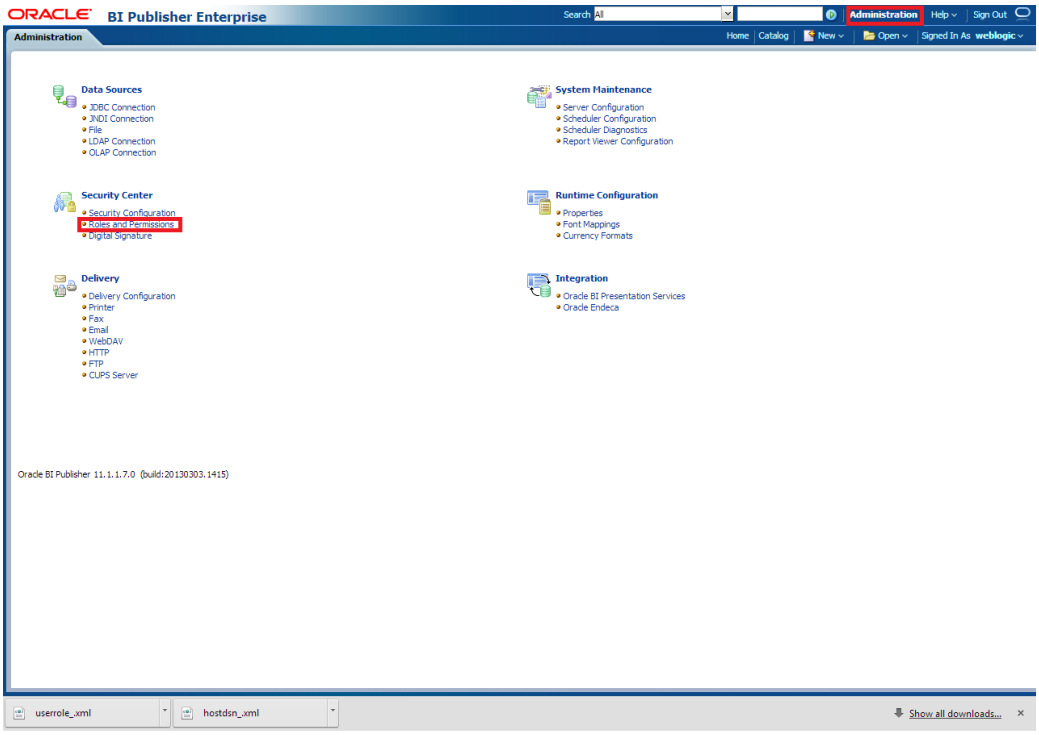


- Click Add button under Permissions and add the two permissions one by one as mentioned below.
  - oracle.bi.publisher.runReportOnline
  - oracle.bi.publisher.accessReportOutput

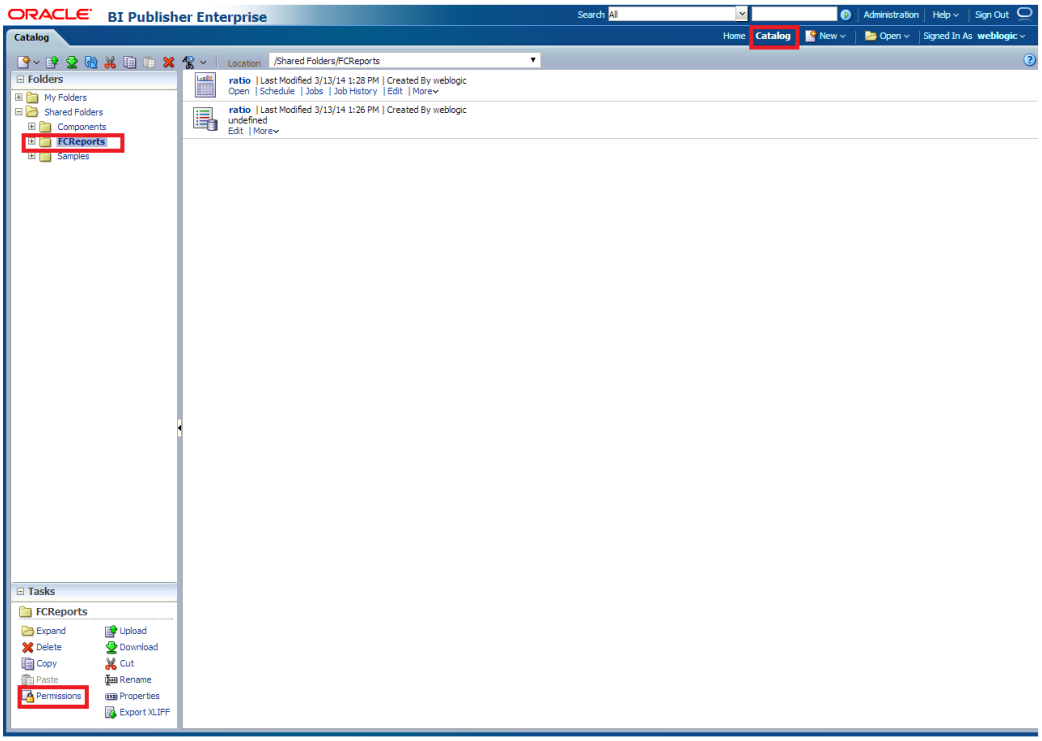


9) After getting information message like “A security added successfully”,

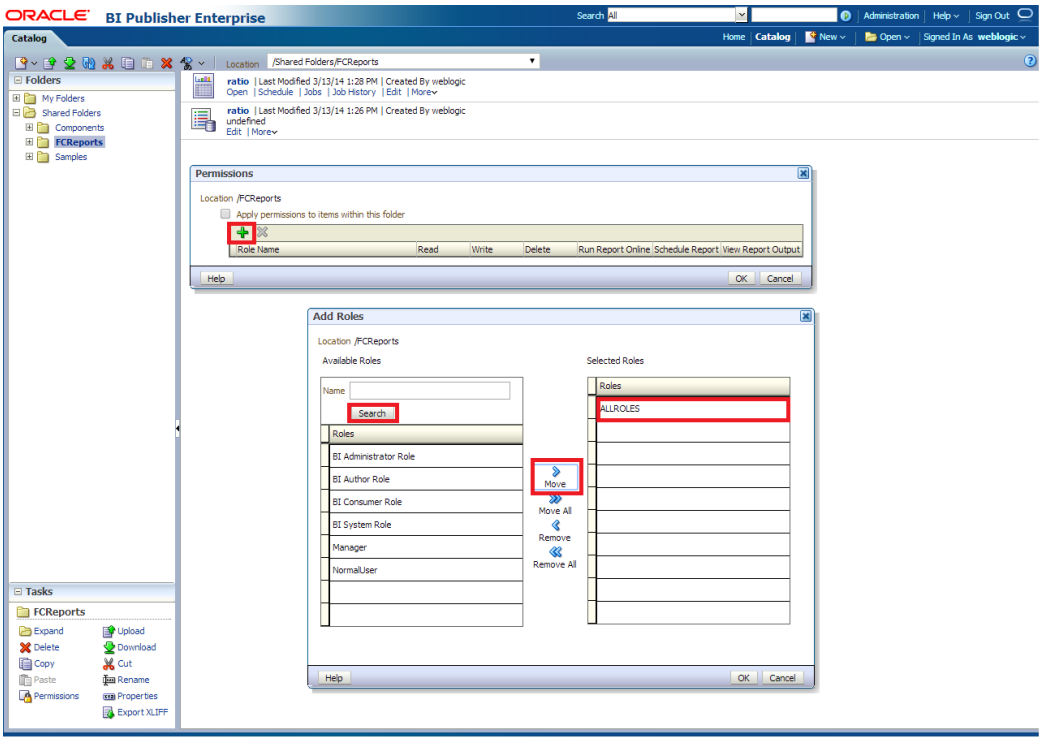
- Login into the BIPublisher , http/s:<hostname>:<port>/xmlpserver
- Click on the Administration .
- Click on the Roles and Permission under Security center and check if the added role(in em) is displayed, If not restart the servers.



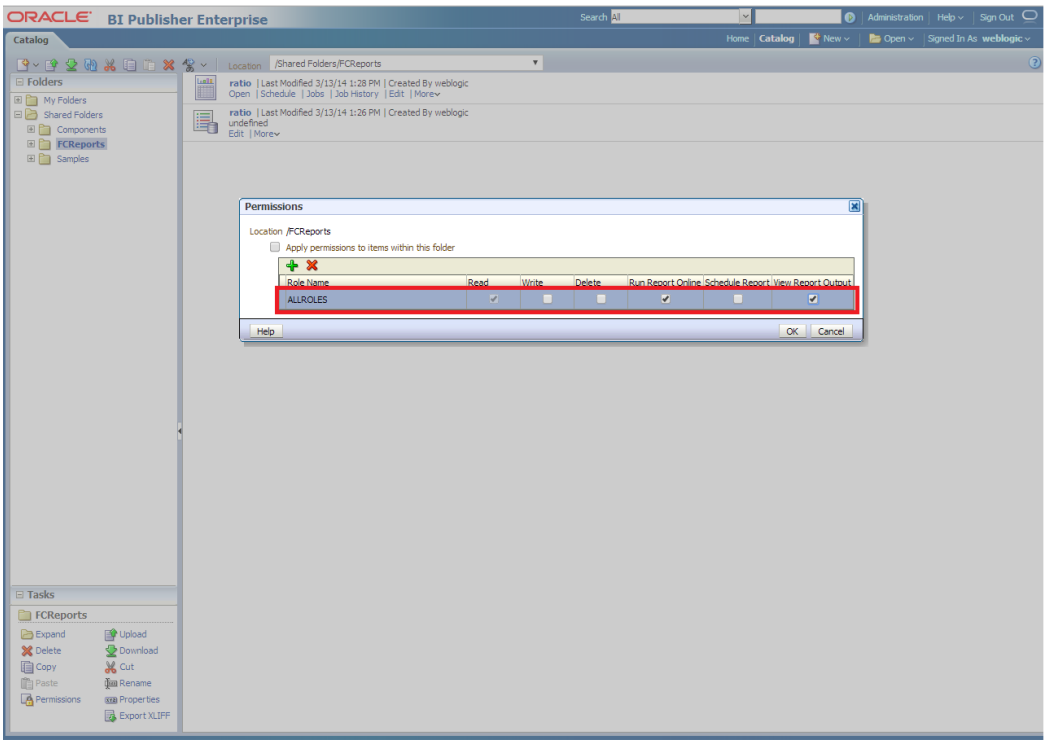
10) Then click on the Catalog , then on the folder that has been created , and then on permissions



11) After clicking on the permissions, a new window will pop up, delete all the roles if any present on click of permissions, then click on Add button, and then click on search button in “Add Roles” window that is launched newly and select the role that has been created and click on move button and click on OK.



12) Finally, the role will be added and select the options that has to be provided for the particular role and check if the permissions is only to items within the folder if necessary.



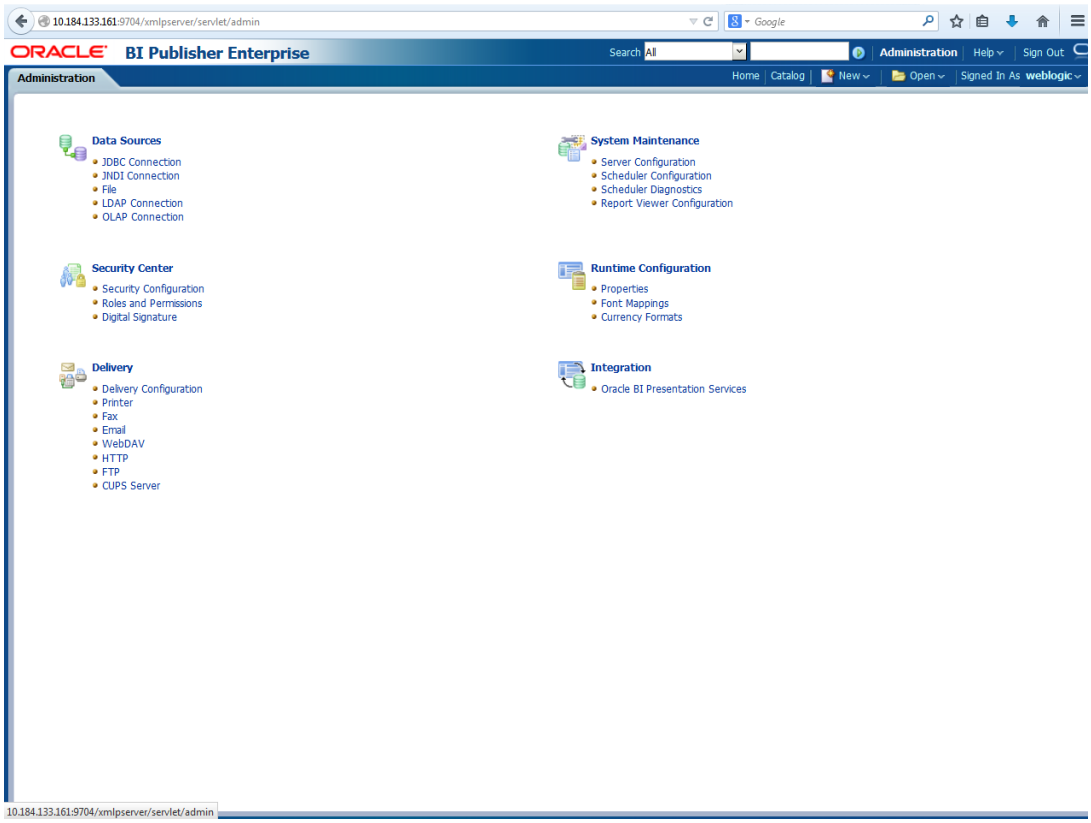
Now the reports in the folder will be accessed accordingly based on the roles.

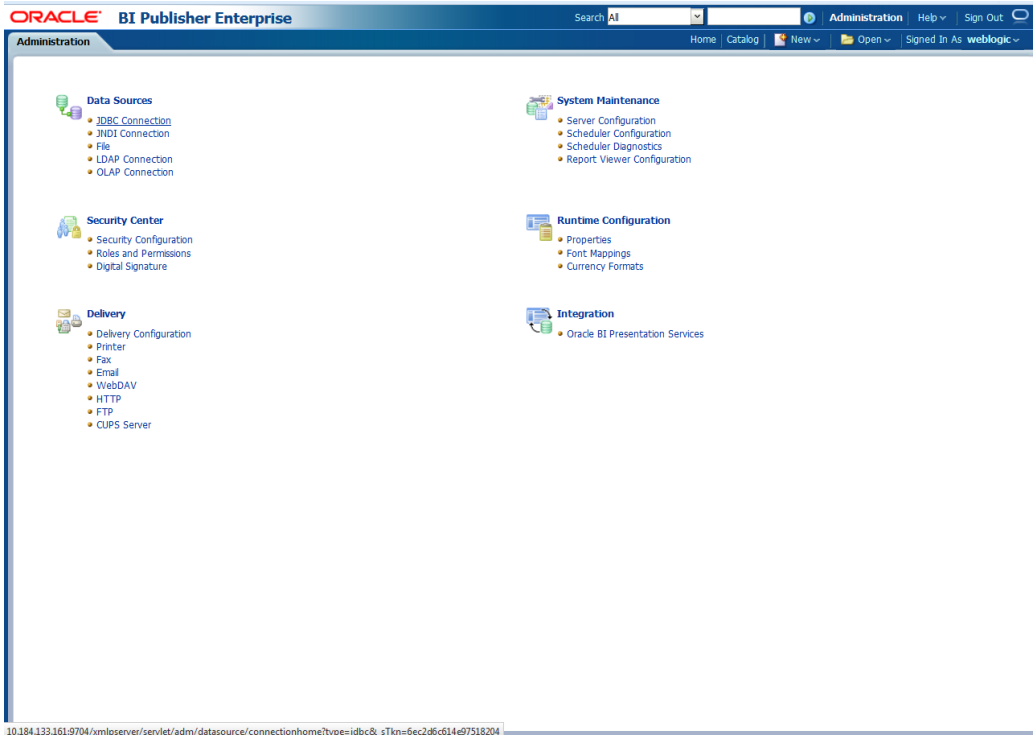
Note:

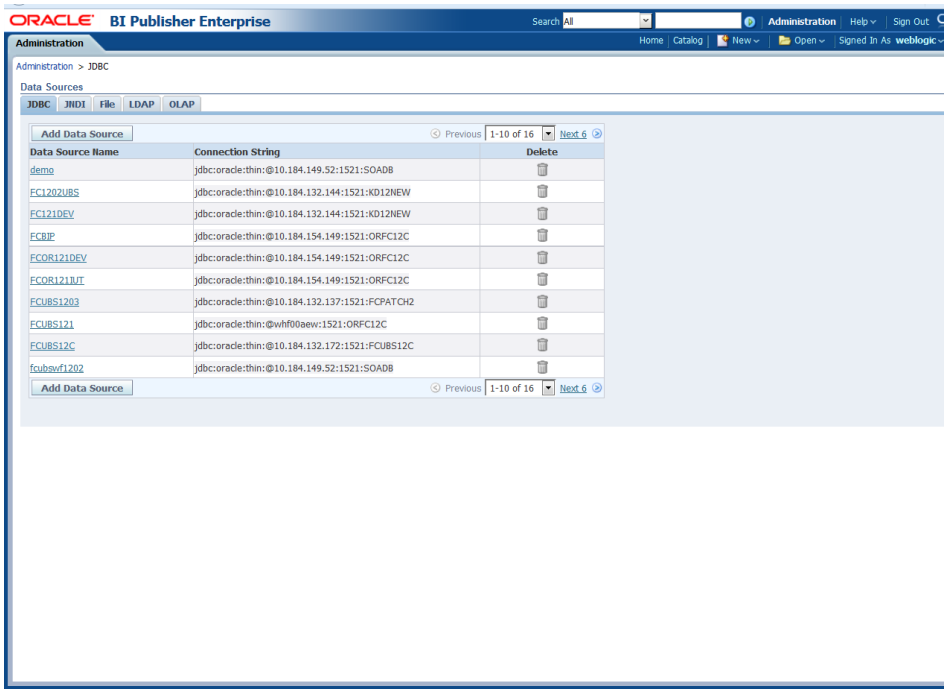
In the similar way we can set the permissions at report level also for particular role.

13. Please login in to Bi Publisher http://server:port/xmlpserver.

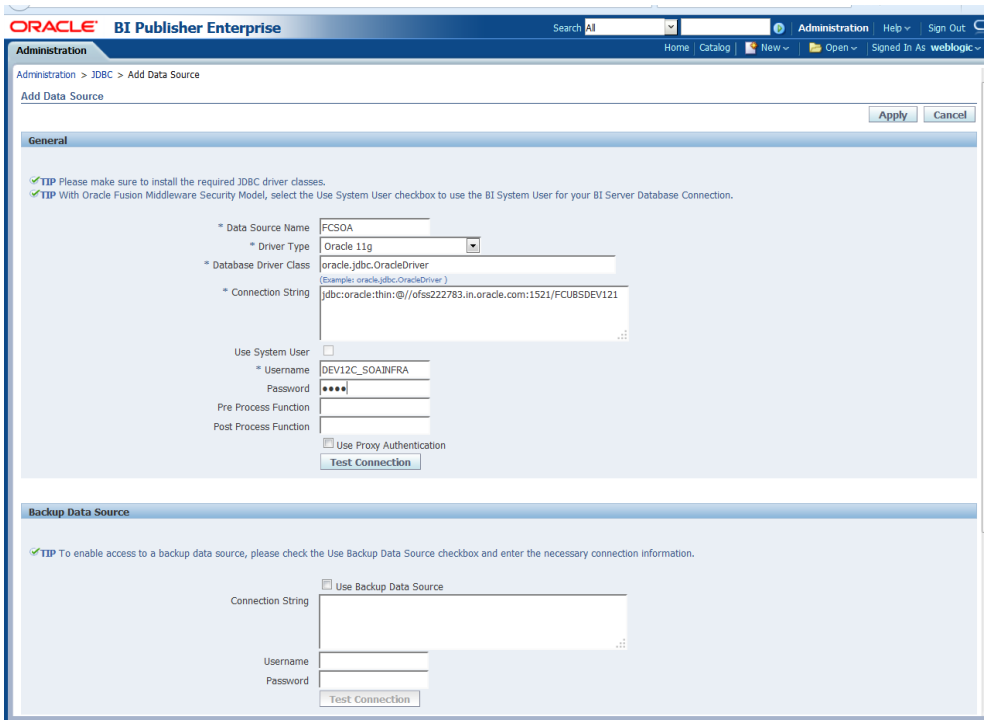
14. Click on Adminstration→ JDBC connection→Add Data Source



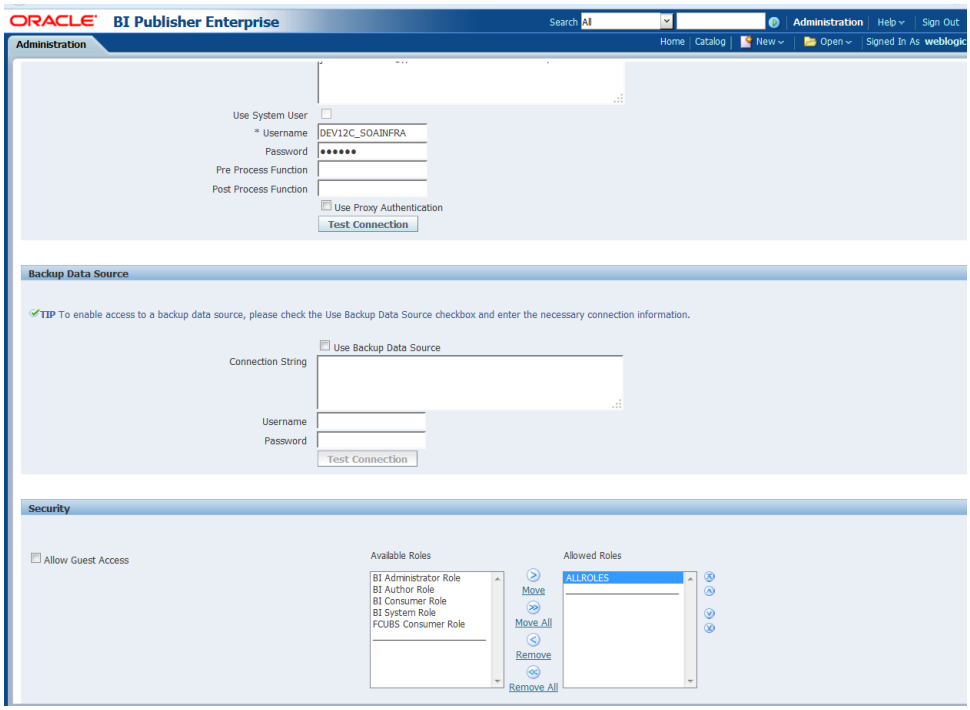




15. Please create the data source with data source name as **FCSOA** and use soa schema details to create the same.



16. Add the FCIS roles to allowed Roles under security

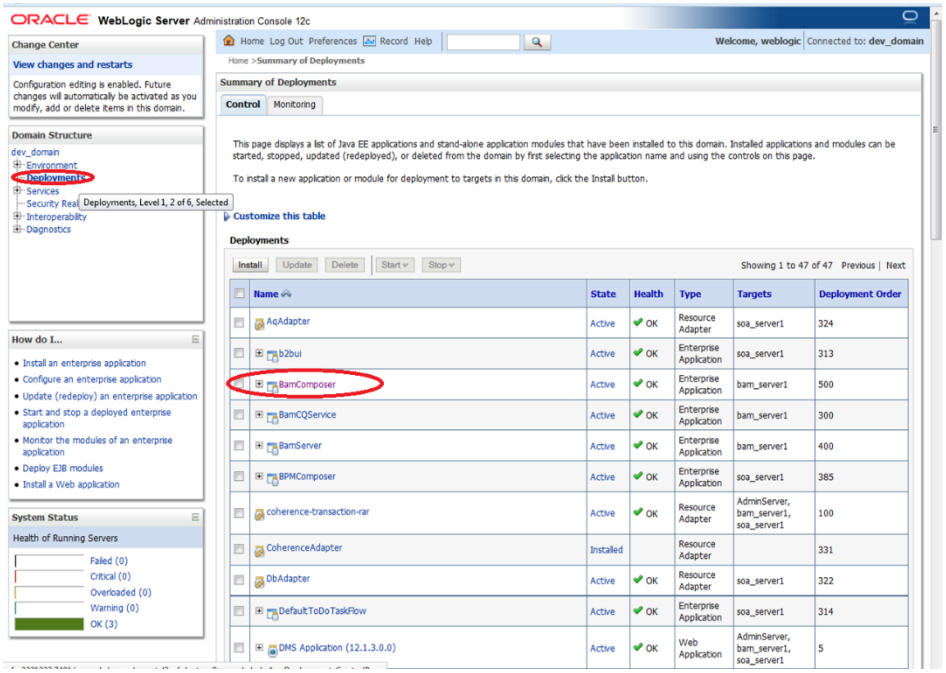


17. Click on test connection .once the connection is established succesfuly .Click on Apply.

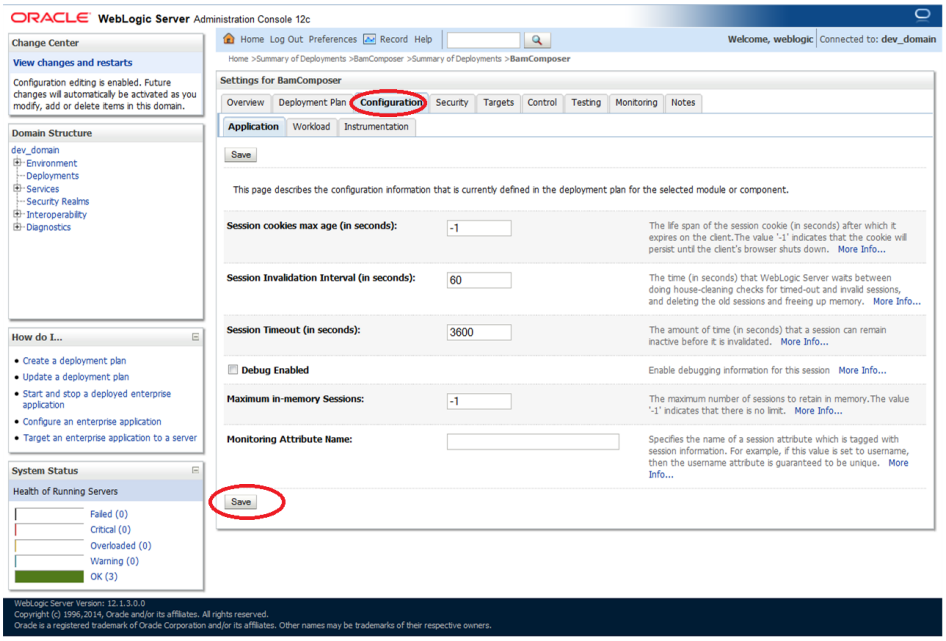
18. Please follow the steps 15 to 17 to create data source for FCIS Schema and give the name as FCBIPBPEL

1.2.9 BAM Report Configuration settings

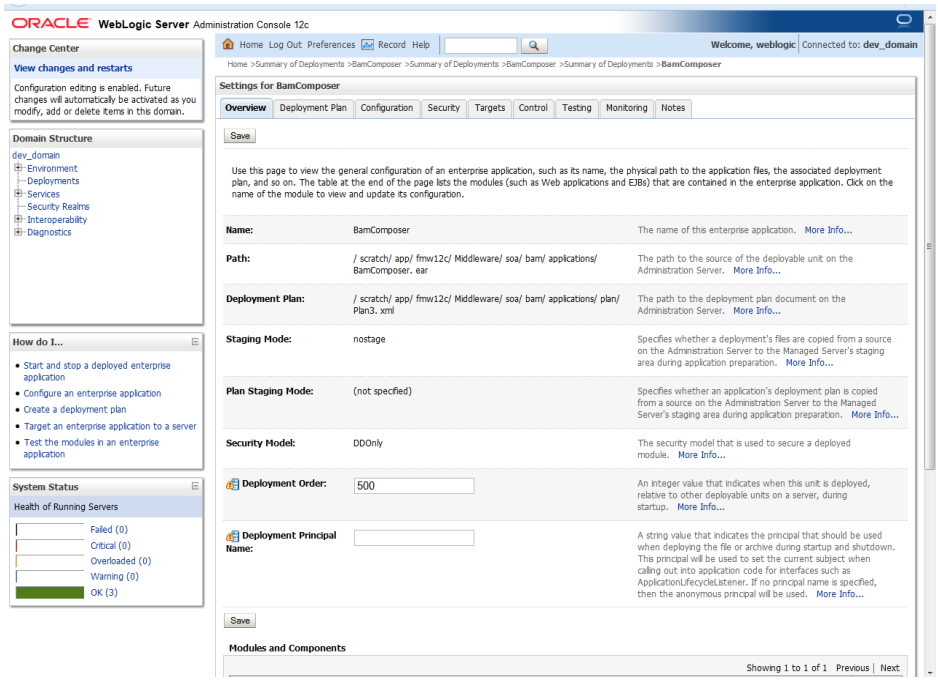
1. Generate a deployment plan for BAM Composer Application.
2. Login in to console http://hostname:port/console
3. Click on Deployments→click on BAM Composer



4. Click on Configuration Configuration →Save



5. Click on Overview→check the deployment plan location

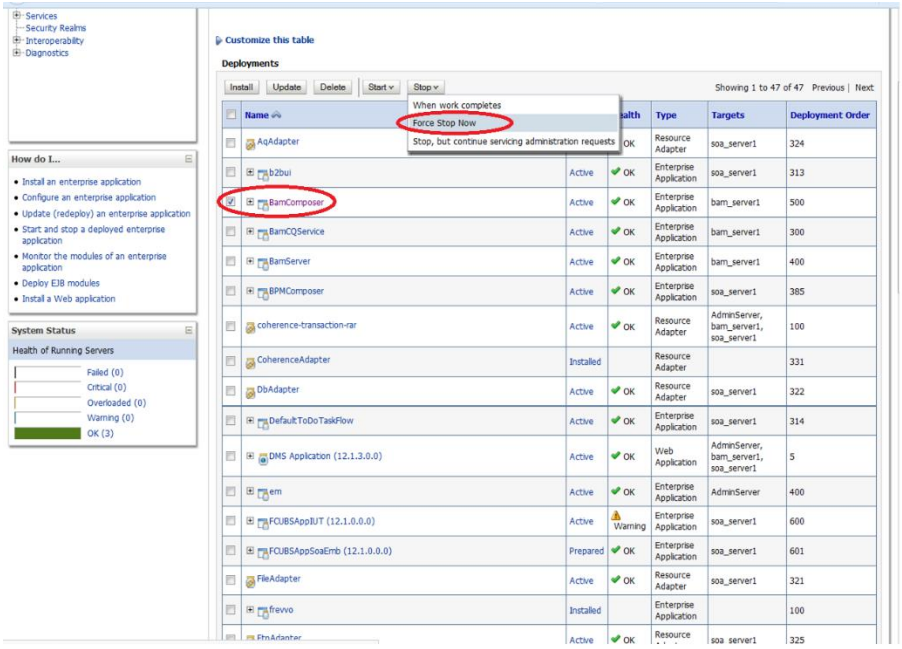


6. Add variable and variable assignment as below to the Plan.xml in <module-name>BamComposerWeb.war</module-name> and for reference please find plan.xml file.

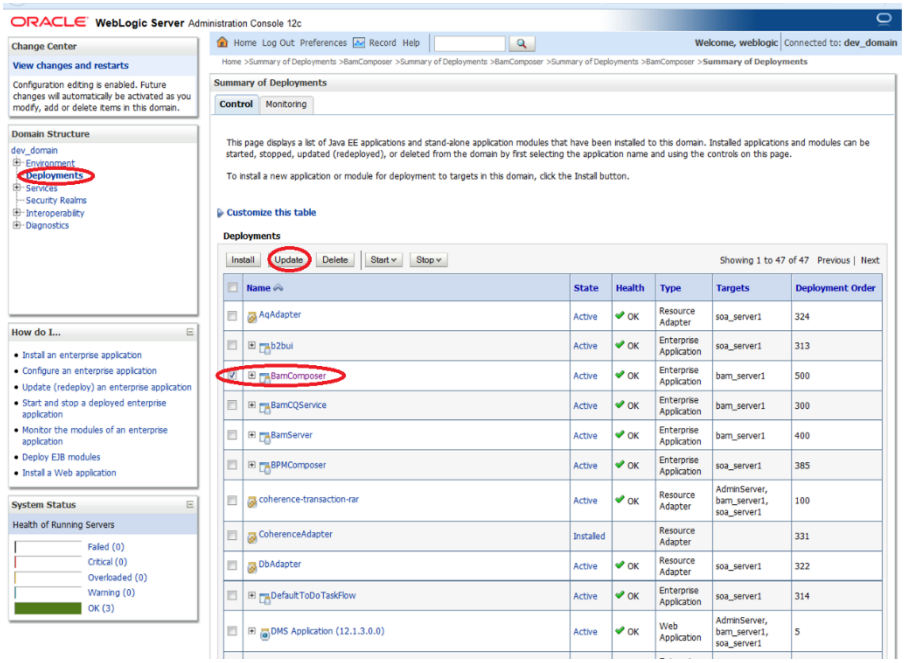
```
  <variable>
    <name>oracle.adf.view.rich.security.FRAME_BUSTING</name>
    <value>never</value>
  </variable>
<module-descriptor external="true">
    <root-element>web-app</root-element>
    <uri>WEB-INF/web.xml</uri>
          <variable-assignment>
      <name>oracle.adf.view.rich.security.FRAME_BUSTING</name>
      <xpath>/web-app/context-param/[param-
name="oracle.adf.view.rich.security.FRAME_BUSTING"]/param-value</xpath>
       <origin>planbased</origin>
    </variable-assignment> </module-descriptor>
```

Plan3.xml

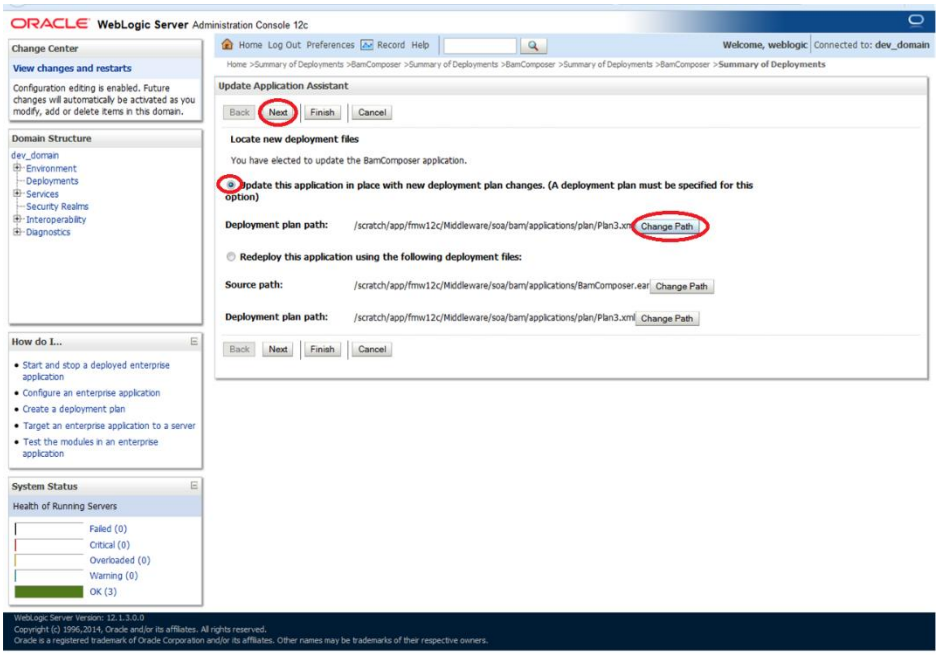
7. Stop the BAM composer application in console.



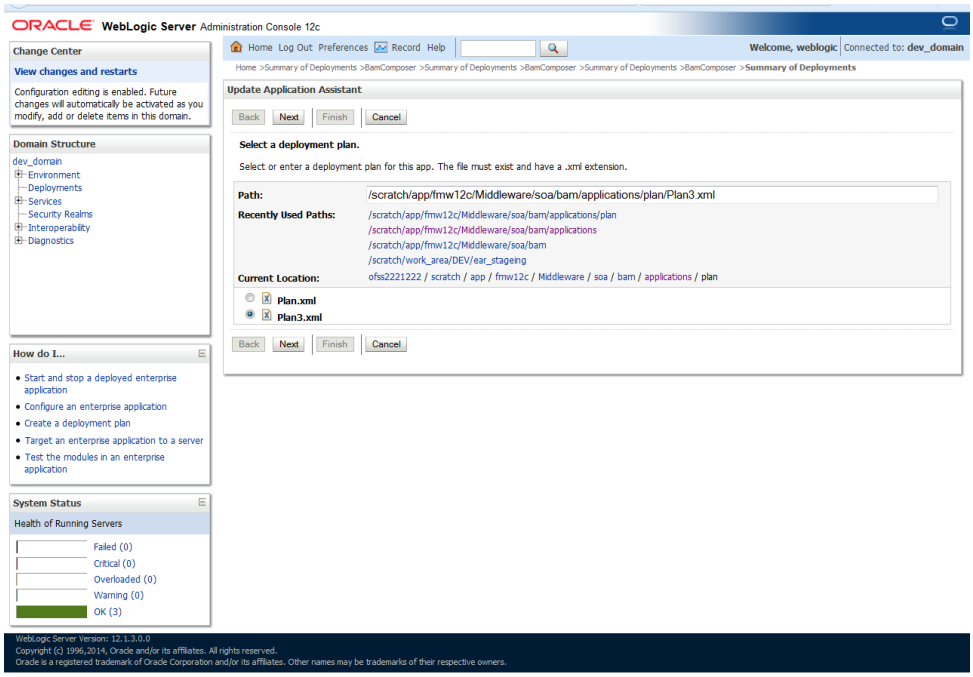
8. Update the deployment plan.
9. Click on deployments →click on BAM Composer checkbox →Click on update

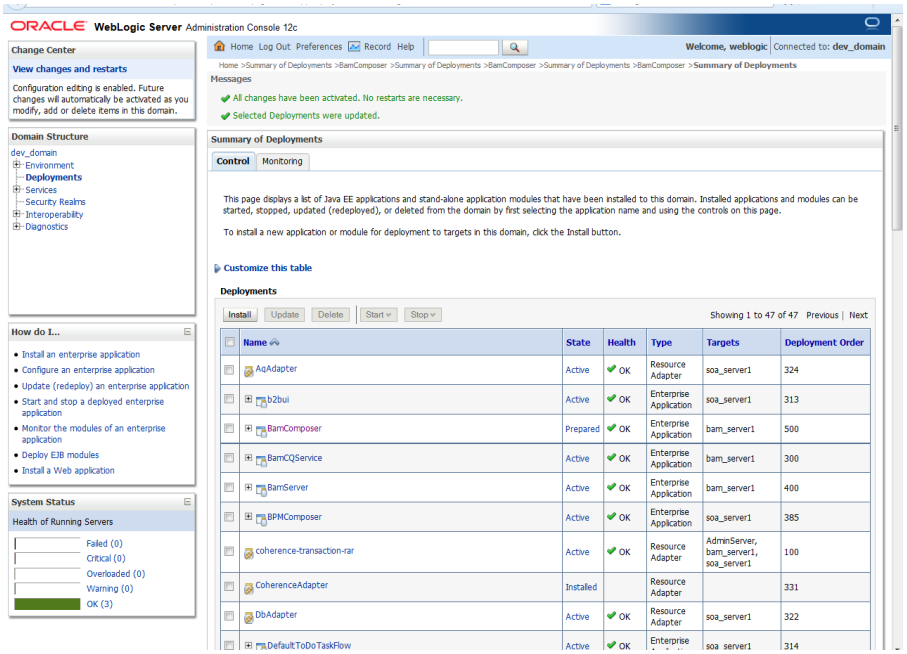


10. Select the Update this application in place with new deployment plan changes and click on change path button.

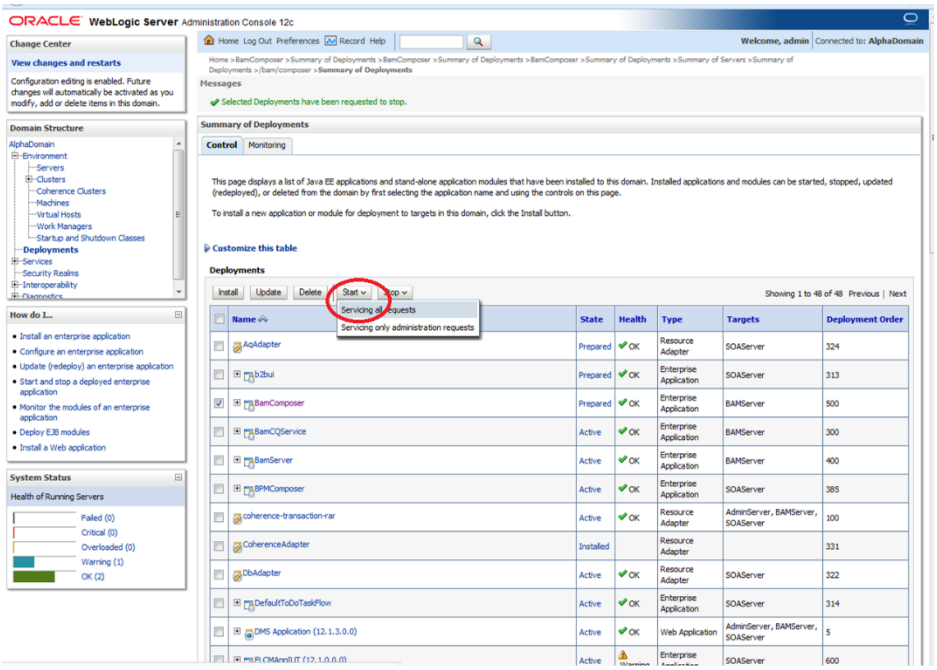


11. Select the latest plan.xml in the in the path→next→next→Finish



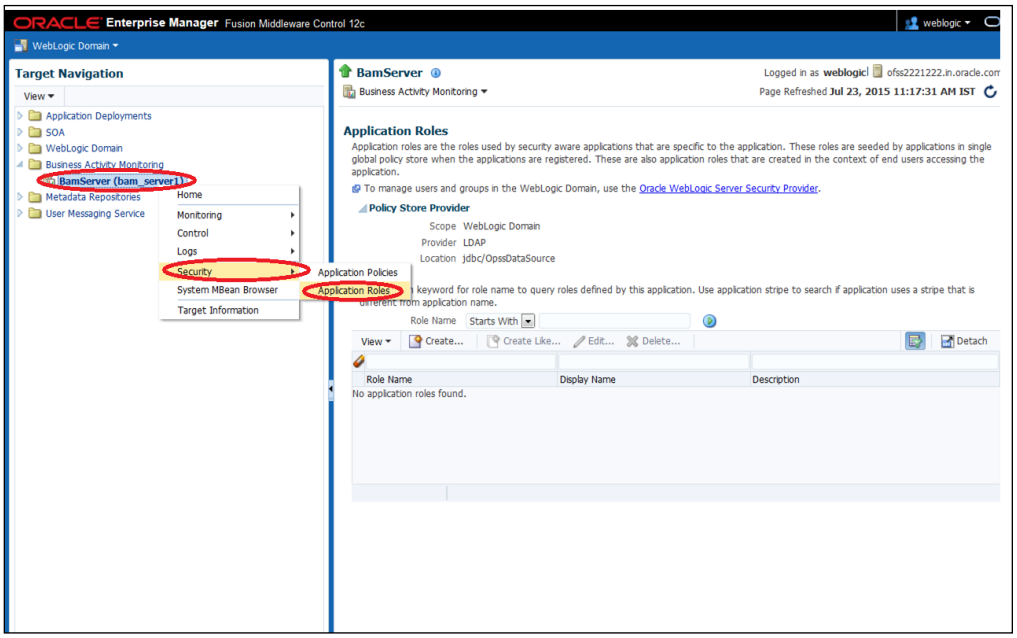


12. Restart the BAM Composer application in the console

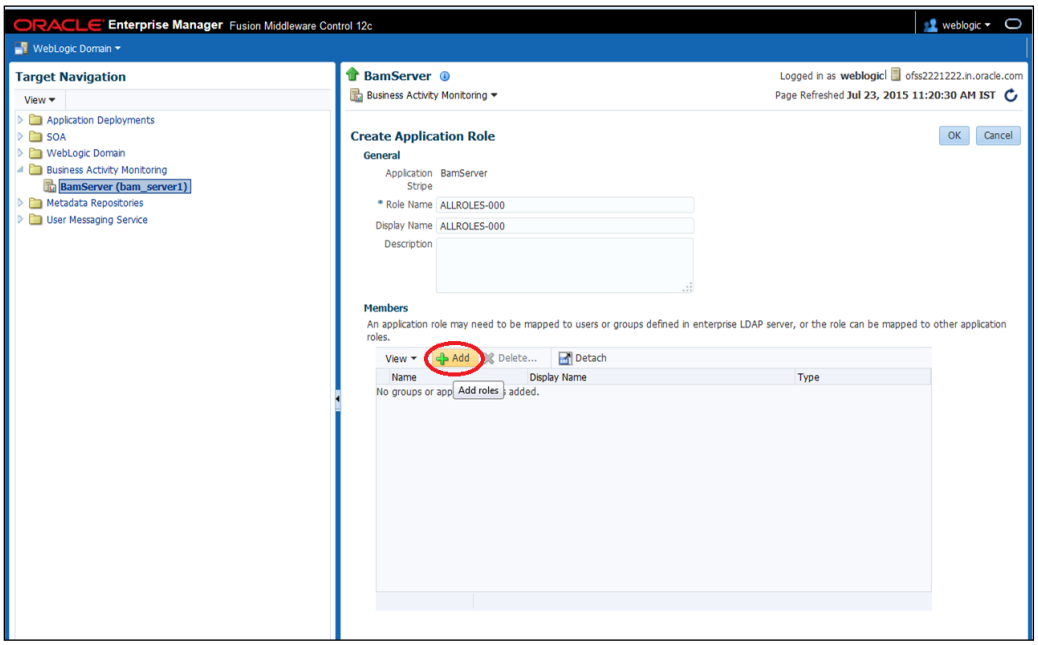


13. Login in to em console http://hostname:port/em

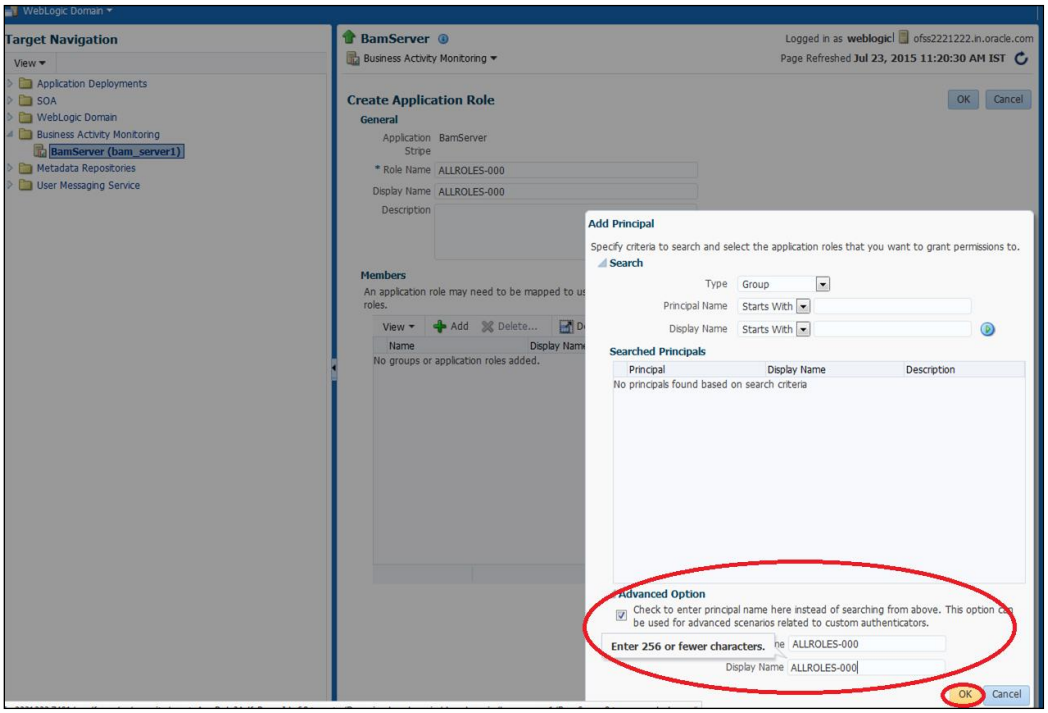
14. Right Click on BAM Server→Security→Application Roles



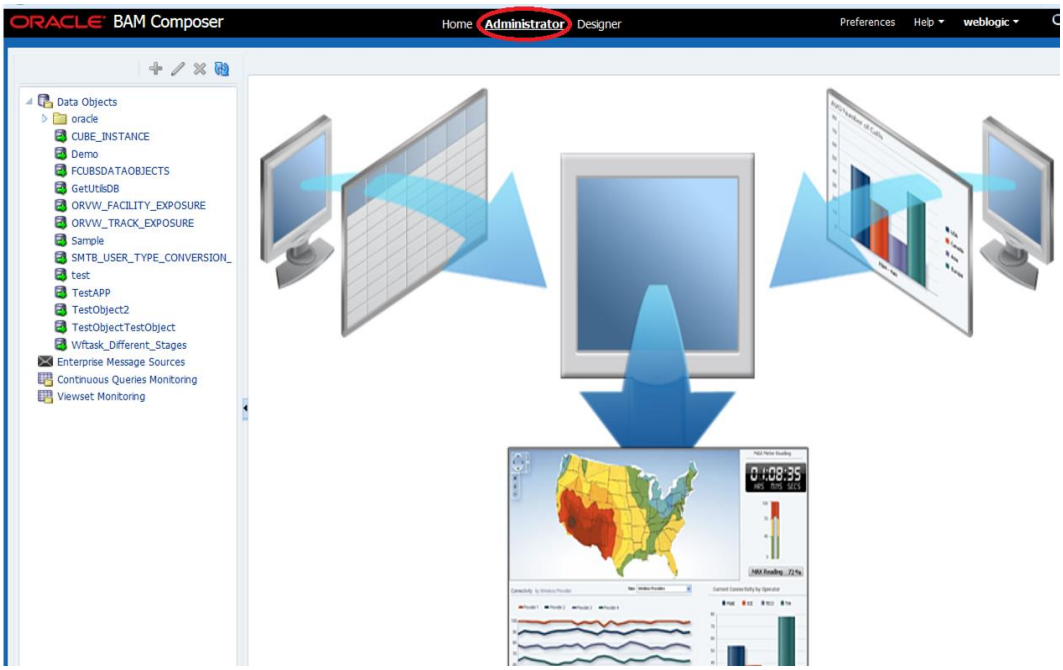
15. Click on Create → create application role with ALL ROLES-000→Click on ADD button in the Members



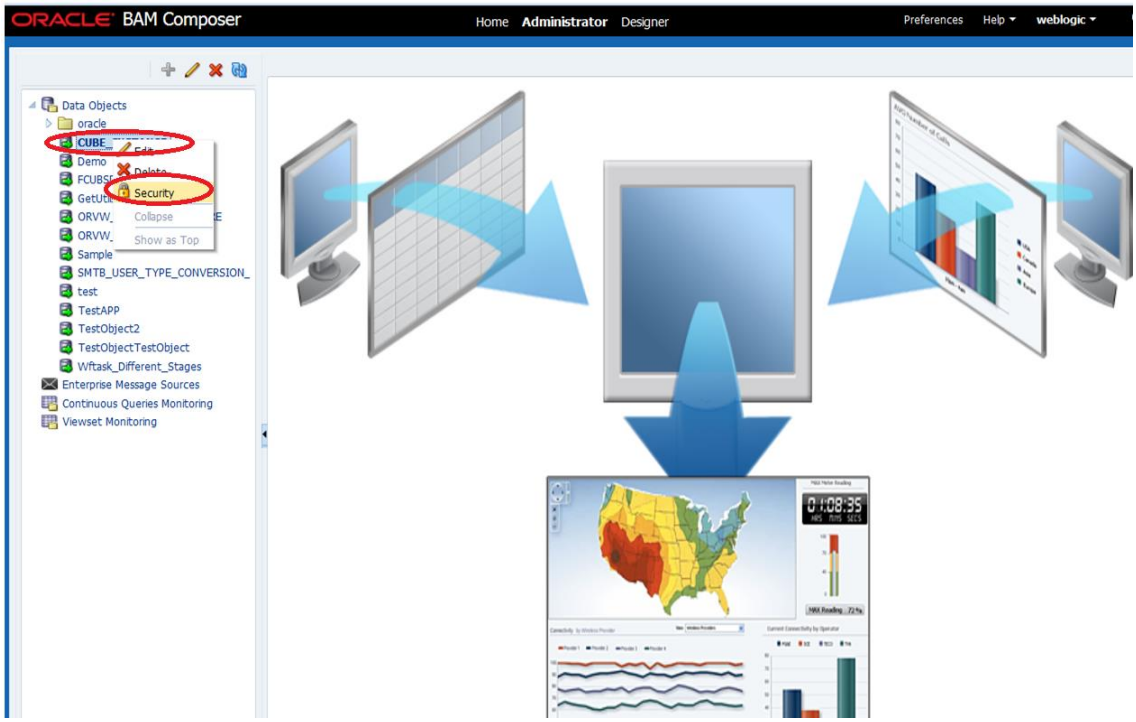
16. Select the Type as Group and add principle details be referring the below screen shot.



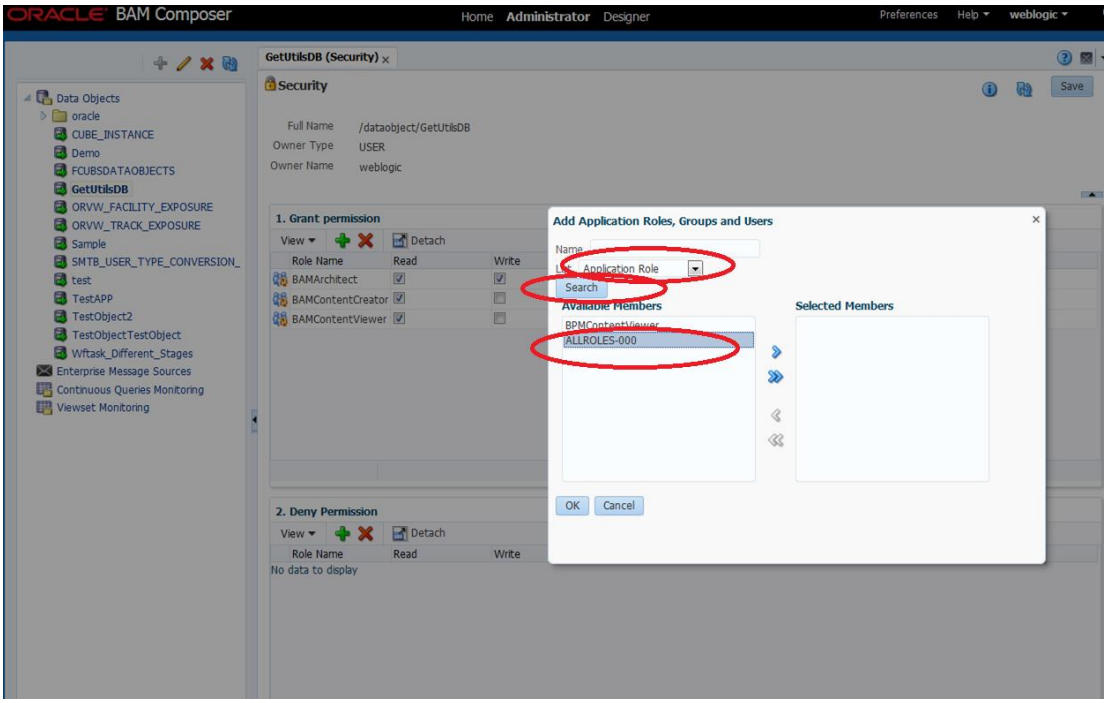
17. Login to BAM Composer → http://hostname:port/bam/composer--> Click on Administrator.



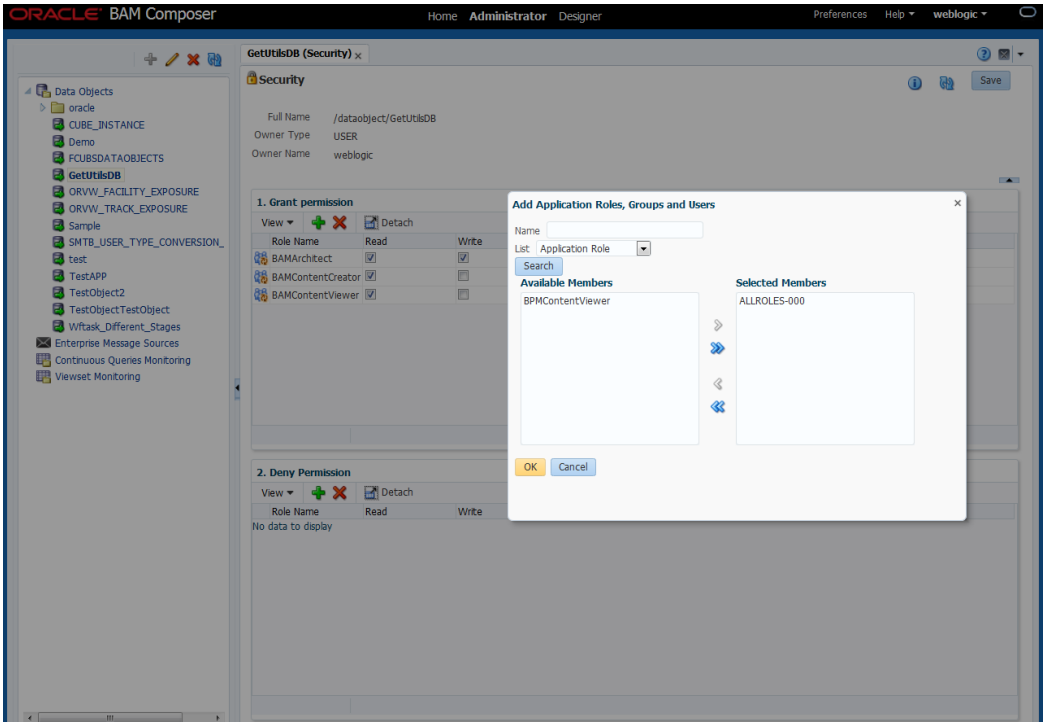
18. Go to Data Object→Right Click on CUBE_INSTANCE→Security



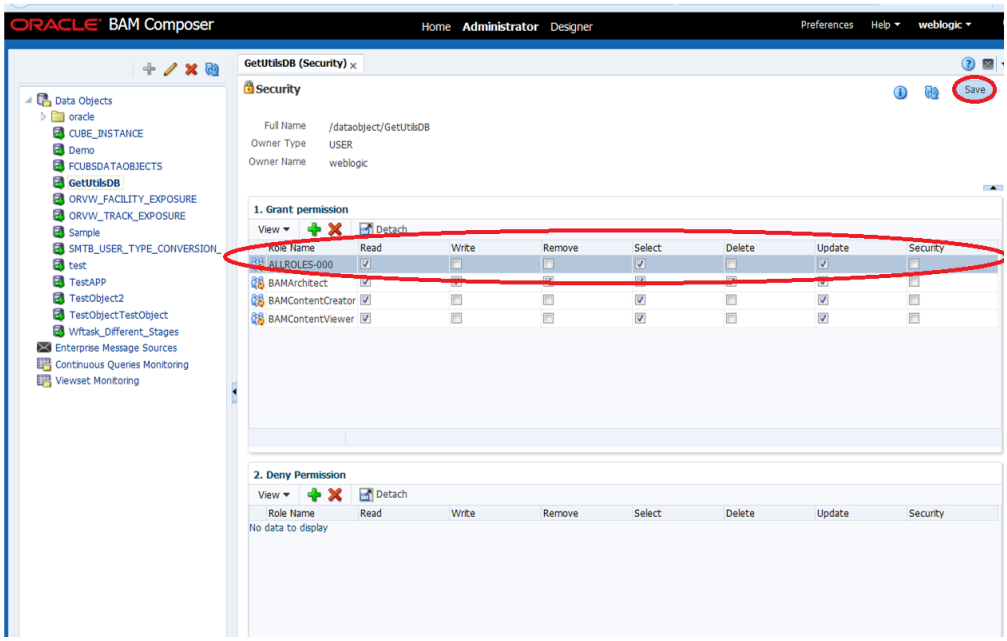
19. Click on Add button under Grant permission and search the list based on the Application Role



20. Move the ALLROLES-000 to Selected members.

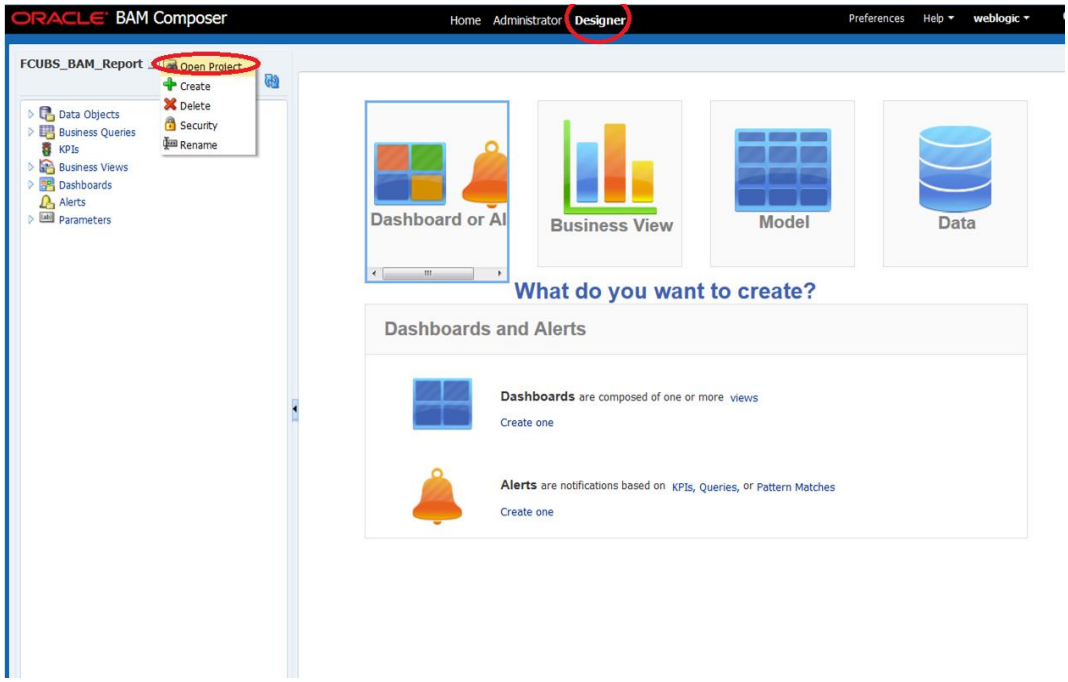


21. Click on read, select and Update check boxes →Click on Save.

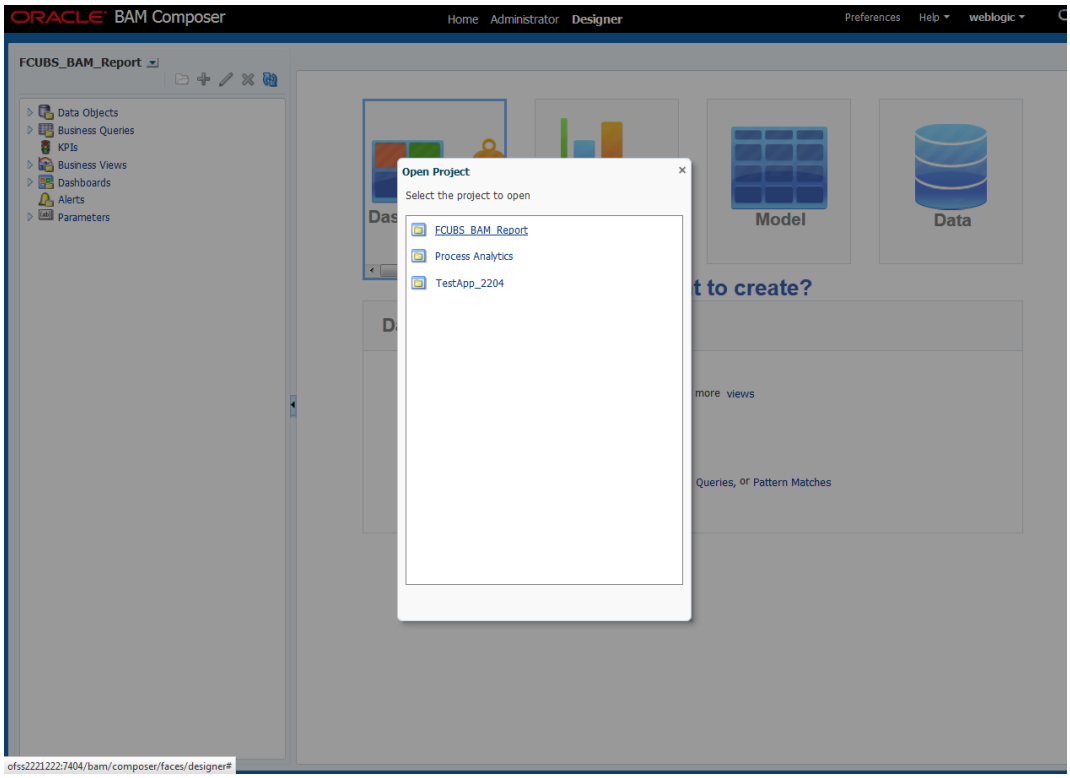


22. Follow the step 17 to 21 for other Data objects also.(cube_instance,wftask_different_stages, ORVW_TRACK_EXPOSURE, ORVW_FACILITY_EXPOSURE, GetUtilsDB, SMTB_USER_TYPE_CONVERSION_VIEW, FCUBSDATAOBJECTS).

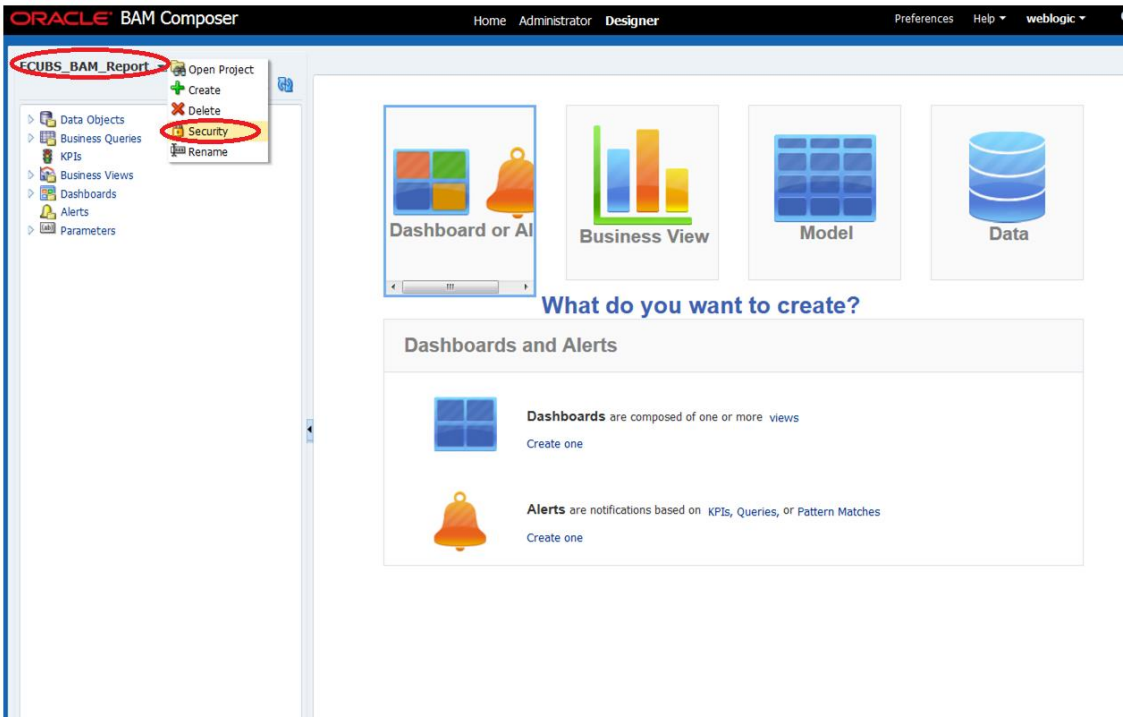
23. Click on Designer →Open Project



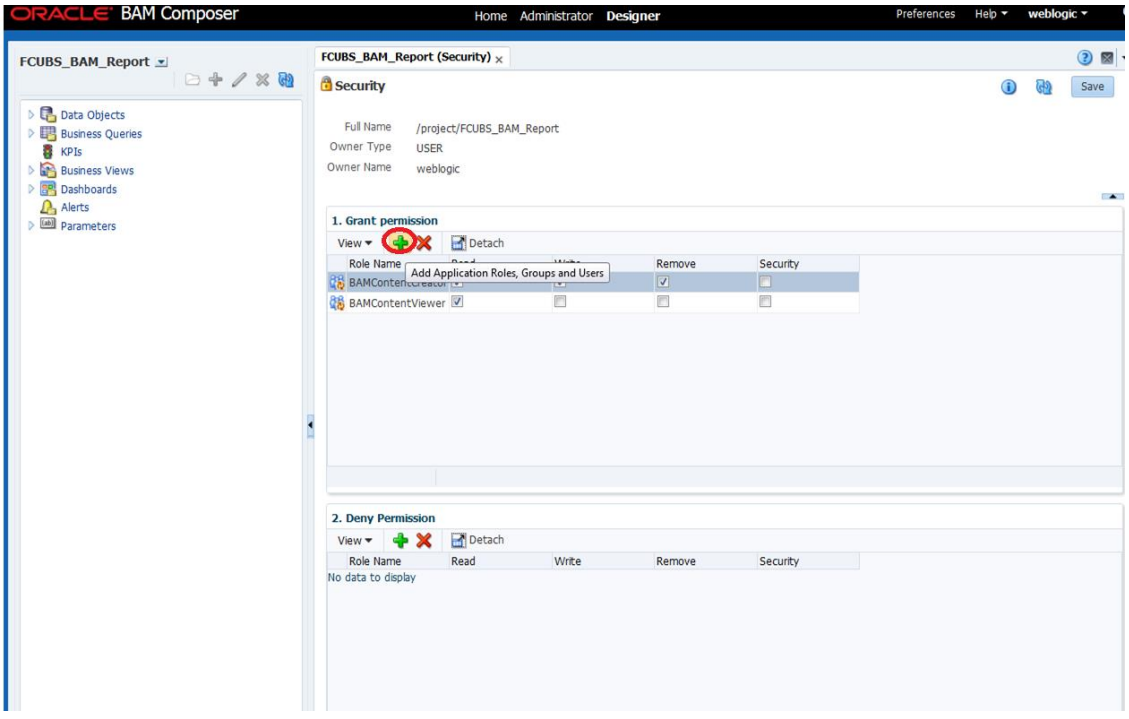
24. Click on FCUBS_BAM_report

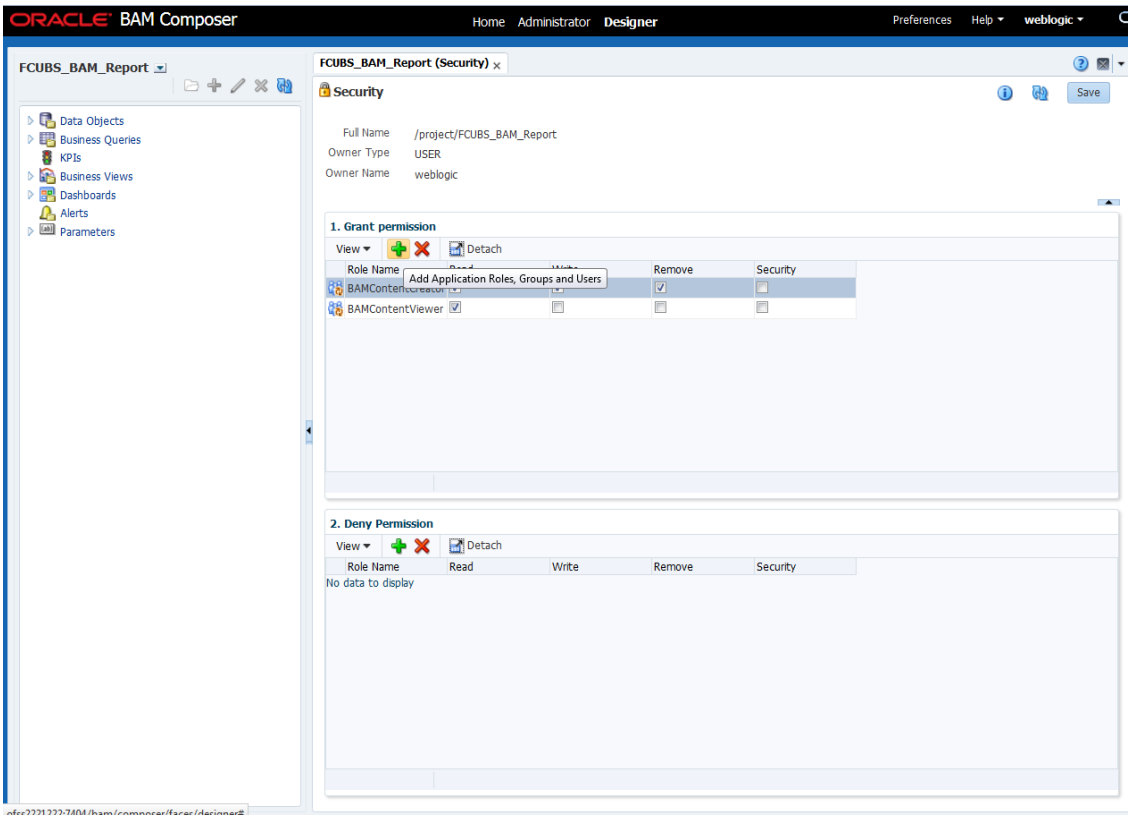


25. Click on FCUBS_BAM_Report →Security

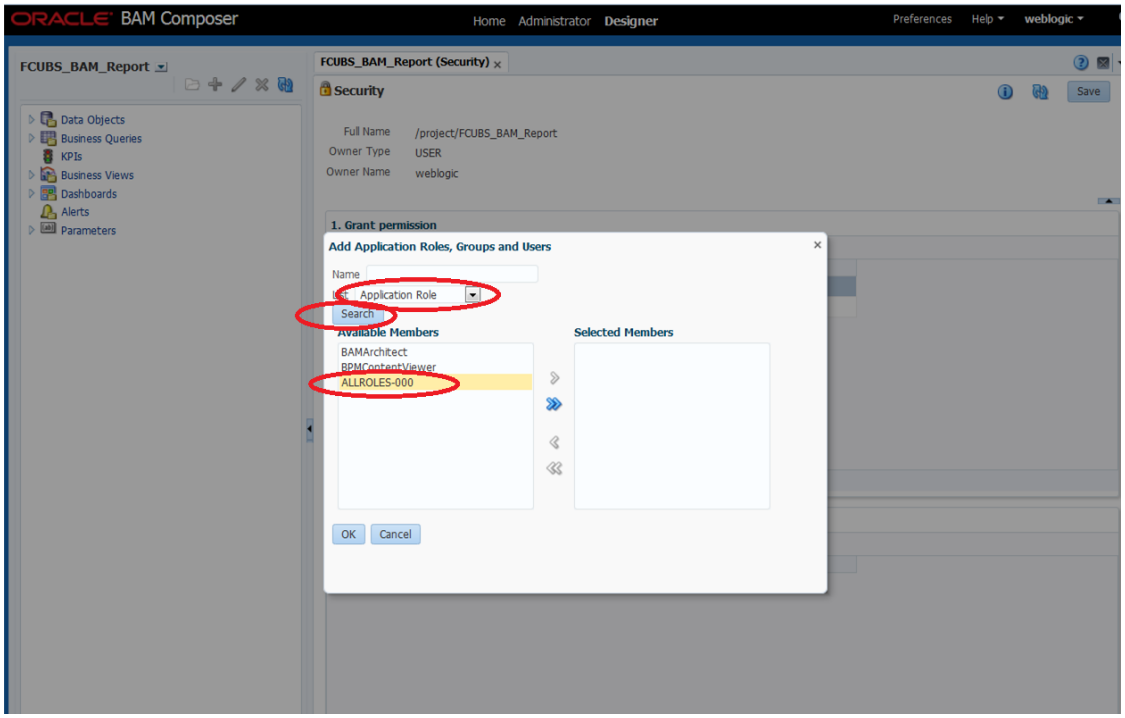


26. Click on ADD button Under Grant Permission.

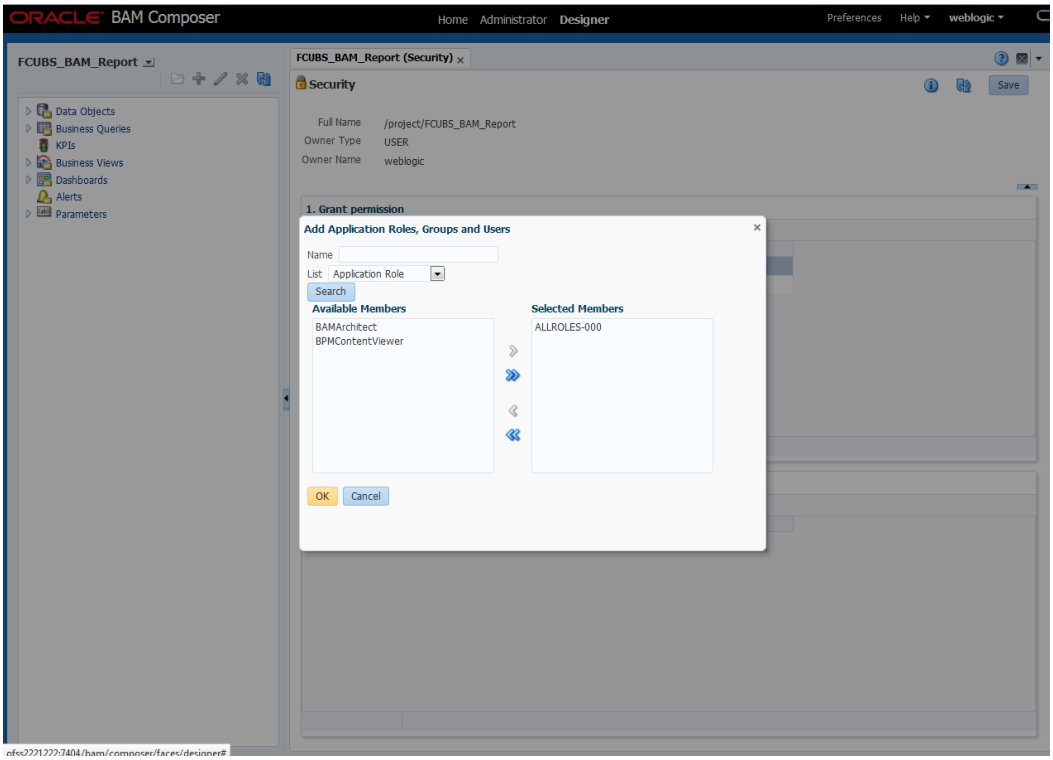




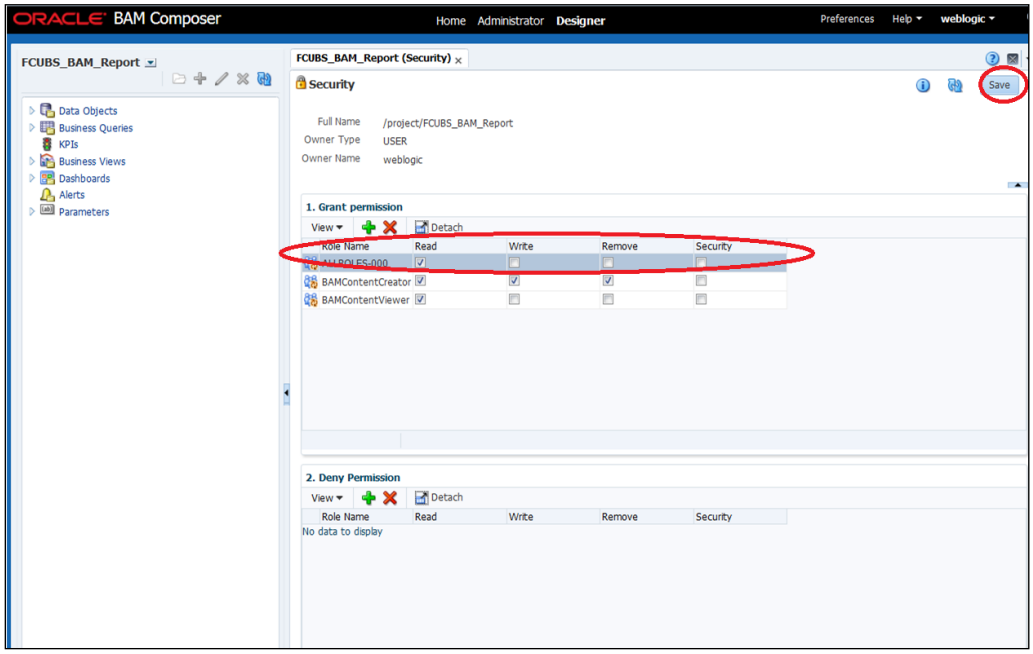
27. Search the List based on the Application Roles and Select the ALLROLES-000



28. Move the ALLROLES-000 to Selected Members and click on ok.



29. Select the Read check box for ALLROLES-000 →Click on Save



1.2.10 IPM configuration to edit the document

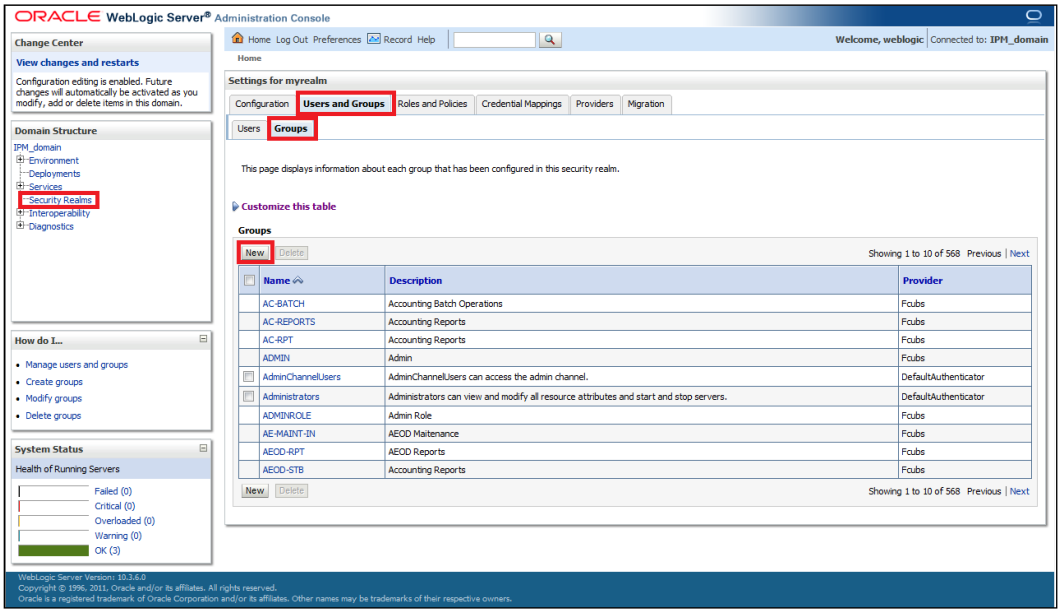
1) Login to the console, http/s:<hostname>:<port>/console with admin user

2) Follow the step 1.2.1 to add the “FCJCustomProvider”.

   After adding, Navigate to security realms > myrealm > Users and Groups and check if the users from the schema are displayed in Users tab, and Roles from the schema are displayed under the Groups Tab.

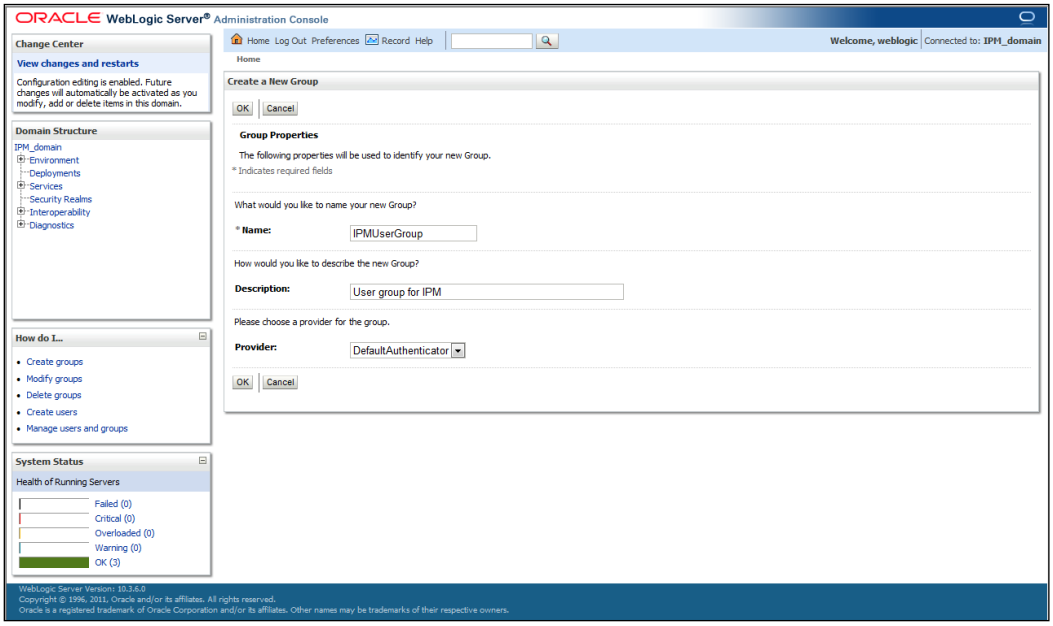
3) After adding the custom authenticator,

   - Navigate to security realms >my realm > Users and Groups > Groups.
   - Click on the New button.

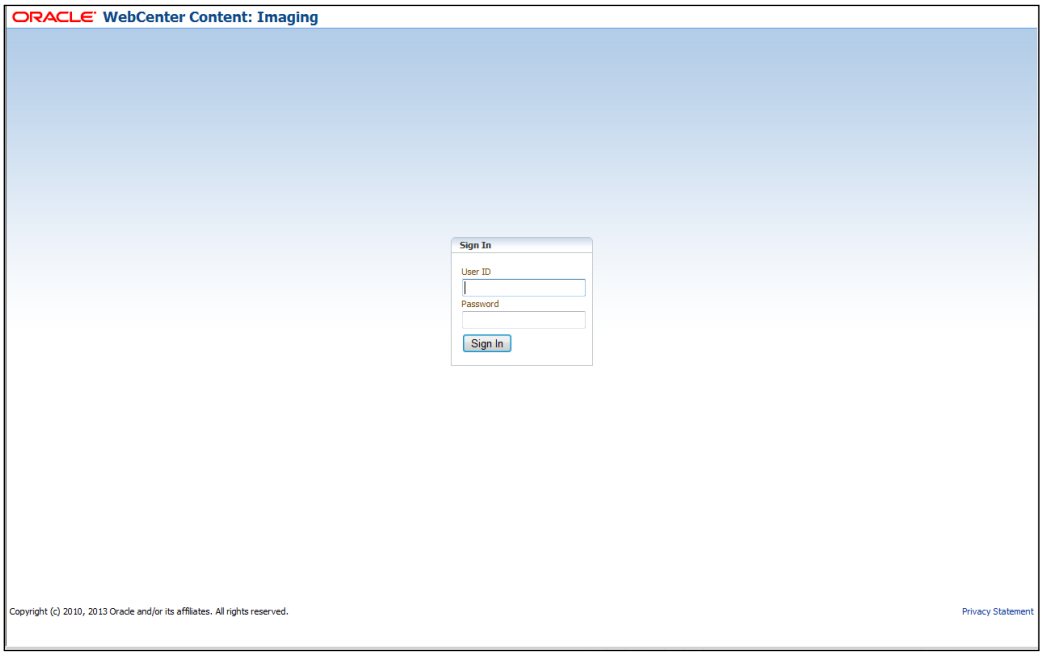


4) After Clicking on the new button,

- Enter the name as “IPMUserGroup”
- Description for it (optional)
- And select the authenticator as “DefaultAuthenticator”
- And then click “Ok”



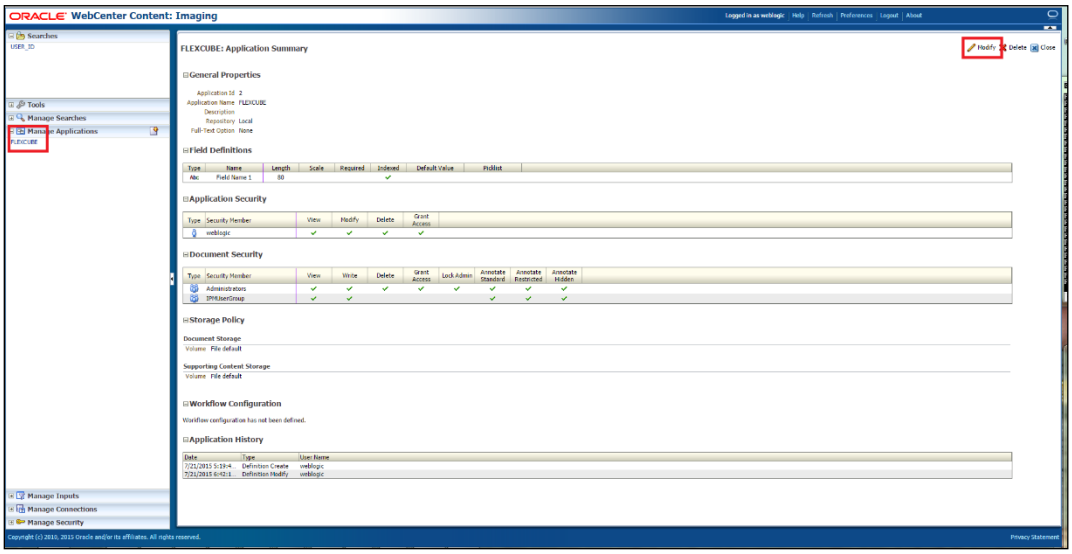
5) Login to the Imaging URL http/s:<hostname>:<port>/imaging with admin user



a. Navigate to Manage Applications

b. Click on the FLEXCUBE

c. Then click on the modify on the right pane



6) After clicking on the modify button,

   a. Navigate to Document Security

   b. Click on Add button

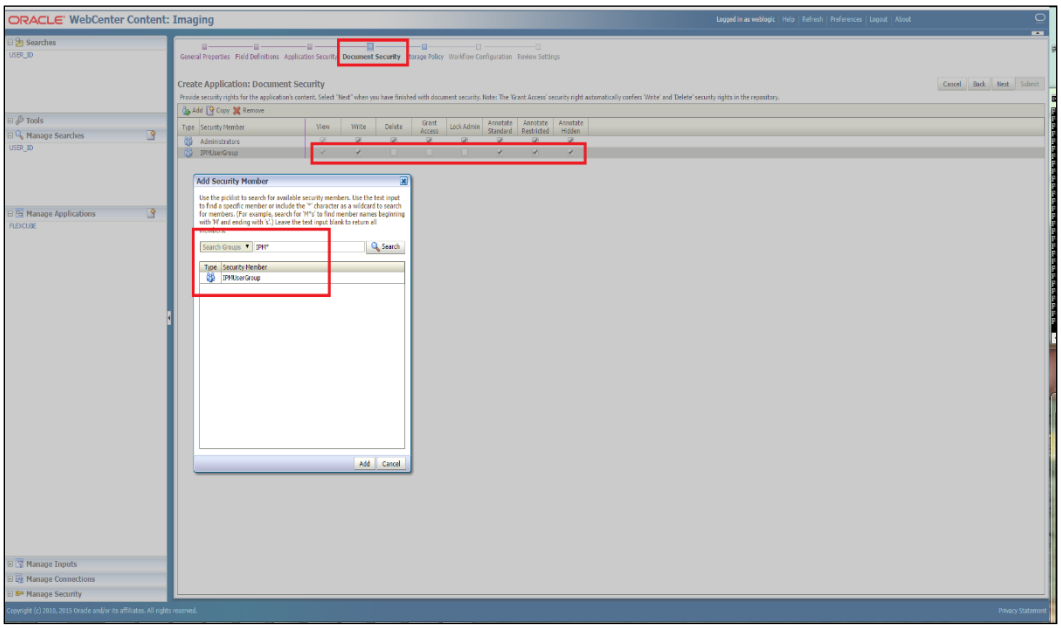
   c. Click on Search button in the pop up window

   d. Select the “IPMUserGroup”

   e. Click on Add

   f. IPMUserGroup will be listed in the panel, select view ,write,annotate Standard,Annotate Restricted and Annotate Hidden checkboxes.

g. Finally click on the submit button on the right corner

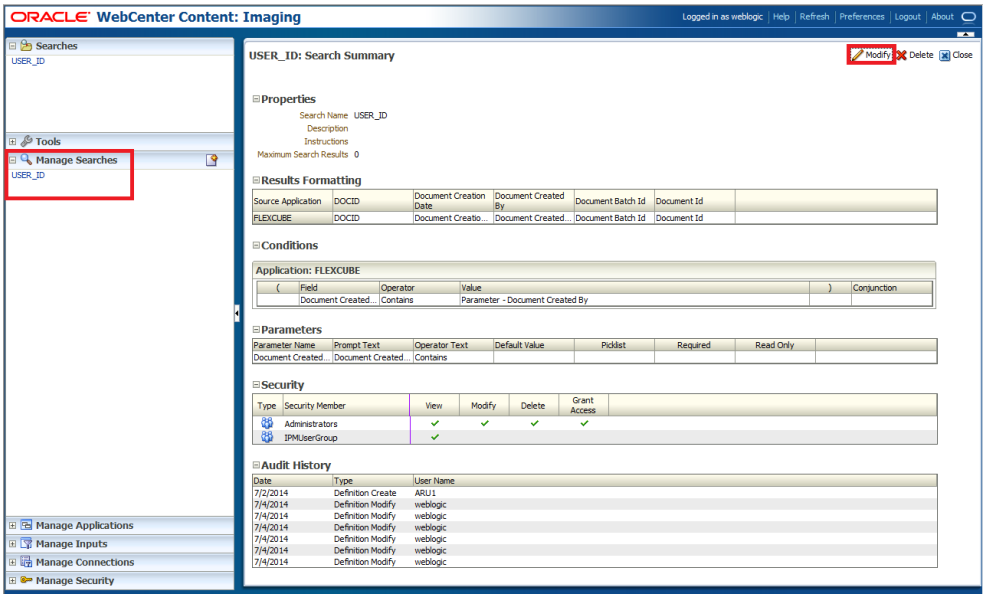


7) After clicking on the submit button,

a. Navigate to Manage Searches

b. Click on the available search (ex: USER_ID in this doc)

c. Click on the modify



8) After clicking on the modify button,

   a. Navigate to Document Security

   b. Click on Add button

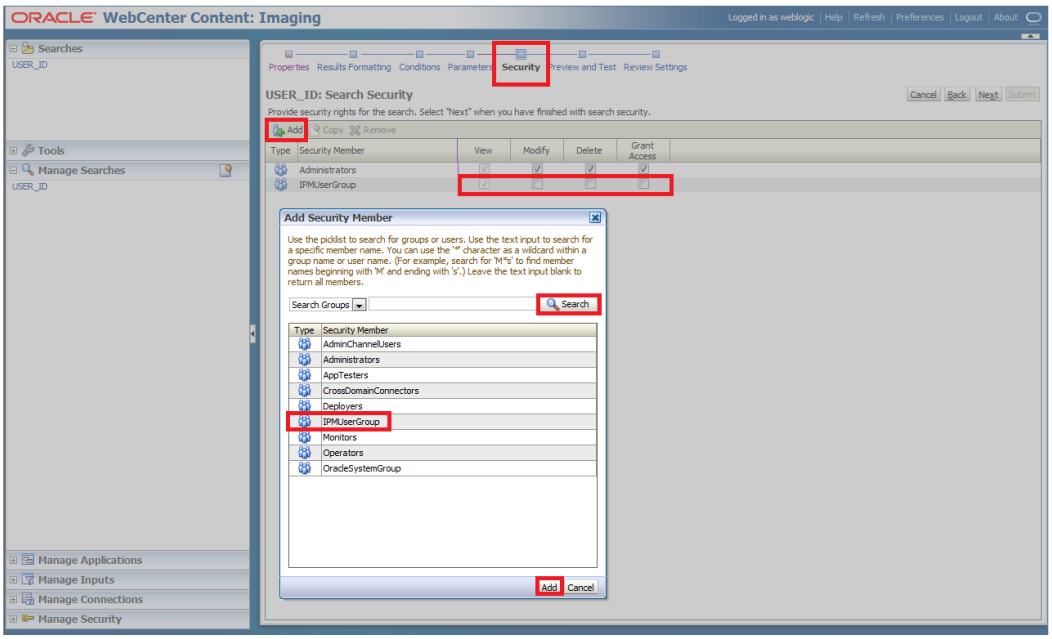
   c. Click on Search button in the pop up window

   d. Select the “IPMUserGroup”

   e. Click on Add

   f. IPMUserGroup will be listed in the panel; don’t select any checkbox except the default view checkbox.

   g. Finally click on the submit button on the right corner



9) Copy the FCBPELCIS.jar to location

<ORACLE_HOME >\user_projects\domains\<domian name>\lib

10) Go to the location – ‘<ORACLE_HOME>\ user_projects\domains\<Domain_created>\config\fmwconfig’

   a. Open ‘jps-config.xml’ file. Search for ‘<serviceProviders>’ tag and add the following code between ‘<serviceProviders>’ and ‘</serviceProviders>’ tags.

```
<serviceProvider
class="oracle.security.jps.internal.idstore.generic.GenericIdentityStoreProvider"
name="custom.generic.provider" type="IDENTITY_STORE">
        <description>DB IdentityStore Provider</description>
</serviceProvider>
```

b. Similarly, Search for '<serviceInstances>' tag and add the following code between '<serviceInstances>' and '</serviceInstances>' tags.

```
 <serviceInstance location="dumb" name="idstore.custom"
provider="custom.generic.provider">
        <description>Custom Identity Store Service Instance</description>
        <property name="idstore.type" value="CUSTOM"/>
        <property name="ADF_IM_FACTORY_CLASS"
value="com.ofss.fcc.bpel.security.idm.providers.stddb.FCIdentityStoreFactory"/
>
        <property name="DATASOURCE_NAME" value="jdbc/fcjdevDS"/>
        <property name="INTERNAL_CONTEXT_REQUIRED" value="true"/>
        <property name="INTERNAL_CONTEXT_NAME"
value="internalstore"/>
      </serviceInstance>
```

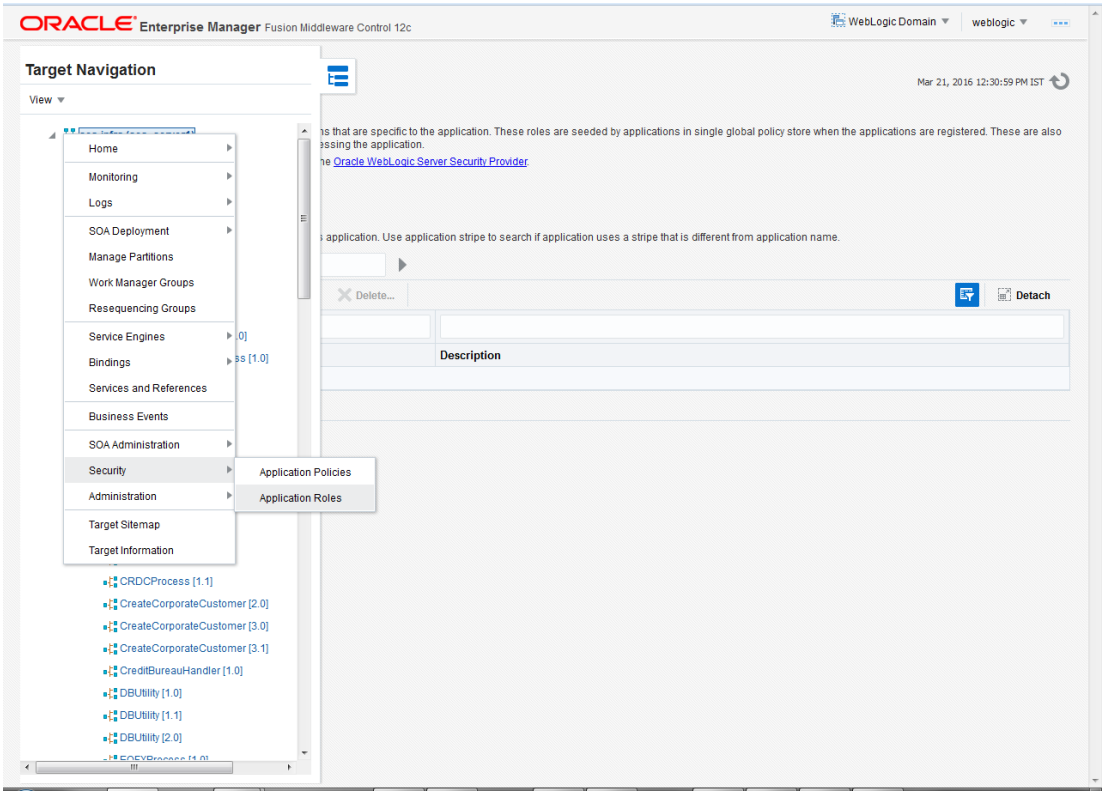
Make sure that the JNDI (jdbc/fcjdevDS) matches the value given during property file creation.

c. Search for '<jpsContexts default="default">' tag and add the following code between '<jpsContexts default="default">' and '</jpsContexts>', preferably after the default 'jpsContext'.

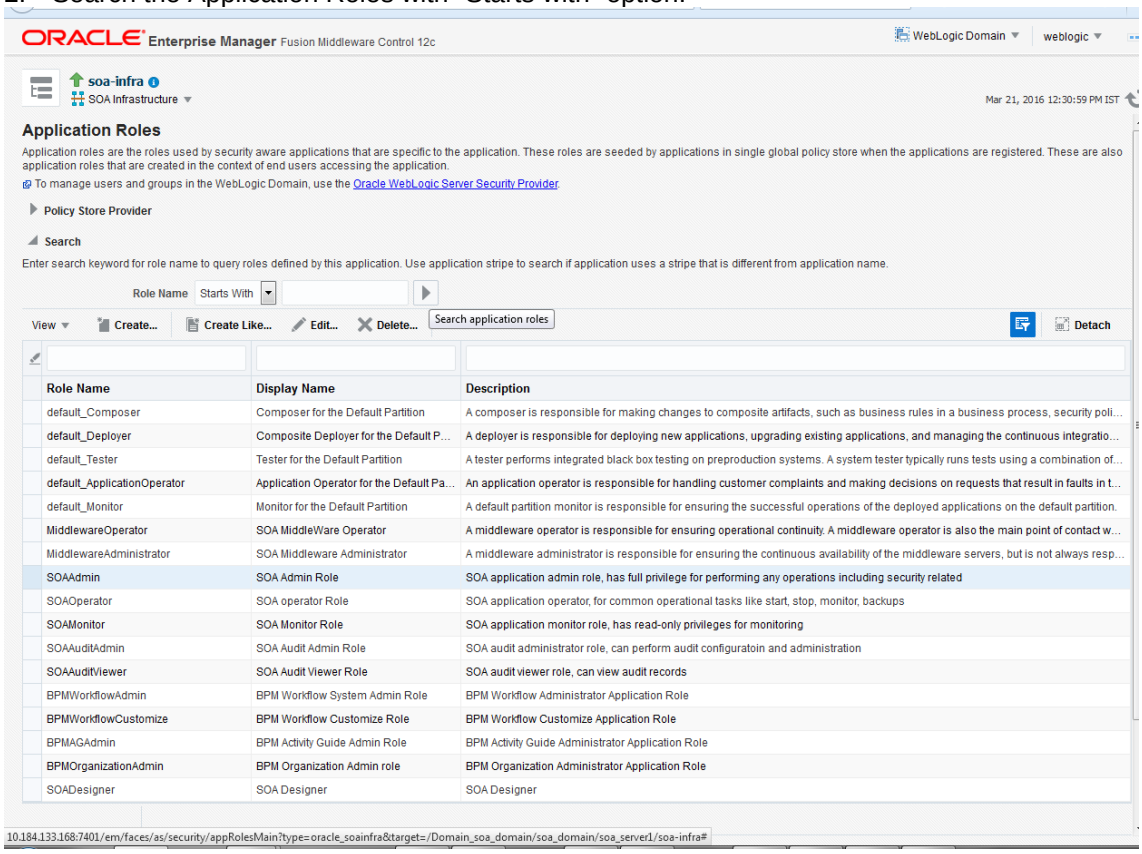
```
  <jpsContext name="internalstore">
    <serviceInstanceRef ref="credstore"/>
    <serviceInstanceRef ref="keystore"/>
    <serviceInstanceRef ref="policystore.xml"/>
    <serviceInstanceRef ref="audit"/>
 </jpsContext>
```

1.2.11 Configuring Superviser Roles in EM

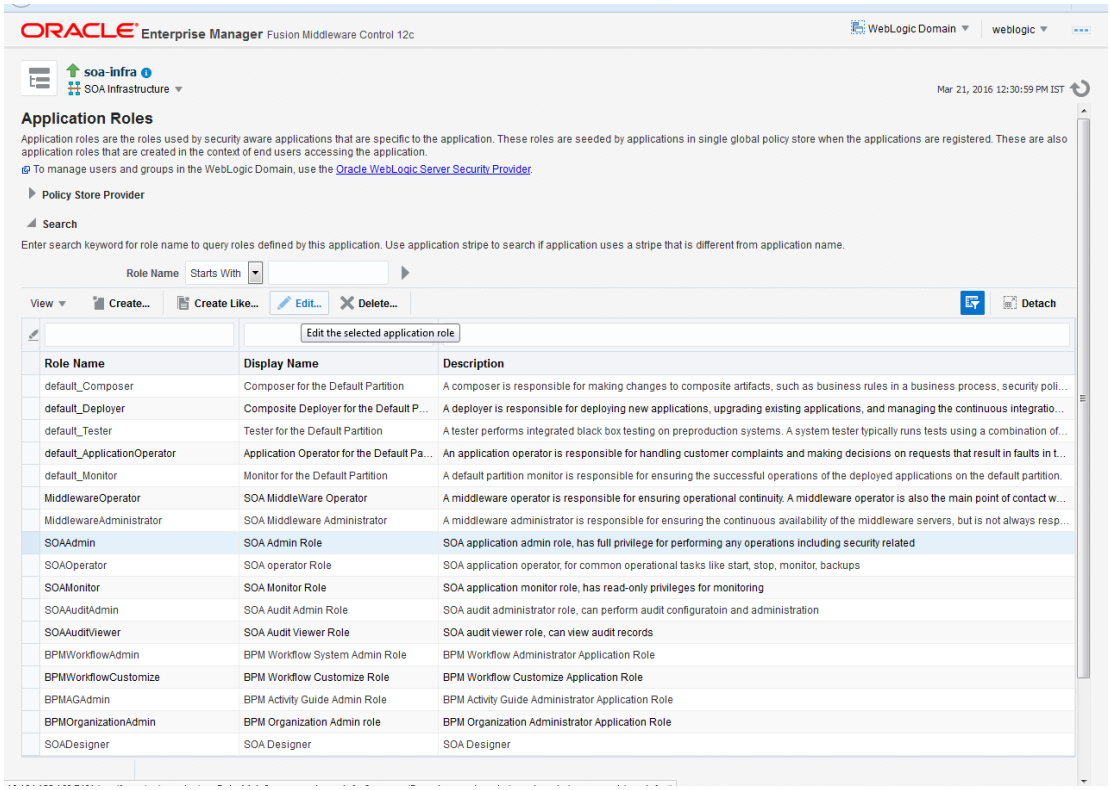
1. Right click on soa-infra. Select security→Application Roles



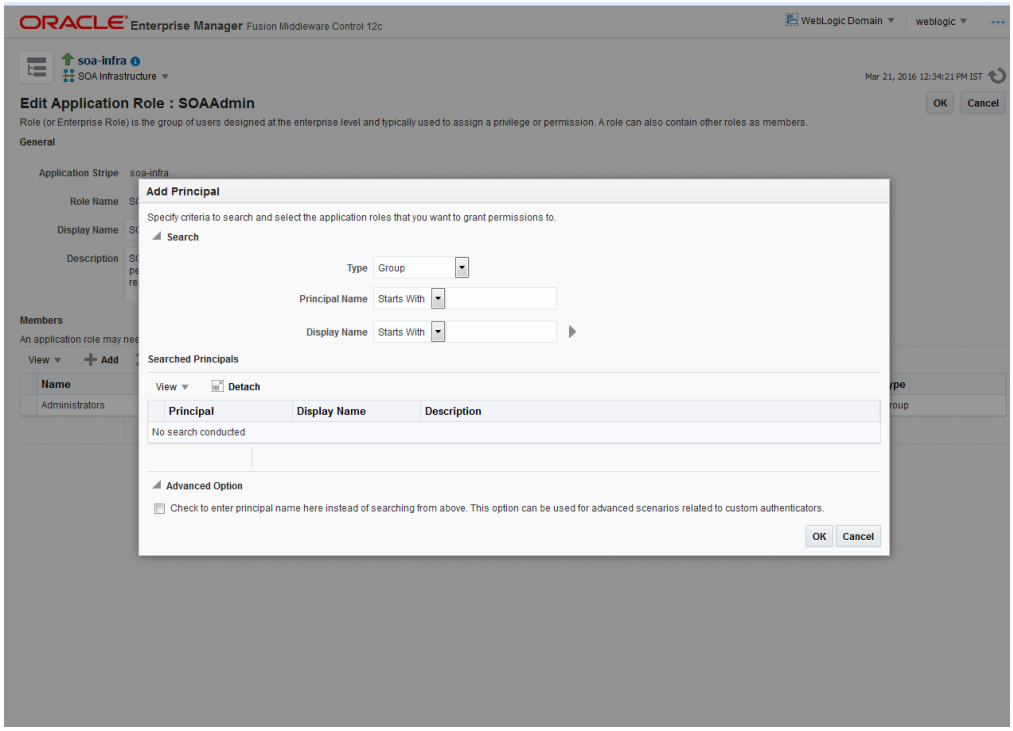
2. Search the Application Roles with “Starts with” option.



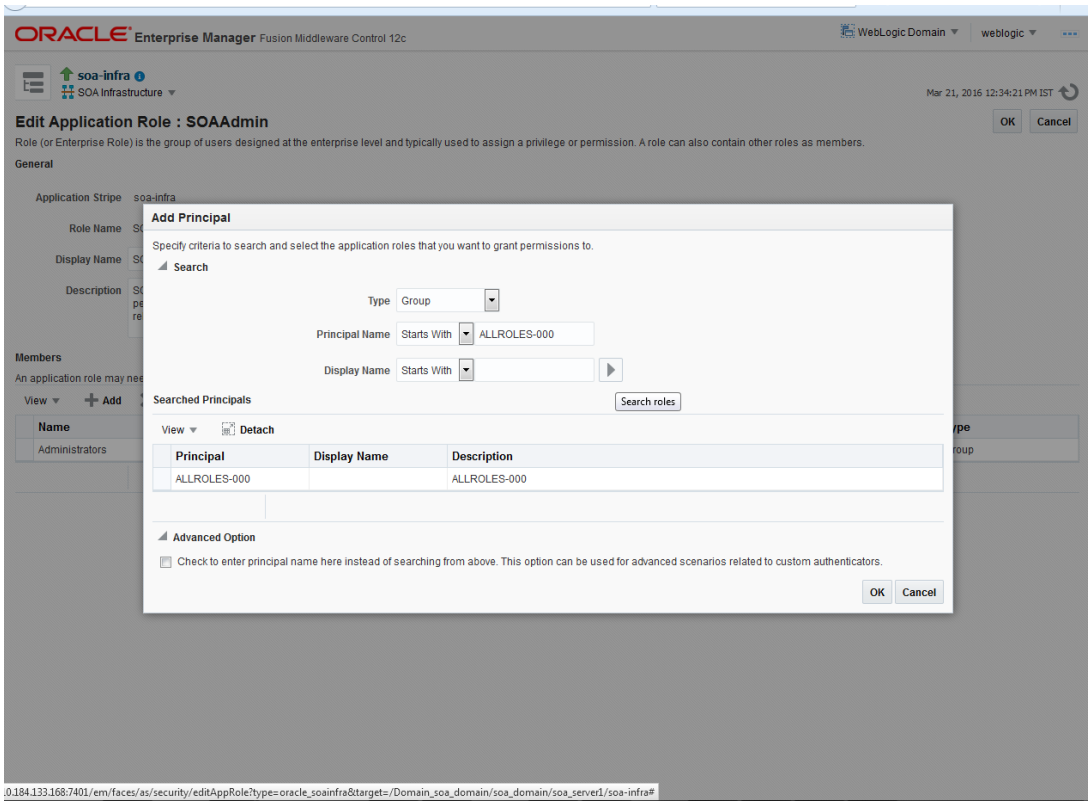
3. Select the SOAAdmin Role and Click on ‘Edit option’.



4. Click on the ADD button and provide the Type as Group from drop down.



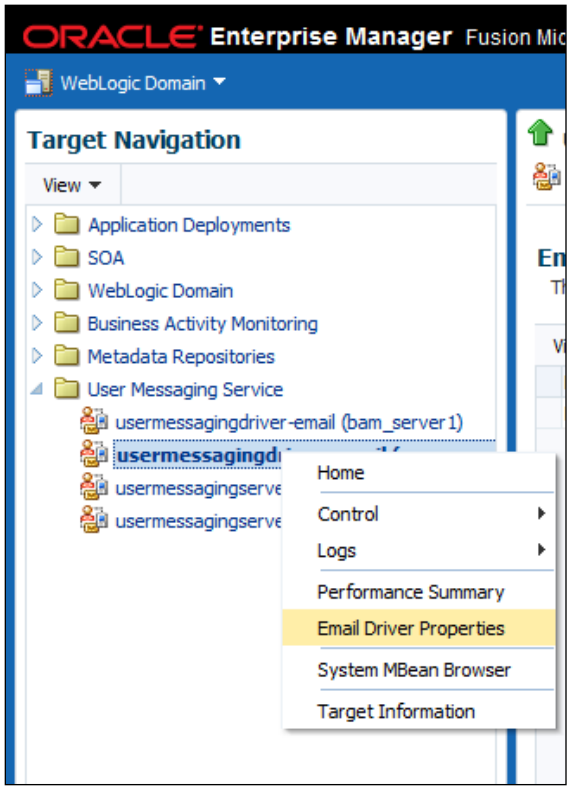
5. Provide the principal name as (EX:ALLROLES-000) Param_val which is mapped to the OR_ADMINROLE in the cstb_param table and search the role.Click on ok.



6. Click on Ok .

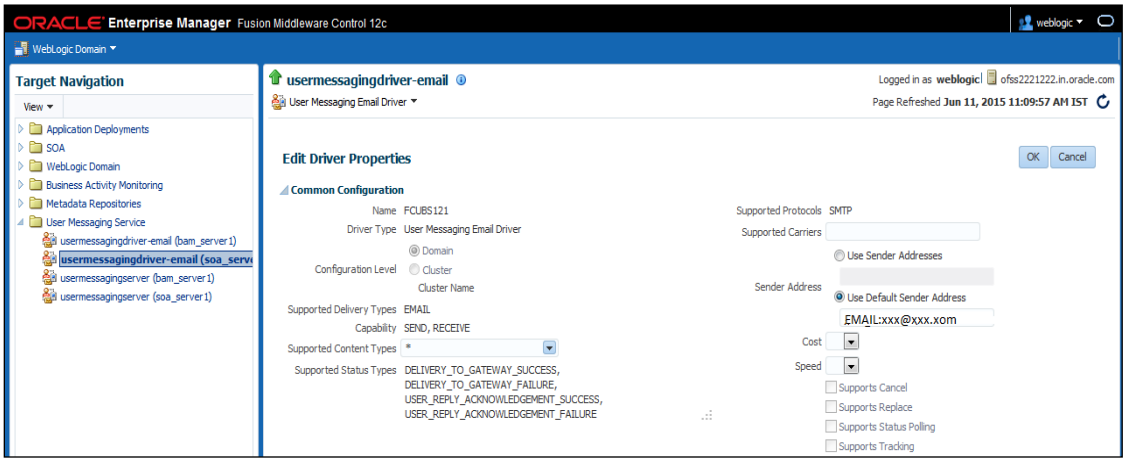
1.2.12 Email Driver Configuration

1. Login to EM console
13. Navigate to User Messaging Service
14. Right click usermessagingdriver-email (soa_server1)
15. Click on Email Driver Properties

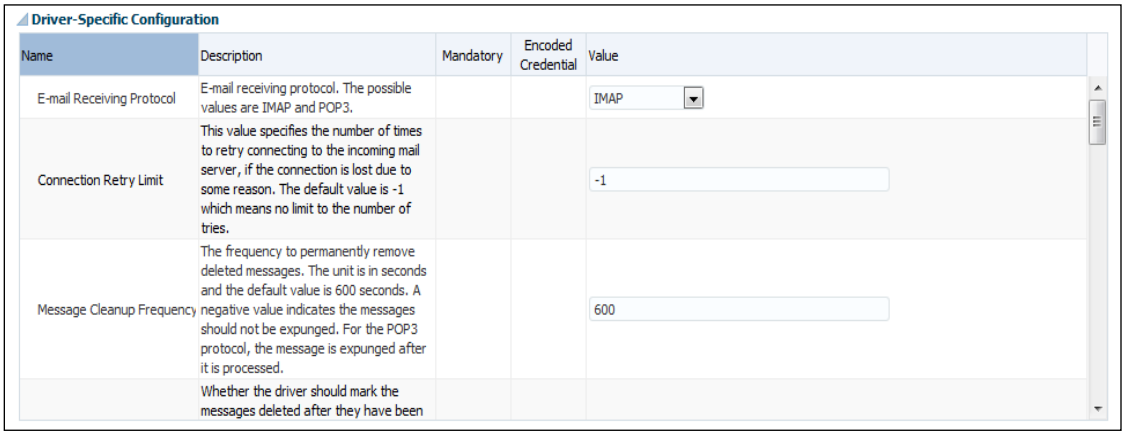


16. .Enter the sender Address and default sender address (This id will be used as sender address).

17. .Enter the supported protocols (SMTP)

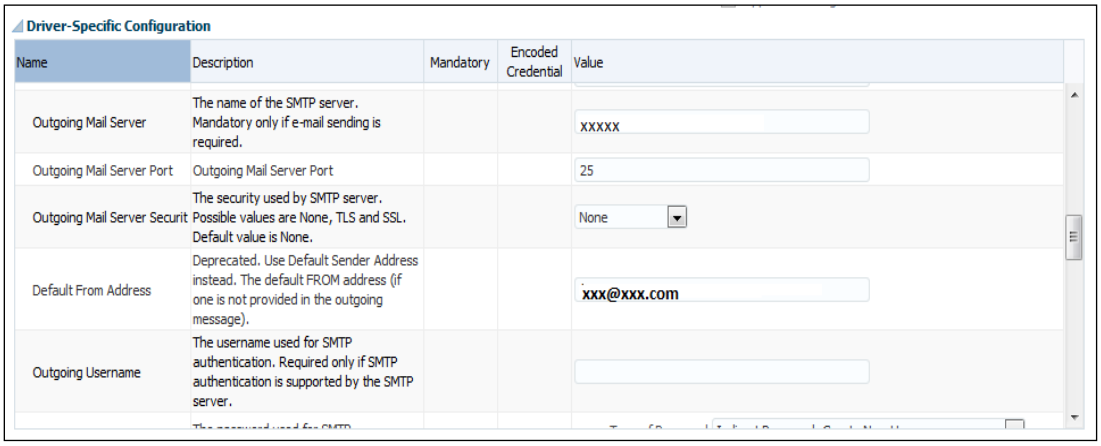


18. Select the mail access protocol (IMAP) as per the mail server specification

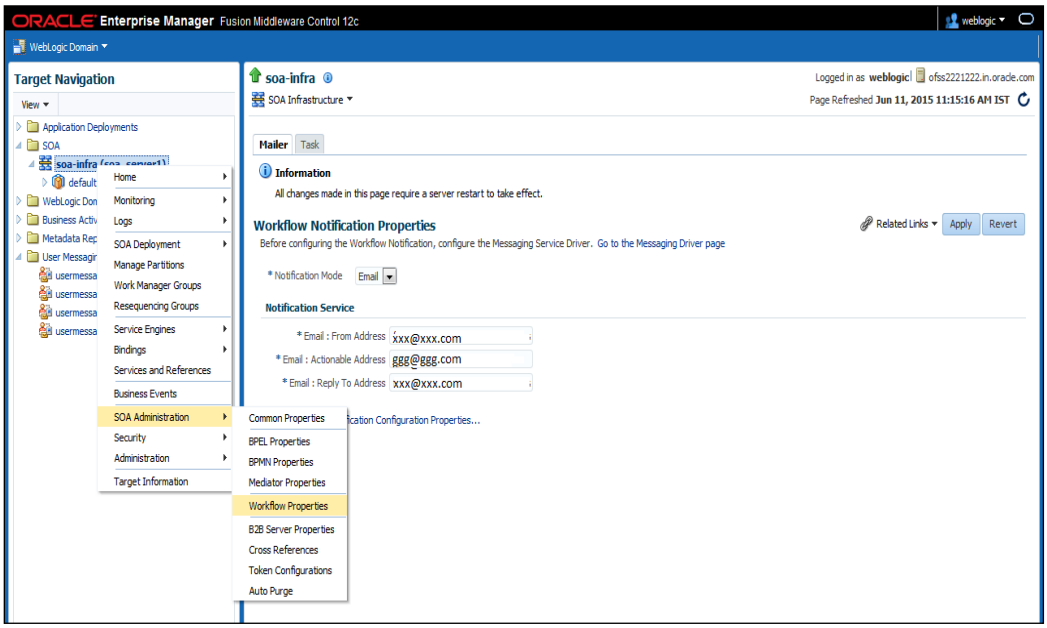


19. Enter the Receive folder in the mailbox (INBOX)
20. Enter the Outgoing mail server hostname or IP
21. .Enter the outgoing mail server port
22. .Enter the outgoing default from address

23. Enter the Outgoing user name and password if required



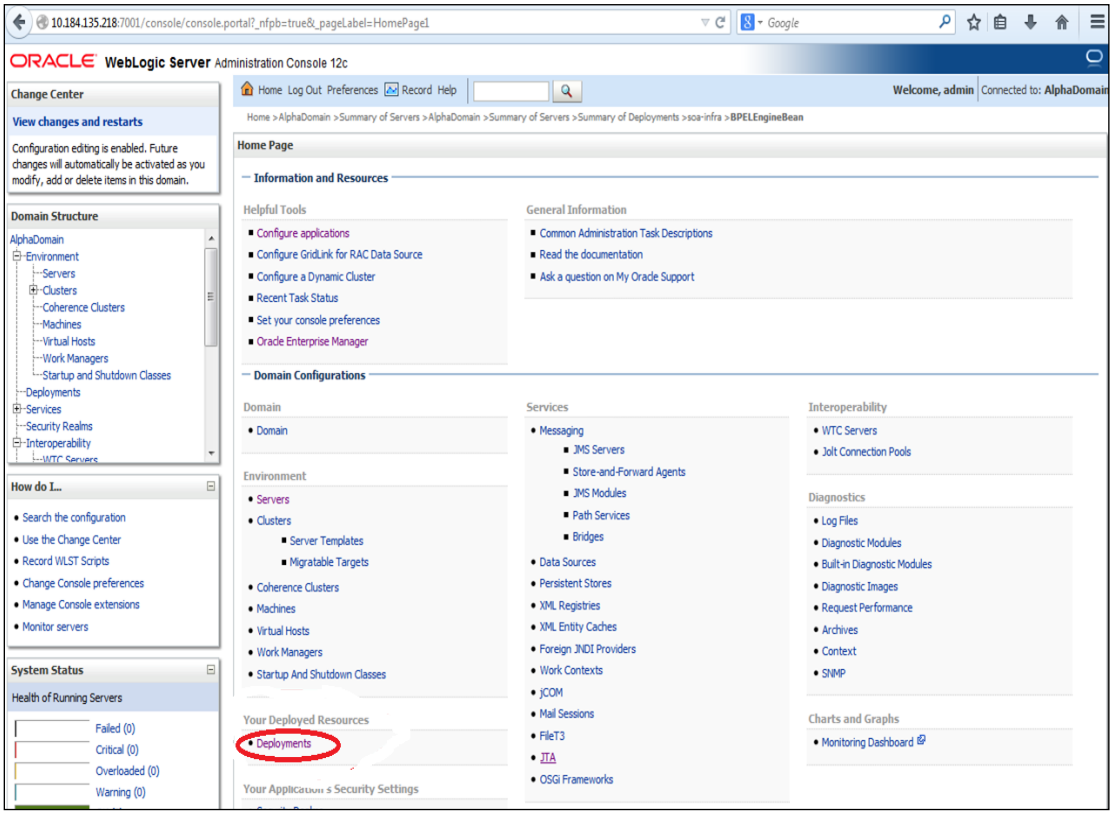
24. Navigate to SOA Administration ->Workflow Properties



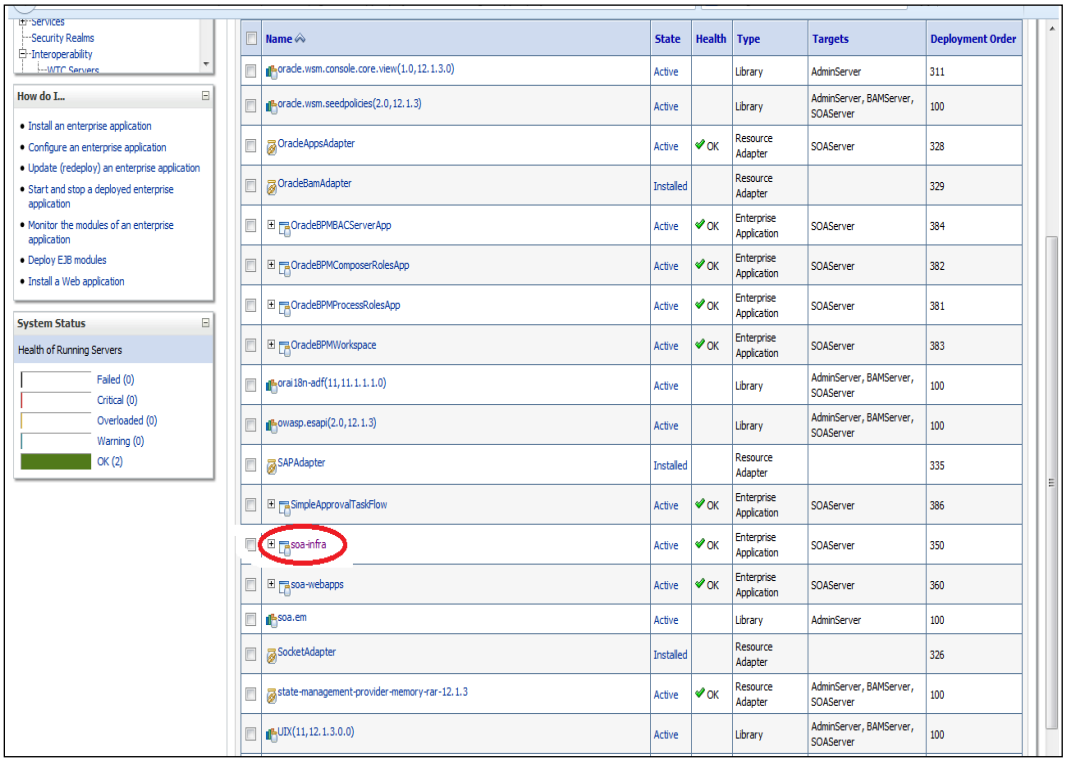
25. Select the notification mode as Email/ALL and enter the from address Actionable address and reply to Address.

1.2.13 TimeOut Settings for BPEL

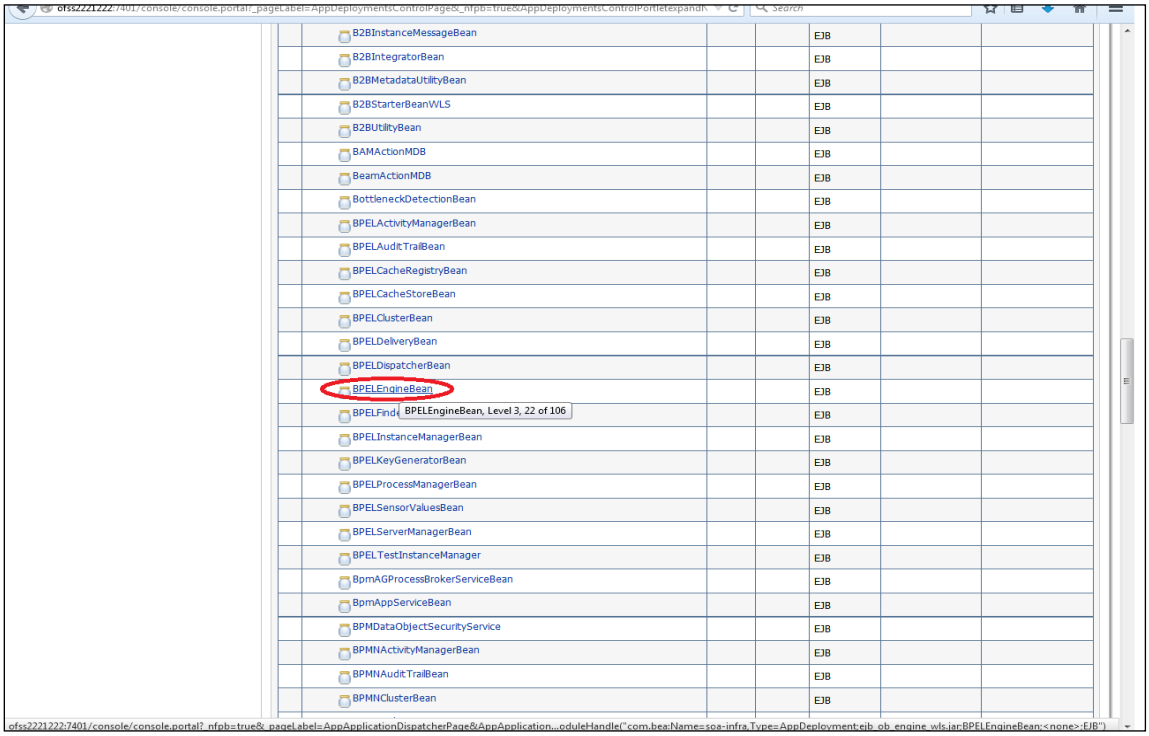
1. Login in to Console (http://hostname:port/console)
2. Click on Deployments

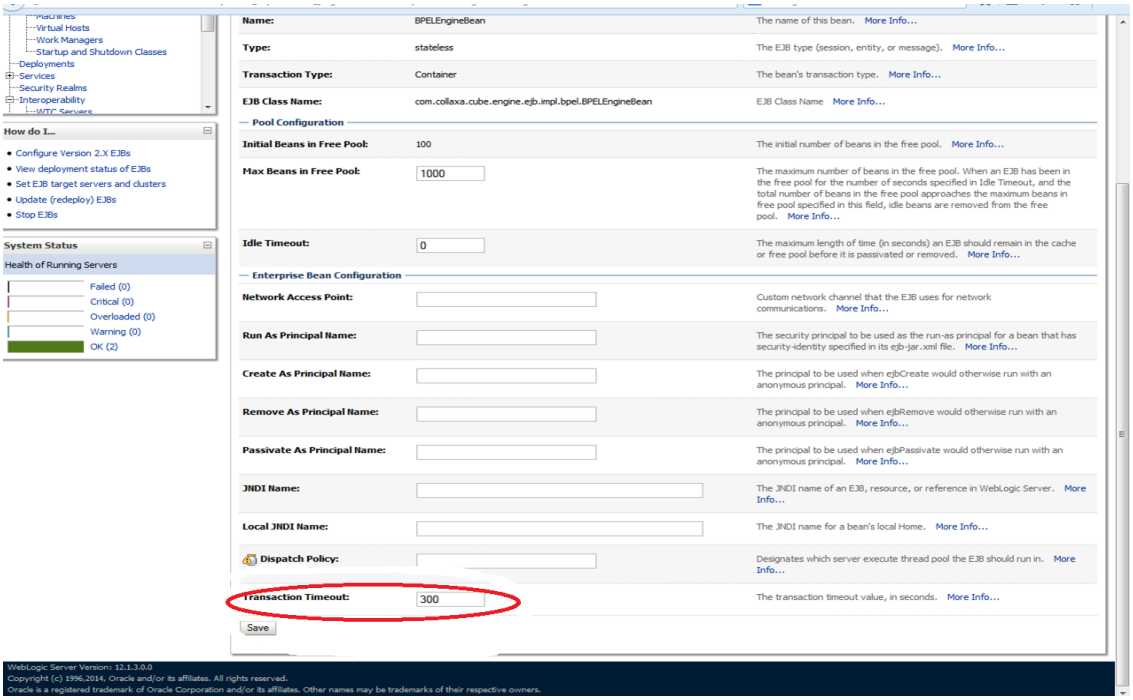


3. Click on SOA_INFRA Application under deployments.

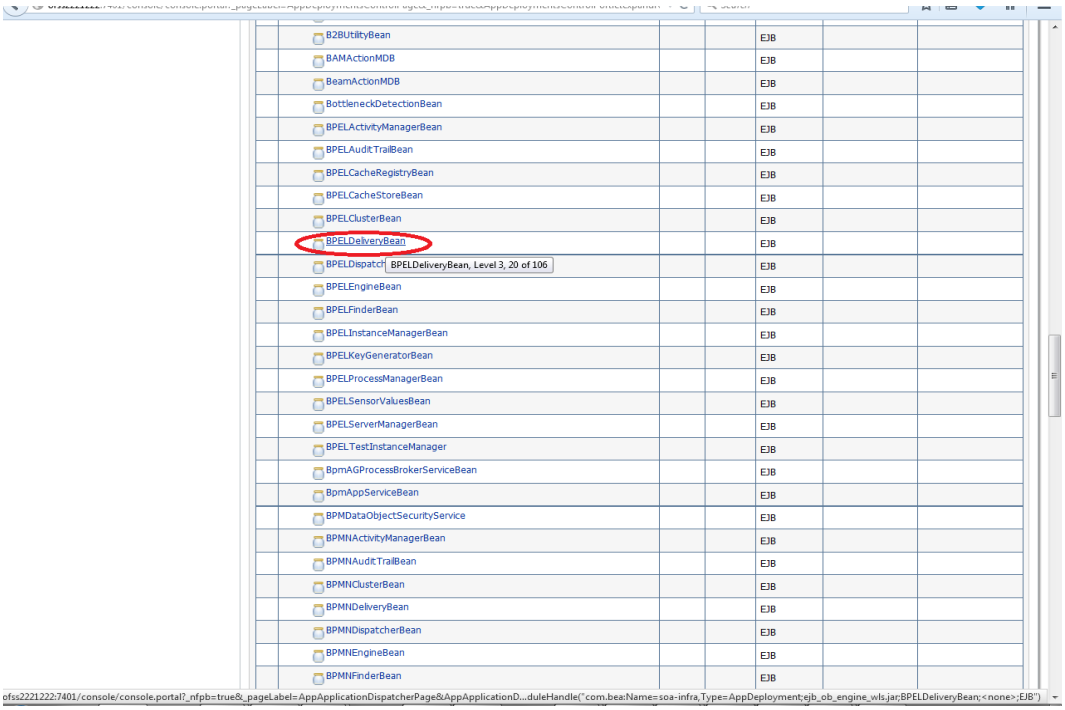


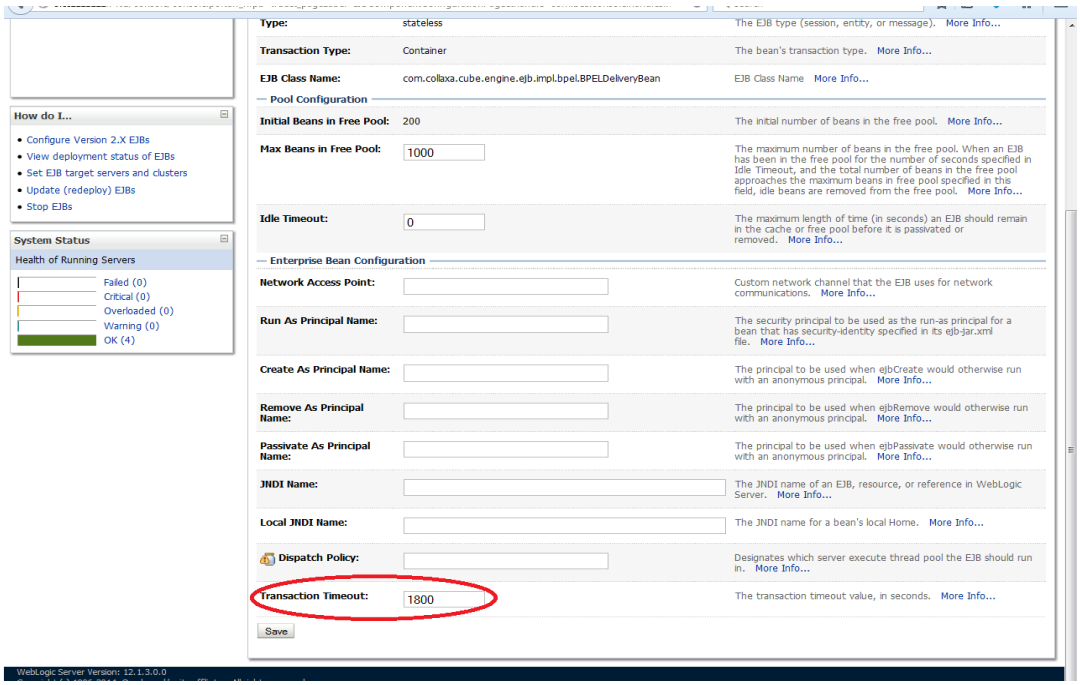
4. Click on BPEL Engine EJB→Configuration→set Transaction Time Out to 300.





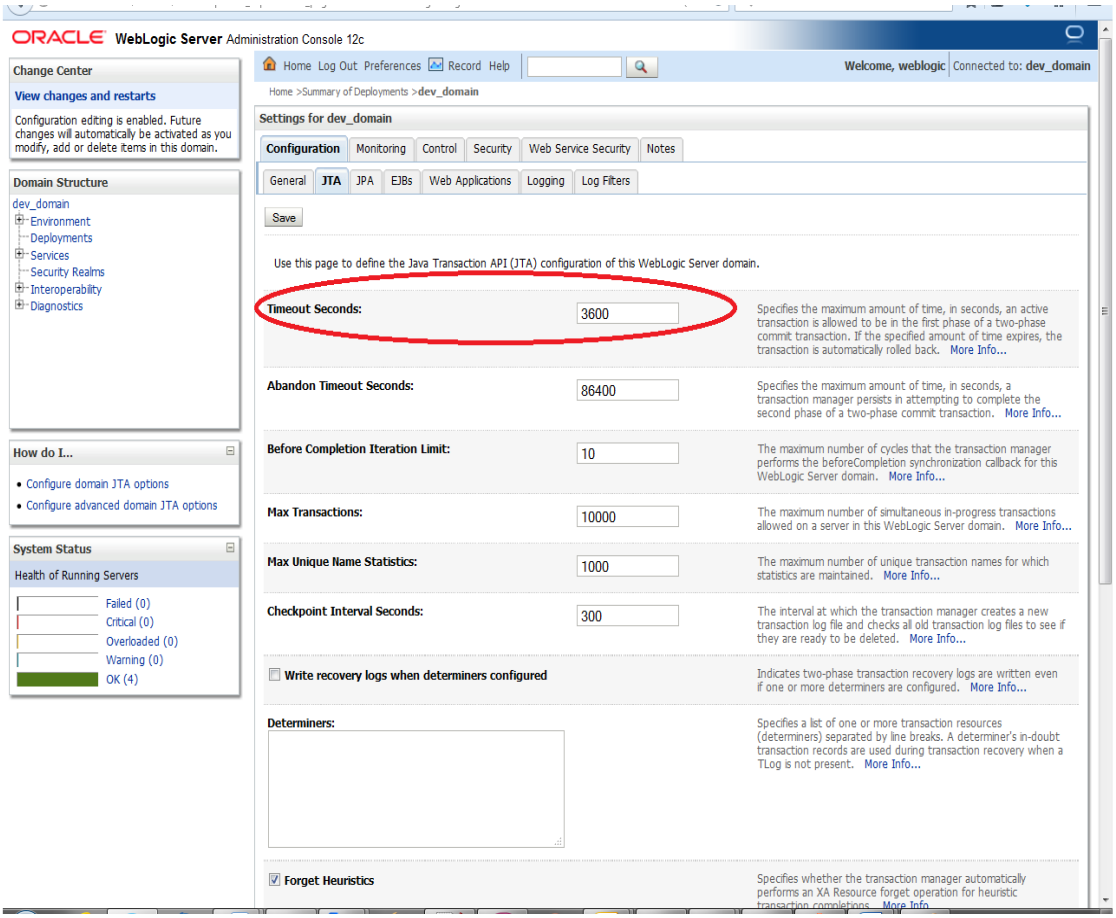
5. Go to EJBs→BPEL Delivery Bean→ Configuration→set TransactionTimeOut to 300



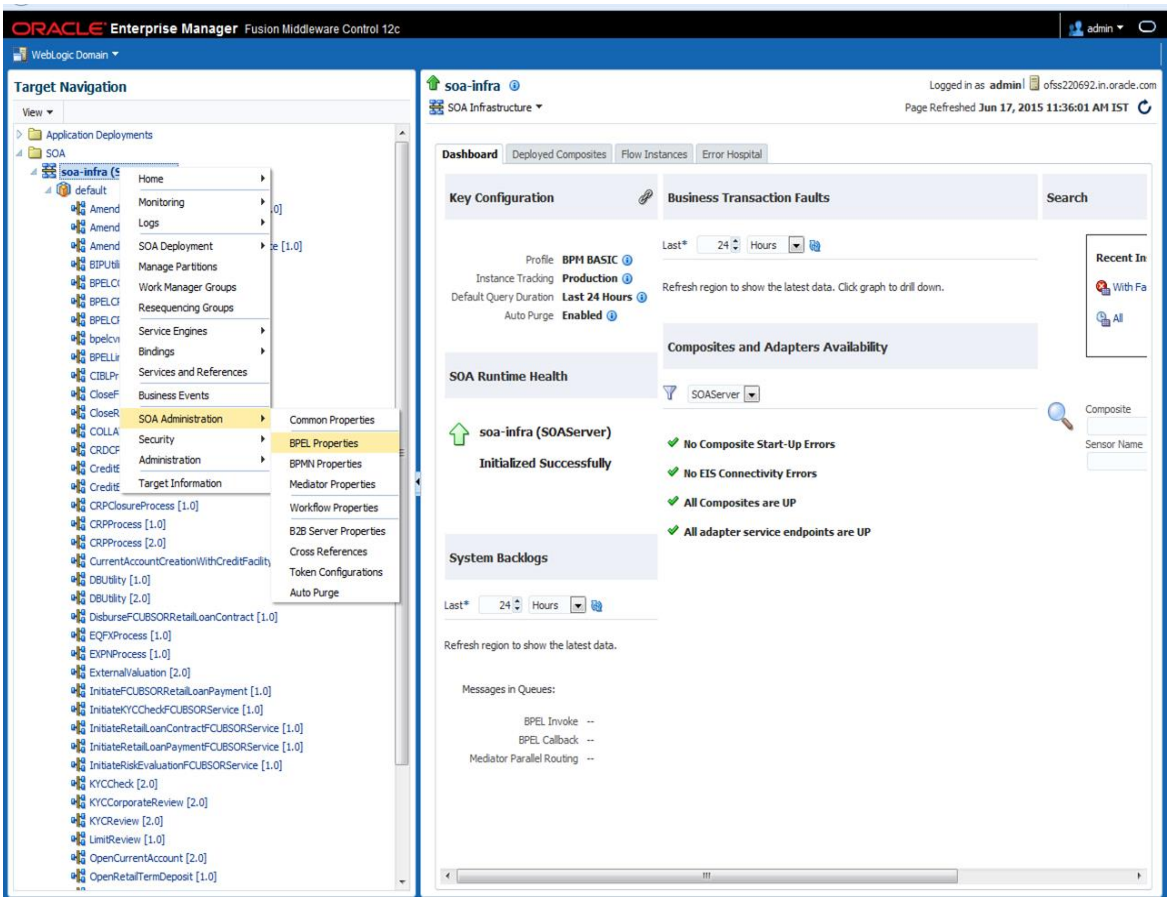


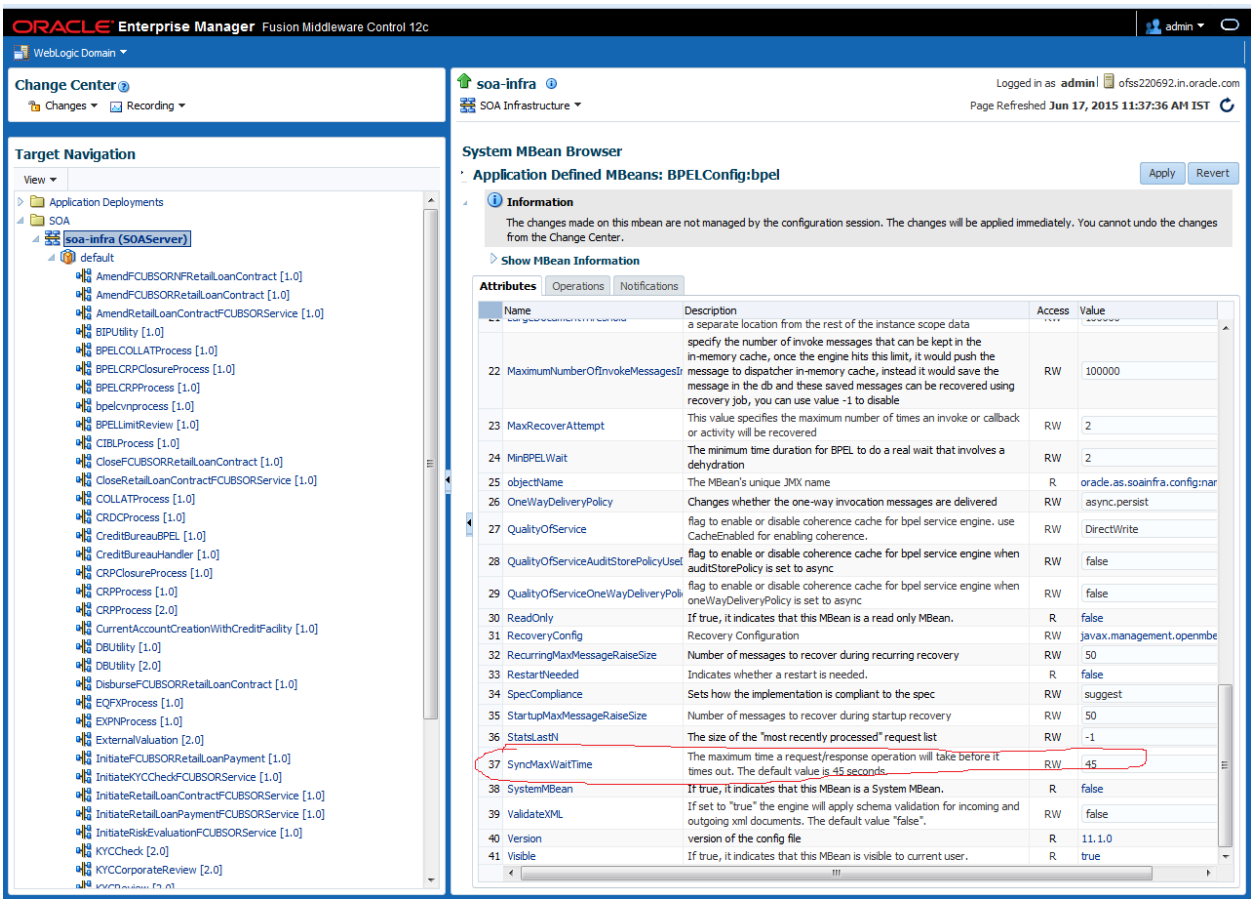
6. Login in to Console →JTA

7. Set the JTA timeout According to the below condition. Make sure BPELEngineBean + BPELDeliveryBean is <= JTA timeout(300+300<=600)


ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
Domain Structure
dev_domain
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Configure domain JTA options
Configure advanced domain JTA options
System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (4)
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: dev_domain
Home >Summary of Deployments >dev_domain
Settings for dev_domain
Configuration Monitoring Control Security Web Service Security Notes
General JTA JPA EJBs Web Applications Logging Log Filters
Save
Use this page to define the Java Transaction API (JTA) configuration of this WebLogic Server domain.
Timeout Seconds: 3600
Specifies the maximum amount of time, in seconds, an active transaction is allowed to be in the first phase of a two-phase commit transaction. If the specified amount of time expires, the transaction is automatically rolled back. More Info...
Abandon Timeout Seconds: 86400
Specifies the maximum amount of time, in seconds, a transaction manager persists in attempting to complete the second phase of a two-phase commit transaction. More Info...
Before Completion Iteration Limit: 10
The maximum number of cycles that the transaction manager performs the beforeCompletion synchronization callback for this WebLogic Server domain. More Info...
Max Transactions: 10000
The maximum number of simultaneous in-progress transactions allowed on a server in this WebLogic Server domain. More Info...
Max Unique Name Statistics: 1000
The maximum number of unique transaction names for which statistics are maintained. More Info...
Checkpoint Interval Seconds: 300
The interval at which the transaction manager creates a new transaction log file and checks all old transaction log files to see if they are ready to be deleted. More Info...
Write recovery logs when determiners configured
Indicates two-phase transaction recovery logs are written even if one or more determiners are configured. More Info...
Determiners:
Specifies a list of one or more transaction resources (determiners) separated by line breaks. A determiner's in-doubt transaction records are used during transaction recovery when a TLog is not present. More Info...
Forget Heuristics
Specifies whether the transaction manager automatically performs an XA Resource forget operation for heuristic

8. Login in to EM console (http://host:port/em)→SOA dminstration→BPEL Properties→MoreConfigpropeties→ Syncmax timeout .Change the SyncmaxtimeOut to 200 secs





1.3 Integrating Oracle FLEXCUBE IS and Scheduler

Before deploying the Oracle FLEXCUBE IS EAR file, you need to carry out the following tasks.

1.3.1 Running Backend Scripts

You need to compile certain tables pertaining to Scheduler in the schema to which the Application points. The version of Quartz to be used is Latest Qualified Version.

Follow the steps given below:

1. Download Quartz Latest Qualified Version.gz file from the following URL: http://www.quartz-scheduler.org/download/download-catalog.html

1. Extract the gz file.

2. Open the folder ‘Quartz-Latest Qualified Version \docs\dbTables’ folder and run ‘tables_oracle.sql’ (this is specific to Oracle Database) in the schema.

STOP For details on latest version of the software qualified with Oracle FLEXCUBE, refer to the release certificate.

1.4 Integrating Oracle FLEXCUBE IS and BIP Reports

You can integrate Oracle FLEXCUBE IS and BIP reports. The details are available in the chapter 'BIP Web Service Reports'.

1.4.1 Deploying Application Through Application Server's Admin Console

Deployment from Weblogic Administration Console

You can find the details pertaining to the deployment of Application using Weblogic Administration Console in the chapter 'Deploying Oracle FLEXCUBE Application on Weblogic'.

1.5 Integrating Oracle FLEXCUBE IS and MBean

In order to integrate Oracle FLEXCUBE IS and MBean, you need to follow the below steps before deploying the Oracle FLEXCUBE IS EAR file created with MBean as a Plugin.

1.5.1 Startup Script Modification

By default, the TopLink used in MBean uses Oracle xml parser internally. However, Weblogic Server has to use JAXPlatform.

To change the system property, follow the steps given below:

1. Go to the Weblogic domain home folder.

   c) Based on the operating system used, open 'startWeblogic.cmd' or 'startWeblogic.sh' from the folder 'bin'.

   d) Search for 'WLS_REDIRECT_LOG'. After '%JAVA_OPTIONS%' add the following code under 'if' and 'else' conditions.

   "-Dtoplink.xml.platform=oracle.toplink.platform.xml.jaxp.JAXPPlatform"

   Now, the details will look like this:

```
if "%WLS_REDIRECT_LOG%"=="" (

   echo Starting WLS with line:

   echo %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% -
Dweblogic.Name=%SERVER_NAME% -
Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy
%JAVA_OPTIONS% %PROXY_SETTINGS% %SERVER_CLASS%

   %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% -
Dweblogic.Name=%SERVER_NAME% -
Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy
%JAVA_OPTIONS% -
Dtoplink.xml.platform=oracle.toplink.platform.xml.jaxp.JAXPPlatform
%PROXY_SETTINGS% %SERVER_CLASS%

) else (
```

```
   echo Redirecting output from WLS window to %WLS_REDIRECT_LOG%

   %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% -
Dweblogic.Name=%SERVER_NAME% -
Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy
%JAVA_OPTIONS% -
Dtoplink.xml.platform=oracle.toplink.platform.xml.jaxp.JAXPPlatform
%PROXY_SETTINGS% %SERVER_CLASS%  >"%WLS_REDIRECT_LOG%" 2>&1

)
```

e) Restart the Weblogic server.

Setting up Plug - Ins
[May] [2022]
Version 14.6.0.0.0

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