

FCUBS Process Flow Deployment  
Oracle FLEXCUBE Universal Banking  
Release 12.5.0.0.0  
[September] [2017]



---

# Table of Contents

.....	1
<b>1. INTRODUCTION .....</b>	<b>3</b>
1.1 BACKGROUND .....	3
1.2 ORGANIZATION OF THE DOCUMENT .....	3
1.3 ACRONYMS AND ABBREVIATIONS .....	3
<b>2. ORACLE JDEVELOPER IDE .....</b>	<b>4</b>
2.1 INTRODUCTION .....	4
2.2 OBTAINING JDEVELOPER IDE .....	4
<b>3. CREATING APPLICATION SERVER CONNECTION .....</b>	<b>5</b>
3.1 INTRODUCTION .....	5
3.2 APPLICATION SEVER CONNECTION .....	5
<b>4. LOADING FCUBS PROCESS FLOWS IN ORACLE JDEVELOPER .....</b>	<b>10</b>
4.1 INTRODUCTION .....	10
4.2 LOADING THE PROCESS .....	10
<b>5. DEPLOYMENT PROFILE AND CONFIGURATION PLAN .....</b>	<b>17</b>
5.1 INTRODUCTION .....	17
5.2 UPDATING THE CONFIGURATION PLAN .....	17
5.3 CONFIG PLAN CHANGES FOR BIPUTILITY PROCESS .....	18
5.4 CONFIG PLAN CHANGES FOR DBUTILITY PROCESS .....	20
5.5 CONFIG PLAN CHANGES FOR GATEWAY PROCESS .....	21
5.6 CONFIG PLAN CHANGES FOR INITIATECORPISLAMICCONTRACT PROCESS .....	22
5.7 UPDATING THE DATASOURCE NAME .....	23
<b>6. DEPLOYING A SINGLE COMPOSITE APPLICATION USING JDEVELOPER .....</b>	<b>25</b>
6.1 INTRODUCTION .....	25
6.2 DEPLOYING THE APPLICATION .....	25
<b>7. DEPLOYING A SINGLE COMPOSITE APPLICATION VIA ENTERPRISE MANAGER CONSOLE</b>	
<b>31</b>	
7.1 INTRODUCTION .....	31
7.2 DEPLOYING THE APPLICATION .....	31
<b>8. DEPLOYING MULTIPLE COMPOSITE APPLICATION USING JDEVELOPER .....</b>	<b>42</b>
8.1 INTRODUCTION .....	42
8.2 CREATING THE DEPLOYMENT PROFILE .....	42
<b>9. DEPLOYING MDS APPLICATION USING JDEVELOPER .....</b>	<b>50</b>
9.1 INTRODUCTION .....	50
9.2 DEPLOYING THE APPLICATION .....	50
<b>10. DEPLOYMENT AND CONFIGURATION OF ORACLE BAM REPORTS .....</b>	<b>53</b>

---

# 1. Introduction

## 1.1 Background

This document provides detailed description on deploying FCUBS BPEL process flows onto a weblogic server configured with soa suite components .This document will cover different approaches for deploying a process.The audience for this document will be the deployment teams of FCUBS BPEL process flows

## 1.2 Organization of the Document

The first chapter of this document gives an introduction with brief background and organization of the document.Subsequent chapters of this document will give the details of the various deployment options.

## 1.3 Acronyms and Abbreviations

Acronyms	Description
BPEL	BPEL Process Flow
BAM	Business Activity Monitoring
SOA Application	With Fusion middleware 12c BPEL process flows becomes part of a SOA Composite application.

---

## 2. Oracle JDeveloper IDE

### 2.1 Introduction

Oracle JDeveloper is the IDE used for BPEL process design and development. It's recommended that the version of JDeveloper used should be in sync with the Oracle SOA suite that is used for BPEL runtime. E.g. (Oracle SOA suite – 12.2.1+ Oracle JDeveloper 12.2.1). Though different versions of Oracle SOA suite and JDeveloper might be compatible it is recommended to go through the releases notes and documentation prior to their usage.

### 2.2 Obtaining JDeveloper IDE

Oracle JDeveloper IDE can be downloaded from oracle website, the hyperlink provided might have been updated. Please check appropriate location prior to download and refer installation and release notes documentation of Oracle JDeveloper for Installation instructions.

<http://www.oracle.com/technetwork/middleware/bpm/downloads/index.html>

<https://edelivery.oracle.com/osdc/faces/SearchSoftware>

Run `fmw_12.2.1.2.0_bpm_quickstart.jar` to install jdeveloper with bpm enabled.

## 3. Creating Application server connection

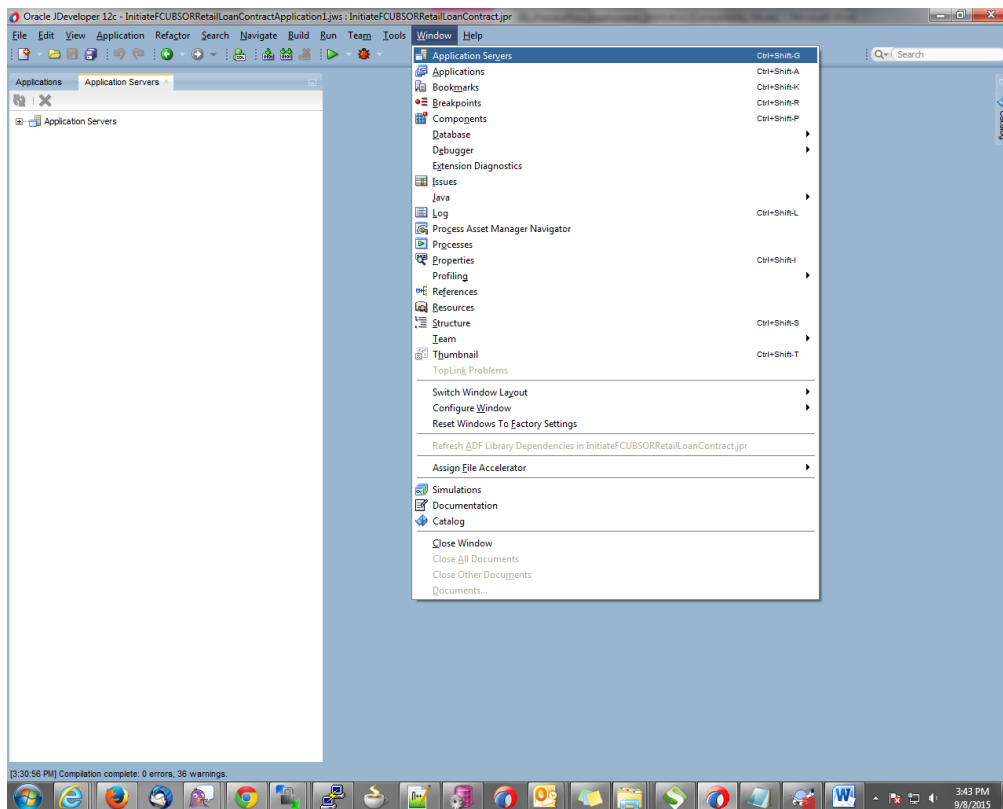
### 3.1 Introduction

Oracle JDeveloper supports deployment of BPEL process flows to WebLogic application servers via JDeveloper application server connection.

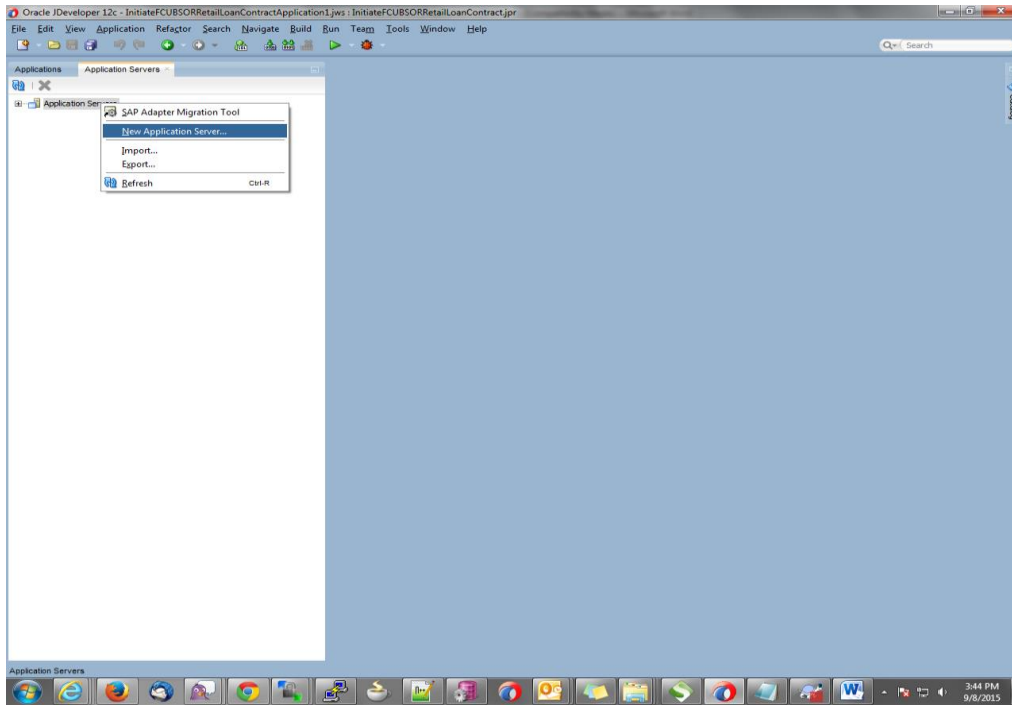
### 3.2 Application Sever Connection

After JDeveloper has been updated with SOA extension, The IDE can be launched from 'Programs' menu or installation location.

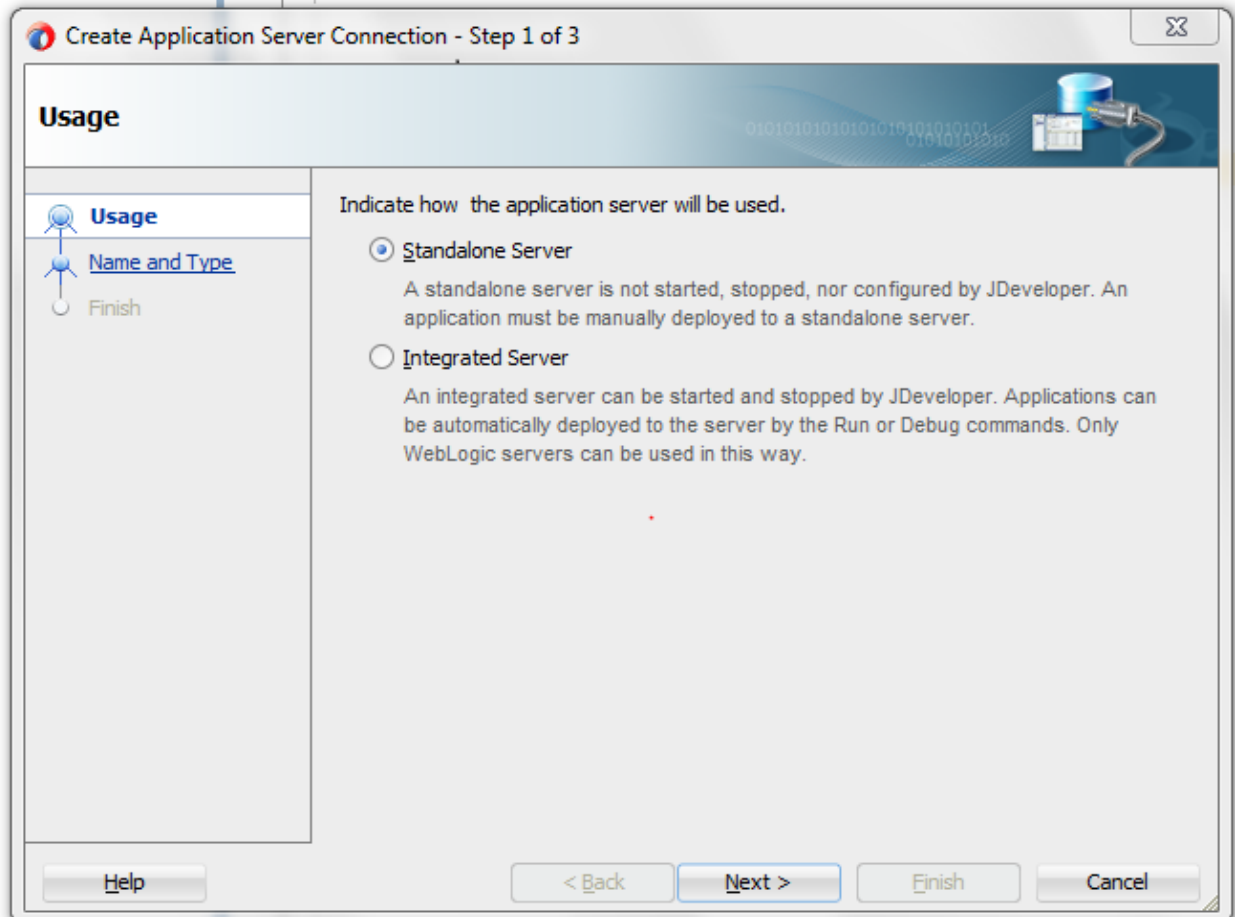
- After JDeveloper is launched
- Click on → windows → Application Servers Navigator



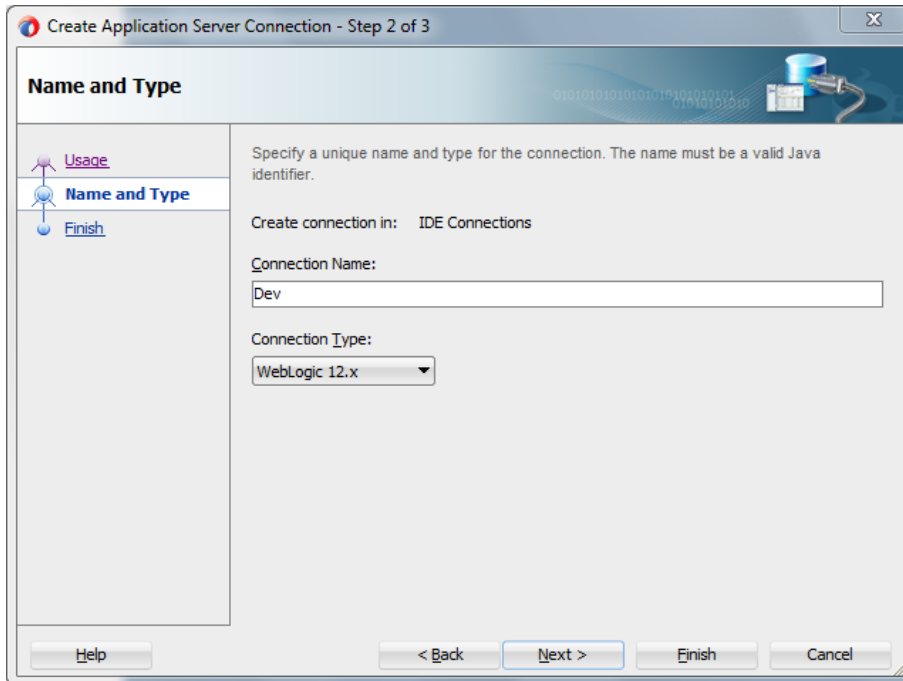
- To create a new WebLogic server connection
- Right click 'Application Servers'
- Click on → New Application Server



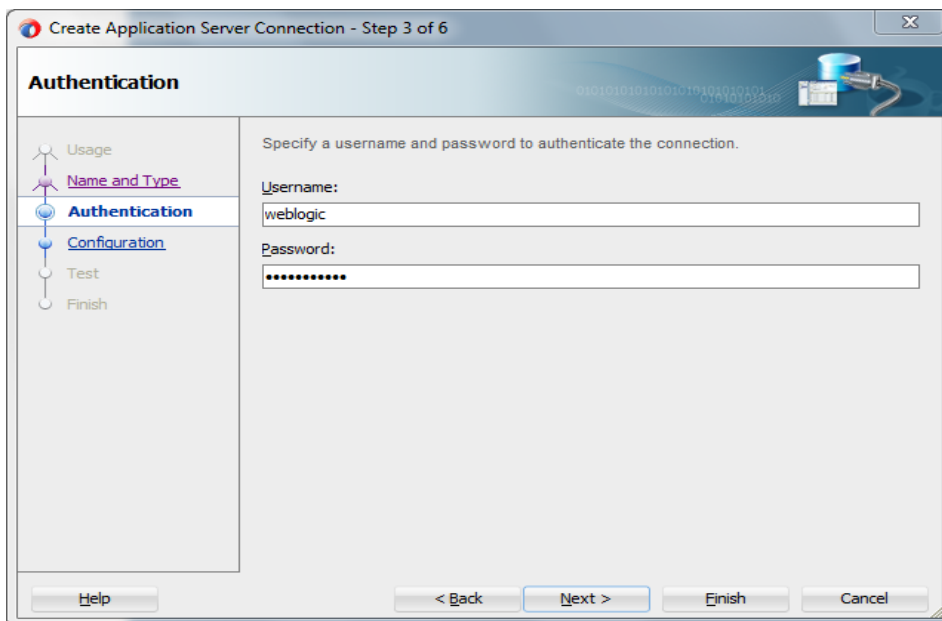
- The “Create Application Server Connection” wizard is launched as shown below.
- Select the Radio button “Standalone Server”
- Click “Next” to proceed with the configuration



- Provide a "Connection Name" to identify the server connection.
- Provide the "Connection Type" to identify the server type.
- Select "WebLogic server <version>"
- Click "Next" to proceed with the configuration

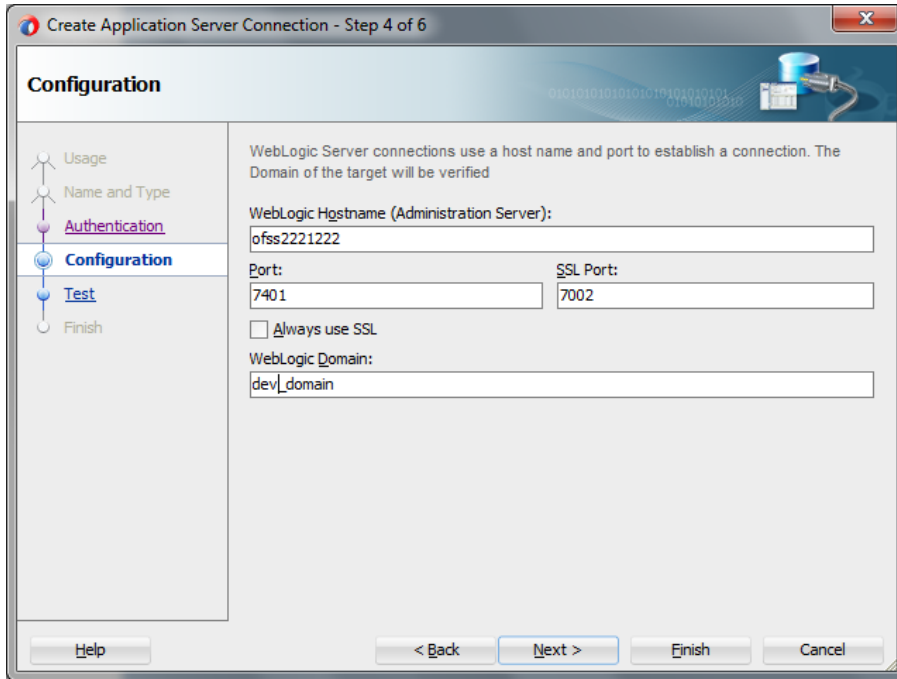


- Provide username / password to connect to the server
- The same username / password that was used while configuring the server is used.
- Click “Next” to proceed with the configuration

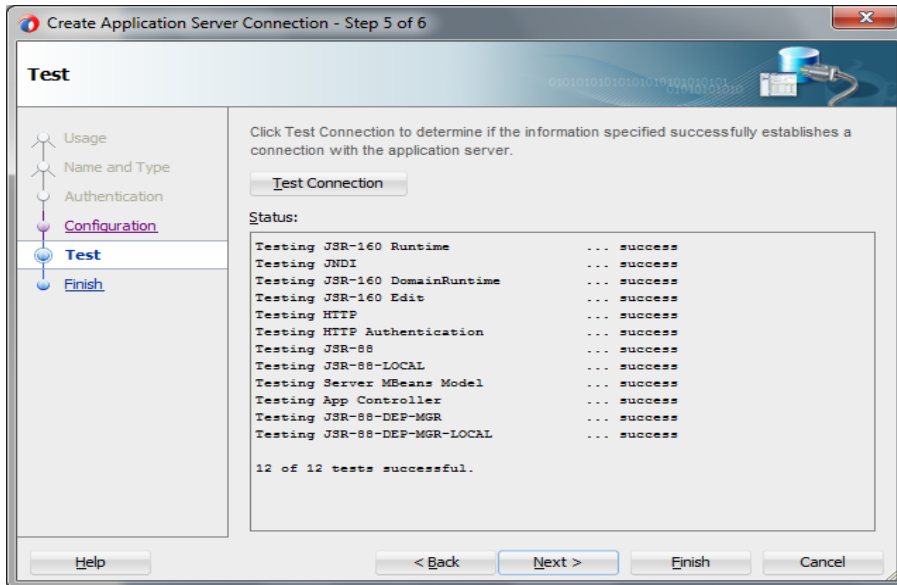


- Provide the WebLogic server hostname and the port number of the Admin server.
- Provide the domain name under which the server has been configured.
- Click “Next” to proceed with the configuration





- Click on the 'Test Connection' to ensure the configuration is done correctly.
- All the tests should go thru and indicate "success" as shown below that will indicate a correct configuration
- Click "Finish" to proceed and complete the configuration



## 4. Loading FCUBS Process flows in Oracle JDeveloper

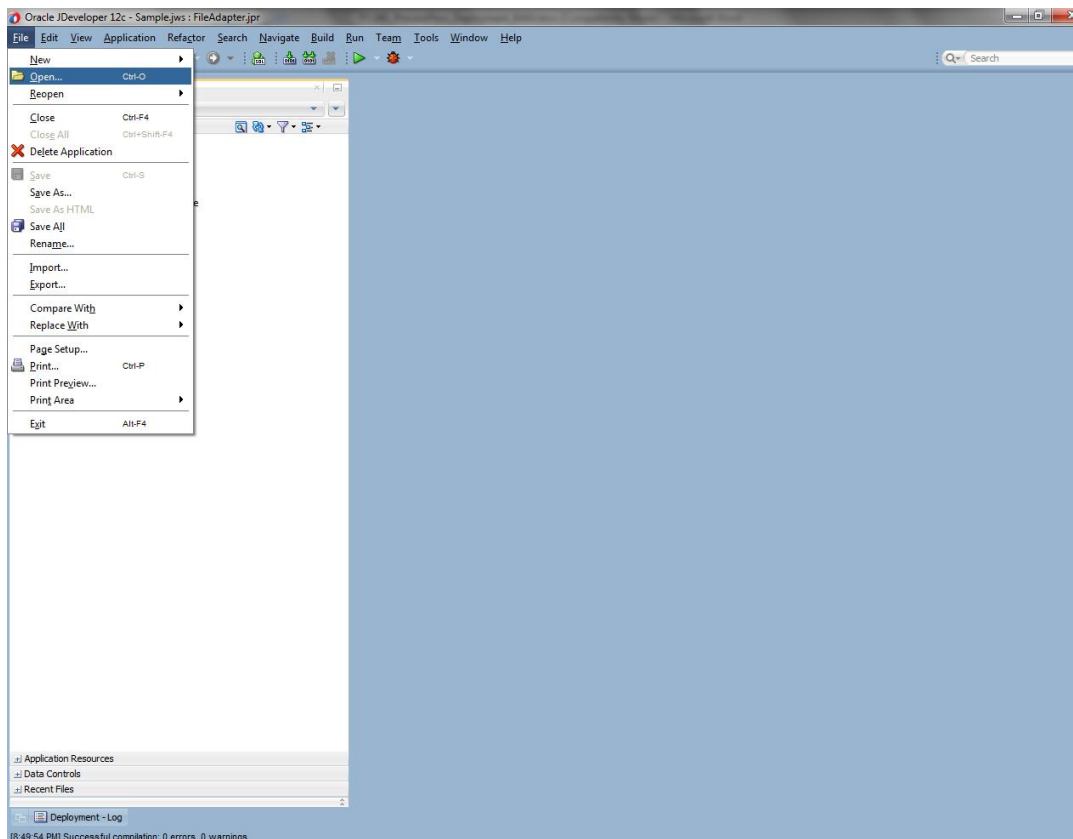
### 4.1 Introduction

The FCUBS BPEL process flows that are to be deployed needs to be obtained from the release area and unzipped into a folder location.

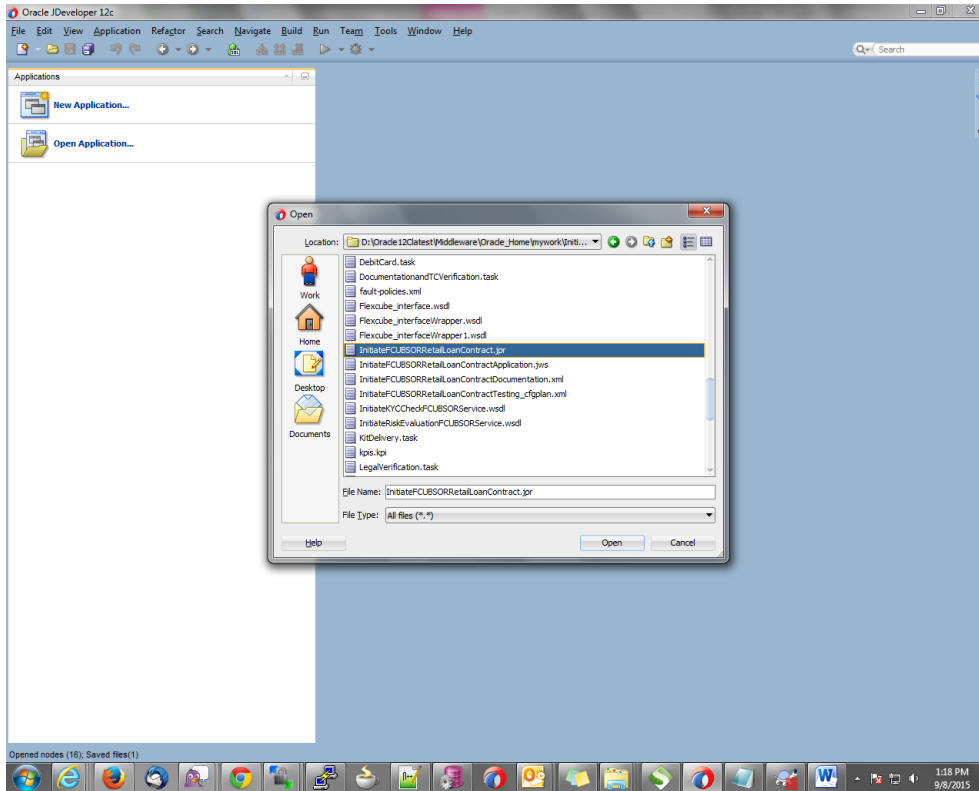
### 4.2 Loading the Process

After JDeveloper IDE is launched from 'Programs' menu or installation location.

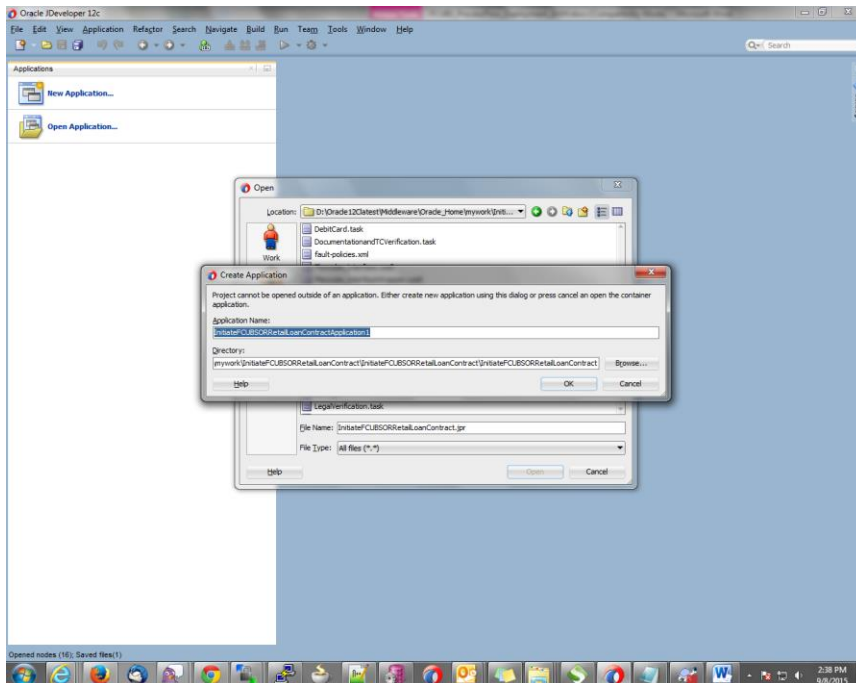
- Click on → File → Open



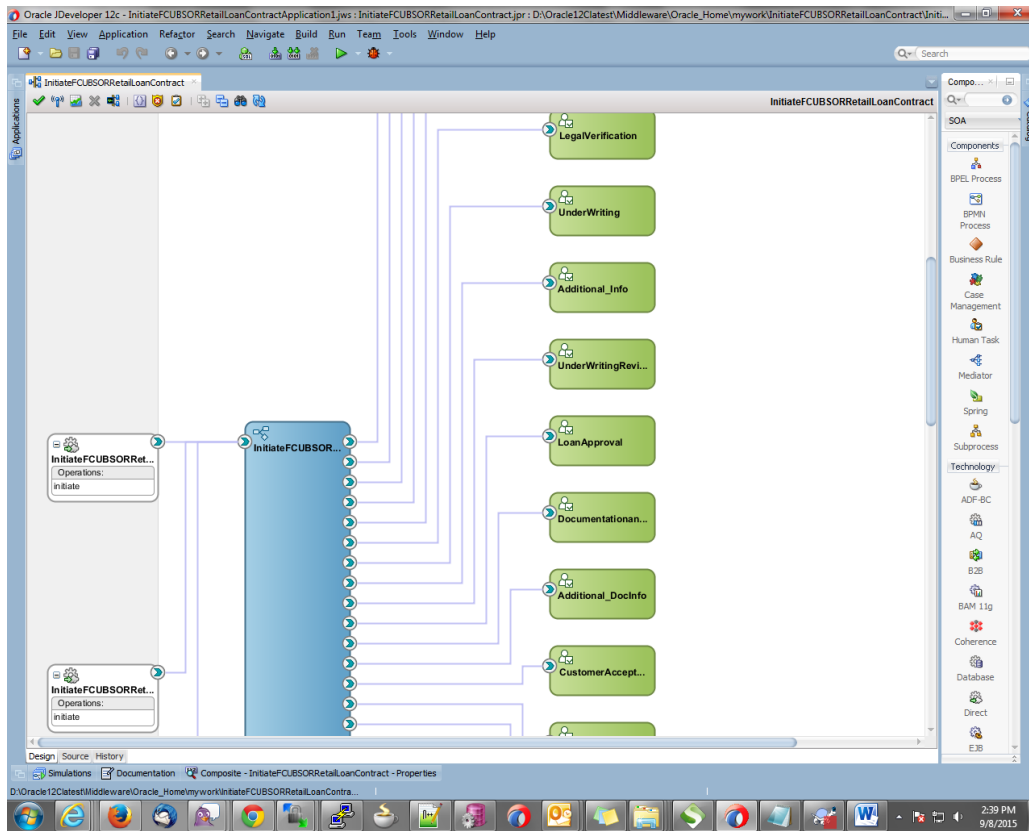
- Navigate to the folder where process flow is deployed
- Locate and select the “.jpr” file under the folder <process\_name>
- Click ‘Open’ to load the process flow in JDeveloper



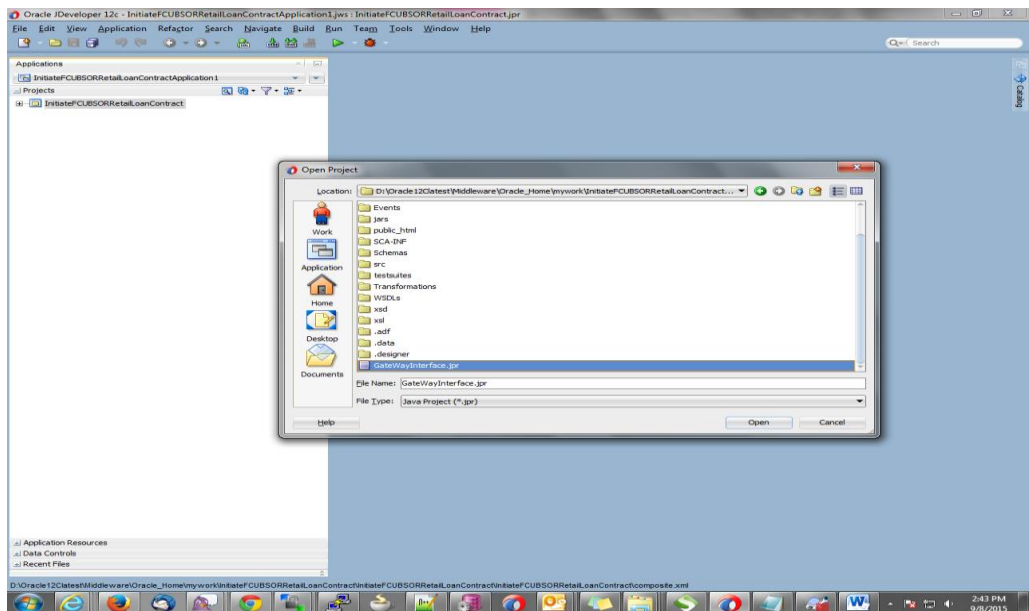
- If this is the first Process flow that is being loaded JDeveloper will prompt for an Application Name and Location where the application file will be stored
- Provide an application name and folder path for the same.
- Click in “Ok” to proceed with loading of the process flow.



- The process flow is loaded into JDeveloper and is displayed as given below
- Clicking on the “composite.xml” under “SOA Content” in Design mode will display the process flow as illustrated in the screen shot.



- All the required process flow can be loaded in the similar fashion from File Menu into the same application.



- After all the necessary process flows are loaded, all process flows will be displayed in the “Application Navigator” menu as illustrated in the screen shot.

In case of Dependent Process Flows like InitiateFCUBSORRetailLoanContract, having other Process Flows as services and subprocesses the composite.xml file has to be modified with the runtime wsdl location of the subprocess (like BIPUtility). The Runtime wsdl is obtained from the em console as shown in the screen shot.

- In the em console, click the process for which runtime wsdl is required and click on Test.

The screenshot shows the Oracle Enterprise Manager Fusion Middleware Control interface. On the left, the 'Target Navigation' pane lists various process flows, with 'BPELLimitReview [1.0]' selected. The main area displays a table with usage statistics for several process flows.

Type	Usage	Total Messages	Average Processing Time (sec)
Web Service	Service	0	0.000
Direct Binding	Service	0	0.000
JCA Adapter	Reference	0	0.000
Web Service	Reference	0	0.000
Web Service	Reference	0	0.000
Web Service	Reference	0	0.000

ORACLE Enterprise Manager Fusion Middleware Control 12c WebLogic Domain ▼ SOA Infrastructure ▼ weblogic ▼ ⋮

BPELLimitReview [1.0] SOA Composite ▼ Mar 29, 2016 3:55:20 PM IST ↻

Active Retire ... Shut Down... Test Settings... ▼  Related Links ▼

Dashboard Composite Definition Flow Inst Test Service Tests Policies

### Components

Name	Component Type
ICDMediatorProcess	BPEL
CreditApproval	Human Workflow
ExternalCreditRating	Human Workflow
DecisionProcess	BPEL
BPELLimitReviewProcess	BPEL
ManualRetry	Human Workflow
LimitReviewInitiationTask	Human Workflow
PendingWithCustomer	Human Workflow
CreditDecision	Human Workflow

### Services and References

Name	Type	Usage	Total Messages	Average Processing Time (sec)
icdmediatorprocess_client_ep	Web Service	Service	0	0.000
BPELLimitReview_client_ep	Direct Binding	Service	0	0.000
DuplicateLimitReviewTaskChecker	JCA Adapter	Reference	0	0.000
ExternalRatingService	Web Service	Reference	0	0.000
LimitsHandoff	Web Service	Reference	0	0.000
CustomerCommunicationService	Web Service	Reference	0	0.000

- We can obtain the runtime wsdl for the process as shown below in the screen shot.

ORACLE® Enterprise Manager Fusion Middleware Control 12c

WebLogic Domain SOA Infrastructure weblogic

BPELLimitReview [1.0] SOA Composite

Mar 29, 2016 3:57:10 PM IST

### Test Web Service

Use this page to test any WSDL or WADL, including WSDLs or WADLs that are not in the farm. To test a Web service, enter the WSDL or WADL and click Parse WSDL or WADL. When the page refreshes with the WSDL or WADL details, first select the Service/Resource, then select the Port/Method, and then select the Operation/Media type that you want to test. Specify any input parameters, and click Test Web Service.

WSDL or WADL:  Parse WSDL or WADL

HTTP Basic Auth Option for WSDL or WADL Access

Service:

Port:

Operation:

Endpoint URL:  Edit Endpoint URL

Request Response

- ▶ Security
- ▶ Quality of Service
- ▶ HTTP Header
- ▶ Additional Test Options
- ▶ Input Arguments

Tree View  Enable Validation  Load Payload  No file selected.

SOAP Body

View  Detach

Name	Type	Value
▶ * payload	payload	

Request Response

- Now we replace this runtime wsdl in the composite.xml of the process as shown in the screen shot for that particular subprocess.

Oracle JDeveloper 12c - InitiateFCUBSORRetailLoanContractApplication1jws:InitiateFCUBSORRetailLoanContract: D:\Oracle12c\test\middleware\Oracle\_Home\mywork\InitiateFCUBSORRetailLoanContract\Init...

File Edit View Application Refactor Search Navigate Build Run Source Team Tools Window Help

Applications

```
e.wsdl">
m/sca/soap/service/Flexcube_interface#wsdl.interface(Initiate_ptt)"/>
m/sca/soap/service/Flexcube_interface}InitiateFCUBSORRetailLoanContract_client_ep"
ie.com/sca/soap/service/Flexcube_interface#wsdl.endpoint(COLLATProcess_client_ep/initate_ptt)" location="">

service"
ionFCUBSORService.wsdl">
cle.com/SendMailNotificationFCUBSORService/SendMailNotificationFCUBSORService/SendMailNotificationFCUBSORService#wsdl.interface(SendMailNotificationFC
endMailNotificationFCUBSORService/SendMailNotificationFCUBSORService/SendMailNotificationFCUBSORService#wsdl.endpoint(SendMailNotificationFCUBSORSev
er.wsdl">
cle.com/LNLatestBureau/CreditBureauHandler/CreditBureauHandler#wsdl.interface(CreditBureauHandler)"/>
LNLatestBureau/CreditBureauHandler/CreditBureauHandler#wsdl.endpoint(creditbureauhandler_client_ep/CreditBureauHandler_ptt)" location="">

CUBSORService.wsdl">
cle.com/SubProcess/InitiateKYCCheckFCUBSORService/InitiateKYCCheckFCUBSORService#wsdl.interface(InitiateKYCCheckFCUBSORService)"/>
ubProcess/InitiateKYCCheckFCUBSORService/InitiateKYCCheckFCUBSORService#wsdl.endpoint(initiatekyccheckfubsorservice_client_ep/InitiateKYCCheckFCUBSOR
ationFCUBSORService.wsdl">
cle.com/SubProcess/InitiateRiskEvaluationFCUBSORService/InitiateRiskEvaluationFCUBSORService#wsdl.interface(InitiateRiskEvaluationFCUBSORService)"/>
ubProcess/InitiateRiskEvaluationFCUBSORService/InitiateRiskEvaluationFCUBSORService#wsdl.endpoint(initiatriskevaluationfubsorservice_client_ep/Initi
ocation="BIFUtility.wsdl">
cle.com/BIFUtility#wsdl.interface(BIFUtility)
ms.oracle.com/BIFUtility#wsdl.interface(BIFUtilityCallback)"/>
IFUtility#wsdl.endpoint(BIFUtility/BIFUtility)" location="http://ofsa2221222.in.oracle.com:7403/soa-infra/services/default/BIFUtility/client?WSOJ"/>
/BIFUtility#wsdl.endpoint(BIFUtility/BIFUtilityCallback_ptt)"/>

ct_clientAdf</source.uri>
ct/References.Externals.InitiateFCUBSORRetailLoanContract_client_ep.service</target.uri>

ct/HumanTasks.ApplicationEntry.reference</source.uri>
target.uri>
```

composite -> reference -> binding.ws

Design Source History

471:193/87

Simulations Documentation binding.ws - Properties

2:53 PM 9/8/2015



# 5. Deployment Profile and Configuration Plan

## 5.1 Introduction

A deployment profile is automatically created for all FCUBS Process flows. The application profile includes the JAR files of SOA projects.

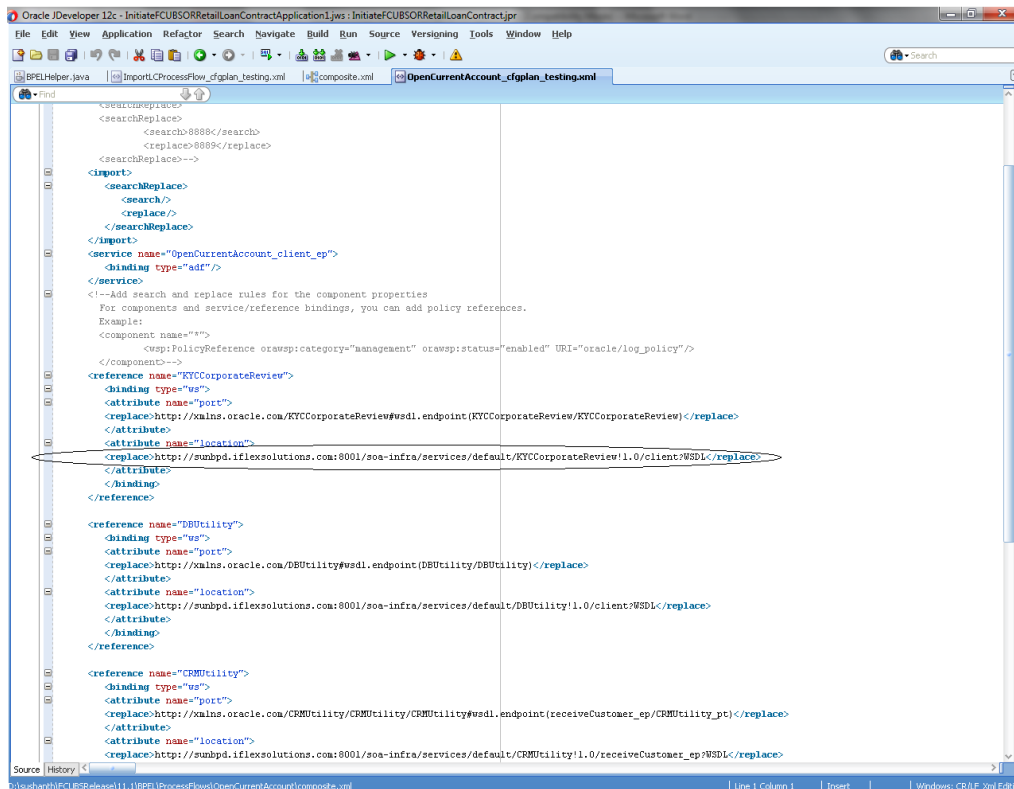
The configuration plan enables us to define the URL and property values to use in different environments. During process deployment, the configuration plan is used to search the SOA project for values that must be replaced to adapt the project to the target environment.

## 5.2 Updating the configuration plan

All the FCUBS process flows has been developed with three configuration plans with the following naming convention for development, testing & production environments. If there are no configuration

plans in any process flow it simply means there are no replacement values that needs to be replaced in the project and that project can be deployed without any config plans.

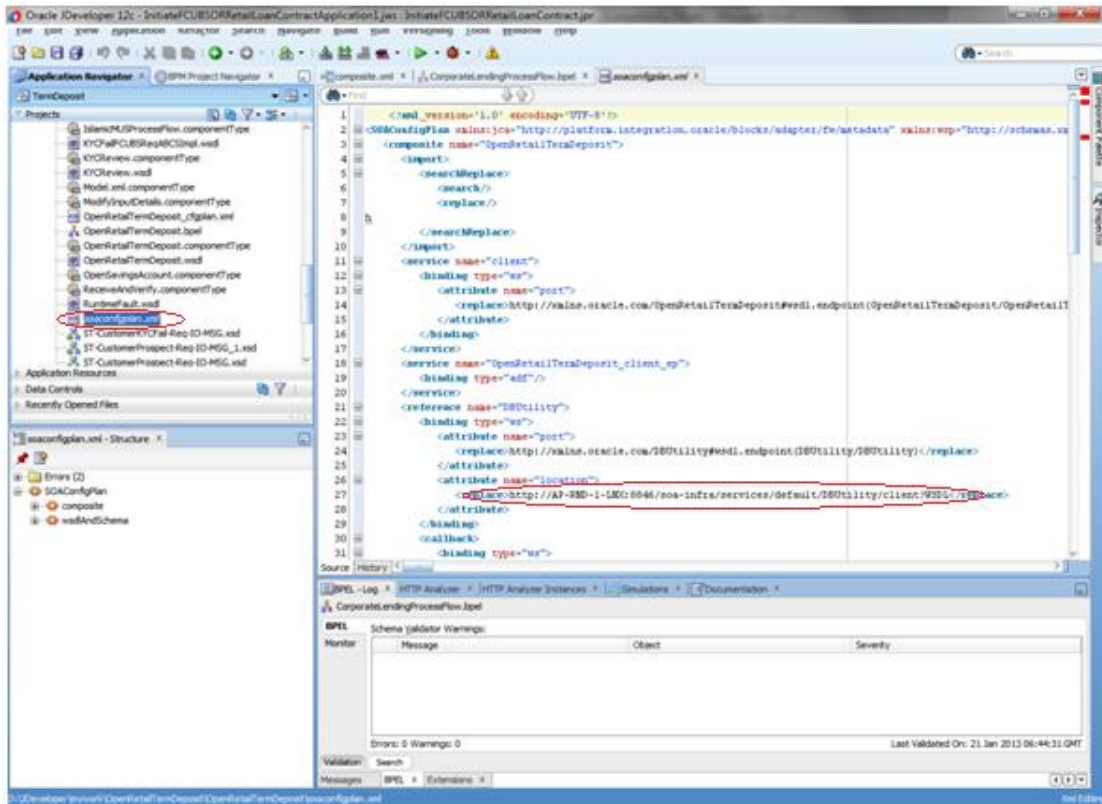
<processflow\_name>\_cfgplan\_dev.xml



In the configuration plan we need to give the latest runtime wsdl location of the subprocesses if present. The runtime wsdl location is obtained as mentioned earlier from the em console.



The soaconfigplan.xml, if present in the project also have to be updated with the runtime wsdli location of the subprocesses since this will be referred by the process in runtime.



### 5.3 Config plan changes for BIPUtility process.

Open the BIPUtility\_cfgplan.xml and copy corresponding values for the below mentioned properties from fcubs.property file.

Config_plan property	fcubs.properties
bpel.preference.BIUSERID	BI_USER
bpel.preference.BIPWD	BI_PASSWORD
bpel.preference.DOCPATH	BPEL_DOC_PATH
bpel.preference.SYMKEY	SYMMETRIC_KEY
bpel.preference.ENTITYENABLED	'Y' to enable entity OR 'N' to disable entity
bpel.preference.DATASOURCE	Map the Datasource JNDI name which is mapped for entity in the property file.
bpel.preference.IPMUSERID	Enter IPM Login Username
bpel.preference.IPMPWD	Enter IPM Login Password
bpel.preference.IPMAPPLICATION	Please provide IPM application (Which will be created after login to IPM application).  Eg: OFSS or FLEXCUBE
bpel.preference.IPMURL	IPM Url upto 'imaging'.  Eg: http://10.184.132.159:16002/imaging

Refer sample screen shot.

```

10 <service name="client">
11 <binding type="ws">
12 <attribute name="port">
13 <replace>http://xmlns.oracle.com/BIFUtility#wsdl.endpoint(BIFUtility/BIFUtility)</replace>
14 </attribute>
15 </binding>
16 </service>
17 <component name="BIFUtility">
18 <property name="bpel.preference.DMS">
19 <replace>IPM</replace>
20 </property>
21 <property name="bpel.preference.BIUSERID">
22 <replace>oM/guktOr4u2x93x20v0QA==</replace>
23 </property>
24 <property name="bpel.preference.BIFWD">
25 <replace>oM/guktOr4uksSebp+bgkg==</replace>
26 </property>
27 <property name="bpel.preference.IPMUSERID">
28 <replace>oM/guktOr4u2x93x20v0QA==</replace>
29 </property>
30 <property name="bpel.preference.IPMFWD">
31 <replace>oM/guktOr4uksSebp+bgkg==</replace>
32 </property>
33 <property name="bpel.preference.IPMAPPLICATION">
34 <replace>OFSS</replace>
35 </property>
36 <property name="bpel.preference.IPMURL">
37 <replace>http://10.184.132.159:16002/imagint</replace>
38 </property>
39 <property name="bpel.preference.DOCPATH">
40 <replace>/scratch/work_area/Dev122ProjectDebugs/</replace>
41 </property>
42 <property name="bpel.preference.SYMKEY">
43 <replace>ORACLE FINANCIALSERVICES</replace>
44 </property>
45 <property name="bpel.preference.ENTITYENABLED">
46 <replace>N</replace>
47 </property>
48 <property name="bpel.preference.DATASOURCE">
49 <replace>jdbc/IcjdevDS</replace>
50 </property>
51 </component>
52 <reference name="BIFPartnerLink">
53 <binding type="ws">
54 <attribute name="port">
55 <replace>http://xmlns.oracle.com/oxp/service/v2#wadl.endpoint(ReportService/ReportService)</replace>
56 </attribute>
57 </binding>
58 </reference>
59 </composite>
60 </source>

```

## 5.4 Config plan changes for DBUtility process.

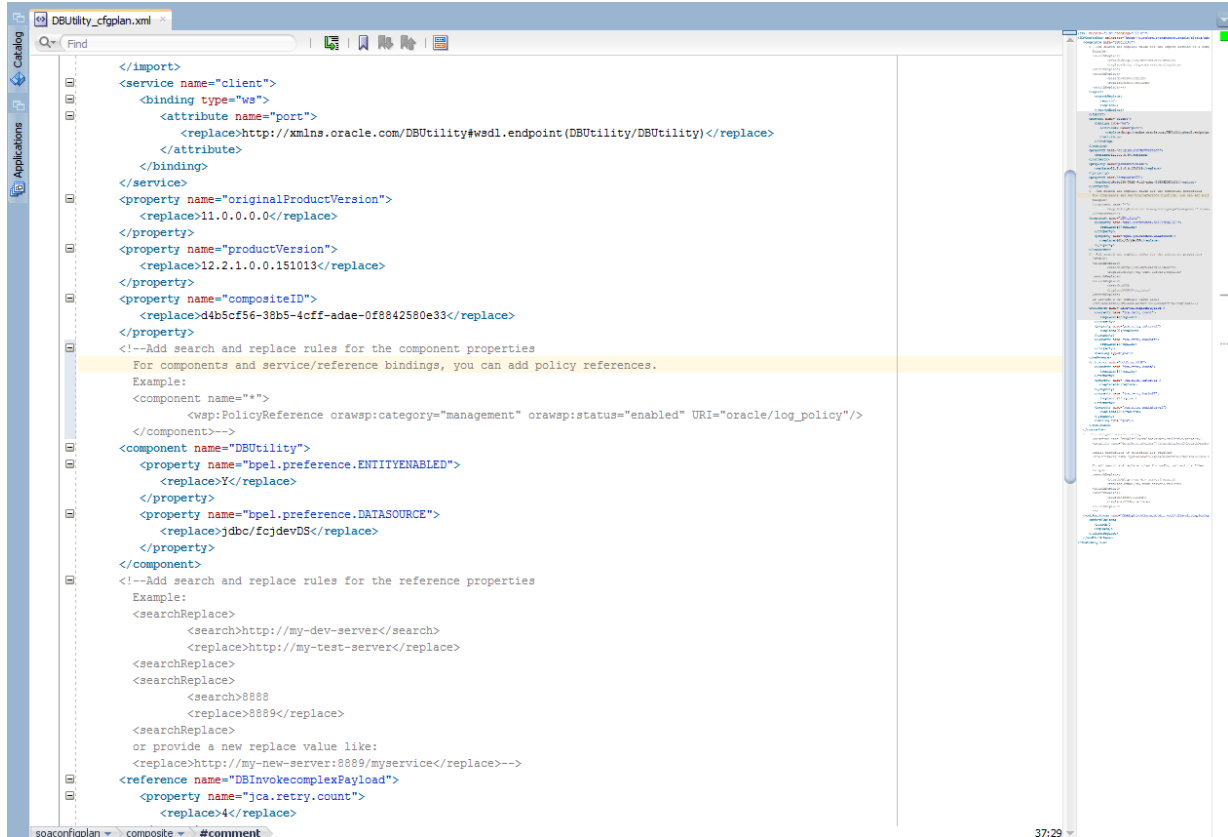
Open the DBUtility \_cfgplan.xml and copy corresponding values for the below mentioned properties.

Config_plan property	Property Values
bpel.preference.ENTITYENABLED	'Y' to enable entity OR 'N' to disable entity
bpel.preference.DATASOURCE	Map the Datasource



	JNDI name which is mapped for entity in the property file.
--	--

Refer sample screen shot.



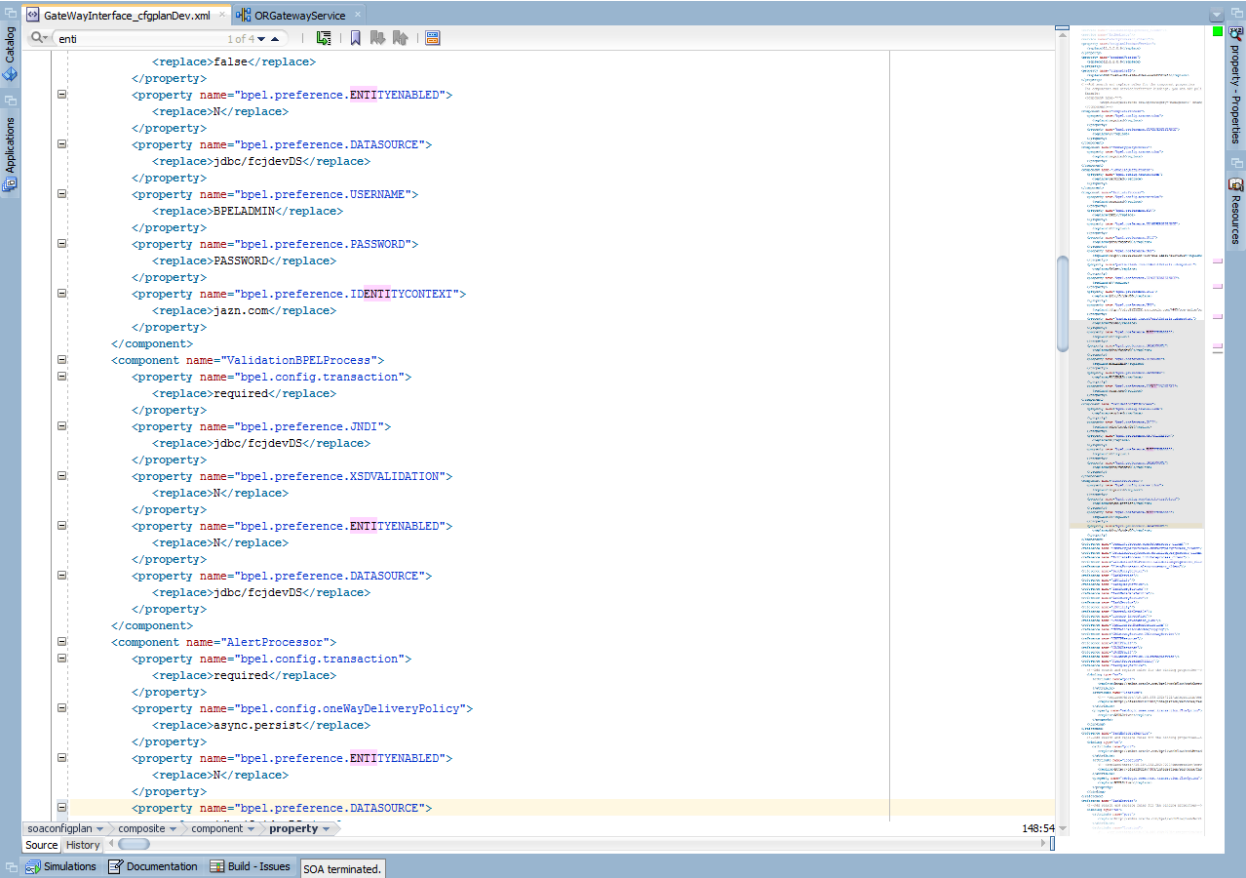
## 5.5 Config plan changes for Gateway process.

Open the GateWayInterface\_cfgplanDev.xml and copy corresponding values for the below mentioned properties.

Config_plan property	Property Values
bpel.preference.ENTITYENABLED	'Y' to enable entity OR 'N' to disable entity

<p>bpel.preference.DATASOURCE</p>	<p>Map the Datasource JNDI Name which is mapped for entity in the property file.</p>
-----------------------------------	--

Refer sample screen shot.



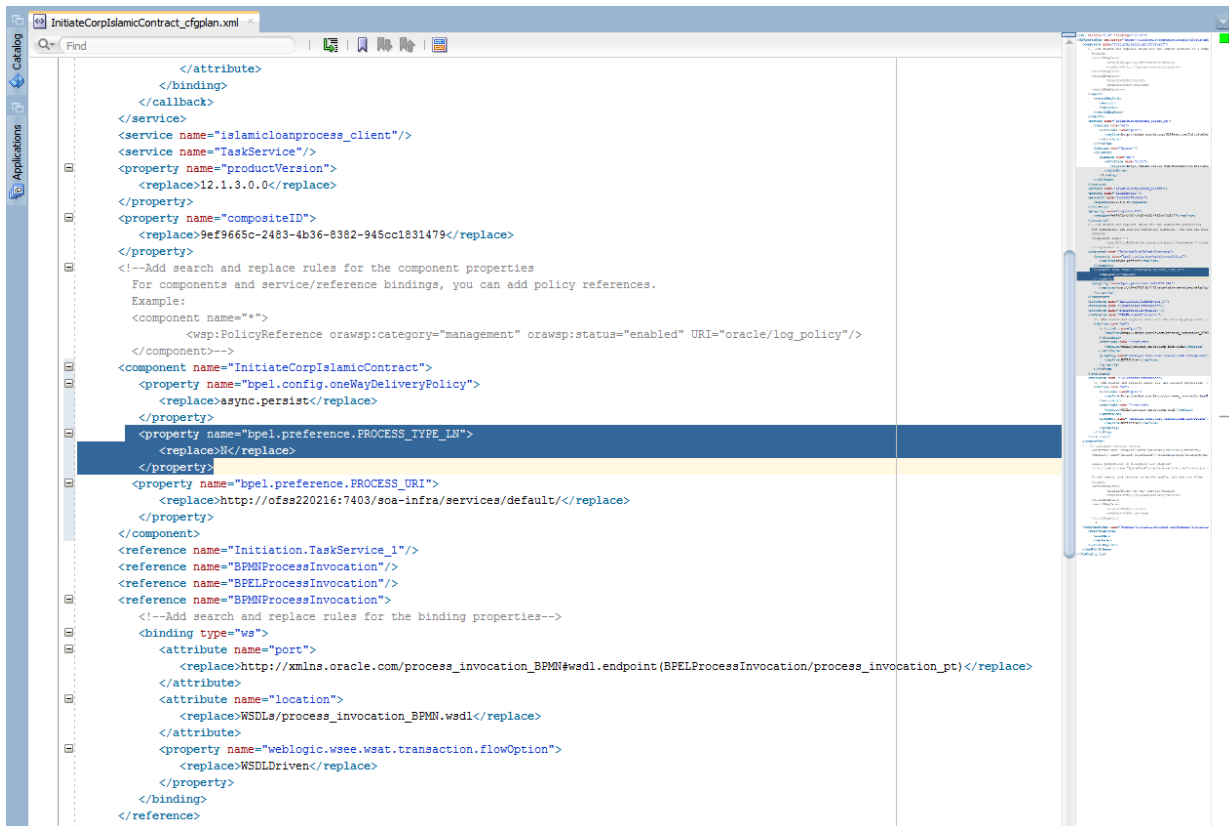
## 5.6 Config plan changes for InitiateCorplslamicContract process

Open the InitiateCorplslamicContract\_cfgplan.xml and copy corresponding values for the below mentioned properties to initiate BPEL or BPMN process from Common process.

Config_plan property	Property Values
<p>bpel.preference.PROCESS_TYPE_LN</p>	<p>Set value as ' L ' to initiate BPEL Process from Common Process</p>

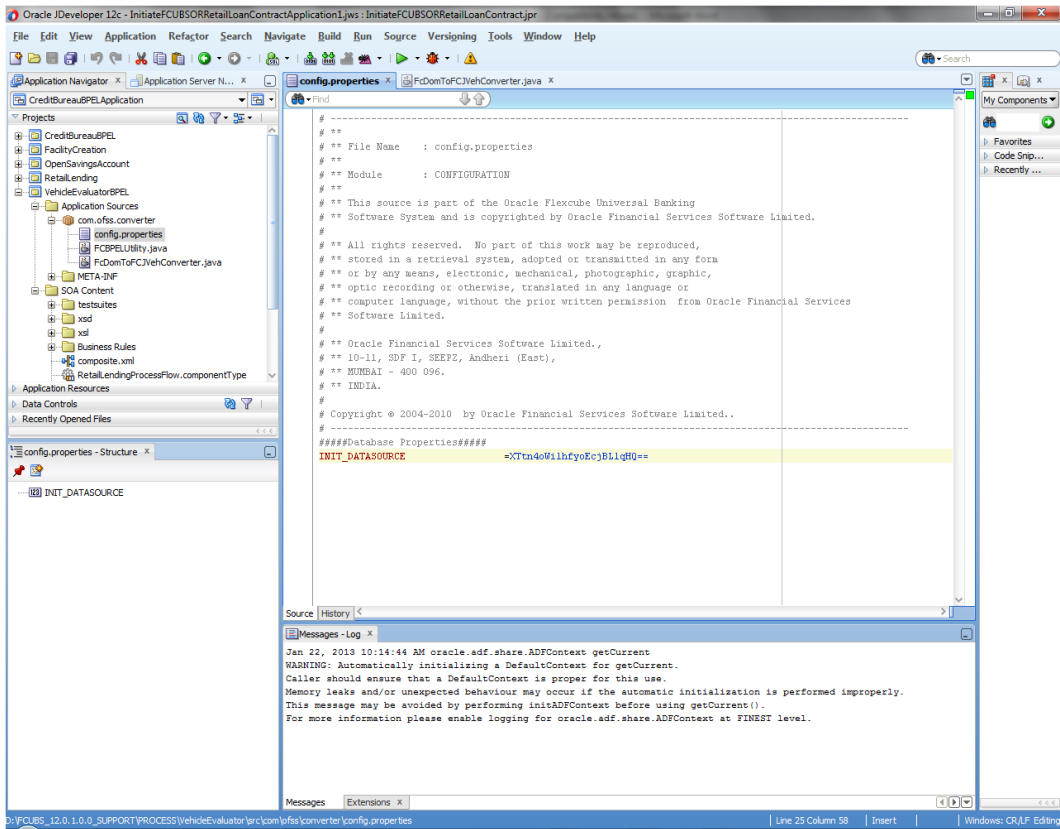
<p>bpel.preference.PROCESS_TYPE_LN</p>	<p>Set value as ' N' to initiate BPMN Process from Common Process</p>
--	---

Refer sample screen shot.



## 5.7 Updating the Datasource name

The config.properties file, if present in the project of any of the sub processes, has the encrypted datasource name. This should be same as the one given in the fcubs.properties file while building the EAR .





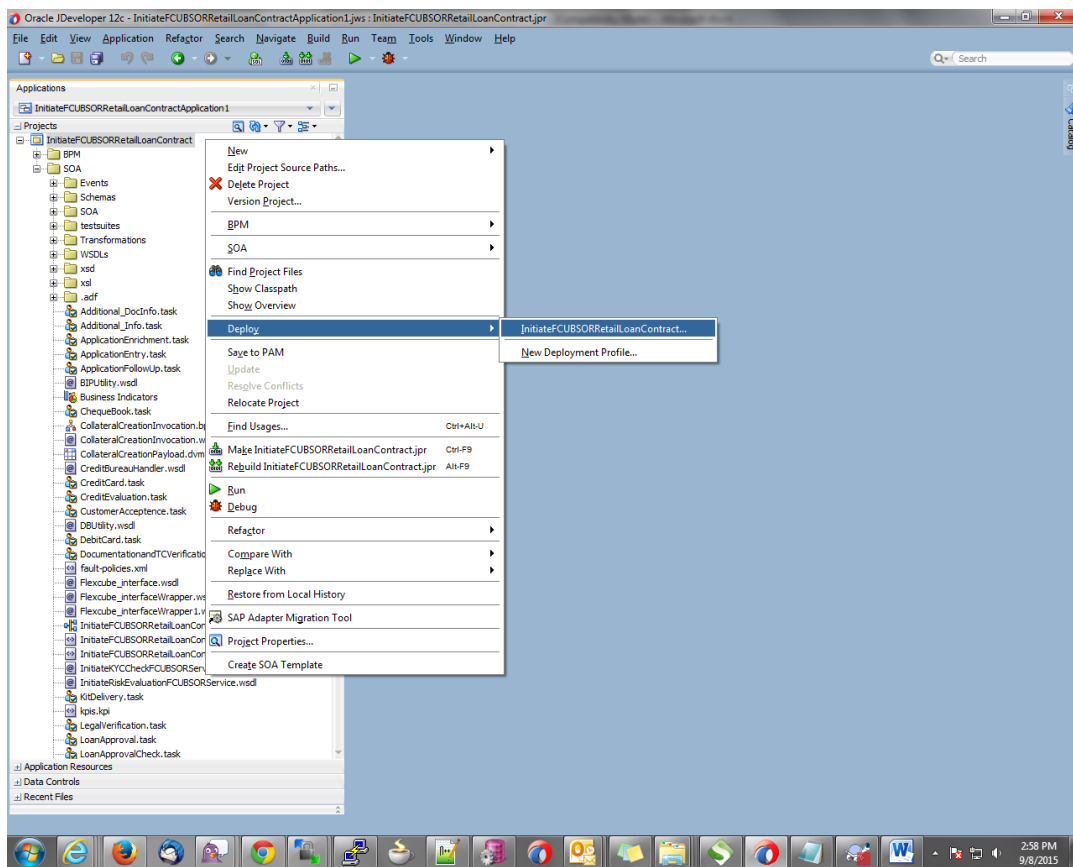
## 6. Deploying a Single Composite application using JDeveloper

### 6.1 Introduction

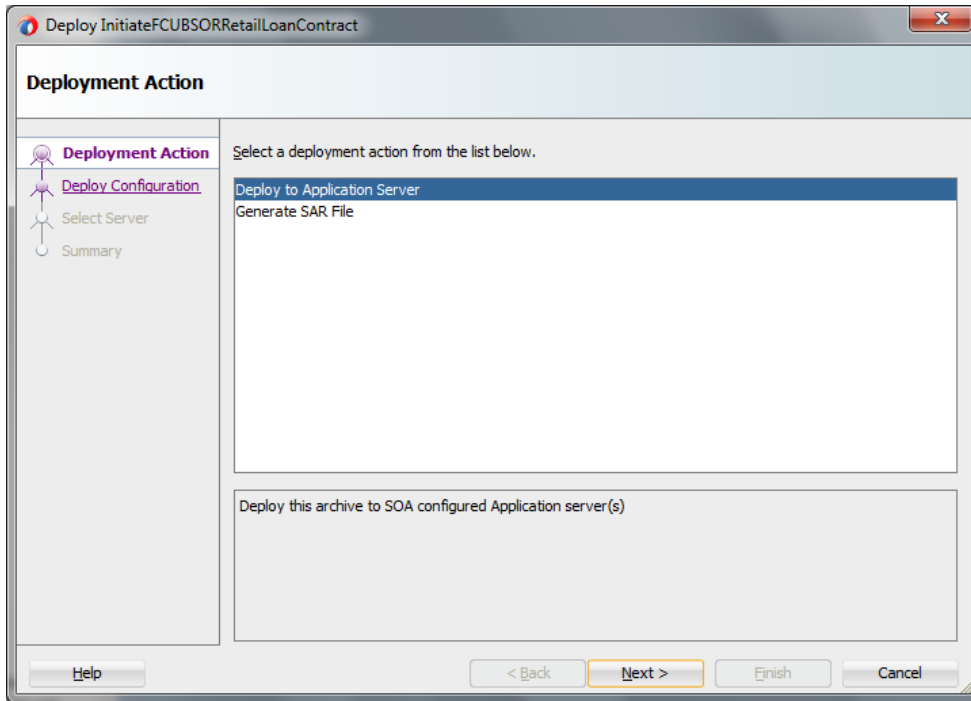
This section describes how to deploy a single SOA composite application with Oracle JDeveloper after completing updating of config plans with respective target environment replacement values.

### 6.2 Deploying the Application

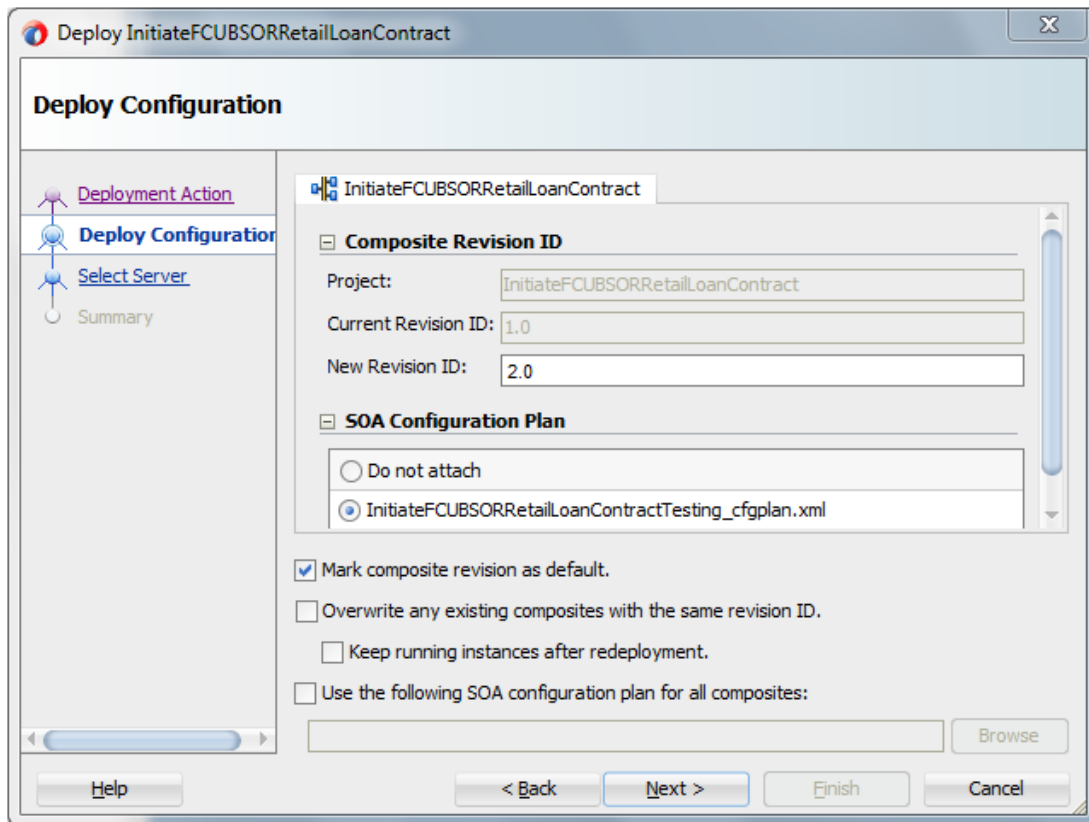
- Right click on the Application that needs to be deployed.
- Select 'Deploy' and then click on the default deployment profile which is the same as the application name.
- This will result in the deployment wizard screen being launched.



- The wizard shows the “Deployment Action” screen .Select ‘Deploy to Application server’ and click ‘Next’



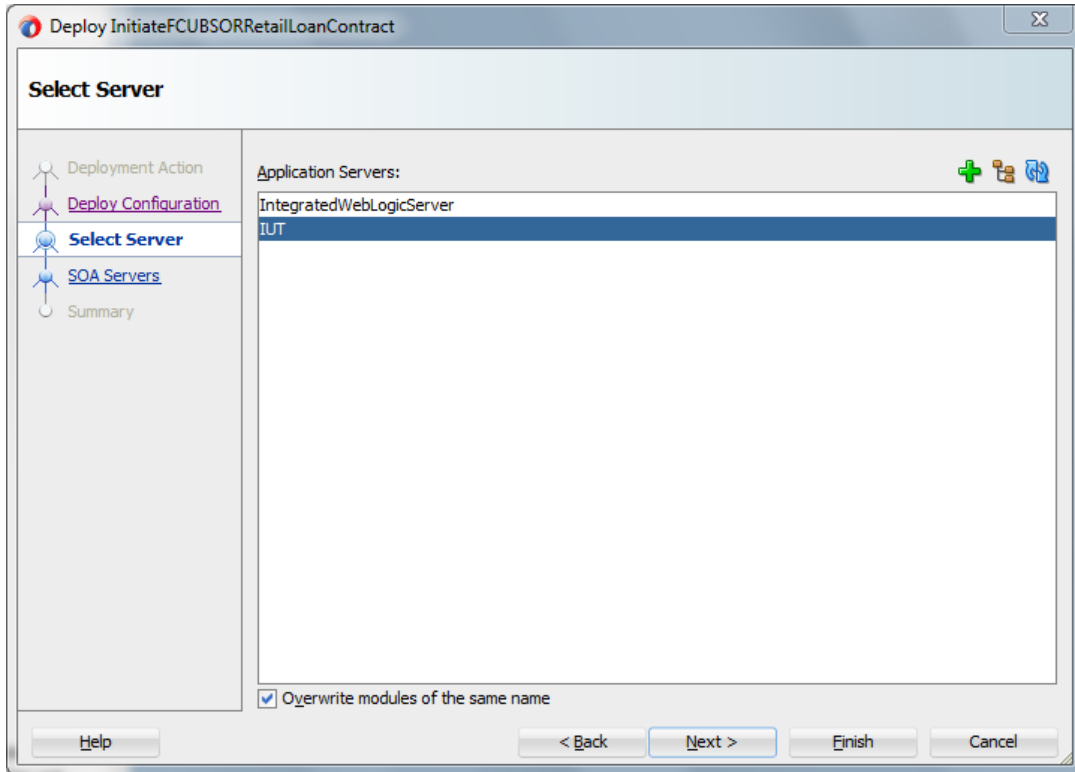
- Deployment configuration is done as illustrated in the below screen shot
- Select a Revision with which the deployment should happen
- Select a " Configuration Plan" that was updated as given in Section 5
- Provide a new revision ID. It should be always higher than the earlier revision of the process flow like 1.0, 2.0,3.0 etc
- Check the checkbox "Mark composite revision as "default"
- Uncheck the checkbox "Overwrite any existing composites with the same revision ID"
- Click "Next" to proceed with the deployment.



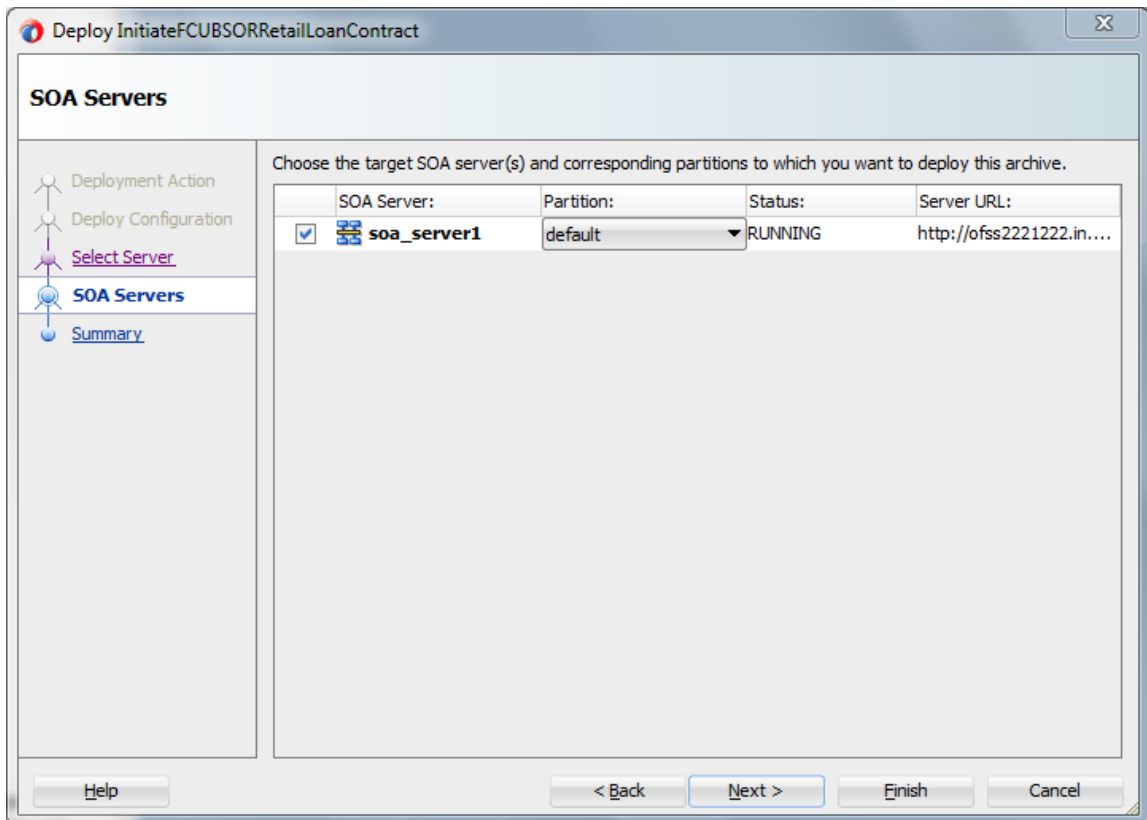
- Select the Application server 'Server Connection' configured that was done in Section 3 to which the deployment needs to be done
- Click 'Next' to proceed with the deployment.

**Note :**

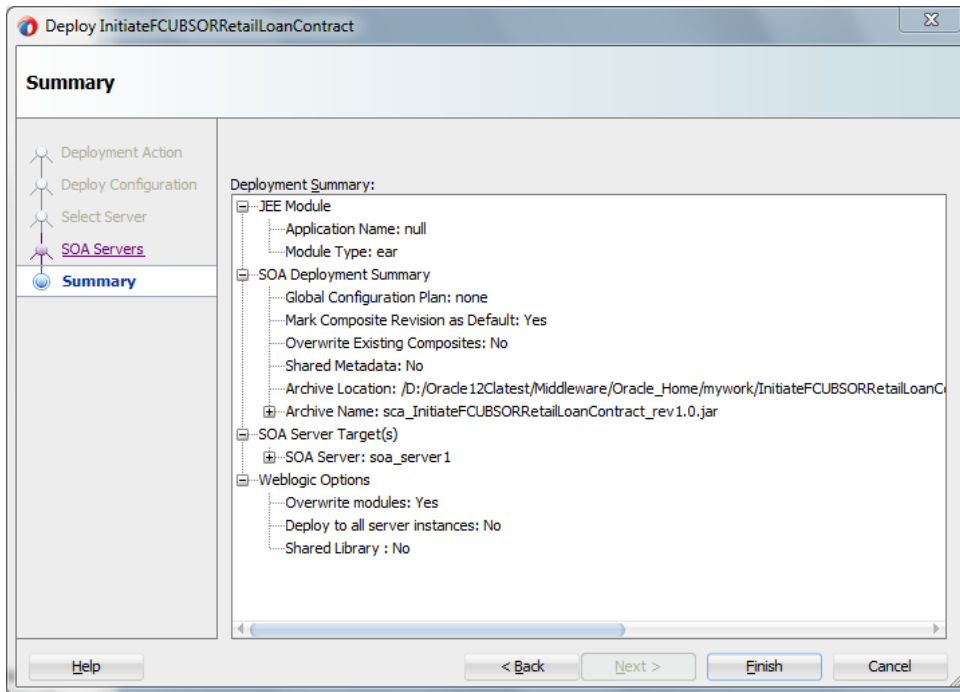
In case "Overwrite any existing composites with the same revision ID" checkbox is checked during the deployment, the active tasks which are currently running on the current revision of the process flow will be moved to "Stale" task status. The tasks which are in "Stale" status will not be displayed in the FLEXCUBE Application (under Task tab). Make sure that, before deploying the process, the "Overwrite any existing composites with the same revision ID" checkbox should be unchecked.



- Select the Application 'server' to which the deployment needs to be done.



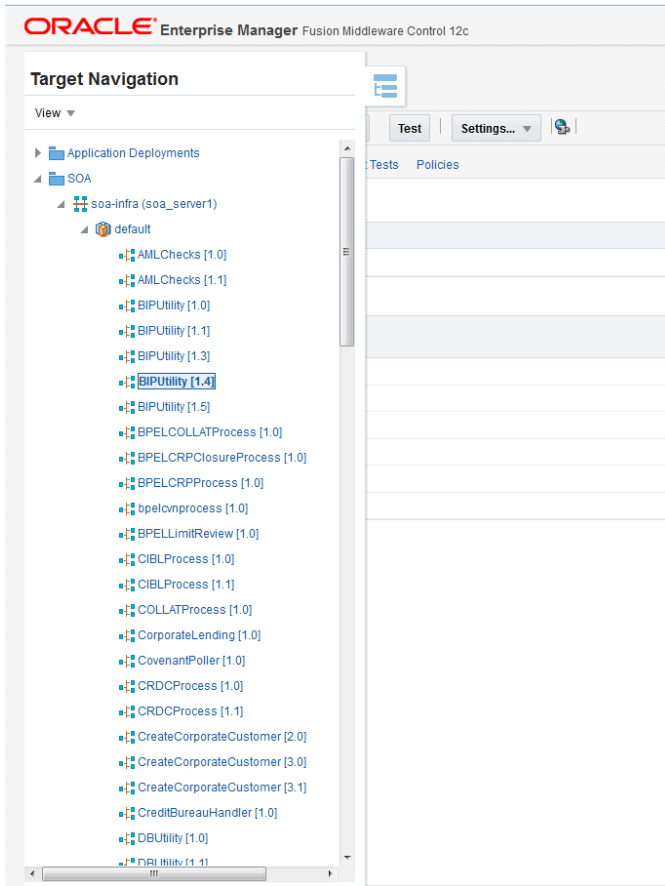
- View the summary of the deployment details and click 'Finish' to complete the deployment.



- The deployment status can be verified in the deployment status Log window.



- The deployed process can be verified by checking if the process is showing up in the SOA Suite enterprise manager console.
- Login to <http://<hostname>:<port>/em>
- Expand SOA - >soa-infra and view all deployed applications



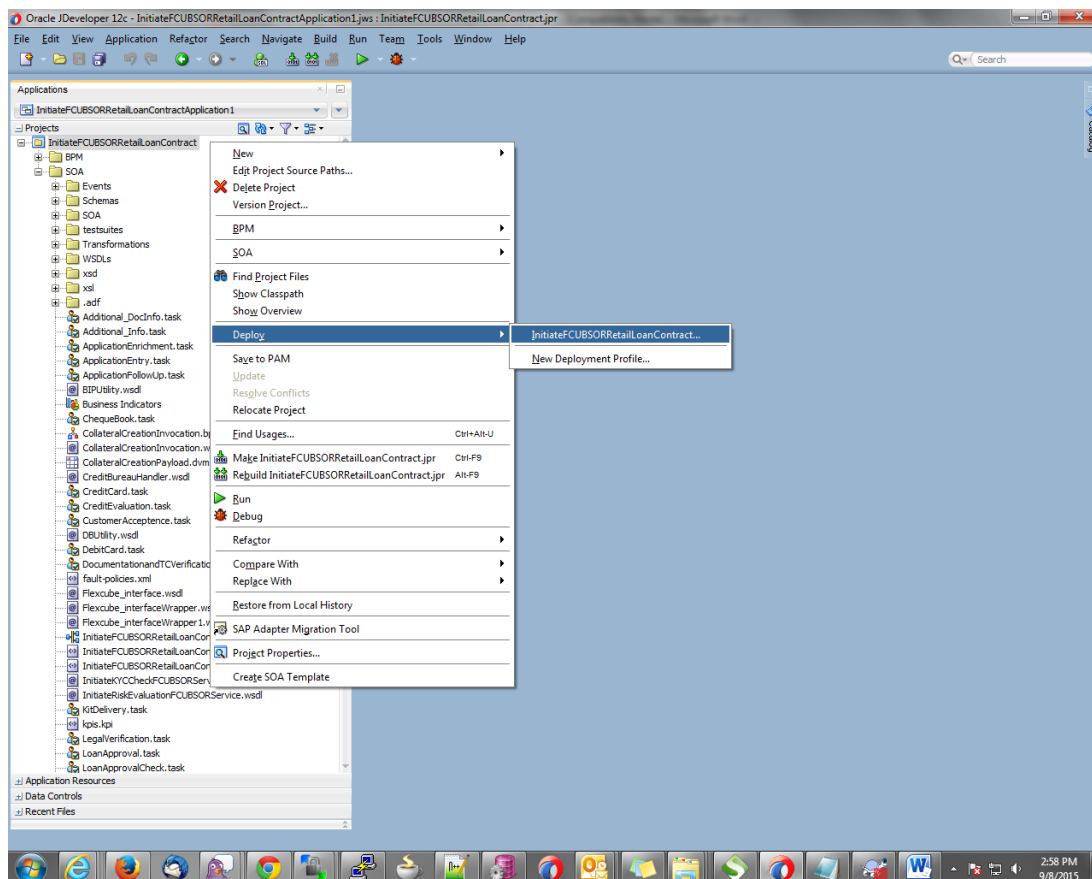
## 7. Deploying a Single Composite application via Enterprise manager console

### 7.1 Introduction

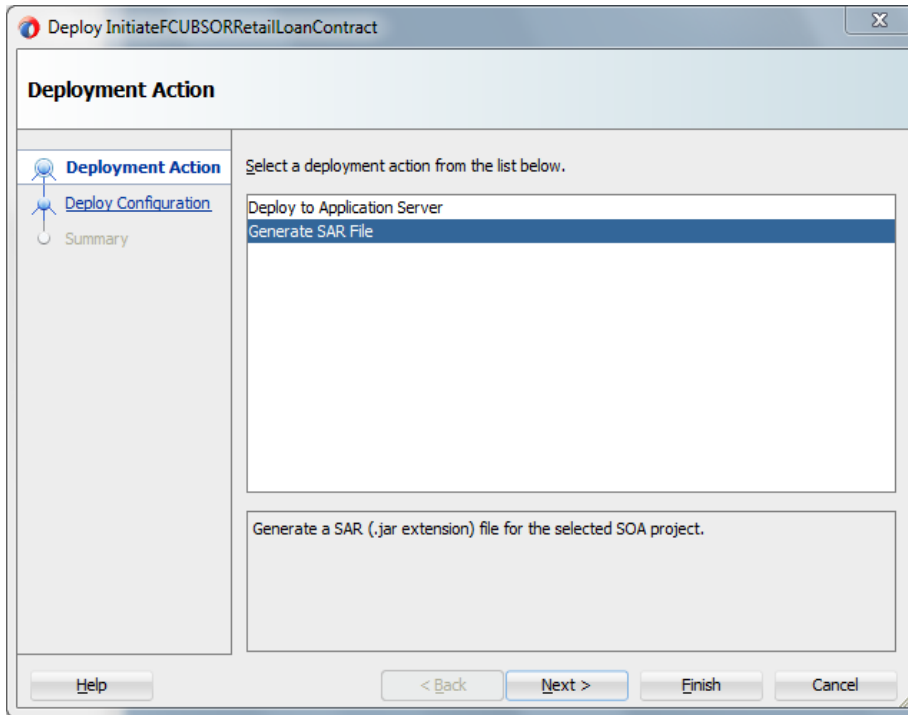
This section describes how to build a SAR file for a single SOA composite application with Oracle JDeveloper and deploy the same via enterprise manager console.

### 7.2 Deploying the Application

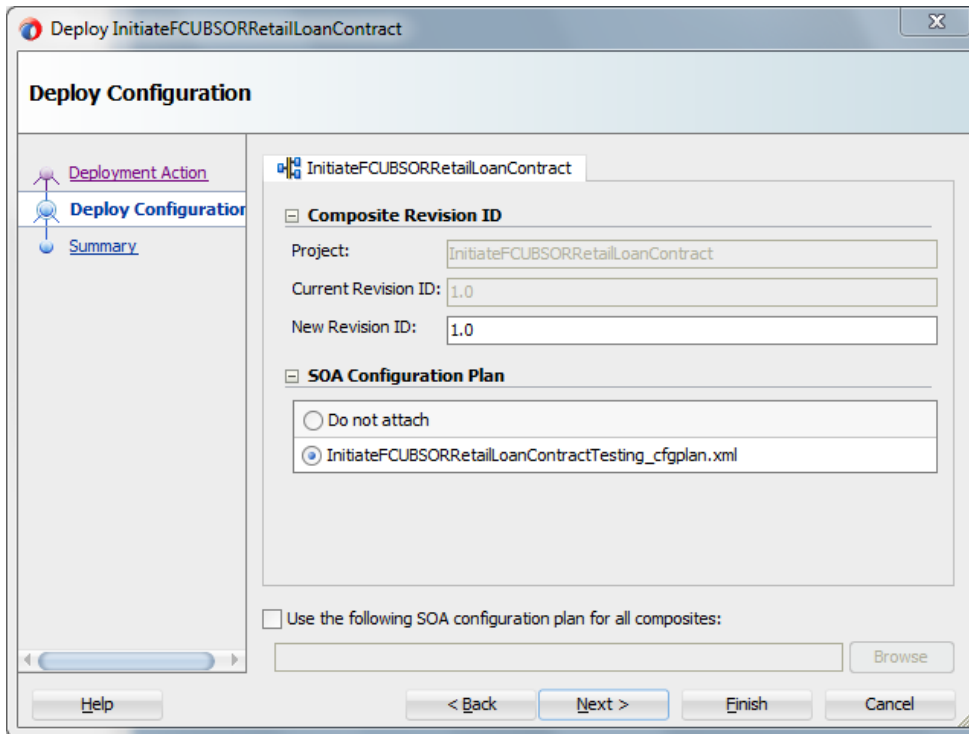
- Right click on the Application that needs to be deployed.
- Select 'Deploy' and then click on the default deployment profile which is the same as the application name.
- This will result in the deployment wizard screen being launched.



- In deployment action screen choose 'Deploy to SAR'
- Click 'Next' to proceed with the deployment.



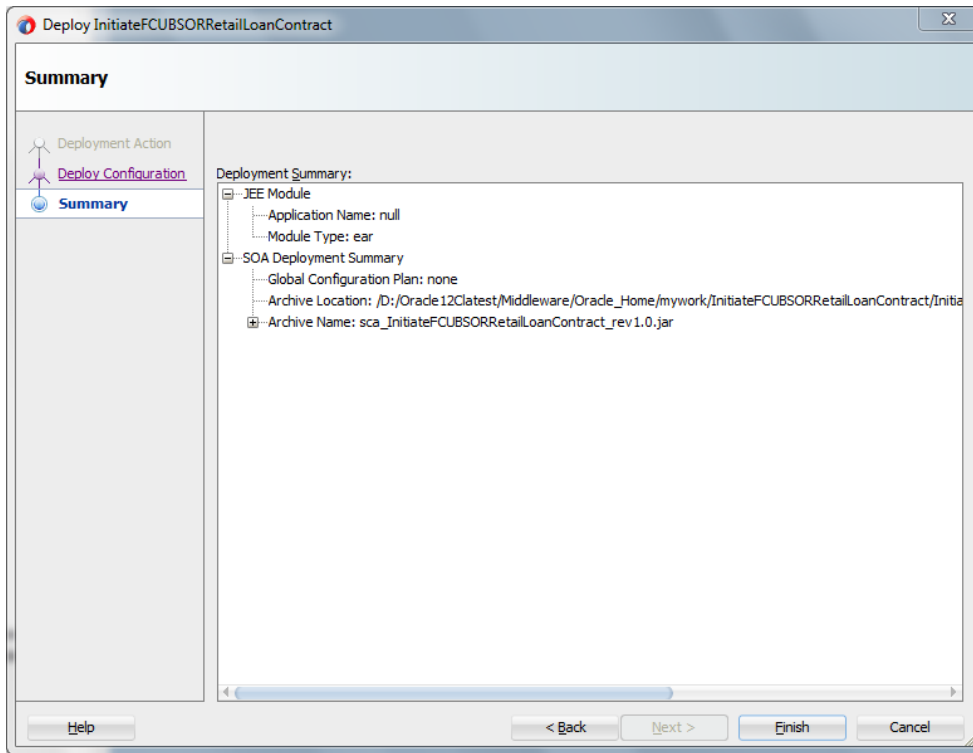
- In deployment configuration screen enter the revision
- Select the configuration plan.
- Click “Next” to proceed with the deployment.



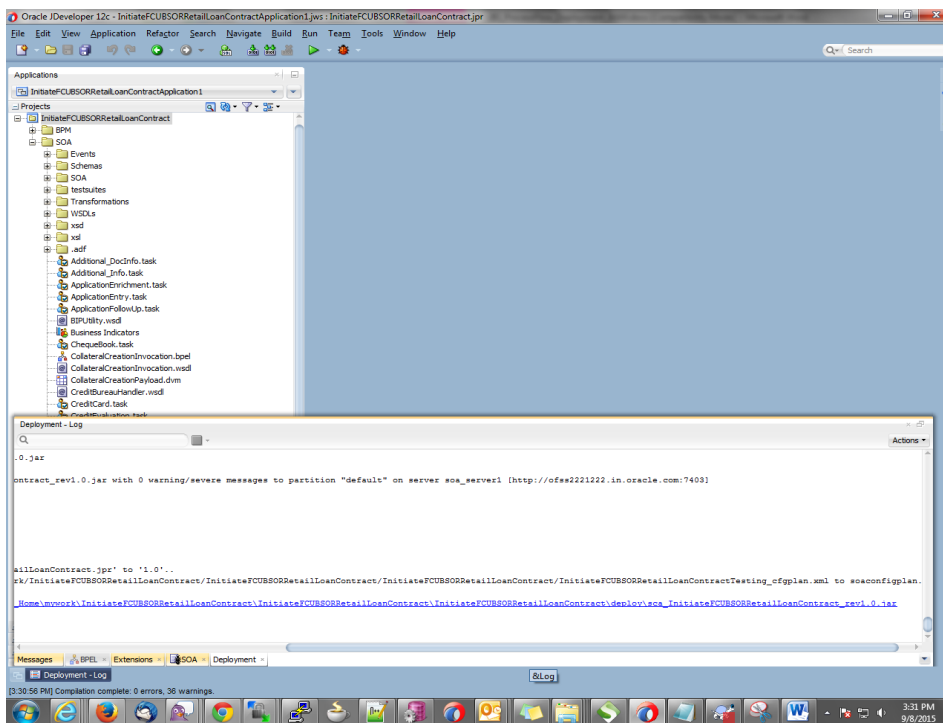
- Review the deployment summary screen



- Click “Finish” to proceed with the deployment.



- Review the deployment log
- It shows the folder onto which the SAR file is written.



- Login to the enterprise manager console.
- Login to <http://<hostname>:<port>/em>



Domain Domain\_soa\_domain

\* User Name

\* Password

ORACLE

Copyright © 1996, 2015, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

- After logging in from the left pane - Expand 'SOA'
- Right click on soa-infra
- Choose SOA Deployment -> and click "Deploy" option.

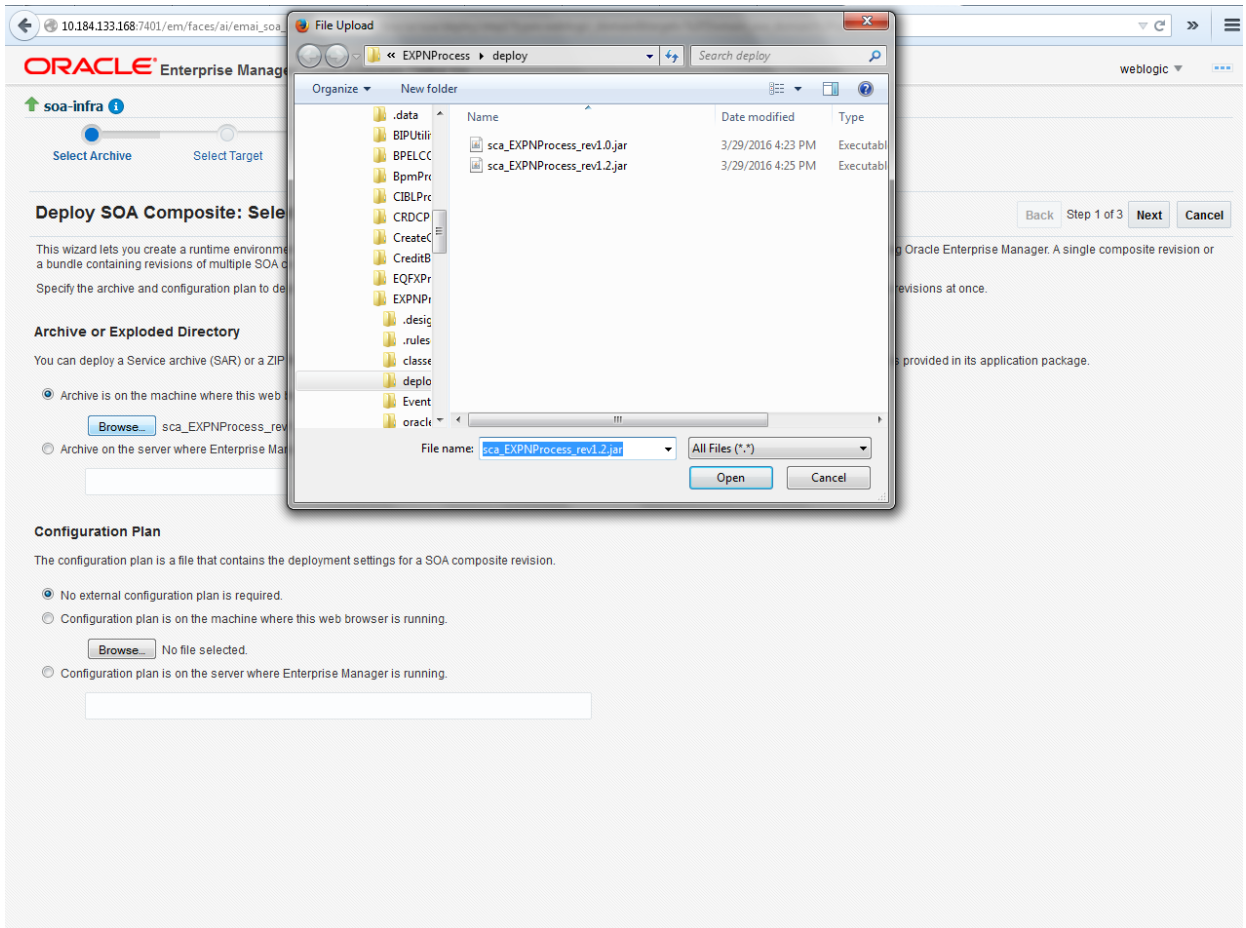
The screenshot shows the Oracle Enterprise Manager Fusion Middleware Control 12c interface. On the left, the 'Target Navigation' pane is open, showing a tree view with 'SOA' selected. A context menu is displayed over the 'SOA' node, with options: Home, Monitoring, Logs, SOA Deployment, Manage Partitions, Work Manager Groups, Resequencing Groups, Service Engines, Bindings [1.0], Services and References, Business Events, SOA Administration, Security, Administration, Target Sitemap, and Target Information. The 'SOA Deployment' option is highlighted, and a sub-menu is open showing 'Deploy...', 'Undeploy...', and 'Redeploy...'. The 'Deploy...' option is selected.

The main area displays the 'Server' details for 'AdminServer'. The host is 'ofss220216.in.oracle.com' and the listen port is 7401. Below this is a table showing the status of the server components:

	Status	Cluster	Machine	State	Health	Listen Port	CPU U
admin)	↑			Running	OK	7401	
	↑		new_Machine_1	Running	OK	7404	
	↑		new_Machine_1	Running	OK	7403	

At the bottom of the table, it indicates 'Columns Hidden 33' and 'Servers 3 of 3'.

- Select the 'SAR' archive
- Select the deployment plan with which the application needs to be deployed as illustrated in the screen shot.



- Click on 'Next' to proceed with the deployment.

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

↑ soa-infra ⓘ

Select Archive    **Select Target**    Confirmation

---

**Deploy SOA Composite: Select Target** ⓘ Back Step 2 of 3 Next Cancel

**WebLogic Server or Cluster**

Based on the context from which you launched this wizard, the selected composite will be deployed to the WebLogic server or cluster shown below. If you wish to deploy to a different target, click Cancel to exit this wizard, navigate to a different WebLogic server or cluster or to the WebLogic Domain, and select Deploy again.

Deployment Target [/Domain\\_soa\\_domain/soa\\_domain/soa\\_server1](#)

Type Oracle WebLogic Server

**Token Configurations**

As a good practice, configure the global token variables referenced by this composite before deploying it. Else the composite may not run properly, once it is deployed. Global token variables are used to resolve environment specific URIs when a composite is moved to another environment. Before starting the deployment operation, ensure that all the tokens referenced by the selected composite are configured. The Token Configurations page can be found in the SOA Administration section of the SOA Infrastructure target menu. [\[More Info...\]](#)

**SOA Partition**

Partitions are logical groupings of composites that help you manage large deployments. The selected composite will be deployed to the partition shown below. If you wish to deploy to a different partition, select it from the list below.

default ▾

- Select default partition.
- Select the default revision option if this deployment needs to be the default one

ORACLE Enterprise Manager Fusion Middleware Control 12c weblogic ▾

soa-infra

Select Archive    Select Target    Confirmation

---

**Deploy SOA Composite: Confirmation** Back Step 3 of 3 Next Deploy Cancel

You are deploying the following SOA composite revision. Click "Deploy" to continue or click "Cancel" to cancel this operation.

Composite Name	EXPNProcess
Composite Revision	1.2
Archive Location	sca_EXPNProcess_rev1.2.jar
Configuration Plan	No external plan specified
Deployment Target	/Domain_soa_domain/soa_domain/soa_server1
SOA Partition	default

**Default Revision**

The above revision will be deployed as the new default revision of the composite. If you wish to keep the current default version, please choose the "Do not change" option below. You can set a different default revision later at any time in the Deployed Composites page that can be accessed from the SOA Infrastructure target menu.

Deploy as default revision  
 Do not change the default revision

- Click on "Deploy" to complete the deployment

ORACLE® Enterprise Manager Fusion Middleware Control 12c weblogic ▾

soa-infra

Select Archive    Select Target    **Confirmation**

**Deploy SOA Composite: Confirmation** Back Step 3 of 3 Next Deploy Cancel

You are deploying the following SOA composite revision. Click "Deploy" to continue or click "Cancel" to cancel this operation.

Composite Name    EXPNProcess  
 Composite Revision    1.2  
 Archive Location    sca\_EXPNProcess\_rev1.2.jar  
 Configuration Plan    No external plan specified  
 Deployment Target    /Domain\_soa\_domain/soa\_dom...  
 SOA Partition    default

**Default Revision**

The above revision will be deployed as the new default revision of the any time in the Deployed Composites page that can be accessed from

Deploy as default revision  
 Do not change the default revision

**Deployment Succeeded**

Composite "EXPNProcess [1.2]" has been successfully deployed.

**Summary**

Deployment Target    /Domain\_soa\_domain/soa\_domain/soa\_server1  
 Archive Name    sca\_EXPNProcess\_rev1.2.jar

Close

not change" option below. You can set a different default revision later at

ORACLE Enterprise Manager Fusion Middleware Control 12c

WebLogic Domain SOA Infrastructure weblogic

Mar 29, 2016 4:30:11 PM IST

### Target Navigation

View

- EXPNProcess [1.2]
  - ExportLCConfirmation [1.0]
  - ExportLCProcessFlow [1.0]
  - ExportLCProcessFlow [1.1]
  - ExportLCProcessFlow [4.0]
  - ExternalValuation [6.0]
  - ImportLCProcessFlow [1.0]
  - ImportLCProcessFlow [1.1]
  - ImportLCProcessFlow [4.0]
  - InitiateCorpIjarahContract [1.0]
  - InitiateCorpIjarahContractService [1.0]
  - InitiateCorpIjarahContractService [1.1]
  - InitiateCorpIslamicContract [1.0]
  - InitiateCorpIstisnaContract [1.0]
  - InitiateCorpIstisnaContractService [1.0]
  - InitiateCorpIstisnaContractService [1.1]
  - InitiateCorpMudharabaContract [1.0]
  - InitiateCorpMudharabaContractService [1.0]
  - InitiateCorpMurabahContract [1.0]
  - InitiateCorpMurabahContractService [1.0]
  - InitiateCorpMusharakaContract [1.0]
  - InitiateCorpMusharakaContractService [1.0]
  - InitiateCorpTawarooqContract [1.0]
  - InitiateCorpTawarooqContractService [1.0]
  - InitiateKYCCheck [1.0]
  - InitiateKYCCheckFCUBSORService [1.0]
  - InitiateRetailLoanContractFCUBSORService [1.0]
  - InitiateRiskEvaluationFCUBSORService [1.0]
  - InPrincipleCreditApproval [1.0]
  - IslamicIjarahAccount [1.0]

Tests Policies

		Component Type		
		BPEL		
Type	Usage	Total Messages	Average Processing Time (sec)	
Web Service	Service	0	0.000	
Web Service	Reference	0	0.000	

- Check the deployed process from the enterprise manager console



### Target Navigation

View ▾

- Application Deployments
  - SOA
    - soa-infra (soa\_server1)
      - default
        - AMLChecks [1.0]
        - AMLChecks [1.1]
        - BIPUtility [1.0]
        - BIPUtility [1.1]
        - BIPUtility [1.3]
        - BIPUtility [1.4]
        - BIPUtility [1.5]
        - BPPELLCOLLATProcess [1.0]
        - BPPELLRPClosureProcess [1.0]
        - BPPELLCRPPProcess [1.0]
        - bpelcmprocess [1.0]
        - BPPELLimitReview [1.0]
        - CIBLProcess [1.0]
        - CIBLProcess [1.1]
        - COLLATProcess [1.0]
        - CorporateLending [1.0]
        - CovenantPoller [1.0]
        - CRDCProcess [1.0]
        - CRDCProcess [1.1]
        - CreateCorporateCustomer [2.0]
        - CreateCorporateCustomer [3.0]
        - CreateCorporateCustomer [3.1]
        - CreditBureauHandler [1.0]
        - DBUtility [1.0]
        - DBUtility [1.1]

Tests Policies

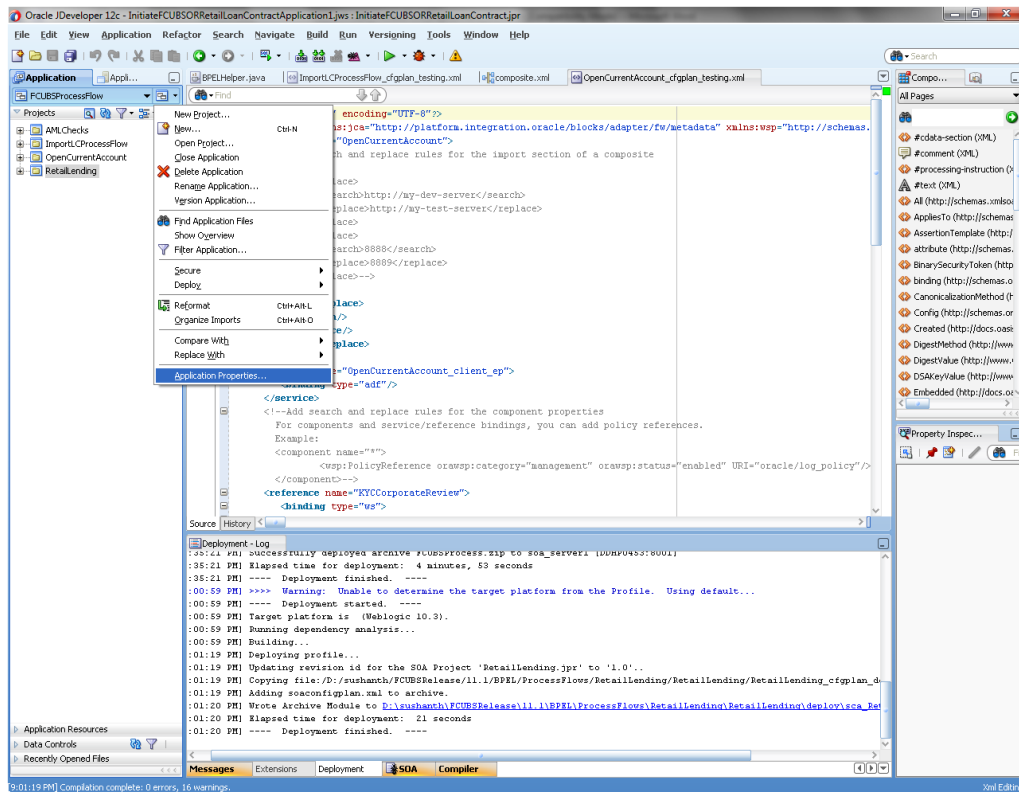
## 8. Deploying Multiple Composite application using JDeveloper

### 8.1 Introduction

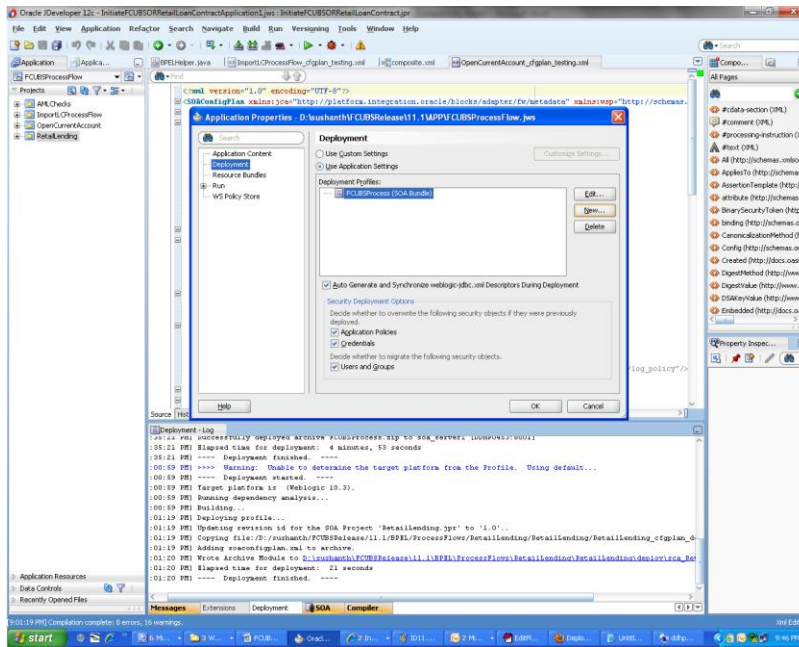
This section describes how to deploy a multiple SOA composite application with Oracle JDeveloper after completing updating of config plans with respective target environment replacement values.

### 8.2 Creating the Deployment Profile

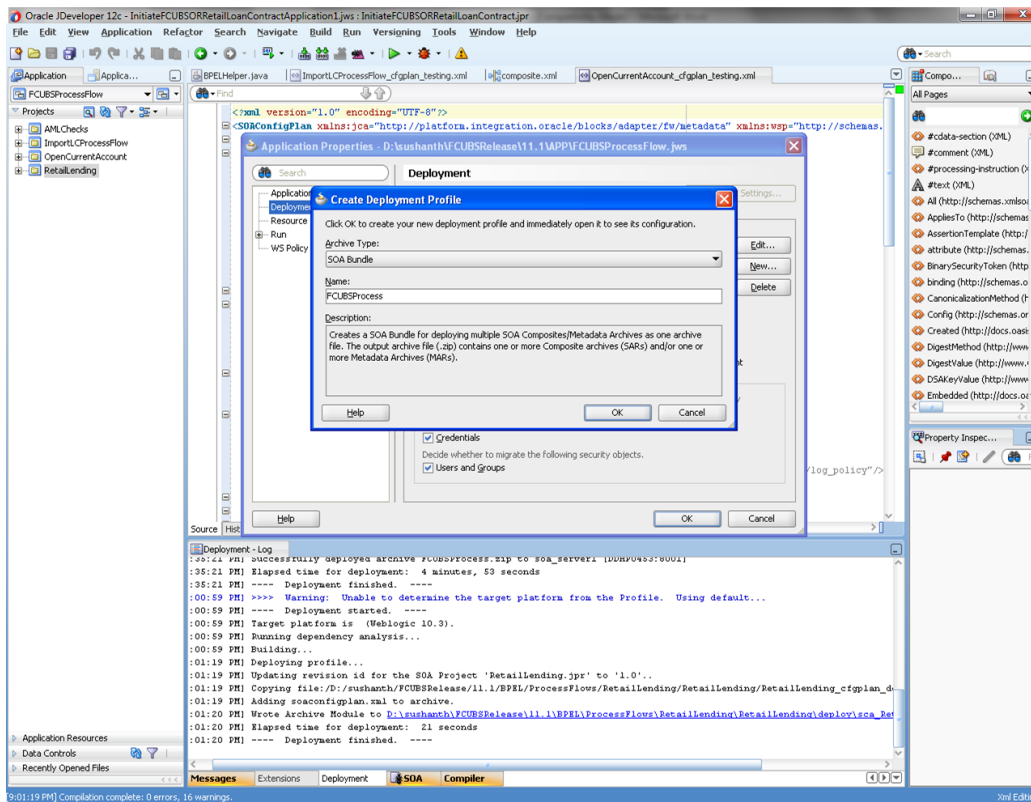
- From the application menu select 'Application Properties' as illustrated in the screen shot.



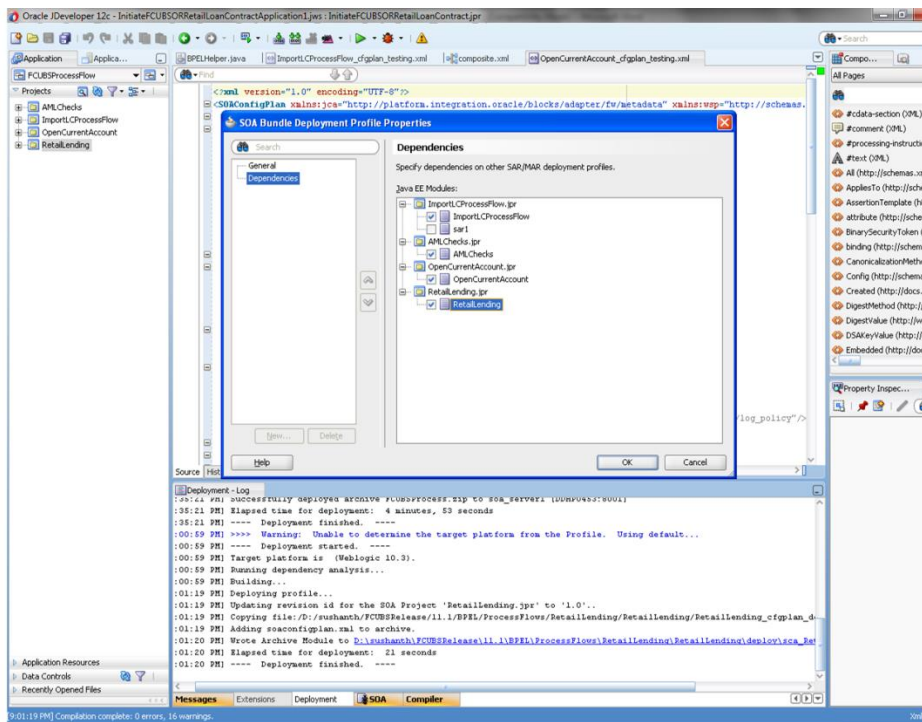
- In the Application Properties dialog, click Deployment.
- Click New.



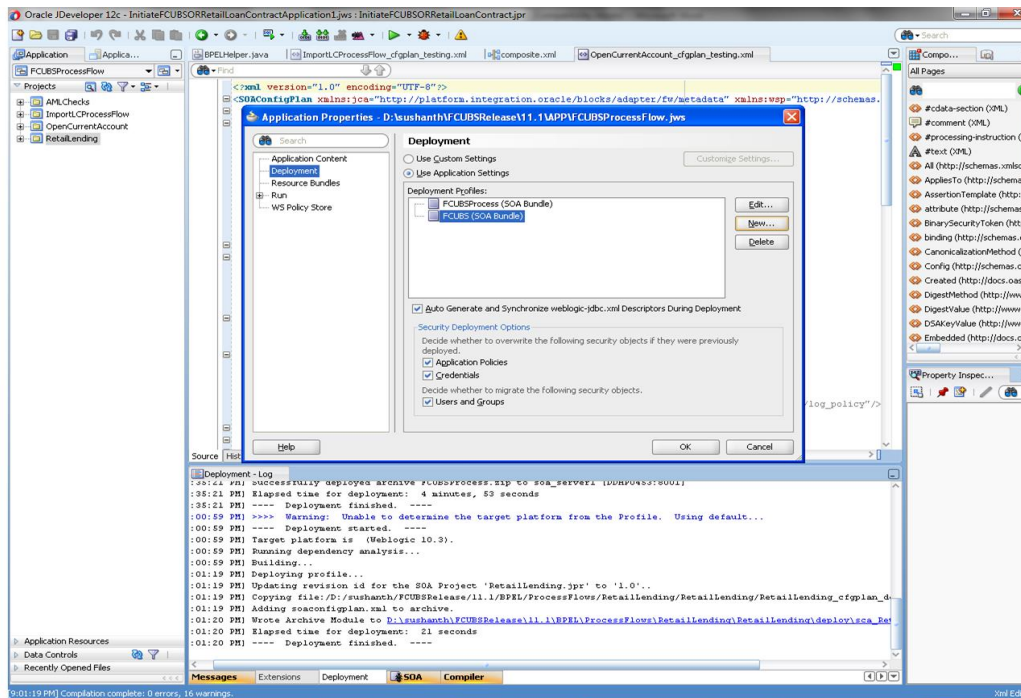
- The Create Deployment Profile dialog appears.
- In the Archive Type list, select SOA Bundle.
- In the Name field, enter a name and click 'OK'.



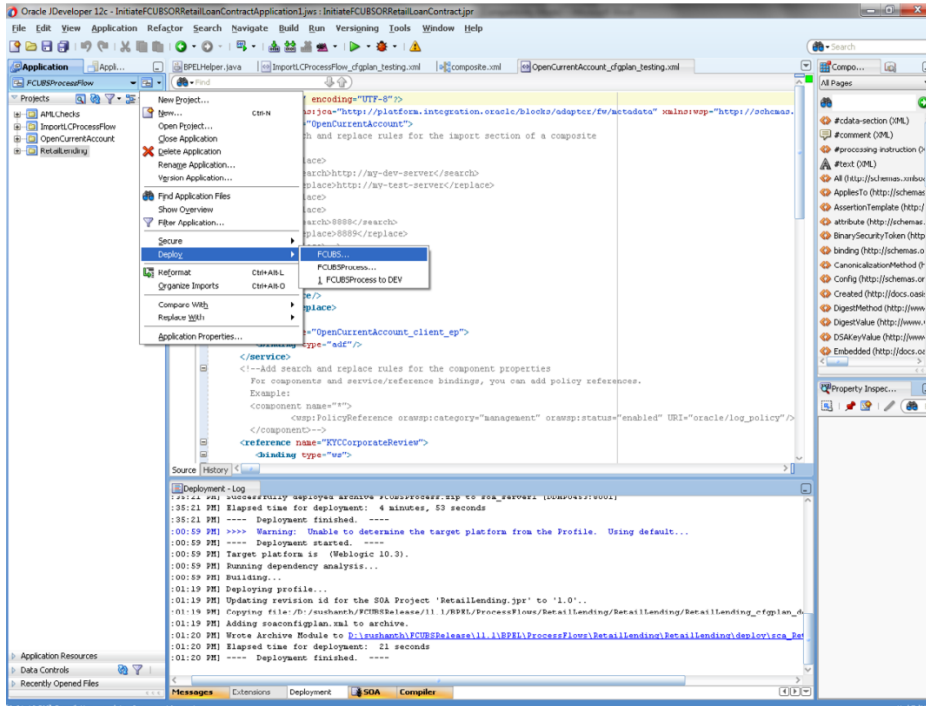
- In the navigator on the left, select the Dependencies node.
- Select the SARs you want to include in this bundle, as illustrated in the screen shot
- Click OK.



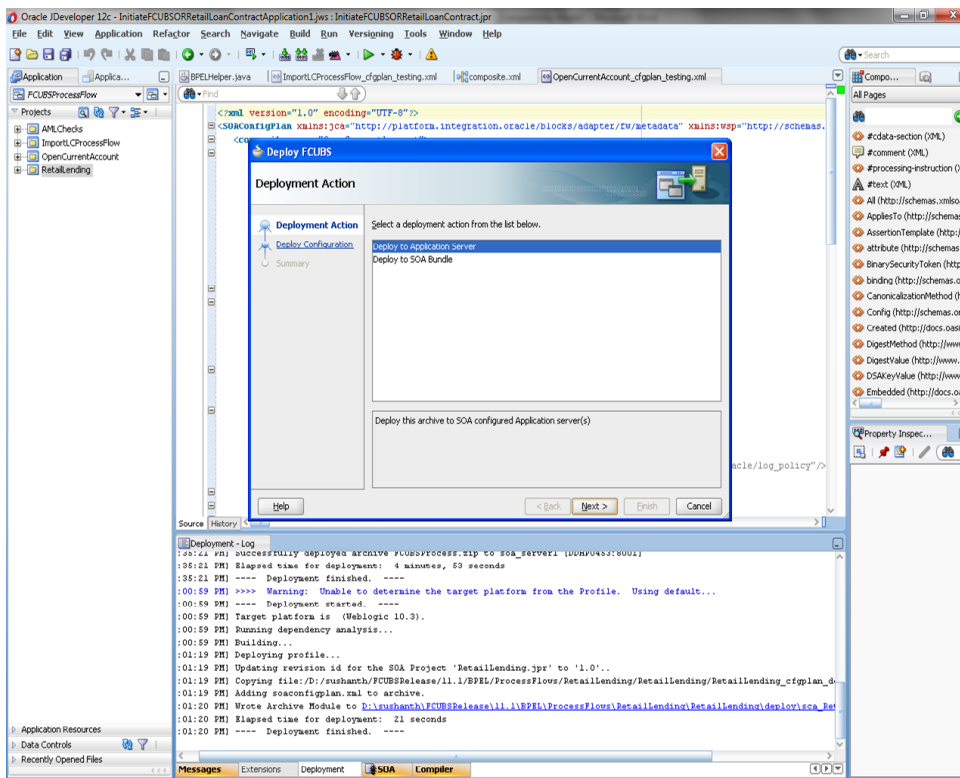
- Click OK to close the Application Properties dialog.



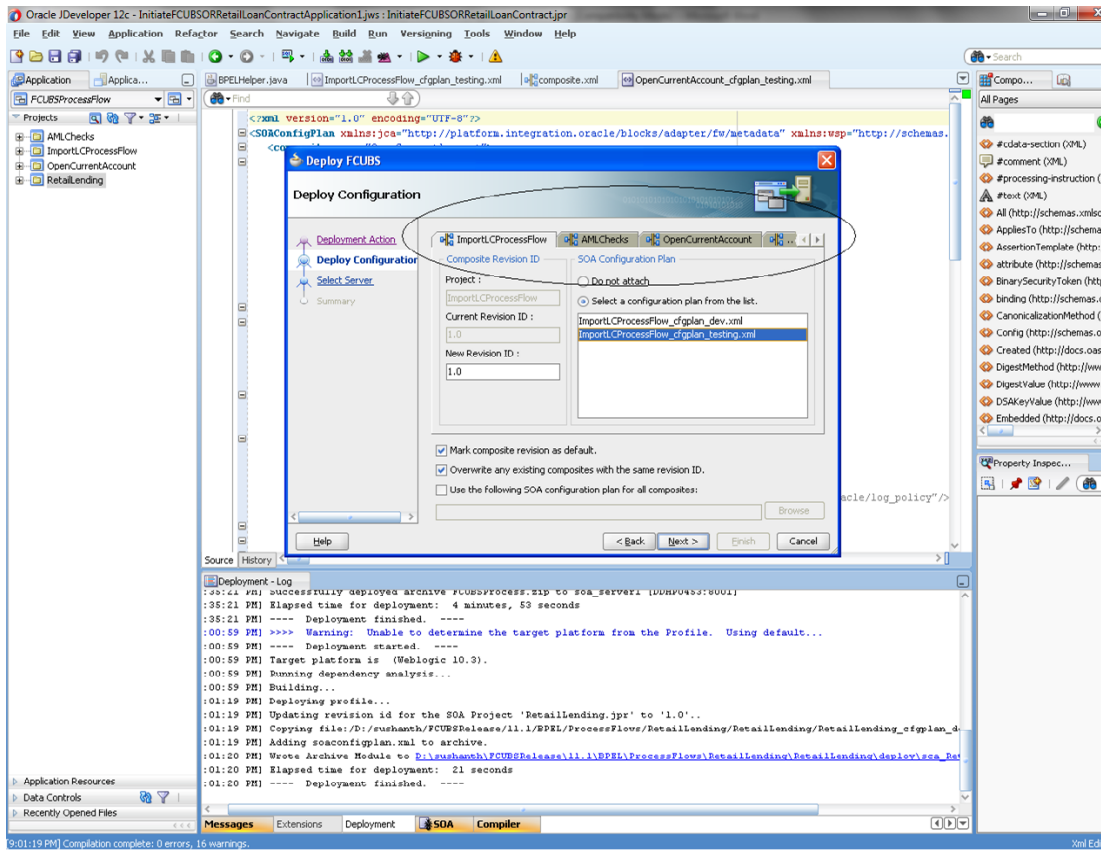
- Select the Application menu again, then select Deploy > SOA\_bundle\_name



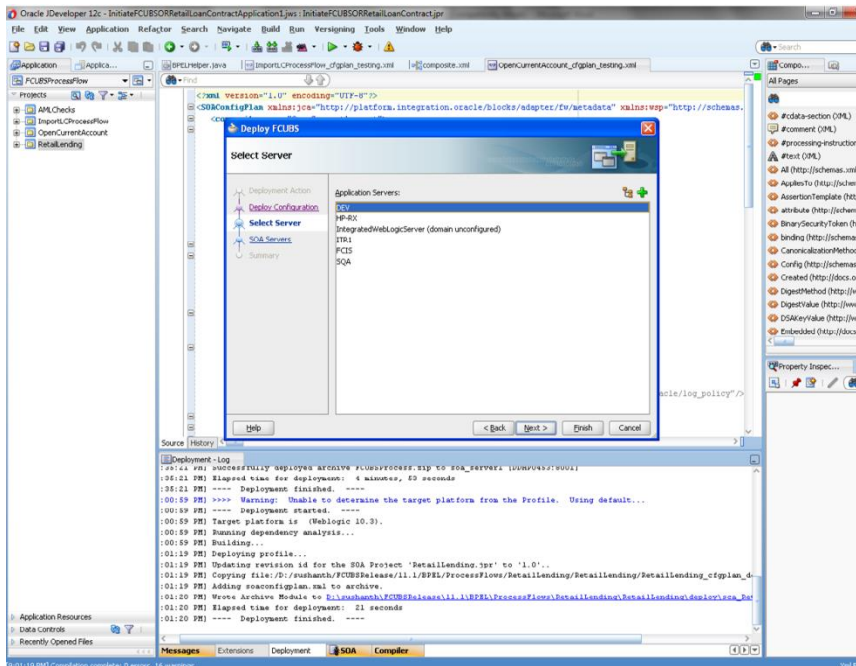
- Deployment screen is launched , Select 'Deploy to Application Server'



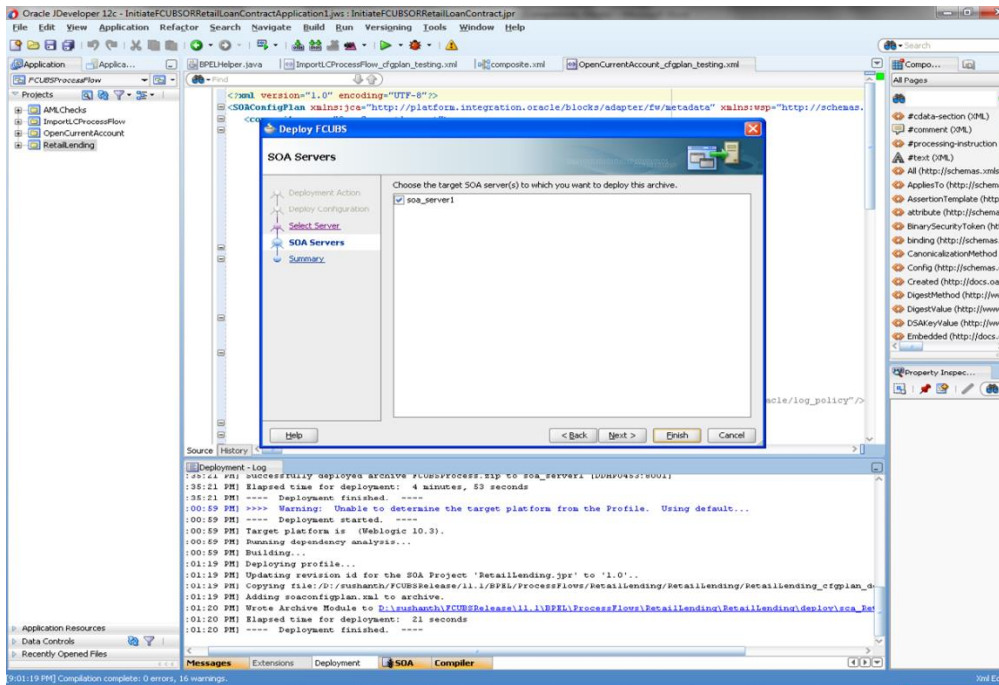
- Deployment configuration is done as illustrated in the below screen shot for each application which is displayed in the tab, application navigation can be done using the pointer provided at the end of the tab.
- Select a Revision with which the deployment should happen
- Select a " Configuration Plan" that was updated as given in Section 5
- Remember to check both the checkboxes
- "Mark composite revision as 'default"
- "Overwrite any existing composites with the same revision ID"
- After all the applications are configured Click "Next" to proceed with the deployment.



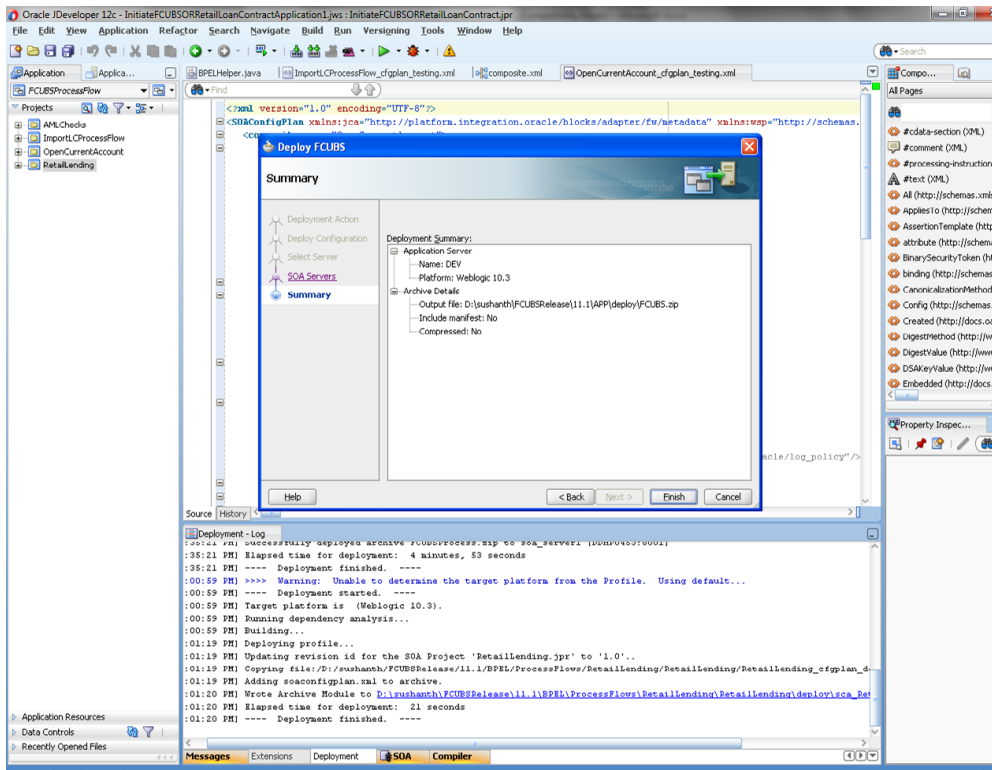
- Select the Application server 'Server Connection' configured that was done in Section 3 to which the deployment needs to be done
- Click 'Next' to proceed with the deployment.



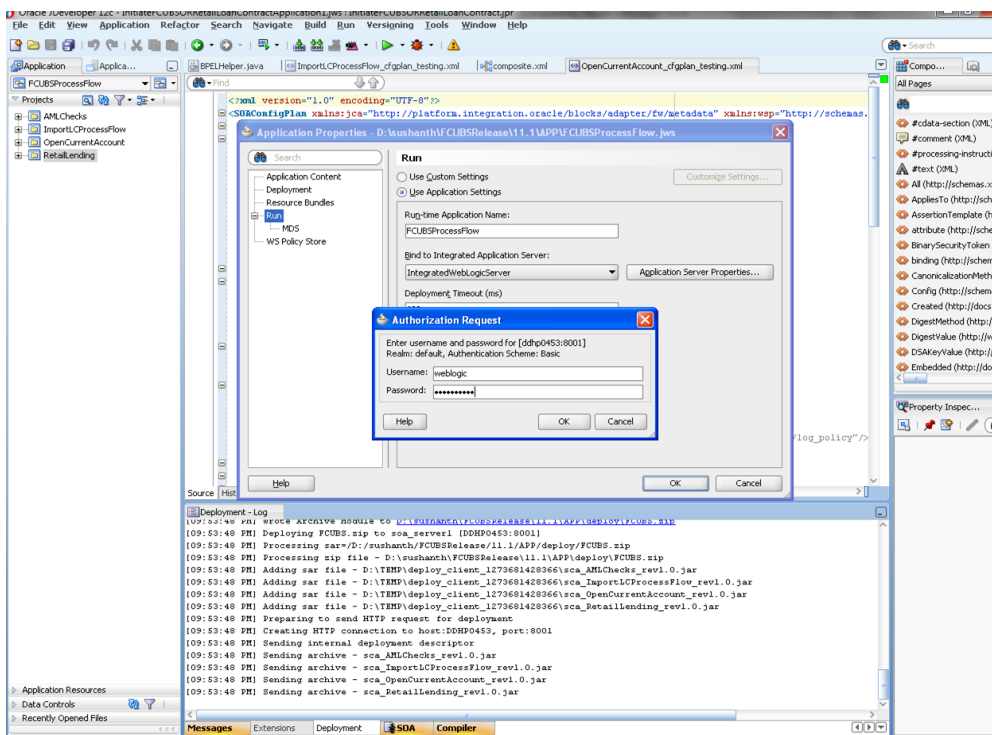
- Select the Application 'server' to which the deployment needs to be done.



- View the summary of the deployment details and click 'Finish' to complete the deployment.

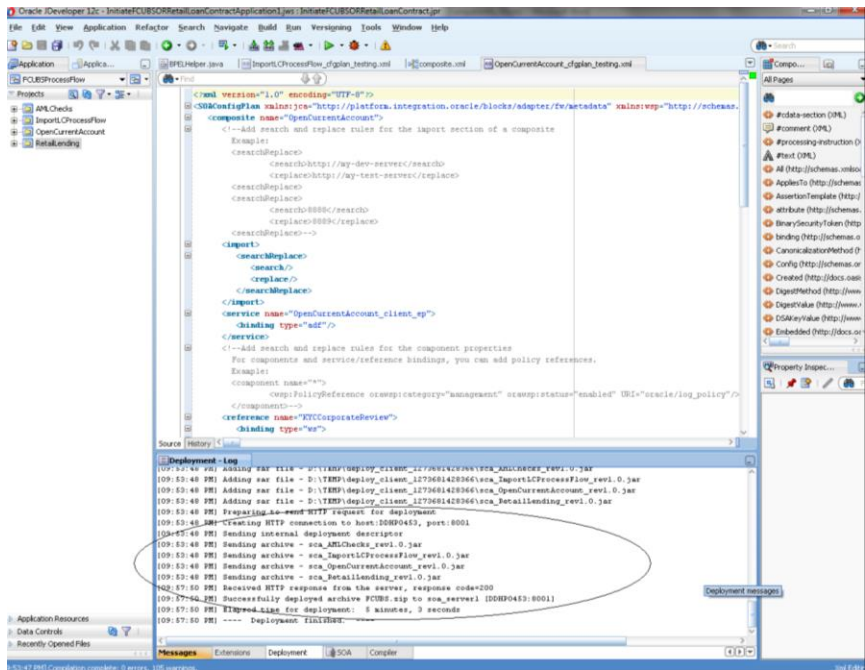


- If the server prompts for username / password provide the credentials for the server.

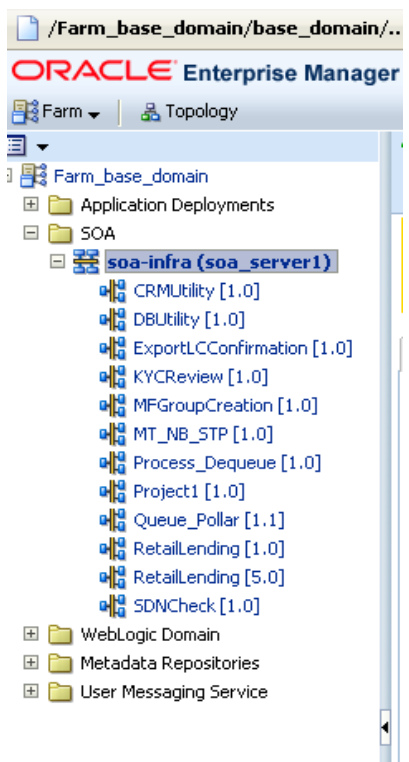


- The deployment status can be verified in the deployment status Log window.





- The deployed process can be verified by checking if the process is showing up in the SOA Suite enterprise manager console.
- Login to <http://<hostname>:<port>/em>
- Expand SOA ->soa-infra and view all deployed applications



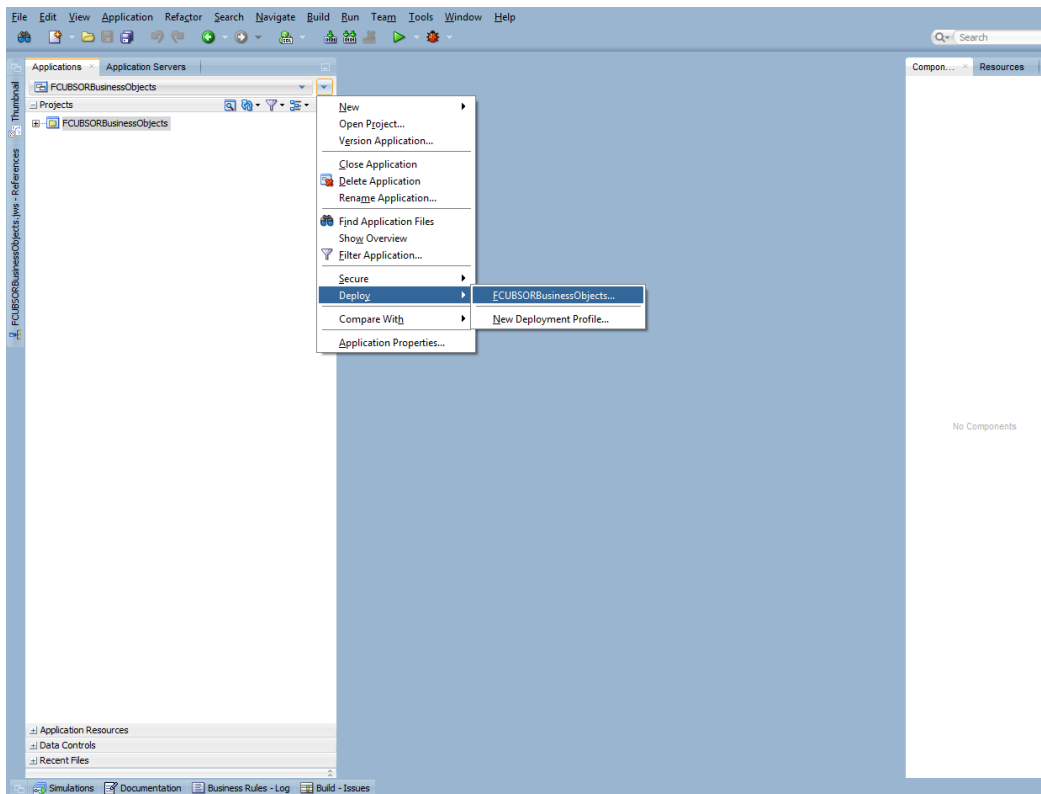
## 9. Deploying MDS application using JDeveloper

### 9.1 Introduction

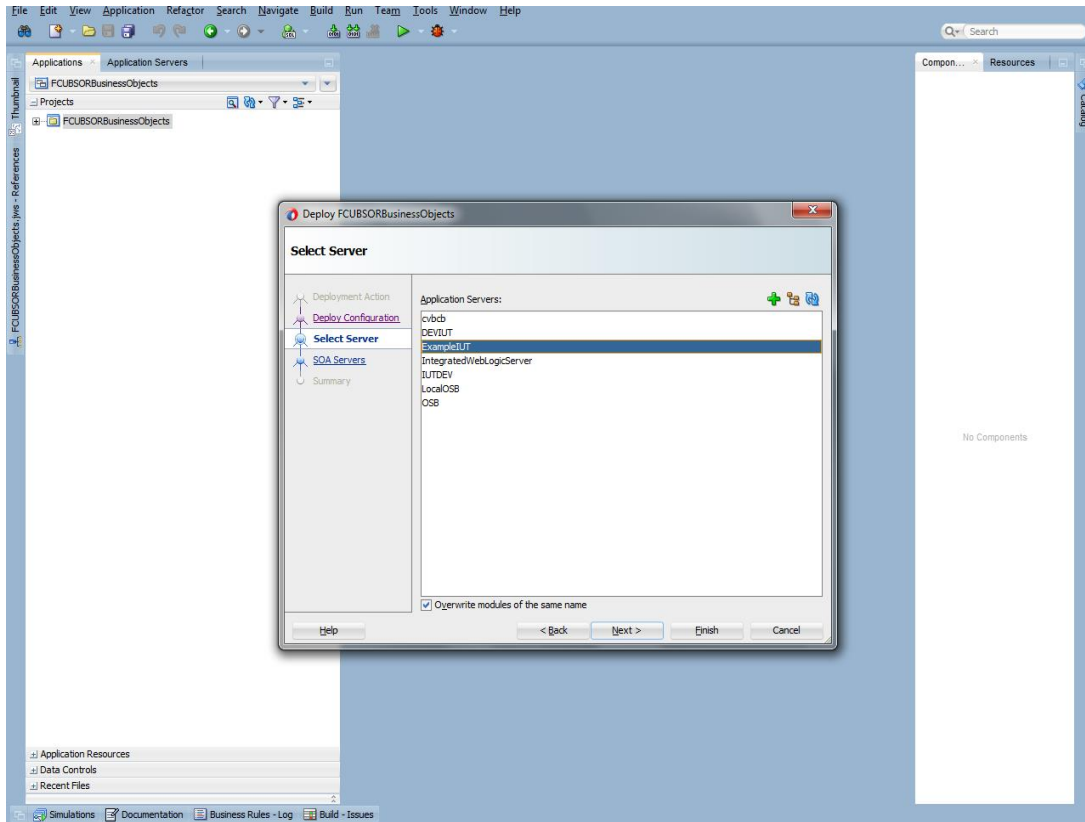
This section describes how to deploy a MDS application with Oracle JDeveloper with respective target environment.

### 9.2 Deploying the Application

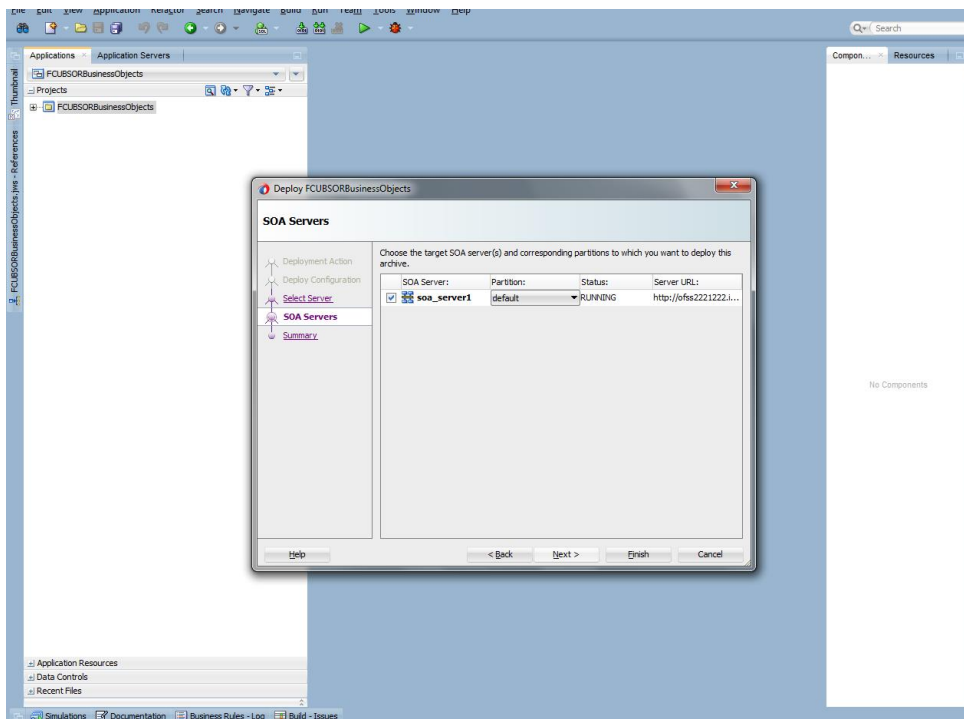
- Load the MDS Application(FCUBSORBusinessObjects,FCUBSORServiceObjects) in JDeveloper
- Right click on the “Application” tab in the JDeveloper
- Select ‘Deploy’ and then click on the default deployment profile which is the same as the application name.
- This will result in the deployment wizard screen being launched.

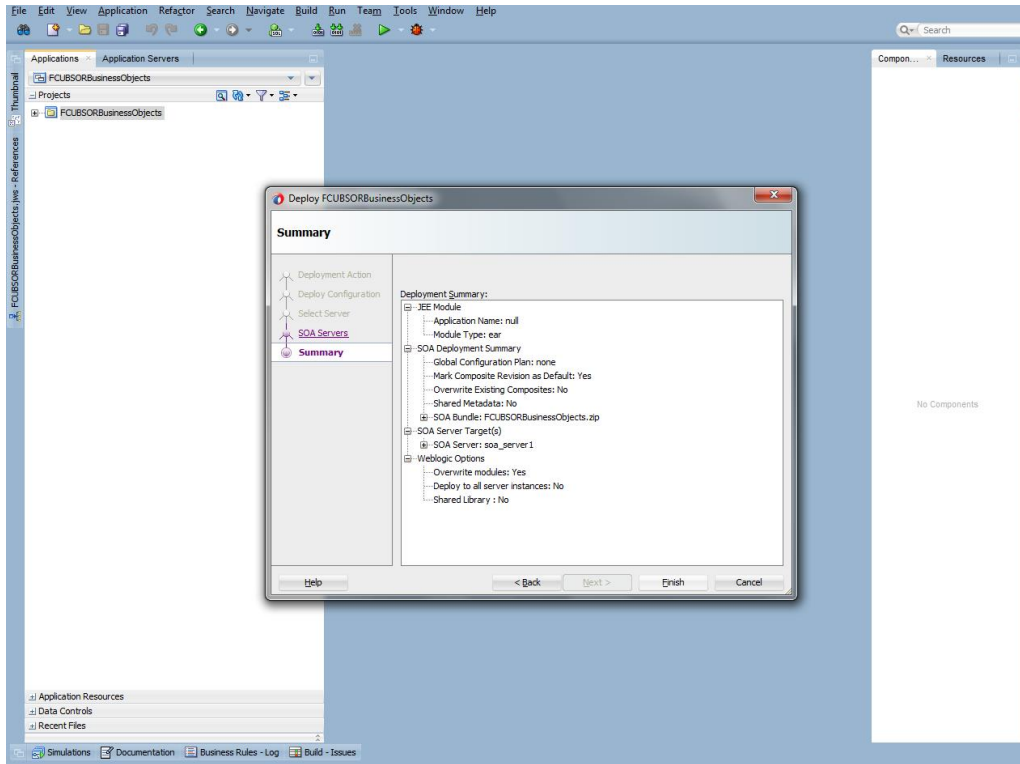


- In deployment action screen choose Deploy to Application Server.
- Click Next→Next to proceed with deployment.
- Select the Application Server to which the MDS Application Needs to Deploy.

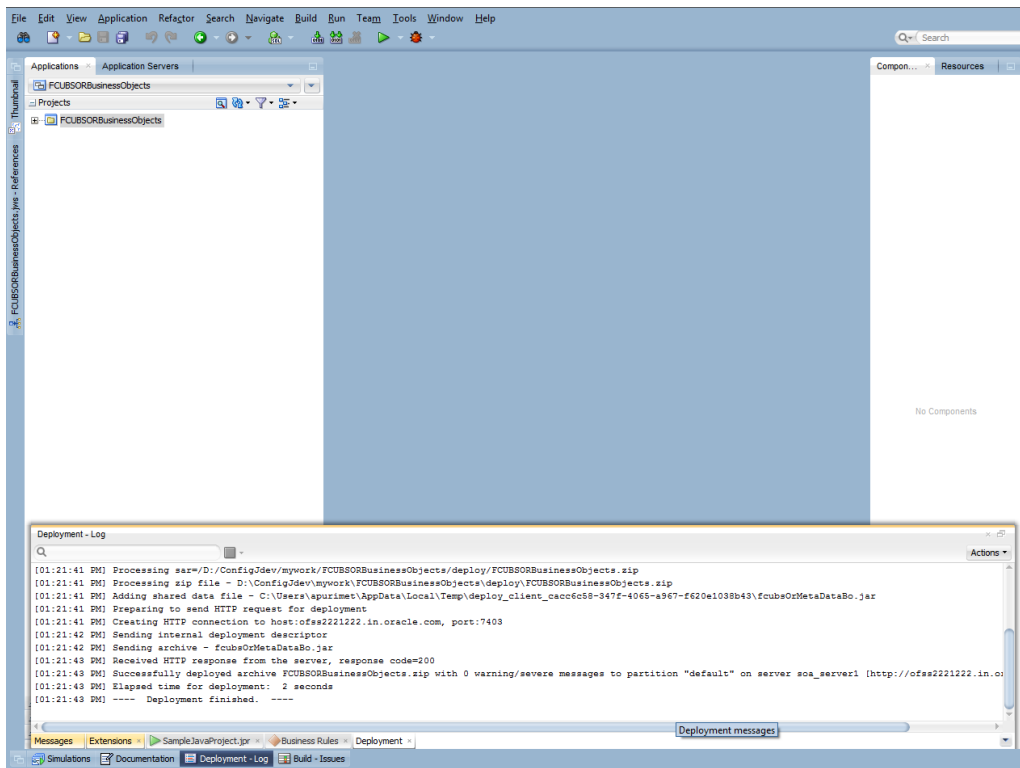


- Click Next and Finish buttons on the deployment wizard after selecting application server.





- Review the deployment log to see successfully deployed message as below



# 10. Deployment and configuration of Oracle BAM Reports

- 1) Login to console <http://hostname:port/console>
- 2) Click on Data sources.

The screenshot displays the Oracle BAM console interface. On the left, there is a navigation tree for 'soa\_domain' with sub-items: Domain Partitions, Environment, Deployments, Services, Security Realms, Interoperability, and Diagnostics. Below the tree are three panels: 'View changes and restarts' (notifying that configuration editing is enabled), 'How do I...' (listing tasks like searching configuration and recording WLST scripts), and 'System Status' (showing 'Health of Running Servers' with 3 OK, 0 Warning, 0 Overloaded, 0 Critical, and 0 Failed). The main content area is titled 'Home > Summary of Servers > Summary of Deployments' and features a 'Home Page' section with 'Information and Resources' (Helpful Tools and General Information), 'Domain Configurations' (Domain, Domain Partitions, Environment), and 'Services' (Messaging, JMS Servers, Store-and-Forward Agents, JMS Modules, Path Services, Bridges, Data Sources, Persistent Stores, XML Registries, XML Entity Caches, Foreign JNDI Providers, Work Contexts, JCOM, Mail Sessions, FileT3, JTA, OSGI Frameworks). Other sections include 'Resource Group Templates', 'Resource Groups', 'Deployed Resources', 'Interoperability', 'Diagnostics', and 'Charts and Graphs' (Monitoring Dashboard).

3) Click on the SOAData source.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area displays the 'Summary of JDBC Data Sources' page. On the left, there are navigation panels for 'Change Center', 'Domain Structure', 'How do I...', and 'System Status'. The 'Domain Structure' panel shows a tree view with 'soa\_domain' expanded. The 'System Status' panel shows 'Health of Running Servers' with 3 OK, 0 Warning, 0 Overloaded, 0 Critical, and 0 Failed. The main content area has a breadcrumb trail: 'Home > Summary of Servers > Summary of Deployments > Summary of JDBC Data Sources'. Below the breadcrumb, there are tabs for 'Configuration' and 'Monitoring'. A descriptive paragraph explains that a JDBC data source is an object bound to the JNDI tree that provides database connectivity. Below this, there is a 'Customize this table' link and a table titled 'Data Sources (Filtered - More Columns Exist)'. The table has columns for Name, Type, JNDI Name, Targets, Scope, and Domain Partitions. The 'SOADataSource' row is highlighted in blue. At the bottom of the console, there is a footer with version information: 'WebLogic Server Version: 12.2.1.0.0 Copyright (c) 1996, 2015, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.'

ORACLE WebLogic Server Administration Console 12c

Home Log Out Preferences Record Help Welcome, weblogic Connected to: soa\_domain

Home > Summary of Servers > Summary of Deployments > Summary of JDBC Data Sources

Summary of JDBC Data Sources

Configuration Monitoring

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

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

Customize this table

Data Sources (Filtered - More Columns Exist)

New Delete Showing 11 to 20 of 20 Previous Next

Name	Type	JNDI Name	Targets	Scope	Domain Partitions
LocalSvcTbdDataSource	Generic	jdbc/LocalSvcTbdDataSource	AdminServer	Global	
mds-bam	Generic	jdbc/mds/beamComposer	AdminServer, bam_server1	Global	
mds-owsm	Generic	jdbc/mds/owsm	AdminServer, bam_server1, soa_server1	Global	
mds-soa	Generic	jdbc/mds/MDS_LocalTxDataSource	AdminServer, soa_server1	Global	
opss-audit-DBDS	Generic	jdbc/AuditAppendDataSource	AdminServer, bam_server1, soa_server1	Global	
opss-audit-viewDS	Generic	jdbc/AuditViewDataSource	AdminServer, bam_server1, soa_server1	Global	
opss-data-source	Generic	jdbc/OpssDataSource	AdminServer, bam_server1, soa_server1	Global	
OrasDPMDataSource	Generic	jdbc/OrasDPMDataSource	bam_server1, soa_server1	Global	
SOADataSource	Generic	jdbc/SOADataSource	bam_server1, soa_server1	Global	
SOALocalTxDataSource	Generic	jdbc/SOALocalTxDataSource	soa_server1	Global	

New Delete Showing 11 to 20 of 20 Previous Next

WebLogic Server Version: 12.2.1.0.0  
Copyright (c) 1996, 2015, Oracle and/or its affiliates. All rights reserved.  
Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

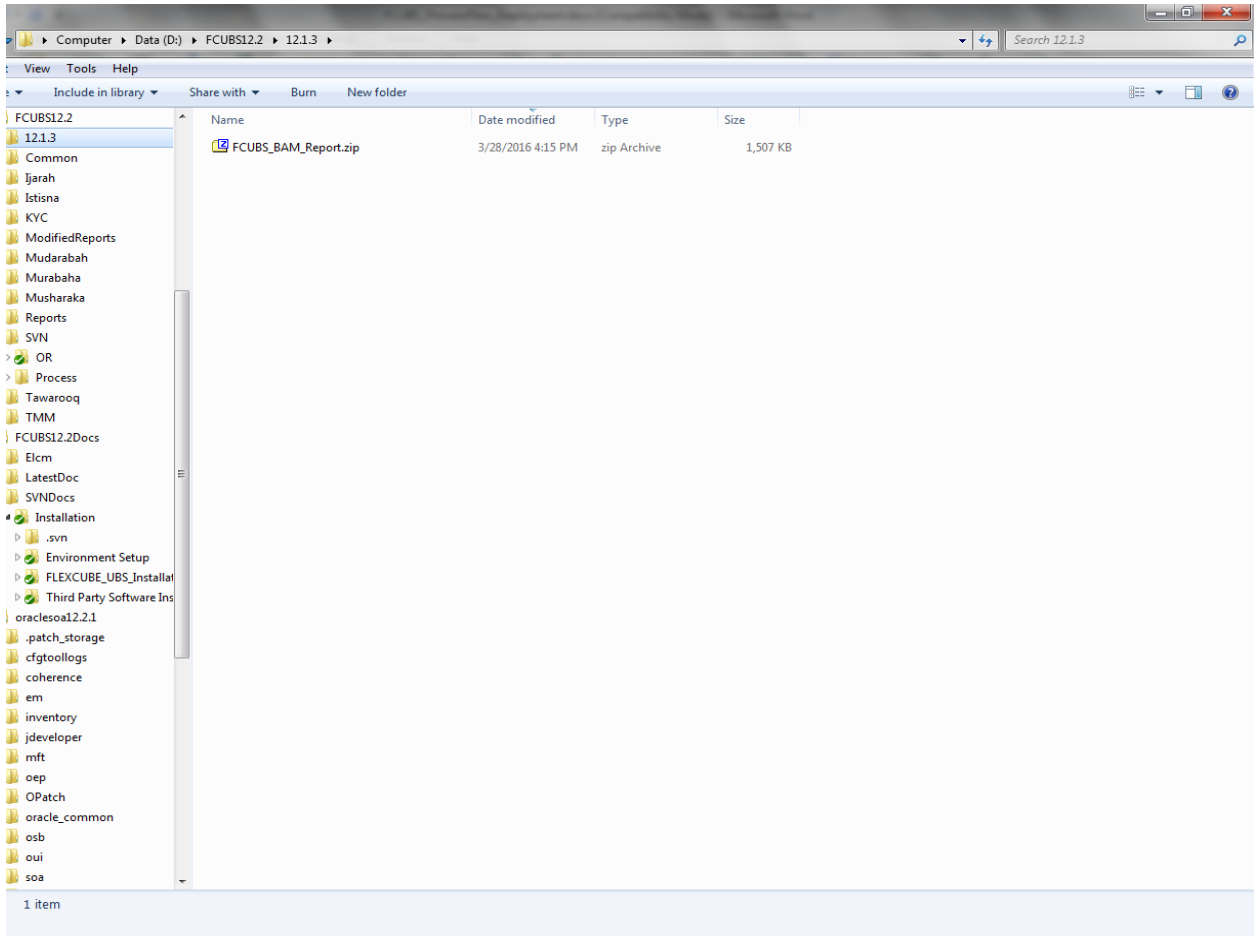
4) Click on Target tabs → Select bam\_server check box → Click Save

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main content area is titled "Settings for SOADataSource" and has several tabs: "Configuration", "Targets", "Monitoring", "Control", "Security", and "Notes". The "Targets" tab is currently selected. Below the tabs, there is a "Save" button. A message states: "This page allows you to select the servers or clusters on which you would like to deploy this JDBC data source." Below this message is a table with the following content:

Servers	
<input type="checkbox"/>	AdminServer
<input checked="" type="checkbox"/>	bam_server1
<input checked="" type="checkbox"/>	soa_server1

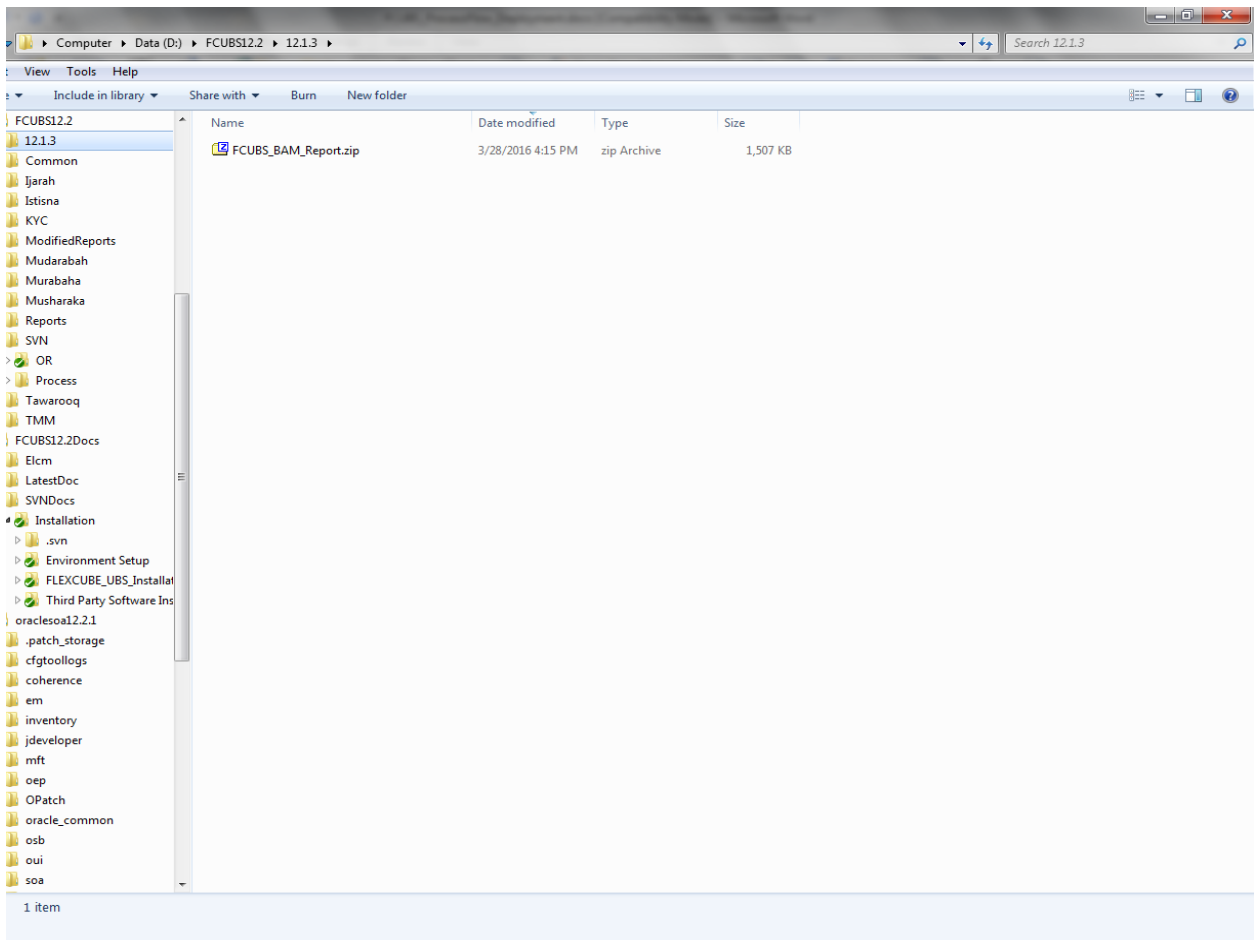
Below the table, there is another "Save" button. On the left side of the console, there are several panels: "Change Center" (with a "View changes and restarts" link), "Domain Structure" (showing a tree view of the domain), "How do I..." (with a link to "Target JDBC data sources"), and "System Status" (showing the health of running servers: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (3)). The footer of the console contains version information: "WebLogic Server Version: 12.2.1.0.0" and copyright information.

- 5) Copy the FCUBS\_BAM\_Report.zip project from SVN (/SOFT/MAIN/OR/Process\_infra/Reports/BAM) to your local system.





- 6) Open the FCUBS\_BAM\_Report.zip →Dataobject →Update the Schema element with the SOA\_INFRA schema name for Wftask\_Different\_Stages.xml, CUBE\_INSTANCE.xml,FCUBSDATAOBJECTS.xml files .



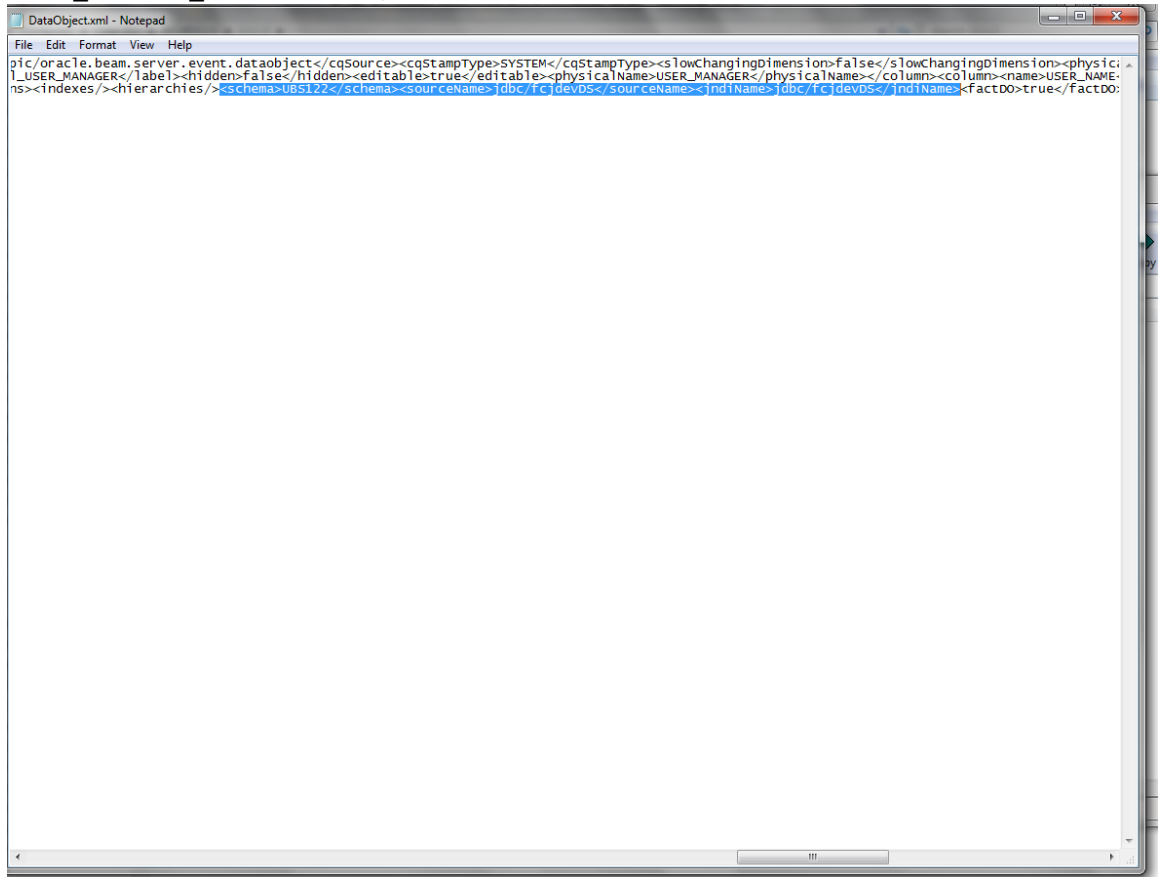
```
DataObject.xml - Notepad
FCUBS Process Flow Development - [Case: Activity Model] - Microsoft Word

File Edit Format View Help

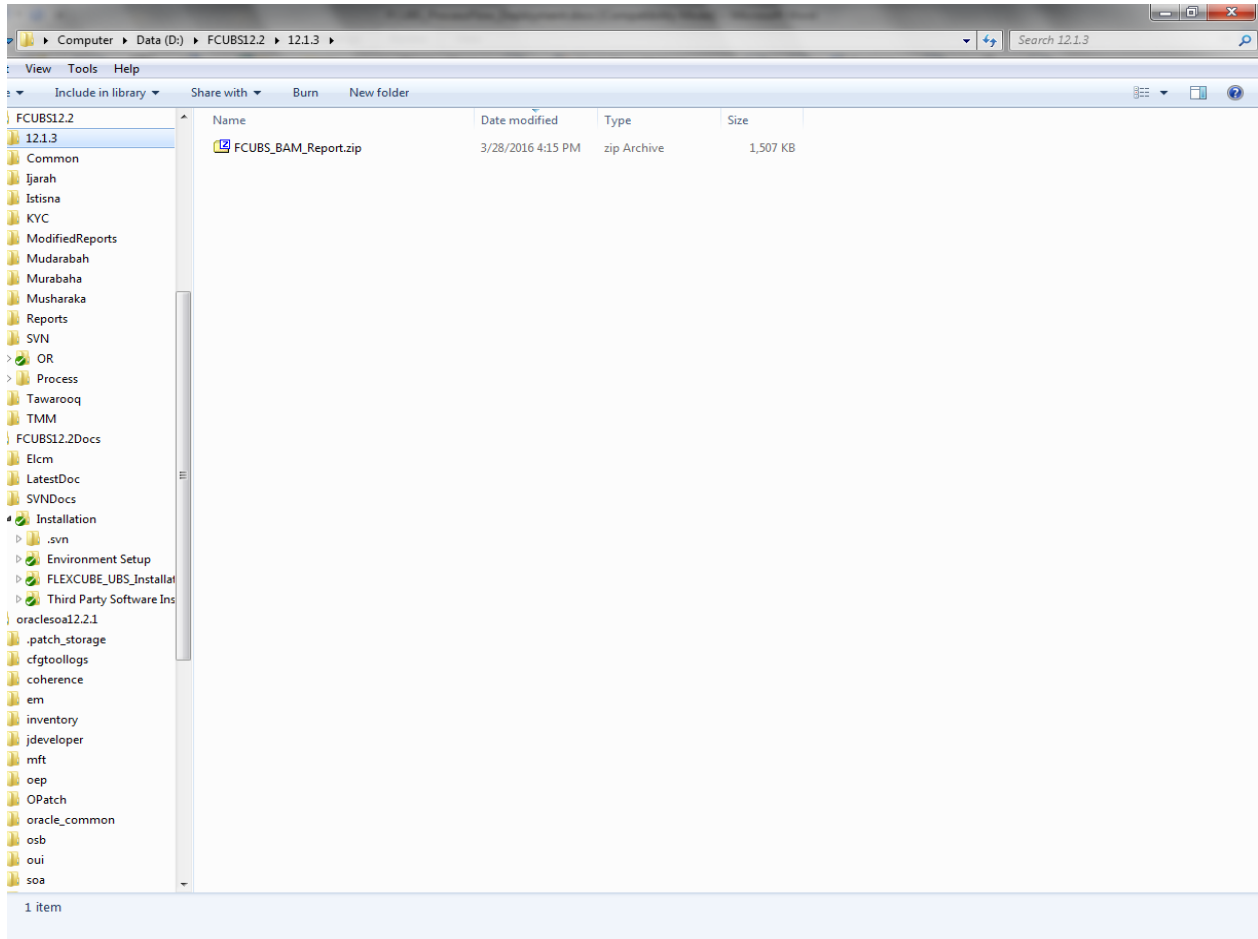
managed<length>500</length><nullable>true</nullable><unique>false</unique><precision>38</precision><scale>10</scale><dataType>VARCHAR</dataType>
</scale><dataType>VARCHAR</dataType><columnType>ATTRIBUTE</columnType><label>label_IDENTIFICATIONKEY</label><hidden>false</hidden><editable>true</editabl
IPTORURI</label><hidden>false</hidden><editable>true</editable><physicalName>WORKFLOWDESCRIPTORURI</physicalName></column><column><name>TASKDE
DEFINITIONNAME</physicalName></column><column><name>APPLICATIONCONTEXT</name><id>54b1f099ed47489ead4bcf3844e2f533</id><internal>false</interna
e9dd919ff7f3abe2</id><internal>false</internal><systemManaged>false</systemManaged><length>200</length><nullable>true</nullable><unique>false
</nullable><unique>false</unique><precision>38</precision><scale>10</scale><dataType>VARCHAR</dataType><columnType>ATTRIBUTE</columnType><label>
</dataType><columnType>DIMENSION</columnType><label>label_COMPOSITIONNAME</label><hidden>false</hidden><editable>true</editable><physicalName>COW
dden</editable>true</editable><physicalName>CONVERSATIONID</physicalName></column><column><name>BUEDATE</name><id>2d0d6730c09f40359d0d07c96c5
b</internal>false</internal><systemManaged>false</systemManaged><length>1</length><nullable>true</nullable><unique>false</unique><precision>38</pre>
```

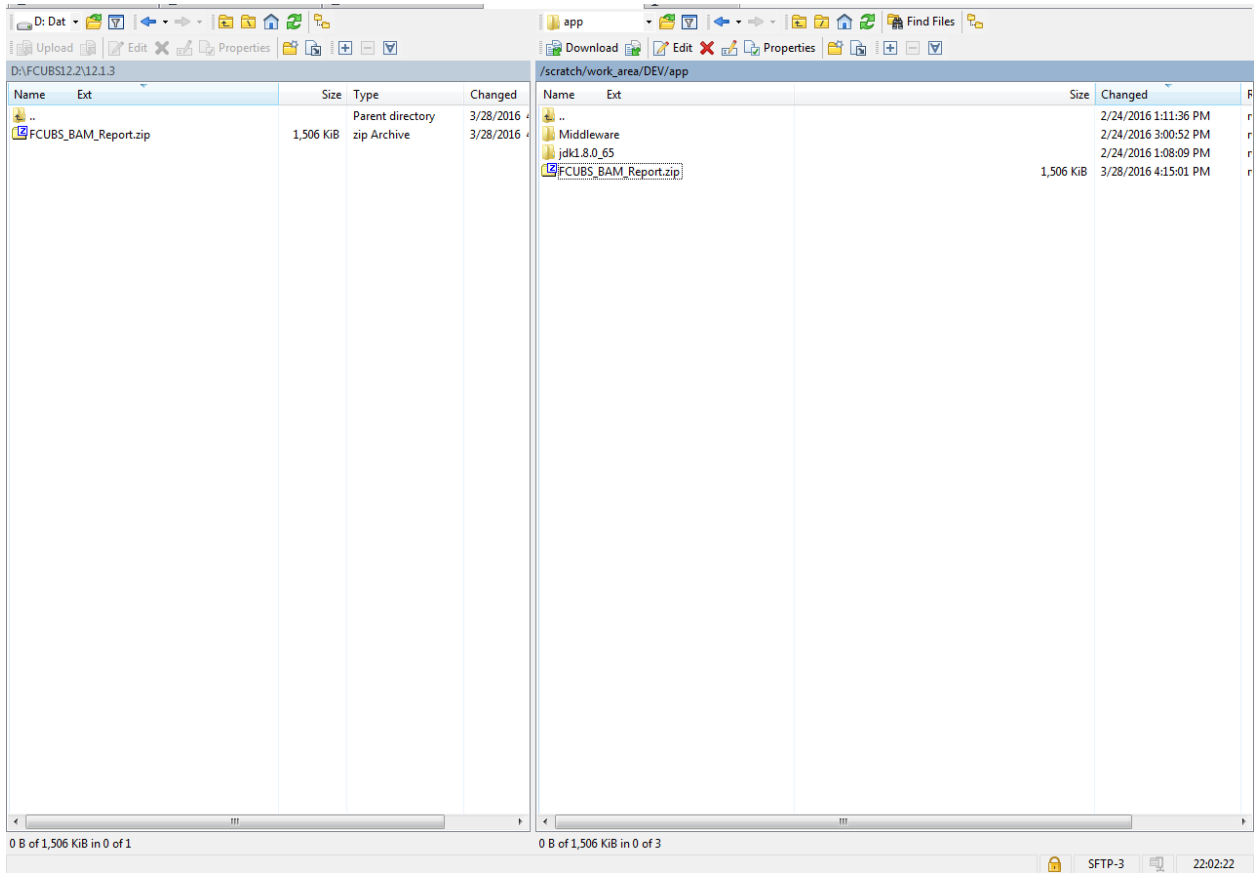


- 7) Open the FCUBS\_BAM\_Report.zip →Dataobject →Update the Schema element with the FCUBS schema name for SMTB\_USER\_TYPE\_CONVERSION\_VIEW.xml, ORVW\_TRACK\_EXPOSURE.xml, ORVW\_FACILITY\_EXPOSURE.xml, GetUtilsDB.xml files.



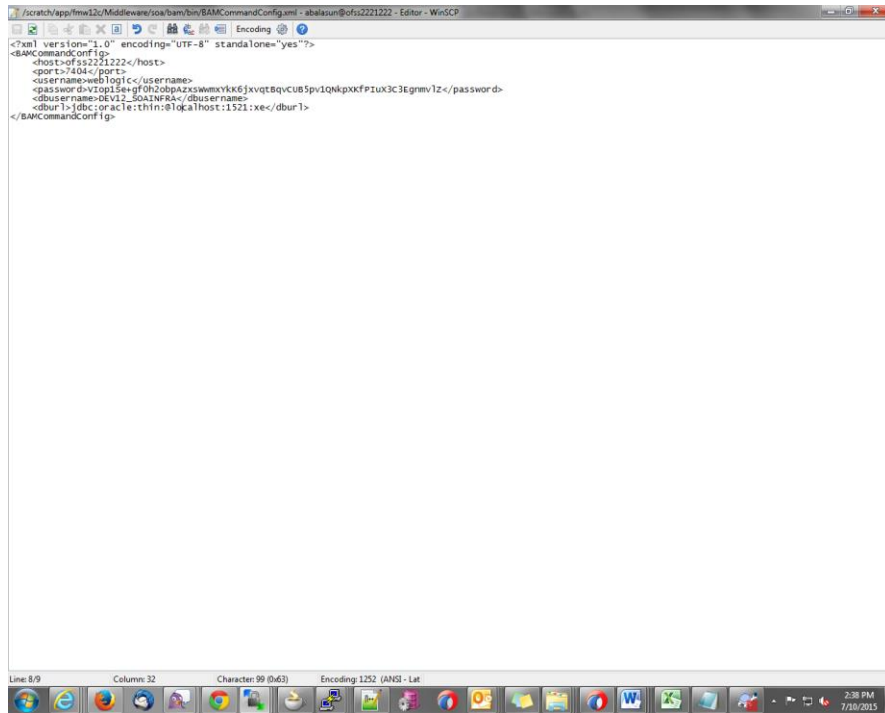
8) Move the BAM Project Unit (.Zip) Local to server location.





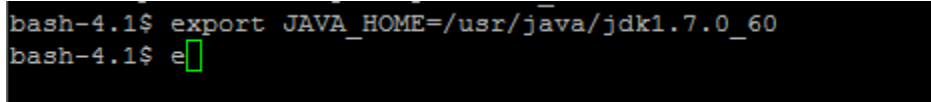
- 9) Configure the BAM server location ,port username and password in BAMCommandConfig.xml. It is available in MIDDLEWARE\_HOME\soa\bam\bin\BAMCommandConfig.xml

EX:



```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<BAMCommandConfig>
  <host>of54221222</host>
  <port>7404</port>
  <username>weblog1</username>
  <password>Vz0p1Se+gf0h2digaZxswmYk6jxvqtqvcuB5pv1QnkpxfP1ux3C1Egmv1z</password>
  <dbuser>ORA122_SOAINFRA</dbuser>
  <dburl>jdbc:oracle:thin:@10.4.1.1:1521:xe</dburl>
</BAMCommandConfig>
```

- 10) Set proper JAVA\_HOME.



```
bash-4.1$ export JAVA_HOME=/usr/java/jdk1.7.0_60
bash-4.1$ e
```

11) Execute the Below BAM Command to import the Dash Board in to the server.

```
./bamcommand -cmd import -file /scratch/work_area/DEV/app/FCUBS_BAM_Report.zip -mode  
append
```

from the below path MIDDLEWARE\_HOME\soa\bam\bin.

```
Enter User Name: weblogic  
Enter Password:  
Connecting to BAM Server.."weblogic@10.184.133.168:7404".  
Connected to BAM Server successfully.  
Attempting import of artifacts from file "/scratch/work_area/DEV/app/FCUBS_BAM_R  
eport.zip".....  
"FCUBS_BAM_Report" has been imported successfully from file "/scratch/work_area/  
DEV/app/FCUBS_BAM_Report.zip" in 63,498 milliseconds.  
Import of 1 artifacts completed successfully in 64,251 milliseconds.  
[fmw122@ofss220216 bin]$ ./bamcommand -cmd import -file /scratch/work_area/DEV/a  
pp/FCUBS_BAM_Report.zip -mode append  
  
Oracle BAM Import/Export Utility [Build 1, BAM Repository Version 2020] Copyright  
© 2014, Oracle and/or its affiliates. All rights reserved.  
Enter User Name: weblogic  
Enter Password:  
Connecting to BAM Server.."weblogic@10.184.133.168:7404".  
Connected to BAM Server successfully.  
Attempting import of artifacts from file "/scratch/work_area/DEV/app/FCUBS_BAM_R  
eport.zip".....  
"FCUBS_BAM_Report" has been imported successfully from file "/scratch/work_area/  
DEV/app/FCUBS_BAM_Report.zip" in 75,498 milliseconds.  
Import of 1 artifacts completed successfully in 75,815 milliseconds.
```



FCUBS Process Flow Deployment  
[September] [2017]  
Version 12.5.0.0.0

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/](http://www.oracle.com/financialservices/)

Copyright © [2007], [2017], Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

**U.S. GOVERNMENT END USERS:** Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.