

FCUBS Process Flow Deployment
Oracle FLEXCUBE Universal Banking
Release 12.4.0.0.0
[May] [2017]



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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

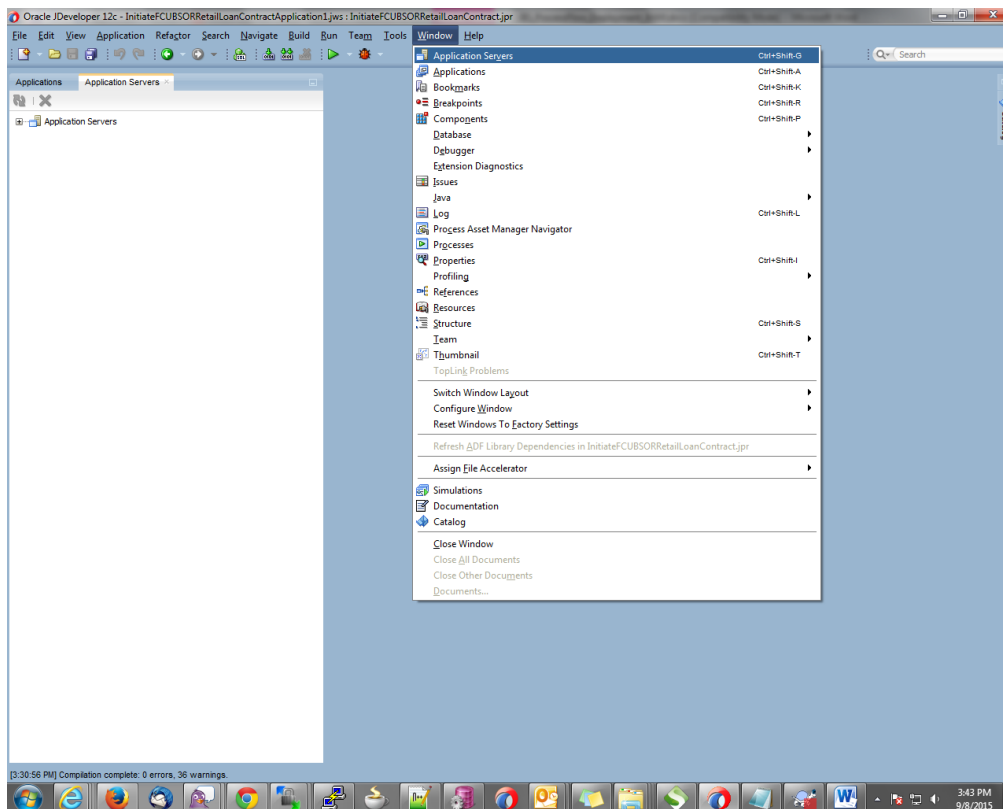
3.1 Introduction

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

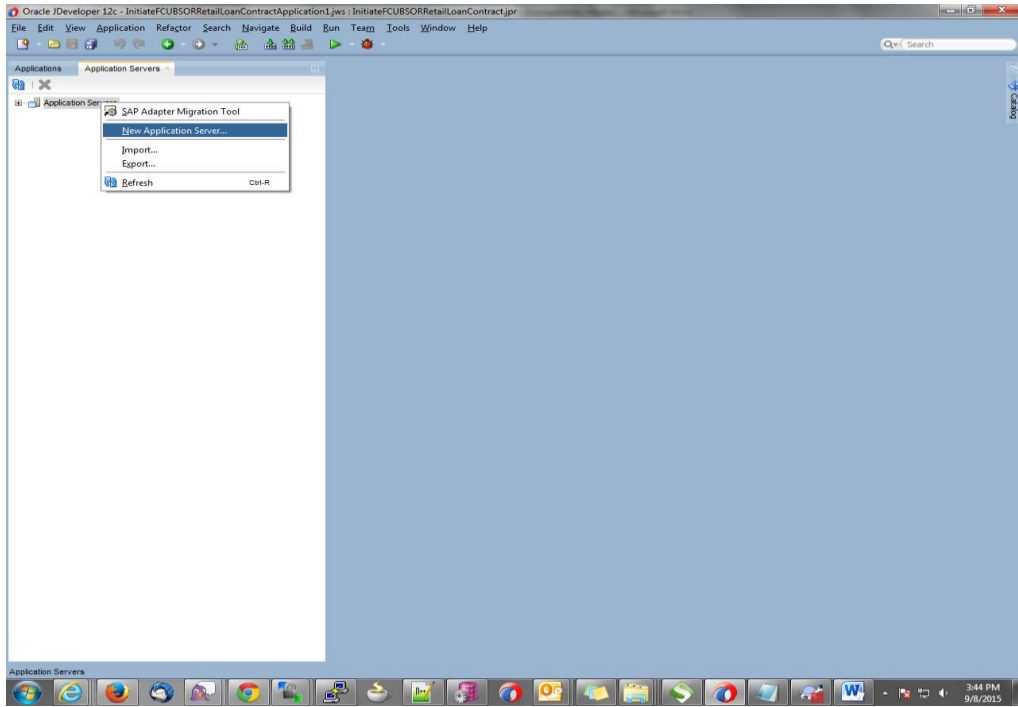
3.2 Application Sever Connection

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

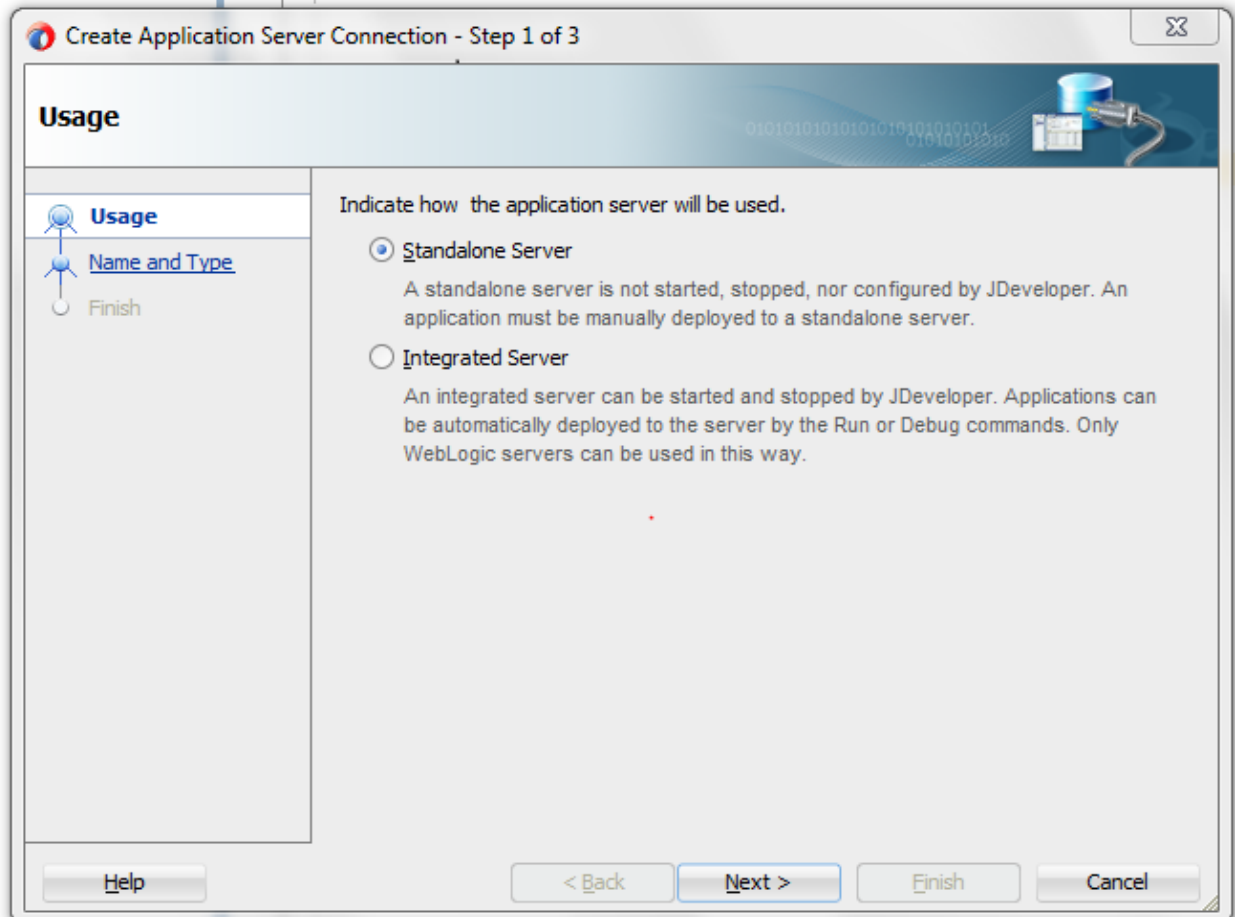
- After JDeveloper is launched
- Click on → windows → Application Servers Navigator



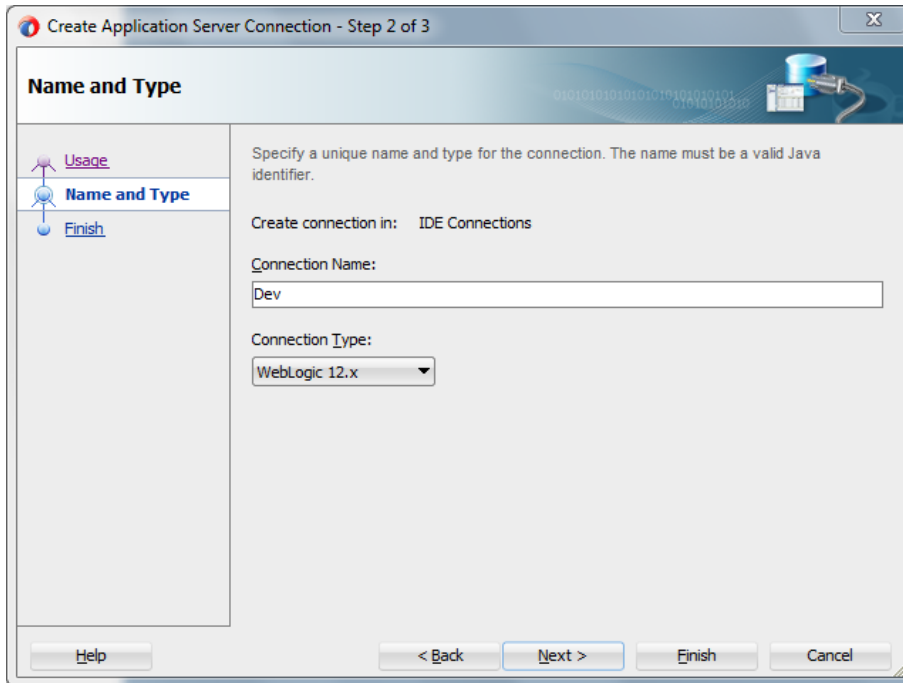
- To create a new WebLogic server connection
- Right click 'Application Servers'
- Click on → New Application Server



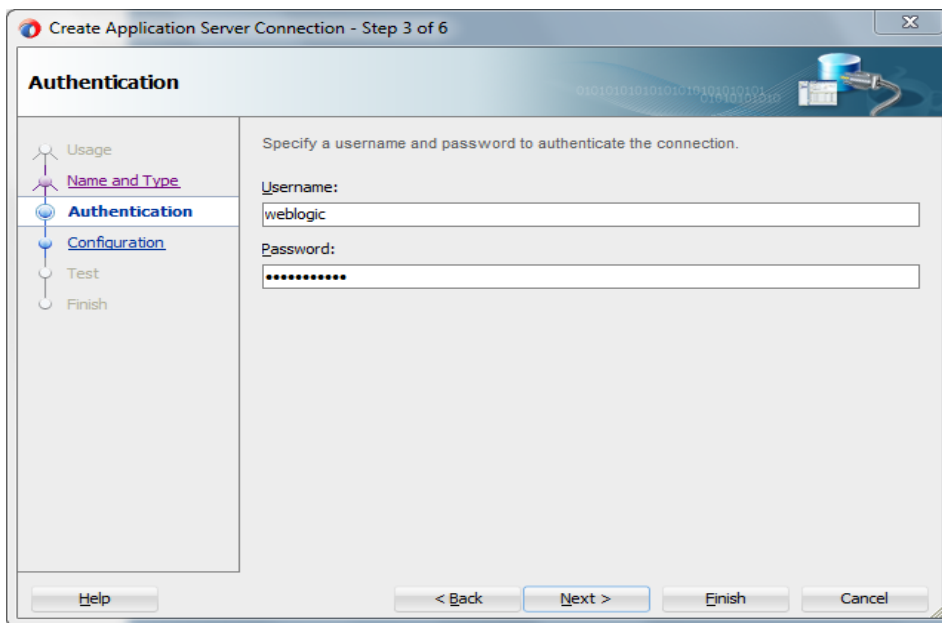
- The “Create Application Server Connection” wizard is launched as shown below.
- Select the Radio button “Standalone Server”
- Click “Next” to proceed with the configuration



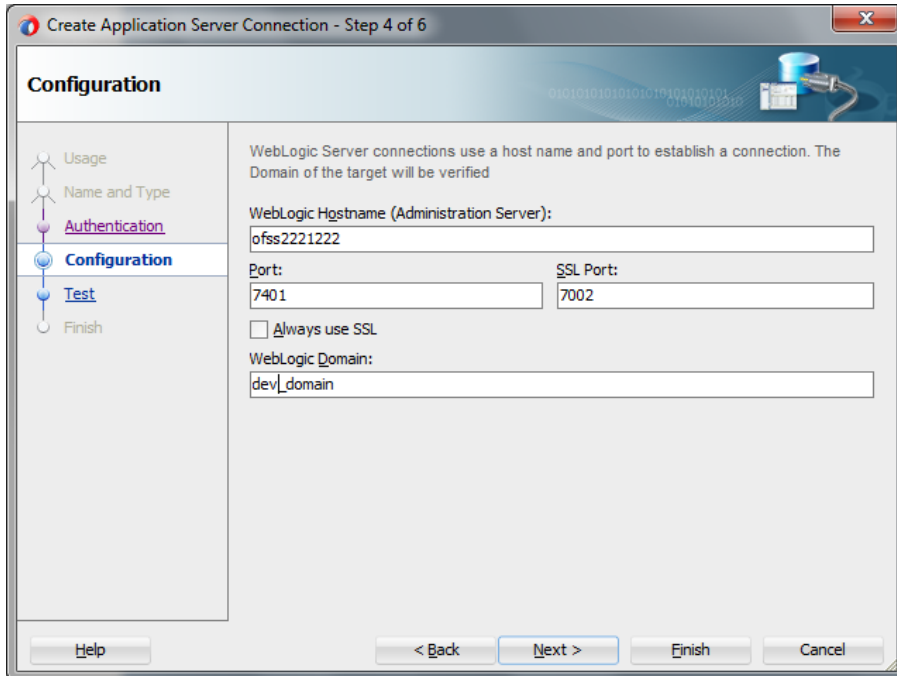
- Provide a "Connection Name" to identify the server connection.
- Provide the "Connection Type" to identify the server type.
- Select "WebLogic server <version>"
- Click "Next" to proceed with the configuration



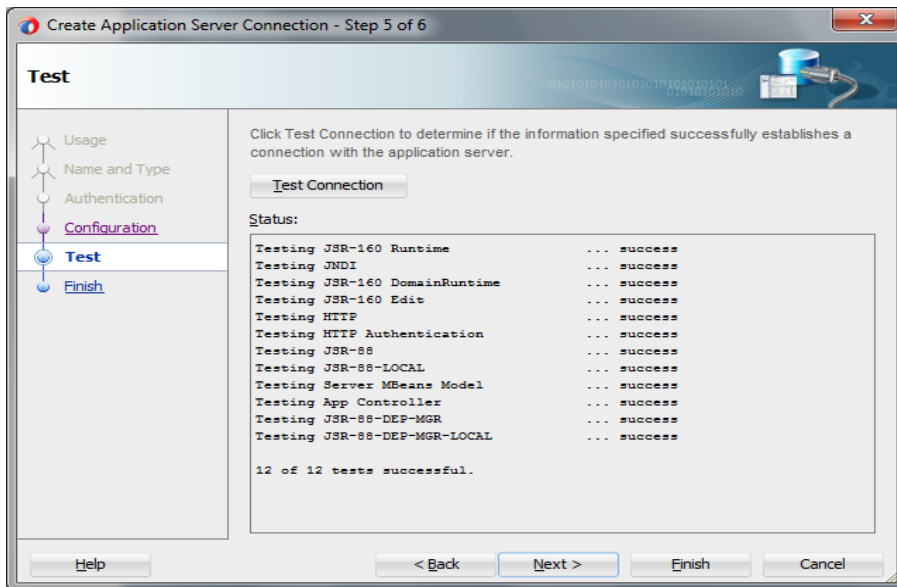
- Provide username / password to connect to the server
- The same username / password that was used while configuring the server is used.
- Click “Next” to proceed with the configuration



- 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

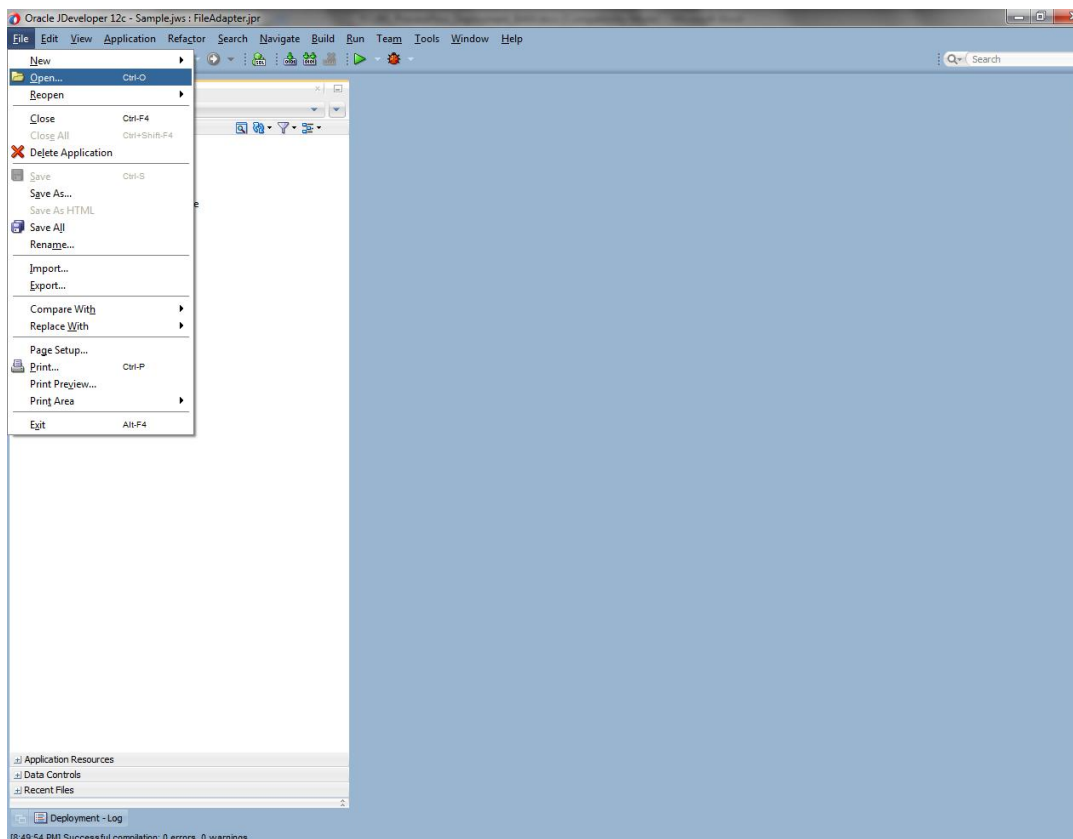
4.1 Introduction

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

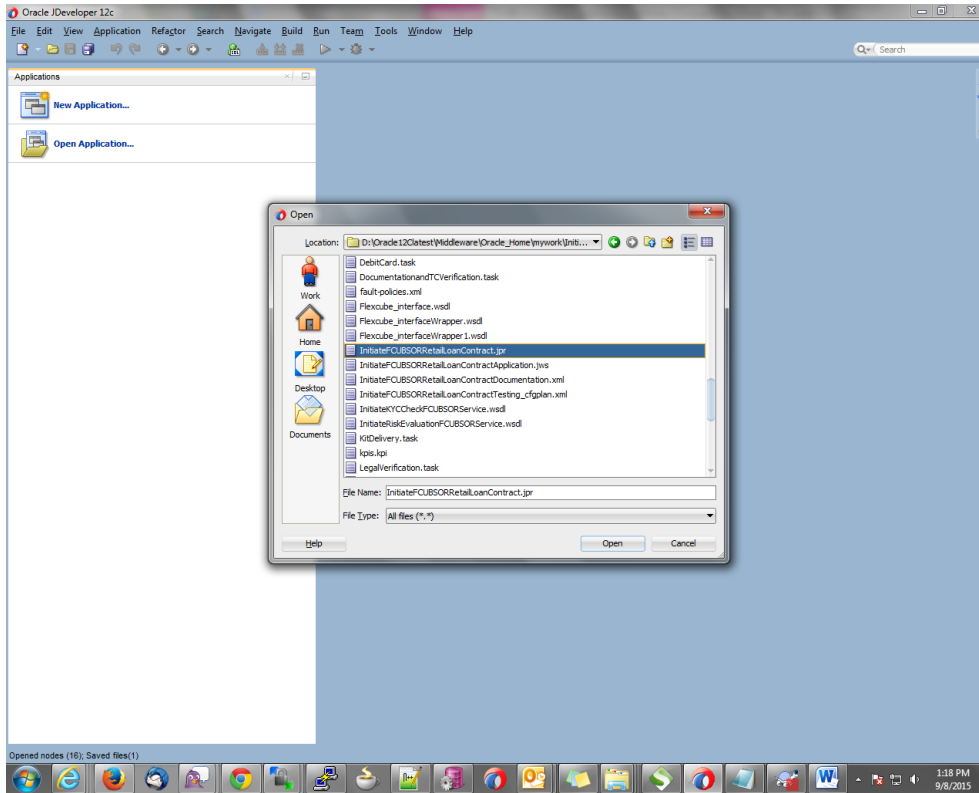
4.2 Loading the Process

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

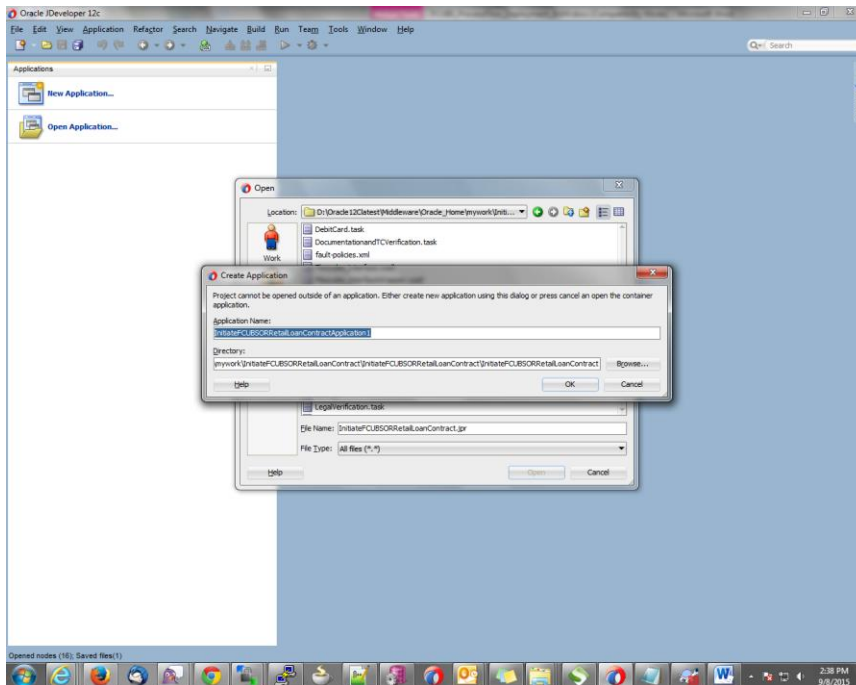
- Click on → File → Open



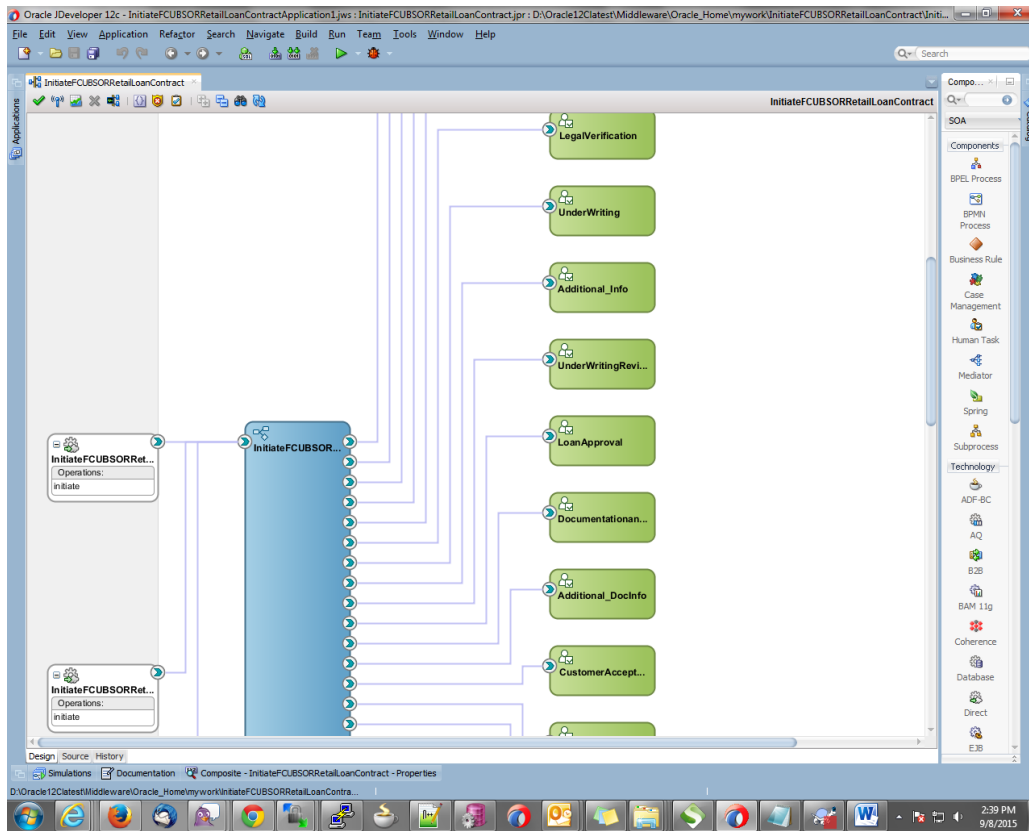
- Navigate to the folder where process flow is deployed
- Locate and select the “.jpr” file under the folder <process_name>
- Click 'Open' to load the process flow in JDeveloper



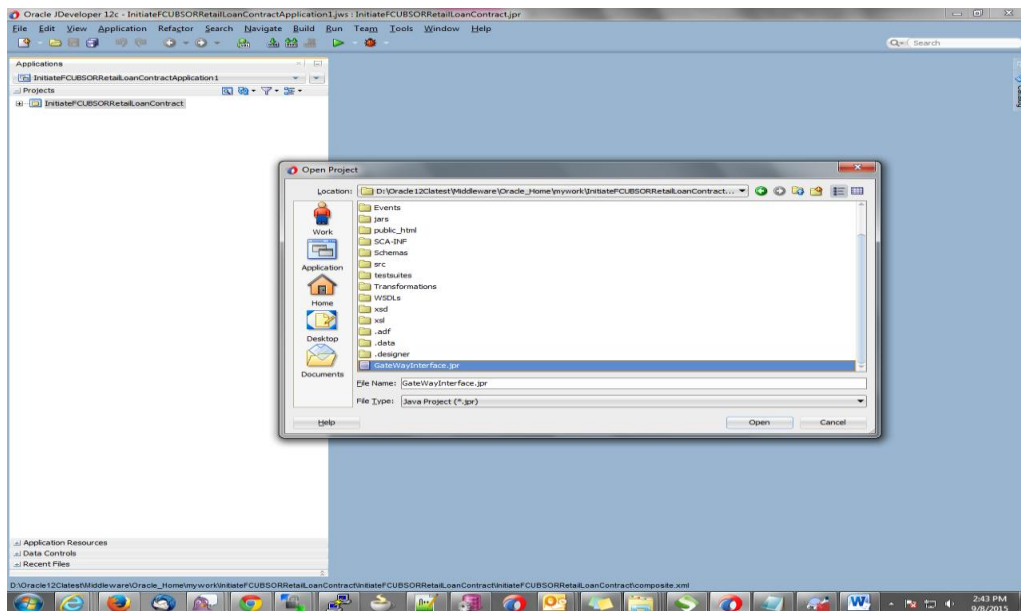
- If this is the first Process flow that is being loaded JDeveloper will prompt for an Application Name and Location where the application file will be stored
- Provide an application name and folder path for the same.
- Click in “Ok” to proceed with loading of the process flow.



- 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 displays the Oracle Enterprise Manager Fusion Middleware Control interface. On the left, the 'Target Navigation' pane shows a tree view of process flows, with 'BPELLimitReview [1.0]' selected. The main area shows a table of process flow details.

| 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 |

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 Insts](#) [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

| 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.

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.

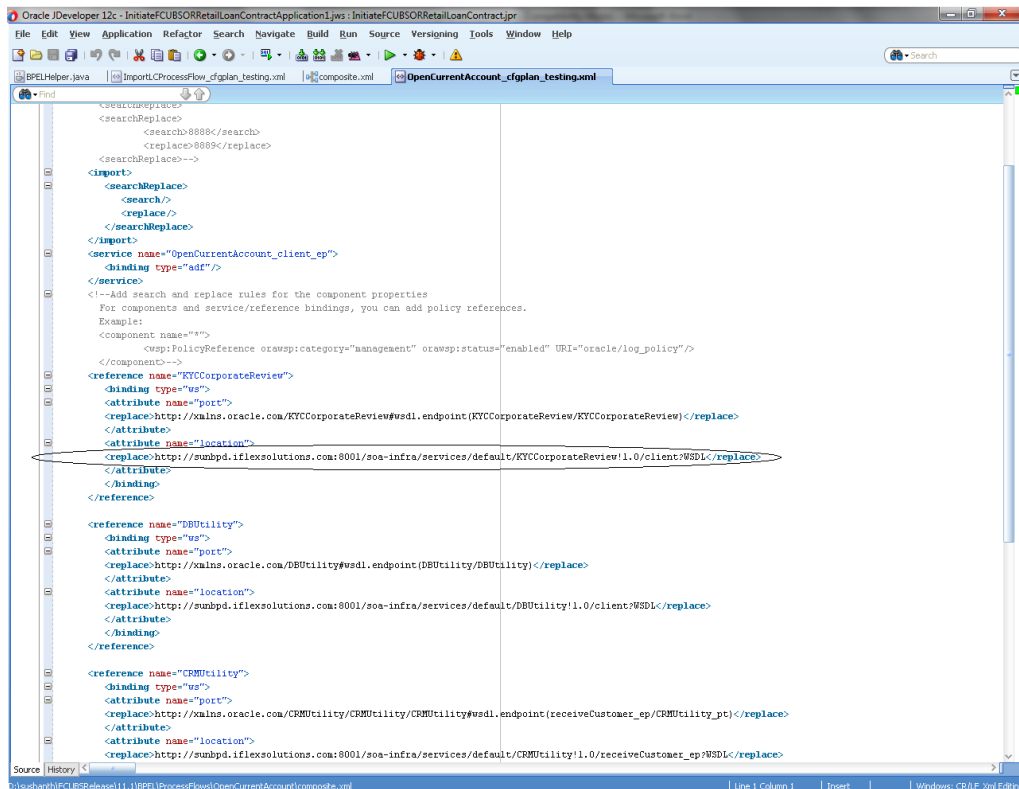
The configuration plan enables us to define the URL and property values to use in different environments. During process deployment, the configuration plan is used to search the SOA project for values that must be replaced to adapt the project to the target environment.

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.

| | |
|--------------------------------|--|
| Config_plan property | fcubs.properties |
| bpel.preference.BIUSERID | BI_USER |
| bpel.preference.BIPWD | BI_PASSWORD |
| bpel.preference.DOC_PATH | 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.

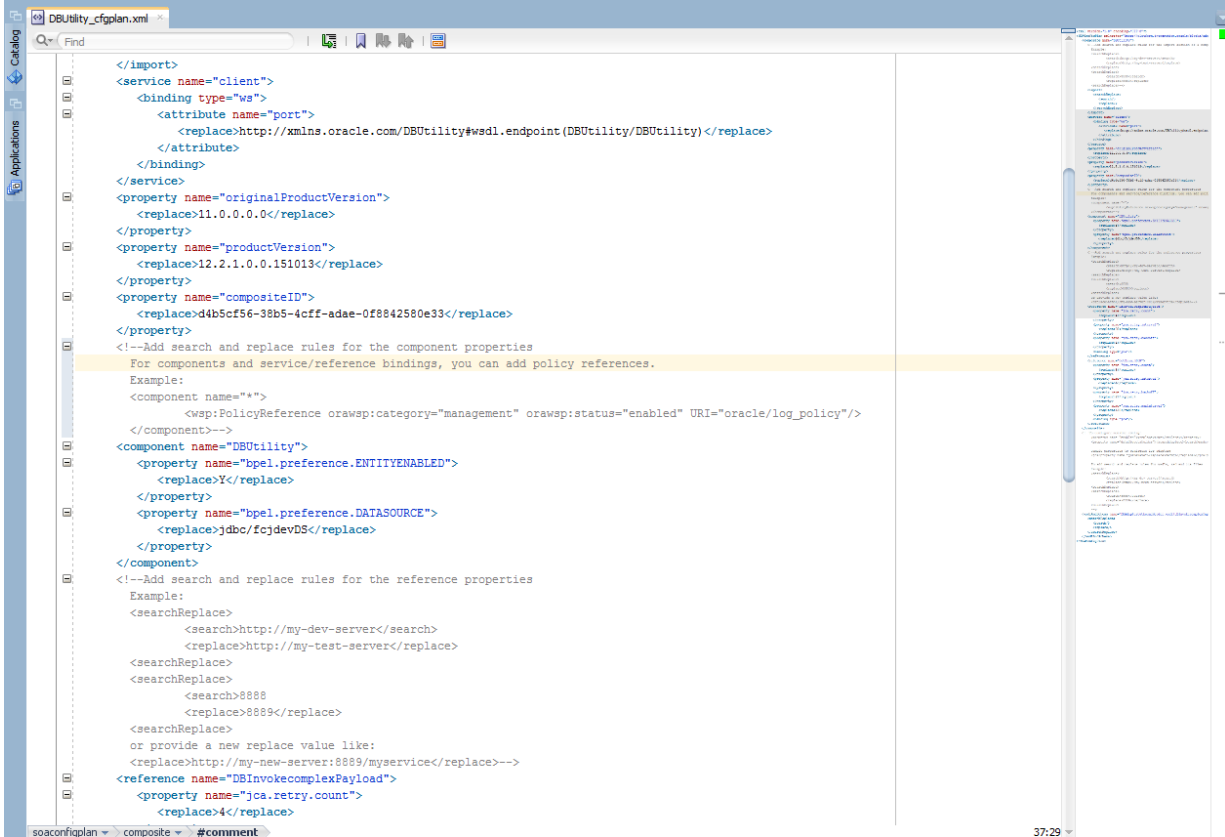
Open the DBUtility _cfgplan.xml and copy corresponding values for the below mentioned properties.

| 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.



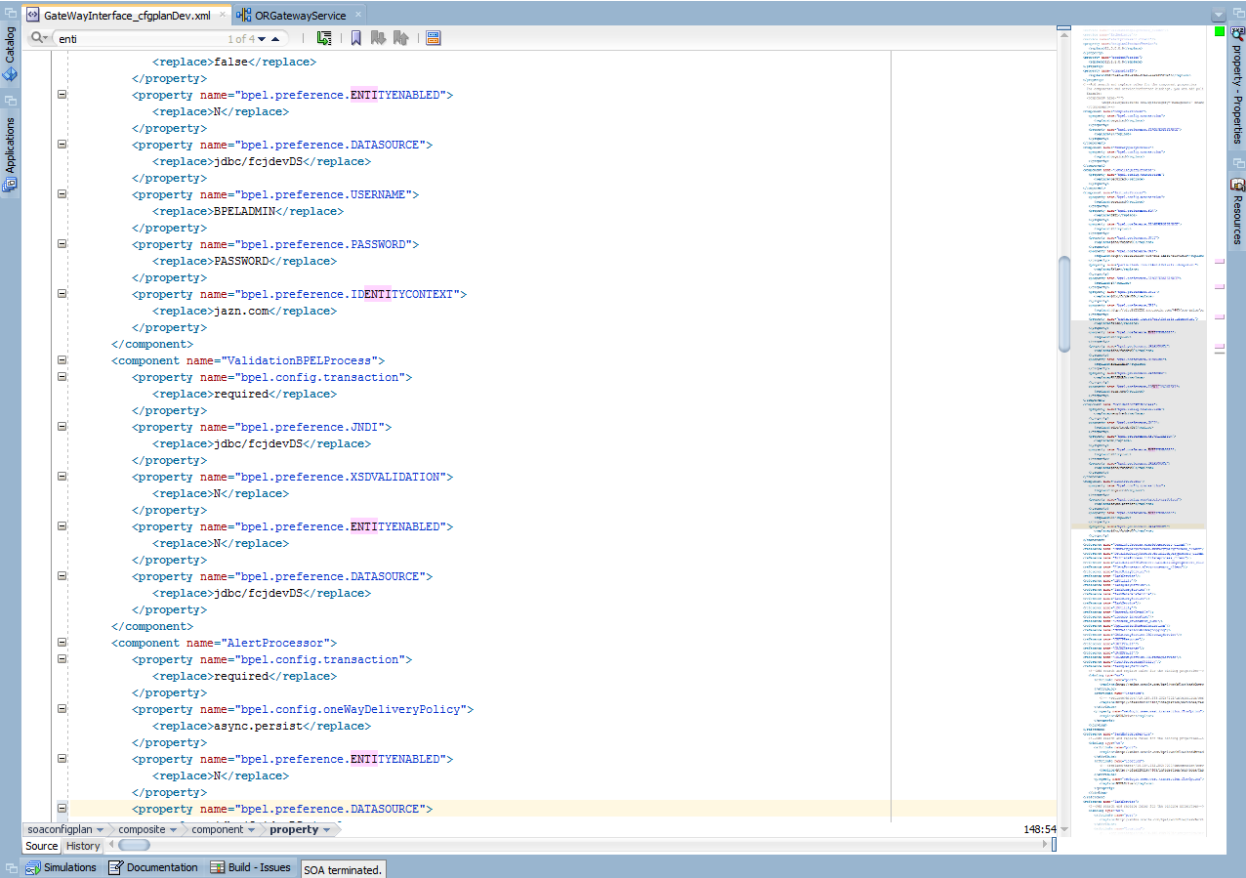
5.5 Config plan changes for Gateway process.

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.



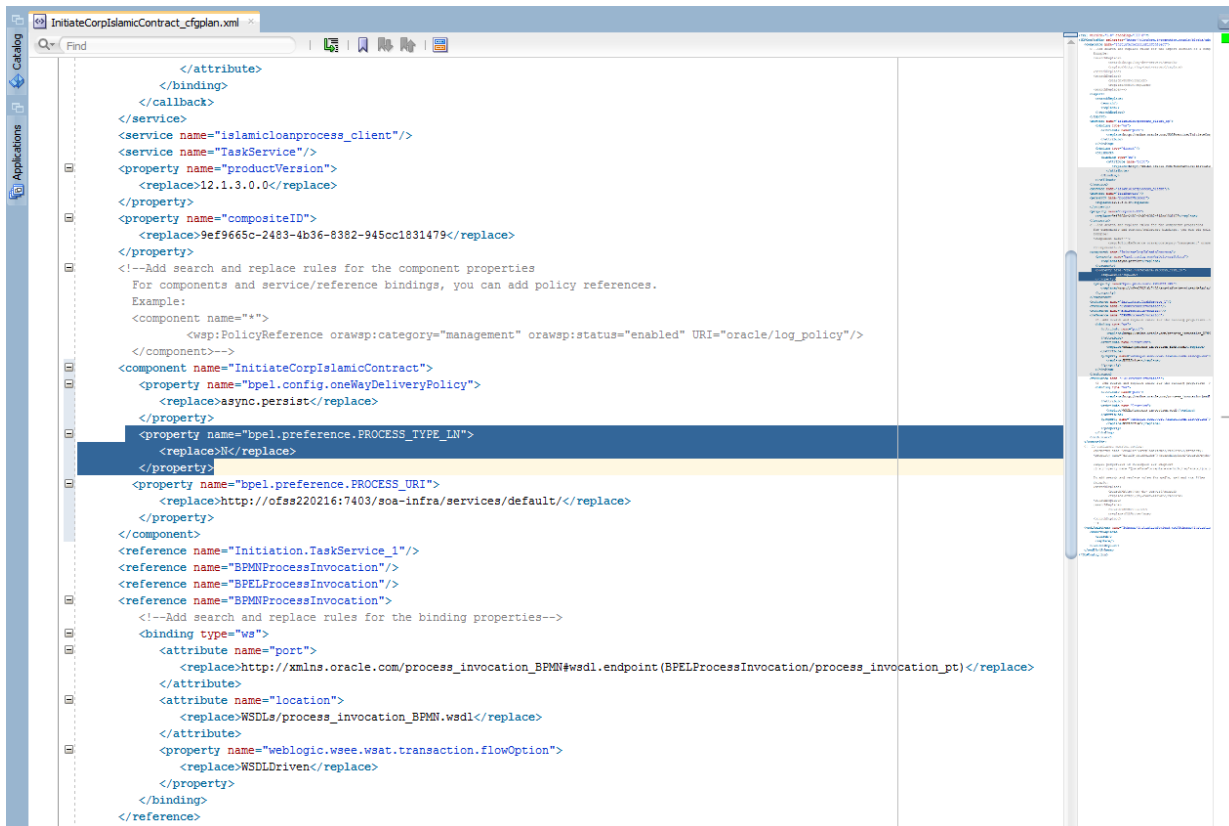
5.6 Config plan changes for InitiateCorplslamicContract process

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> |

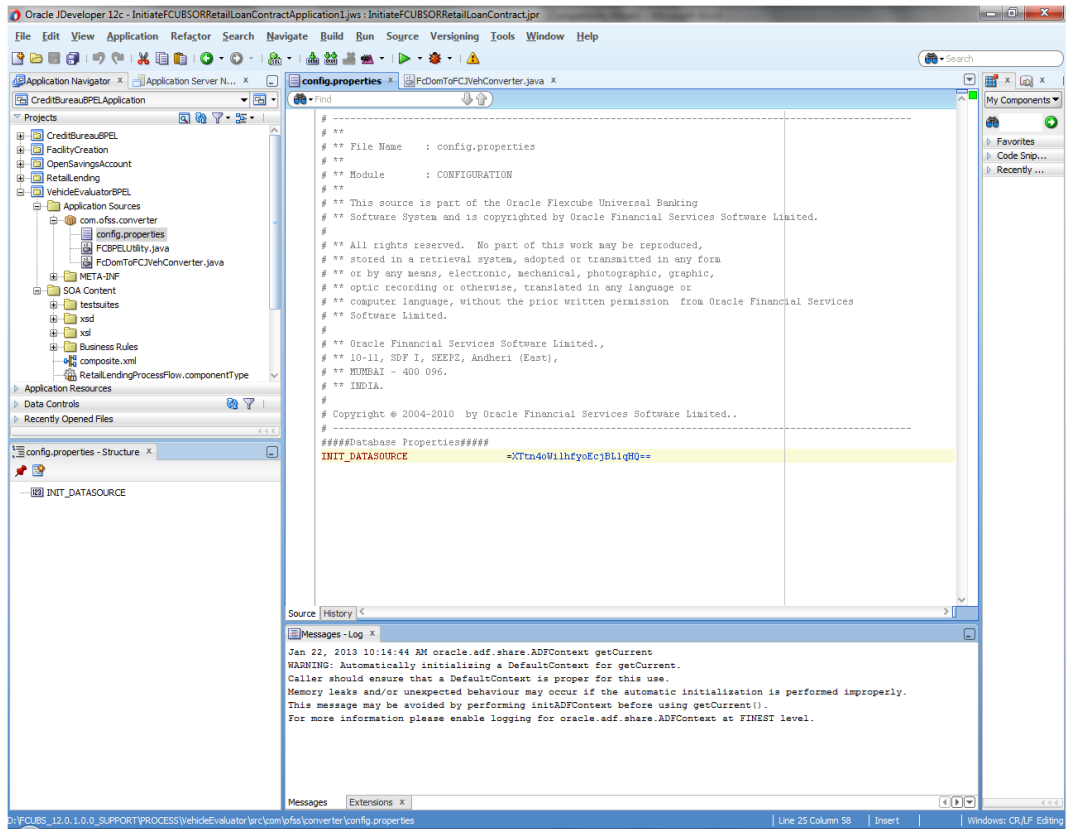
| | |
|--|---|
| <p>bpel.preference.PROCESS_TYPE_LN</p> | <p>Set value as ' N' to initiate BPMN Process from Common Process</p> |
|--|---|

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 .



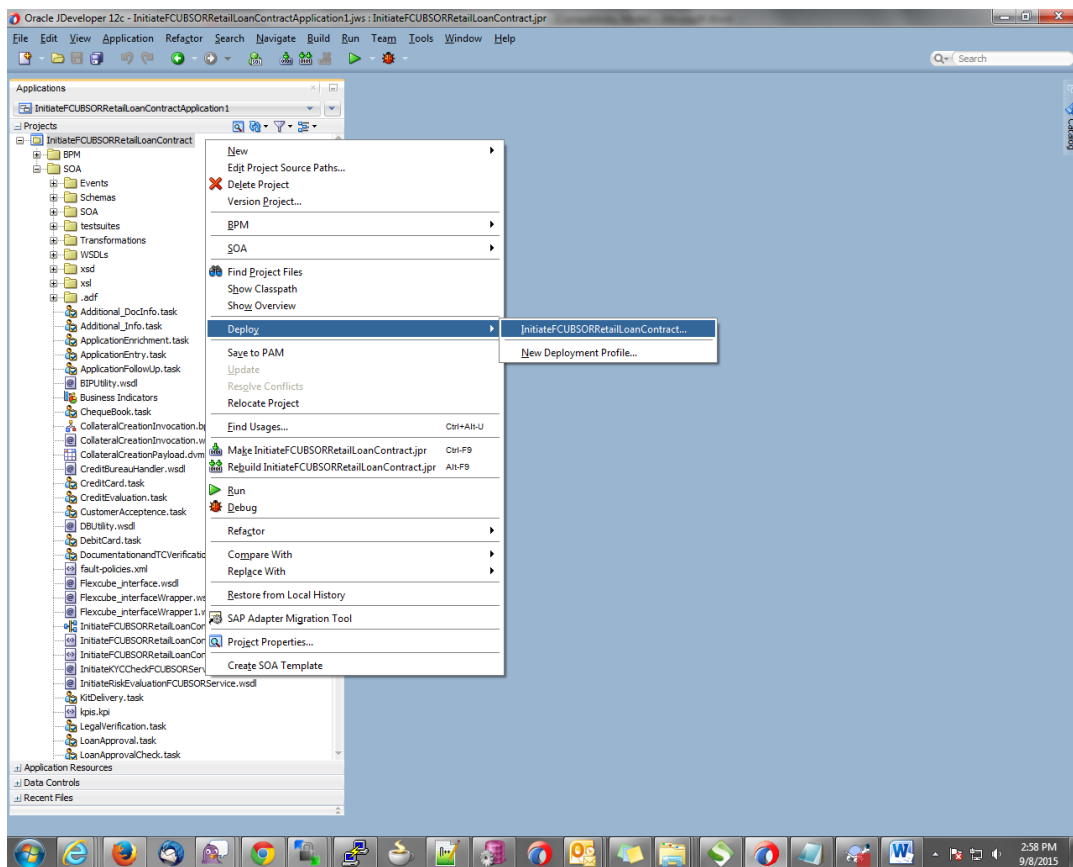
6. Deploying a Single Composite application using JDeveloper

6.1 Introduction

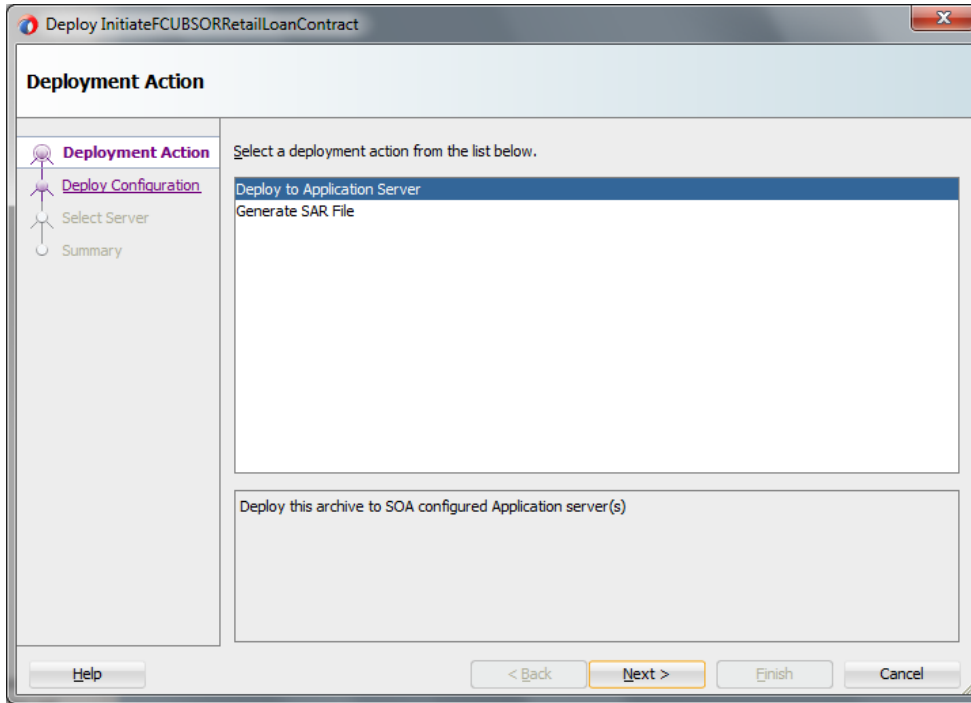
This section describes how to deploy a single SOA composite application with Oracle JDeveloper after completing updating of config plans with respective target environment replacement values.

6.2 Deploying the Application

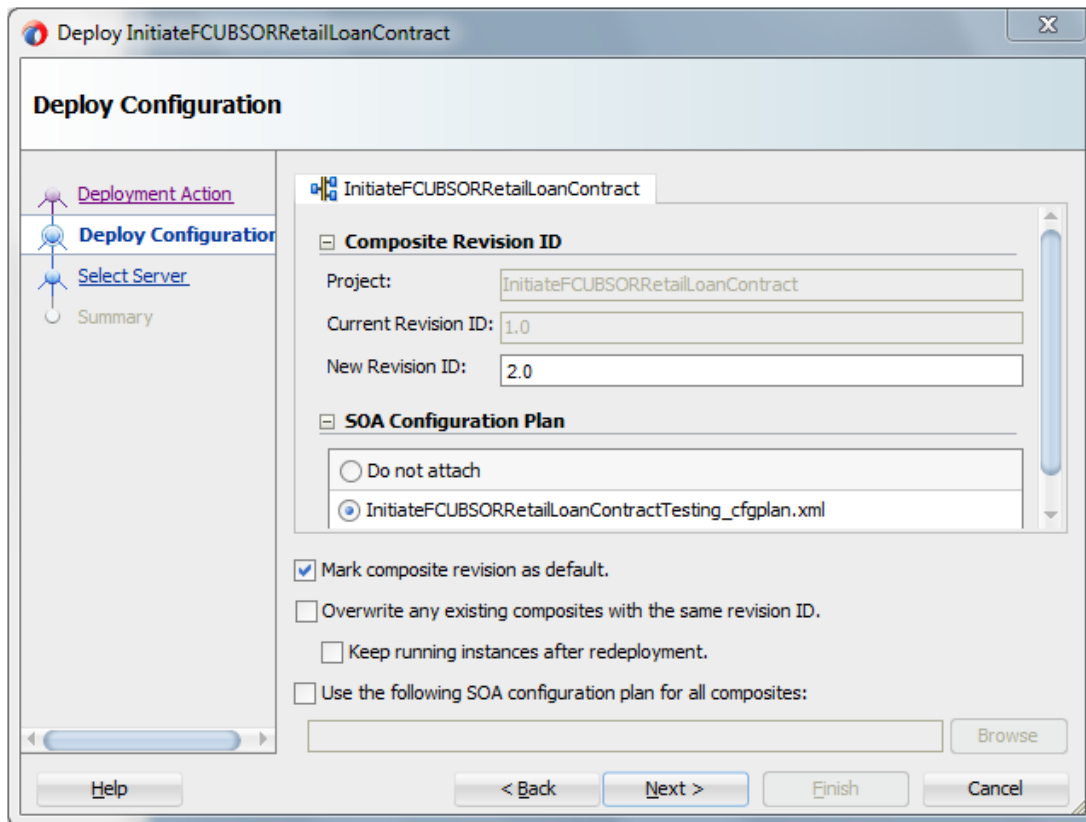
- Right click on the Application that needs to be deployed.
- Select 'Deploy' and then click on the default deployment profile which is the same as the application name.
- This will result in the deployment wizard screen being launched.



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



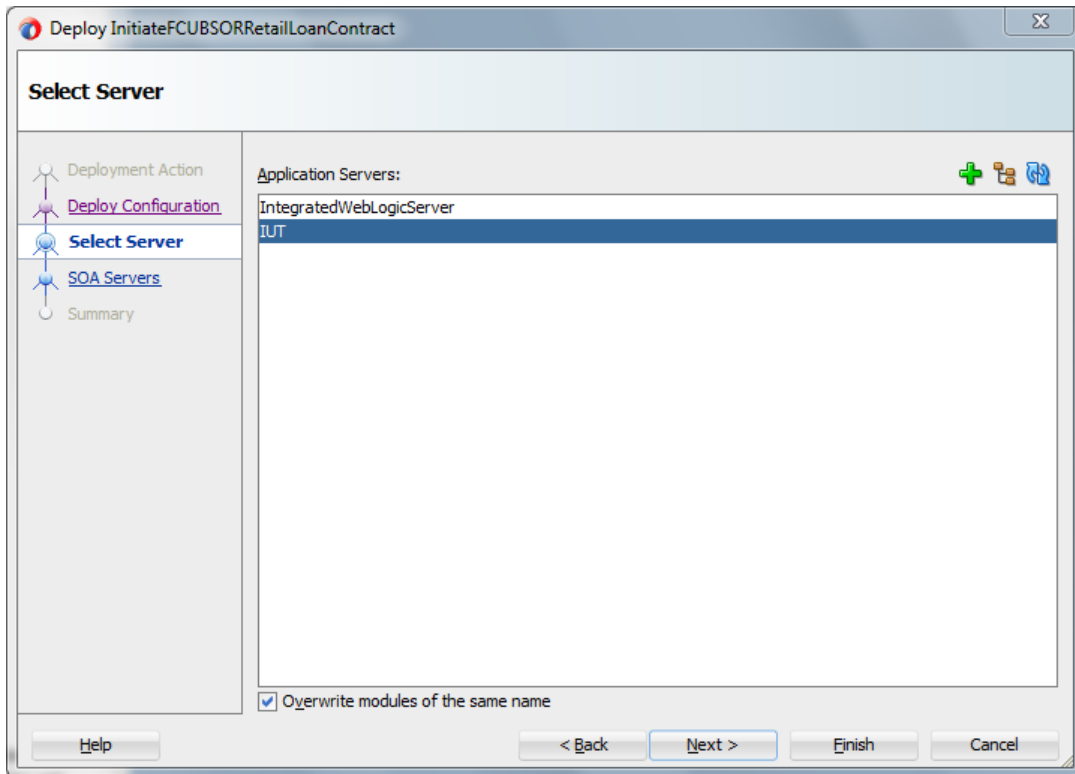
- Deployment configuration is done as illustrated in the below screen shot
- Select a Revision with which the deployment should happen
- Select a " Configuration Plan" that was updated as given in Section 5
- Provide a new revision ID. It should be always higher than the earlier revision of the process 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.



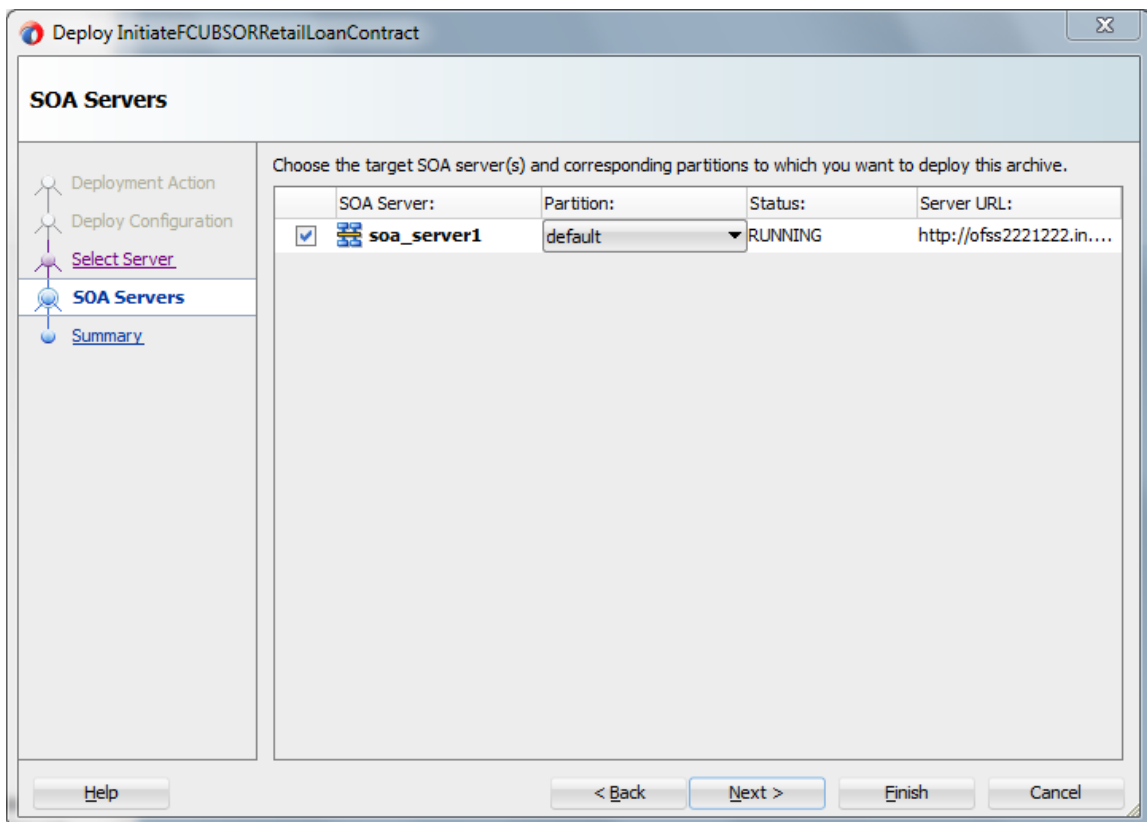
- Select the Application server 'Server Connection' configured that was done in Section 3 to which the deployment needs to be done
- Click 'Next' to proceed with the deployment.

Note :

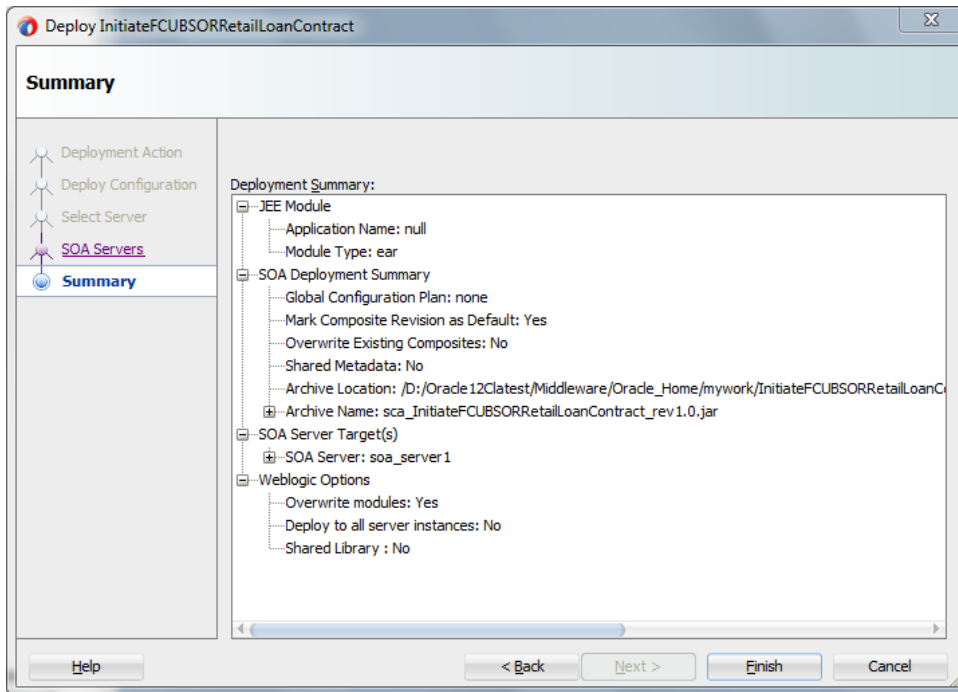
In case "Overwrite any existing composites with the same revision ID" checkbox is checked during the deployment, the active tasks which are currently running on the current revision of the process flow will be moved to "Stale" task status. The tasks which are in "Stale" status will not be displayed in 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.



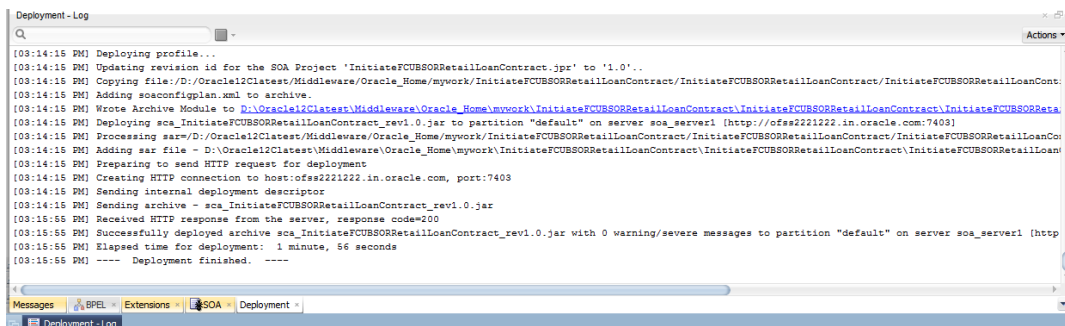
- Select the Application 'server' to which the deployment needs to be done.



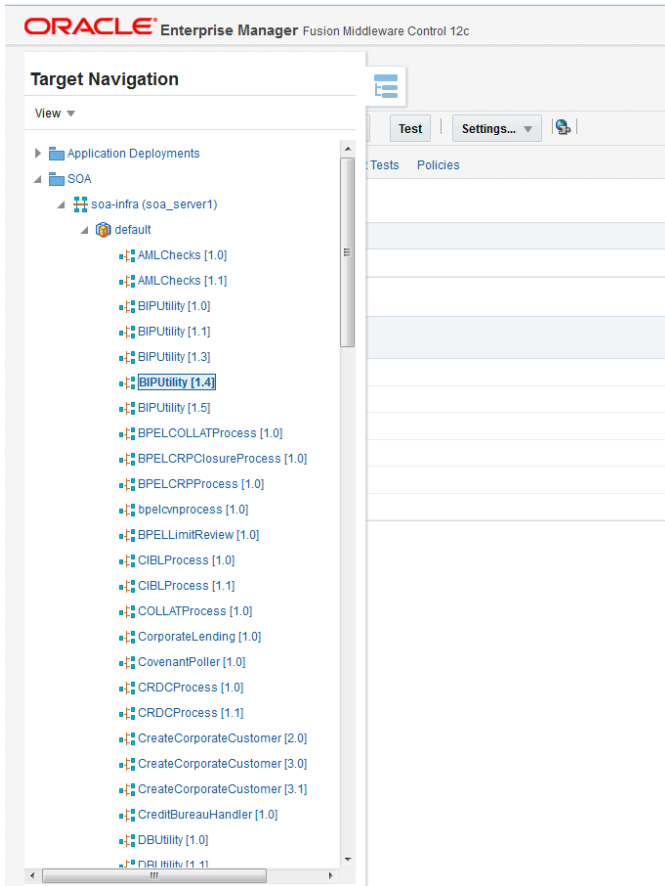
- View the summary of the deployment details and click 'Finish' to complete the deployment.



- 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



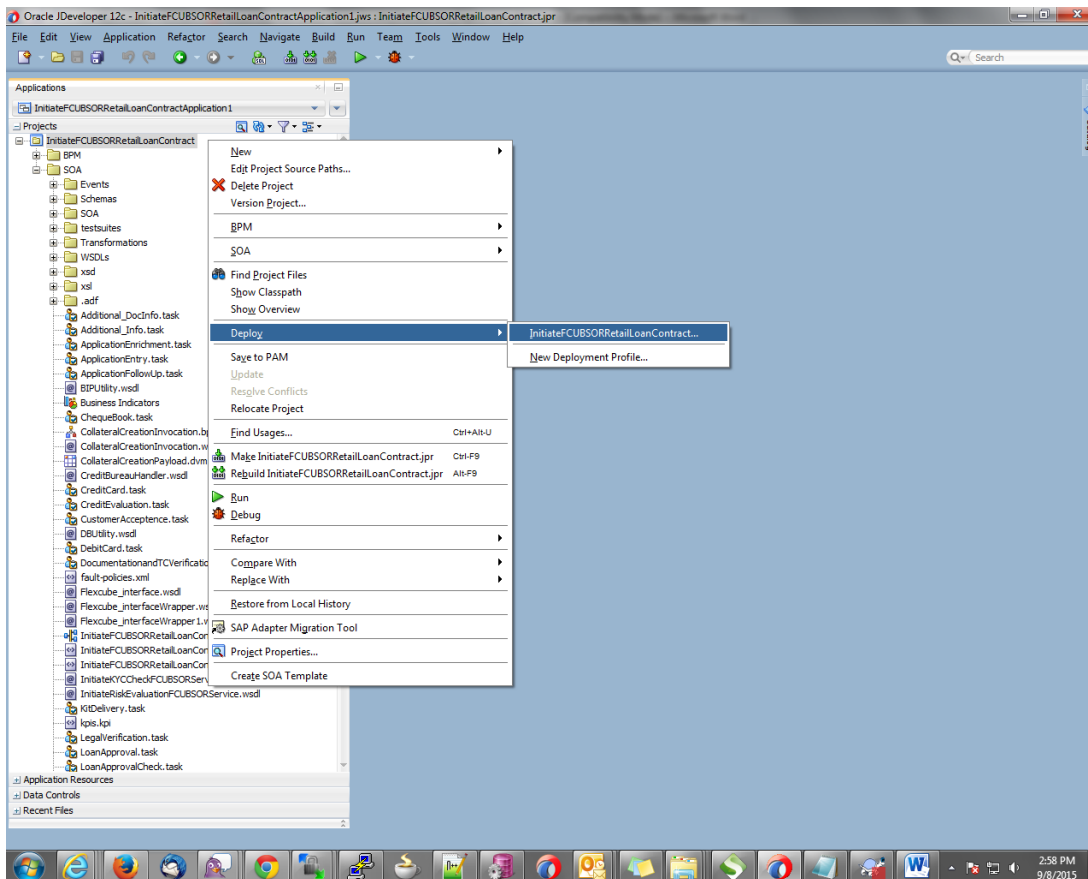
7. Deploying a Single Composite application via Enterprise manager console

7.1 Introduction

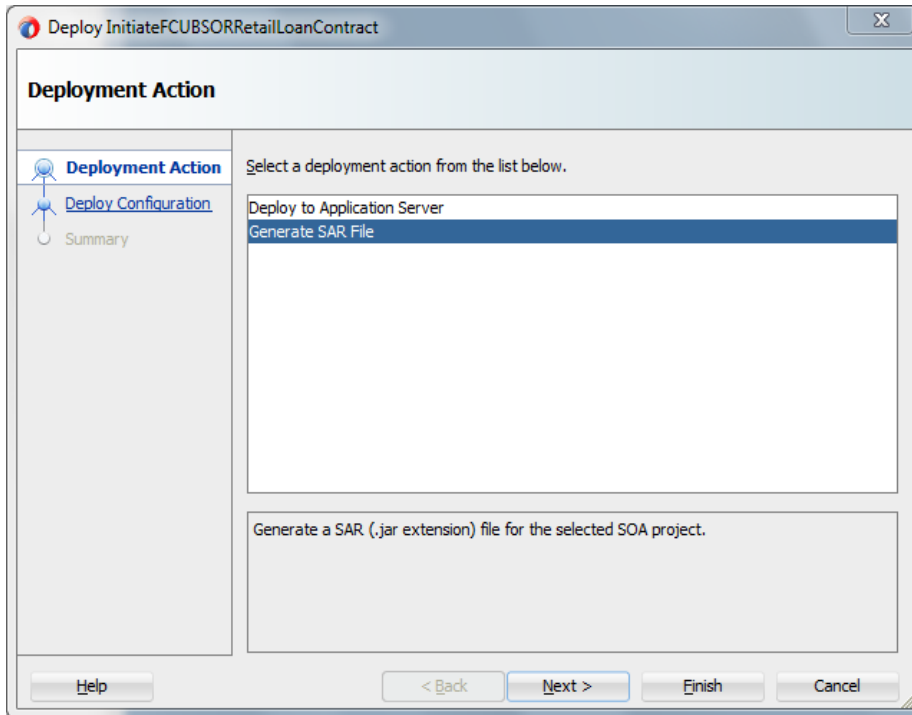
This section describes how to build a SAR file for a single SOA composite application with Oracle JDeveloper and deploy the same via enterprise manager console.

7.2 Deploying the Application

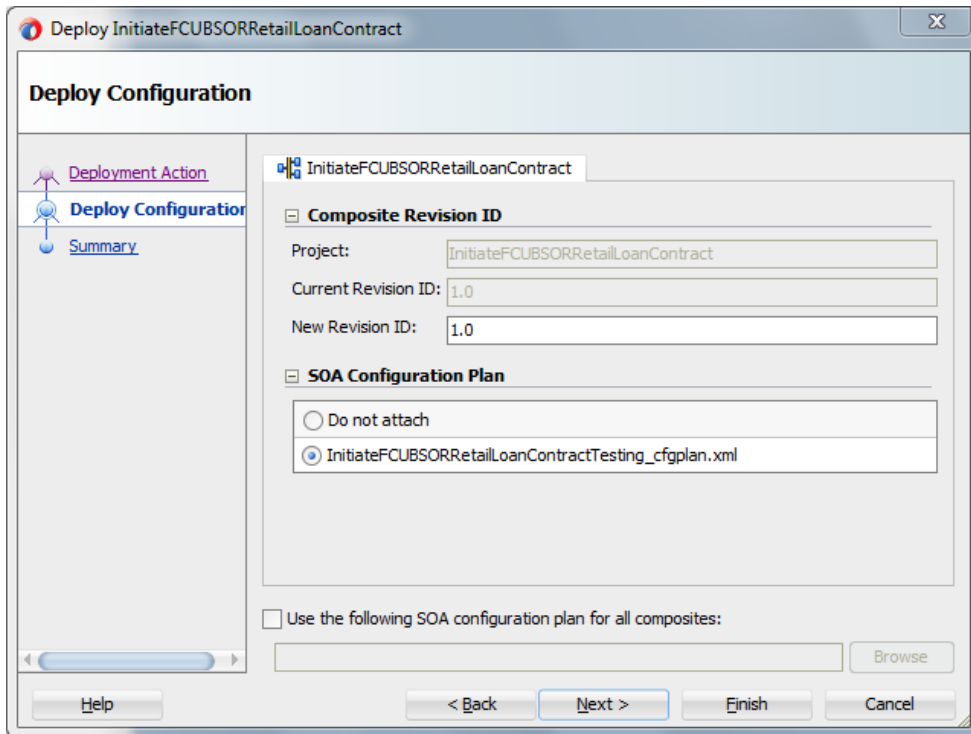
- Right click on the Application that needs to be deployed.
- Select 'Deploy' and then click on the default deployment profile which is the same as the application name.
- This will result in the deployment wizard screen being launched.



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

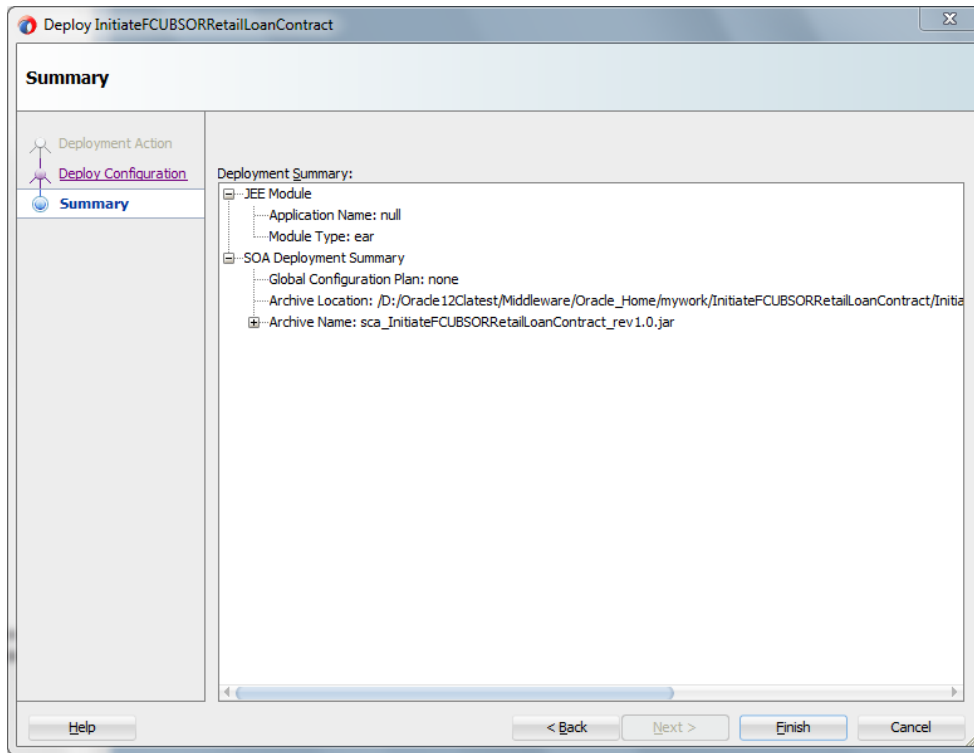


- In deployment configuration screen enter the revision
- Select the configuration plan.
- Click “Next” to proceed with the deployment.

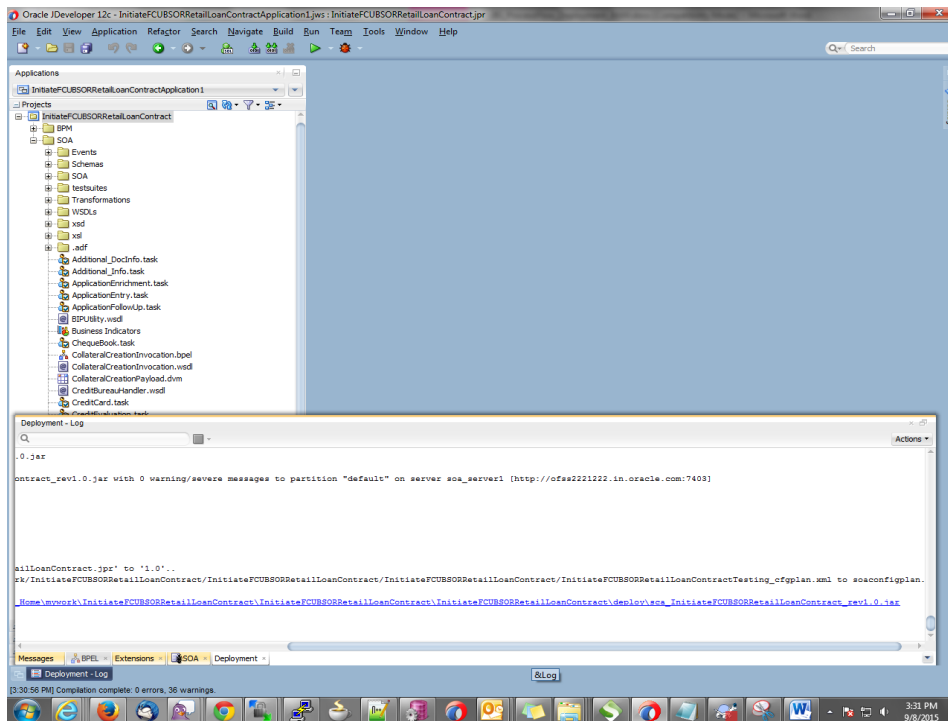


- Review the deployment summary screen

- 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

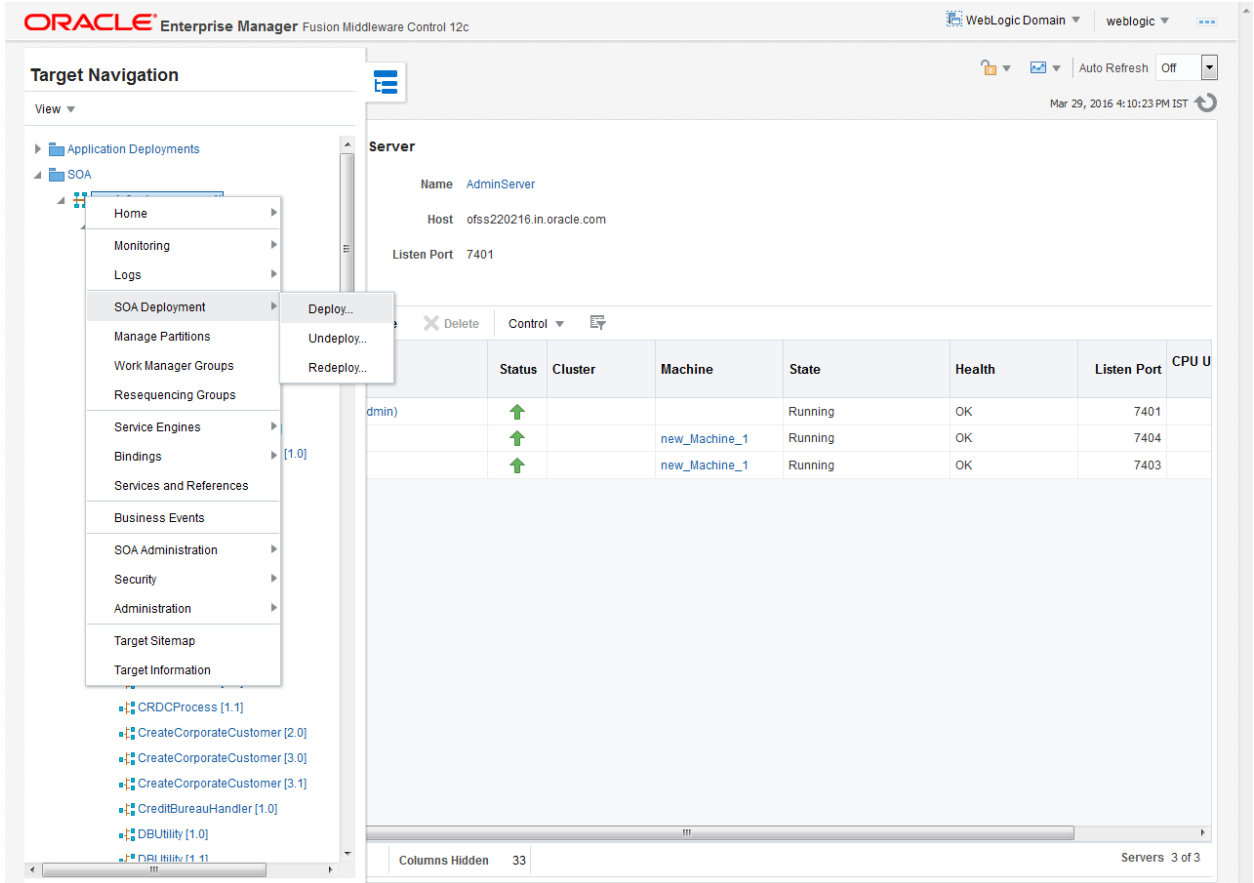
* User Name

* Password

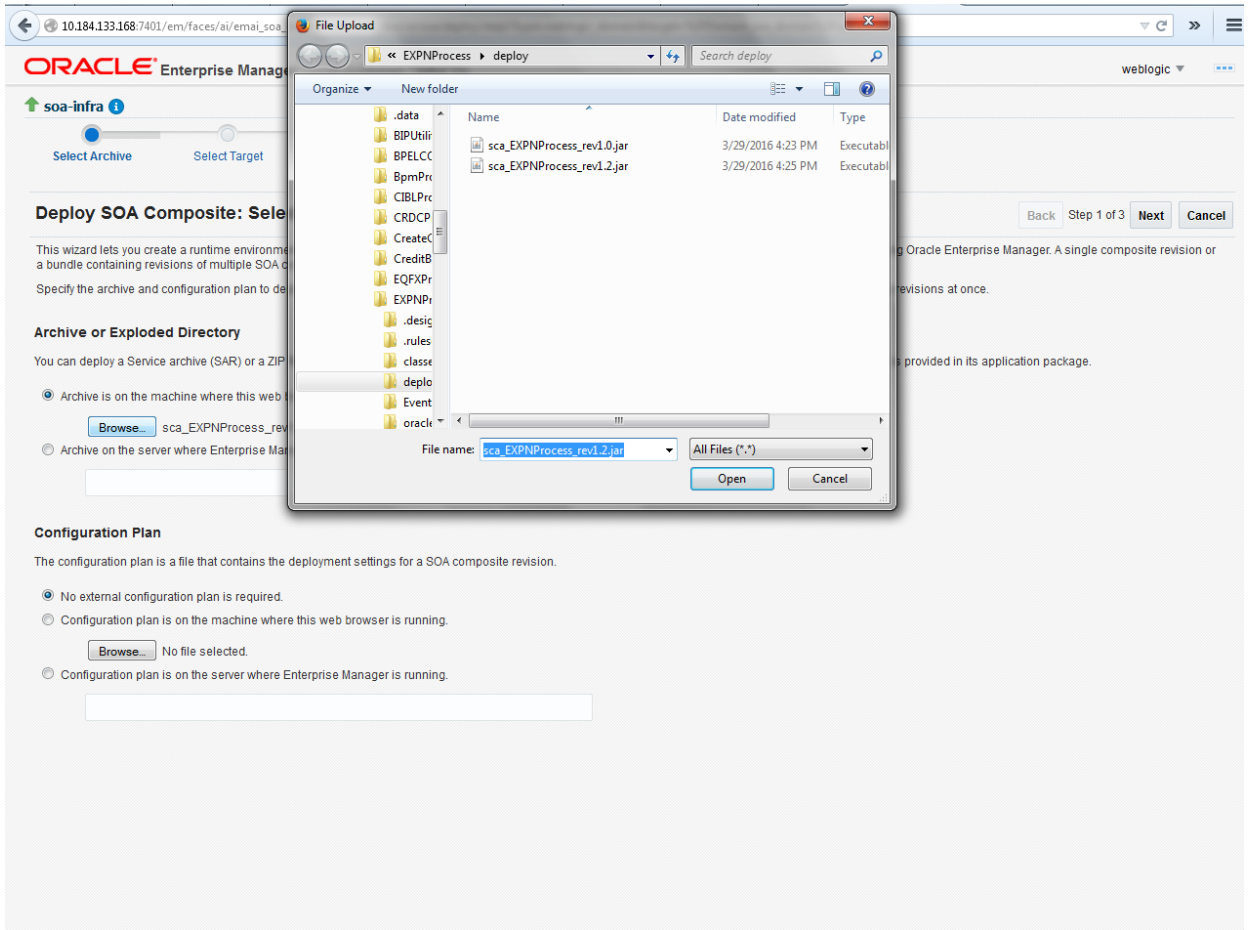
ORACLE

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



- 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.

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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

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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

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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 composite. You can set a different default revision later at any time in the Deployed Composites page that can be accessed from the SOA Composite page.

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

ORACLE Enterprise Manager Fusion Middleware Control 12c

WebLogic Domain SOA Infrastructure weblogic

Mar 29, 2016 4:30:11 PM IST

Target Navigation

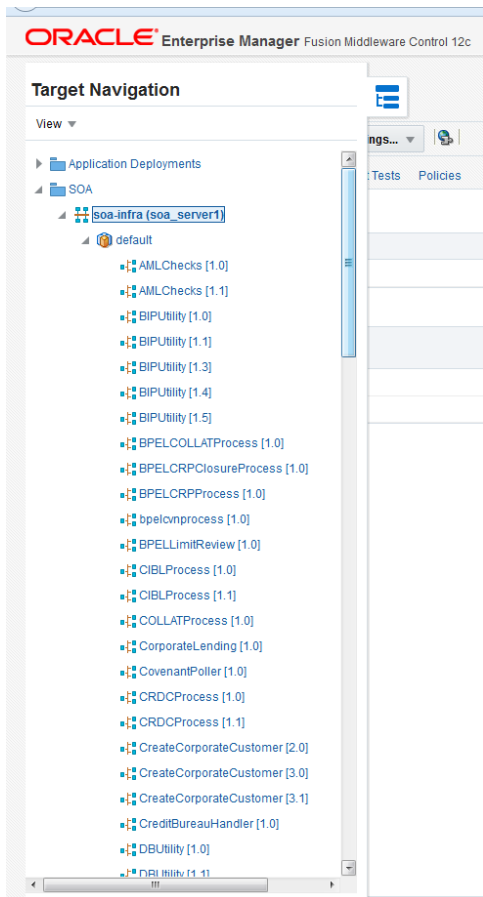
View

- 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]
- InitiateCorpJarrahContract [1.0]
- InitiateCorpJarrahContractService [1.0]
- InitiateCorpJarrahContractService [1.1]
- InitiateCorpIslamicContract [1.0]
- InitiateCorpIstisnaContract [1.0]
- InitiateCorpIstisnaContractService [1.0]
- 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]
- IslamicJarrahAccount [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



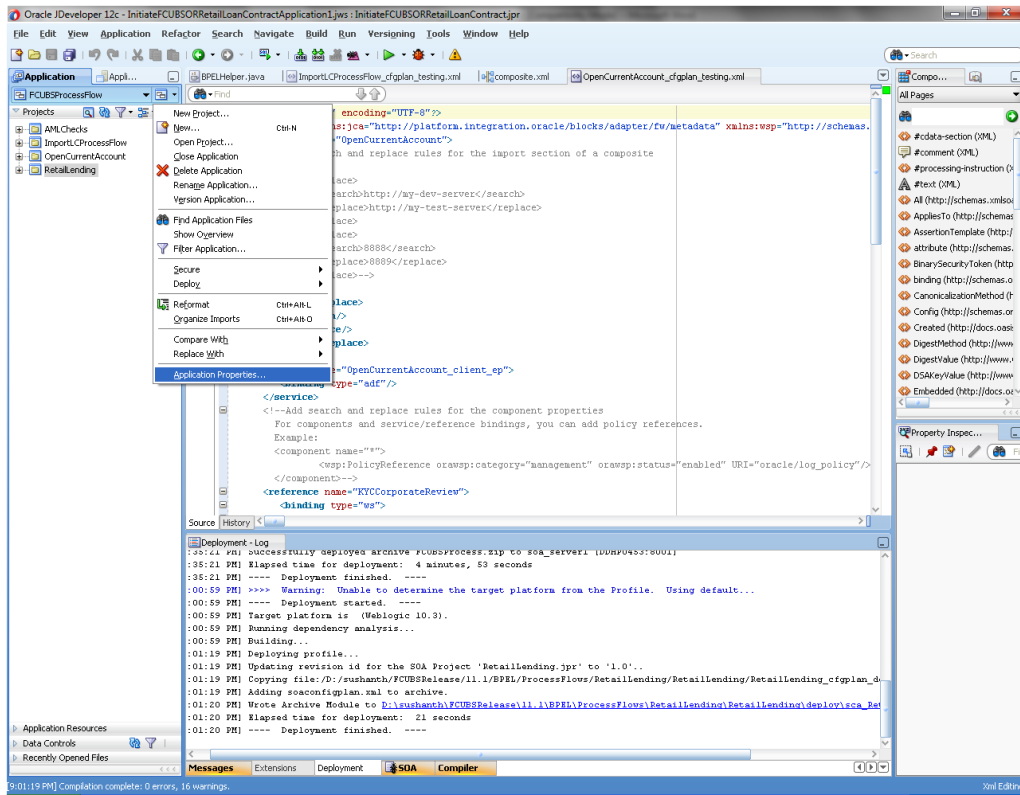
8. Deploying Multiple Composite application using JDeveloper

8.1 Introduction

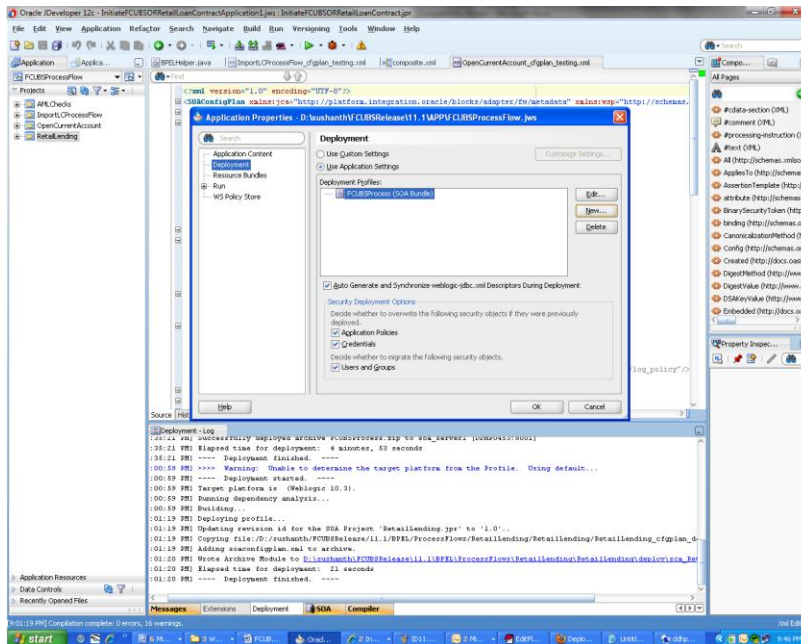
This section describes how to deploy a multiple SOA composite application with Oracle JDeveloper after completing updating of config plans with respective target environment replacement values.

8.2 Creating the Deployment Profile

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

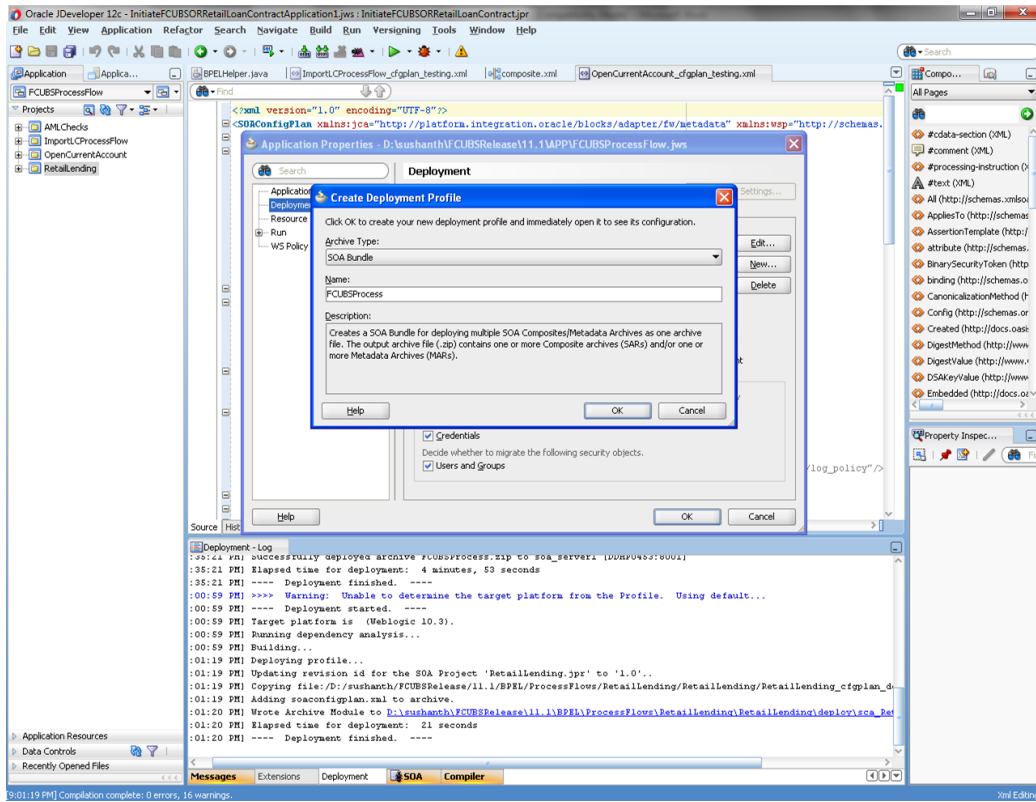


- In the Application Properties dialog, click Deployment.
- Click New.

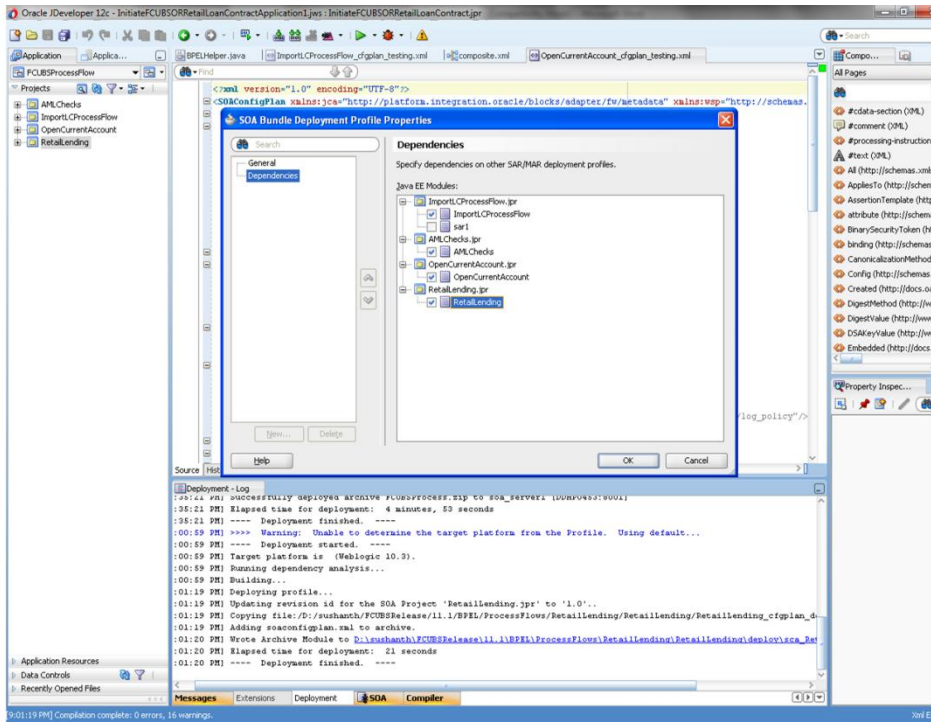


- The Create Deployment Profile dialog appears.
- In the Archive Type list, select SOA Bundle.

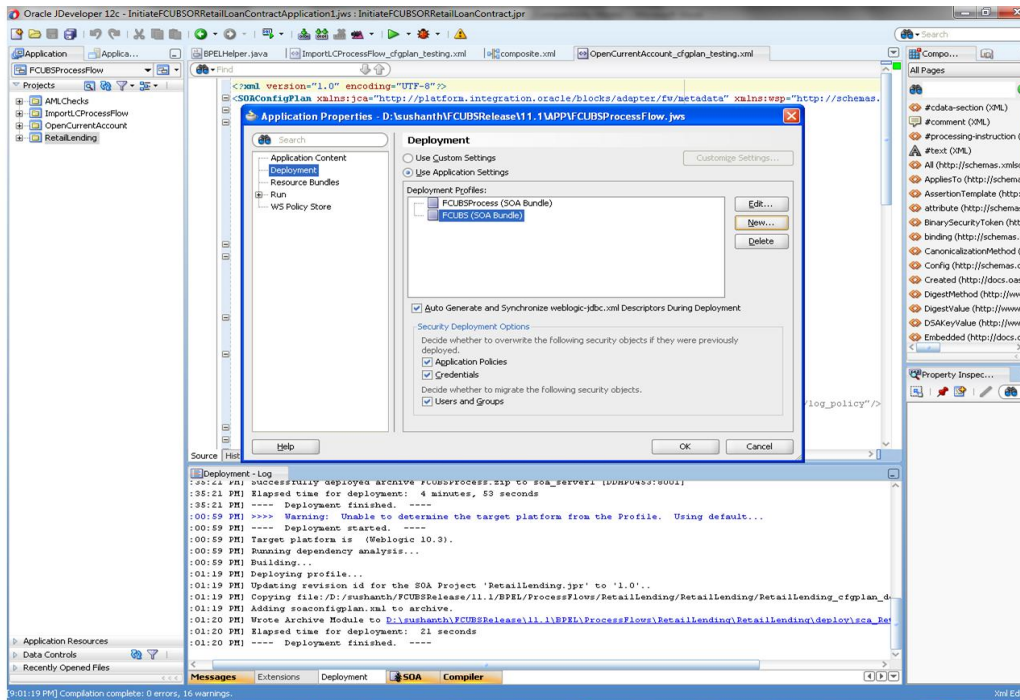
- In the Name field, enter a name and click 'OK'.



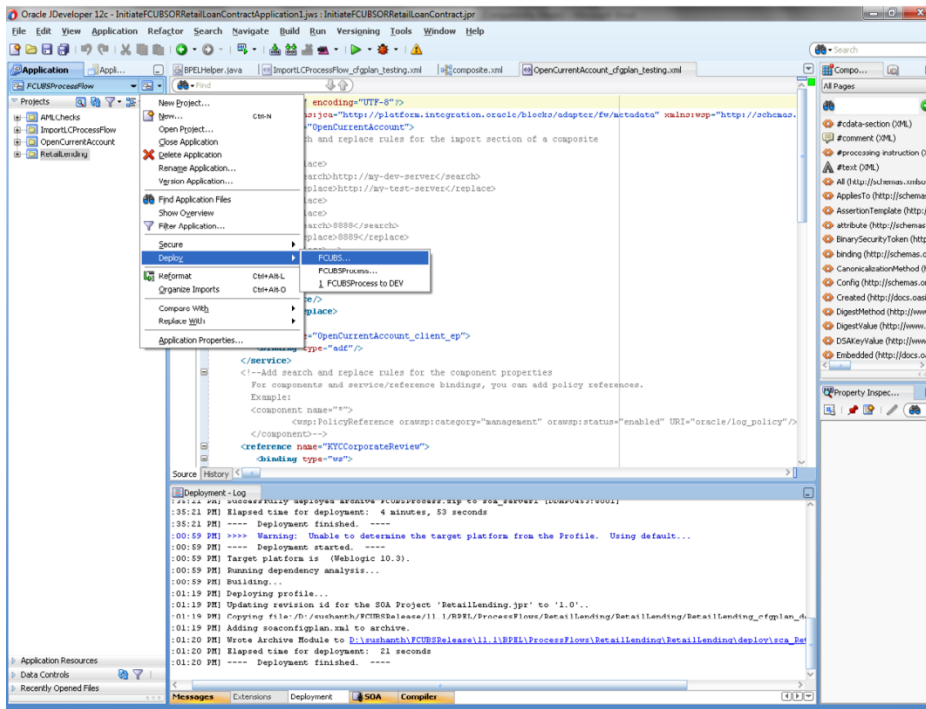
- In the navigator on the left, select the Dependencies node.
- Select the SARs you want to include in this bundle, as illustrated in the screen shot
- Click OK.



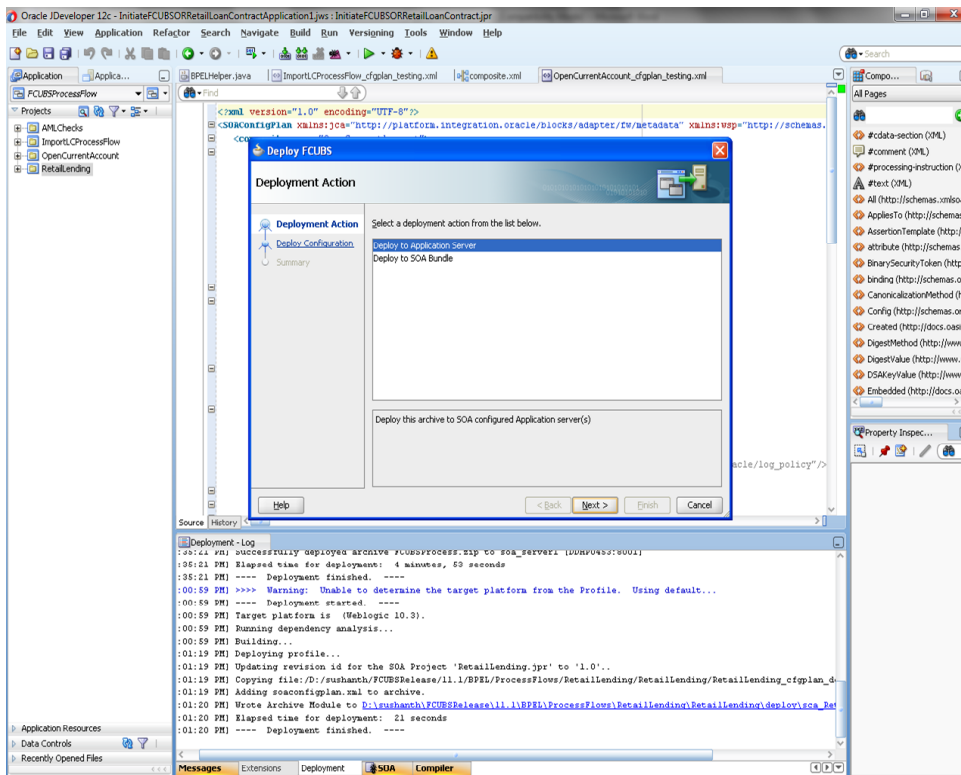
- Click OK to close the Application Properties dialog.



- Select the Application menu again, then select Deploy > SOA_bundle_name

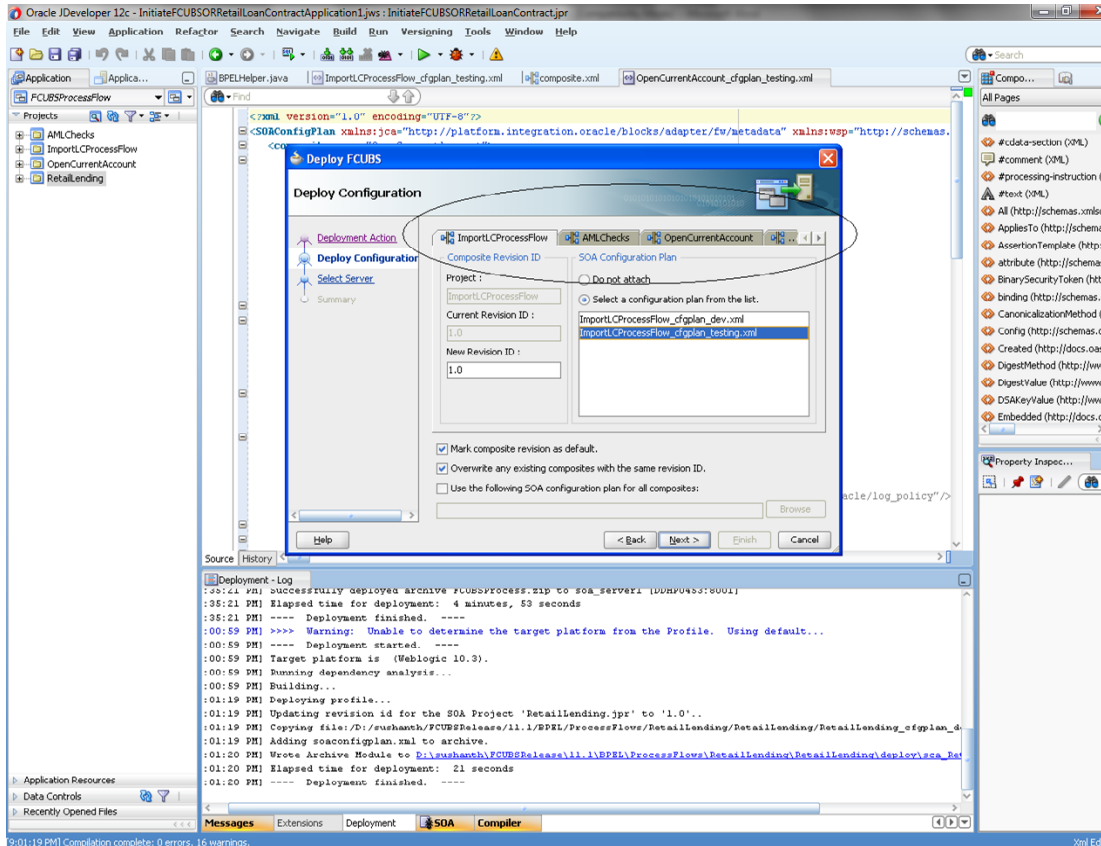


- Deployment screen is launched , Select 'Deploy to Application Server'

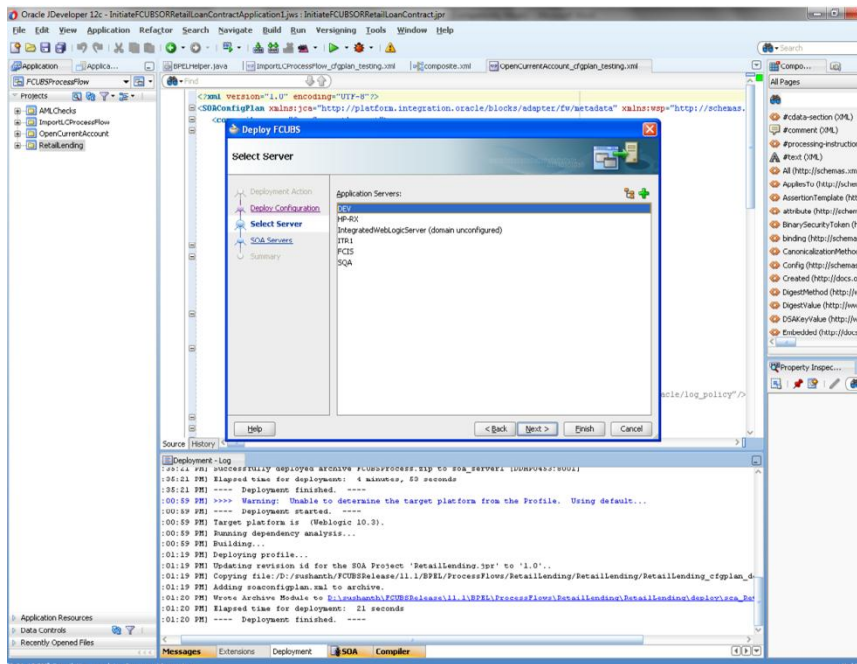


- Deployment configuration is done as illustrated in the below screen shot for each application which is displayed in the tab, application navigation can be done using the pointer provided at the end of the tab.

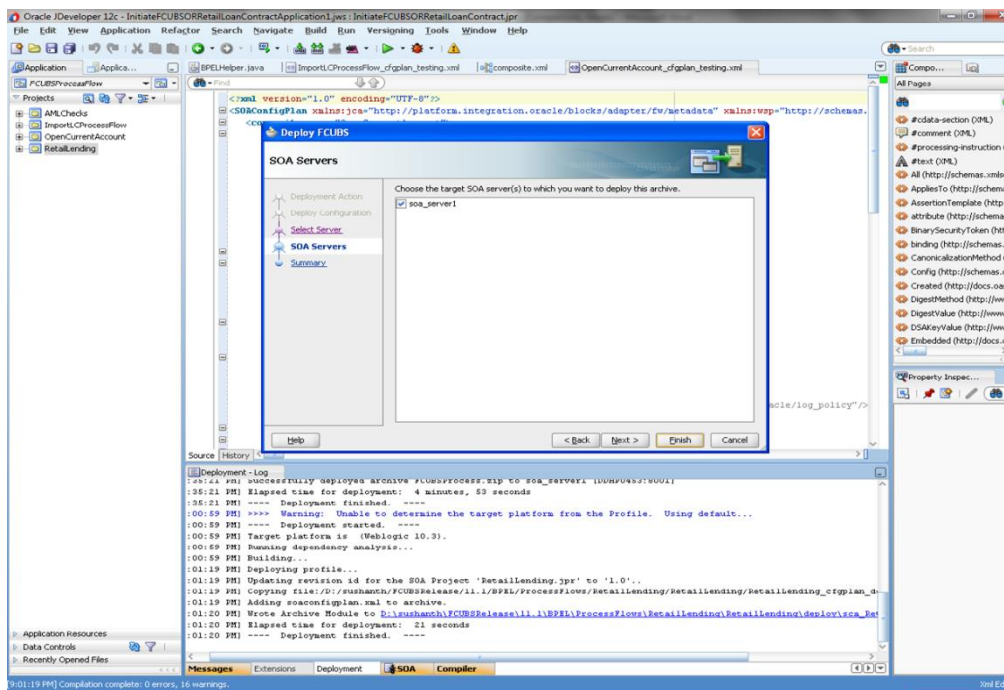
- Select a Revision with which the deployment should happen
- Select a " Configuration Plan" that was updated as given in Section 5
- Remember to check both the checkboxes
- "Mark composite revision as 'default"
- "Overwrite any existing composites with the same revision ID"
- After all the applications are configured Click "Next" to proceed with the deployment.



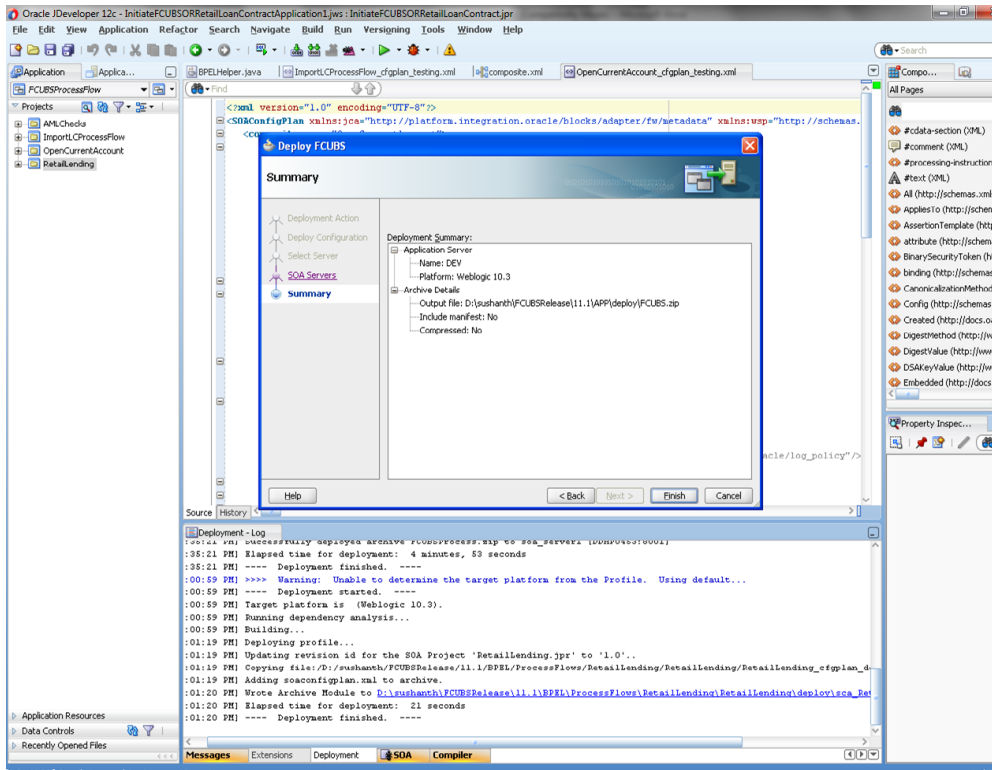
- Select the Application server 'Server Connection' configured that was done in Section 3 to which the deployment needs to be done
- Click 'Next' to proceed with the deployment.



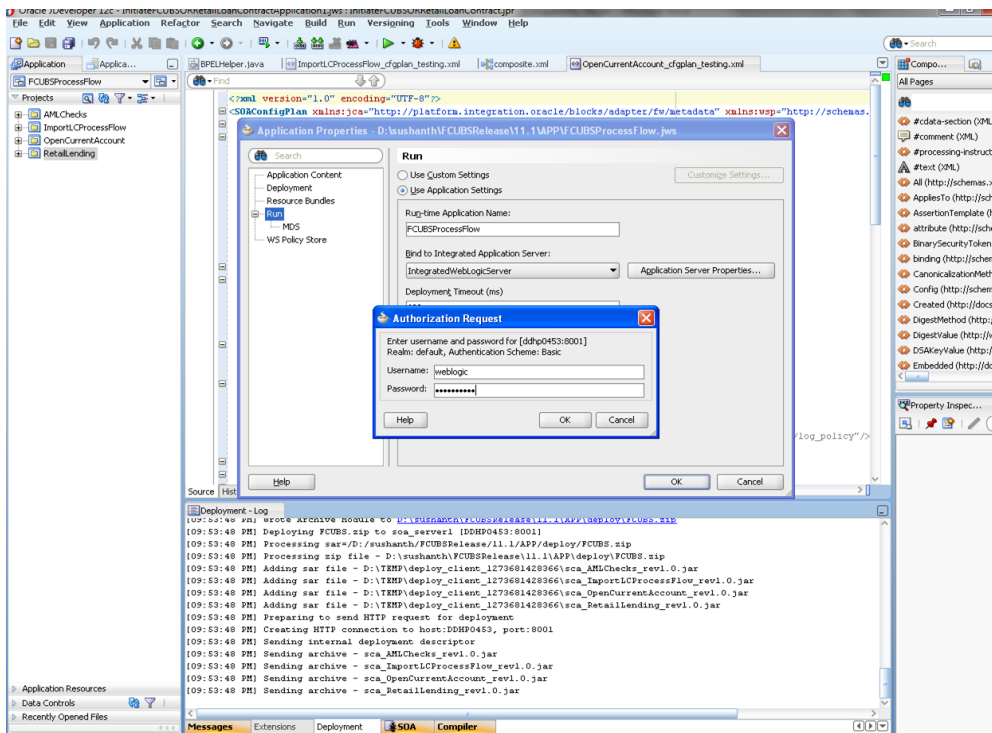
- Select the Application 'server' to which the deployment needs to be done.



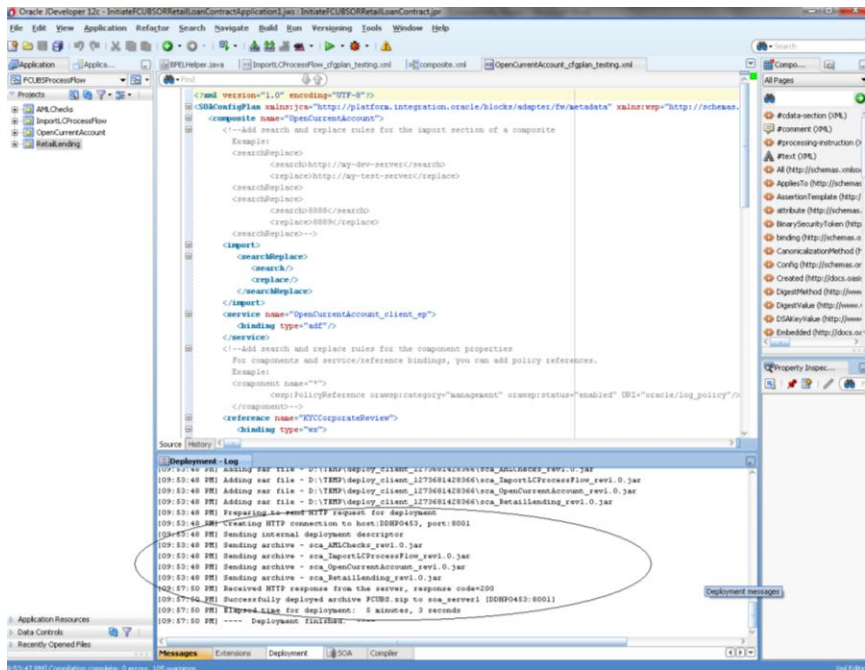
- View the summary of the deployment details and click 'Finish' to complete the deployment.



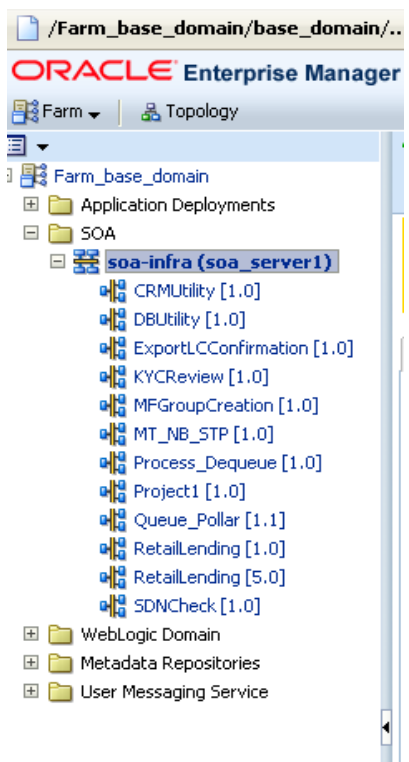
- If the server prompts for username / password provide the credentials for the server.



- 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



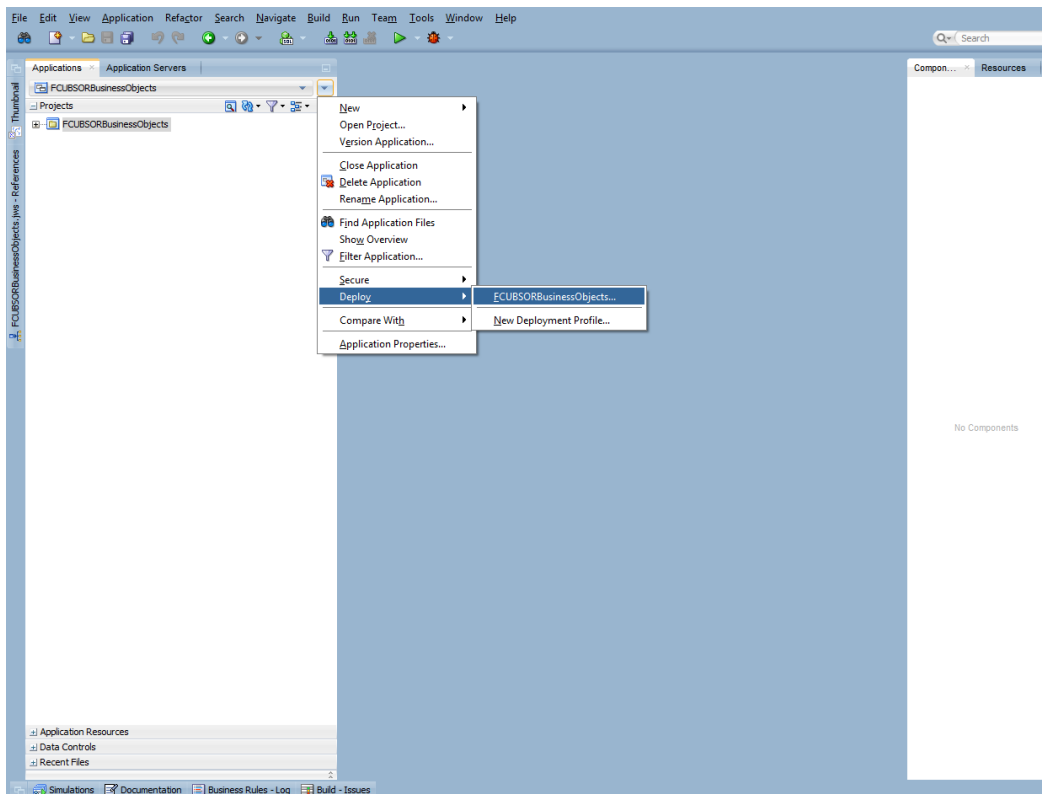
9. Deploying MDS application using JDeveloper

9.1 Introduction

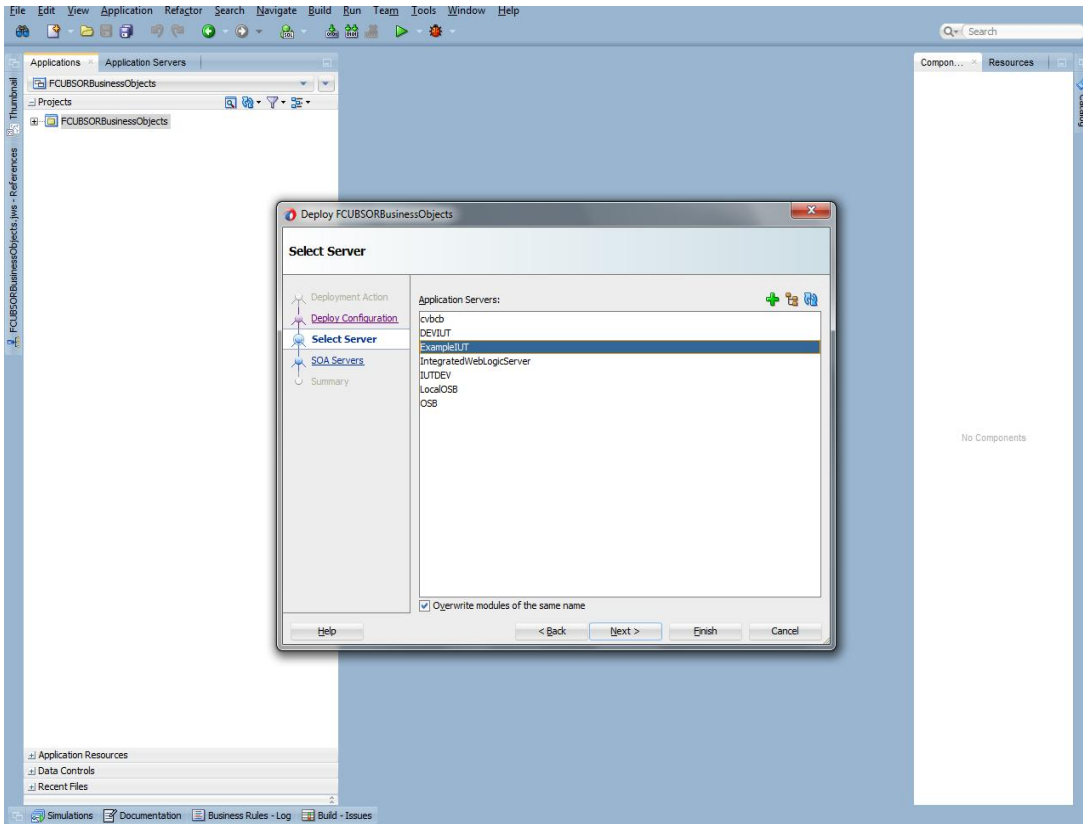
This section describes how to deploy a MDS application with Oracle JDeveloper with respective target environment.

9.2 Deploying the Application

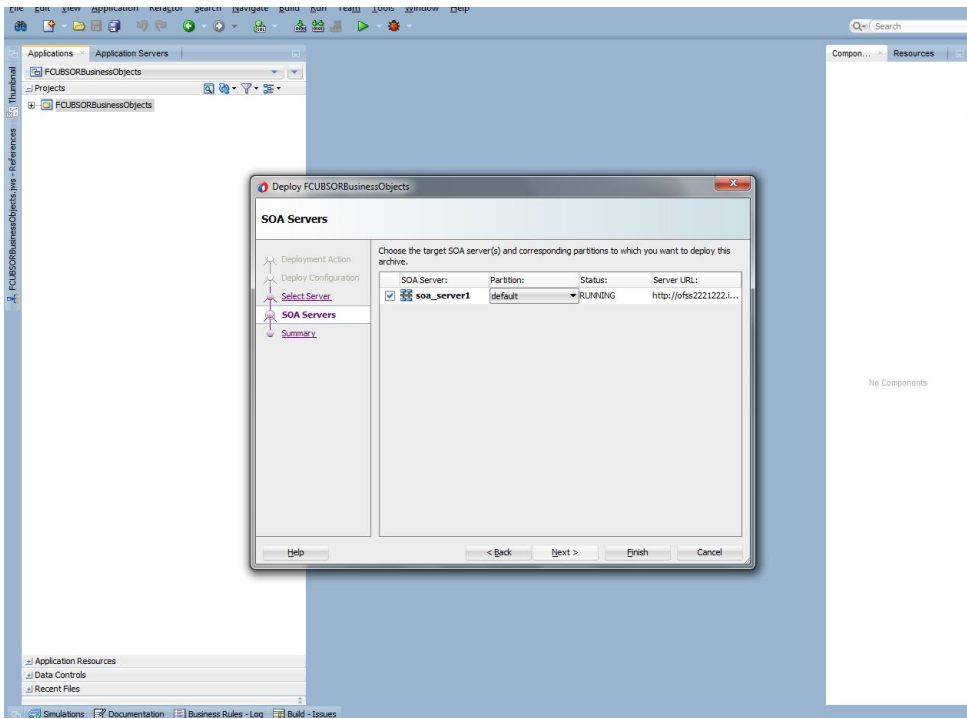
- Load the MDS Application(FCUBSORBusinessObjects,FCUBSORServiceObjects) in JDeveloper
- Right click on the “Application” tab in the JDeveloper
- Select ‘Deploy’ and then click on the default deployment profile which is the same as the application name.
- This will result in the deployment wizard screen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

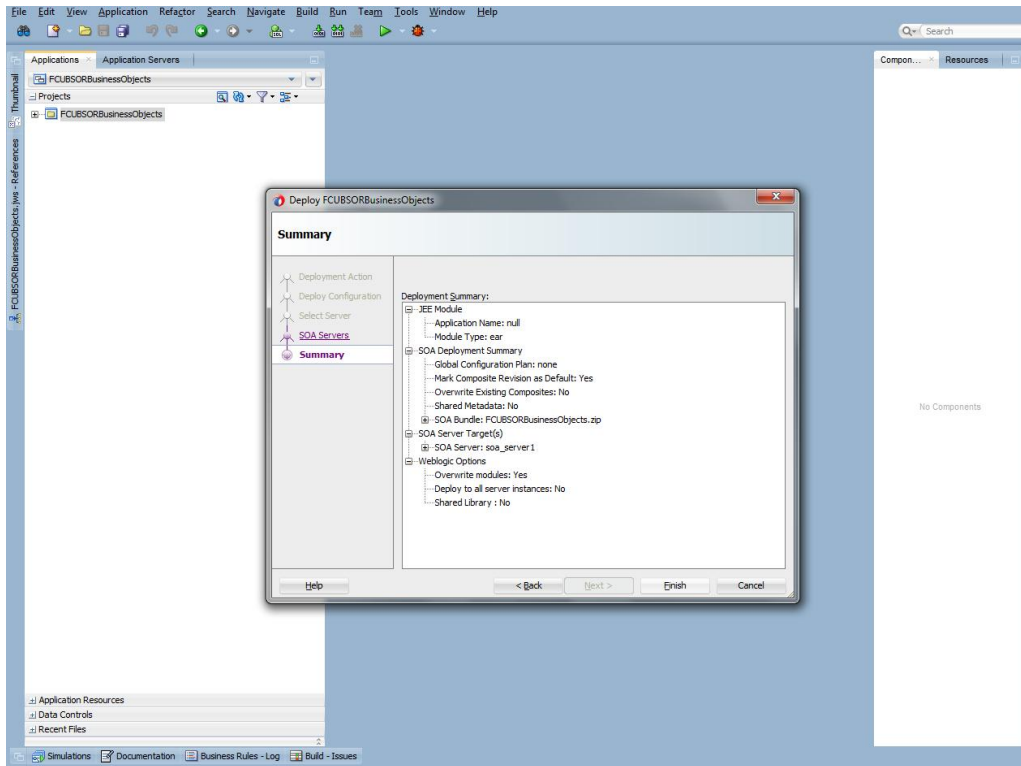


- In deployment action screen choose Deploy to Application Server.
- Click Next→Next to proceed with deployment.
- Select the Application Server to which the MDS Application Needs to Deploy.

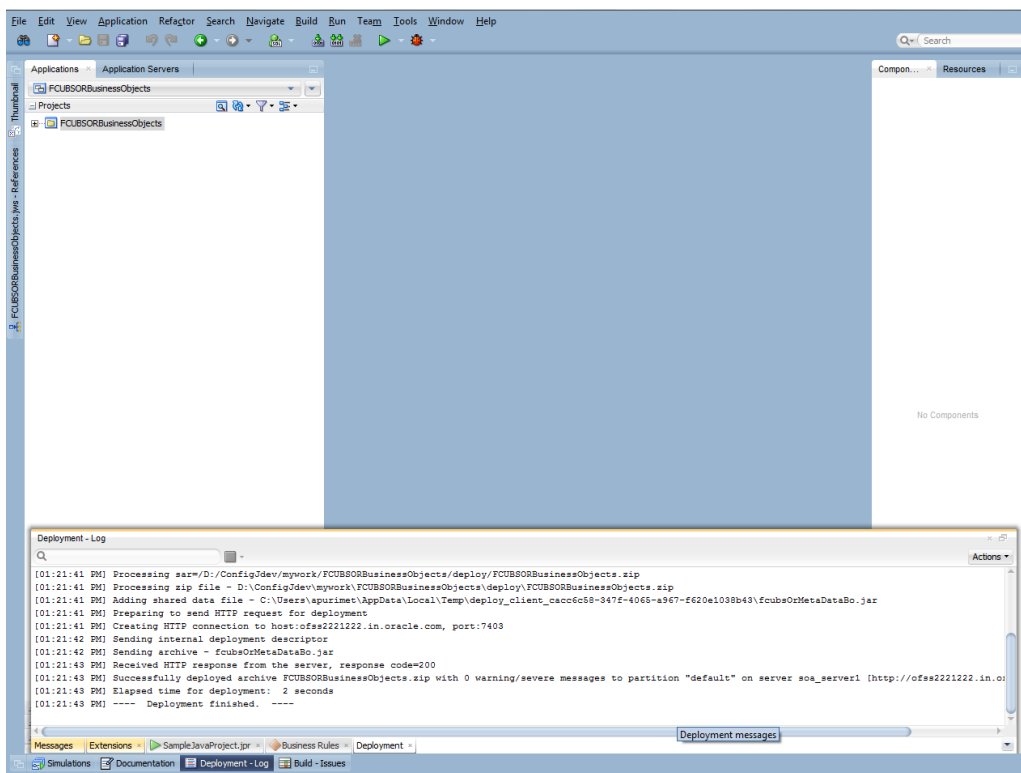


- Click Next and Finish buttons on the deployment wizard after selecting application server.





- 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 like '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...' (providing search and management tips), 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' (including helpful tools like 'Configure applications' and 'Oracle Enterprise Manager', and general information like 'Common Administration Task Descriptions'). Below this is the 'Domain Configurations' section, which is organized into a grid of categories: 'Domain' (Domain), 'Domain Partitions' (Domain Partitions, Partition Work Managers), 'Environment' (Servers, Clusters, Coherence Clusters, Machines, Virtual Hosts, Virtual Targets, Work Managers, Concurrent Templates, Resource Management, Startup And Shutdown Classes), 'Resource Group Templates' (Resource Group Templates), 'Resource Groups' (Resource Groups), 'Deployed Resources' (Deployments), '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), 'Interoperability' (WTC Servers, Jolt Connection Pools), 'Diagnostics' (Log Files, Diagnostic Modules, Built-in Diagnostic Modules, Diagnostic Images, Request Performance, Archives, Context, SNMP, Interceptors), 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 the health of running servers as 'OK (3)'. The main content area includes a breadcrumb trail, a search bar, and a 'Summary of JDBC Data Sources' section with 'Configuration' and 'Monitoring' tabs. Below this is a descriptive paragraph about JDBC data sources and a table of existing data sources. The 'SOADataSource' is highlighted in the table.

Summary of JDBC Data Sources

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

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

Customize this table

Data Sources (Filtered - More Columns Exist)

| Name | Type | JNDI Name | Targets | Scope | Domain Partitions |
|-----------------------|---------|--------------------------------|---------------------------------------|--------|-------------------|
| LocalSvcTbiDataSource | Generic | jdbc/LocalSvcTbiDataSource | AdminServer | Global | |
| mds-bam | Generic | jdbc/mds/beamComposer | AdminServer, bam_server1 | Global | |
| mds-ovsm | Generic | jdbc/mds/ovsm | 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 | |

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.

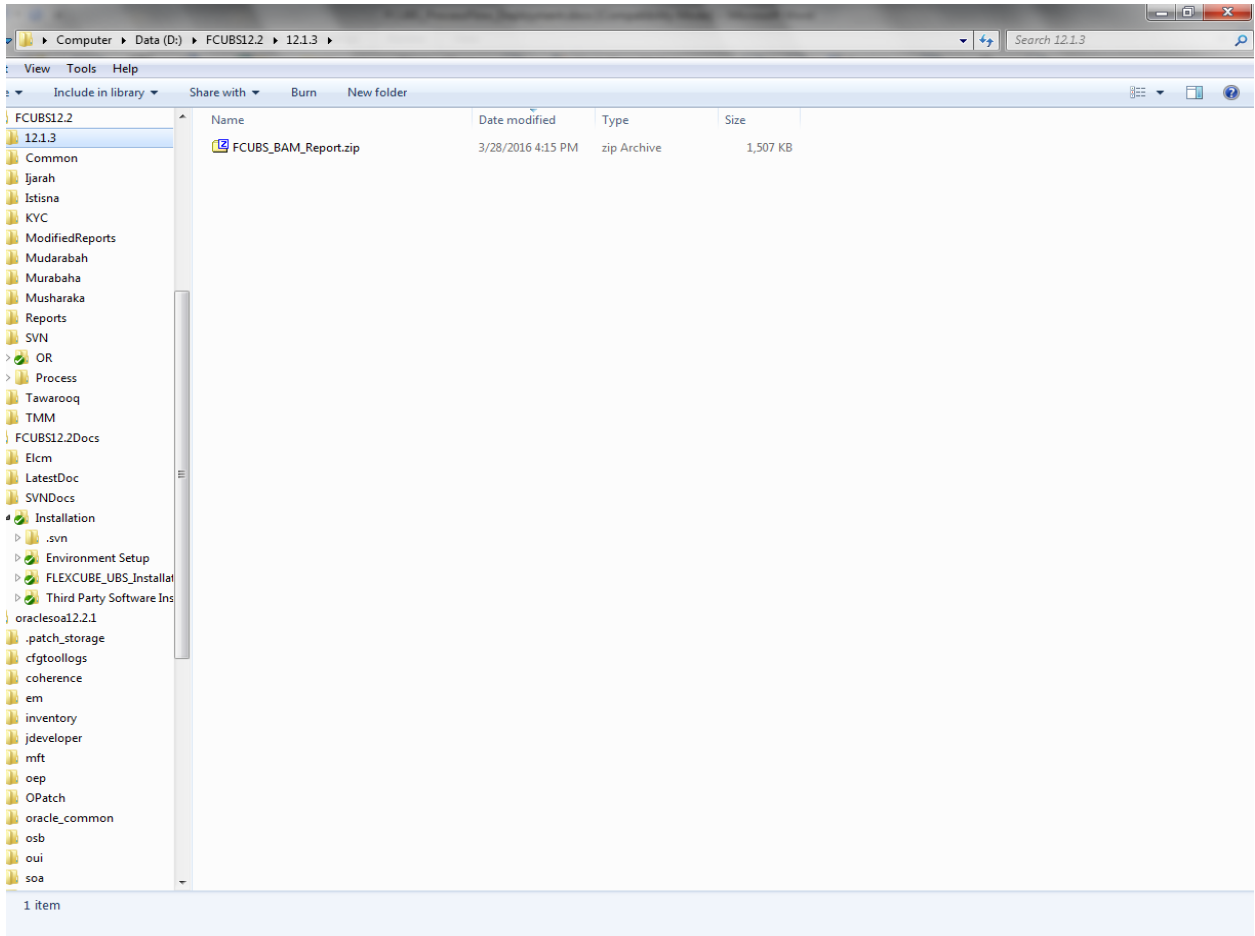
4) Click on Target tabs → Select bam_server check box → Click Save

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:

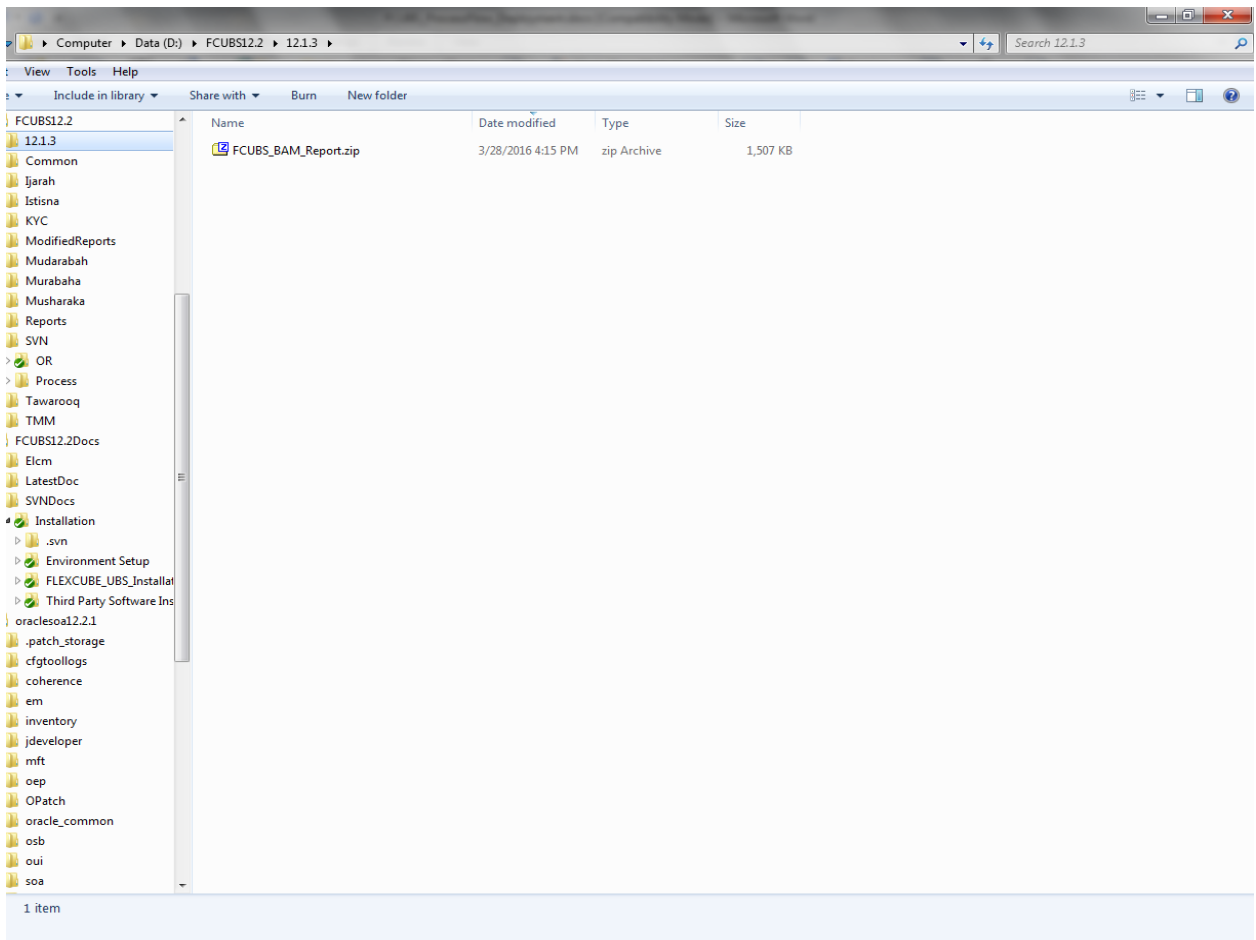
| Servers | |
|-------------------------------------|-------------|
| <input type="checkbox"/> | AdminServer |
| <input checked="" type="checkbox"/> | bam_server1 |
| <input checked="" type="checkbox"/> | soa_server1 |

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 hierarchy), "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.



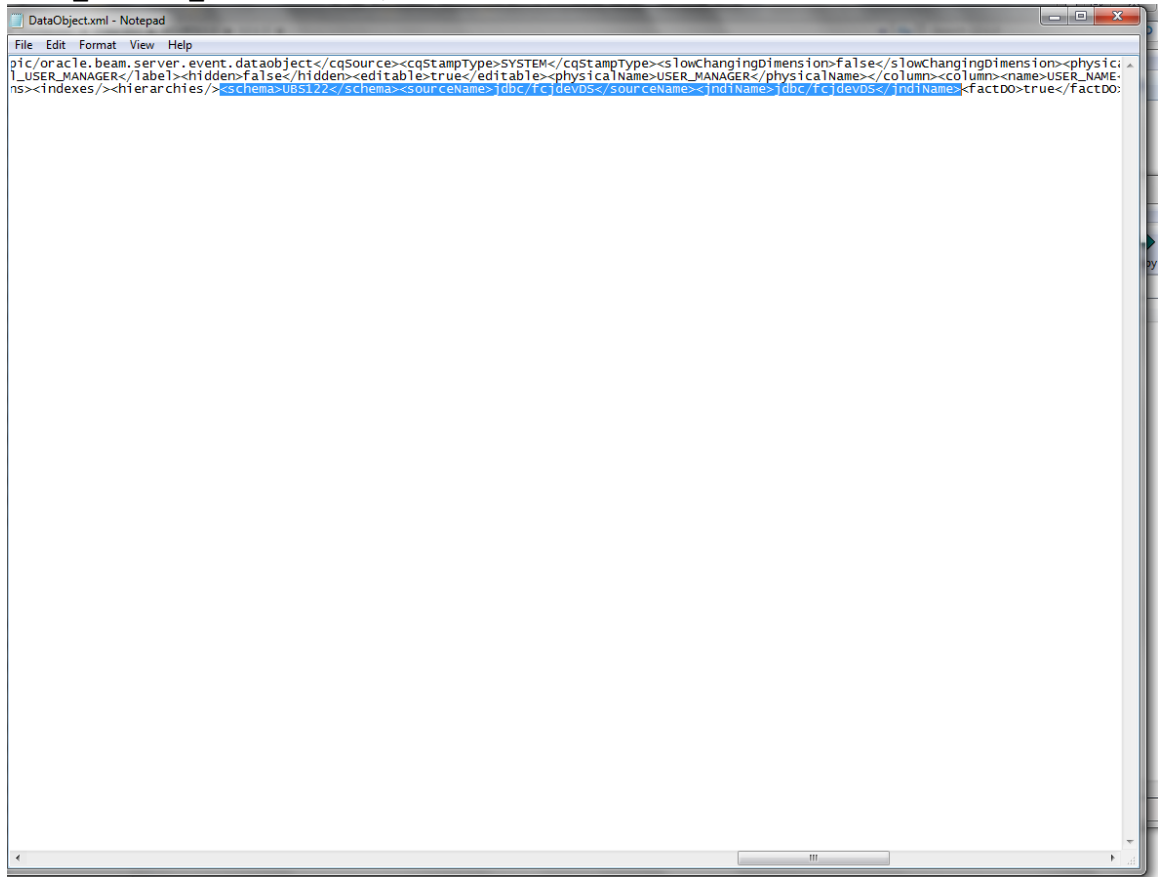
- 6) Open the FCUBS_BAM_Report.zip →Dataobject →Update the Schema element with the SOA_INFRA schema name for Wftask_Different_Stages.xml, CUBE_INSTANCE.xml,FCUBSDATAOBJECTS.xml files .



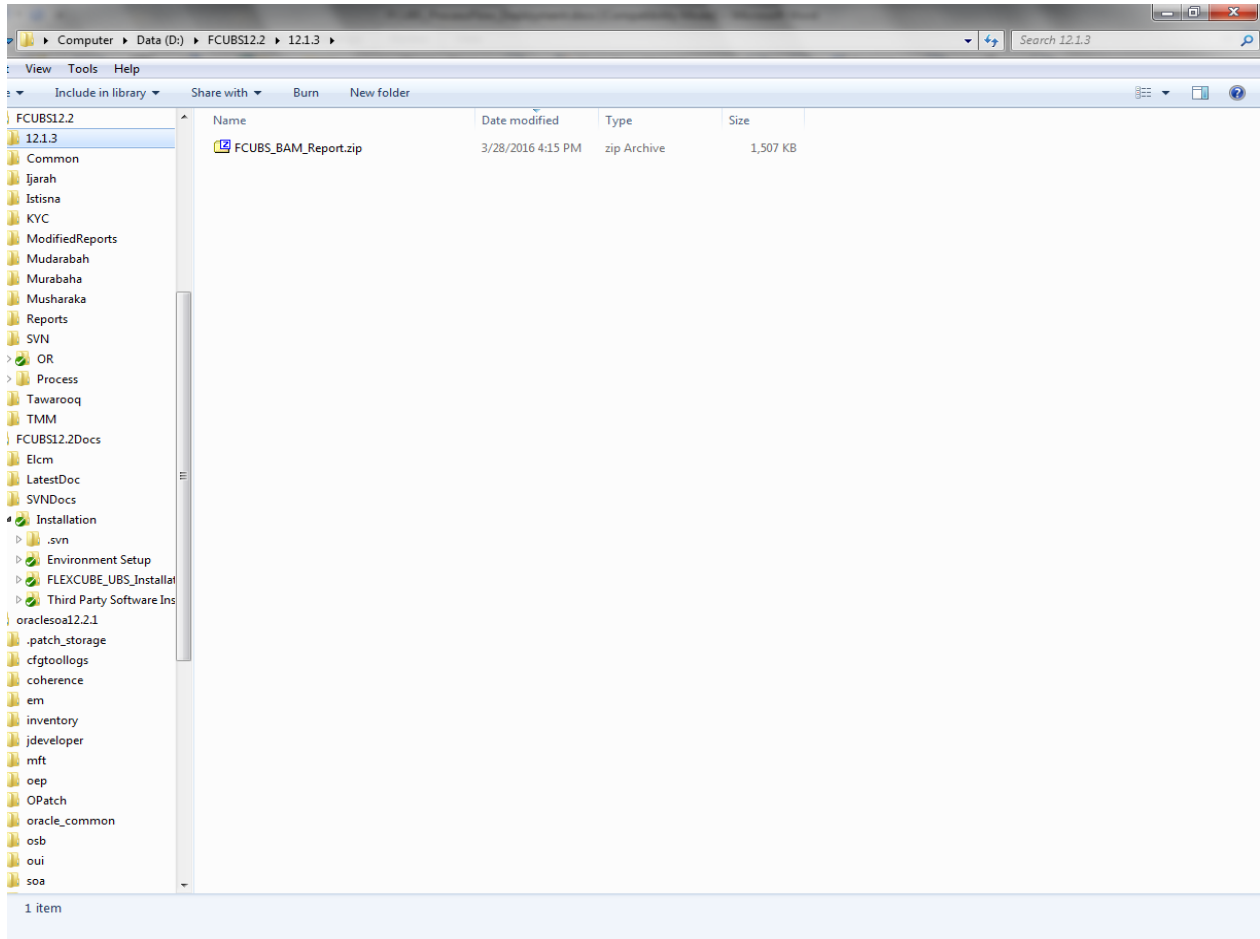
```
DataObject.xml - Notepad
File Edit Format View Help
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```

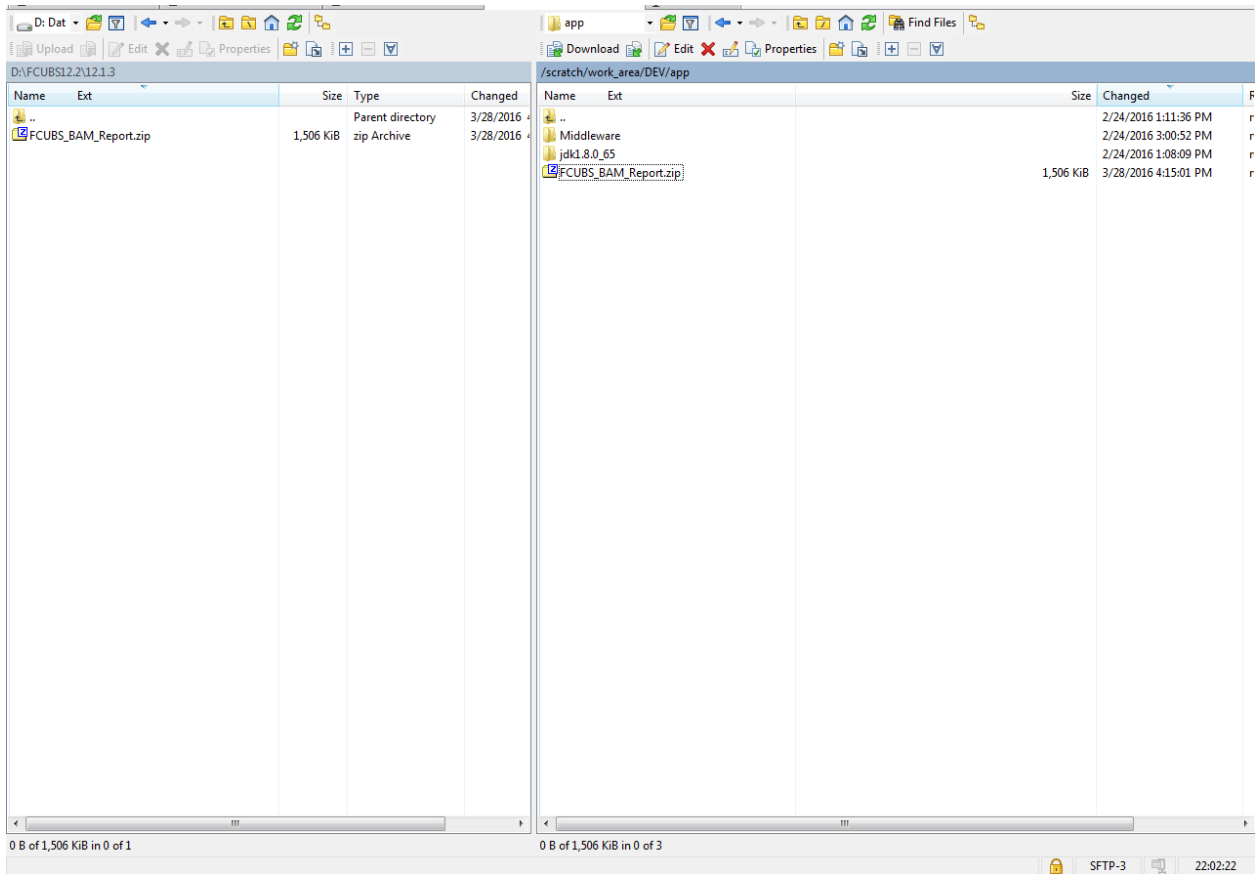


- 7) Open the FCUBS_BAM_Report.zip →Dataobject →Update the Schema element with the FCUBS schema name for SMTB_USER_TYPE_CONVERSION_VIEW.xml, ORVW_TRACK_EXPOSURE.xml, ORVW_FACILITY_EXPOSURE.xml, GetUtilsDB.xml files.



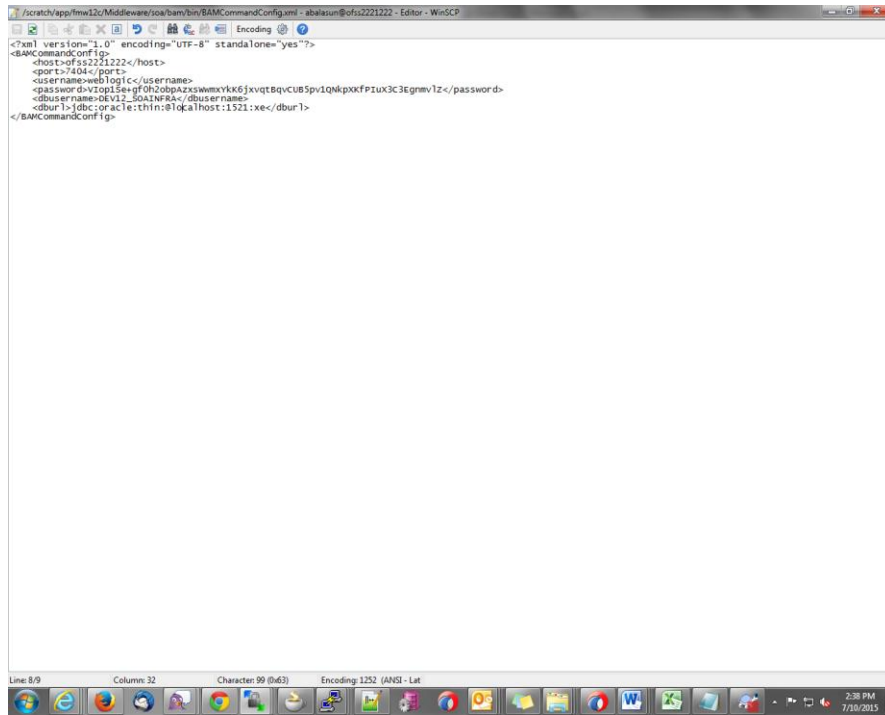
8) Move the BAM Project Unit (.Zip) Local to server location.





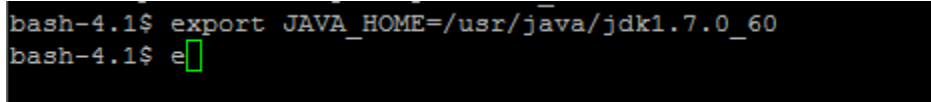
- 9) Configure the BAM server location ,port username and password in BAMCommandConfig.xml. It is available in MIDDLEWARE_HOME\soa\bam\bin\BAMCommandConfig.xml

EX:



```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<BAMCommandConfig>
  <host>of51221222</host>
  <port>7404</port>
  <username>weblog1</username>
  <password>v2opt15e+pf0h2dbpazxswmxyk6jxvqtqvcub5pv1qkpkxfP1ux3c3tgmvlz</password>
  <dbusername>sa112_0A1NF8A/<dbusername>
  <dburl>|jdbc:oracle:thin:@10ca1host: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] Copyrigh
t © 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
[May] [2017]
Version 12.4.0.0.0

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