

BIP Installation Guide

Oracle Financial Services Lending and Leasing

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BIP Installation Guide
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<https://www.oracle.com/industries/financial-services/index.html>

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Oracle Financial Services Lending and Leasing User Documentation

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- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

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1. Preface

This document contains notes and installation steps needed to install and Configure Oracle BI Publisher. Oracle Financial Services Lending and Leasing relies on this software to configure reports and this document is in no way meant to replace Oracle documentation supplied with this Oracle product or available via Oracle technical support. The purpose of this document is only meant to supplement the Oracle documentation and to provide Oracle Financial Services Lending and Leasing specific installation instructions.

For recommendations on security configuration, refer Security Configuration Guide.

BI Publisher installation consists of the following steps.

- [Installing BI Publisher](#)
- [Configuring BI Publisher](#)
- [Creating BI Publisher Datasource](#)
- [Importing Reports to BI Publisher Server](#)
- [Configure MDB Mail Server](#)

1.1 Prerequisites

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

- Oracle Software Delivery Cloud (<http://edelivery.oracle.com/>)
 - Oracle Technology Network (OTN)
1. JDK Version 1.8.0_221 or above (<https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>)
 2. Oracle WebLogic Server 12c Version 12.2.1.3.0 (Fusion Middleware Infrastructure Installer) <http://www.oracle.com/technetwork/middleware/weblogic/downloads/wls-main-097127.html>
 3. Oracle BI Publisher Version BI 12.2.1.3.0 / 12.2.1.4.0 <http://www.oracle.com/technetwork/middleware/bi-publisher/downloads/index.html>

Note

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

1.2 Audience

This document is intended for system administrators or application developers who are installing Oracle Financial Services Lending and Leasing Application.

Conventions Used

Term	Refers to
Home Directory/ \$OFSLL_HOME	Oracle Financial Services Lending and Leasing Home Directory

2. Installing BI Publisher

2.1 Installing BI Publisher

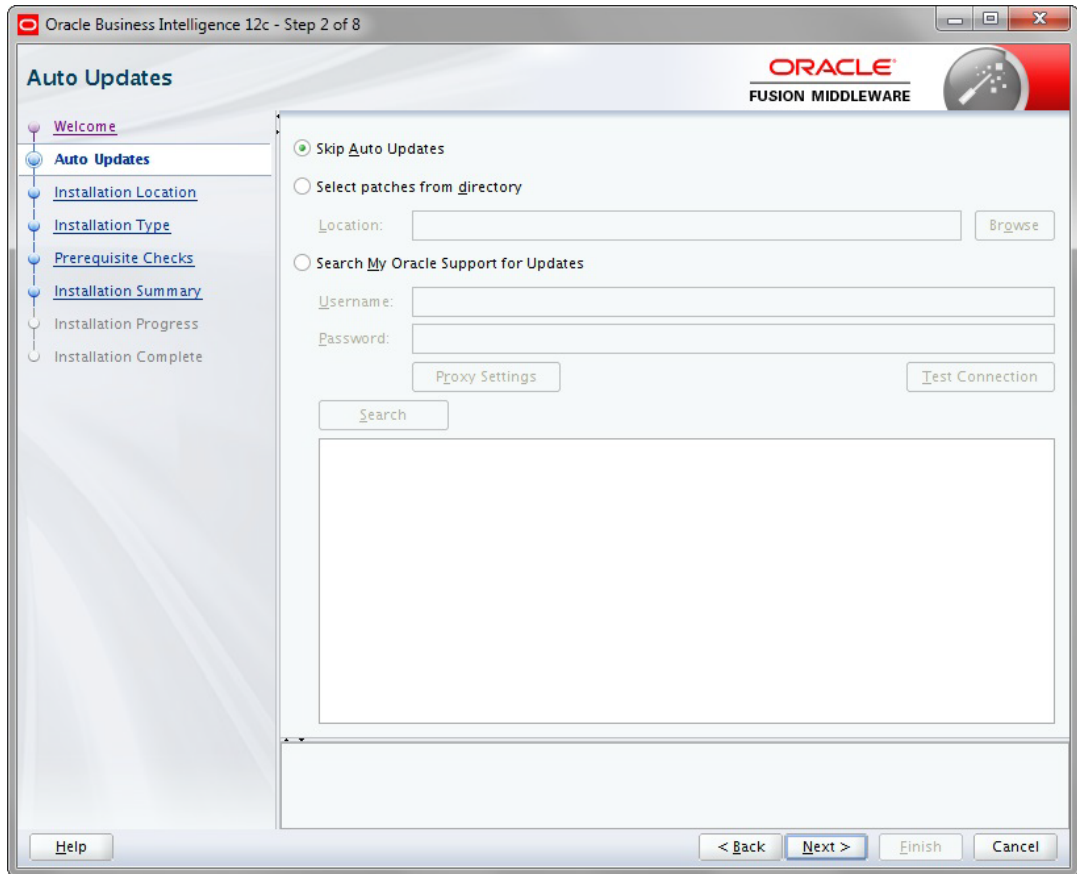
Follow the below steps to install BI publisher:

1. Download and unzip all the software related to OBIEE (2 zip files).
 - fmw_12.2.1.3.0_bi_linux64_Disk1_1of2.zip
 - fmw_12.2.1.3.0_bi_linux64_Disk1_2of2.zip
2. Navigate to bin file
3. Run `./bi_platform-12.2.1.3.0_linux64.bin`
4. The following window is displayed.



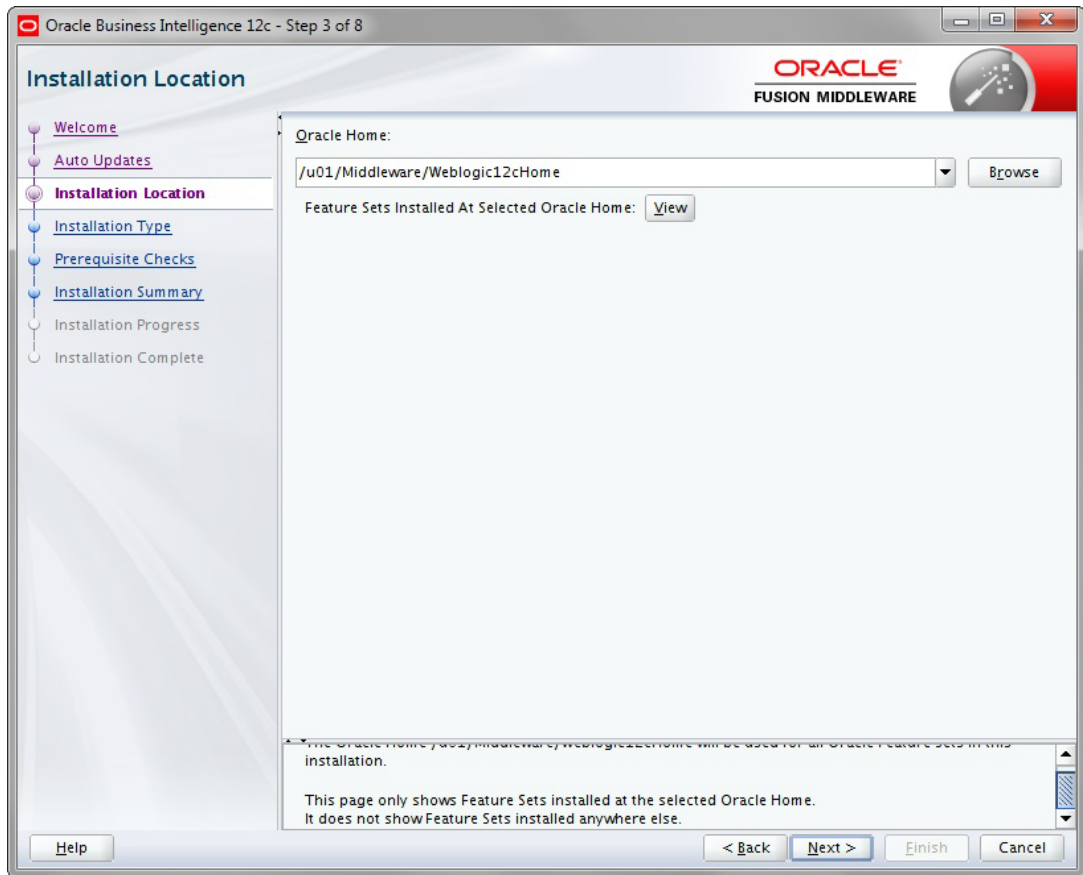
5. Click 'Next'. The following window is displayed.

6. Select the option 'Skip Software Updates'.

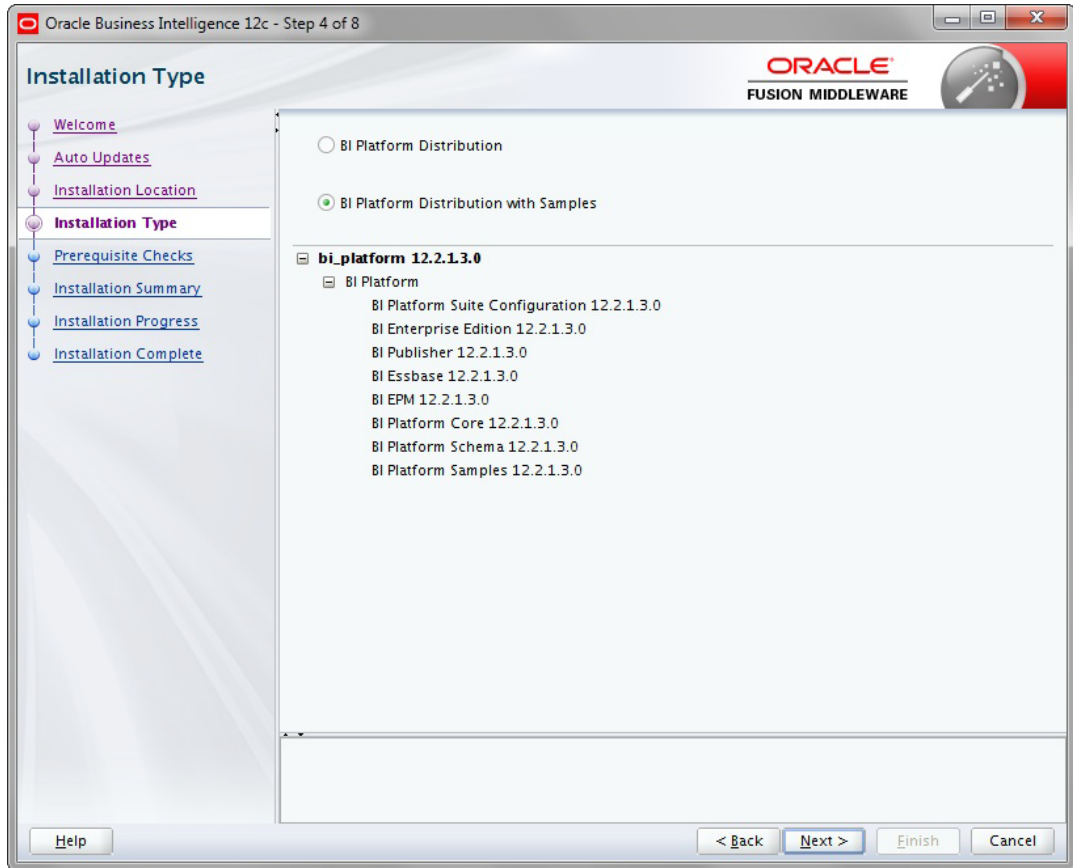


7. Click 'Next'. The following window is displayed.

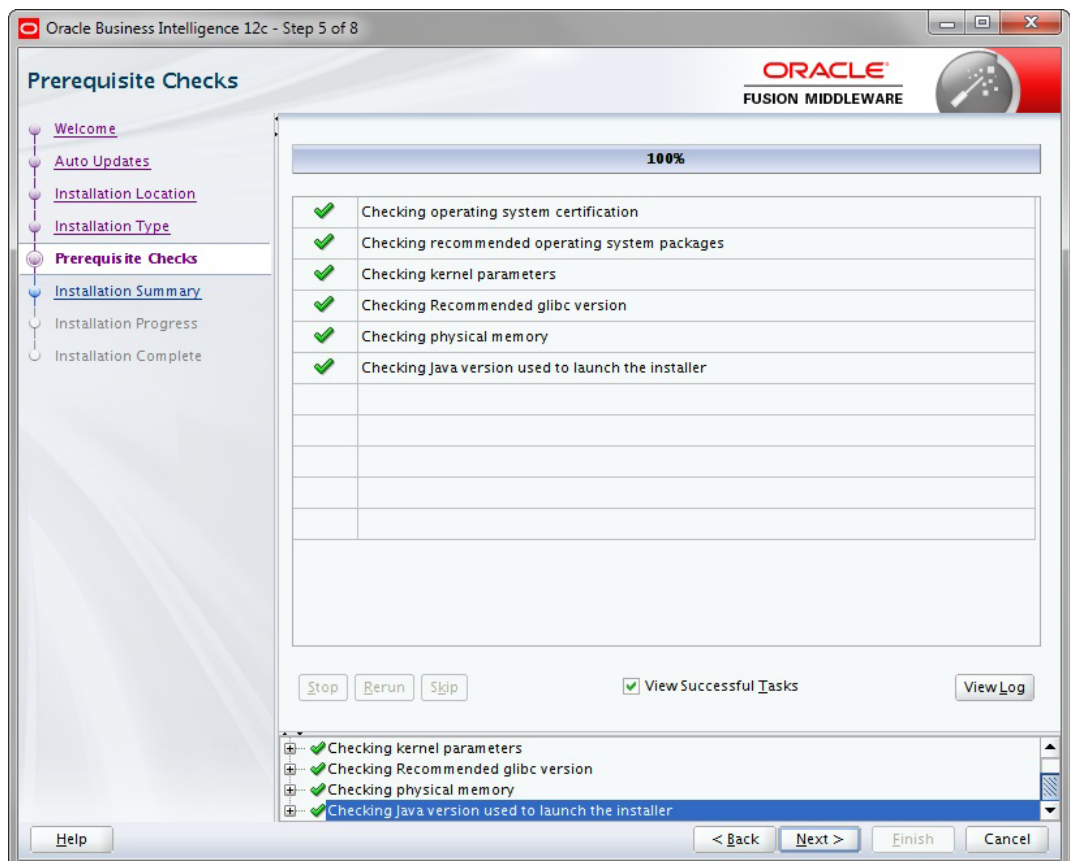
8. Browse Oracle Middleware Home path (for example /u01/Middleware/ Weblogic12cHome) and click 'Next'.



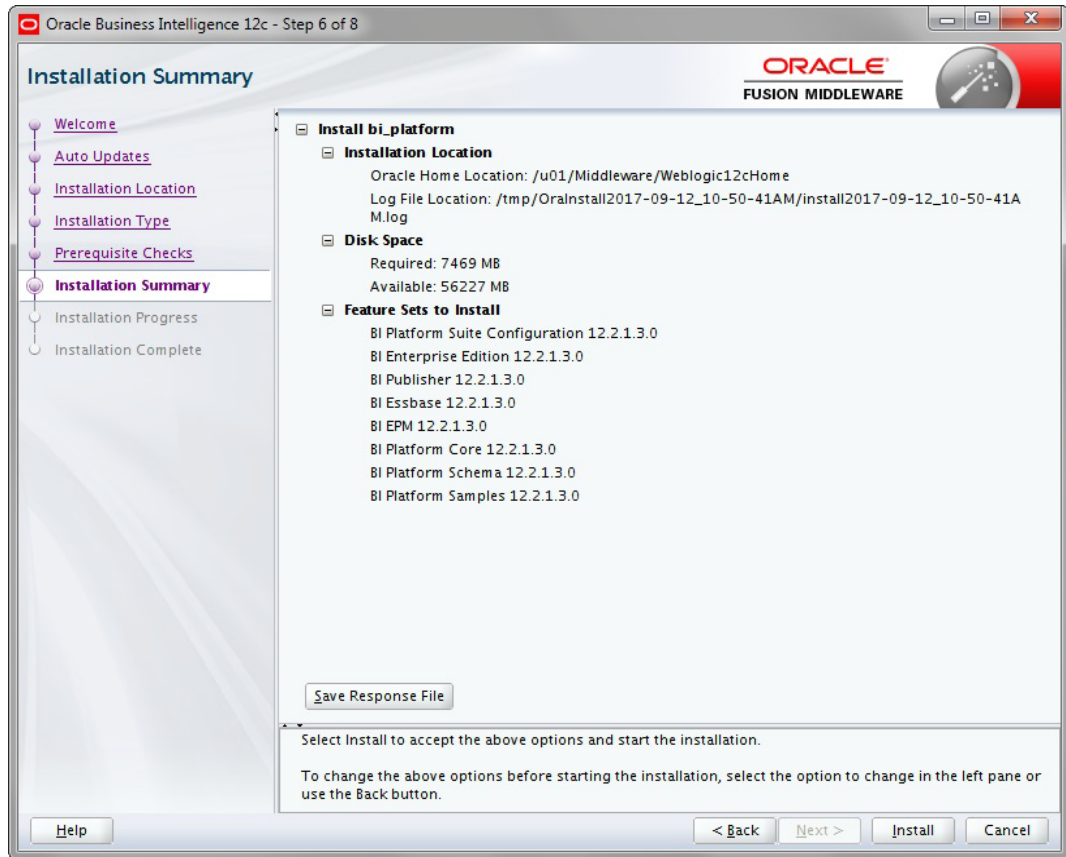
9. Select the option 'BI Platform Distribution with Samples' and click 'Next'.



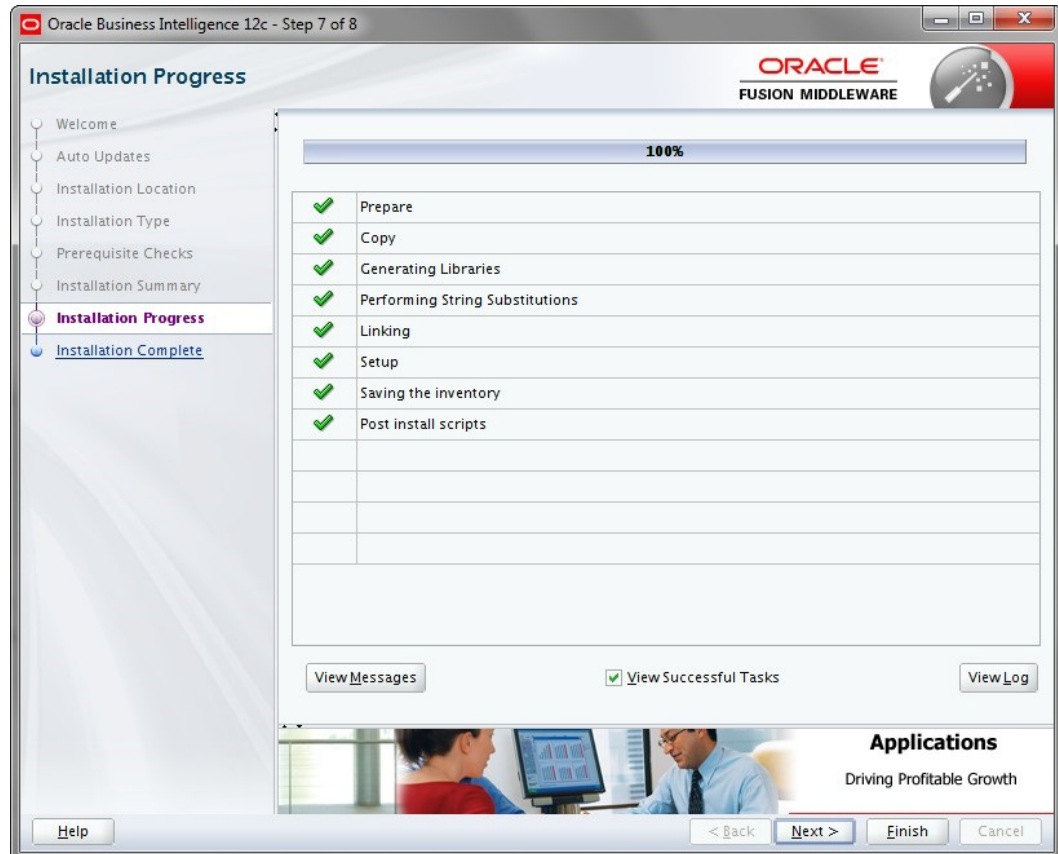
10. The following window is displayed. Click 'Next'.



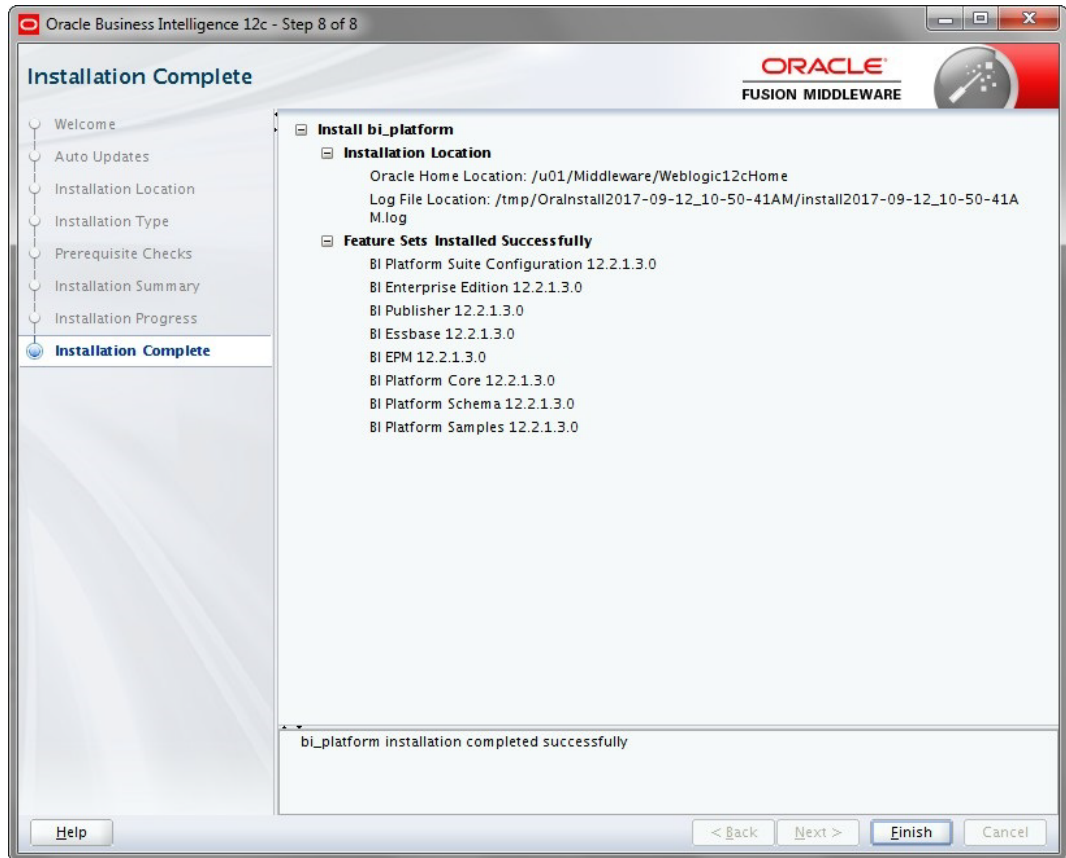
11. The following window is displayed. Click 'Install'.



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



13. Once the installation is complete click 'Finish' to close.



3. Configuring BI Publisher

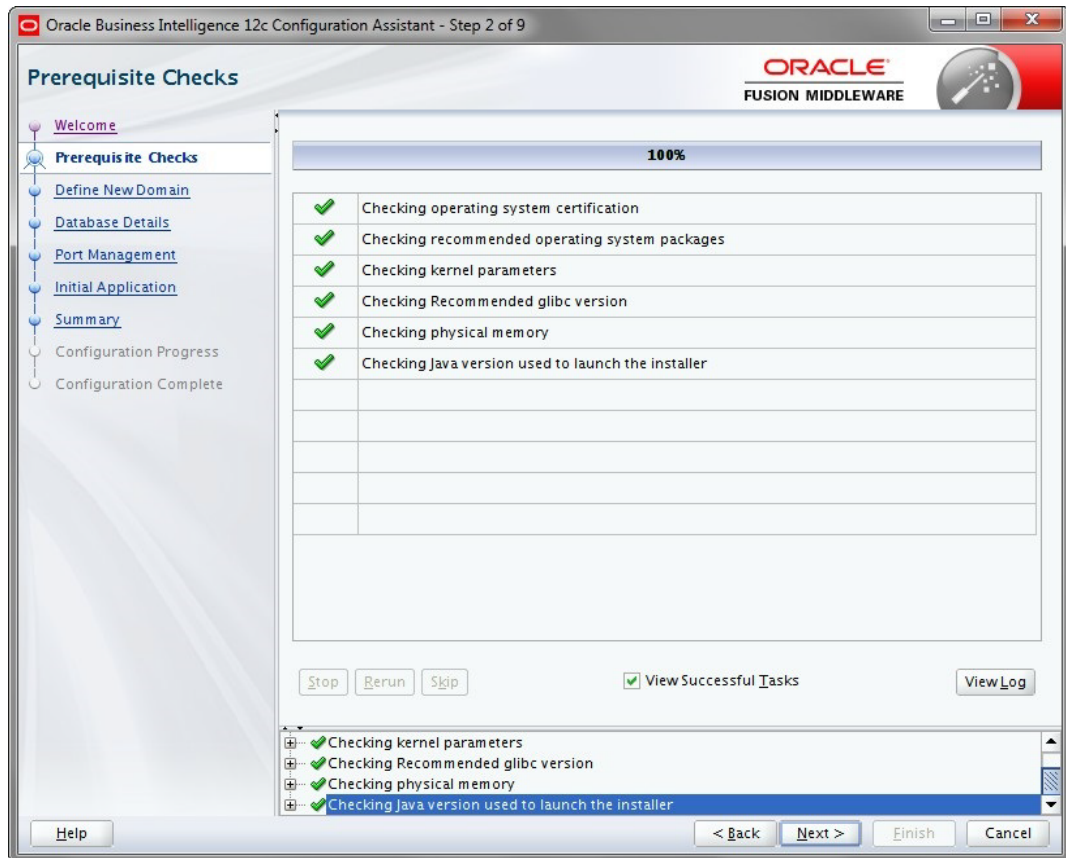
After installing BI Publisher, the next step is to configure BIP.

To configure BIP

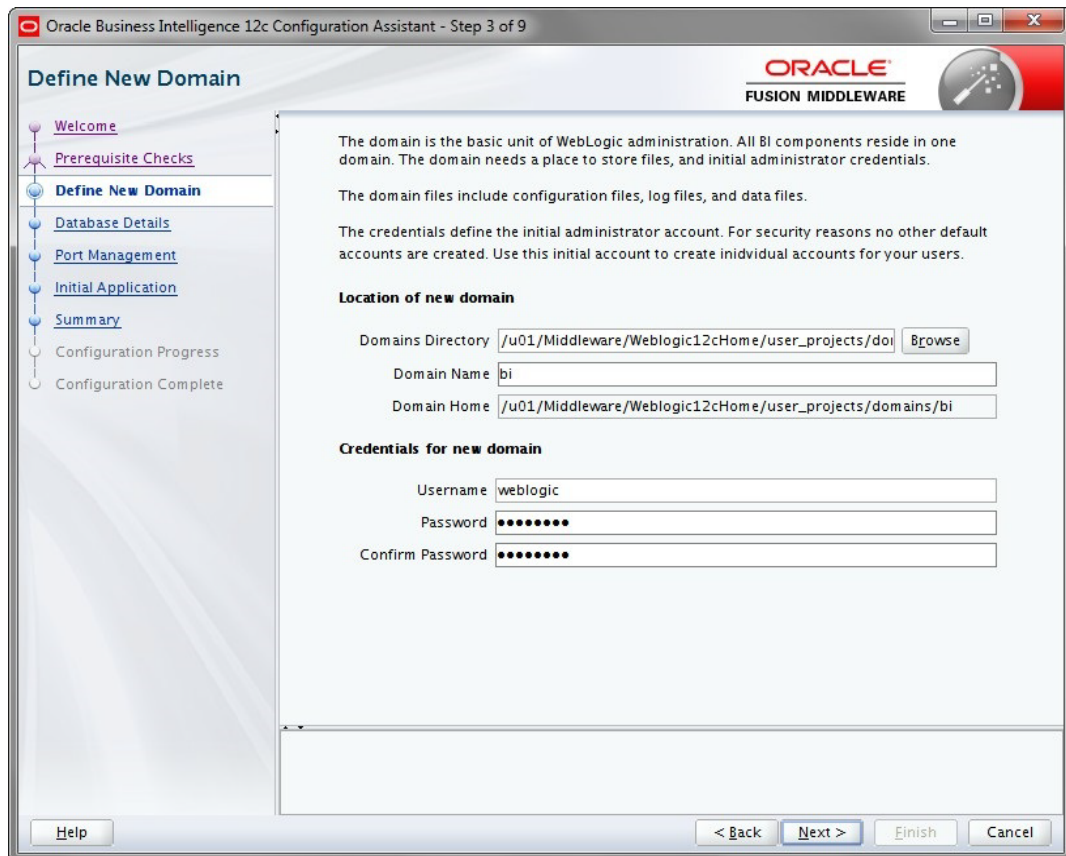
1. Launch configuration window and browse to \$BI_HOME/bin (for example, BI_HOME is /u01/Middleware/Weblogic12cHome/bi).
2. Run ./config.sh. The following window is displayed.



3. Select the option 'Business Intelligence Publisher' and Click 'Next'.



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

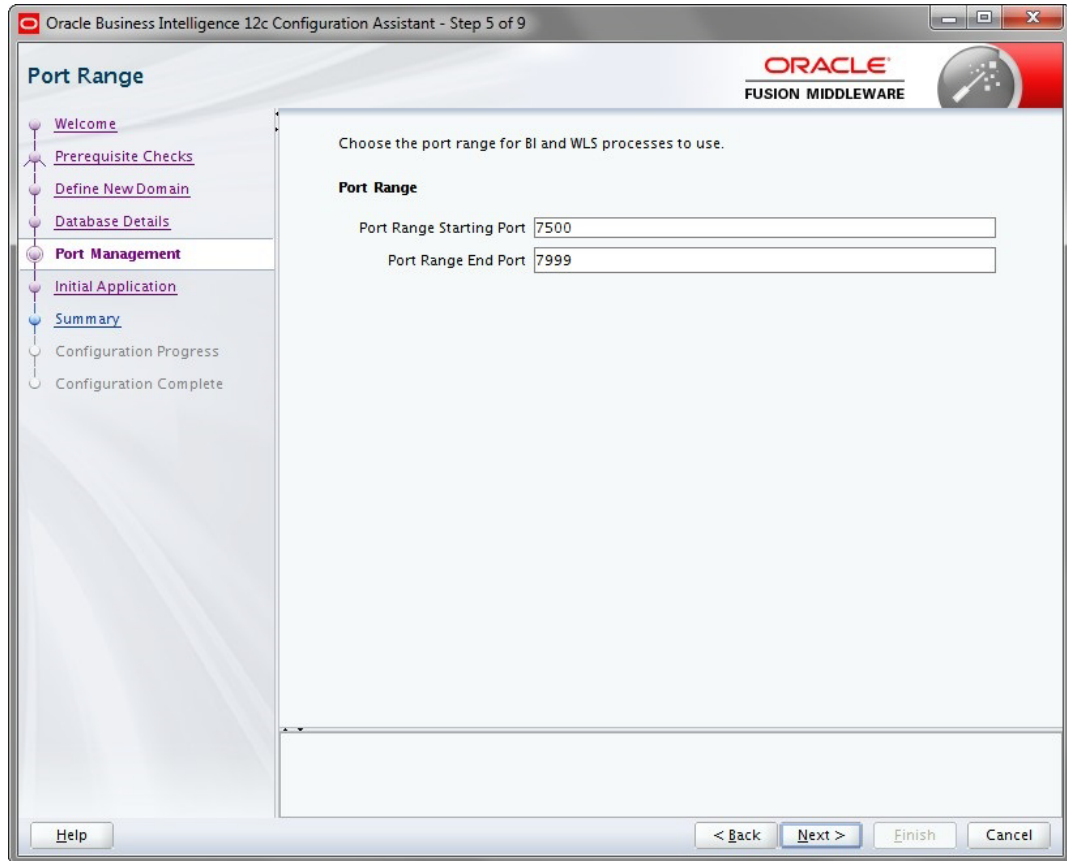


5. Enter the User Name, Password and Domain Name for BI Publisher domain. Click 'Next'. The following window is displayed.

The screenshot shows the 'Database Schema' window in the Oracle Business Intelligence 12c Configuration Assistant. The window title is 'Oracle Business Intelligence 12c Configuration Assistant - Step 4 of 9'. The Oracle logo and 'FUSION MIDDLEWARE' are in the top right. A navigation pane on the left lists: Welcome, Prerequisite Checks, Define New Domain, Database Details (selected), Port Management, Initial Application, Summary, Configuration Progress, and Configuration Complete. The main area contains the following text: 'Database schemas are required for storage of internal housekeeping information. These schemas are distinct from any data sources which you plan to analyse in BI. The simplest option is to create new database schemas here. Alternatively you can use existing schemas you created earlier using the Repository Creation utility (RCU). Using RCU in advance gives you additional options, such as choosing tablespaces. RCU is available in directory /u01/Middleware/Weblogic12cHome/oracle_common/bin.' There are two radio buttons: 'Create new schemas' (selected) and 'Use existing schemas'. Below the selected option are several input fields: 'Schema prefix' (OFSLL), 'Schema password' (masked with dots), 'Confirm schema password' (masked with dots), 'Database type' (Oracle Database), 'Username' (sys), 'Password' (masked with dots), and 'Simple connect string' (ofssl.in.oracle.com:1521:ORCL). At the bottom are buttons for 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

6. Select the option 'Create New Schema' and specify the Schema prefix, Schema password, database type, user name, password, simple connect string.

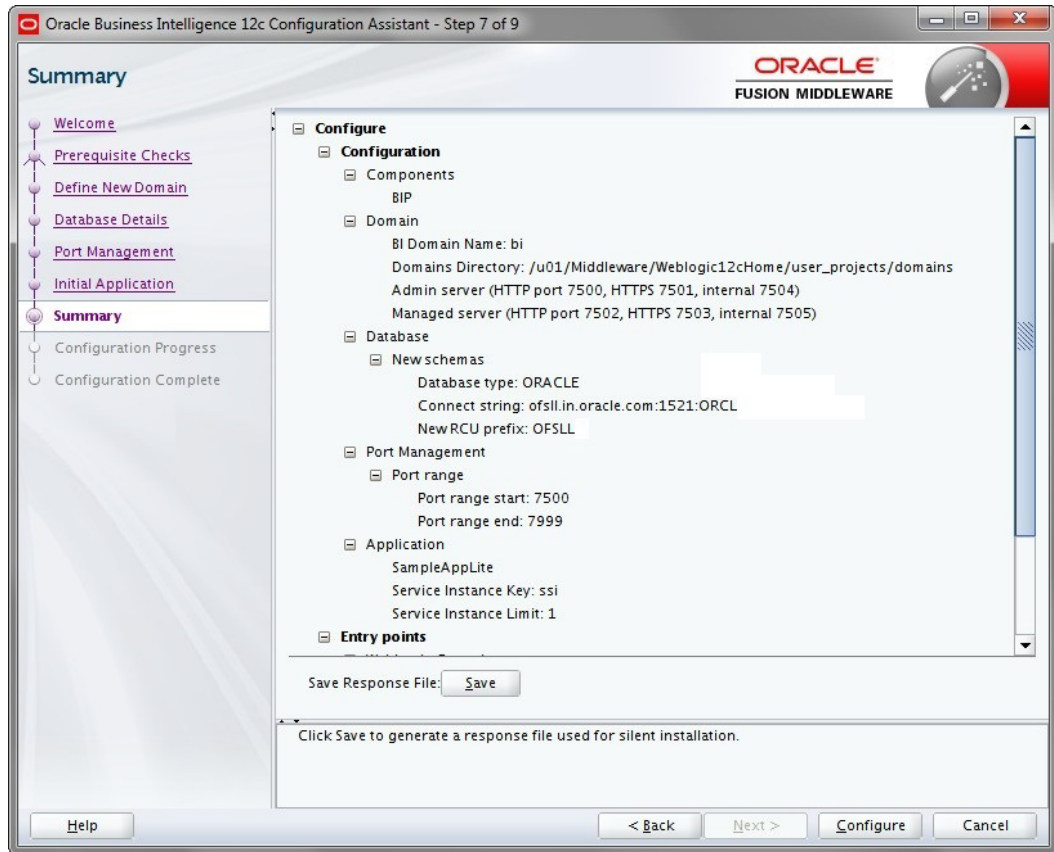
7. Click 'Next'. The following window is displayed.



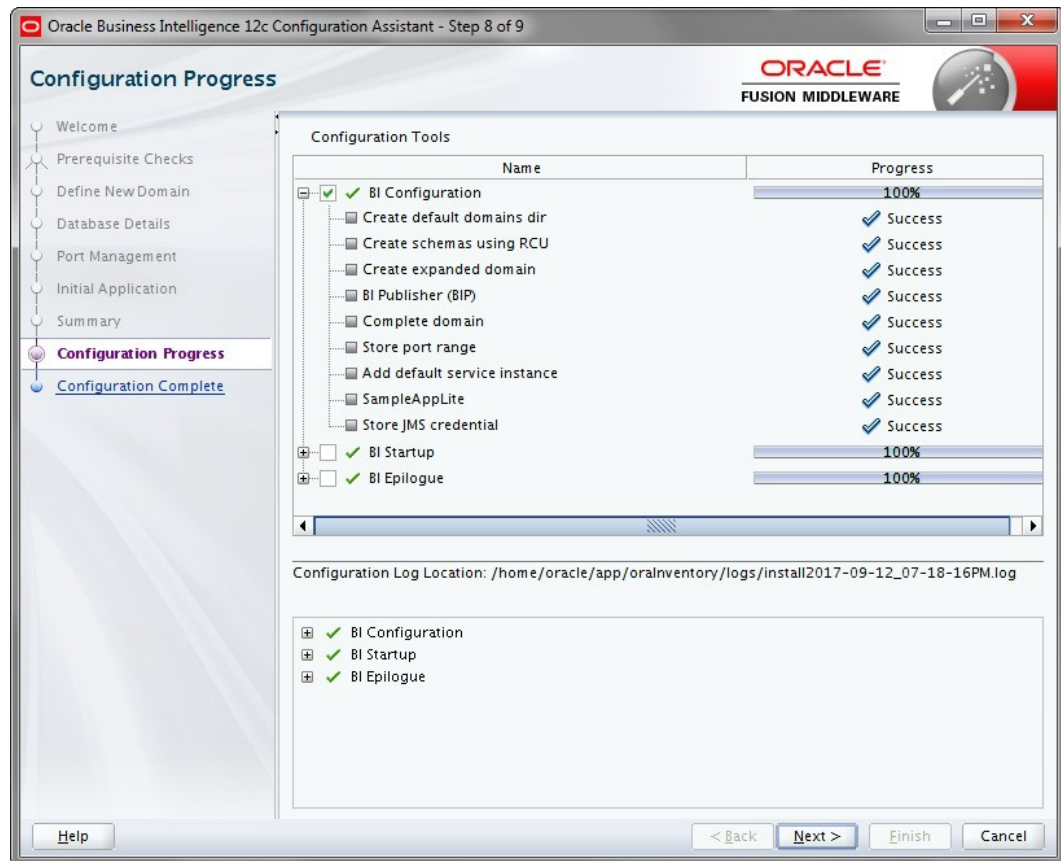
8. Click 'Next'. The following window is displayed.



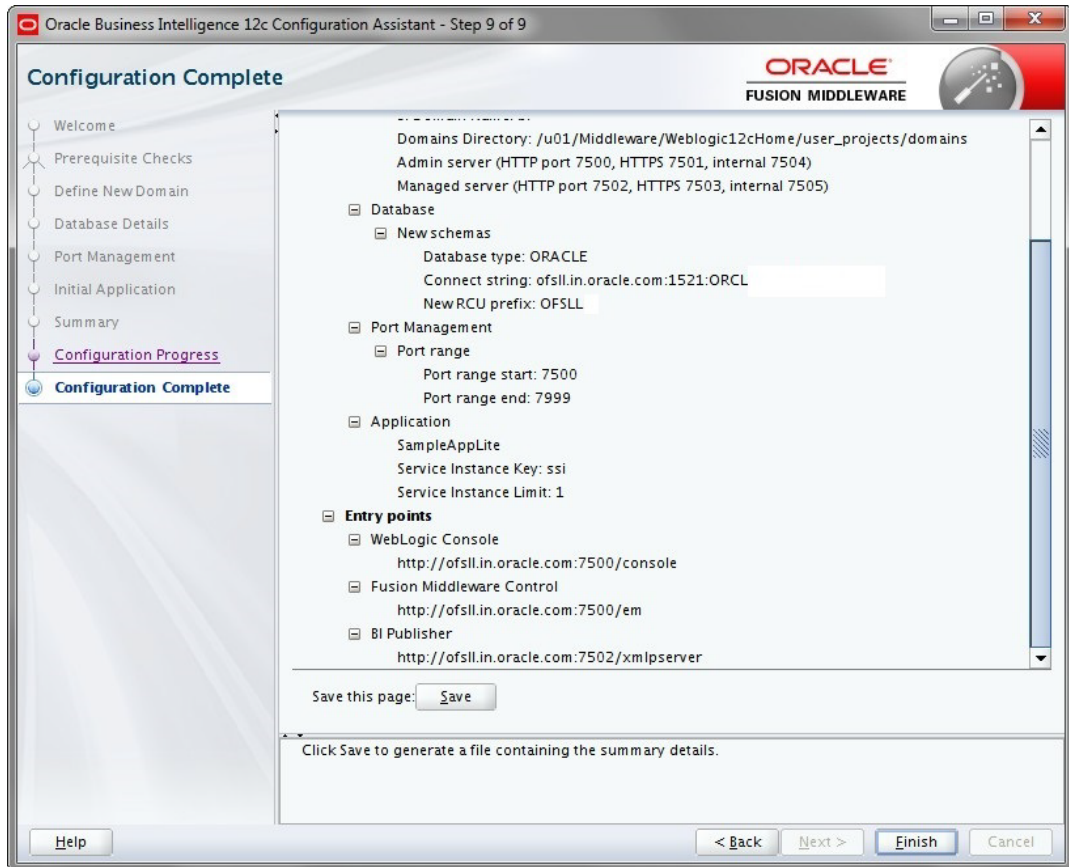
9. Click 'Next'. The following window is displayed.



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



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



12. Click 'Save' and save the Response File.

13. Click 'Finish'. The application will create a new domain for BI Publisher with the details as highlighted in the above screen.

3.1 Verifying Successful BIP Deployment

Successful BIP deployment can be verified by launching the BIP URL <http://hostname:<port>/xmlpserver>.

4. Creating BI Publisher Datasource

To create BI Publisher Datasource, do the following:

- On BI Publisher Domain, create Data Source with JNDI as 'jdbc/ofsllbipdb' and select the appropriate database driver.
- Target the datasources to 'bi_server1'

1. Access the weblogic console URL using <http://hostname:<port>/console>.

The screenshot shows the Oracle WebLogic Server Administration Console. The main content area displays the 'Summary of JDBC Data Sources' page. A message at the top states: 'All changes have been activated. No restarts are necessary.' Below this, there is a table of data sources. The table has columns for Name, Type, JNDI Name, and Targets. The data sources listed are:

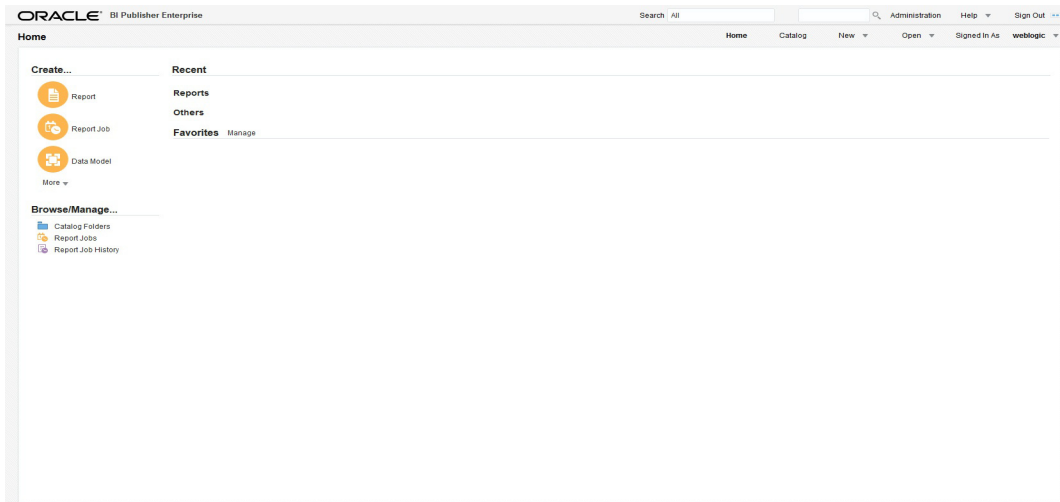
Name	Type	JNDI Name	Targets
jdbcForm_datasource	Generic	jdbc/FormDataSource	bi_cluster
LocalFileTheDataSource	Generic	jdbc/LocalFileTheDataSource	AdminServer
midb-ovsm	Generic	jdbc/midb/ovsm	AdminServer, bi_cluster
OGSL_BP	Generic	jdbc/OGSLBP	bi_server1
jdbcAuditViewOS	Generic	jdbc/AuditViewDataSource	AdminServer, bi_cluster
opss-audit-viewOS	Generic	jdbc/AuditViewDataSource	AdminServer, bi_cluster
opss-data-source	Generic	jdbc/OpssDataSource	AdminServer, bi_cluster
WLSSchemaDataSource	Generic	jdbc/WLSSchemaDataSource	bi_cluster

2. Launch <http://hostname:port/xmlpserver>. The following window is displayed.

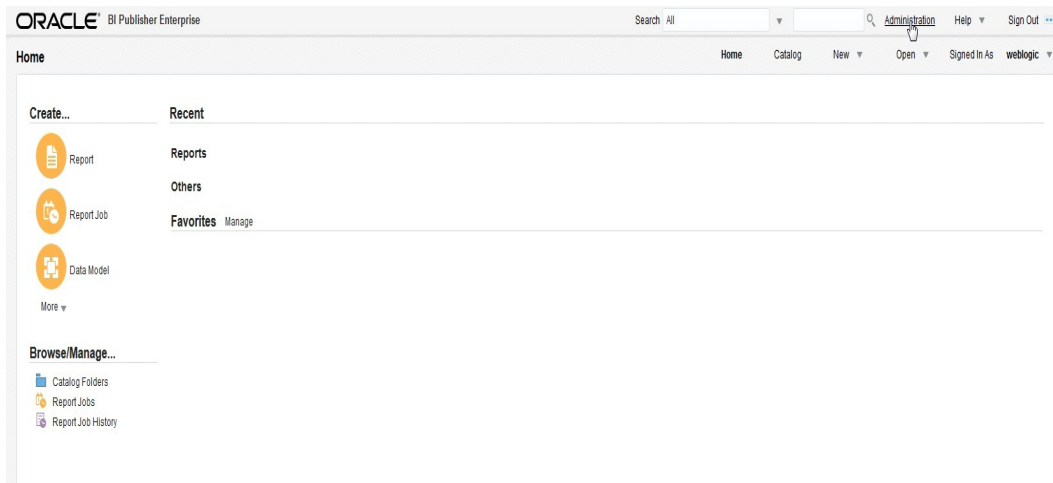
The screenshot shows the Oracle BI Publisher Enterprise Sign In page. The page title is 'ORACLE BI Publisher Enterprise'. The main content area contains a 'Sign In' form with the following fields and options:

- Username:
- Password:
- Accessibility Mode:
- Sign In button
- Language dropdown menu: English (United States)

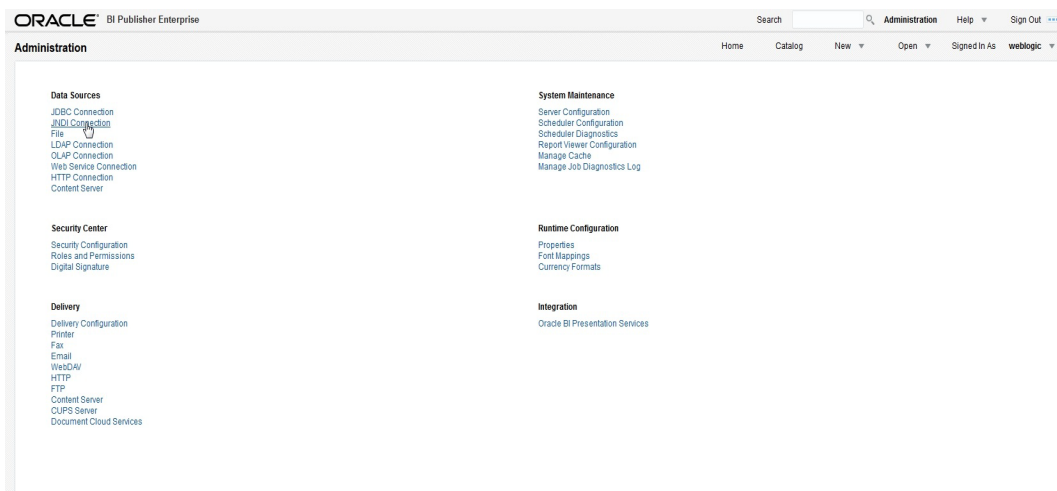
3. Login using the same credentials used for 'WebLogic administration' console login. The following window is displayed.



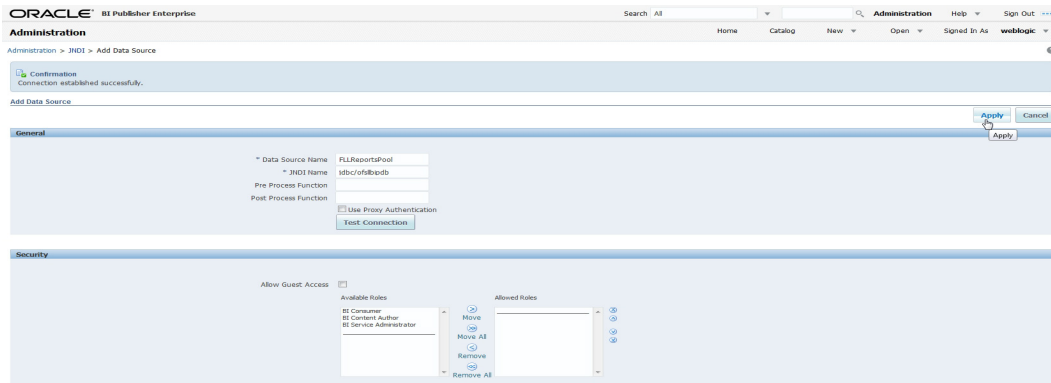
4. Click 'Administration' in the header section. The following window is displayed.



5. Click 'JNDI Connection'.



6. The following window is displayed.



7. Add the following details:

- Specify Data Source Name as 'FLLReportsPool' and JNDI Name as 'jdbc/ofsllbipdb'.
- Under 'Security' section, select 'BI Author Role' and 'BI Consumer Role' from Available Roles and assign them as Allowed Roles.

Note

If "BI Author" and "BI Consumer" roles are not displayed in the 'Available Roles' section, you need to create the roles as explained in following 'Creating Roles' section.

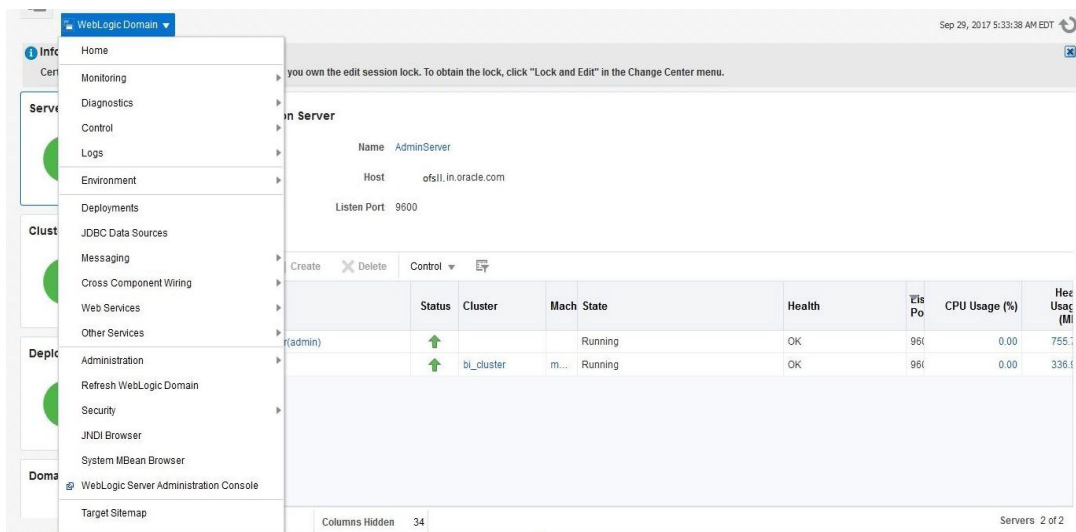
8. Click 'Apply'.

4.1 Creating Roles

The following section details the steps to be followed to create "BI Author" and "BI Consumer" roles which are used to define security roles while creating Data Source on BI Publisher Domain.

To create WebLogic Application Role

1. Login to Enterprise Manager using the URL - <http://hostname:port/em>.
2. Select Weblogic Domain > Security > Application Roles as indicated in the following screen.



- In the Application Stripe field, select 'obi' from the drop-down list. The option 'BIServiceAdministrator' is added by default. Click 'Create'.

Application Roles

Application roles are the roles used by security aware applications that are specific to the application. These roles are seeded by applications in single global policy store when the applications are registered. These are also application roles that are created in the context of end users application.

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

Policy Store Provider

Search

Select an application and enter a search keyword for the role name to search for roles defined by this application. Use the application stripe to search if the application uses a stripe that is different from the application name.

Application Stripe: obi

Role Name: Starts With

View

Role Name	Display Name	Description
BIServiceAdministrator	BI Service Administrator	This role confers privileges required to administer a service instance.

Membership for BIServiceAdministrator

Principal	Display Name	Type	Description
weblogic	weblogic	User	This user is the default administrator.

- Specify the following details:

- Role Name
- Display Name
- Description

Create Application Role

Role (or Enterprise Role) is the group of users designed at the enterprise level and typically used to assign a privilege or permission. A role can also contain other roles as members.

General

Application Stripe: obi

Role Name: BIConsumer

Display Name: BIConsumer

Description: The base-level role that grants the user access to existing analyses, dashboards and agents, allows them to run or schedule existing BI Publisher reports, but not create any new ones.

Members

An application role may need to be mapped to users or groups defined in enterprise LDAP server, or the role can be mapped to other application roles.

View

Name	Display Name	Type
No groups or application roles added.		

- Click 'Add' to add the application role to the members family. The same can later be mapped to required Users or Groups defined in Enterprise LDAP server, or the role can be mapped to other application roles.

Create Application Role

Role (or Enterprise Role) is the group of users designed at the enterprise level and typically used to assign a privilege or permission. A role can also contain other roles as members.

General

Add Principal

Specify criteria to search and select the application roles that you want to grant permissions to.

Search

Type: User

Principal Name: Starts With

Display Name: Starts With

Searched Principals

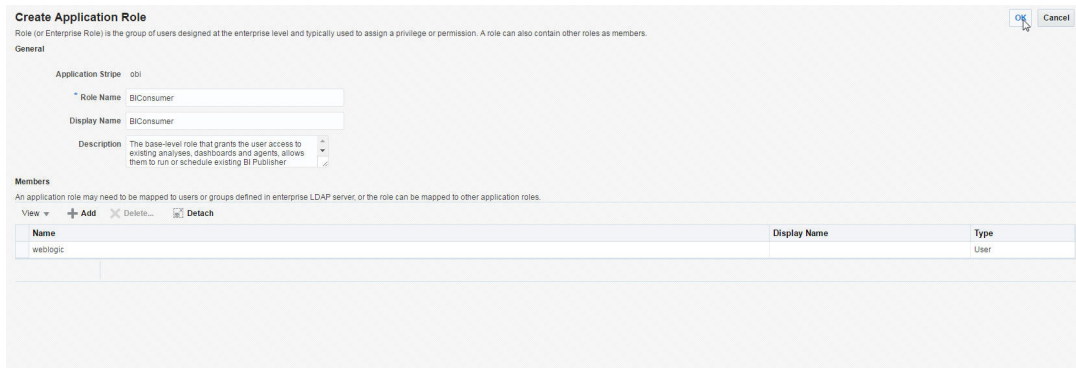
View

Principal	Display Name	Description
LCMUser		This is the default service account for WebLogic Server Lifecycle Manager configuration updates.
OracleSystemUser		Oracle application software system user.
weblogic		This user is the default administrator.

Advanced Option

Check to enter principal name here instead of searching from above. This option can be used for advanced scenarios related to custom authenticators.

6. Add the Weblogic User by selecting “weblogic” in the ‘Searched Principals’ section and click ‘OK’. The Weblogic User is added to the application role.

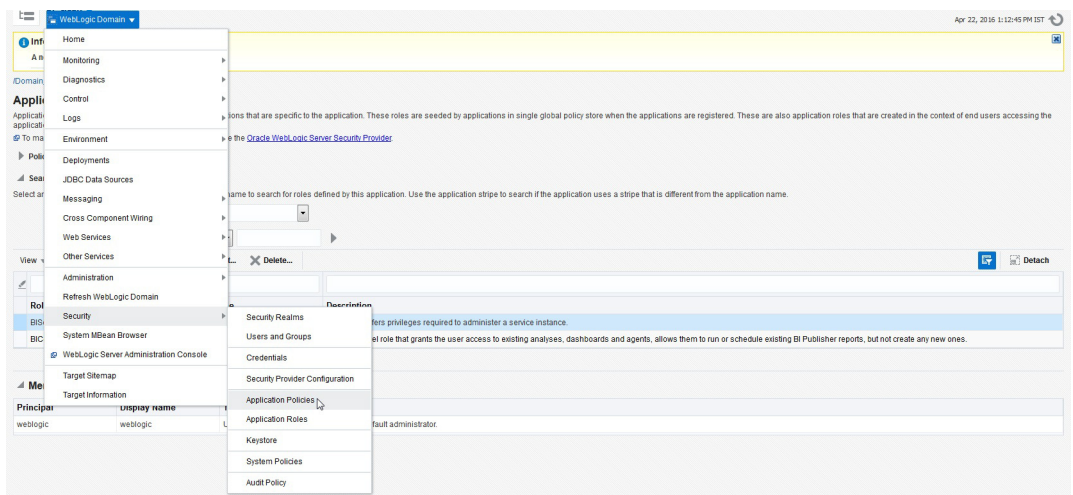


7. Click ‘OK’. The new role is added to the list of application roles.



To Create WebLogic Application Policies

1. Login to Enterprise Manager using the URL - http://hostname:port/em.
2. Select Weblogic Domain > Security > Application Policies as indicated in the following screen:



3. In the Application Stripe field, select 'obi' from the drop-down list. Click 'Create'.

Application Policies
 Application policies are the authorization policies that an application relies upon for controlling access to its resources.
 To manage users and groups in the WebLogic Domain, use the [Oracle WebLogic Server Security Provider](#).

Policy Store Provider

Search
 Select an application and enter the search keyword for principals or permissions to query application security grants. Use the application stripe to search if the application uses a stripe that is different from the application name.

Application Stripe: obi

Principal Type: Application Role

Principal Name: Starts With

View | Create... | Create Like... | Edit... | Delete... | Detach

Principal	Display Name	Description
BIServiceAdministrator	BI Service Administrator	

Policies for BIServiceAdministrator

Permissions

Resource Name	Resource Type	Permission Actions	Permission Class	Permission Set
oracle.bi.publisher.administerServer	oracle.bi.publisher.perm...	_all_		bip.administrator

4. In 'Create Application Grant' screen, under the Grantee section, click 'Add'.

Create Application Grant OK Cancel

For managing an application policy, select a particular grantee and attach a permission to it.

Application Stripe: obi

Grantee
 Select the grantees (user, group or application role) you want to add to the policy.

View | Add | Delete... | Detach

Name	Display Name	Type	Description
No users or groups added.			

Permissions
 Select from permissions and resources used in this application. Enter search criteria to search for right permissions.

View | Add | Edit... | Delete... | Detach

Permission Class	Resource Name	Re Permission Ty Actions	Permission Set
No permissions added.			

5. Select the newly created application role from the list and click 'OK'. The new role is added to the list.

Create Application Grant OK Cancel

For managing an application policy, select a particular grantee and attach a permission to it.

Application Stripe: obi

Grantee
 Select the grantees (user, group or application role) you want to add to the policy.

View | Add | Delete... | Detach

Permissions
 Select from permissions and resources used in this application. Enter search criteria to search for right permissions.

View | Add | Edit... | Delete... | Detach

Add Principal

Specify criteria to search and select the application roles that you want to grant permissions to.

Search

Type: Application Role

Principal Name: Starts With

Display Name: Starts With

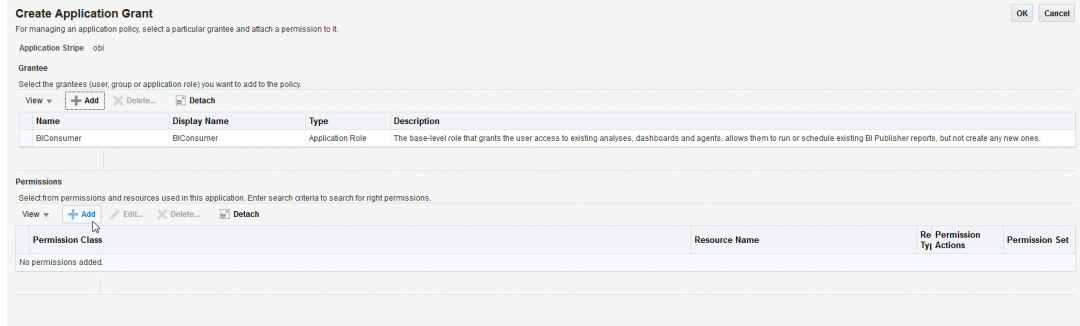
Searched Principals

Principal	Display Name	Description
anonymous-role	Anonymous Role	
authenticated-role	Authenticated Role	
BIConsumer	BIConsumer	The base-level role that grants the user access to existing analyses, dashboards and agents, allows them to run or schedule existing BI Publisher reports, but not create any new ones.
BIServiceAdministrator	BI Service Administrator	This role confers privileges required to administer a service instance.

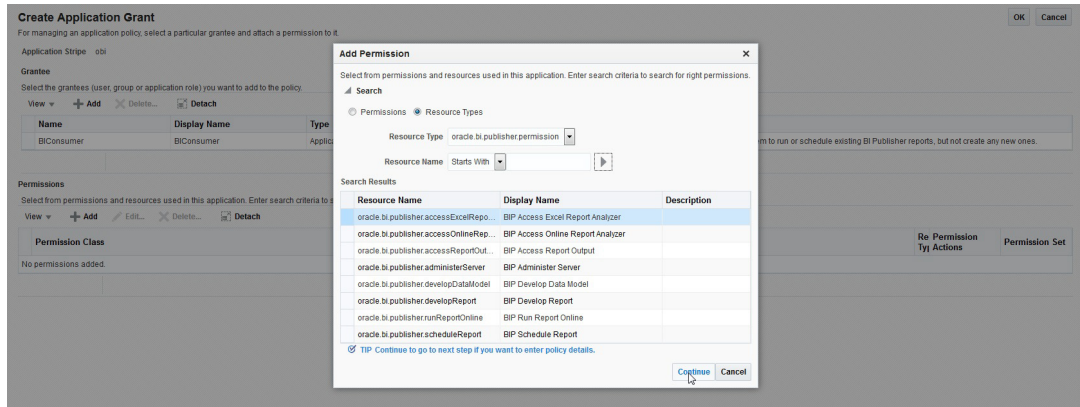
View | Detach

OK Cancel

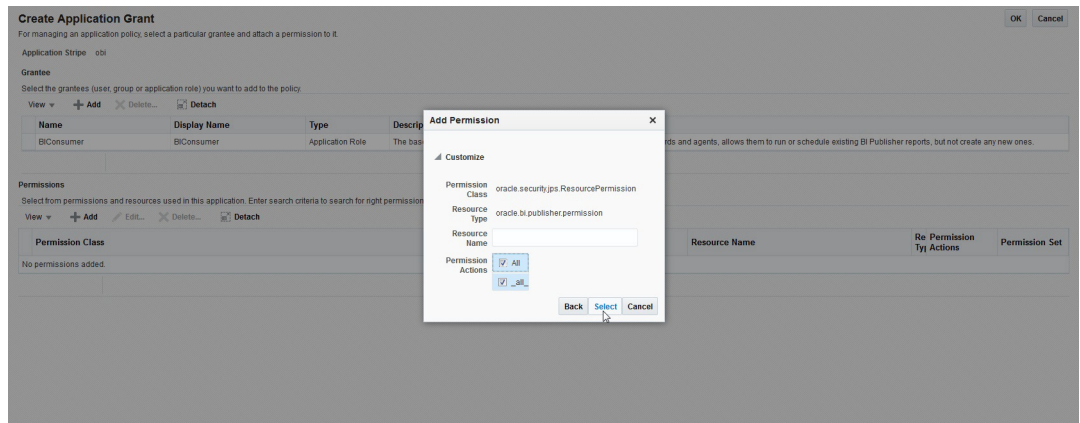
6. In the 'Permissions' section, click 'Add'.



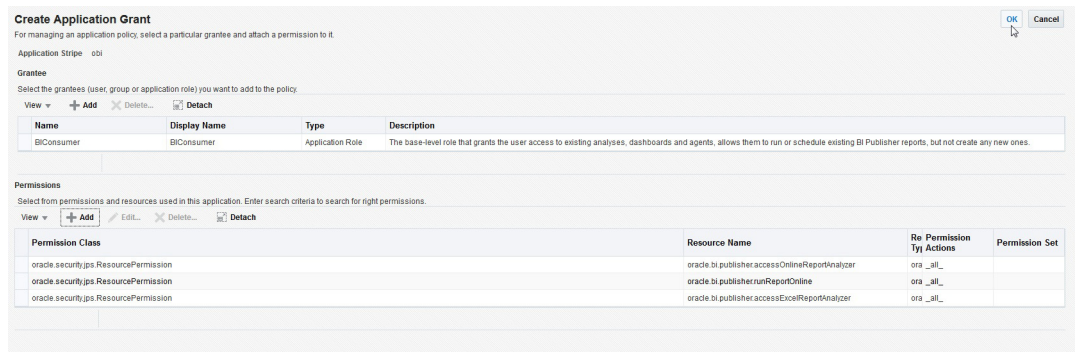
7. In the search criteria, select 'Resource Type' and select the resource type from the drop-down list. Select the required resource from the search results and click 'Continue'.



8. Define the required permission(s) for the application role by selecting the appropriate Permission Class and Permissions Actions check box. Click 'Select'.



9. The selected permissions are defined to the application role. Similarly you can define the required permissions for other application roles.



10. Once done, click 'OK'.

Application Policies
 Application policies are the authorization policies that an application relies upon for controlling access to its resources.
 To manage users and groups in the WebLogic Domain, use the [Oracle WebLogic Server Security Provider](#).

Policy Store Provider

Search

Select an application and enter the search keyword for principals or permissions to query application security grants. Use the application stripe to search if the application uses a stripe that is different from the application name.

Application Stripe: obi

Principal Type: Application Role

Principal Name: Starts With

View | Create... | Create Like... | Edit... | Delete... | Detach

Principal	Display Name	Description
BIConsumer	BIConsumer	
BIServiceAdministrator	BI Service Administrator	

Policies for BIConsumer

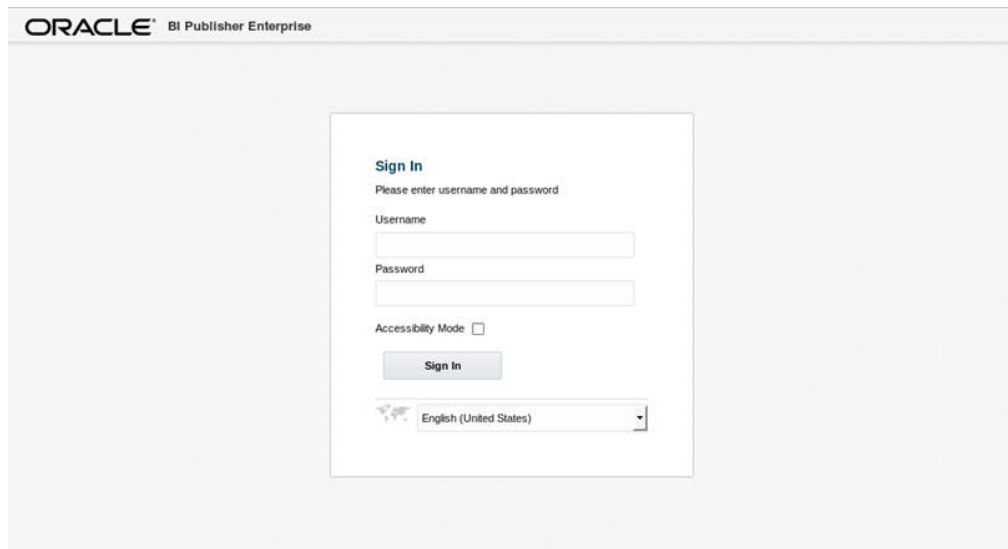
Permissions

Resource Name	Resource Type	Permission Actions	Permission Class	Permission Set
oracle.bi.publisher.runReportOnline	oracle.bi.publisher.permi...	_all_	oracle.security.jps.ResourcePermission	
oracle.bi.publisher.accessOnlineReportAnalyzer	oracle.bi.publisher.permi...	_all_	oracle.security.jps.ResourcePermission	
oracle.bi.publisher.accessExcelReportAnalyzer	oracle.bi.publisher.permi...	_all_	oracle.security.jps.ResourcePermission	

5. Importing Reports to BI Publisher Server

To import ofsl application reports to BI Publisher Server, do the following:

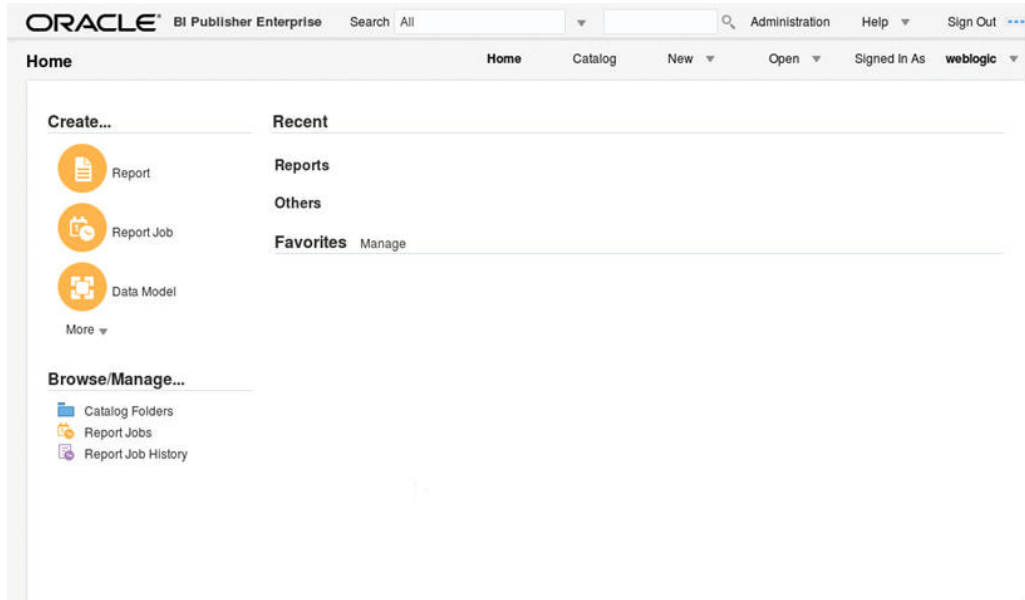
1. Copy and extract the OFSLLReports.zip file to staging area.
2. Launch the Oracle Business Intelligence Publisher Application using `http://hostname:port/xmlpserver`
3. Login with valid credentials.



The screenshot shows the Oracle BI Publisher Enterprise Sign In page. The page title is "ORACLE BI Publisher Enterprise". The main content area contains a "Sign In" form with the following elements:

- Sign In** (Section Header)
- Please enter username and password
- Username (Text input field)
- Password (Text input field)
- Accessibility Mode
- Sign In (Submit button)
- Language dropdown menu (Currently set to English (United States))

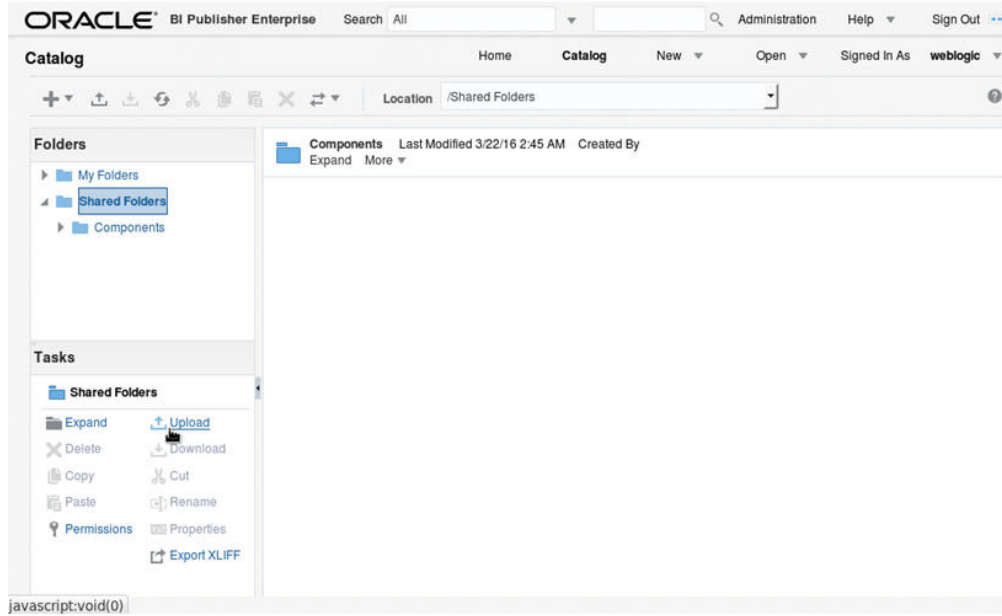
4. Following window is displayed. Click on 'Catalog Folders' on the left pane.



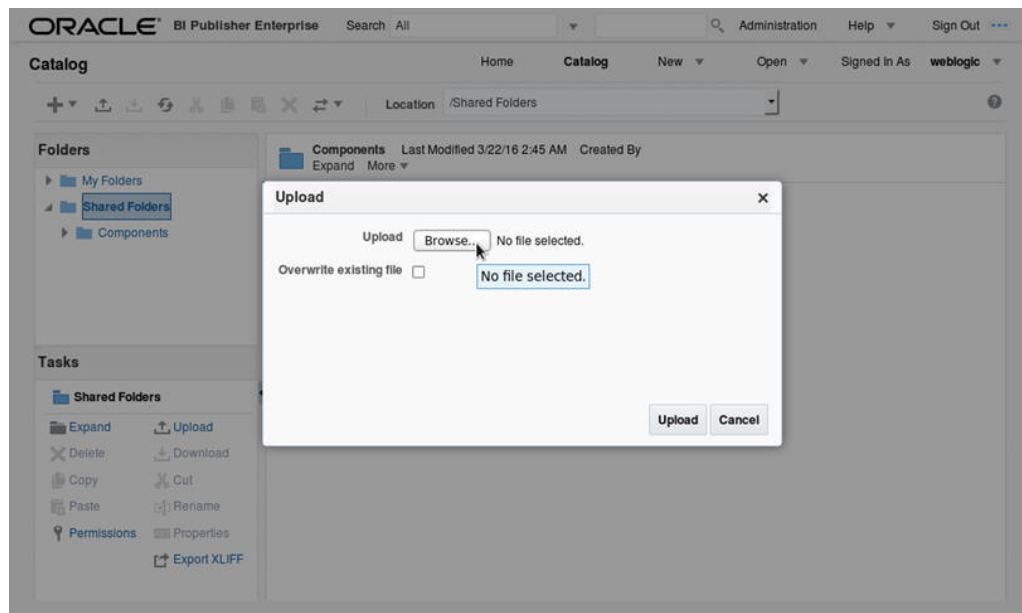
The screenshot shows the Oracle BI Publisher Enterprise Home page. The page title is "ORACLE BI Publisher Enterprise". The page contains the following elements:

- Search bar (All)
- Administration Help Sign Out
- Home Catalog New Open Signed In As **weblogic**
- Create...**
 - Report
 - Report Job
 - Data Model
 - More
- Recent**
 - Reports
 - Others
 - Favorites Manage
- Browse/Manage...**
 - Catalog Folders
 - Report Jobs
 - Report Job History

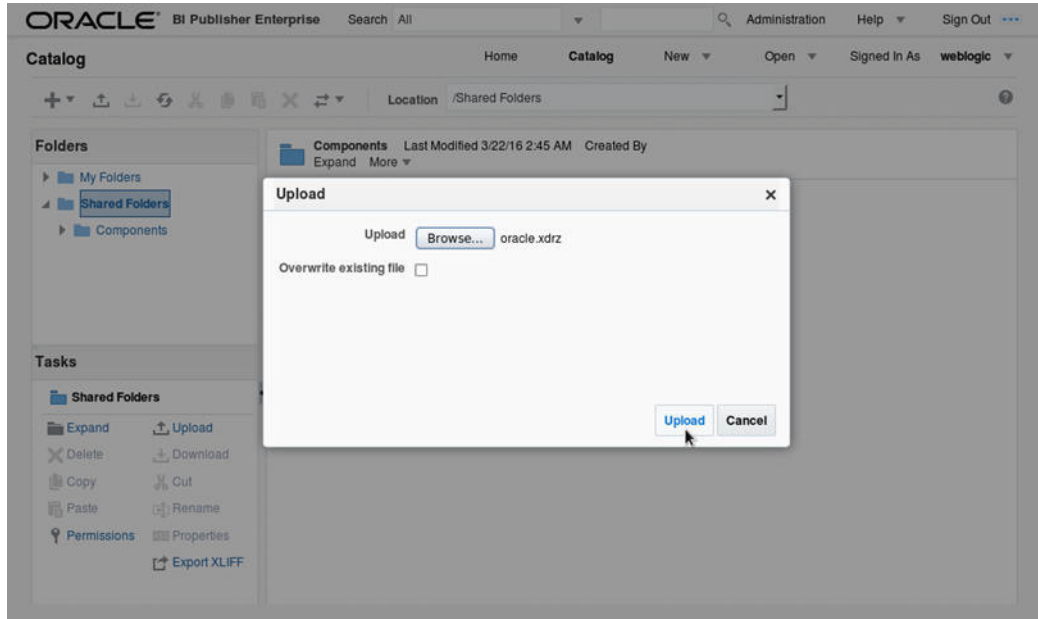
5. Click on 'Shared Folders' option and then click 'Upload'.



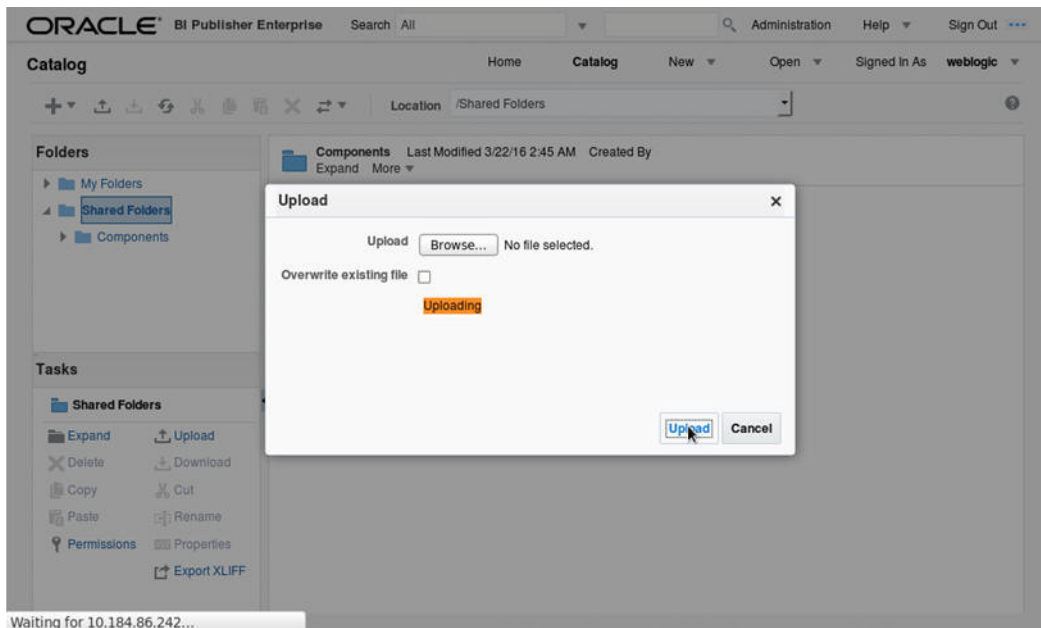
6. The following window is displayed. Browse to the location where the oracle.xrzr file is saved. Click the 'Overwrite Existing File' check box if you are overwriting an existing directory.



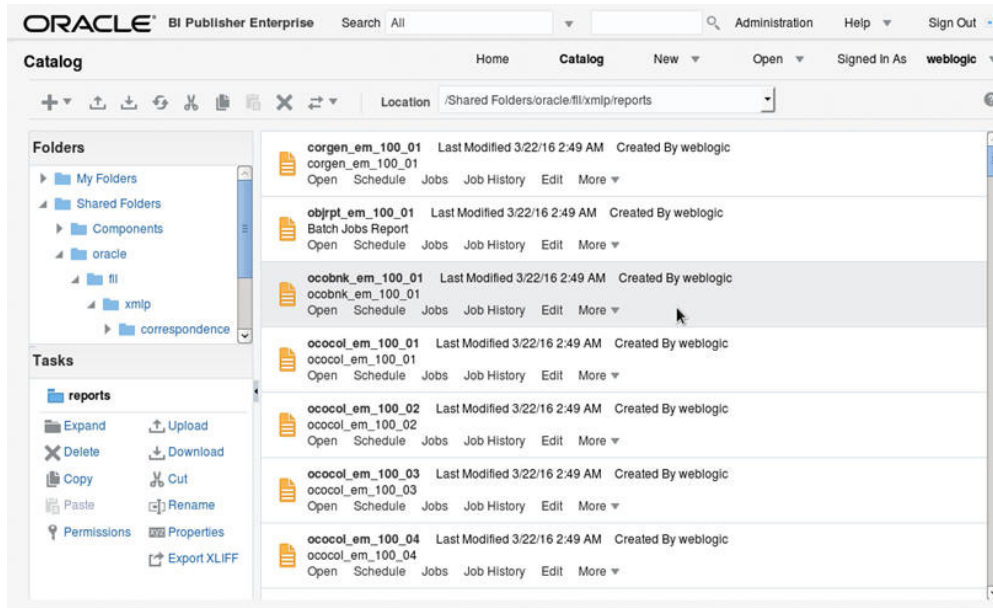
7. Click on 'Upload'.



8. The following window is displayed.



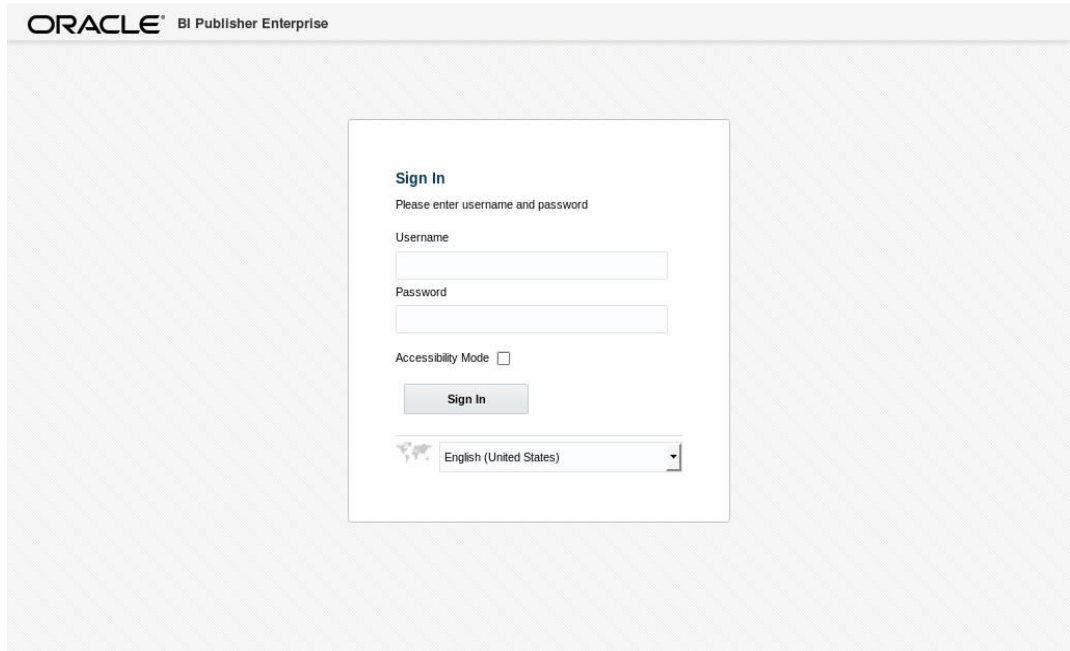
9. Once the upload is completed, click any folder to see the list of reports under the directory. The following window is displayed.



6. Configure MDB Mail Server

Refer to the following instructions to configure the MDB email server. This is required for outbound email communications.

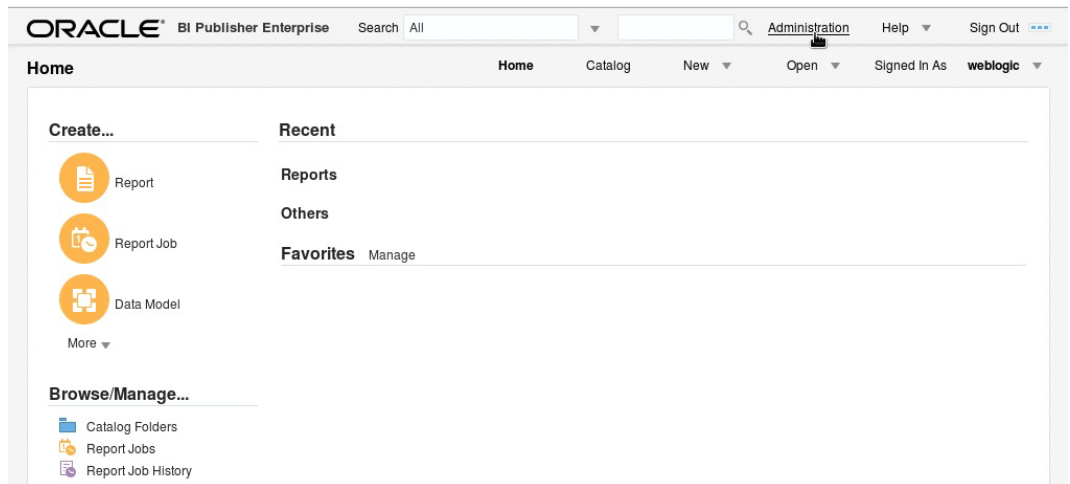
1. Launch the Oracle Business Intelligence (BI) Publisher application (<http://hostname:port/xmlpserver>). The following window is displayed.



The screenshot shows the Oracle BI Publisher Enterprise Sign In page. The page title is "ORACLE BI Publisher Enterprise". The main content area contains a "Sign In" form with the following elements:

- Sign In** (Section Header)
- Please enter username and password
- Username:
- Password:
- Accessibility Mode
- Sign In** (Button)
- Language: English (United States) (Dropdown menu)

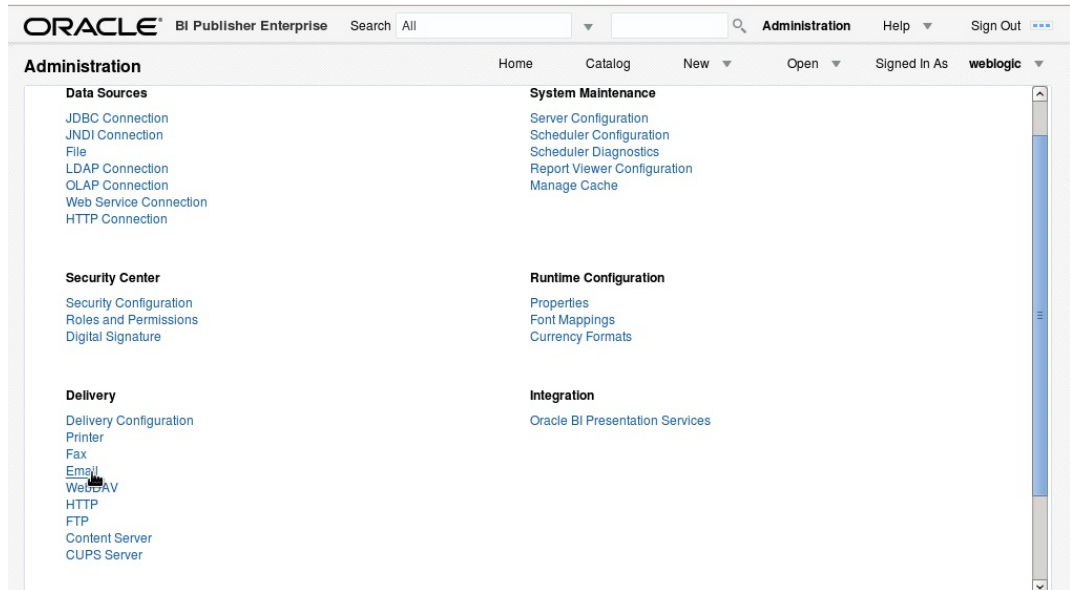
2. Login using the valid credentials. The following window is displayed.



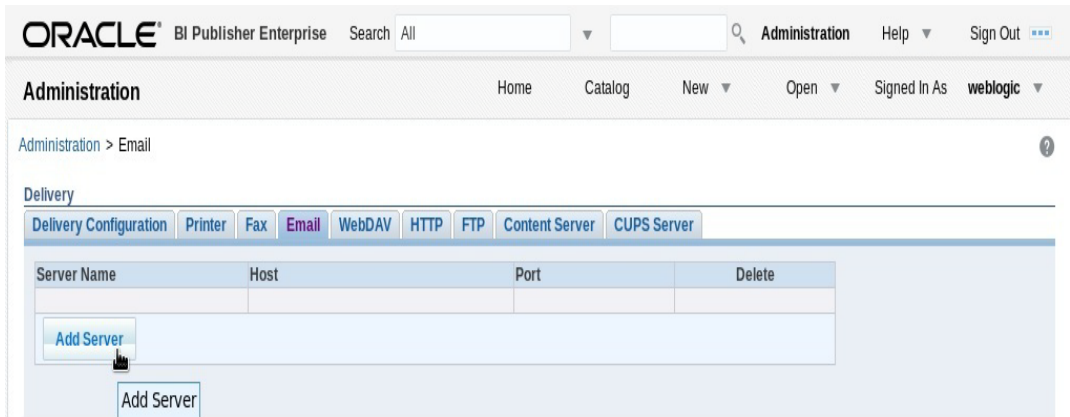
The screenshot shows the Oracle BI Publisher Enterprise Home page. The page title is "ORACLE BI Publisher Enterprise". The page contains the following elements:

- Home** (Section Header)
- Home Catalog New Open Signed In As **weblogic**
- Create...** (Section Header)
- Report (Icon)
- Report Job (Icon)
- Data Model (Icon)
- More (Dropdown)
- Browse/Manage...** (Section Header)
- Catalog Folders (Icon)
- Report Jobs (Icon)
- Report Job History (Icon)
- Recent** (Section Header)
- Reports (Section Header)
- Others (Section Header)
- Favorites** Manage (Section Header)

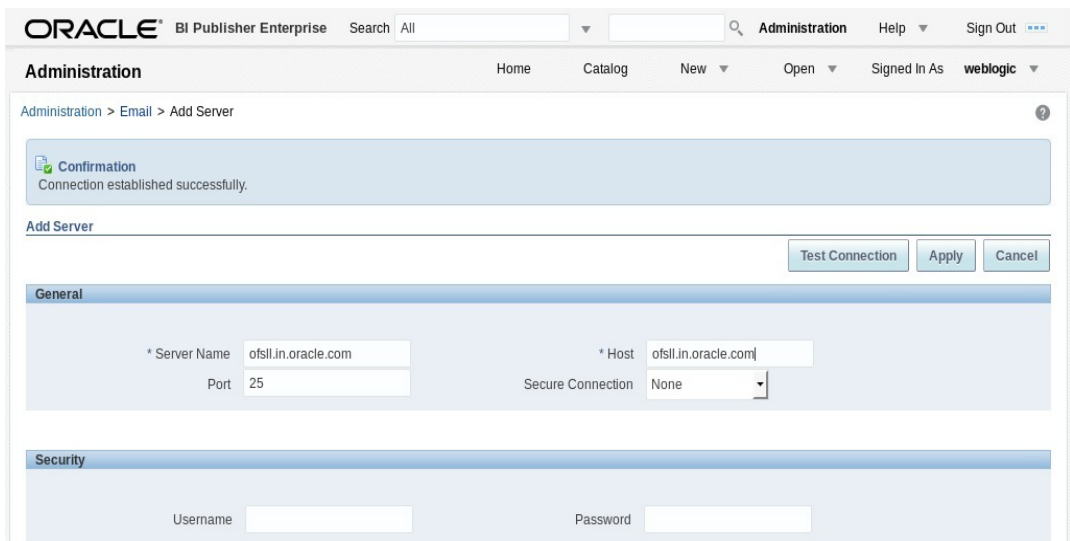
3. Click 'Administration'. The following window is displayed.



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



5. Click 'Add Server'. The following window is displayed.



6. Specify the Server details (server name, host, and port number) and click 'Test Connection'. On completion, a confirmation message is displayed as indicated.

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

The screenshot shows the Oracle BI Publisher Administration console. The breadcrumb navigation is 'Administration > Email > Add Server'. The page title is 'Add Server'. There are three buttons at the top right: 'Test Connection', 'Apply', and 'Cancel'. Below the buttons is a 'General' section with the following fields:

* Server Name	ofssl.in.oracle.com	* Host	ofssl.in.oracle.com
Port	25	Secure Connection	None

Below the 'General' section is a 'Security' section with the following fields:

Username		Password	
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8. The MDB email server is successfully added as indicated.

The screenshot shows the Oracle BI Publisher Administration console. The breadcrumb navigation is 'Administration > Email'. The page title is 'Delivery'. There are several tabs: 'Delivery Configuration', 'Printer', 'Fax', 'Email', 'WebDAV', 'HTTP', 'FTP', 'Content Server', and 'CUPS Server'. The 'Email' tab is selected. Below the tabs is a table with the following data:

Server Name	Host	Port	Delete
ofssl.in.oracle.com	ofssl.in.oracle.com	25	

Below the table is an 'Add Server' button.