

OAS Installation Guide

Oracle Financial Services Lending and Leasing

Release 14.11.0.0.0

Part No. F40454-01

May 2021

OAS Installation Guide
May 2021
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

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

Copyright © 2007, 2021, 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.

Send Us Your Comments

Oracle Financial Services Lending and Leasing User Documentation

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document. Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- 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?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the Oracle Documentation available at www.docs.oracle.com which contains the most current Documentation Library plus all documents revised or released recently.

Send your comments using the electronic mail address: financialservices_ww@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.

Table of Contents

1. Preface	1-1
1.1 Prerequisites.....	1-1
1.2 Audience.....	1-1
2. Installing OA Publisher	2-1
2.1 Installing OA Publisher	2-1
3. Configuring OA Publisher	3-1
3.1 Verifying Successful OA Publisher Deployment.....	3-6
4. Creating OA Publisher Datasource	4-1
4.1 Creating Roles.....	4-3
5. Importing Reports to OA Publisher Server	5-1
6. Configure MDB Mail Server	6-1

1. Preface

This document contains notes and installation steps needed to install and Configure Oracle Analytics 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.

Oracle Analytics Publisher installation consists of the following steps.

- [Installing OA Publisher](#)
- [Configuring OA Publisher](#)
- [Creating OA Publisher Datasource](#)
- [Importing Reports to OA 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_281 or above (<https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>)
 2. Oracle WebLogic Server 12c Version 12.2.1.4.0 (Fusion Middleware Infrastructure Installer) <http://www.oracle.com/technetwork/middleware/weblogic/downloads/wls-main-097127.html>
 3. The patches for Fusion Middleware 12.2.1.4.0 with the following patch number are to be applied - 30657796. However, this is required only for OAS Linux and can be ignored for OAS Windows.
 4. Oracle Analytic Server (OAS) 5.9.0
<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

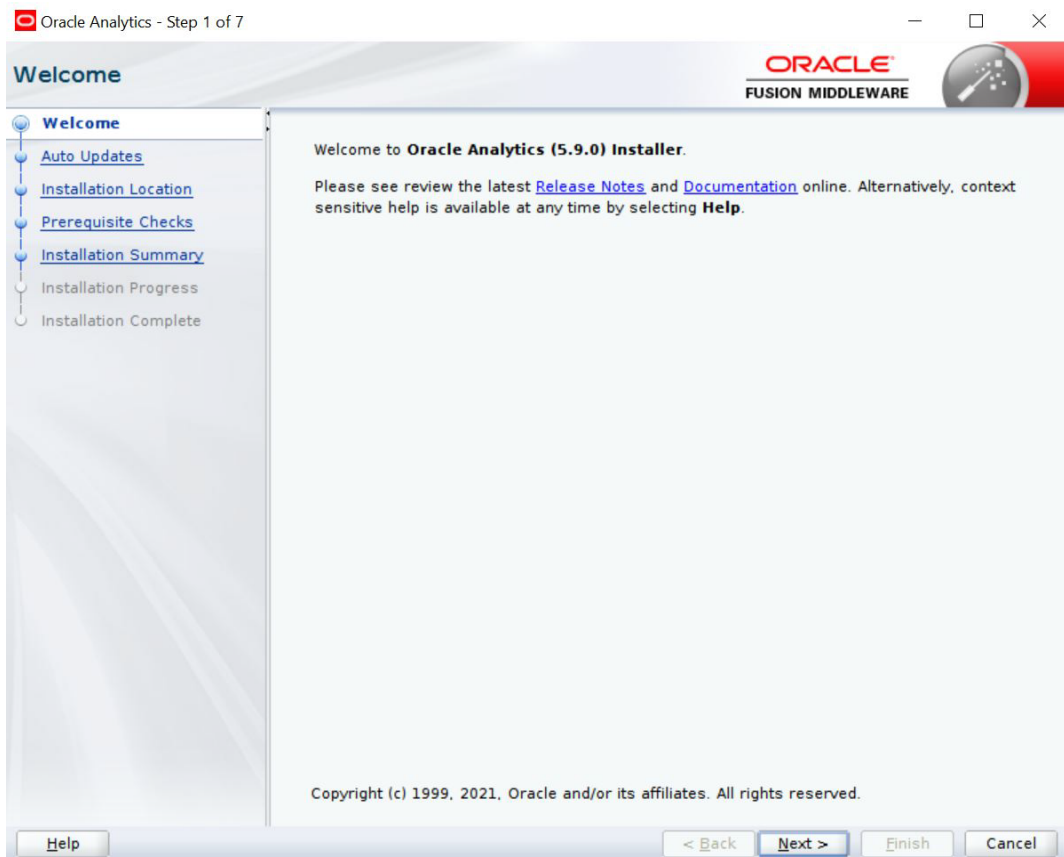
Term	Refers to
Home Directory/ \$OFSSL_HOME	Oracle Financial Services Lending and Leasing Home Directory

2. Installing OA Publisher

2.1 Installing OA Publisher

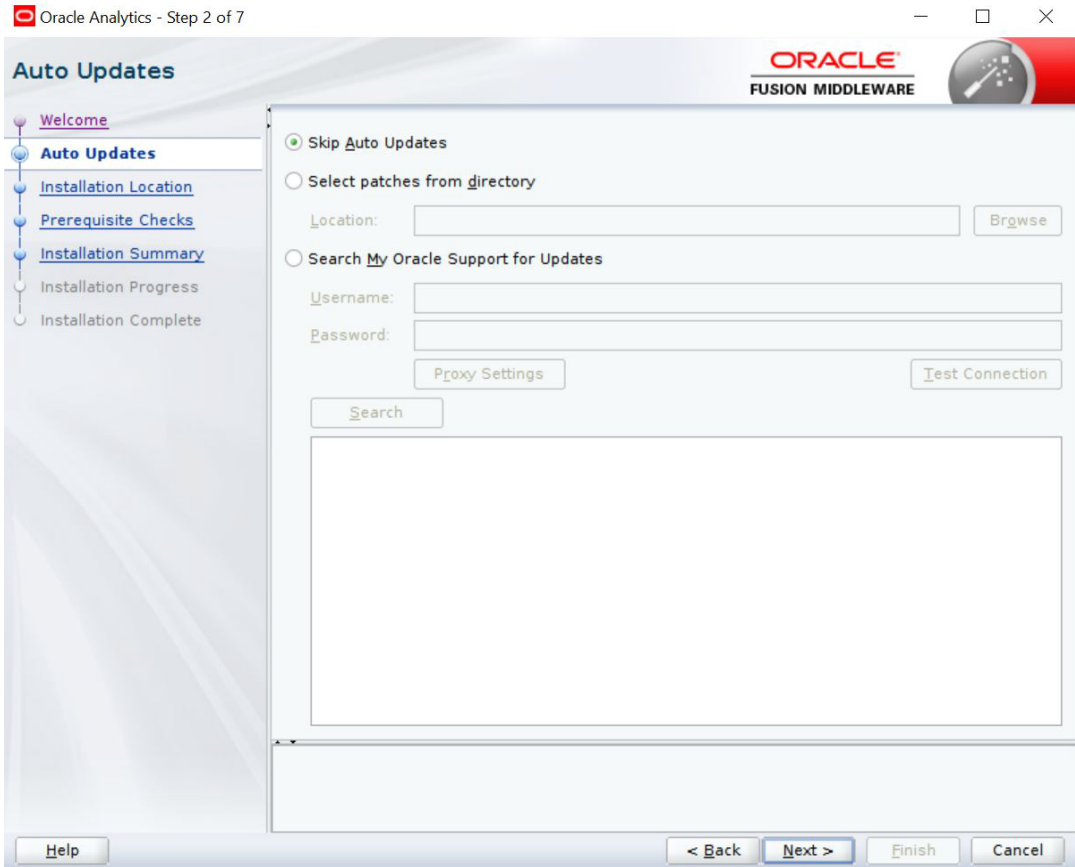
Follow the below steps to install Oracle Analytics publisher:

1. Download and unzip 'Oracle_Analytics_Server_Linux_5.9.0.zip'.
2. Navigate to .jar file location.
3. Run the command `java -jar Oracle_Analytics_Server_Linux_5.9.0.jar`
4. The following window is displayed.



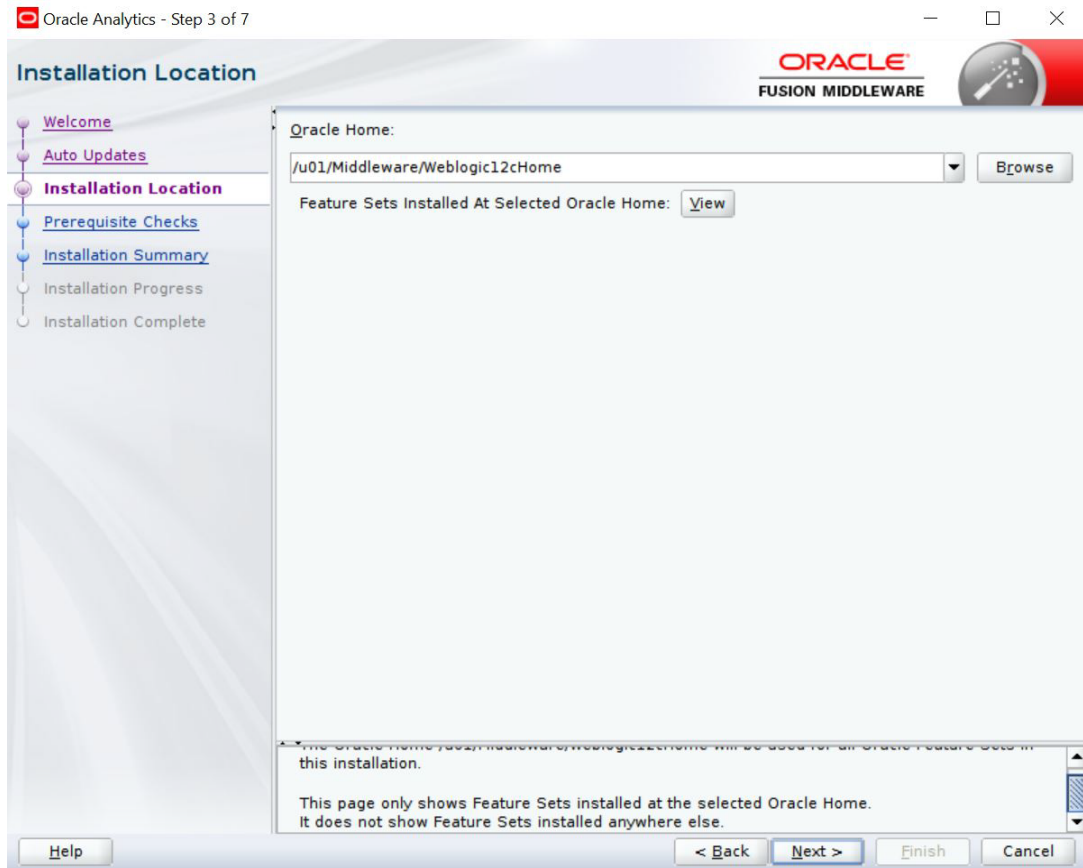
5. Click 'Next'. The following window is displayed.

6. Select the option 'Skip Software Updates'.

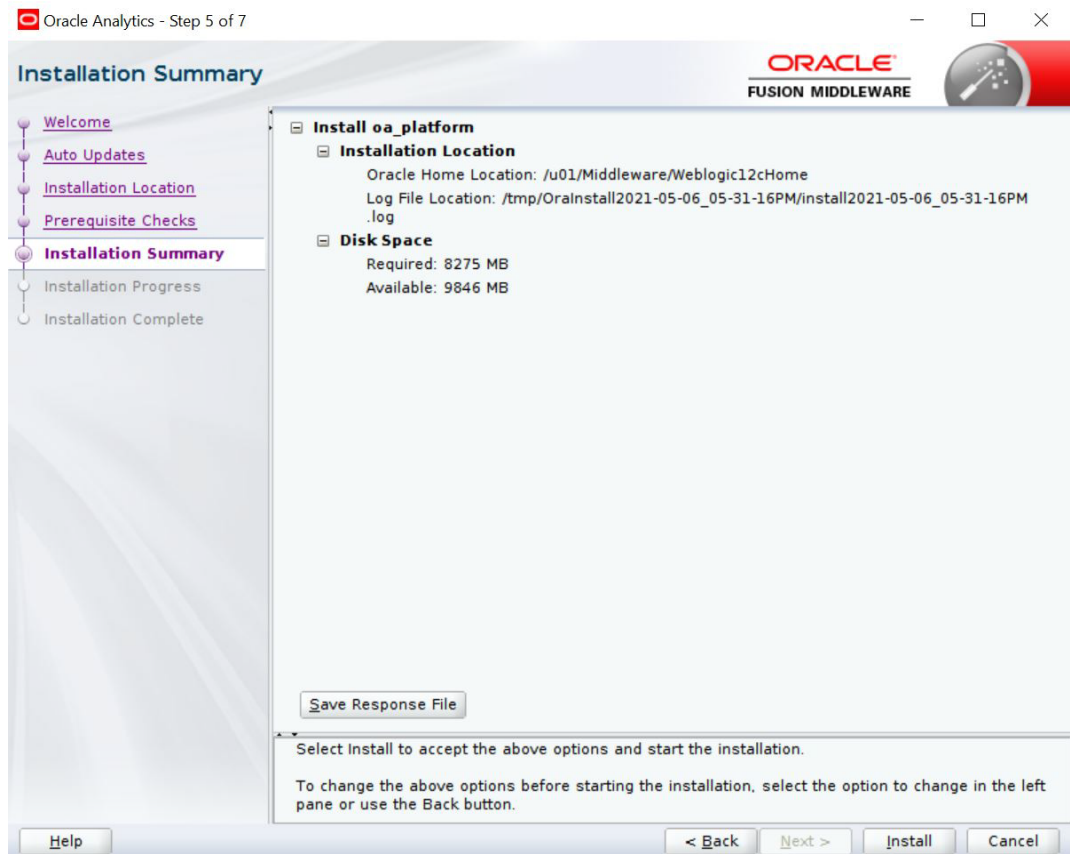


7. Click 'Next'. The following window is displayed.

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



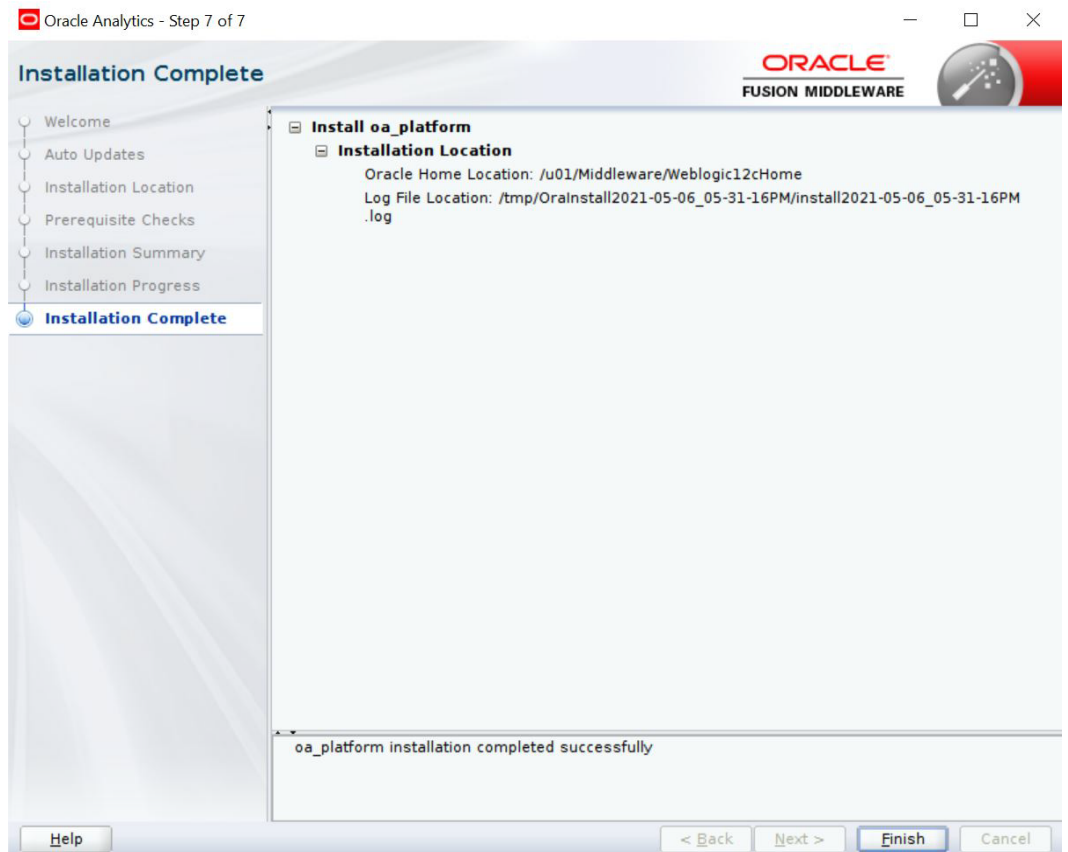
- The following window is displayed. Click 'Next'.



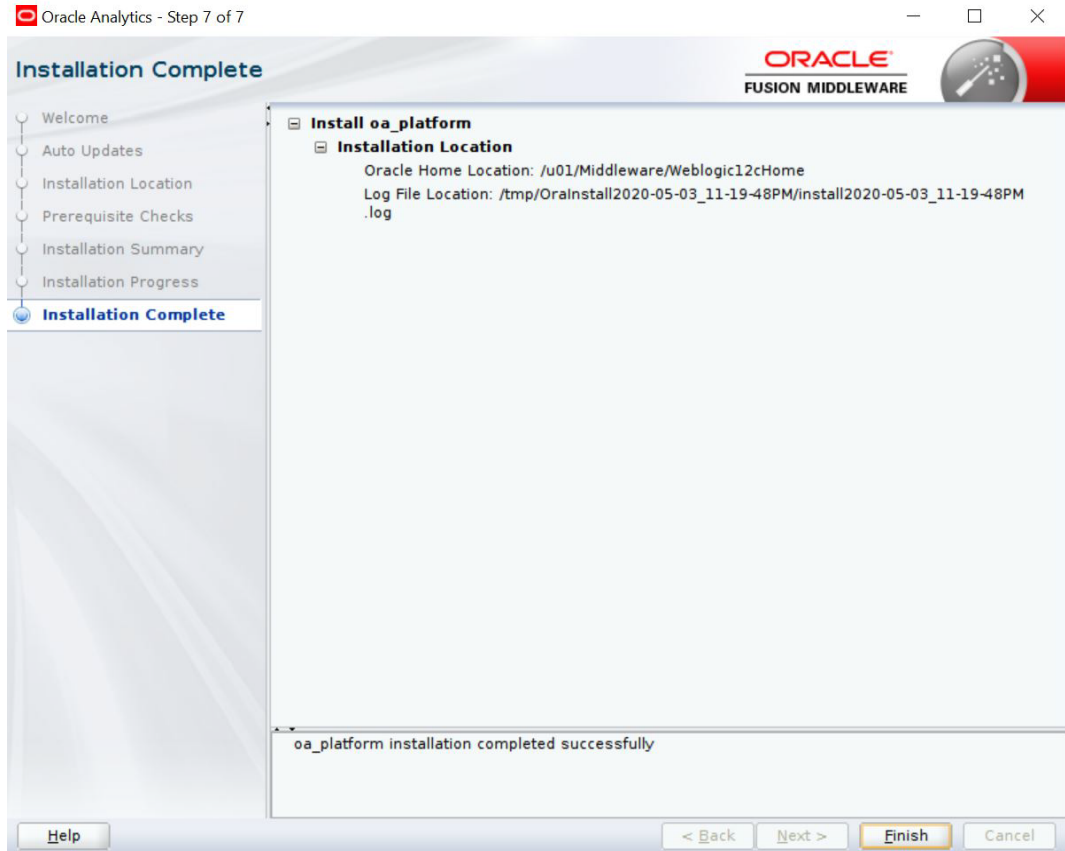
10. The following window is displayed. Click 'Install'.



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



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

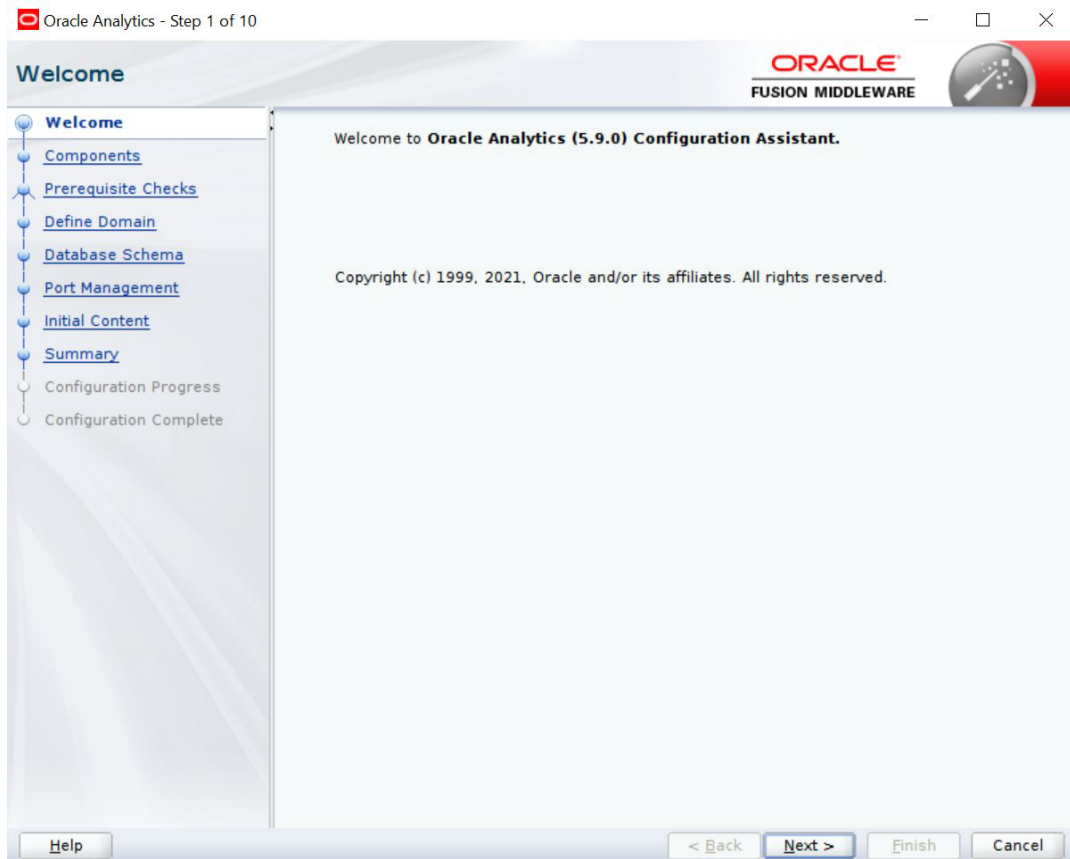


3. Configuring OA Publisher

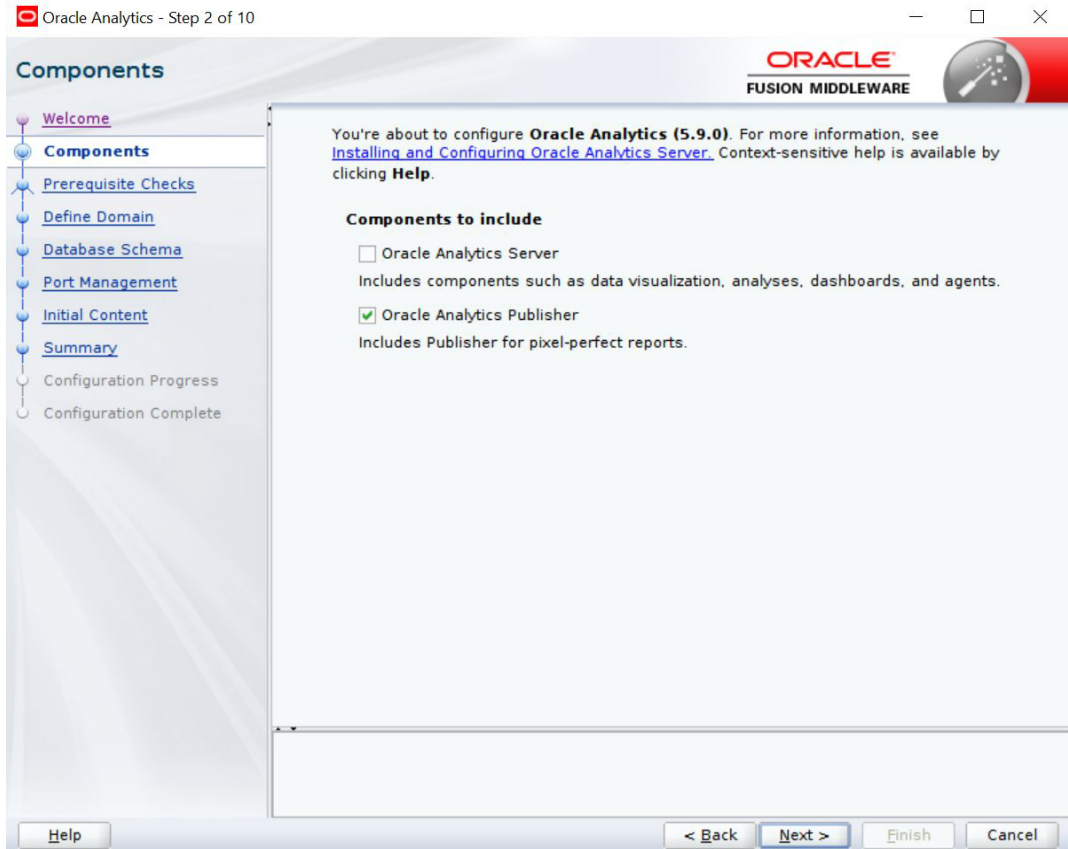
After installing OA Publisher, the next step is to configure OA Publisher.

To configure OA Publisher

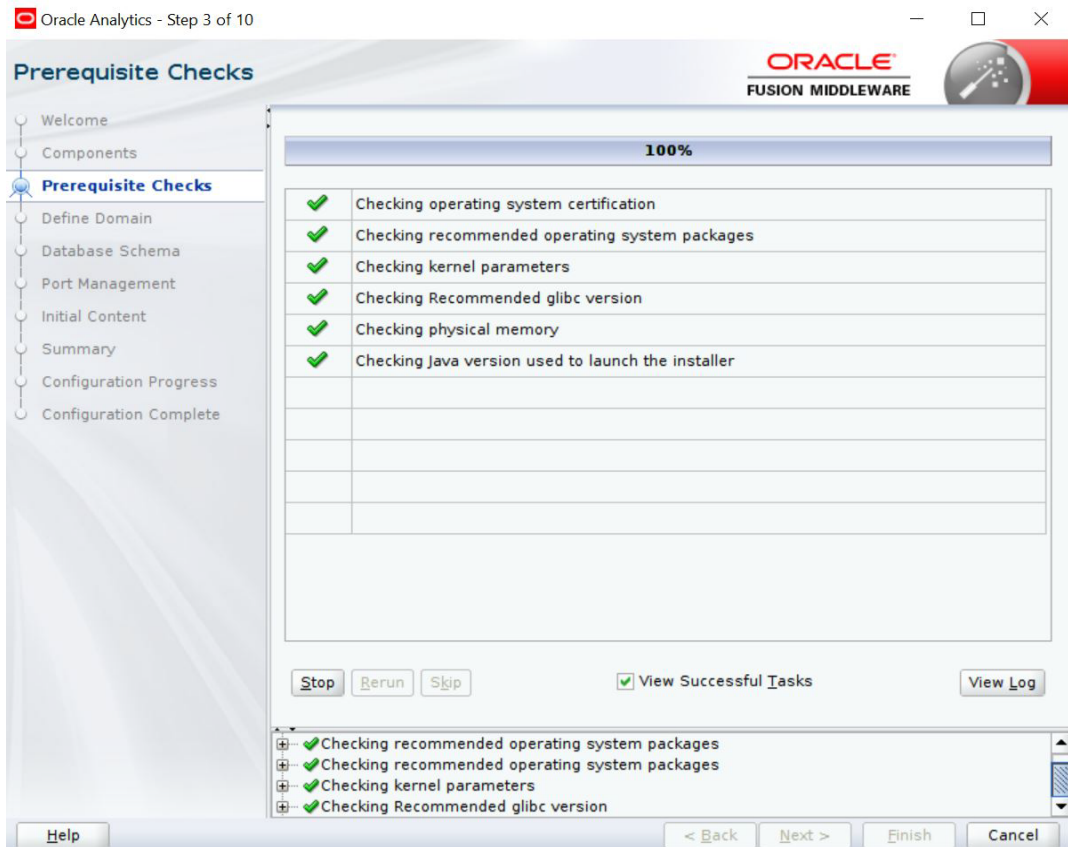
1. Launch configuration window and browse to `$BI_HOME/bin` (for example, `BI_HOME` is `/u01/Middleware/Weblogic12cHome/bi`).
2. Run `./config.sh`. The following window is displayed.



3. Select the option 'Oracle Analytics Publisher' and Click 'Next'.



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



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

Oracle Analytics - Step 4 of 10

Define Domain

The domain is the basic unit of WebLogic administration. All Oracle Analytics components reside in one domain. The domain needs a place to store files, and initial administrator credentials.

The domain files include configuration files, log files, and data files.

The credentials define the initial administrator account. For security reasons no other default accounts are created. Use this initial account to create individual accounts for your users.

Location of new domain

Domains Directory: /u01/Middleware/Weblogic12cHome/user_projects/domains

Domain Name:

Domain Home: /u01/Middleware/Weblogic12cHome/user_projects/domains/bi

Credentials for new domain

Username:

Password:

Confirm Password:

Enter a password for the System Administrator.
The password must be a minimum of 8 and not exceed 30 alphanumeric characters. It must begin with an alphabetic character, use only alphanumeric, underscore (_), dollar (\$) or pound (#) characters and include at least 1 digit.

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

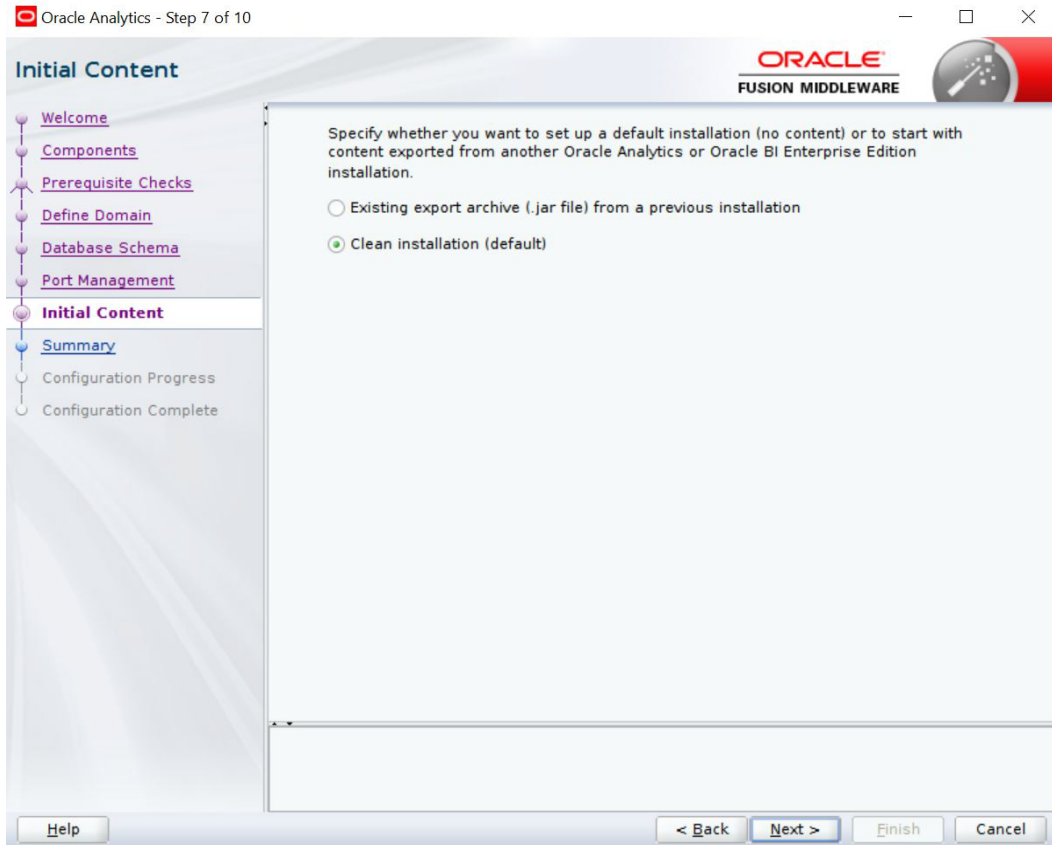
7. Click 'Next'. The following window is displayed.

The screenshot shows the 'Database Schema' configuration window. The title bar reads 'Oracle Analytics - Step 5 of 10'. The Oracle Fusion Middleware logo is in the top right. A navigation pane on the left lists steps: Welcome, Configuration, Prerequisite Checks, Define Domain, Database Details (selected), Port Management, Initial Application, Summary, Configuration Progress, and Configuration Complete. The main content area has 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 Oracle Analytics. 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.' Below this, there are two radio buttons: 'Create new schemas' (selected) and 'Use existing schemas'. The 'Create new schemas' section contains 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.oracle.com:1521:OLLMDR). At the bottom, there are buttons for 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

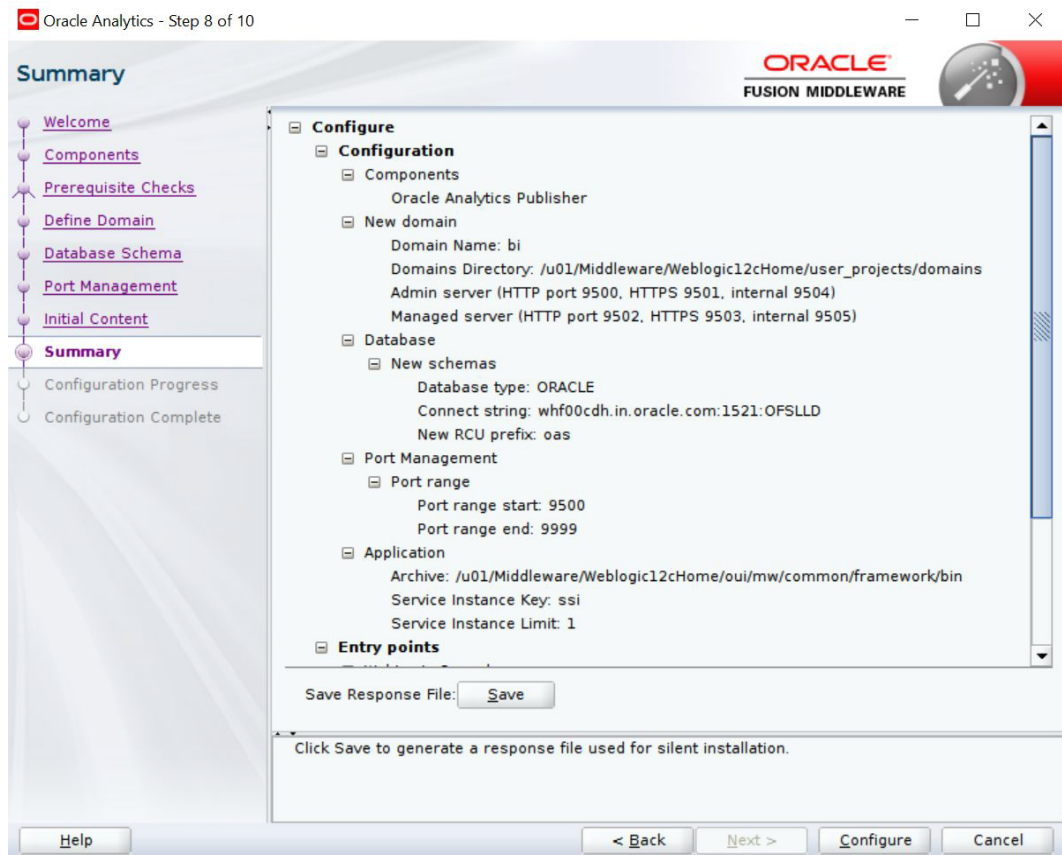
8. Click 'Next'. The following window is displayed.

The screenshot shows the 'Port Management' configuration window. The title bar reads 'Oracle Analytics - Step 6 of 10'. The Oracle Fusion Middleware logo is in the top right. A navigation pane on the left lists steps: Welcome, Components, Prerequisite Checks, Define Domain, Database Schema, Port Management (selected), Initial Content, Summary, Configuration Progress, and Configuration Complete. The main content area has the following text: 'Specify the ports that Oracle Analytics and WebLogic Server processes can use.' Below this, there is a section titled 'Port Range' with two input fields: 'Port Range Starting Port' (9500) and 'Port Range End Port' (9999). At the bottom, there are buttons for 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

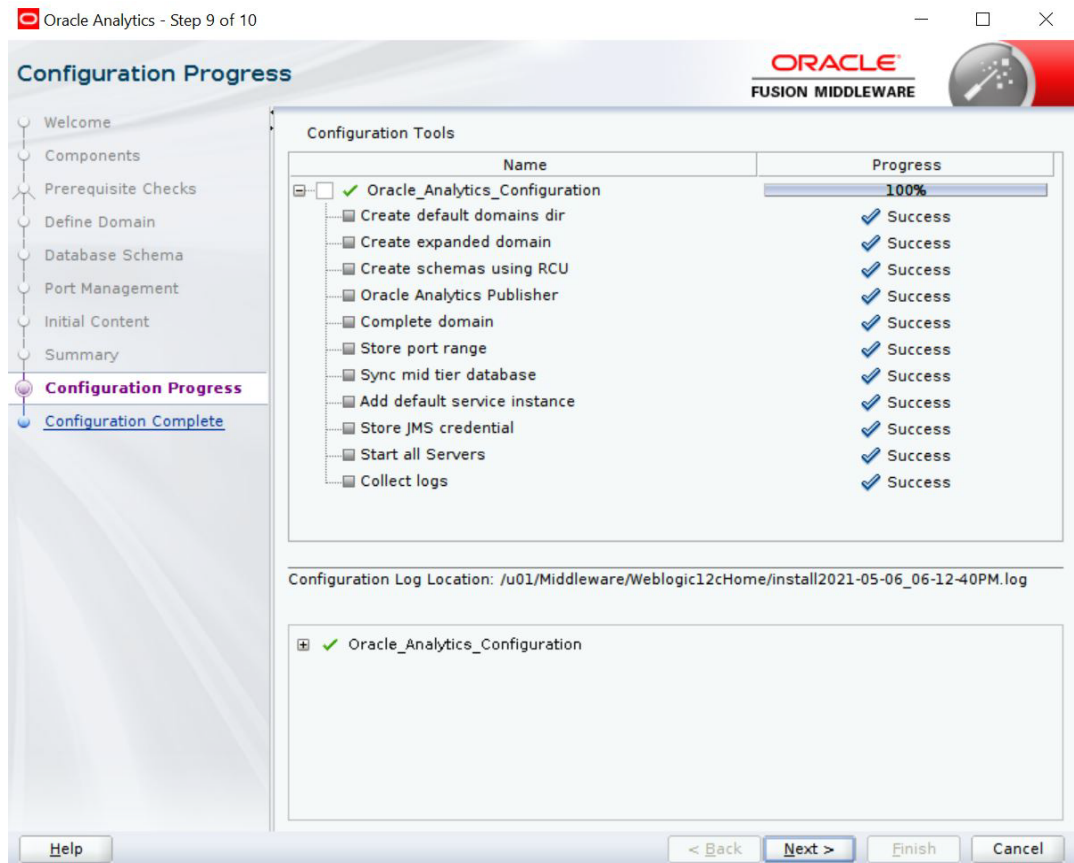
9. Click 'Next'. The following window is displayed.



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 OA Publisher with the details as highlighted in the above screen.

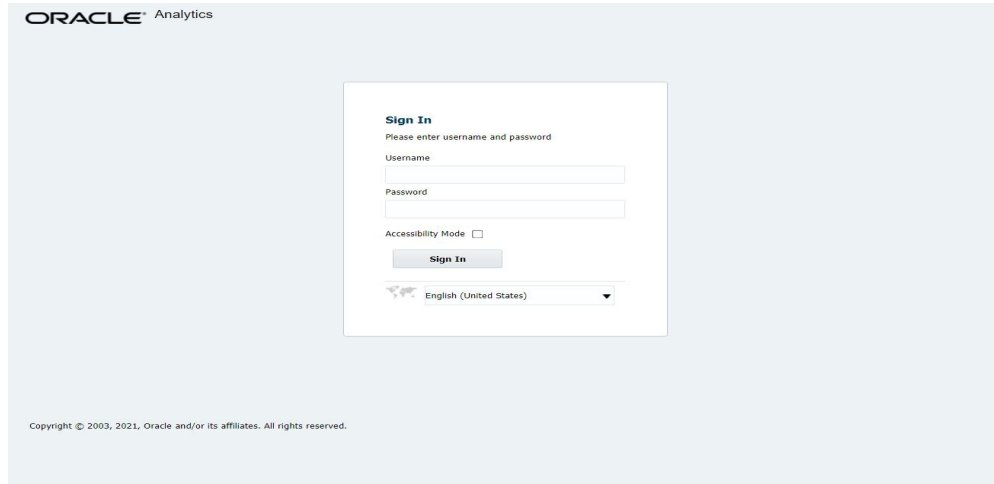
3.1 Verifying Successful OA Publisher Deployment

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

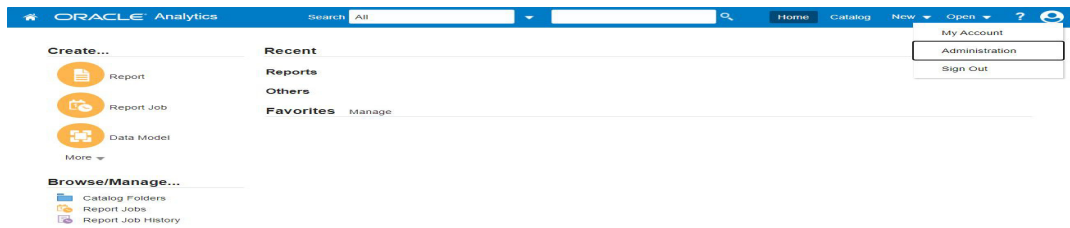
4. Creating OA Publisher Datasource

To create OA Publisher Datasource, do the following:

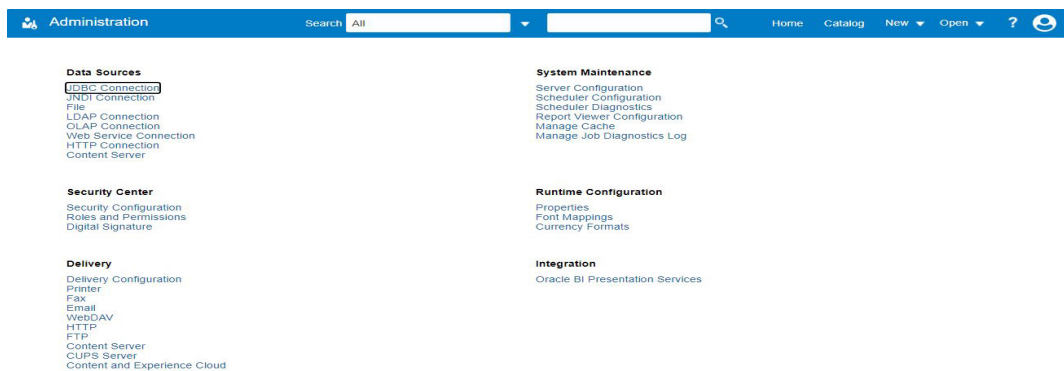
1. Access the console URL using `http://hostname:<port>/xmlpserver`.



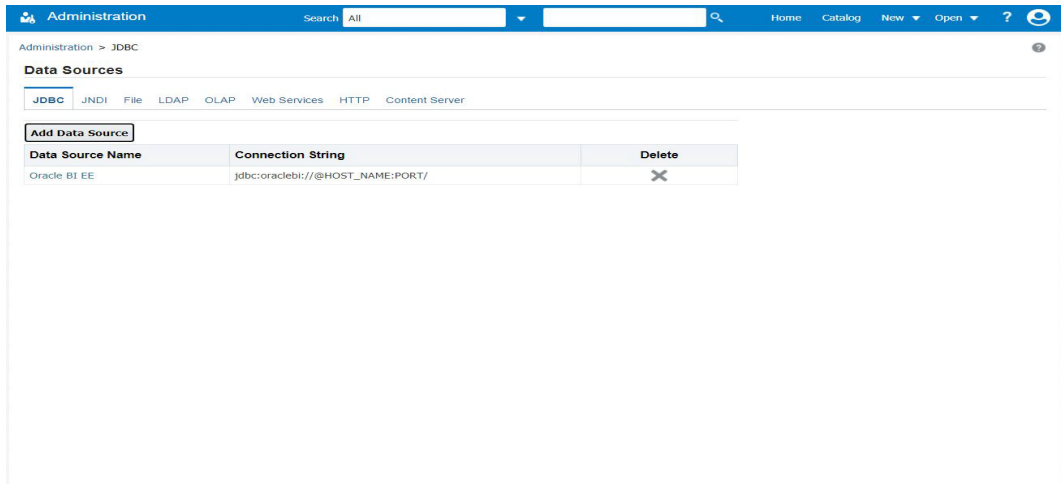
2. The following window is displayed. Click Administration option on the header.



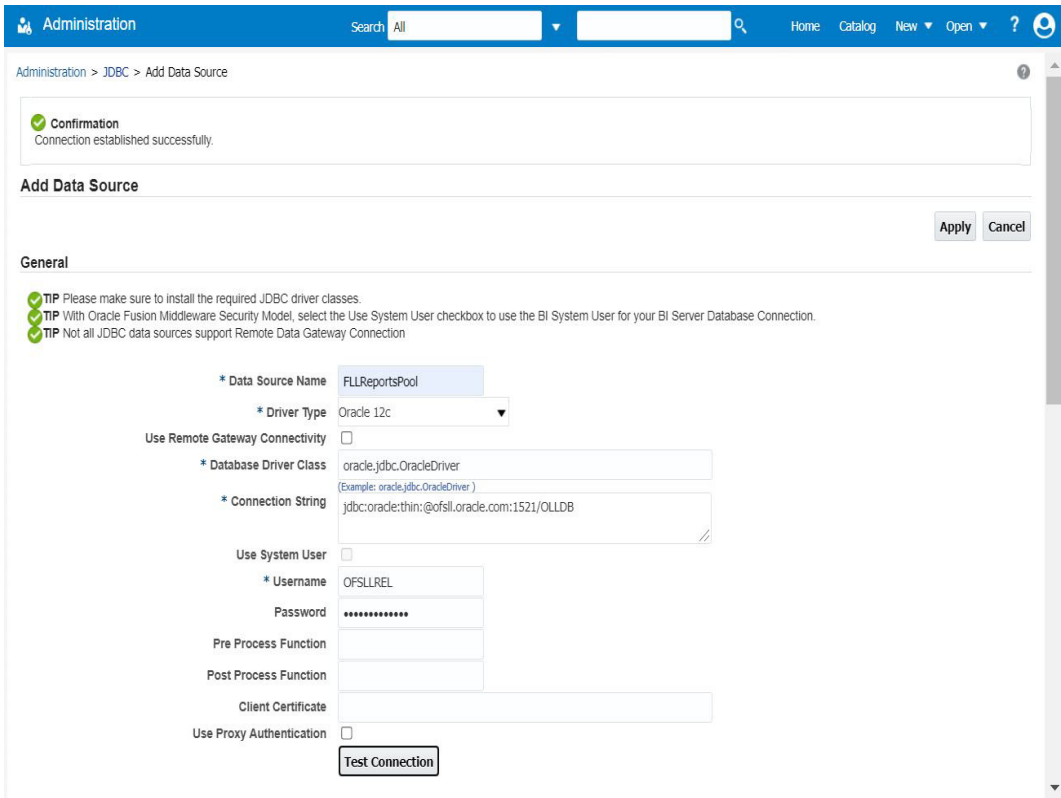
3. Click on 'JDBC Connection'.



4. Click 'Add Data Source'.



5. Add the following details:



- Specify Data Source Name as 'FLLReportsPool'.
- Click on 'Test Connection'.
- 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.

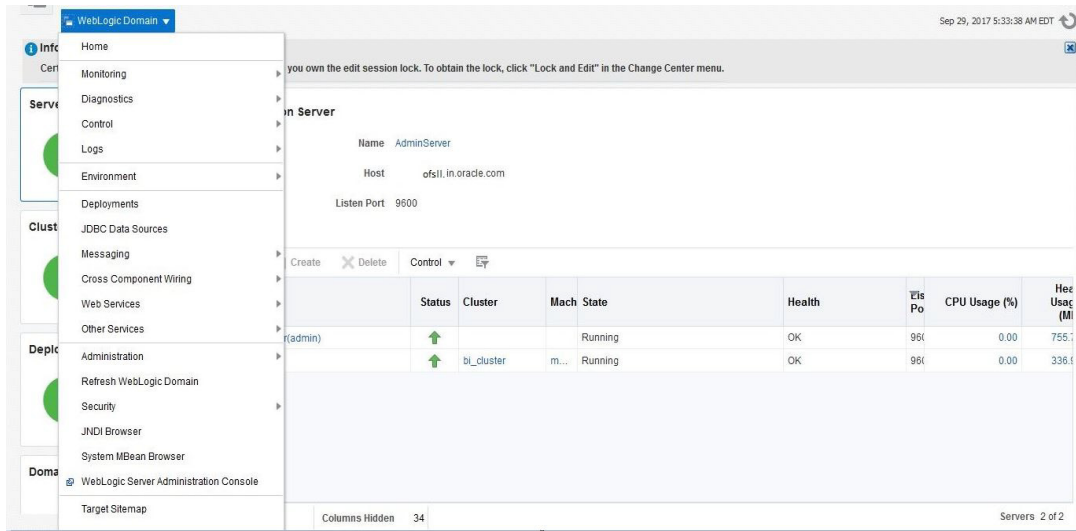
6. Click 'Apply'.

4.1 Creating Roles

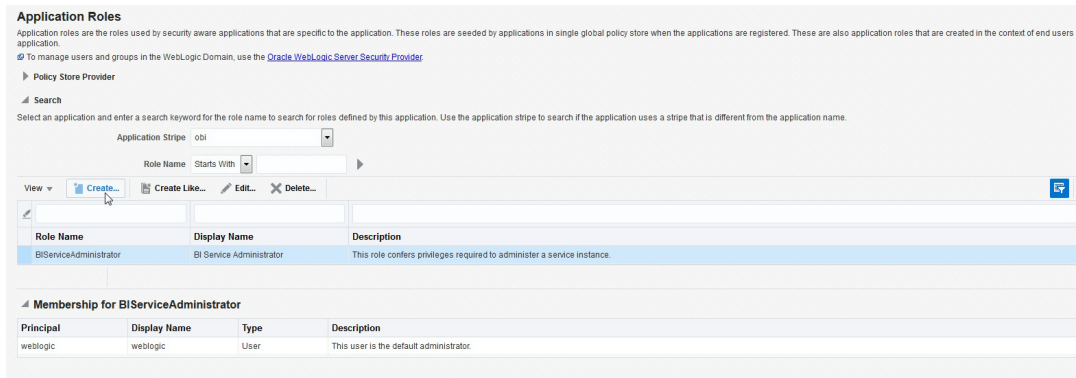
The following section details the steps to be followed to create “BI Author” and “BI Consumer” roles which are used to define security roles while creating Data Source on OA Publisher.

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.



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



4. Specify the following details:

- Role Name
- Display Name
- Description



- 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

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.

- Add the Weblogic User by selecting "weblogic" in the 'Searched Principals' section and click 'OK'. The Weblogic User is added to the application role.

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.

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.

Name	Display Name	Type
weblogic		User

- Click 'OK'. The new role is added to the list of application roles.

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 accessing the application.

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

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

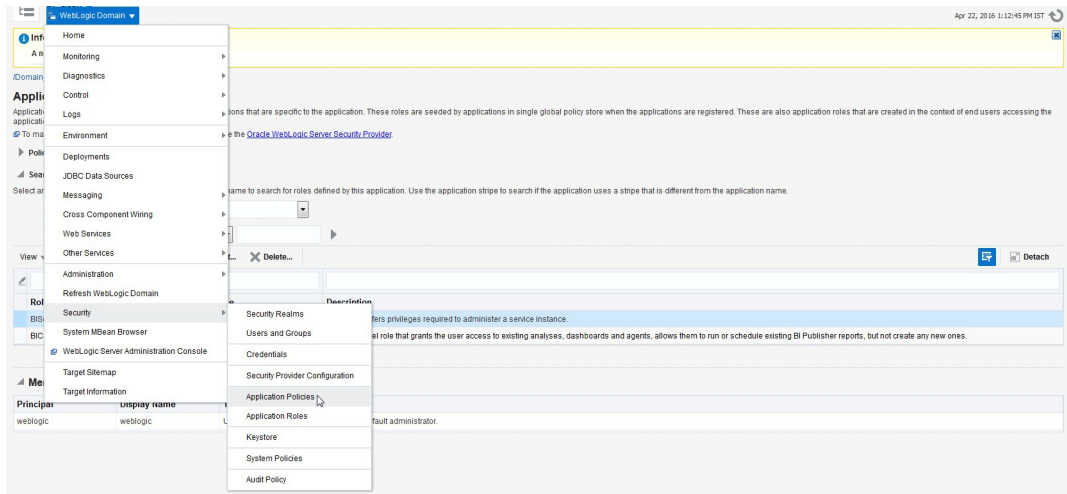
Membership for BIServiceAdministrator

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

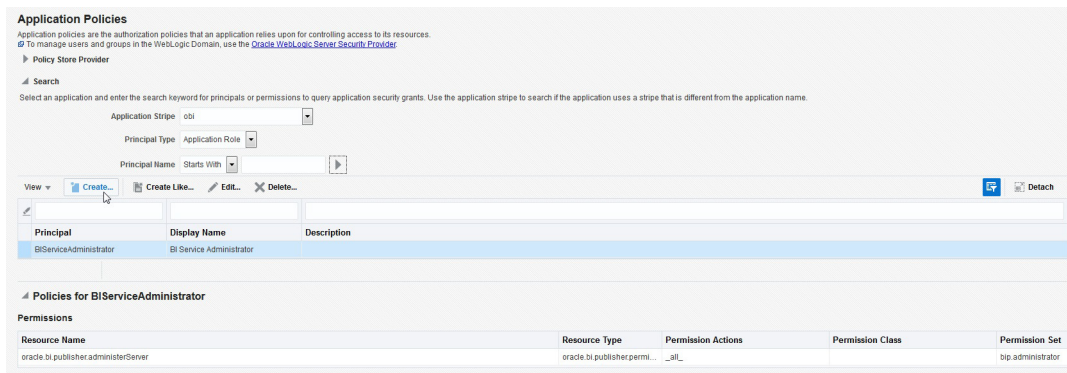
To Create WebLogic Application Policies

- Login to Enterprise Manager using the URL - http://hostname:port/em.

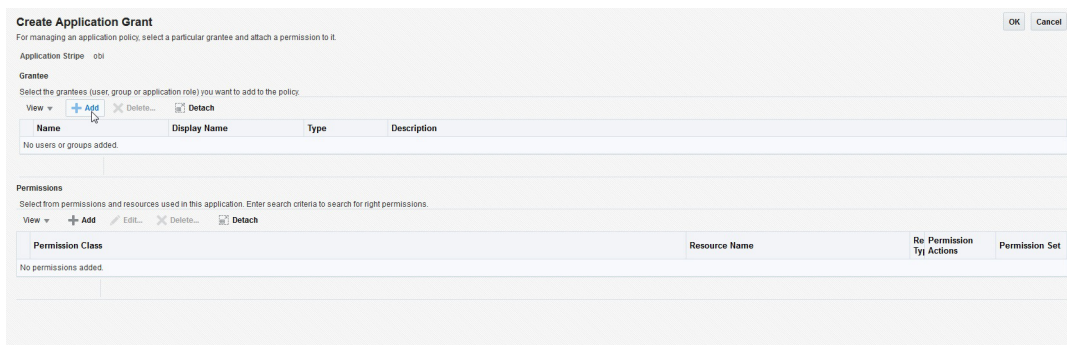
2. Select Weblogic Domain > Security > Application Policies as indicated in the following screen:



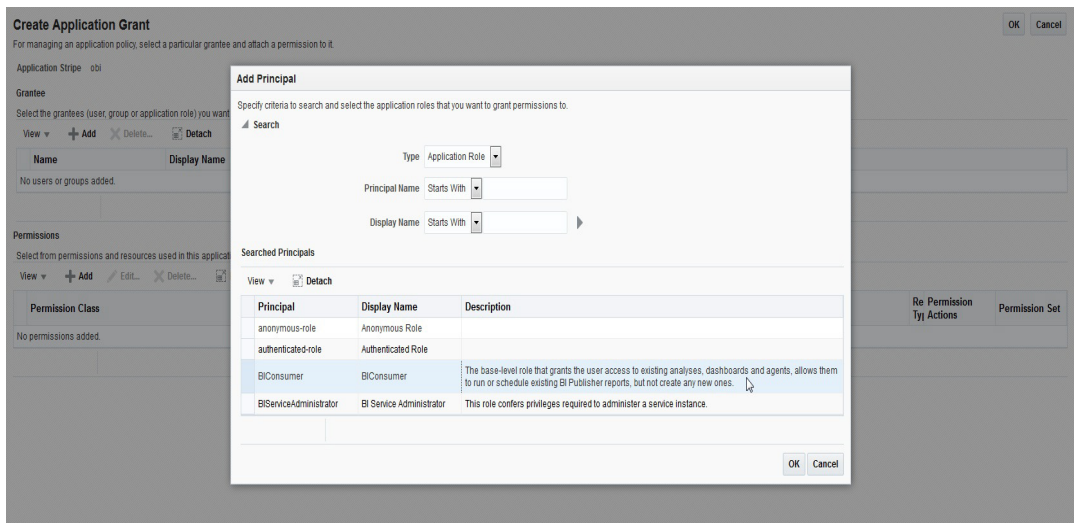
3. In the Application Stripe field, select 'obi' from the drop-down list. Click 'Create'.



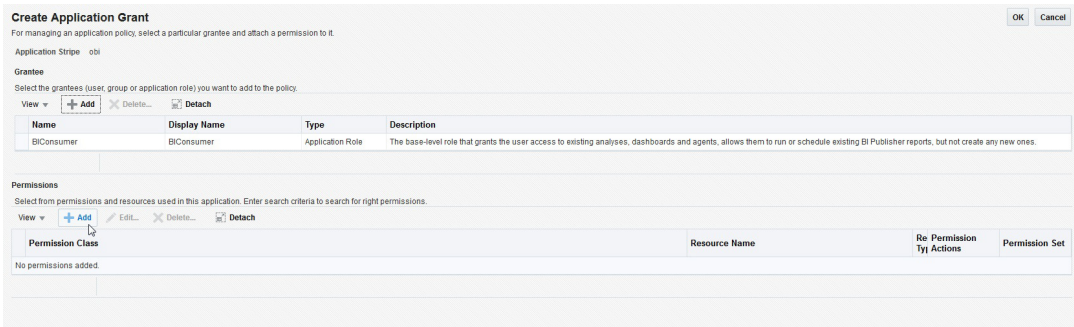
4. In 'Create Application Grant' screen, under the Grantee section, click 'Add'.



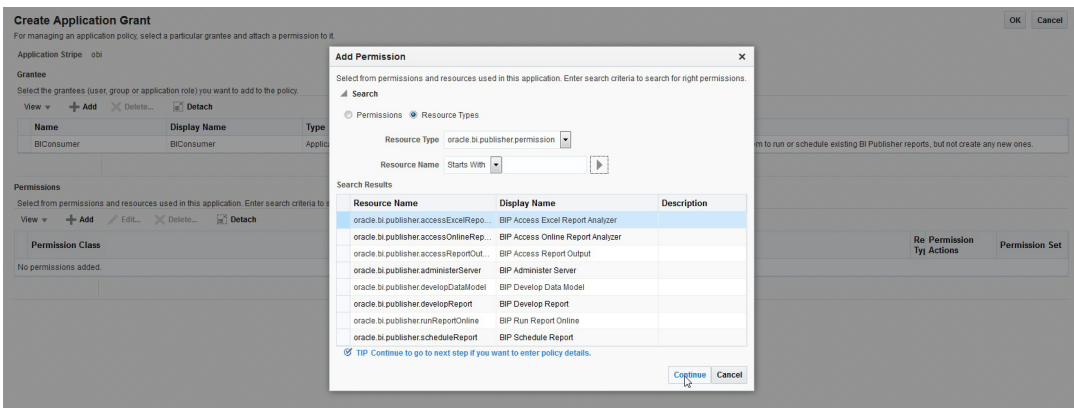
- Select the newly created application role from the list and click 'OK'. The new role is added to the list.



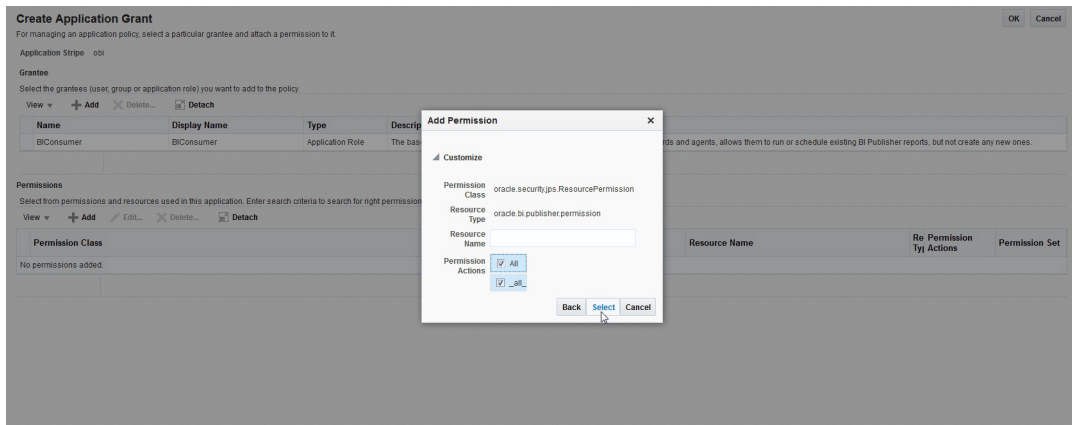
- In the 'Permissions' section, click 'Add'.



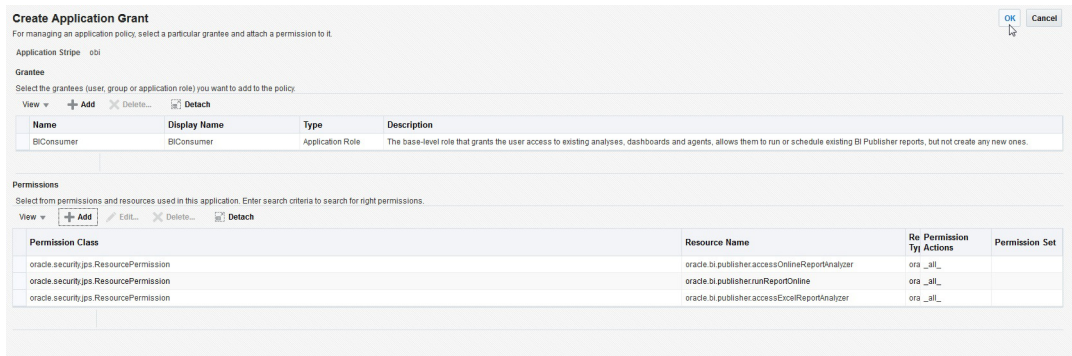
- In the search criteria, select 'Resource Type' and select the resource type from the drop-down list. Select the required resource from the search results and click 'Continue'.



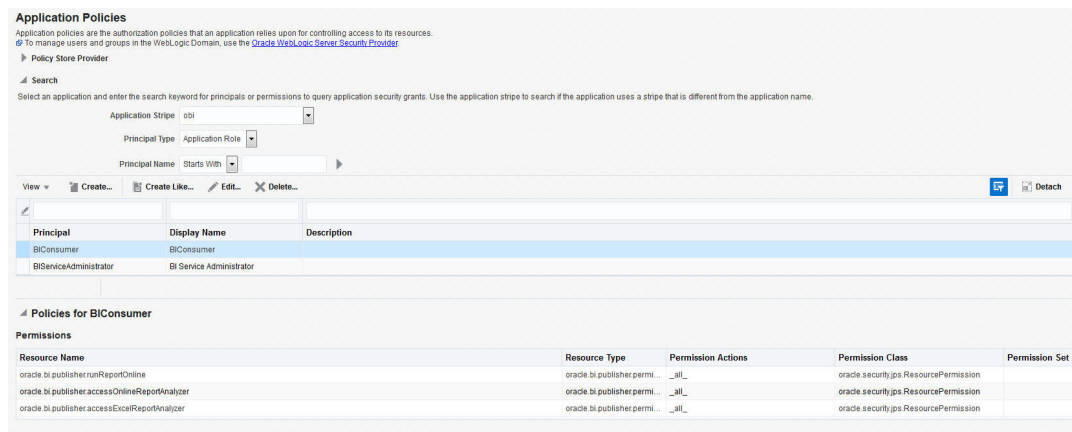
- Define the required permission(s) for the application role by selecting the appropriate Permission Class and Permissions Actions check box. Click 'Select'.



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



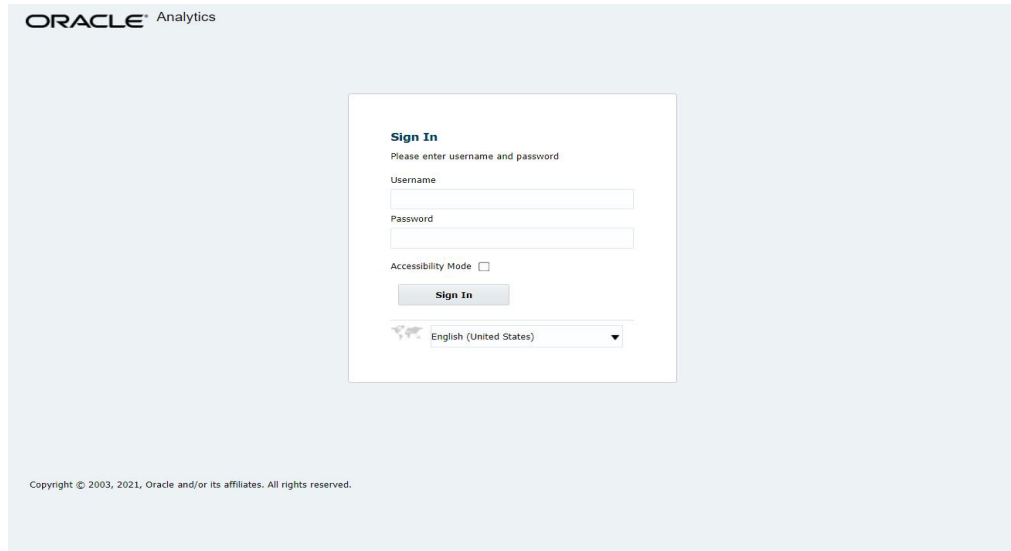
- Once done, click 'OK'.



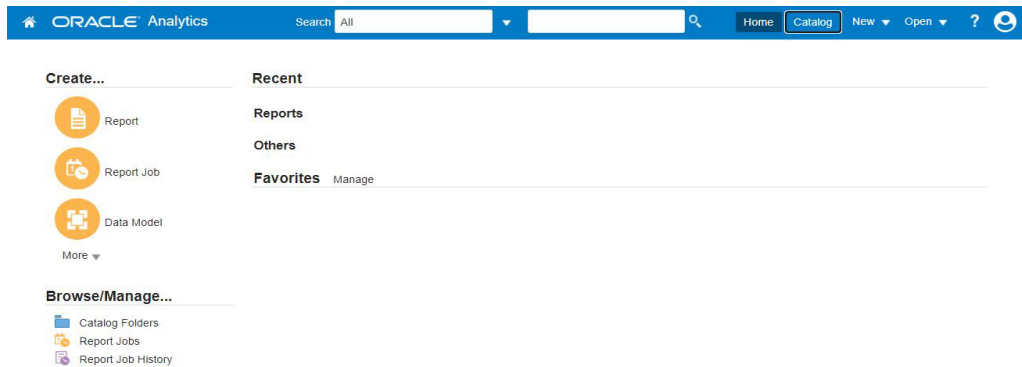
5. Importing Reports to OA Publisher Server

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

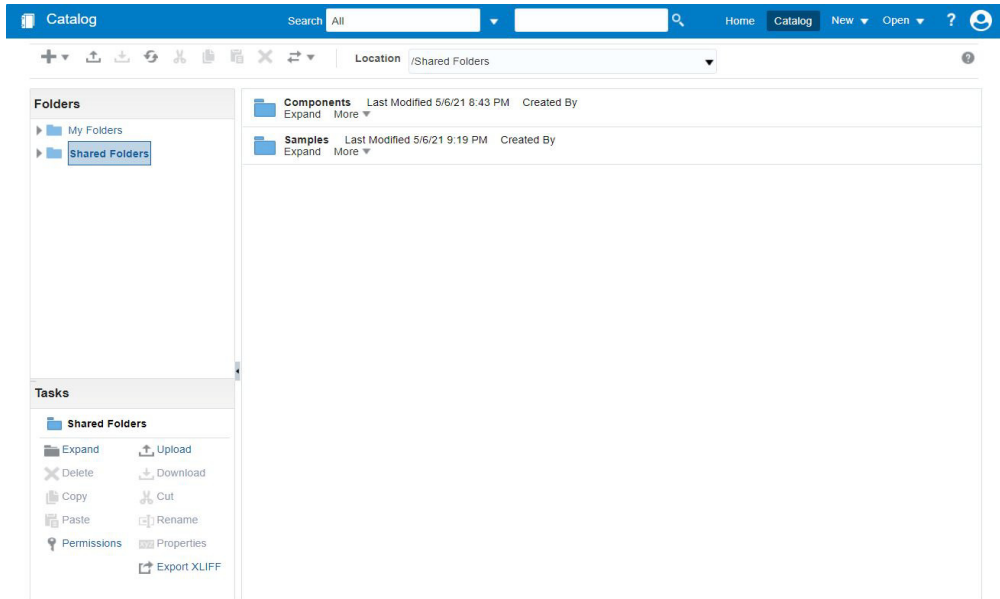
1. Copy and extract the OFSLLReports.zip file to staging area.
2. Launch the Oracle Analytics Publisher Application using `http://hostname:port/xmlpserver`
3. Login with valid credentials.



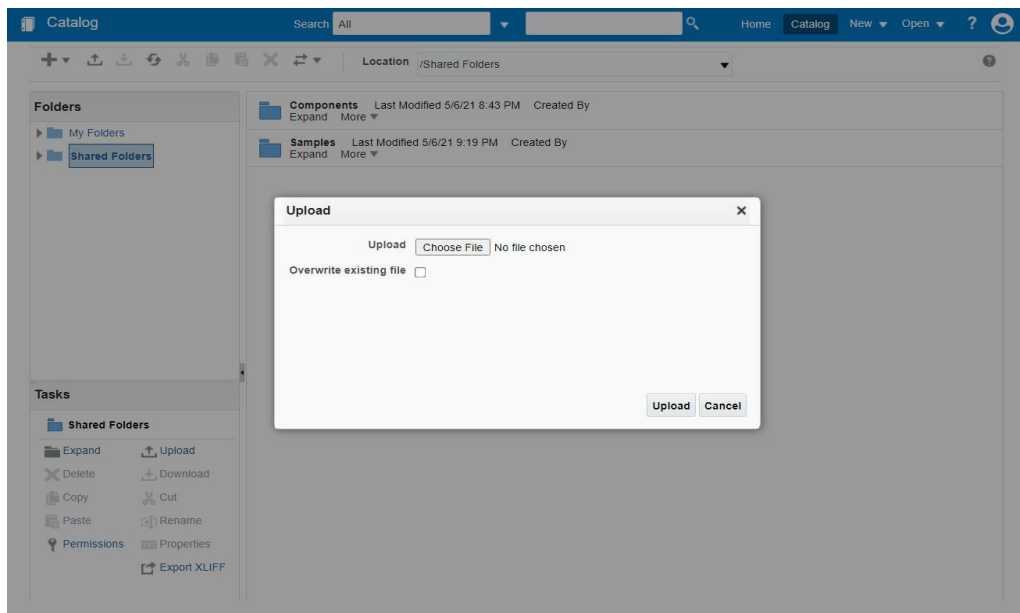
4. Following window is displayed. Click on 'Catalog Folders' on the left pane.



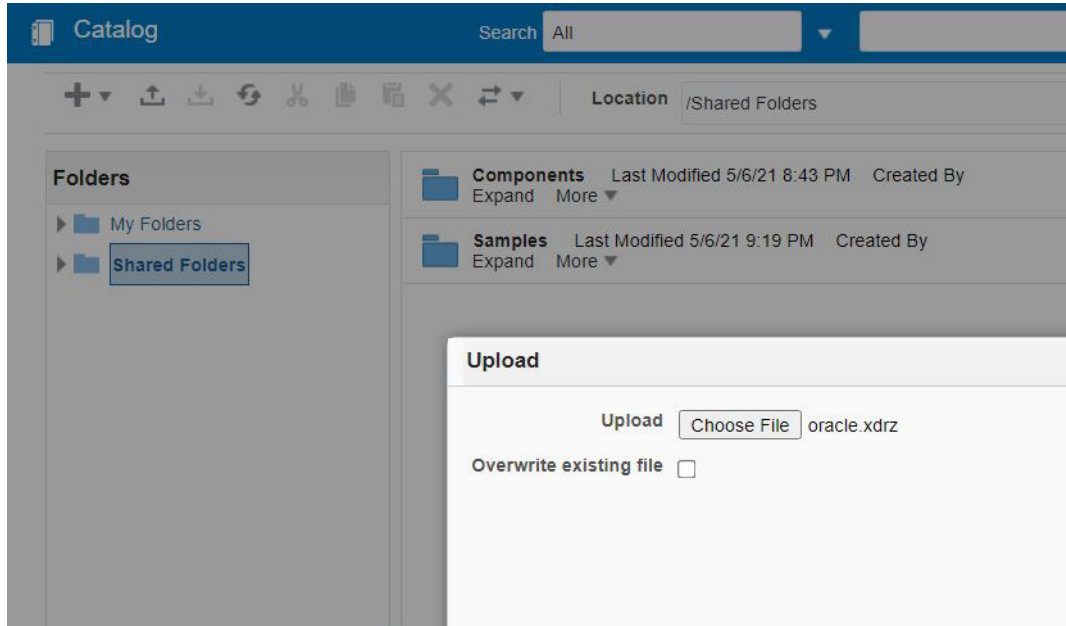
5. Click on 'Shared Folders' option and then click 'Upload'.



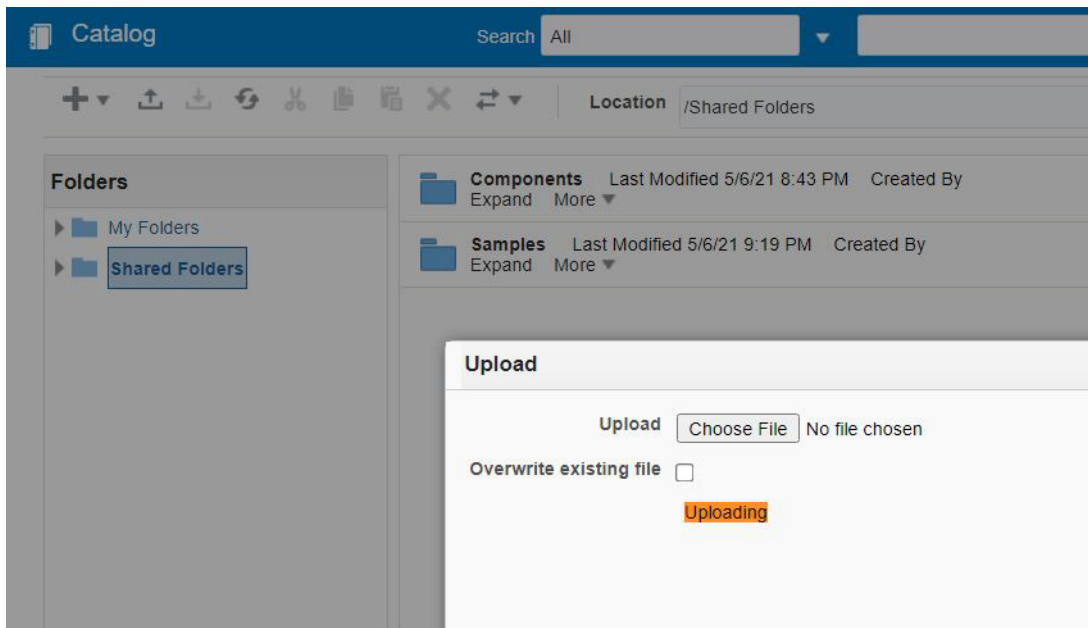
6. The following window is displayed. Browse to the location where the oracle.xdrz file is saved. Click the 'Overwrite Existing File' check box if you are overwriting an existing directory.



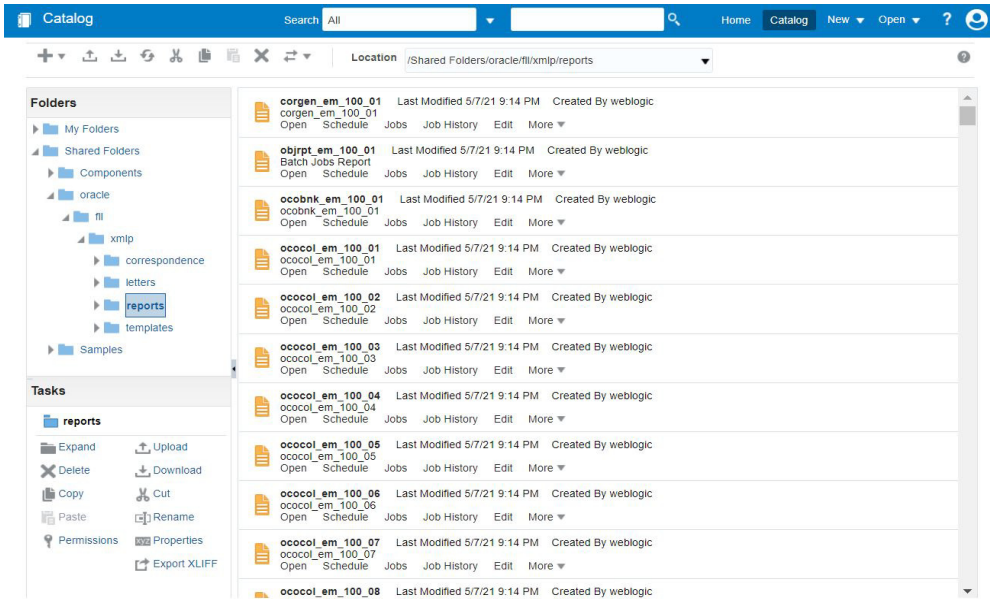
7. Click on 'Upload'.



8. The following window is displayed.



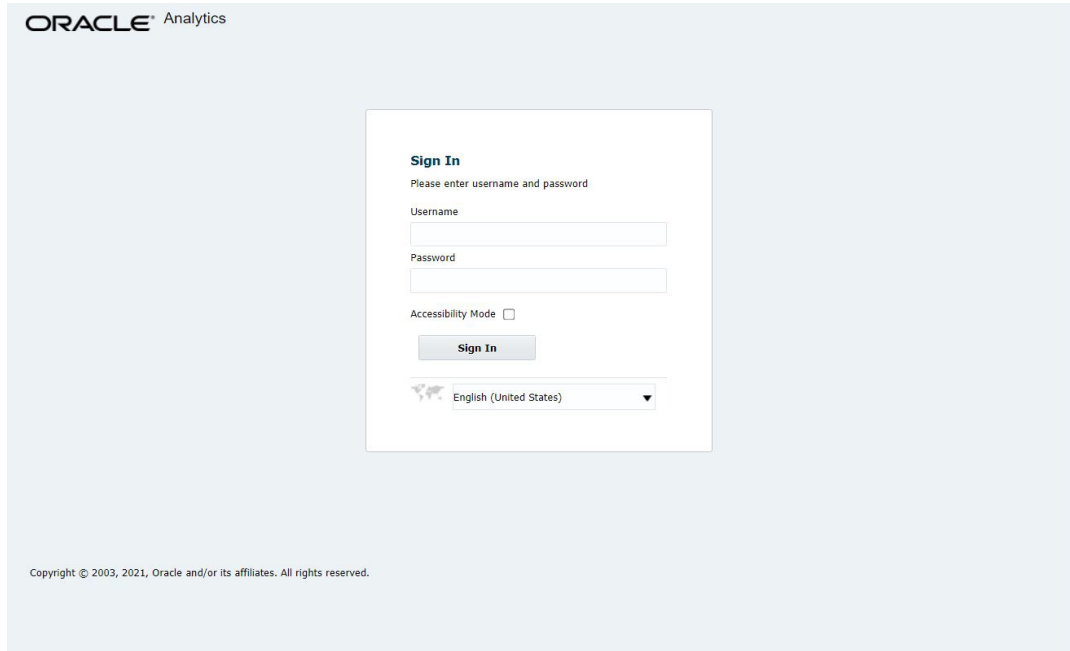
- Once the upload is completed, click any folder to see the list of reports under the directory. The following window is displayed.



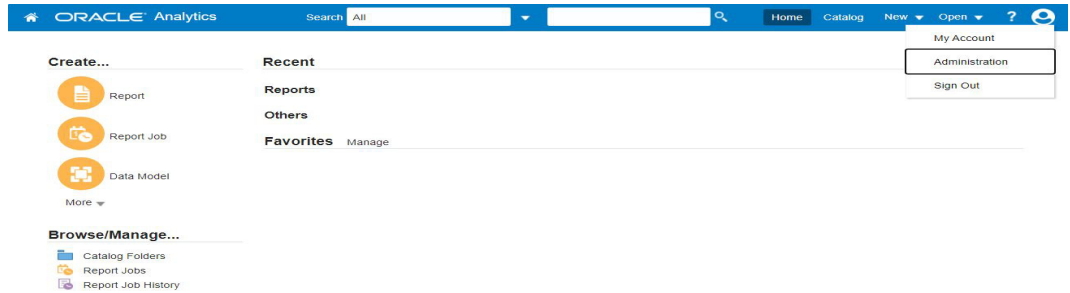
6. Configure MDB Mail Server

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

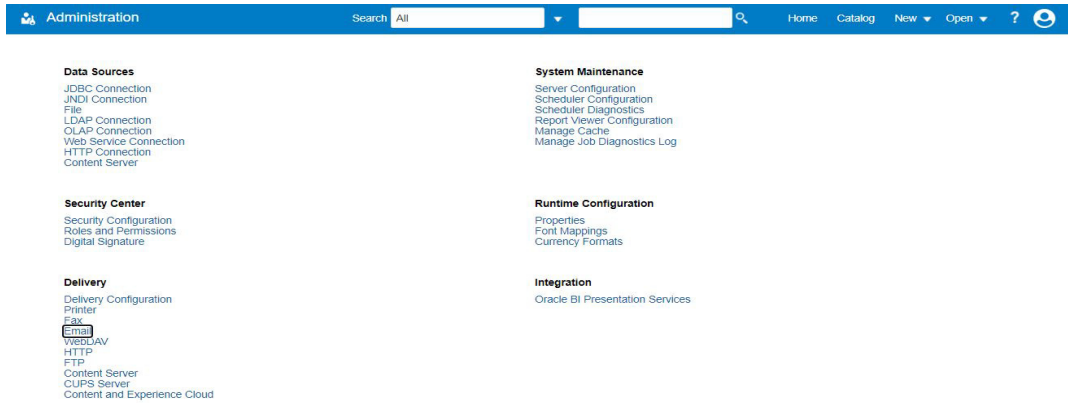
1. Launch the Oracle Analytics Publisher application (<http://hostname:port/xmlpserver>). The following window is displayed.



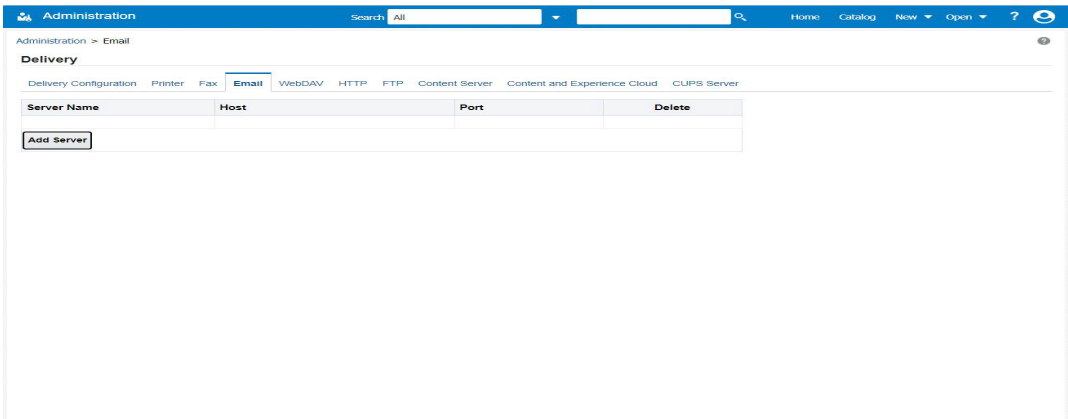
2. Login using the valid credentials. The following window is displayed.



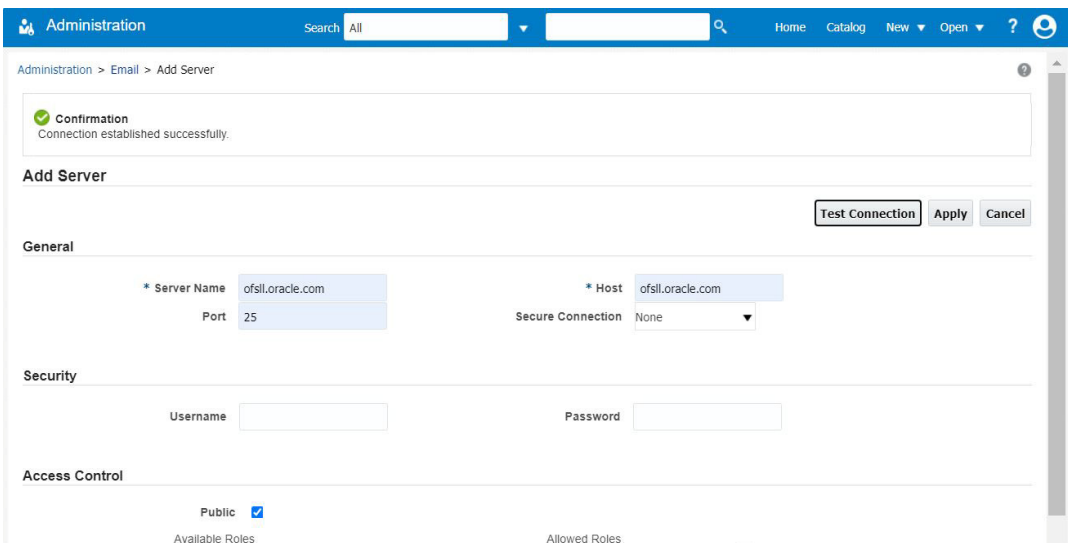
3. Click 'Administration'. The following window is displayed.



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.

Administration > Email > Add Server

Confirmation
Connection established successfully.

Add Server Test Connection Apply Cancel

General

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

Security

Username Password

Access Control

Public

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

Administration > Email

Delivery

Delivery Configuration Printer Fax **Email** WebDAV HTTP FTP Content Server Content and Experience Cloud CUPS Server

Server Name	Host	Port	Default	Delete
ofsil.oracle.com	ofsil.oracle.com	25	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Add Server