Oracle FLEXCUBE Direct Banking

Reports Setup and Configuration
Release 12.0.3.0.0

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ORACLE®

Oracle FLEXCUBE Direct Banking

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April 2014

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Contents

Release 12.0.3.0.0 0
Oracle FLEXCUBE Direct Banking 1
Oracle FLEXCUBE Direct Banking Reports Setup and Configuration 1
1 Preface 2
1.1 Intended Audience 2
1.2 Documentation Accessibility 2
1.3 Access to OFSS Support 2
1.4 Structure 2
1.5 Related Information Sources 2
2 Abbreviations 3
3 Overview 4
3.1 Audience 4
4 Setup and configuration 5
5 Reports Features 6
5.1 Report Types 6
5.1.1 Bank Reports 6
5.1.2 Customer Reports 6
5.1.3 Spending Analysis 6
6 Installation and Deployment 7
6.1 Hardware Requirement 7
6.2 Deployments 7
6.3 Database Connection 8
6.4 Reports Scheduler Database 14
6.5 Report Definitions 15
6.6 Report Formats 15
6.7 Report Scheduling 16
6.8 Report Delivery 16
6.9 Compression for Downloading Reports 16
6.10 Designing report in Oracle BI Publisher 17
6.11 Transactions for Customer Reports 48
6.11.1 Manage Reports 48
6.11.2 Download Reports 48
6.12 Database Setup and Configurations for Reports 48
6.13 Reports Purging and Archiving 49
6.14 Guidelines for Report Layout 49
6.15 Guidelines for Reports Design 50
7 Report Tool 57
7.1 Usage of Report Tool: 57
8 Dependent Java Libraries 58
9 Web Service Interfaces with Oracle 59
10 References 60

1 Preface

1.1 Intended Audience

This document intended for the following audience:

- Architecture and Design Teams within Oracle FLEXCUBE Direct Banking Partners
- Development Teams
- Implementation Teams
- Implementation Partners

1.2 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

1.3 Access to OFSS Support

https://support.us.oracle.com/

1.4 Structure

This document is organized into the following categories:

Preface gives information on the intended audience. It also describes the overall structure of the Bank Reports setup and configuration.

Overview provides brief information on the overall functionality covered in the banking reports setup and configuration doc.

1.5 Related Information Sources

For more information on Oracle FLEXCUBE Direct Banking Reports setup and configuration Release 12.0.3.0.0, refer to the following documents:

- Oracle FLEXCUBE Direct Banking Reports Design.
- Oracle FLEXCUBE Direct Banking Bank Reports Definition.
- Oracle FLEXCUBE Direct Banking Customer Reports Definition.

2 Abbreviations

FCDB	Oracle FLEXCUBE Direct Banking
Java EE / JEE	Java Enterprise Edition
Java SE / JSE	Java 2 Standard Edition
DBA	Database Administrator
JDK	Java Development Kit
DTO	Data Transfer Object
DO	Data Object
XML	Extensible Markup Language
XDO	XML Data Objects
FO	Formatting Objects
RTF	Rich Text Format
LDB	Local Database
DBA	Database Administrator

3 Overview

Oracle FLEXCUBE Direct Banking, the multi channel solution, for direct customer touch points like Internet and Mobile devices has adopted the Oracle Business Intelligence (BI) Publisher Reporting tool for all its reporting needs.

The document provides installations, setup and Configuration guidelines for integrating the reports available within the Oracle FLEXCUBE Direct Banking platform.

3.1 Audience

The audiences for this document are

- Architecture and Design Teams within Oracle FLEXCUBE Direct Banking
- Development Teams
- Implementation Teams
- Implementation Partners

The document assumes a good knowledge of the following

- Oracle FLEXCUBE Direct Banking
- Oracle BI Publisher Enterprise

4 Setup and configuration

Oracle FLEXCUBE Direct Banking provides various reports using Oracle Business Intelligence (BI) Publisher for the financial institutions implementing the solution as well as for the customers of these institutions via the internet banking channel. These reports are shipped along with the FCDB Installer .

In the installer these Reports are located in FCDB.zip file which is present in FCDBInstall folder of the Installer package .within the FCDB.zip file the reports are available in obip folder which is located in FCDB\system. The Obip folder needs to be extracted and copied to <FCDB base dir>\system for further usage

5 Reports Features

Oracle FLEXCUBE Direct Banking provides various reports using Oracle Business Intelligence (BI) Publisher for the financial institutions implementing the solution as well as for the customers of these institutions via the internet banking channel.

5.1 Report Types

The Oracle FLEXCUBE Direct Banking solution provides reports which are classified as

- Bank Reports and
- Customer Reports
- Spending Analysis

The complete list of Bank and Customer Reports are available in the Oracle FLEXCUBE Direct Banking Report Definitions document and are added / updated / deleted with every release of the product.

5.1.1 Bank Reports

The Bank Reports are standard list of administrative, operational reports for the bank. The bank Reports are directly available from the Oracle BI Publisher tool and the Oracle FLEXCUBE Direct Banking application does not integrate to deliver the Bank reports. The bank is expected to use the Oracle BI Publisher itself for all administrative, operational and delivery of the Bank Reports. These are standard reports that the bank can schedule within the Oracle XML Publisher tool as per requirements.

5.1.2 Customer Reports

The Customer Reports, by definition, are reports which shall be available for Customers directly on the internet banking site for downloading as per their selected parameters. The Customer Reports are out of the box reports for the Customers which can be parameterized by the Customer based on the set of available parameters for the report.

The Oracle FLEXCUBE Direct Banking application provides a user interface for the customers to register for the available Customer Reports and integrates the reports with the Oracle BI Publisher for retrieval of reports for each customer.

5.1.3 Spending Analysis

The spend analysis report is a report available through Spending Analysis transaction. User can download the spending analysis details in .pdf format which is generated using this report configuration.

6 Installation and Deployment

6.1 Hardware Requirement

The Oracle BI Publisher is expected to be single instance deployment and not a cluster deployment. It is recommended that a separate hardware be used for the installation of the reports generation since the reports generation shall be a CPU intensive activity. Installation on the Oracle FLEXCUBE Direct Banking Application Server should be avoided for the Oracle BI Publisher installations.

Typical hardware requirements for the Oracle BI Publisher shall be

2 CPU (Dual Core) Intel Xeon, 3.0+ GHz, Windows 2003, 2 GB RAM OR 1 CPU Montecito / Power 5, 2 GB RAM, Standard Unix (HP-UX/AIX)

The hardware required can be revised as per implementation requirements.

The standard Oracle BI Publisher installation document, available with the software, should be used to install the software.

6.2 Deployments

The BI Publisher media contains:

- BI Publisher server application
- BI Publisher runtime libraries
- BI Publisher fonts
- BI Publisher desktop tools
- Documentation: User's Guide, Javadocs, demos, and samples

Individual components are located as follows:

Directory	Component
manual\fonts	Font files
manual\generic	xmlpserver.war (for non-oc4j application servers) xmlpserver.ear (for non-oc4j application servers)
manual\oc4j	xmlpserver.ear (for oc4j)
manual\XMLP	XMLP repository
manual\XMLP\DemoFiles	Data source for demo reports.
manual\XMLP\Tools	Template Builder for Word Add-in

The server application allows creating, managing and scheduling reports.

Oracle BI publisher is a pure J2EE application and can be extensively installed on

- Oracle AS 10.1.3
- IBM WebSphere 6.0,6.1
- OC4J Standalone 10.1.3
- Apache Tomcat.5
- Sun Java System Web Server 6.1,7.0

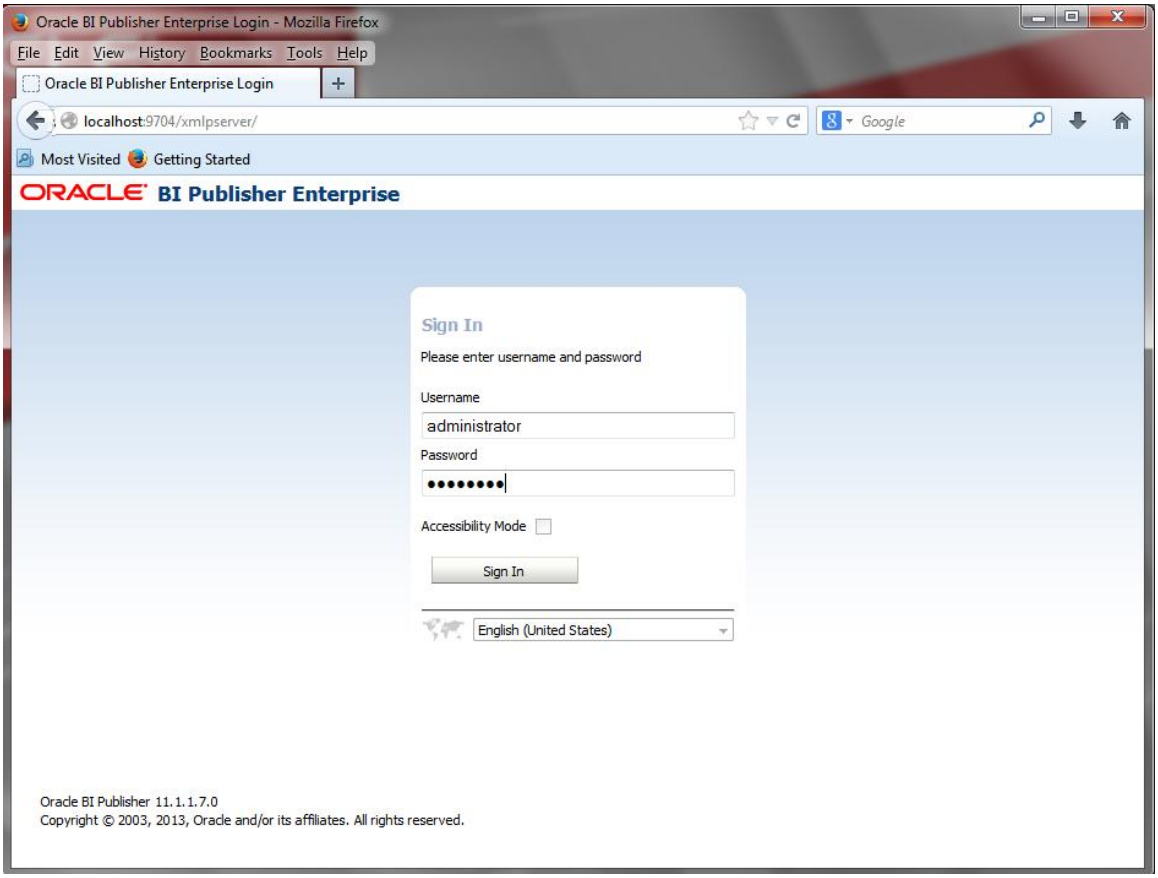
6.3 Database Connection

The Oracle BI Publisher server requires a Database connection to refresh the reports. Oracle FLEXCUBE Direct Banking uses the Oracle database as the persistent database for the Oracle BI Publisher reports.

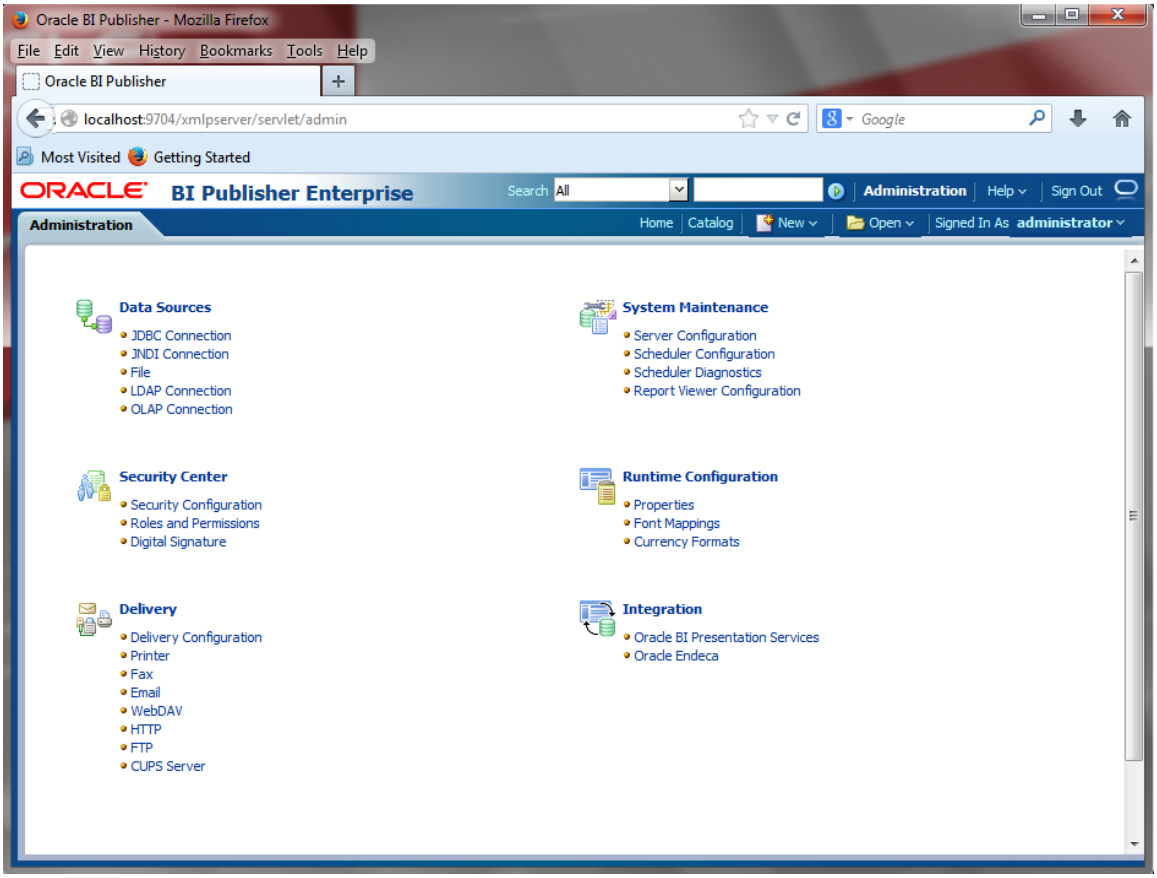
To refresh the reports, Oracle BI Publisher requires a database connection by creating Data source on BI server.

Step 1: Login into the Oracle BI Server with proper User ID and Password.

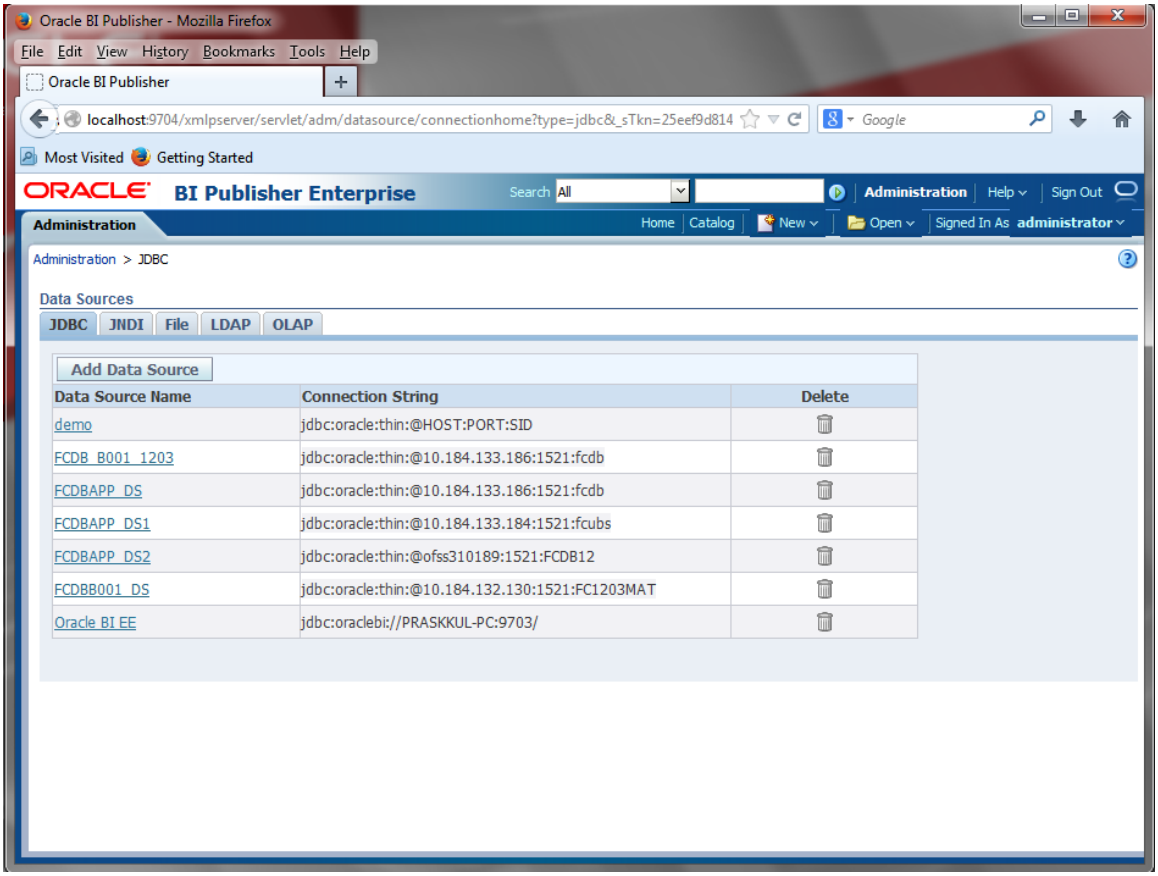
Note: Username/Password is case sensitive



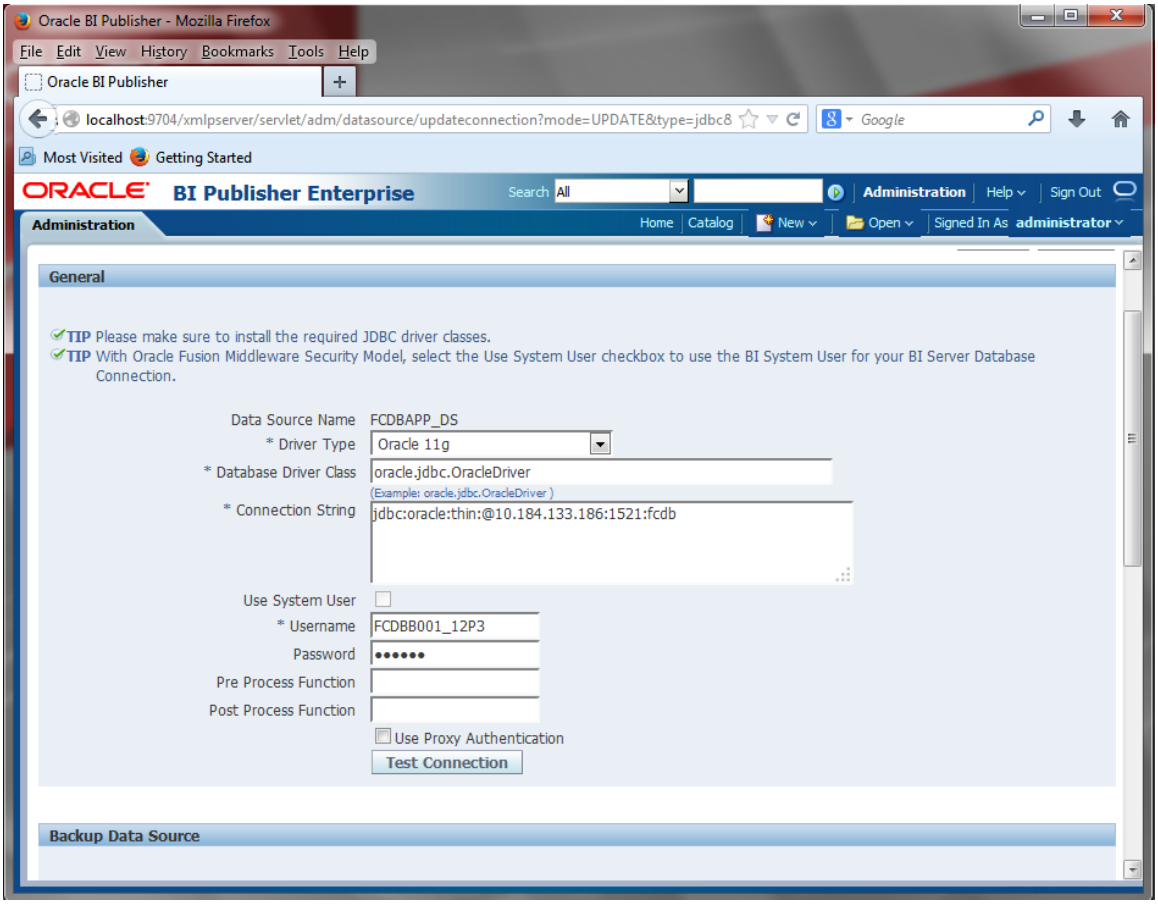
Step 2: User can create data source to connect the BI server with Oracle database through JDBC connection.



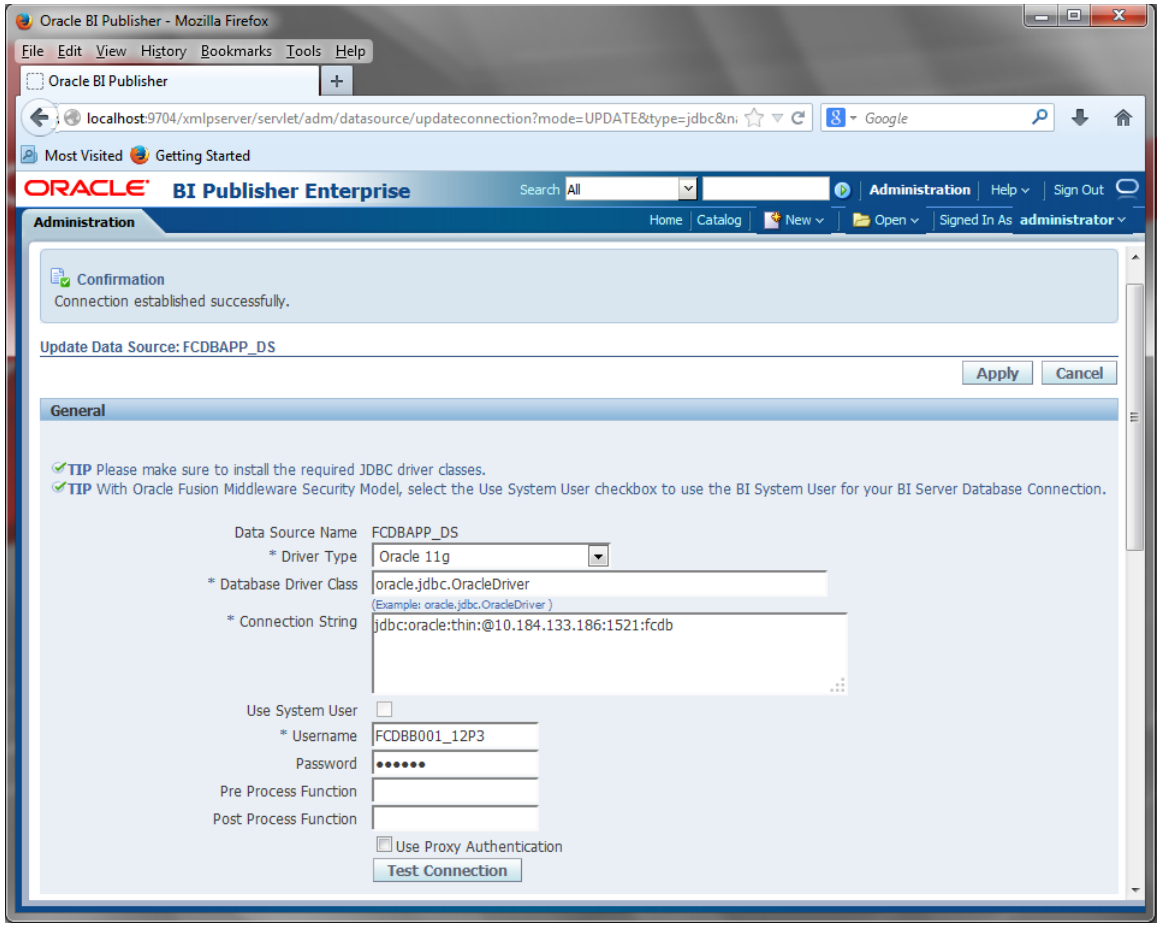
Step 3: User can create or update the existing data source to connect the BI server with Oracle database.



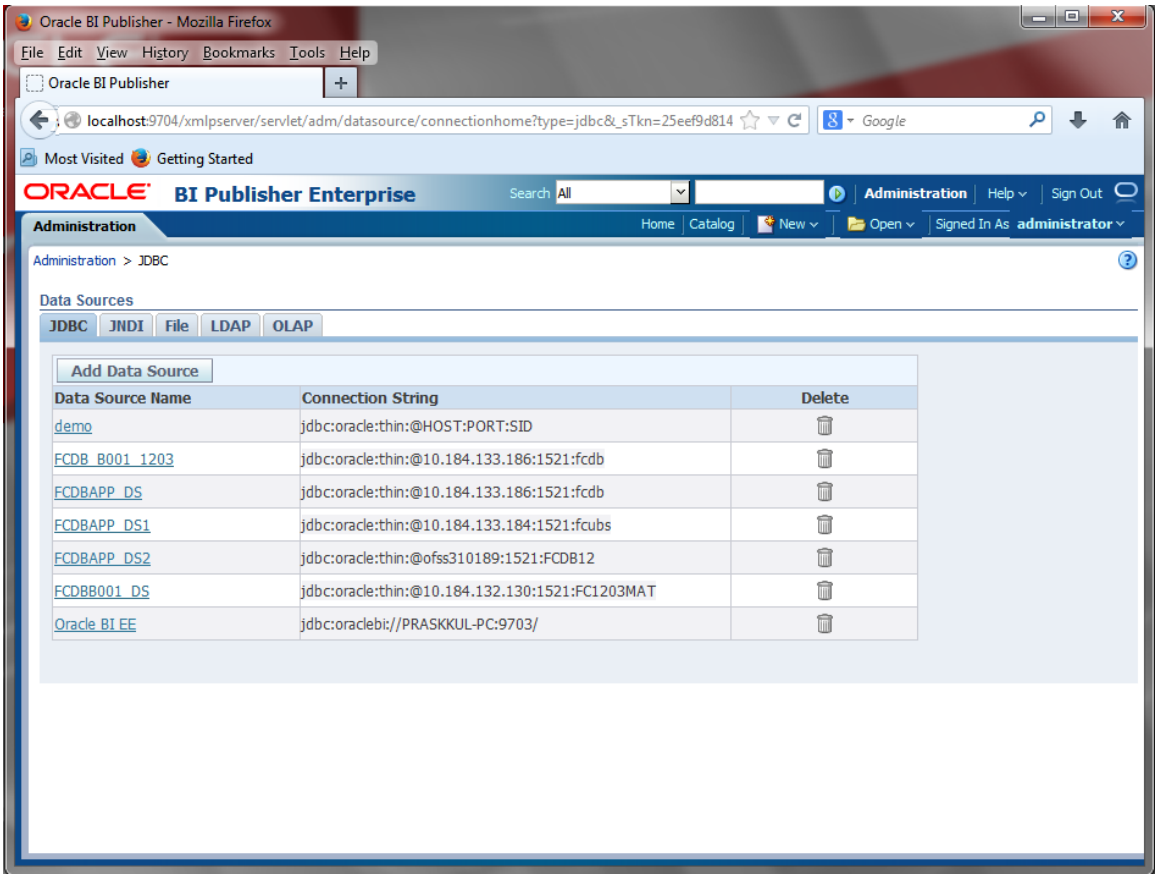
Step 4: Provide all the details related to the database.



Step 5: After providing the entire database details, user can test the connection.



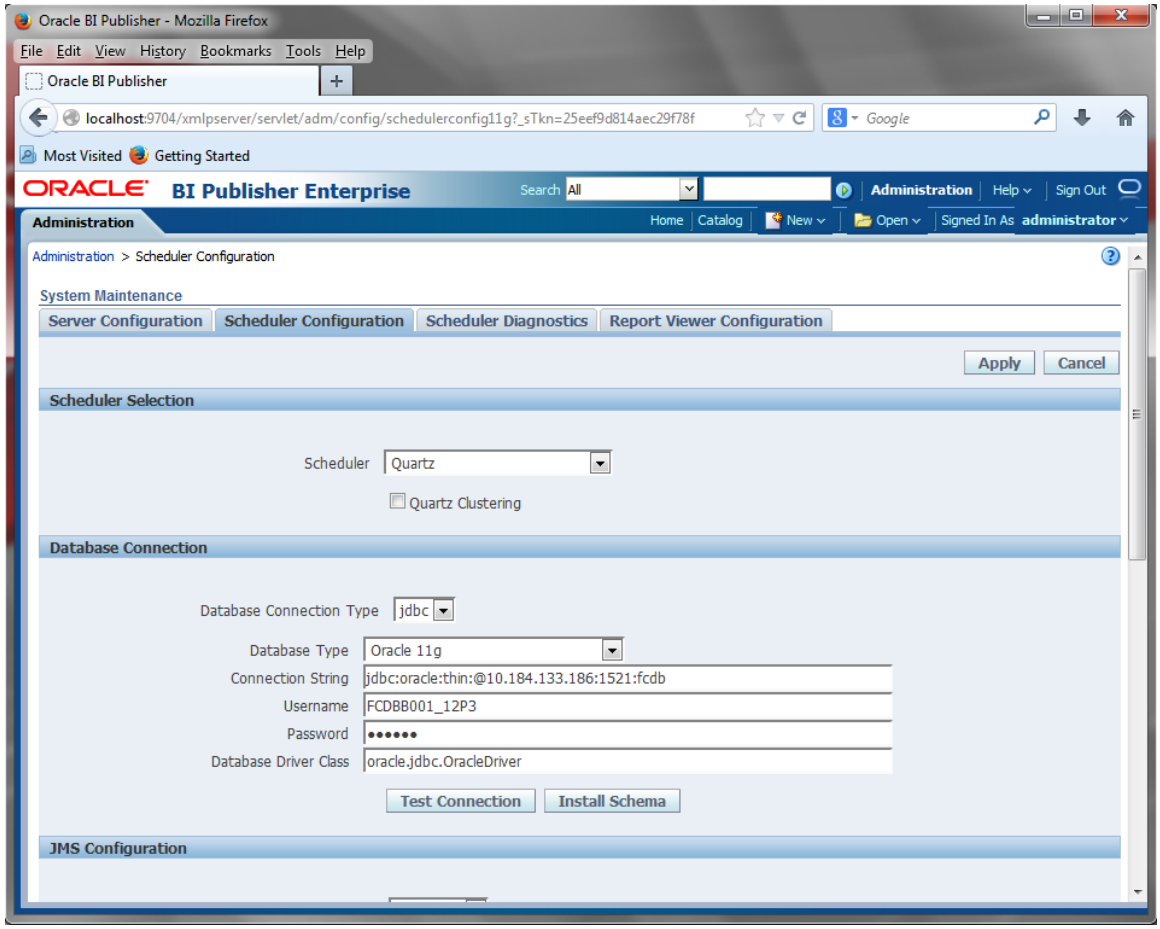
Step 5: After successful test connection user can apply this Data Source to refresh the reports on Oracle BI server.



6.4 Reports Scheduler Database

The Oracle BI Publisher Scheduler requires a database for scheduling data to be persisted within the solution. Oracle FLEXCUBE Direct Banking uses the Oracle database as the persistent database for the Oracle BI Publisher reports.

The Oracle BI Publisher requires a database connection to Oracle database with CONNECT, RESOURCE and DBA rights. The initial setup requires the DBA rights and the same can be revoked once the database has been setup for a new installation. The base database schema is base lined in the Oracle FLEXCUBE Direct Banking version control system and can be used to setup the Oracle BI Publisher instead of creation of the new scheduler schema.



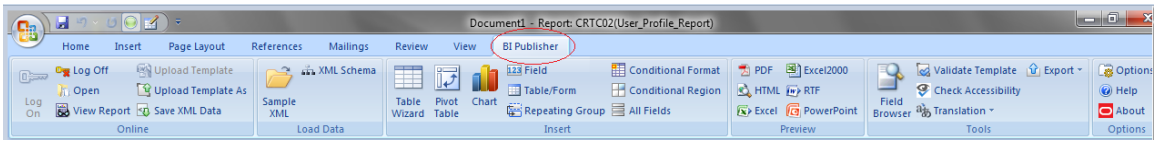
The following tables are created by the Oracle BI Publisher in the Oracle schema. A brief description of the table is provided for relevant tables.

TABLE NAME	DESCRIPTION
XMLP_SCHED_JOB	The table registered jobs within the Oracle BI Publisher. Each registered job and its parameters are located in this table indexed by the JOB ID column.
XMLP_SCHED_SUBSCRIPTION	The table stores the reports that are generated in the intermediate.
XMLP_SCHED_OUTPUT	The table stores the report output that are generated based on the schedule parameters. This table can be purged based on the CREATED date if the size of this database requires to be managed.
SEQUENCE QRTZ_JOB_DETAILS QRTZ_JOB_LISTENERS QRTZ_TRIGGERS QRTZ_SIMPLE_TRIGGERS QRTZ_CRON_TRIGGERS QRTZ_BLOB_TRIGGERS QRTZ_TRIGGER_LISTENERS QRTZ_CALENDARS QRTZ_PAUSED_TRIGGER_GRPS QRTZ_FIRED_TRIGGERS QRTZ_SCHEDULER_STATE QRTZ_LOCKS	These tables are internal tables used by the Oracle XML BI Publisher. The details of these tables are not known currently. But these tables are found to be empty for all practical purposes.

6.5 Report Definitions

The Report Definitions should be made during development using the Oracle BI Publisher Reports Designer that integrates within the Microsoft Word application.

The following image shows the relevant sections in Microsoft Word which allow using Microsoft Word as the design tool for the reports.



Refer the *Template Builder for Word Tutorial.pdf* for the usage of the tools to design the various reports. The design templates are .RTF documents.

6.6 Report Formats

The Oracle BI Publisher supports multiple output formats but the PDF document is preferred over other formats for simplicity of layout and security to be added to the document. The report formats available for bank reports are PDF, Microsoft Excel, HTML, MHTML, RTF, Powerpoint, CSV and data. The Customer reports are presently available in the PDF, Microsoft Excel, HTML formats.

PDF (Portable Document Format) to be used for all standard reports. All reports are by default configured to be delivered in the PDF format. PDF has been considered for easy usability and download options for the reports. The PDF documents can be downloaded and printed using any standard printer.

Microsoft Excel Format to be used for reports that have a long list of columns. This should be used if the report has to be horizontal (landscape) in nature with a large number of columns. Microsoft Excel is preferred over any other format purely for its easy arrangement of data and providing an option to the user to use the standard Microsoft Excel features once the report is downloaded.

HTML and MHTML formats to be used to view the report on Web Browser and do not require any additional software like MS-Office or PDF viewer.

RTF (Rich Text Format) format to be used to view the report on default word processing editor Word Pad and do not require Microsoft Office to be available to view the report

PowerPoint format to be user to view the report directly as a Microsoft PowerPoint presentation.

CSV (Comma separated values) format to be used to view the report in a format, where each associated item is separated by the commas of its set. Each line in the CSV file corresponds to a row in the table. Within a line, fields are separated by commas, each field belonging to one table column. This format is useful if the data of the report is to be uploaded to any other program used by the customer or financial institutions.

"Data" format to be used to view the report in XML format and is easier to be processed by other applications

6.7 Report Scheduling

The scheduling of reports is to be performed using the scheduling features of the Oracle BI Publisher tools. For both Bank Reports and Customer Reports, the scheduler in Oracle BI Publisher is used to schedule and generate the reports.

For Customer Reports, the scheduler is invoked from within the Oracle FLEXCUBE Direct Banking application by integrating the Oracle BI Publisher with Web Services APIs provided by Oracle BI Publisher itself.

6.8 Report Delivery

The Bank Reports shall be delivered within the Oracle BI Publisher application. The reporting tool provides multiple options for delivery including Email or Printing. The Bank can configure any delivery option as appropriate. The reports can be delivered within the Oracle BI Publisher application, in which case the bank users require to login to the Oracle BI Publisher application.

The tool can also deliver the reports to a FTP Server if the bank implements a centralized delivery system. The standard bank reports generated by the Oracle BI Publisher can be integrated for delivery with an external enterprise reports delivery system using this approach.

The Customer Reports shall be delivered as a download option within the Oracle FLEXCUBE Direct Banking application. The application provides two functions to allow the registration of the reports using the application and download the generated reports.

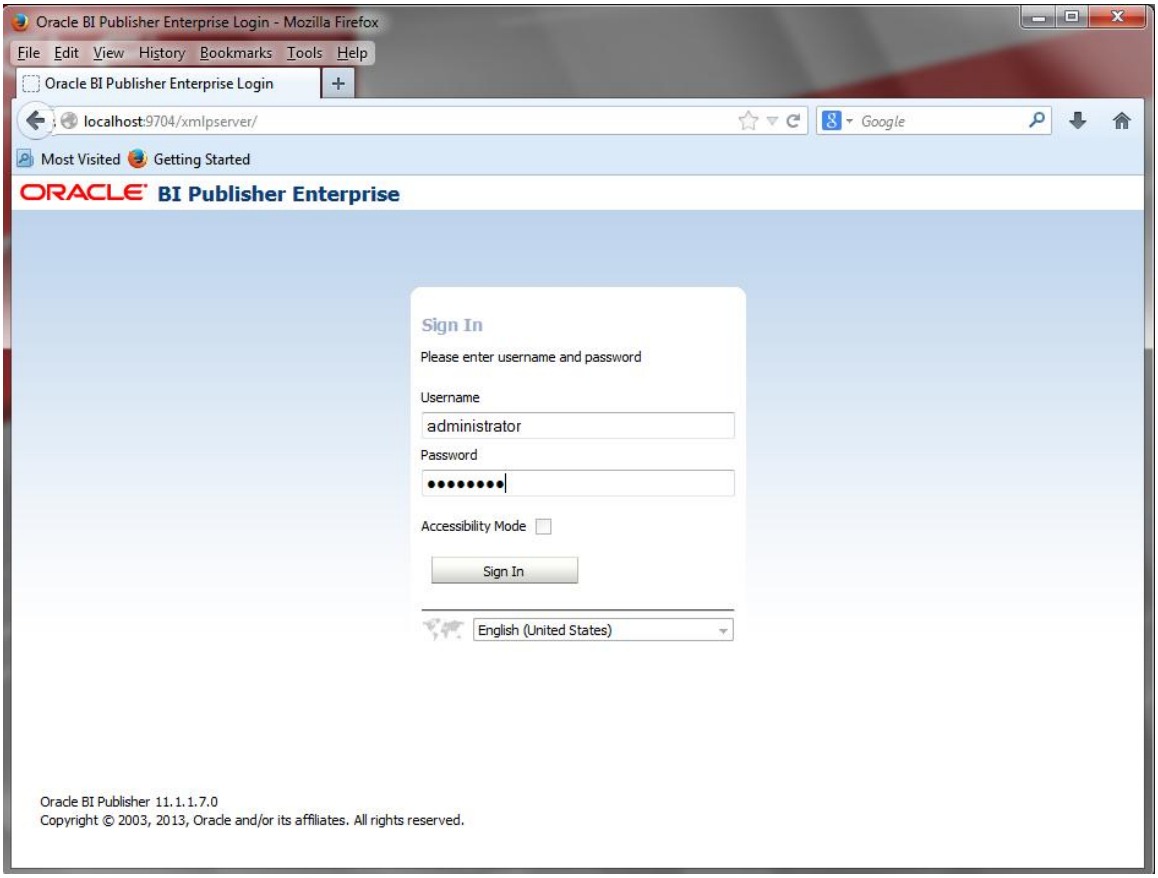
6.9 Compression for Downloading Reports

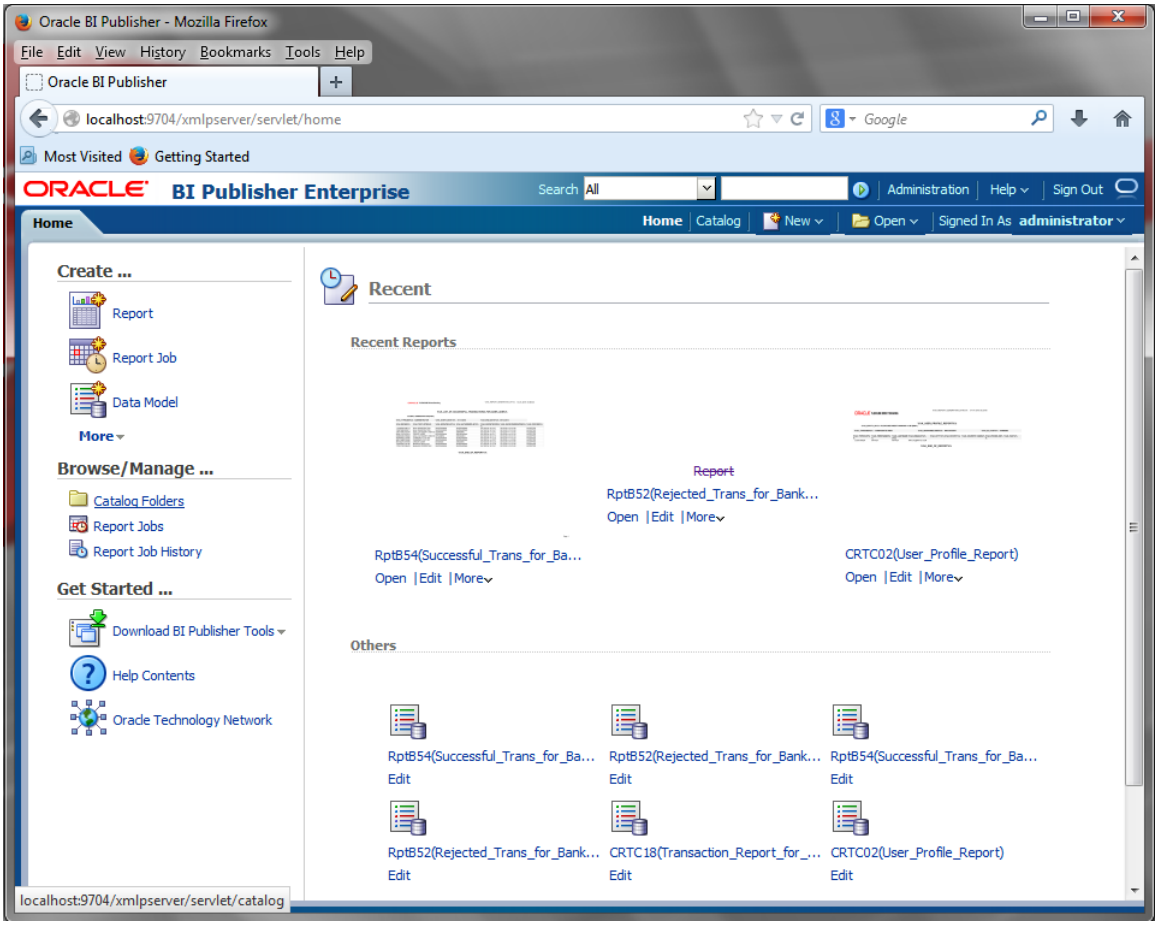
All Bank Reports delivered by the Oracle BI Publisher are managed by the Oracle application itself. The download option is available to the user. The Customer reports in the HTML shall be downloaded as a zip archived file.

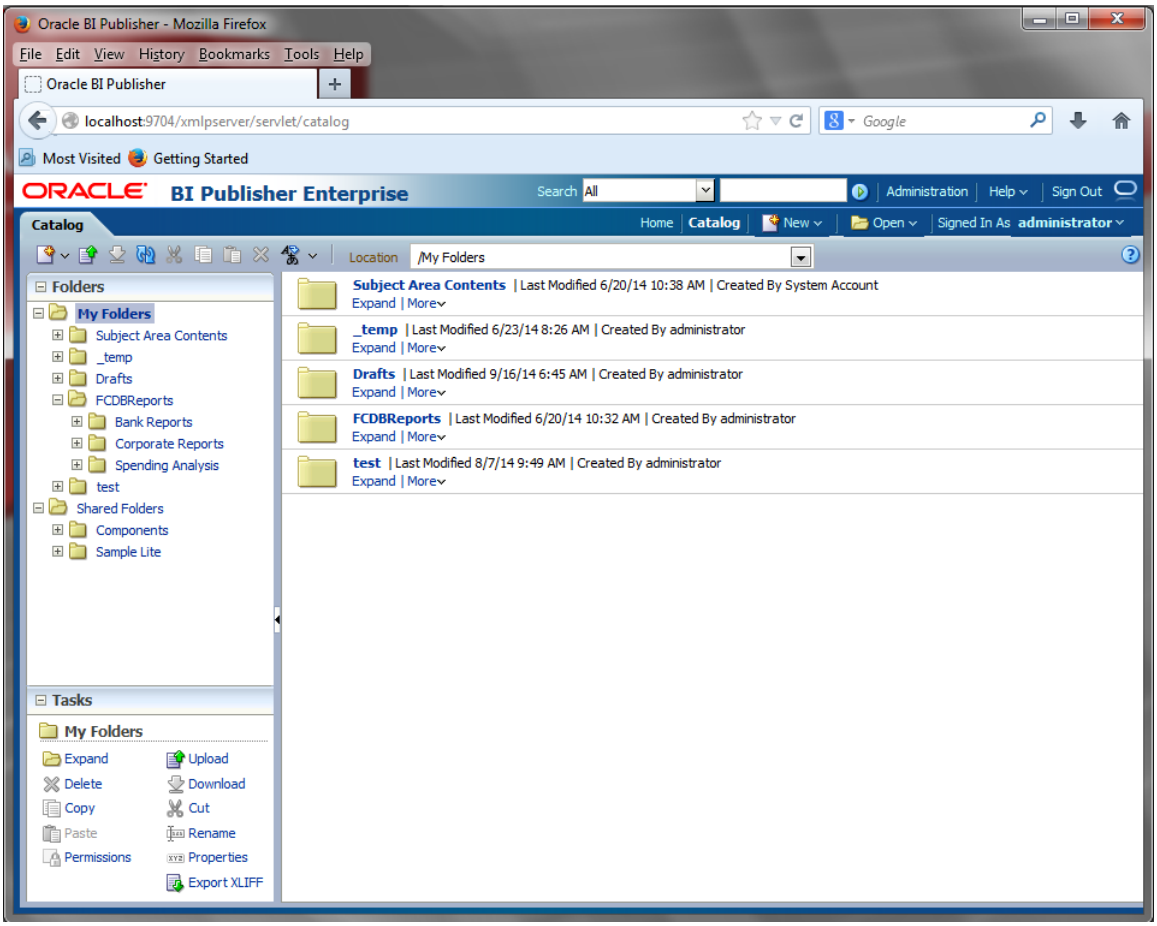
6.10 Designing report in Oracle BI Publisher

Step 1: Login into the Oracle BI Server with proper User ID and Password and Click on Catalog.

Note: Username/Password is case sensitive




Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
localhost:9704/xmlpserver/servlet/home
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
Home
Home Catalog New Open Signed In As administrator
Create ...
Report
Report Job
Data Model
More
Browse/Manage ...
Catalog Folders
Report Jobs
Report Job History
Get Started ...
Download BI Publisher Tools
Help Contents
Oracle Technology Network
Recent
Recent Reports
Report
RptB52(Rejected_Trans_for_Bank...
Open |Edit |More
RptB54(Successful_Trans_for_Ba...
Open |Edit |More
CRTC02(User_Profile_Report)
Open |Edit |More
Others
RptB54(Successful_Trans_for_Ba...
Edit
RptB52(Rejected_Trans_for_Bank...
Edit
RptB54(Successful_Trans_for_Ba...
Edit
RptB52(Rejected_Trans_for_Bank...
Edit
CRTC18(Transaction_Report_for_...
Edit
CRTC02(User_Profile_Report)
Edit
localhost:9704/xmlpserver/servlet/catalog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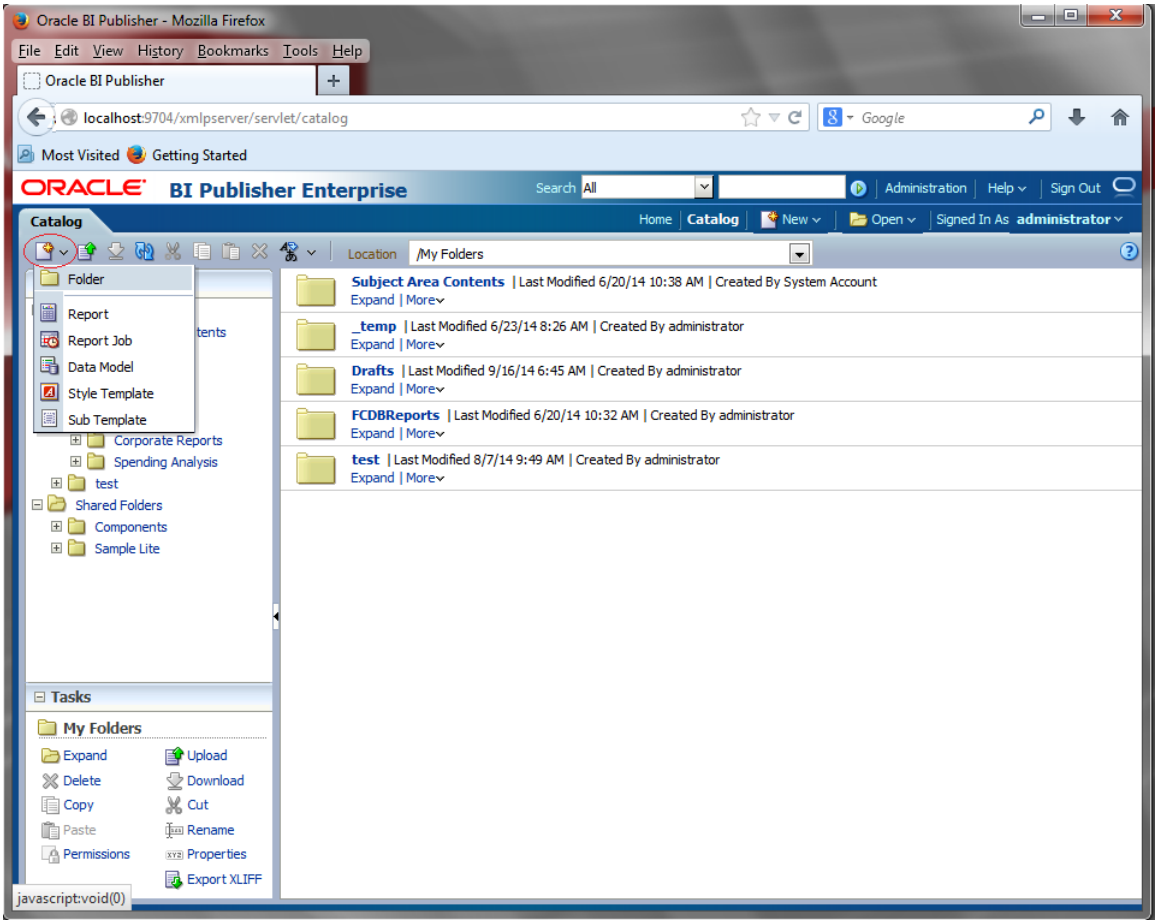
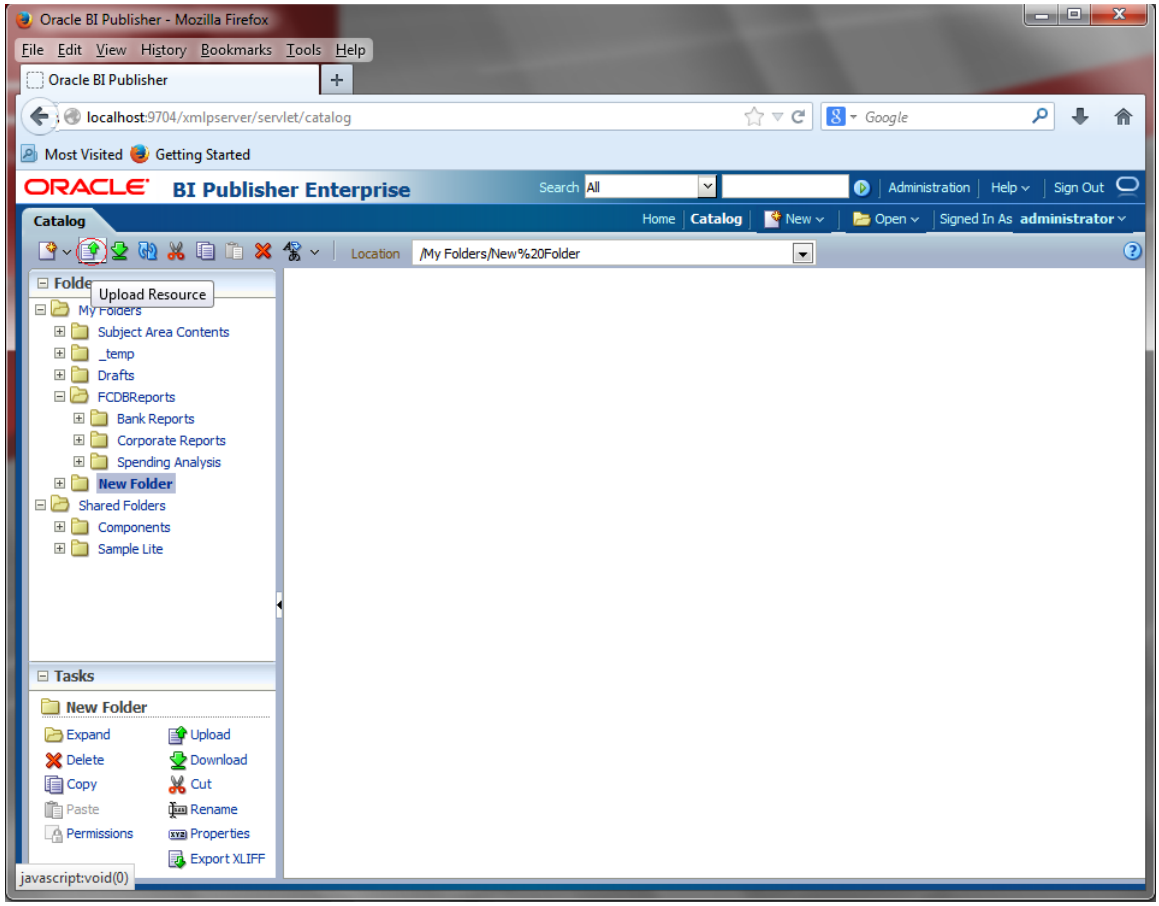
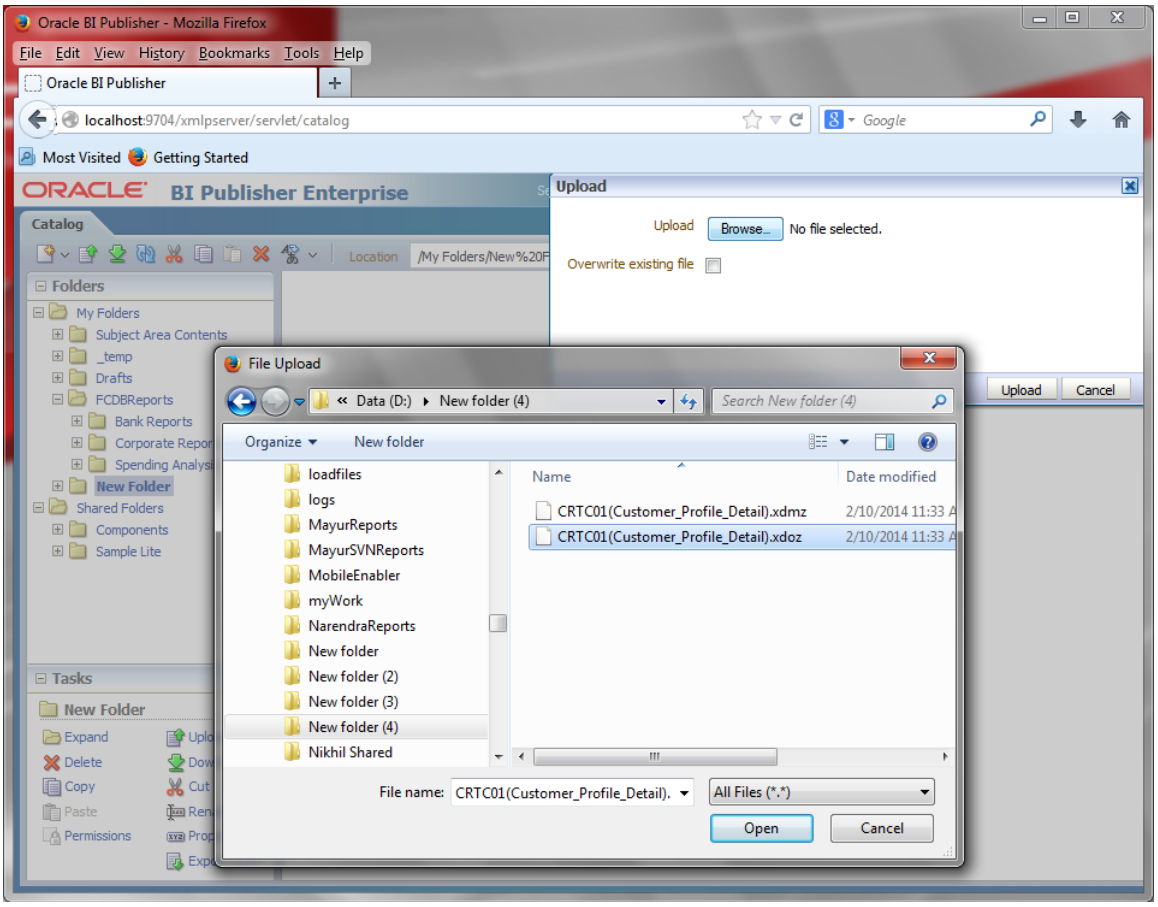
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration
Help
Sign Out
Catalog
Home Catalog New Open Signed In As administrator
Location /My Folders
Folders
My Folders
Subject Area Contents
_temp
Drafts
FCDBReports
Bank Reports
Corporate Reports
Spending Analysis
test
Shared Folders
Components
Sample Lite
Subject Area Contents | Last Modified 6/20/14 10:38 AM | Created By System Account
Expand | More
_temp | Last Modified 6/23/14 8:26 AM | Created By administrator
Expand | More
Drafts | Last Modified 9/16/14 6:45 AM | Created By administrator
Expand | More
FCDBReports | Last Modified 6/20/14 10:32 AM | Created By administrator
Expand | More
test | Last Modified 8/7/14 9:49 AM | Created By administrator
Expand | More
Tasks
My Folders
Expand
Upload
Delete
Download
Copy
Cut
Paste
Rename
Permissions
Properties
Export XLIFF

Step 2: User can create a specific folder to store the reports by "Create new folder" option.



Step 3: Upload report by uploading a .xdoz file created by report wizard (in RTF file) having four files like .xdo file, .xlf file, .rtf file and a .xdmz file having .xdm file.

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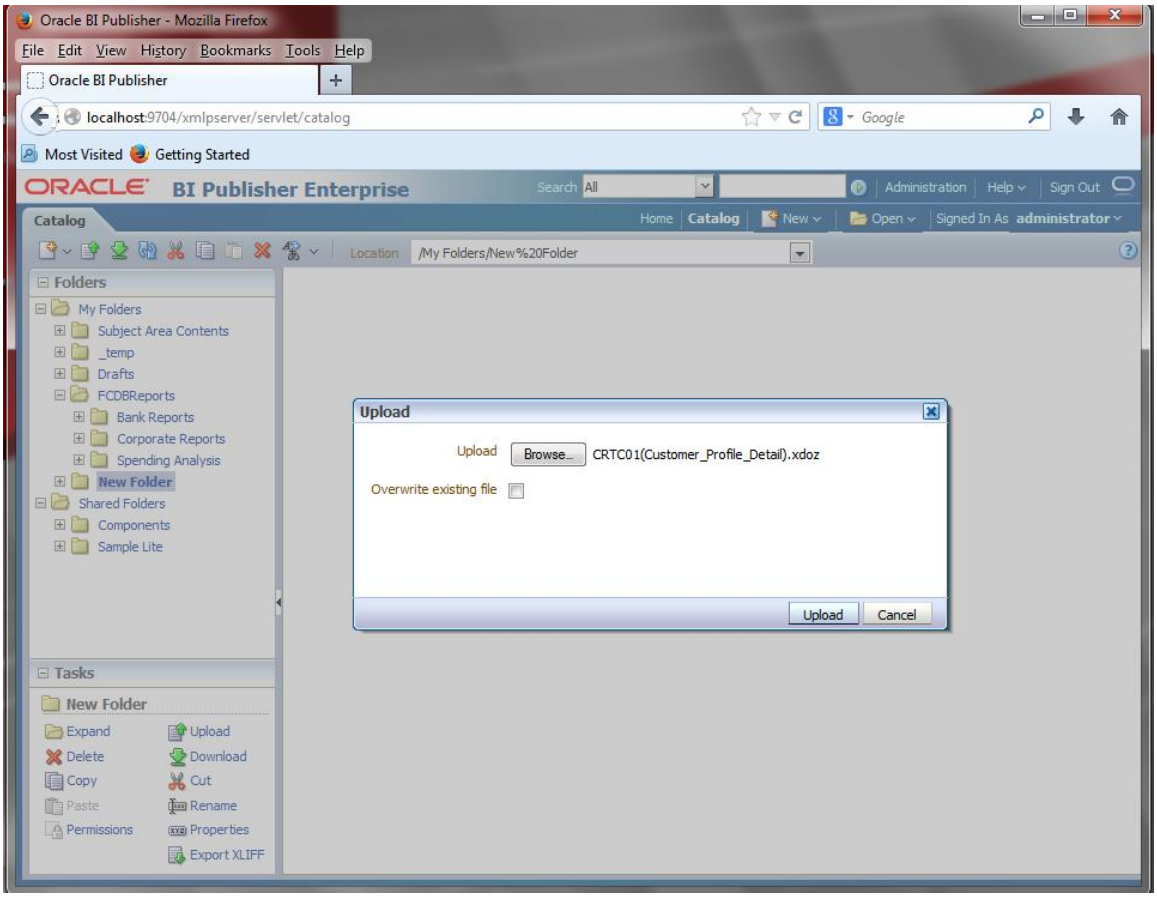
ORACLE BI Publisher Enterprise
Catalog
Folders
My Folders
Subject Area Contents
_temp
Drafts
FCDBReports
Bank Reports
New Folder
Shared Folders
Components
Sample Lite
Tasks
New Folder
Expand
Delete
Copy
Paste
Permissions
Upload
Upload Browse... No file selected.
Overwrite existing file
Upload
Cancel
File Upload
Data (D:) New folder (4)
Search New folder (4)
Organize
New folder
loadfiles
logs
MayurReports
MayurSVNReports
MobileEnabler
myWork
NarendraReports
New folder
New folder (2)
New folder (3)
New folder (4)
Nikhil Shared
Name
Date modified
CRTC01(Customer_Profile_Detail).xdmz
CRTC01(Customer_Profile_Detail).xdoz
File name: CRTC01(Customer_Profile_Detail).
All Files (*.*)
Open
Cancel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My Folders
Subject Area Contents
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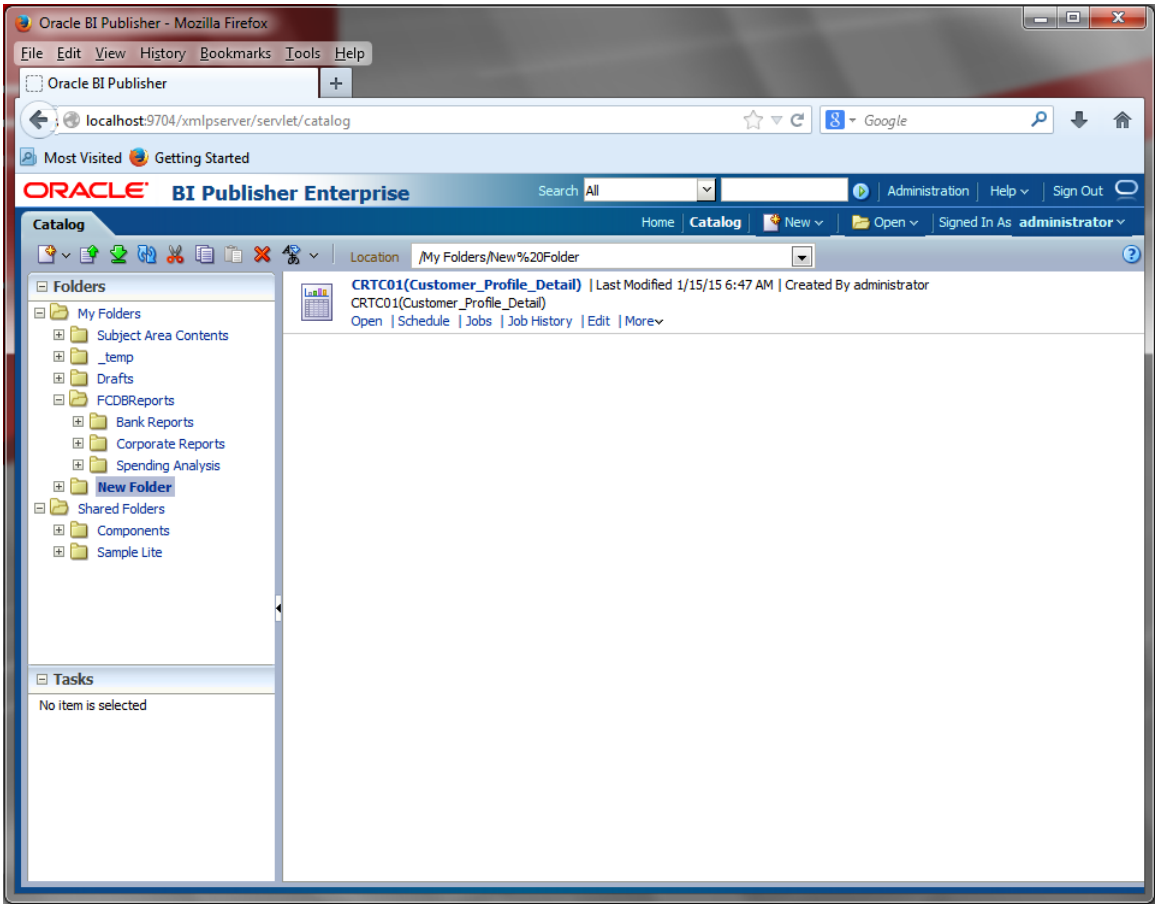
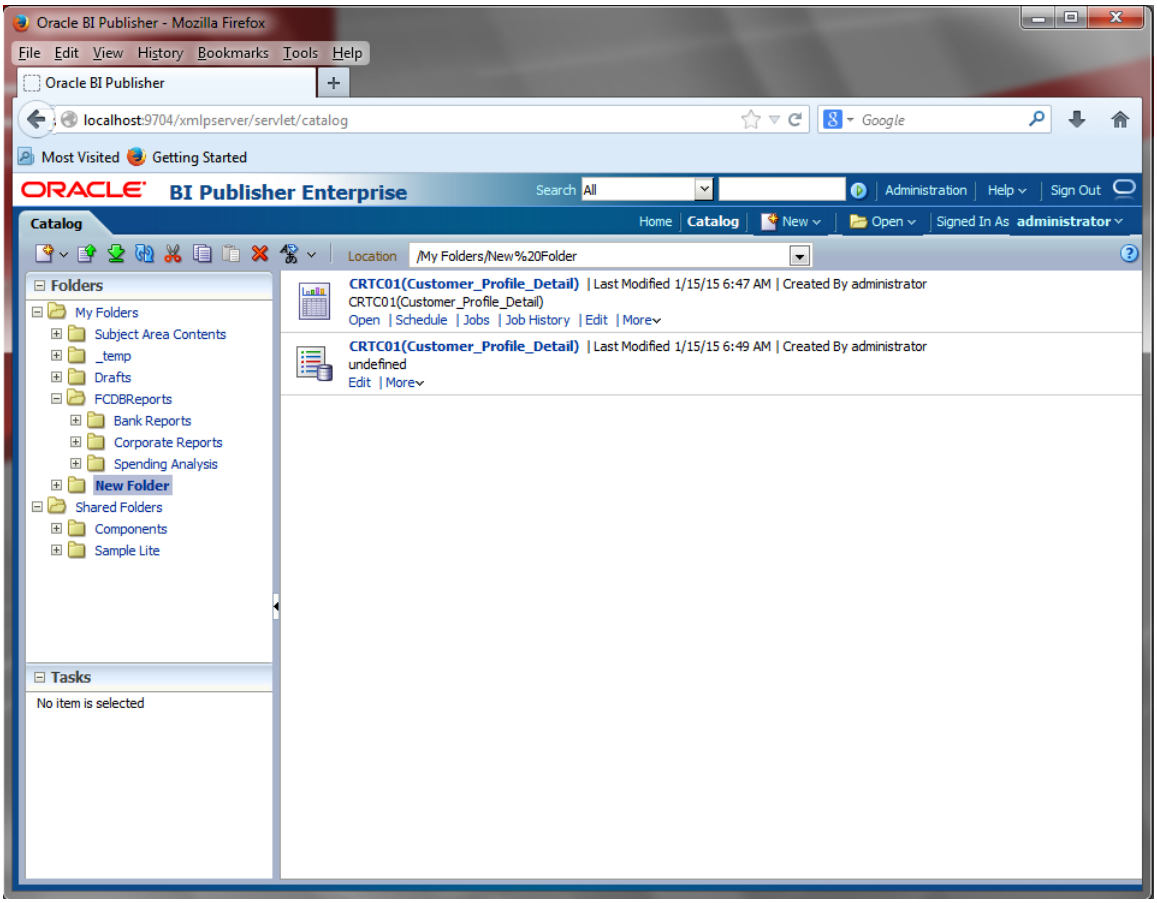
Drafts
FCDBReports
Bank Reports
Corporate Reports
Spending Analysis
New Folder
Shared Folders
Components
Sample Lite
Tasks
New Folder
Expand
Upload
Delete
Download
Copy
Cut
Paste
Rename
Permissions
Properties
Export XLIFF
Upload
Upload
Browse...
CRTC01(Customer_Profile_Detail).xdoz
Overwrite existing file
Upload
Cancel



Similarly upload .xdmz file.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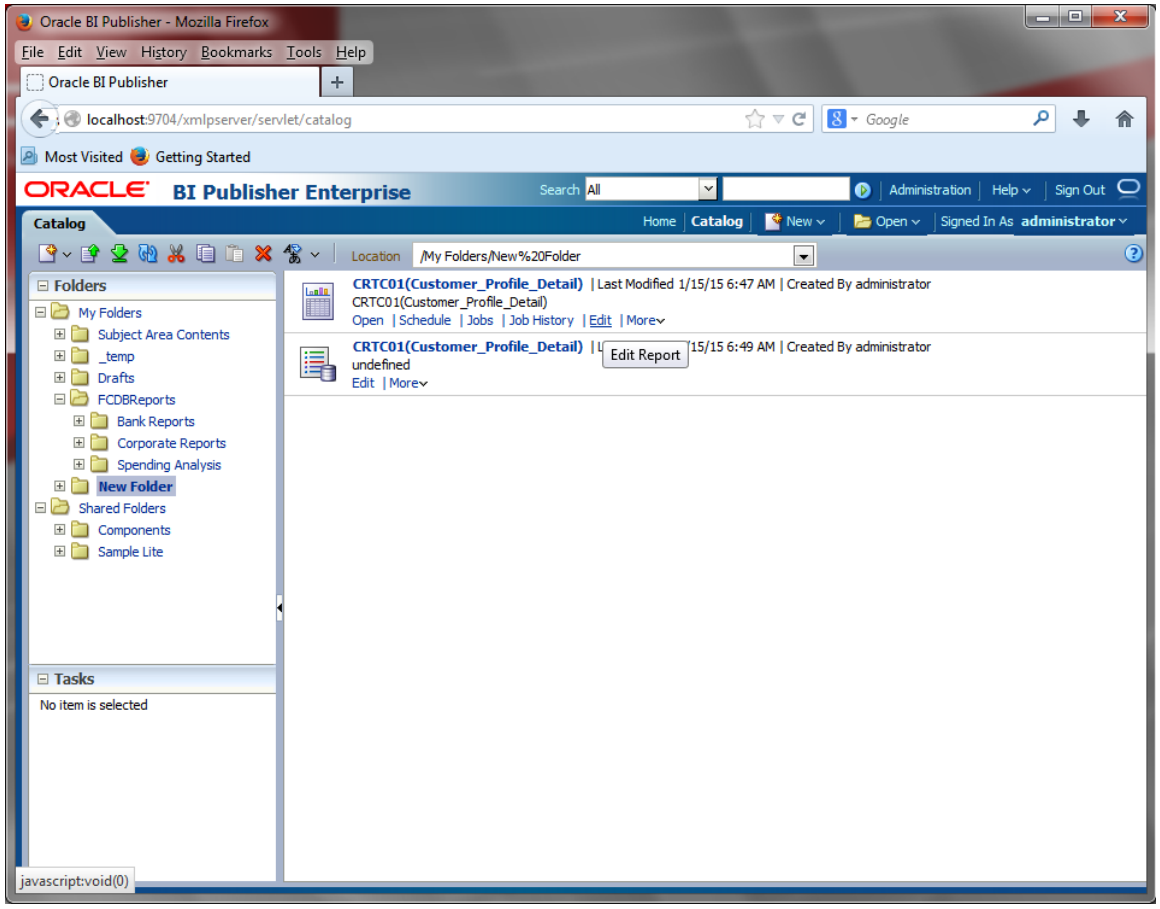
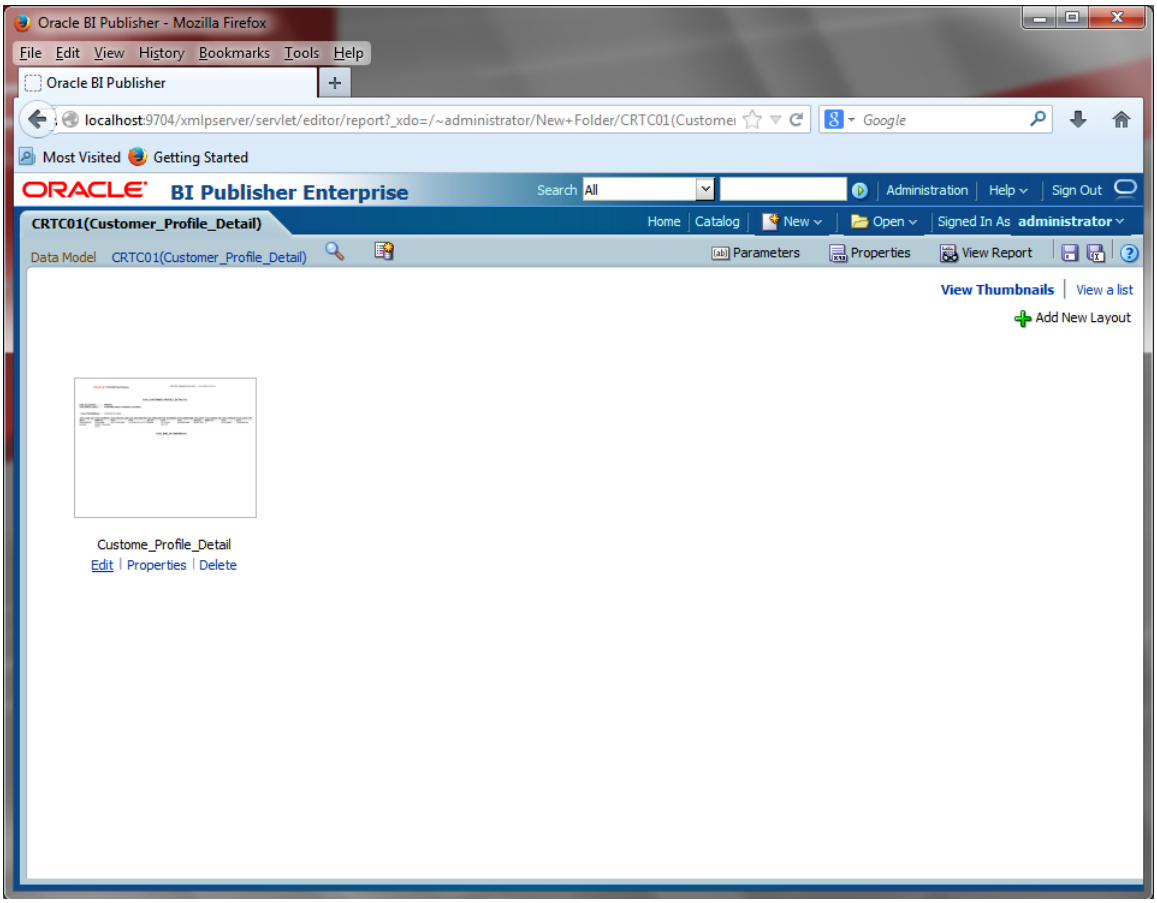
Location /My Folders/New%20Folder
Folders
My Folders
Subject Area Contents
_temp
Drafts
FCDBReports
Bank Reports
Corporate Reports
Spending Analysis
New Folder
Shared Folders
Components
Sample Lite
Tasks
No item is selected
CRTC01(Customer_Profile_Detail) | Last Modified 1/15/15 6:47 AM | Created By administrator
CRTC01(Customer_Profile_Detail)
Open | Schedule | Jobs | Job History | Edit | More
CRTC01(Customer_Profile_Detail) | Last Modified 1/15/15 6:49 AM | Created By administrator
undefined
Edit | More

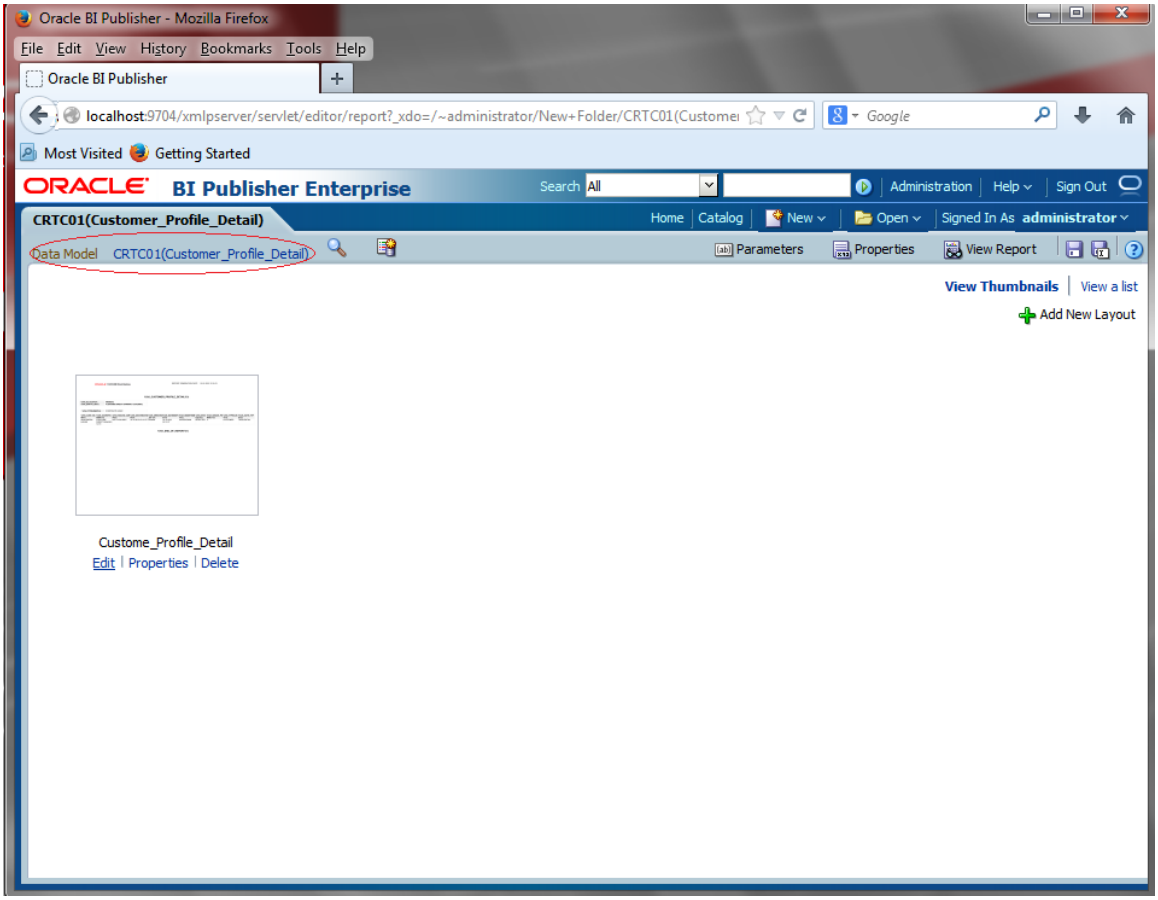
Step 4: Edit the report, if required by clicking on 'Edit' button of the particular report. The 'Description' tab contains the description of the report.

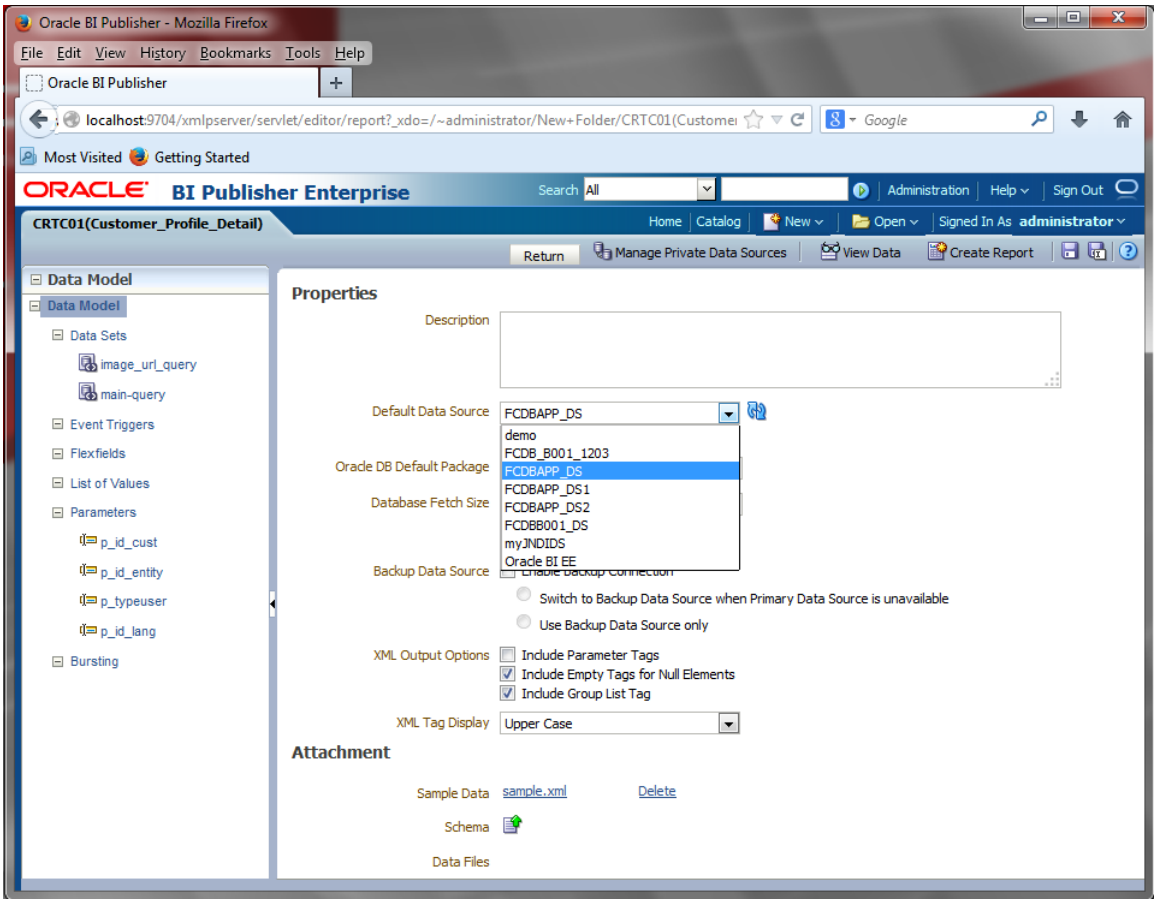
Database source should be chosen from the list in 'Default Data Source' tab.
If the report is having any parameters then no. of parameters should be put in 'Parameters per line' tab.

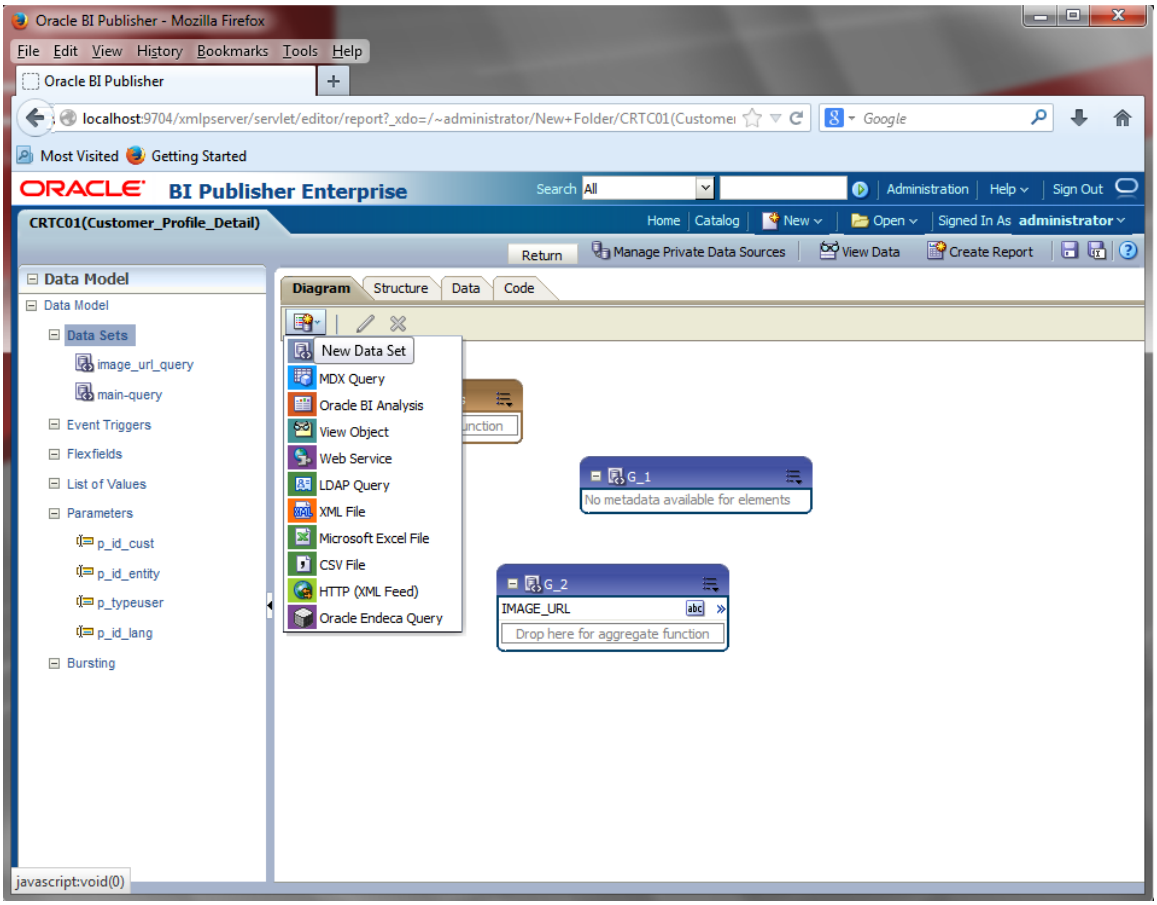


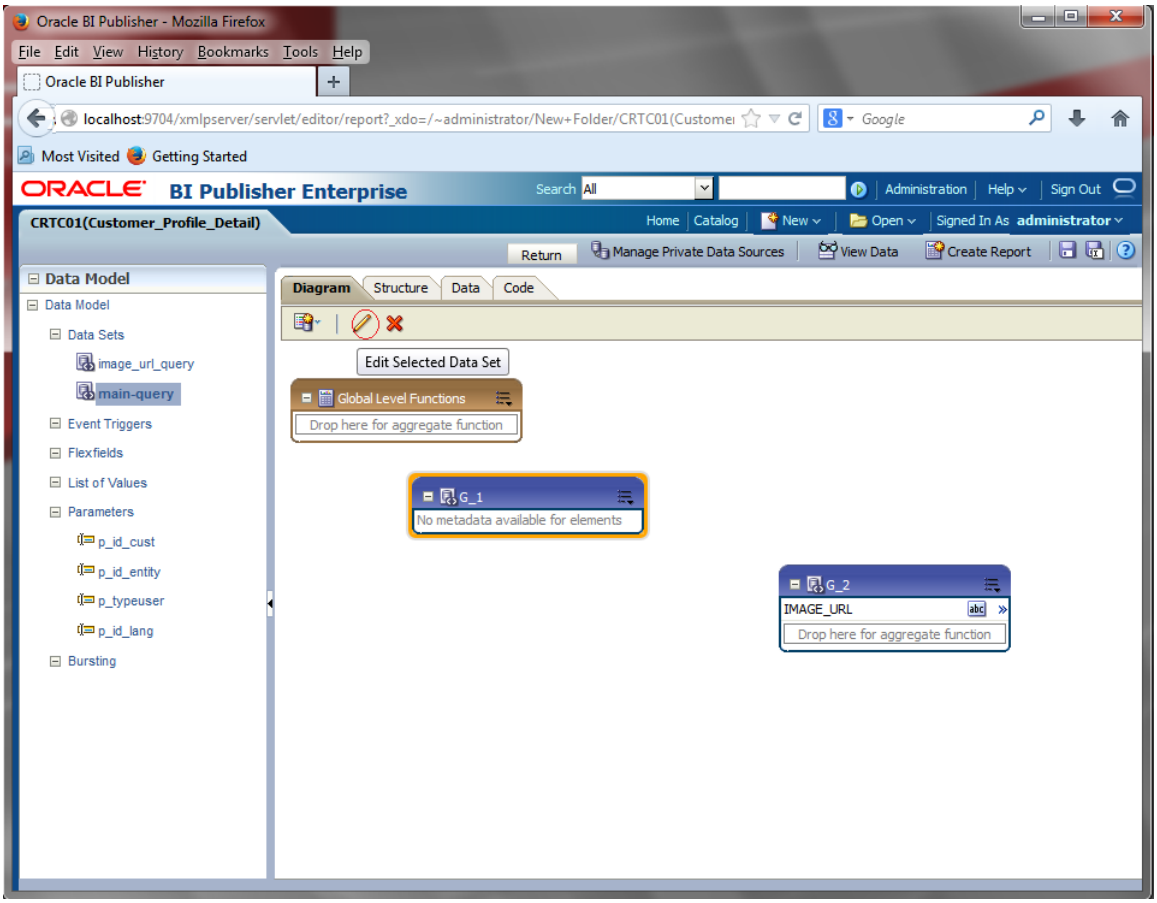

Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
localhost:9704/xmlpserver/servlet/editor/report?_xdo=/~administrator/New+Folder/CRTC01(Customer
Google
Most Visited
Getting Started
ORACLE
BI Publisher Enterprise
Search All
Administration
Help
Sign Out
CRTC01(Customer_Profile_Detail)
Home
Catalog
New
Open
Signed In As administrator
Data Model
CRTC01(Customer_Profile_Detail)
Parameters
Properties
View Report
View Thumbnails
View a list
Add New Layout
Custome_Profile_Detail
Edit | Properties | Delete

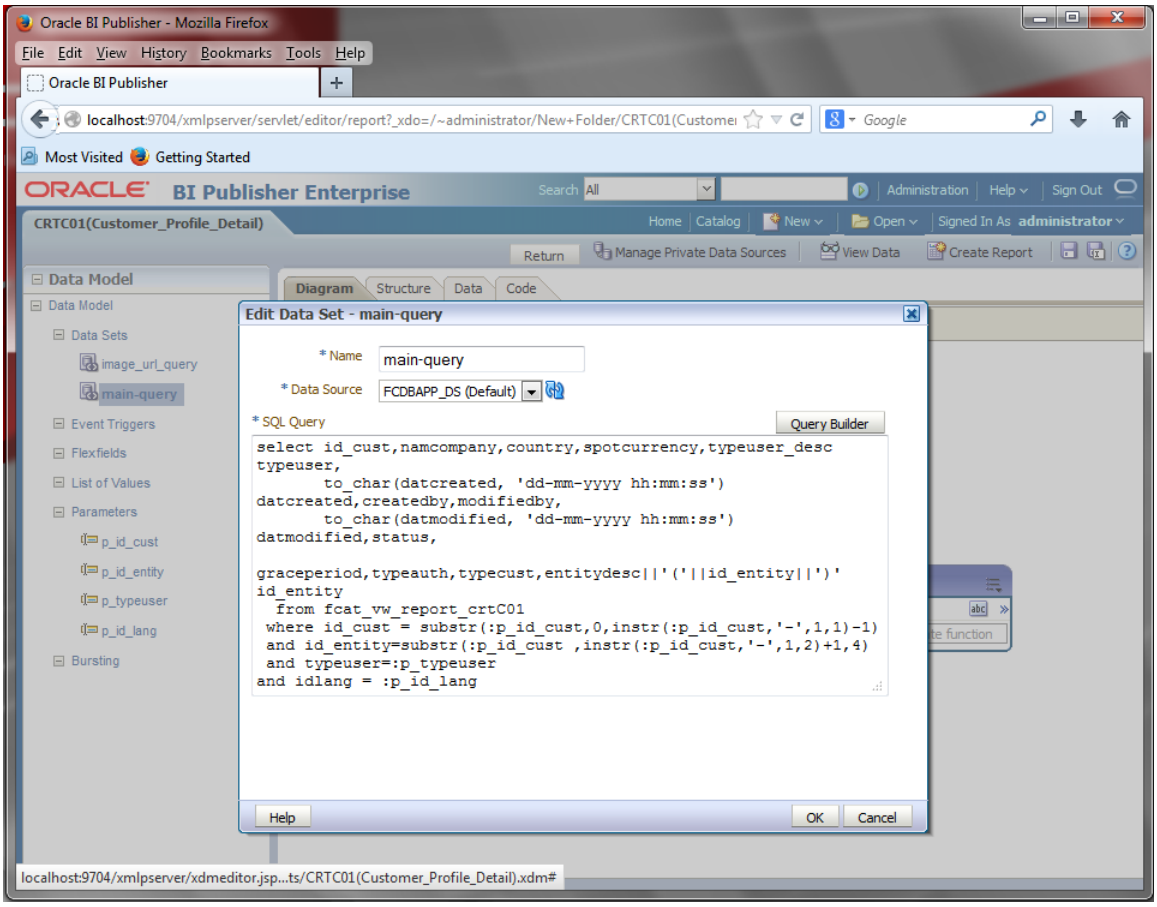
Step 5: In "Data model" node user can add new query by selecting "new" button otherwise can modify the existing query. Data Source tab needs to get refreshed with Data Source connection.



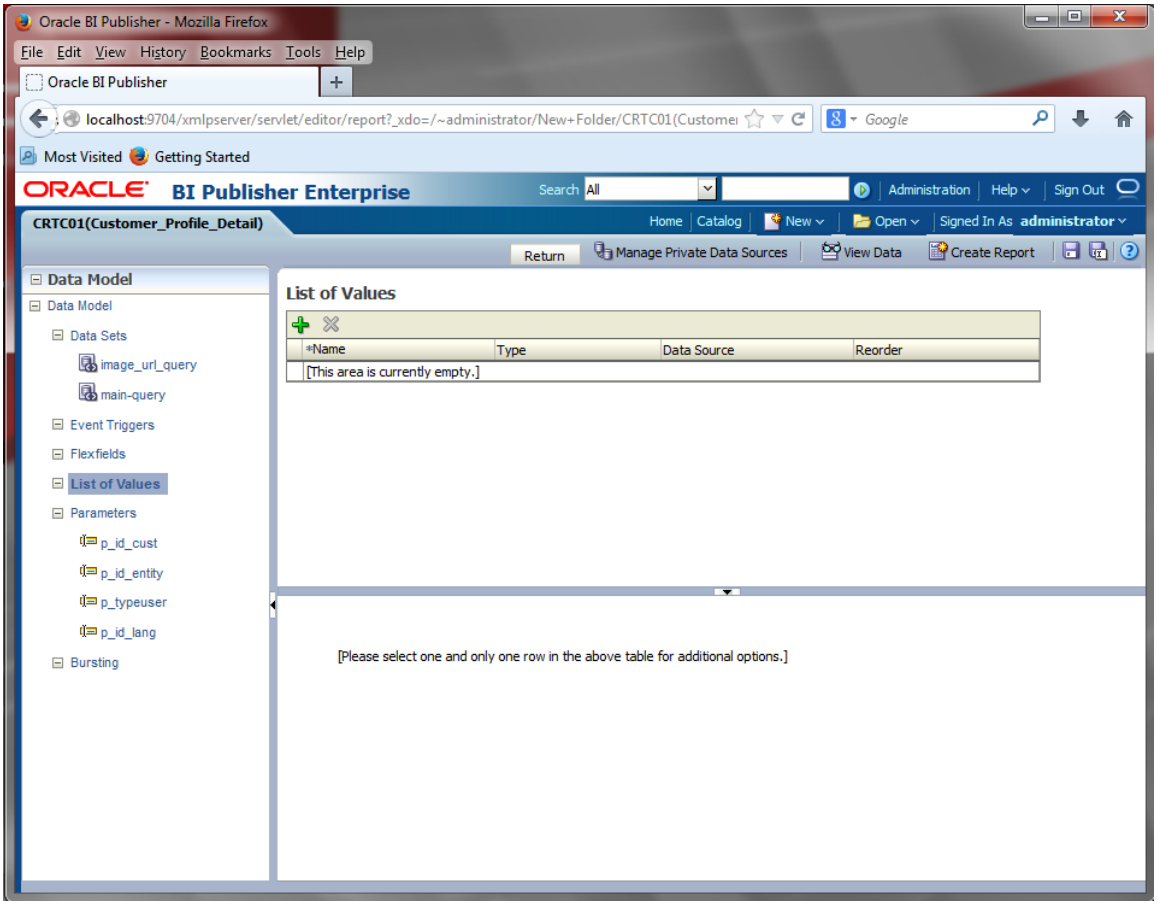

Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
localhost:9704/xmlpserver/servlet/editor/report?_xdo=/~administrator/New+Folder/CRTC01(Customer
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
CRTC01(Customer_Profile_Detail)
Home Catalog New Open Signed In As administrator
Return Manage Private Data Sources View Data Create Report
Data Model
Data Model
Data Sets
image_url_query
main-query
Event Triggers
Flexfields
List of Values
Parameters
p_id_cust
p_id_entity
p_typeuser
p_id_lang
Bursting
Properties
Description
Default Data Source
FCDBAPP_DS
demo
FCDB_B001_1203
FCDBAPP_DS
FCDBAPP_DS1
FCDBAPP_DS2
FCDBB001_DS
myJNDIDS
Oracle BI EE
Oracle DB Default Package
Database Fetch Size
Backup Data Source
Switch to Backup Data Source when Primary Data Source is unavailable
Use Backup Data Source only
XML Output Options
Include Parameter Tags
Include Empty Tags for Null Elements
Include Group List Tag
XML Tag Display
Upper Case
Attachment
Sample Data
sample.xml
Delete
Schema
Data Files


Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
localhost:9704/xmlpserver/servlet/editor/report?_xdo=/~administrator/New+Folder/CRTC01(Customer
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
CRTC01(Customer_Profile_Detail)
Home Catalog New Open Signed In As administrator
Return
Manage Private Data Sources
View Data
Create Report
Data Model
Data Model
Data Sets
image_url_query
main-query
Event Triggers
Flexfields
List of Values
Parameters
p_id_cust
p_id_entity
p_typeuser
p_id_lang
Bursting
Diagram
Structure
Data
Code
New Data Set
MDX Query
Oracle BI Analysis
View Object
Web Service
LDAP Query
XML File
Microsoft Excel File
CSV File
HTTP (XML Feed)
Oracle Endeca Query
G_1
No metadata available for elements
G_2
IMAGE_URL
Drop here for aggregate function
javascript:void(0)


Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
localhost:9704/xmlpserver/servlet/editor/report?_xdo=/~administrator/New+Folder/CRTC01(Customer
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
CRTC01(Customer_Profile_Detail)
Home Catalog New Open Signed In As administrator
Return
Manage Private Data Sources
View Data
Create Report
Data Model
Data Model
Data Sets
image_url_query
main-query
Event Triggers
Flexfields
List of Values
Parameters
p_id_cust
p_id_entity
p_typeuser
p_id_lang
Bursting
Diagram
Structure
Data
Code
Edit Selected Data Set
Global Level Functions
Drop here for aggregate function
G_1
No metadata available for elements
G_2
IMAGE_URL
Drop here for aggregate function

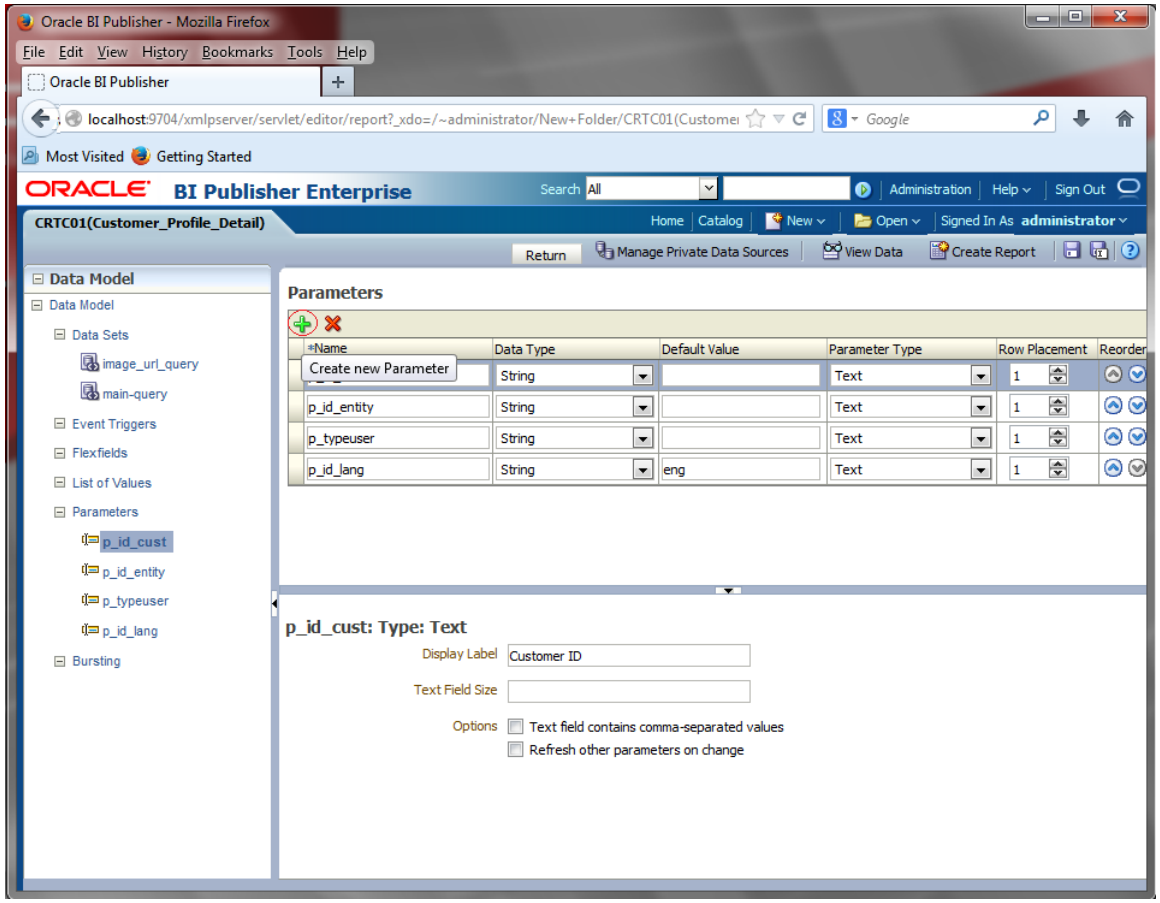

Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
localhost:9704/xmlpserver/servlet/editor/report?_xdo=/~administrator/New+Folder/CRTC01(Customer
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
CRTC01(Customer_Profile_Detail)
Home Catalog New Open Signed In As administrator
Return Manage Private Data Sources View Data Create Report
Data Model
Diagram Structure Data Code
Data Model
Data Sets
image_url_query
main-query
Event Triggers
Flexfields
List of Values
Parameters
p_id_cust
p_id_entity
p_typeuser
p_id_lang
Bursting
Edit Data Set - main-query
* Name main-query
* Data Source FCDBAPP_DS (Default)
* SQL Query
Query Builder
select id_cust,namcompany,country,spotcurrency,typeuser_desc
typeuser,
to_char(datcreated, 'dd-mm-yyyy hh:mm:ss')
datcreated,createdby,modifiedby,
to_char(datmodified, 'dd-mm-yyyy hh:mm:ss')
datmodified,status,
graceperiod,typeauth,typecust,entitydesc||'('||id_entity||')'
id_entity
from fcat_vw_report_crtC01
where id_cust = substr(:p_id_cust,0,instr(:p_id_cust,'-',1,1)-1)
and id_entity=substr(:p_id_cust ,instr(:p_id_cust,'-',1,2)+1,4)
and typeuser=:p_typeuser
and idlang = :p_id_lang
Help
OK
Cancel
localhost:9704/xmlpserver/xdmeditor.jsp...ts/CRTC01(Customer_Profile_Detail).xdm#

Step 6: "List of values" node contains the query to fetch the data for the parameter if the report is having any parameter and the parameter values will be displayed within a dropdown.



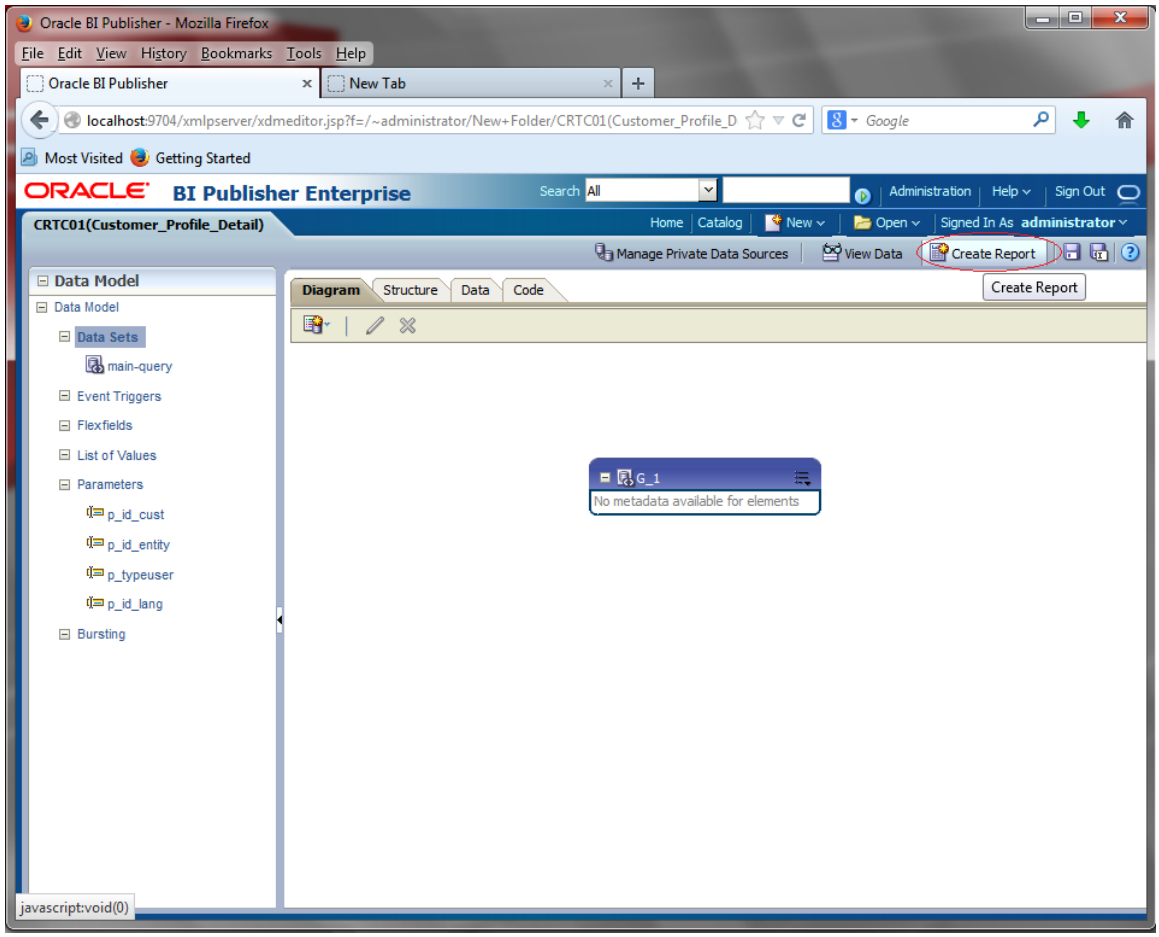
Step 7: On "Parameters" node user can add new parameter by selecting "new" button and can add the required details like Identifier, Data type, Default Value, Parameter Type, display label etc. User can add multiple parameters as well.

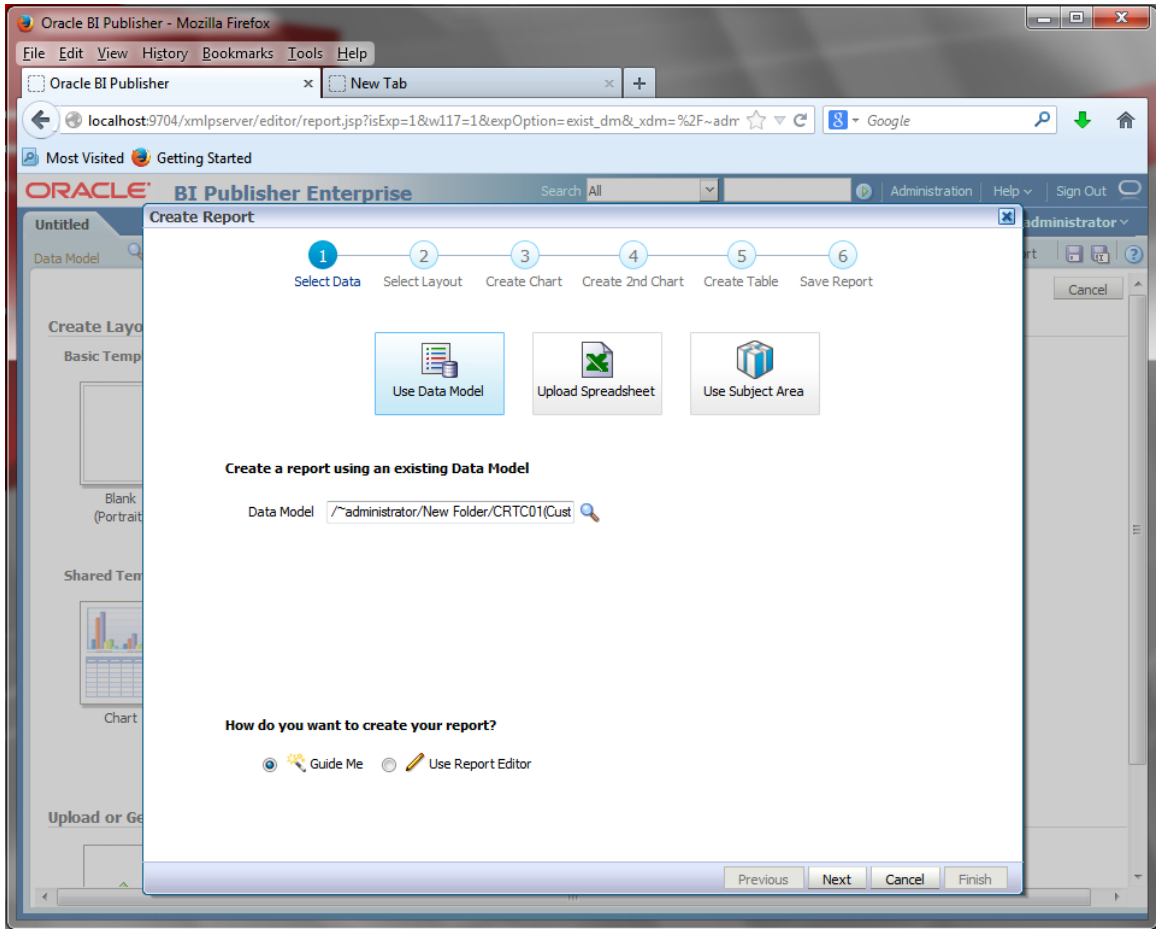
Note: The value of Identifier field should match to the parameter within the main query.



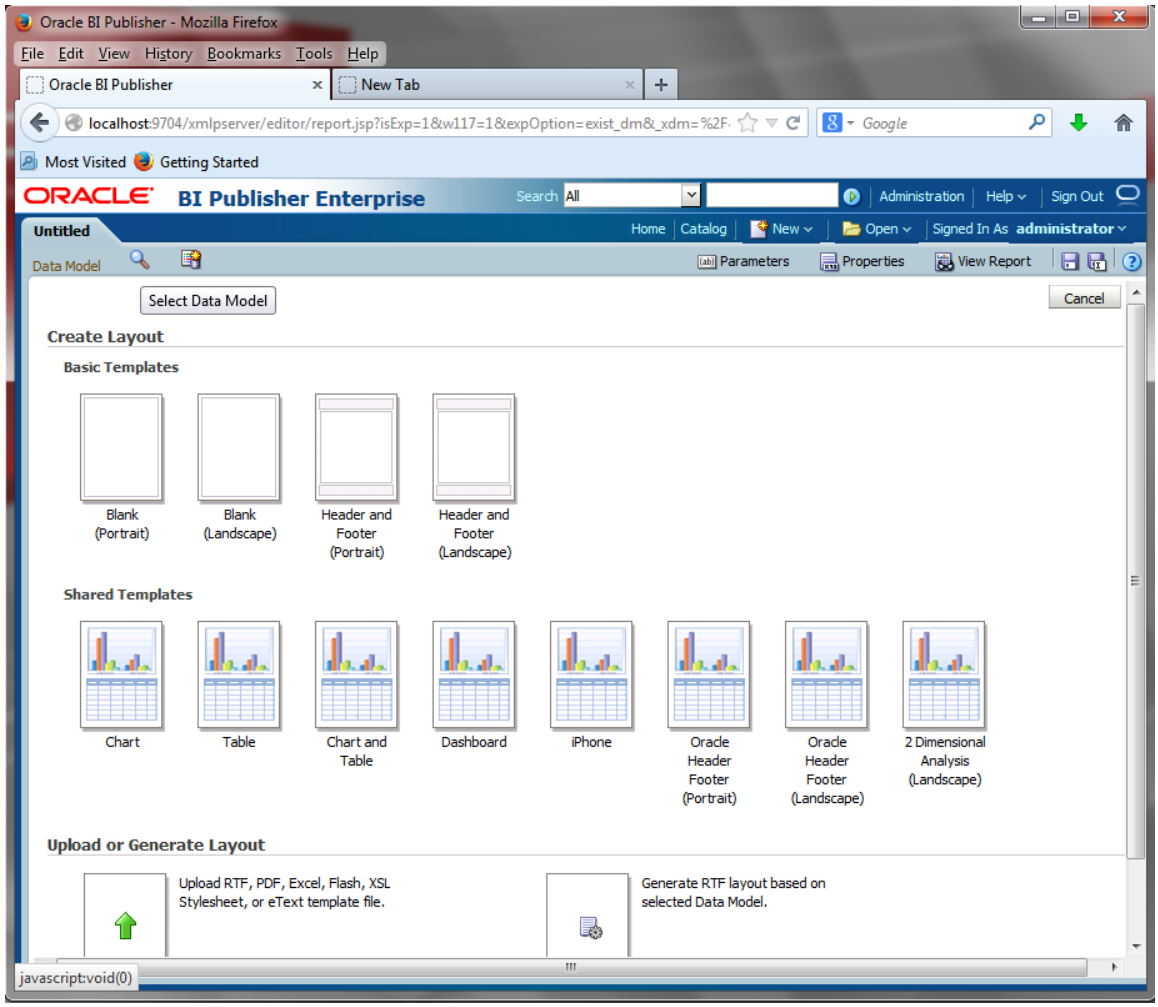
Step 8: Upload the .rtf (designed in word format) and .xlf (translatable file) files.

Select a Data Model and Click on **Create Report**.

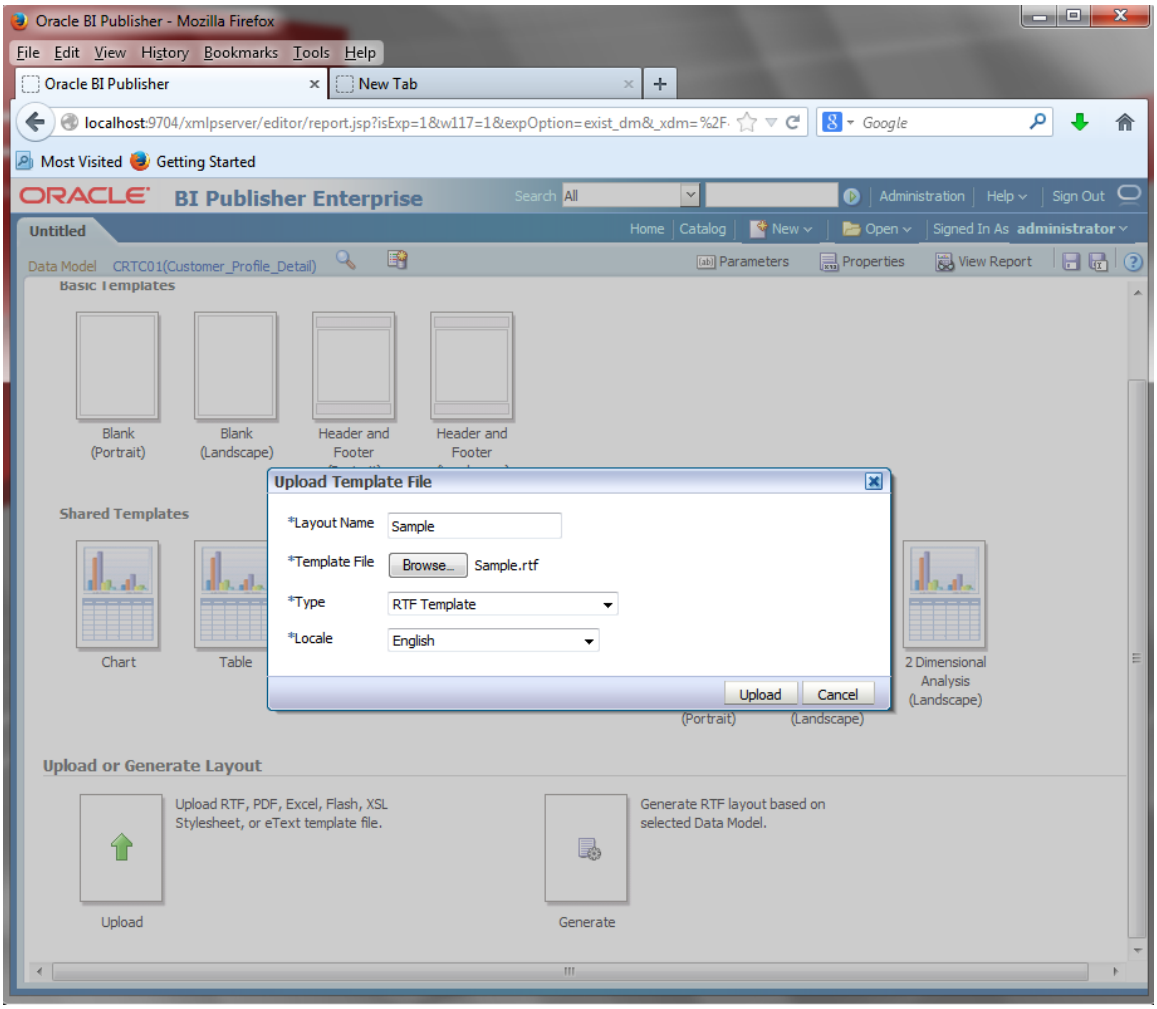

Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
New Tab
localhost:9704/xmlpserver/xdmeditor.jsp?f=/~administrator/New+Folder/CRTC01(Customer_Profile_D
Most Visited
Getting Started
ORACLE
BI Publisher Enterprise
Search All
Administration
Help
Sign Out
CRTC01(Customer_Profile_Detail)
Home
Catalog
New
Open
Signed In As administrator
Manage Private Data Sources
View Data
Create Report
Create Report
Data Model
Data Model
Data Sets
main-query
Event Triggers
Flexfields
List of Values
Parameters
p_id_cust
p_id_entity
p_typeuser
p_id_lang
Bursting
Diagram
Structure
Data
Code
G_1
No metadata available for elements
javascript:void(0)



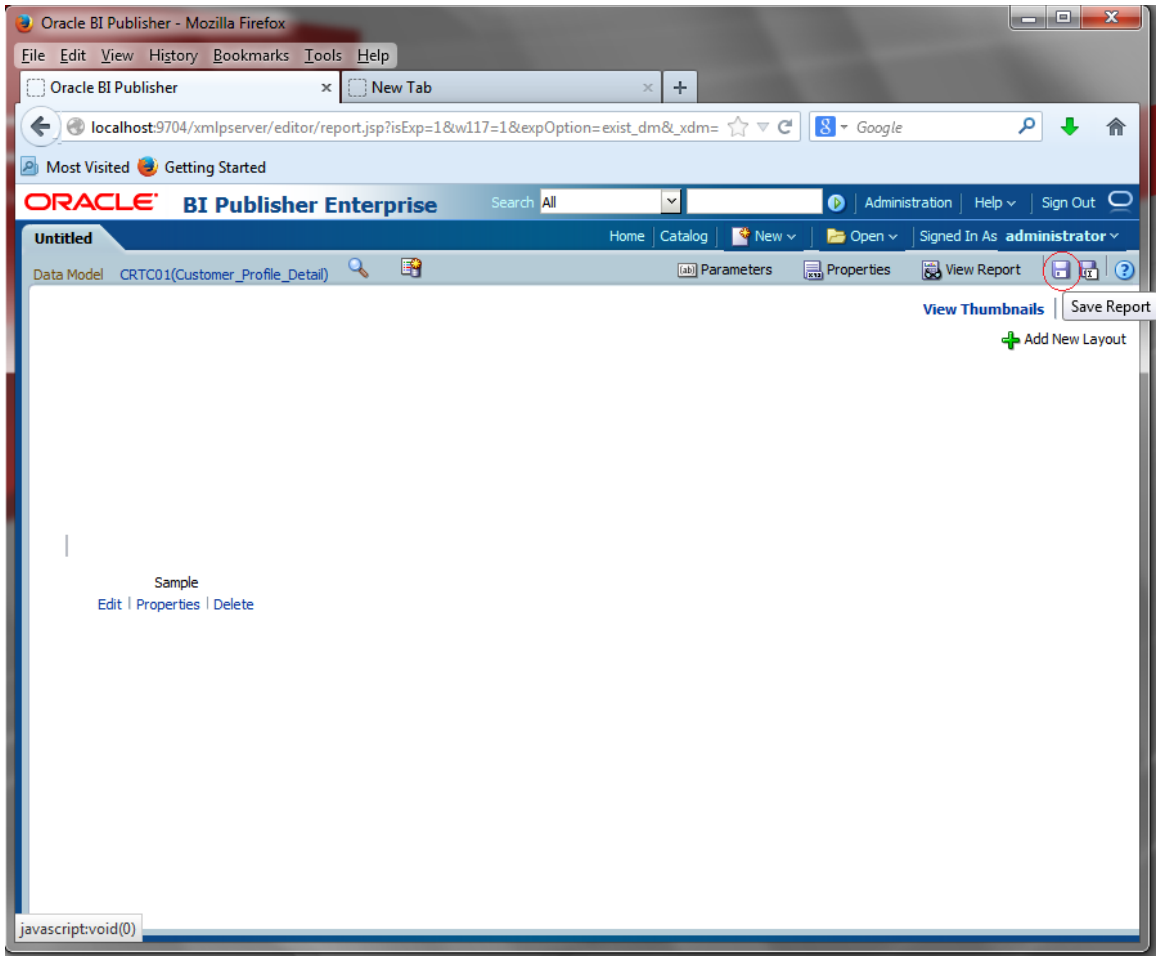
Click **Cancel** and select a particular **Data Model**.



Click on **Upload** to upload the RTF file and fill particular fields.

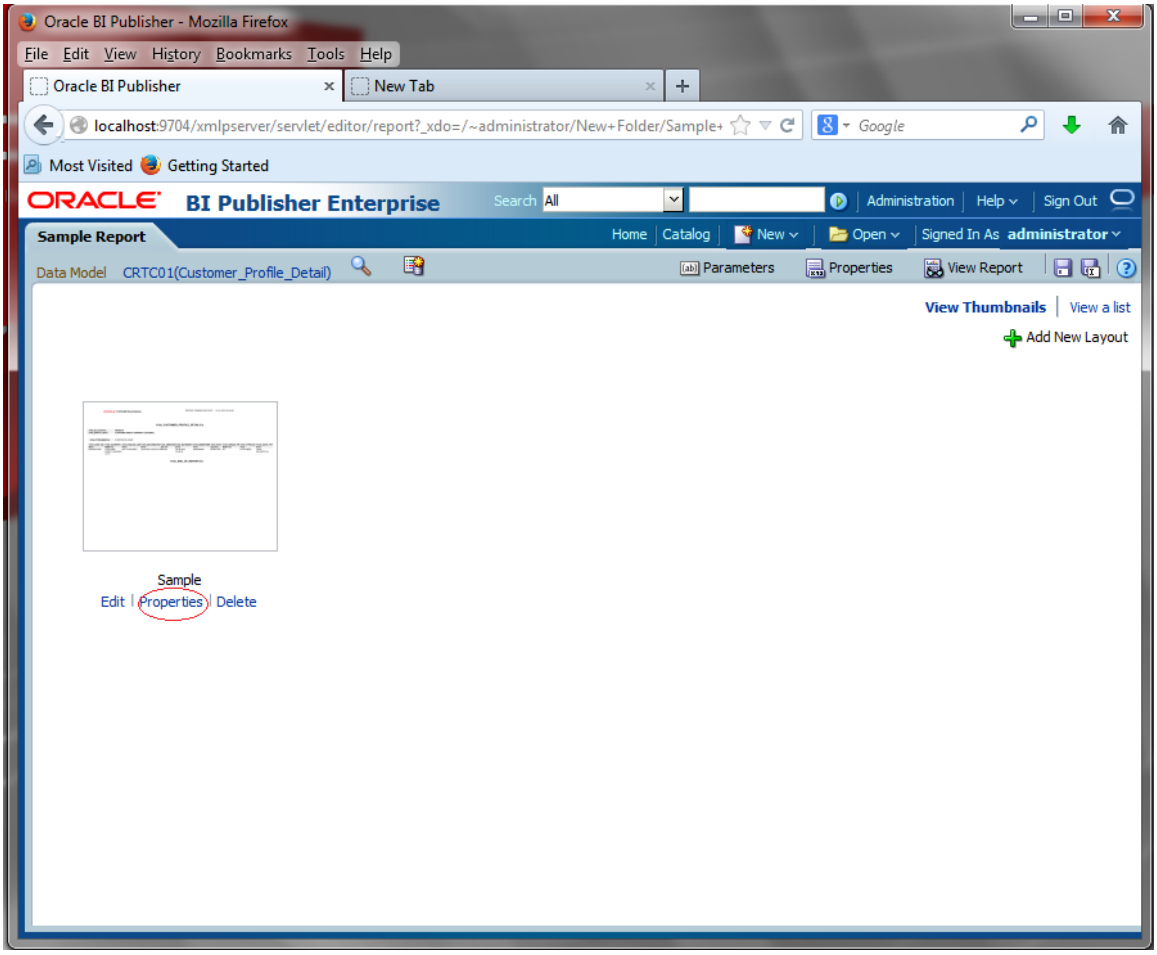


Click on **Save** to save a report.

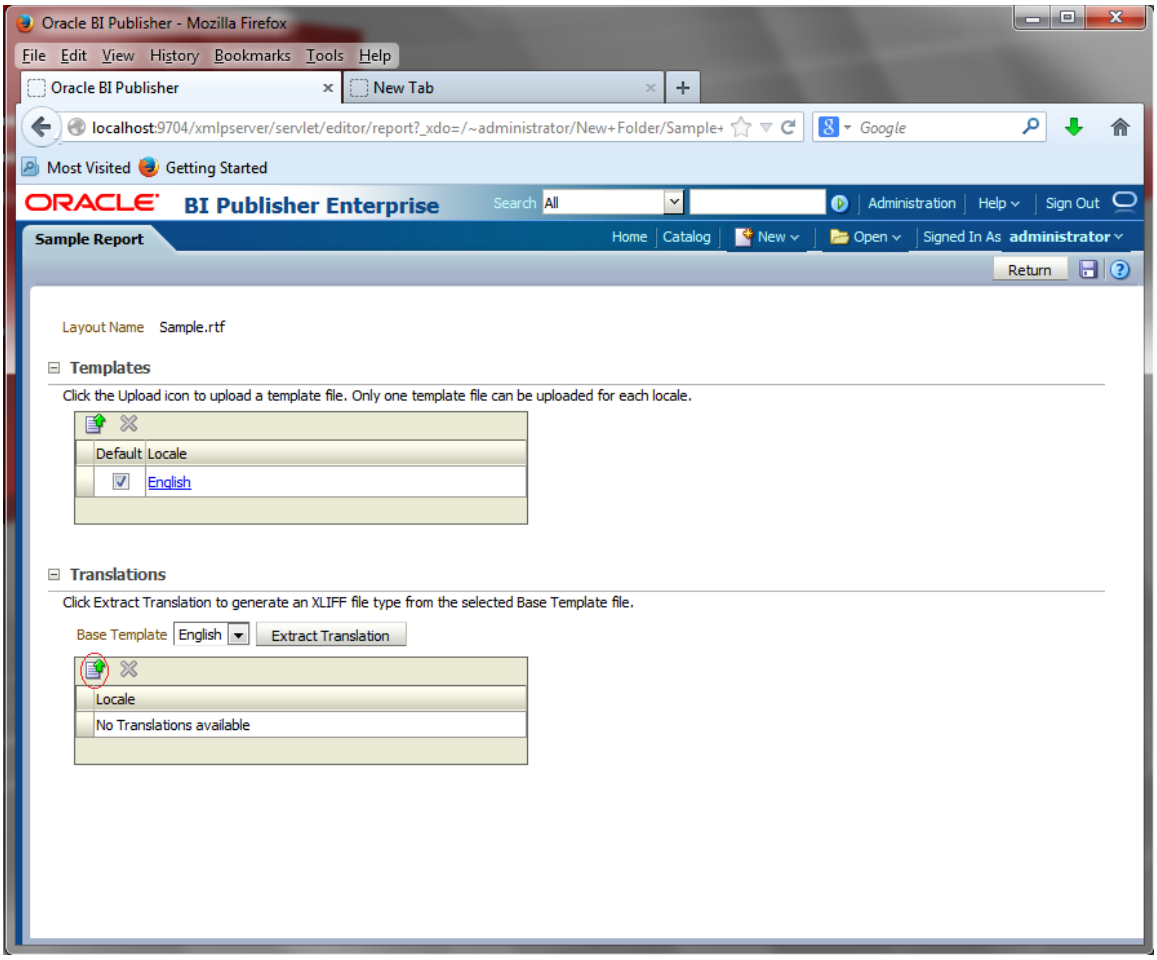

Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
New Tab
localhost:9704/xmlpserver/editor/report.jsp?isExp=1&w117=1&expOption=exist_dm&_xdm=
Most Visited
Getting Started
ORACLE
BI Publisher Enterprise
Search All
Administration
Help
Sign Out
Untitled
Home
Catalog
New
Open
Signed In As administrator
Data Model
CRTC01(Customer_Profile_Detail)
Parameters
Properties
View Report
Save Report
View Thumbnails
Add New Layout
Sample
Edit | Properties | Delete
javascript:void(0)

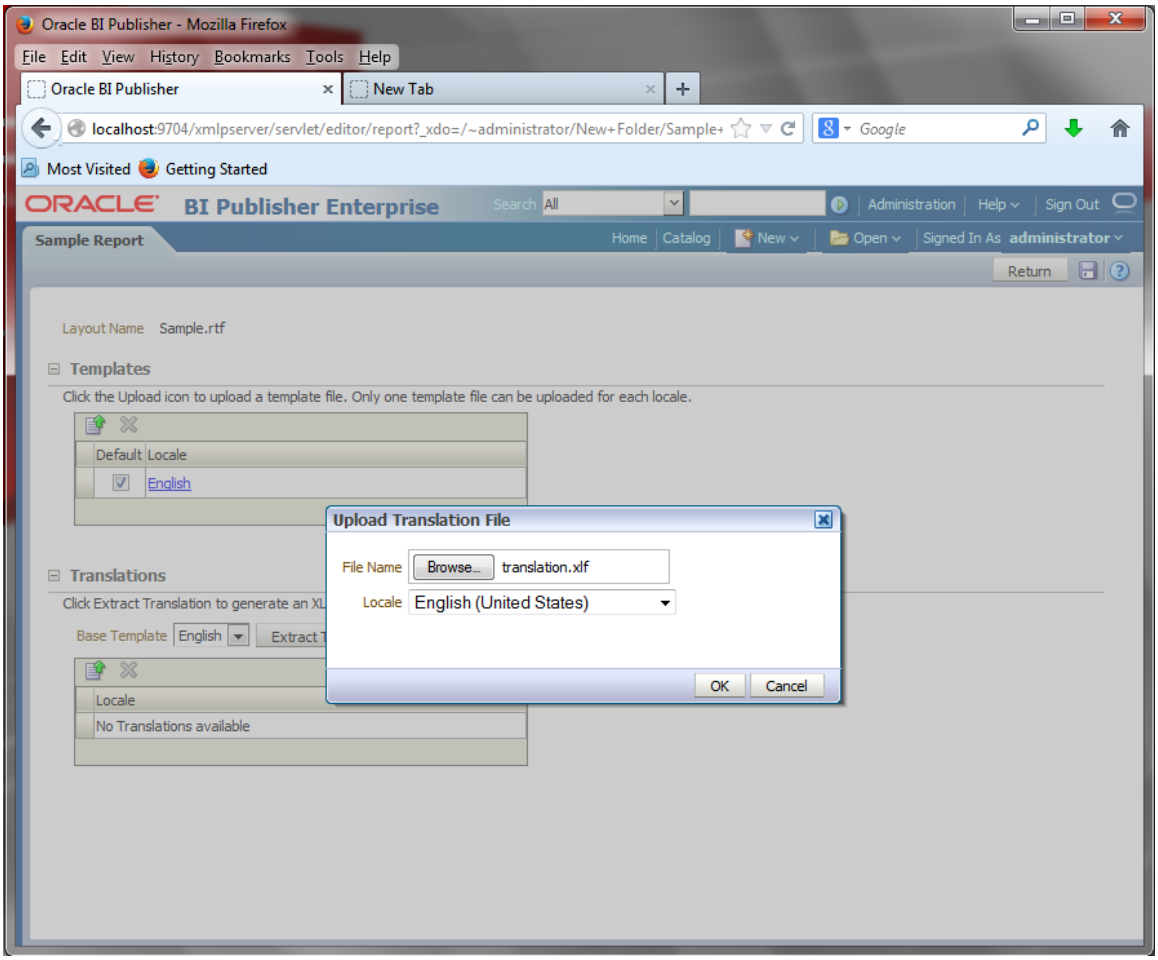
Step 9: Upload a translation (.xlf) file.

Click on **Properties**.

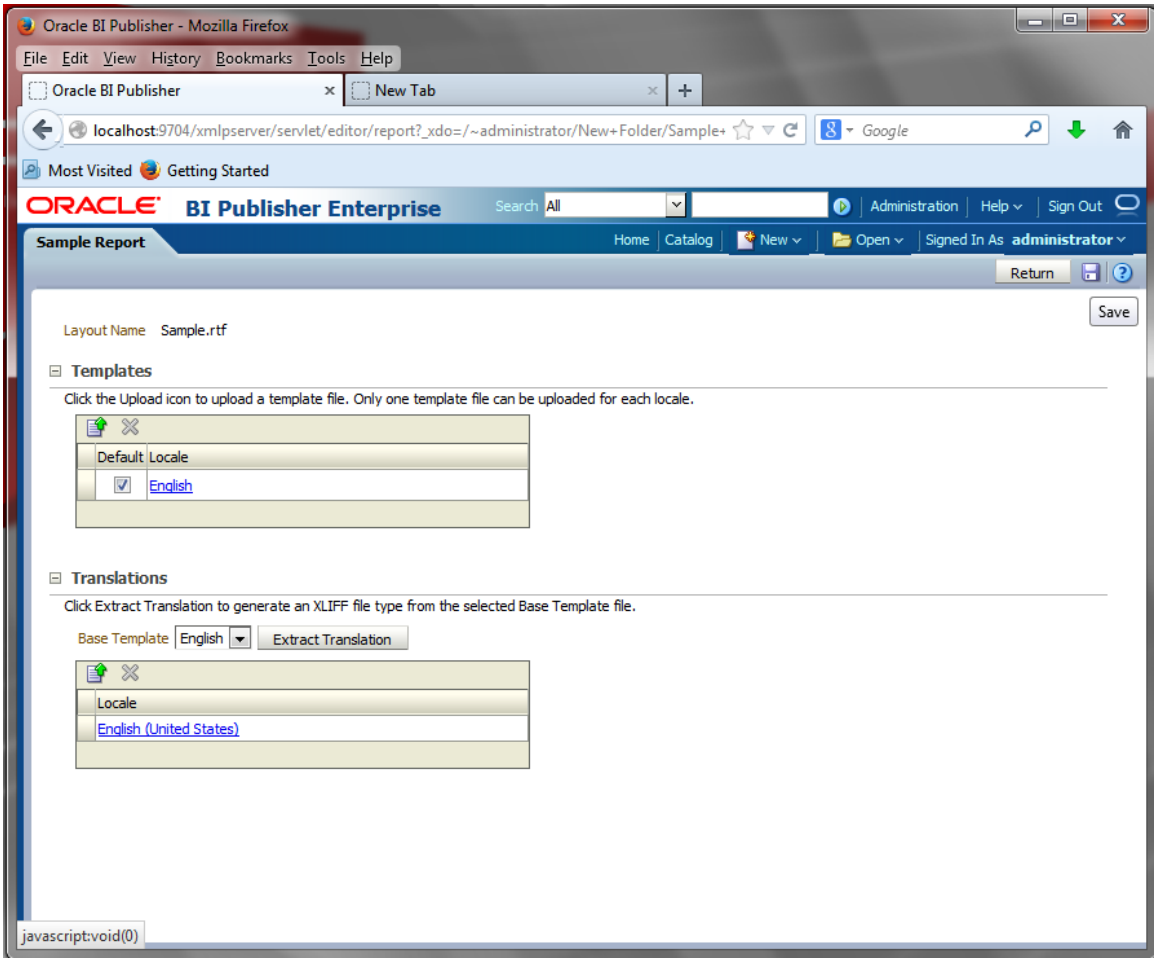


Click on **Upload** and fill particular details.

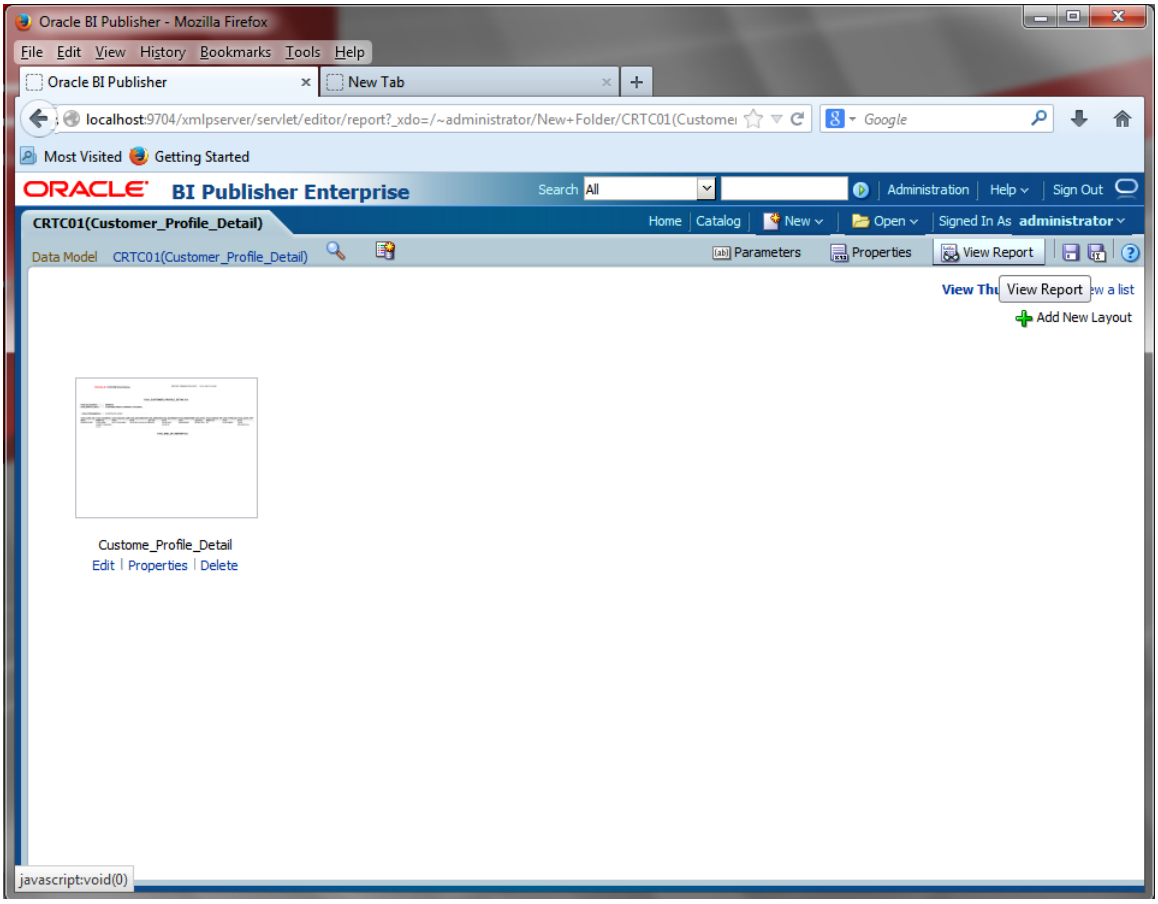

Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
New Tab
localhost:9704/xmlpserver/servlet/editor/report?_xdo=/~administrator/New+Folder/Sample+
Google
Most Visited
Getting Started
ORACLE
BI Publisher Enterprise
Search All
Administration
Help
Sign Out
Sample Report
Home
Catalog
New
Open
Signed In As administrator
Return
Layout Name Sample.rtf
Templates
Click the Upload icon to upload a template file. Only one template file can be uploaded for each locale.
Default
Locale
English
Translations
Click Extract Translation to generate an XLIFF file type from the selected Base Template file.
Base Template
English
Extract Translation
Locale
No Translations available

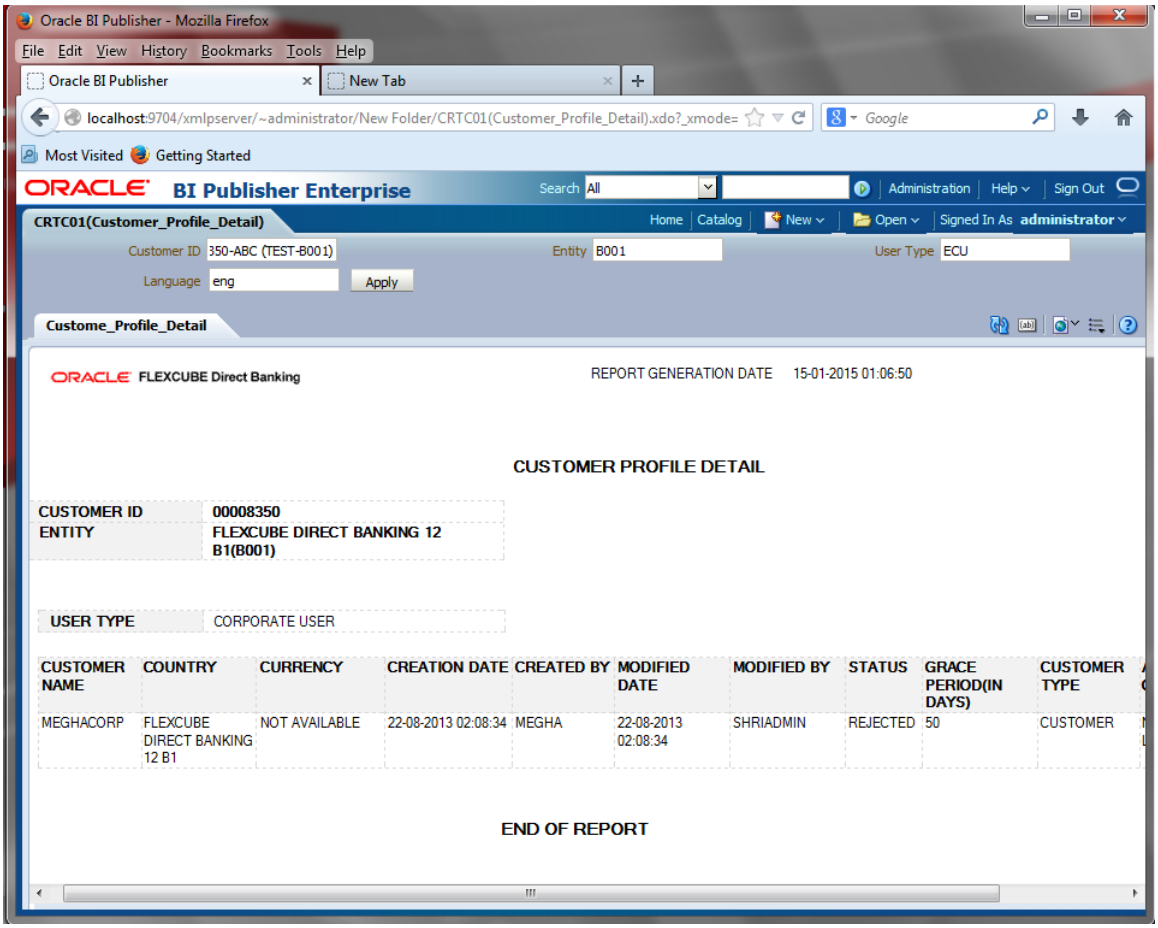


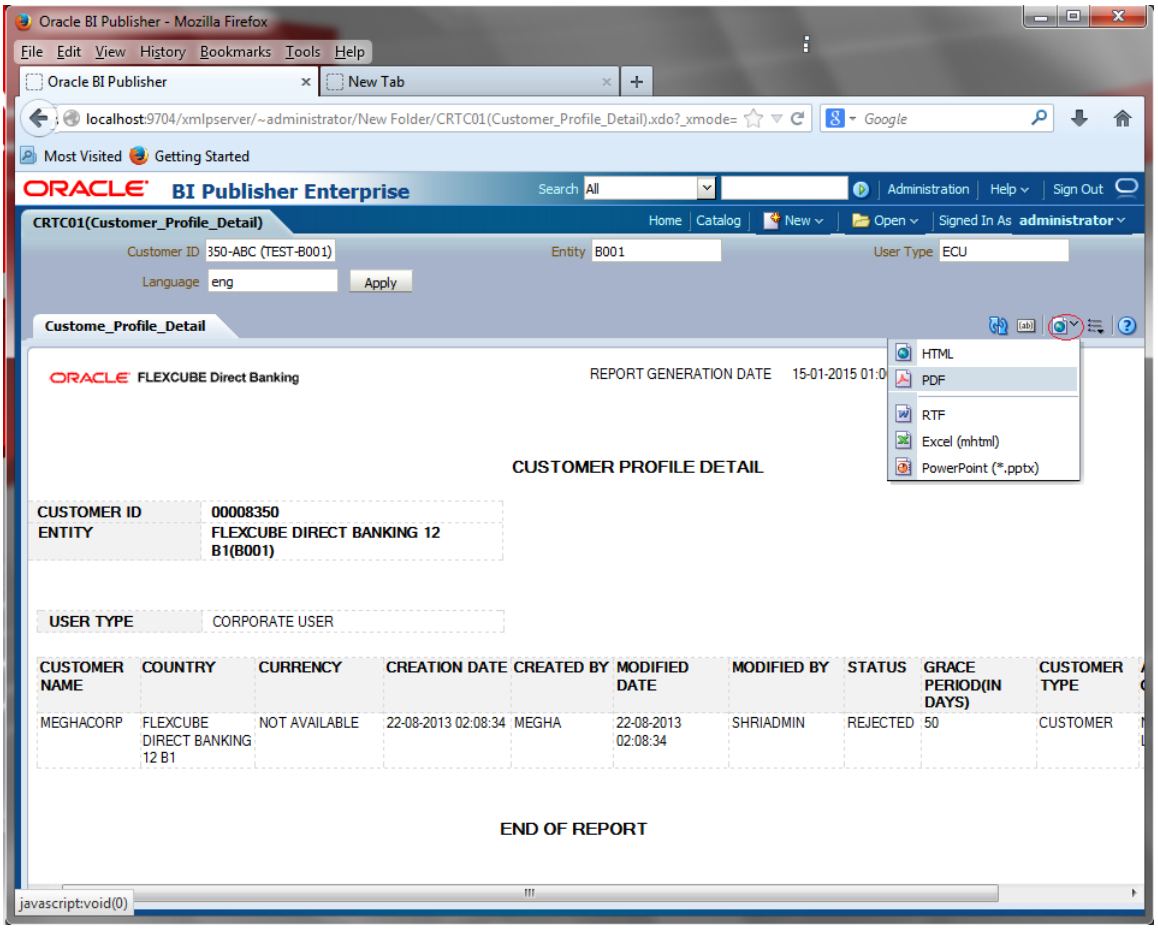
Click **Save** to save the report.

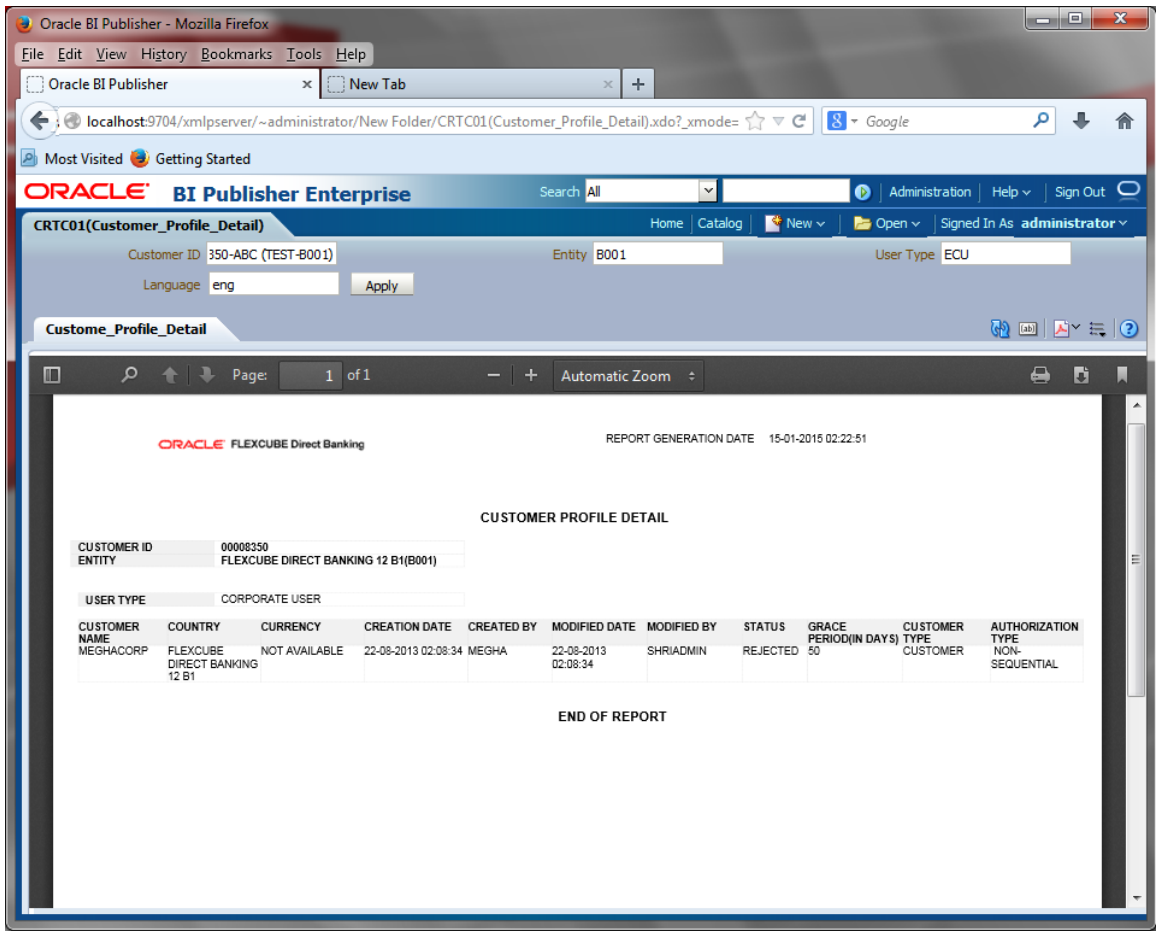

Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
New Tab
localhost:9704/xmlpserver/servlet/editor/report?_xdo=/~administrator/New+Folder/Sample+
Google
Most Visited
Getting Started
ORACLE
BI Publisher Enterprise
Search All
Administration
Help
Sign Out
Sample Report
Home
Catalog
New
Open
Signed In As administrator
Return
Save
Layout Name Sample.rtf
Templates
Click the Upload icon to upload a template file. Only one template file can be uploaded for each locale.
Default
Locale
English
Translations
Click Extract Translation to generate an XLIFF file type from the selected Base Template file.
Base Template
English
Extract Translation
Locale
English (United States)
javascript:void(0)

Step 10: By clicking on 'View' report will be displayed in the particular format as selected from the dropdown.




Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
New Tab
localhost:9704/xmlpserver/~administrator/New Folder/CRTC01(Customer_Profile_Detail).xdo?_xmode=
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
CRTC01(Customer_Profile_Detail)
Home Catalog New Open Signed In As administrator
Customer ID 350-ABC (TEST-B001)
Entity B001
User Type ECU
Language eng
Apply
Custome_Profile_Detail
ORACLE FLEXCUBE Direct Banking
REPORT GENERATION DATE 15-01-2015 01:06:50
CUSTOMER PROFILE DETAIL
CUSTOMER ID 00008350
ENTITY FLEXCUBE DIRECT BANKING 12 B1(B001)
USER TYPE CORPORATE USER
CUSTOMER NAME
COUNTRY
CURRENCY
CREATION DATE
CREATED BY
MODIFIED DATE
MODIFIED BY
STATUS
GRACE PERIOD(IN DAYS)
CUSTOMER TYPE
MEGHACORP
FLEXCUBE DIRECT BANKING 12 B1
NOT AVAILABLE
22-08-2013 02:08:34
MEGHA
22-08-2013 02:08:34
SHRIADMIN
REJECTED
50
CUSTOMER
END OF REPORT


Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
New Tab
localhost:9704/xmlpserver/~administrator/New Folder/CRTC01(Customer_Profile_Detail).xdo?_xmode=
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
CRTC01(Customer_Profile_Detail)
Home Catalog New Open Signed In As administrator
Customer ID 350-ABC (TEST-B001)
Entity B001
User Type ECU
Language eng
Apply
Custome_Profile_Detail
HTML
PDF
RTF
Excel (mhtml)
PowerPoint (*.pptx)
ORACLE FLEXCUBE Direct Banking
REPORT GENERATION DATE 15-01-2015 01:0
CUSTOMER PROFILE DETAIL
CUSTOMER ID 00008350
ENTITY FLEXCUBE DIRECT BANKING 12 B1(B001)
USER TYPE CORPORATE USER
CUSTOMER NAME
COUNTRY
CURRENCY
CREATION DATE
CREATED BY
MODIFIED DATE
MODIFIED BY
STATUS
GRACE PERIOD(IN DAYS)
CUSTOMER TYPE
MEGHACORP
FLEXCUBE DIRECT BANKING 12 B1
NOT AVAILABLE
22-08-2013 02:08:34
MEGHA
22-08-2013 02:08:34
SHRIADMIN
REJECTED
50
CUSTOMER
END OF REPORT
javascript:void(0)


Oracle BI Publisher - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Oracle BI Publisher
New Tab
localhost:9704/xmlpserver/~administrator/New Folder/CRTC01(Customer_Profile_Detail).xdo?_xmode=
Most Visited Getting Started
ORACLE BI Publisher Enterprise
Search All
Administration Help Sign Out
CRTC01(Customer_Profile_Detail)
Home Catalog New Open Signed In As administrator
Customer ID 350-ABC (TEST-B001)
Entity B001
User Type ECU
Language eng
Apply
Custome_Profile_Detail
Page: 1 of 1
Automatic Zoom
ORACLE FLEXCUBE Direct Banking
REPORT GENERATION DATE 15-01-2015 02:22:51
CUSTOMER PROFILE DETAIL
CUSTOMER ID 00008350
ENTITY FLEXCUBE DIRECT BANKING 12 B1(B001)
USER TYPE CORPORATE USER
CUSTOMER NAME
COUNTRY
CURRENCY
CREATION DATE
CREATED BY
MODIFIED DATE
MODIFIED BY
STATUS
GRACE PERIOD(IN DAYS)
CUSTOMER TYPE
AUTHORIZATION TYPE
MEGHACORP
FLEXCUBE DIRECT BANKING 12 B1
NOT AVAILABLE
22-08-2013 02:08:34
MEGHA
22-08-2013 02:08:34
SHRIADMIN
REJECTED
50
CUSTOMER
NON-SEQUENTIAL
END OF REPORT

6.11 Transactions for Customer Reports

The Customer Reports are integrated within the Oracle FLEXCUBE Direct Banking application and supported using two primary transactions

- Manage Reports
- Download Reports

6.11.1 Manage Reports

Manage Reports function allows the users to register for the reports and schedule the same within Oracle FLEXCUBE Direct Banking. Oracle FLEXCUBE Direct Banking shall use the Oracle BI Publisher via Web Services based interfaces to schedule the reports within the application.

6.11.2 Download Reports

Download Reports function allows the users to download the scheduled reports as they are generated. The download can be in the format in which the report was registered.

The Manage and Download Reports functions can be granted to any user type within the system as long as the reports are configured properly in the MSTALERTS and MSTENTITYUSERALERTS base tables. The relevant reports are expected to be configured in these tables and made available for registration for the respective users.

6.12 Database Setup and Configurations for Reports

All reports must be assigned a unique Alert ID of Alert Type 'R'. During report registration process (Through Admin Application) this Unique Alert ID is used to register the report for report generation. MSTALERTS and MSTENTITYUSERALERTS are two LDB tables used to contain definition and access specific information for All Alert. Apart from these two tables, MSTPROPERTIES is used to define the mapping between Individual Alert ID with the actual report as well as few day 0 configurations.

USERREPORTREG is another table used for BI Reports and maintains the report registrations for the users.

The details of the above tables are documented in the Oracle FLEXCUBE Direct Banking Database Design document.

Following are few day 0 properties, which need to be configured in MSTPROPERTIES during report setup:

PROPNAME	PROPVALUE	MANDATORY	DESCRIPTION
FCAT.BI.ABSPATH.<ALERT ID>		Y	The Relative path of the BI report on the BI Server
FCAT.BI.SERVER.URL	http://<host>:<port>/xmlpserver/services/PublicReportService	Y	Web Service URL for Public Report Service
FCAT.BI.SERVER.IDUSER	<Login ID>	Y	Login Id for Bi Publisher
FCAT.BI.SERVER.PWD	<Password>	Y	Password for User ID
FCAT.BI.REPORT.PUBLIC	true/false	N	Flag for public report

FCAT.BI.REPORT.UTF8	true/false	N	Flag for use UTF-8 character set
FCAT.BI.REPORT.SAVEOUTPUT	true/false	N	Flag to indicate save report output
FCAT.BI.REPORT.SAVEDATA	true/false	N	Flag to indicate save report data
FCAT.BI.REPORT.BURST	true/false	N	Flag to use Bursting Option

Example of a Data Entry (Sql Scripts):

- ✓ **MSTALERT :**

```
insert into MSTALERT (IDALERT, DESCRIPTION, ALERTTYPE, ISPUSHALERT,
SUBJECT, ALERTPRIORITY, GENERATORCLASSNAME, PROPERTIESSTR,
ISENABLED, FROMADDRESS, SYSTEMCODE, ALERT_FREQ,
ALERT_CYCLE_COUNT, PARAM_ADTNL_TYPE, TOKEN1, TOKEN2, TOKEN3,
TOKEN4, DAT_CREATED, DAT_NEXT_RUN, DAT_LAST_RUN, GROUP_CODE,
ID_ENTITY) values ('CRT0001', 'SESSION SUMMARY REPORT', 'R', 'Y',
SESSION SUMMARY REPORT,
6,      'com.iflex.fcat.services.apps.endpoints.RegisterAlertService',
null, 'Y', 'fcat', null, -2, 1, 'FD', null, null, null, null, null, to_date('30-10-2007',
'dd-mm-yyyy'), null, null, 'B001');
```

- ✓ **MSTENTITYUSERALERTS :**

```
insert into MSTENTITYUSERALERTS (ID_ENTITY, TYPEUSER, IDALERT,
OBJMAPPING,  REGISTRATIONCLASS, ISENABLED)
values ('B001', 'ENU', 'CRT0001', null, null, 'Y');
```

6.13 Reports Purging and Archiving

The Oracle BI Publisher scheduler schema can be purged especially the XMLP_SCHED_JOB, XMLP_SCHED_ SUBSCRIPTION and XMLP_SCHED_OUTPUT tables. The tables can be archived using standard archiving techniques and purged based on the CREATED column to retain the recent records and purge historical records.

6.14 Guidelines for Report Layout

The following guidelines are expected to be followed

- The ReportTemplate.rtf document should be used as the base template for structure and layout for the report definition.
- The Oracle FLEXCUBE Direct Banking standard logo can be replaced by the bank logo for the implementation, if required.
- The font for the report data should be Microsoft Sans Serf with the font size as point 8.

Example: This is Microsoft Sans Serif Font in Size 10

- The table borders should be gray for each of segregation of formatting and data for the reports.
- Each report should indicate the end of report using a standard footer as provided

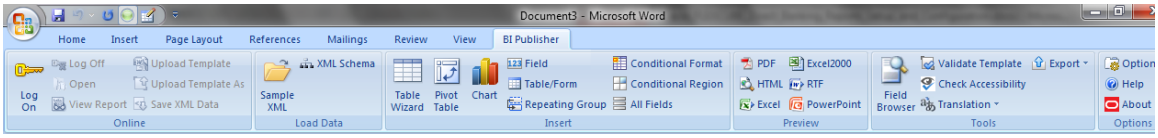
--- END OF REPORT ---

- The language keyword for the end of report tag is %%K_END_OF_REPORT%%
- Additional text for the reports can be added in the Header / Footer or body as appropriate
- All English Language Keywords in the report template (.RTF document) should be template-ized using the standard templatization process of Oracle FLEXCUBE Direct Banking. The keywords should be added to the report and the resulting .XML definition for the report should be converted using the *ReportTool* utility.
- The report names for all Bank Reports should start with RPT and the naming format is RPTXXXX where XXXX indicated the report number. The Report Definitions document provides the details of the report for cross referencing.
- The report names for all Customer Reports should start with CRT and the naming format is CRTXXXX where XXXX indicates the report number, if generated directly from BI. Random names are generated if the report is downloaded from FCDB Application. The Report Definitions document provides the details of the report for cross referencing.

6.15 Guidelines for Reports Design

The following guidelines are expected to be followed to design a report. The sample of a report template is attached in the Sample Report Template section.

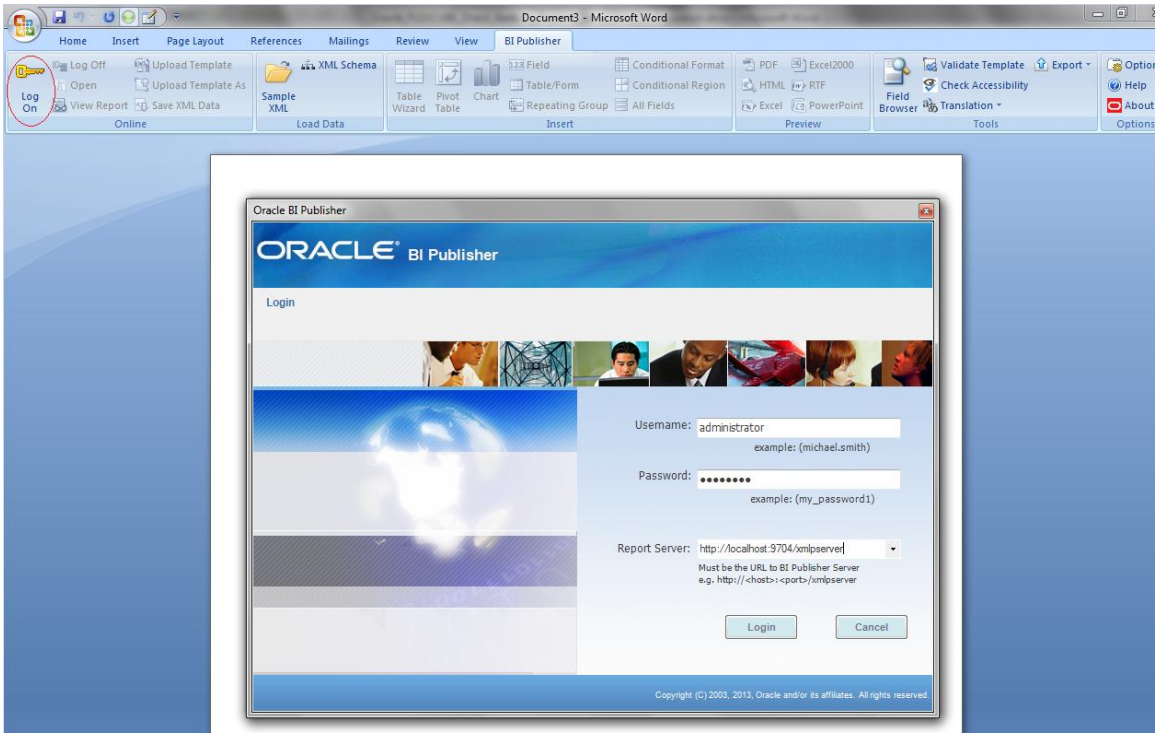
The Template Builder is tightly integrated with Microsoft Word and allows the user to perform various functionalities like:



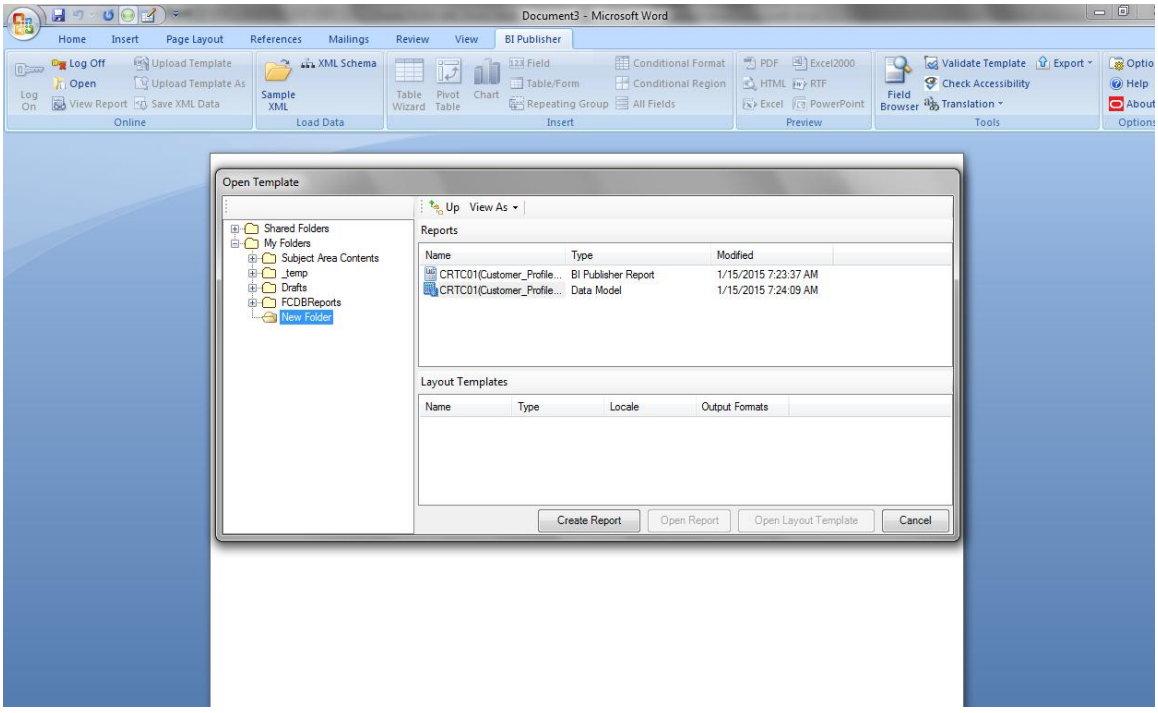
Refer the *Template Builder for Word Tutorial. pdf* for the usage of the tools to design the various reports.

- Insert data fields into your RTF template
- Insert data driven tables
- Insert data driven forms
- Insert data driven charts
- Preview RTF templates with sample XML data
- Browse and update the content of form fields
- Extract boilerplate text into an XLIF translation file and test translations.

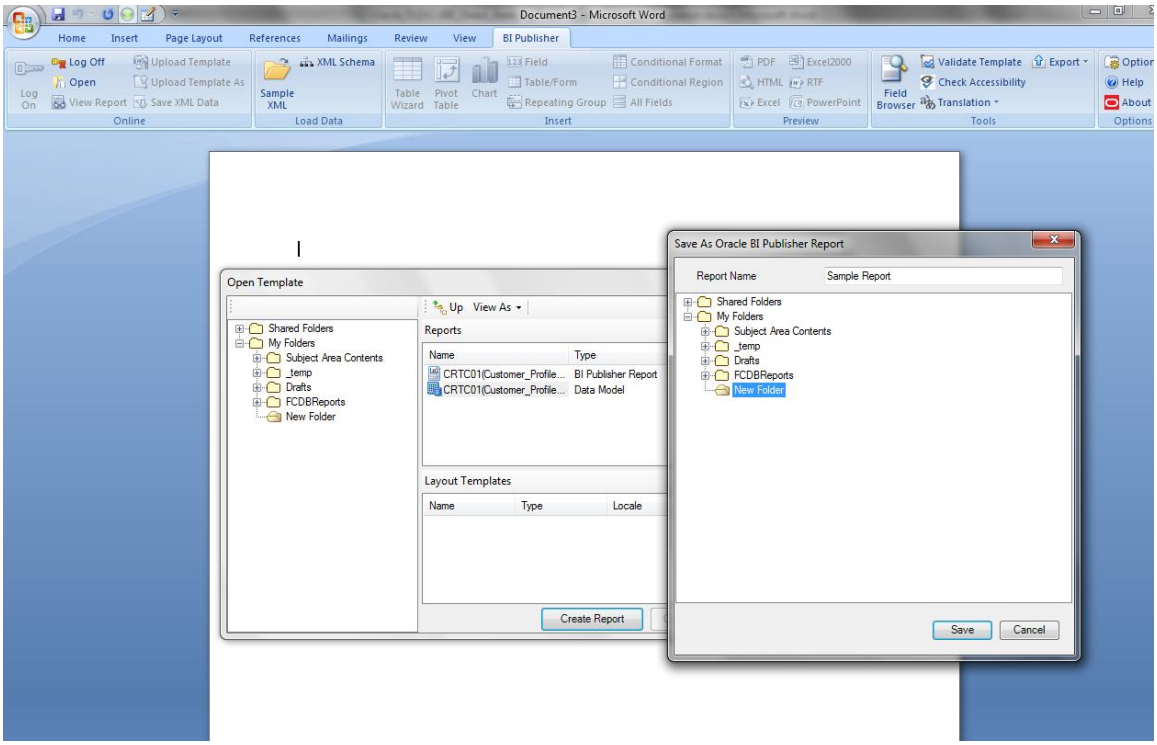
Basically the designing can be started by Logging in to the BI Publisher.



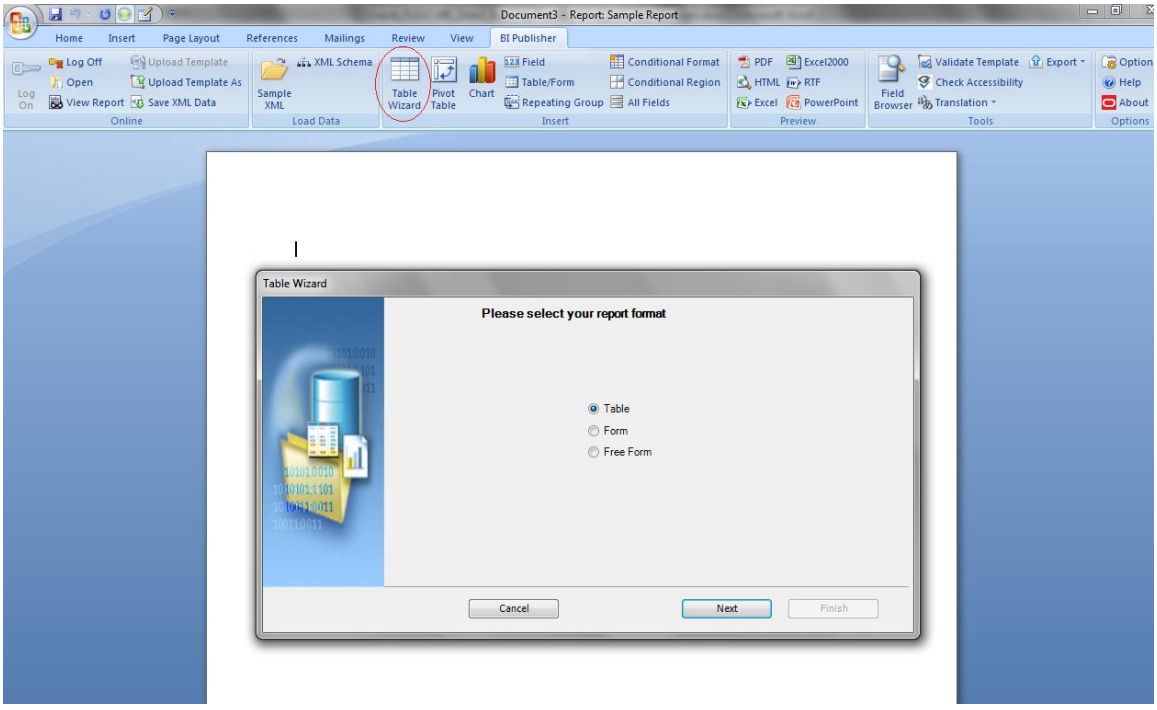
Select a **Data Model** using which the Report is to be designed.

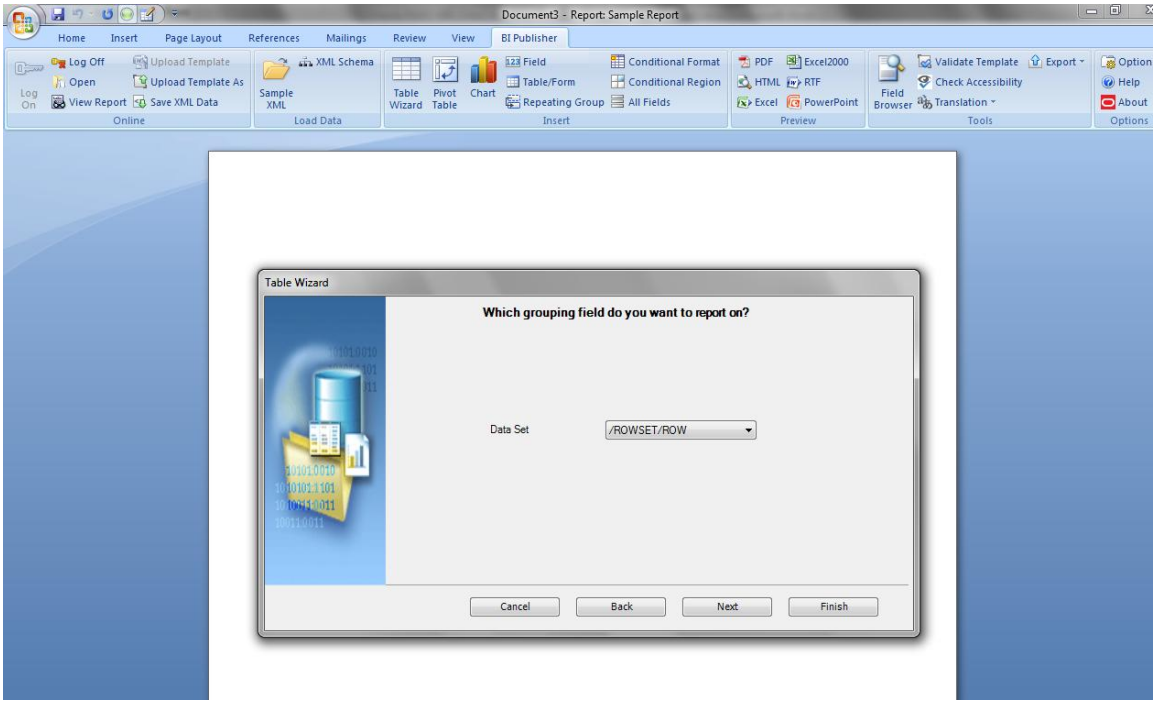


Click on **Create Report** and fill the required details and Click **Save** to create a report.

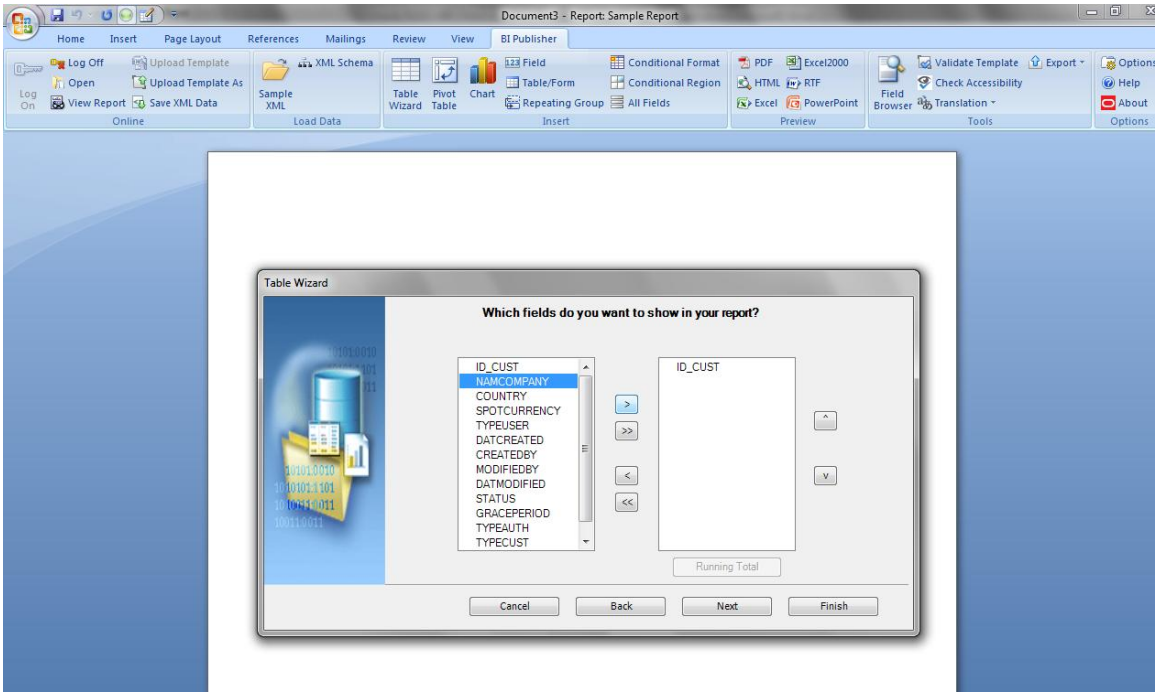


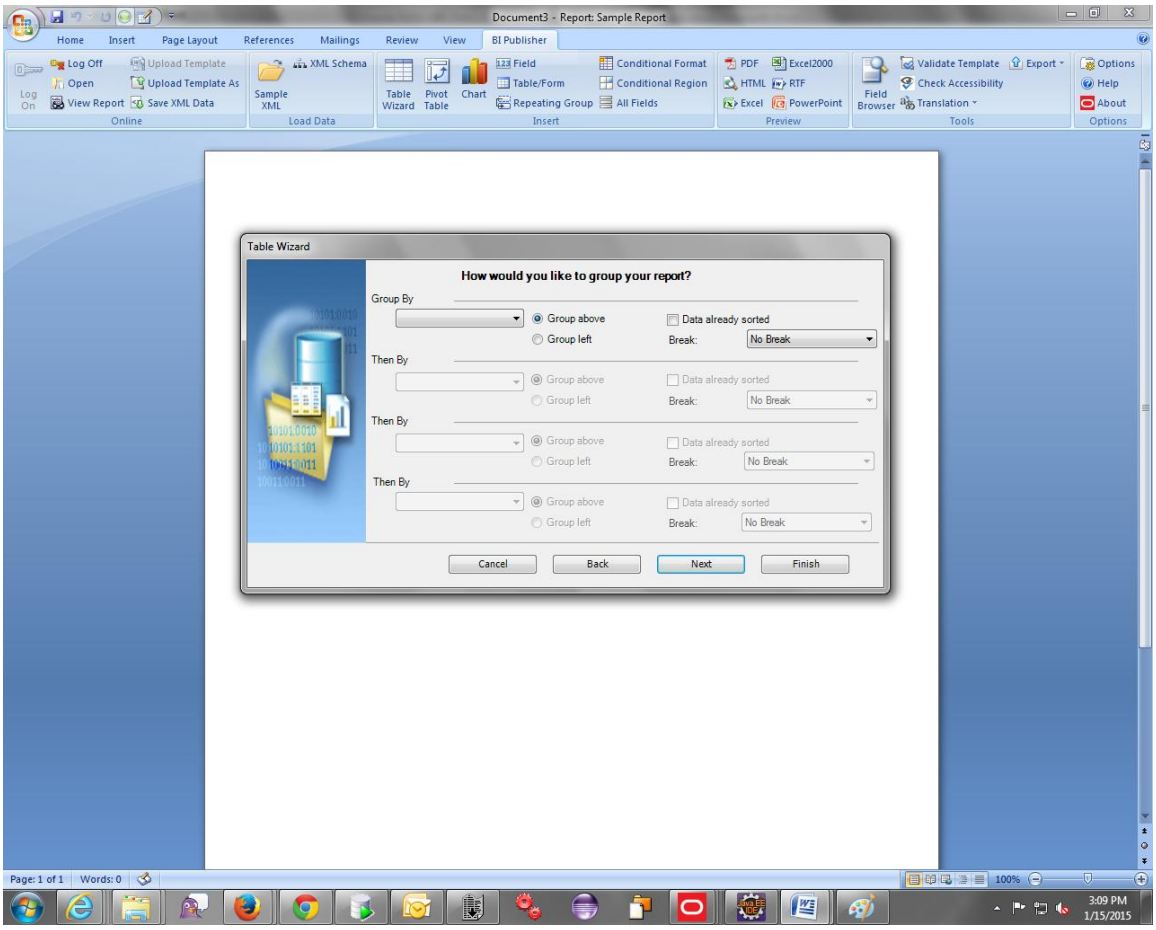
From the Menu bar select **Table Wizard** to load the data from the **Data Model**.

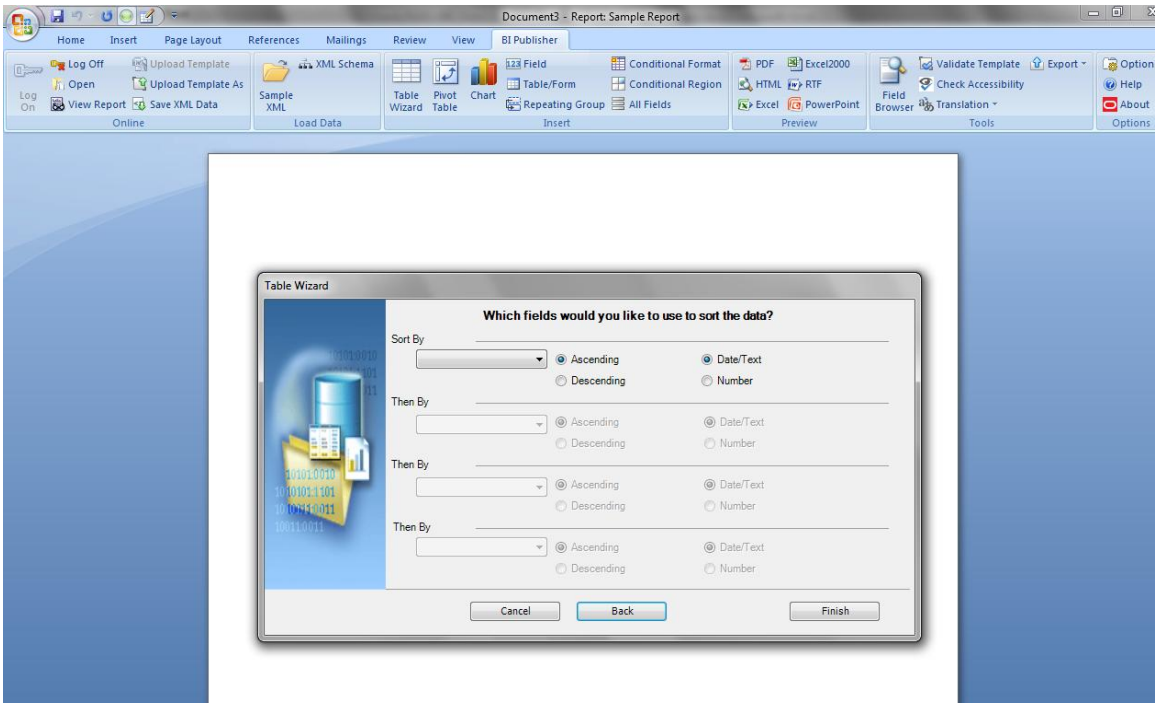




Select the fields that you want to display in the report.




Document3 - Report: Sample Report
Home
Insert
Page Layout
References
Mailings
Review
View
BI Publisher
Log Off
Open
View Report
Upload Template
Upload Template As
Save XML Data
Online
XML Schema
Sample XML
Load Data
Table Wizard
Pivot Table
Chart
Field
Table/Form
Repeating Group
Conditional Format
Conditional Region
All Fields
Insert
PDF
Excel2000
HTML
RTF
Excel
PowerPoint
Preview
Field Browser
Validate Template
Export
Check Accessibility
Translation
Tools
Options
Help
About
Options
Table Wizard
How would you like to group your report?
Group By
Group above
Group left
Data already sorted
Break:
No Break
Then By
Then By
Then By
Cancel
Back
Next
Finish
Page: 1 of 1
Words: 0
100%
3:09 PM
1/15/2015



The user can edit the data by choosing Name from Properties.

Style:

User can select Table to create a table inside the template.

Grouping:

Grouping is an operation to re-group the data.

Sort by:

User can select an element by which the data will be sorted.

Sort Order:

If the user selected an element for **Sort By**, the data should be sorted in either ascending or descending.

Sort Data Type:

If the user selected an element for **Sort By,** the data is sorted as **Text** by default. It can be sorted as number by choosing **Number.**

Break:

This property allows the user to insert a page break or a section break between every data group.

The order in which the data elements are shown reflects the order of the columns in the table. After all **OK** button will be clicked. The table should look like this.

ID_CUST	NAMCOMPANY	COUNTRY	TYPEUSER	CREATEDBY	STATUS
FID_CUST	NAMCOMPANY	COUNTRY	TYPEUSER	CREATEDBY	STATUS E

Preview Template:

After adding fields to the document, user may want to test the template. Oracle XML Publisher Template Builder allows the user to preview the template with sample XML data. The output will be in Adobe Acrobat Reader (PDF), Microsoft Word File (RTF), Microsoft EXCEL (EXCEL) or a browser (HTML).

From the **Preview** menu, the user has to select PDF or HTML or EXCEL or RTF to preview the template in corresponding formats.

Sample Report Template

The report template to be used as a guiding base in attached below. The same should be used as a starting template for all reports including Bank and Customer Reports. The template can be changed at an implementation level.

Report Template.rtf

7 Report Tool

The Report Tool is made to generate XLIFF (XML Localization Interchange File Format) from a RTF (Rich Text Format).

To generate an XLIFF file from an RTF template:

- From ReportTemplate menu, select **Tools > Translation > Extract Text**
  BI Publisher extracts the translatable string from the template and exports them to a XLIFF (.xlf) file.
- Save the file to the desired location.
- This .xlf file can be sent to a translator for the language translation.

  The .xlf file generated by the BI Publisher has the following structure.

```
<xliff>
  <file>
    <header>
      <body>
        <trans-unit>
          <source>
          <target>
          <note>
```

- The <file> element includes the attributes source-language and target-language. The valid value for source-language and target-language is a combination of the language code of a country.

Example:

Translation (Language/Territory)	source-language	target-language
To English/Canada	en_Us	en_CA

When the .xlf file will be edited, the target-language must be changed to appropriate locale and finally .rtf and .xlf files will be merged and this functionality has been performed by **Report Tool.**

7.1 Usage of Report Tool:

- This tool takes a zip of .rtf file, .xsd file, and .xdo file as input.
- It reads the zip file. Reads the .rtf file. If more than one .rtf, .xdo and .xsd files are found, then throws error.
- It will convert .rtf into .xlf file inside the zip. Stores in the memory.
- The .xlf file should be stored with the suffix of target language (_en_US).

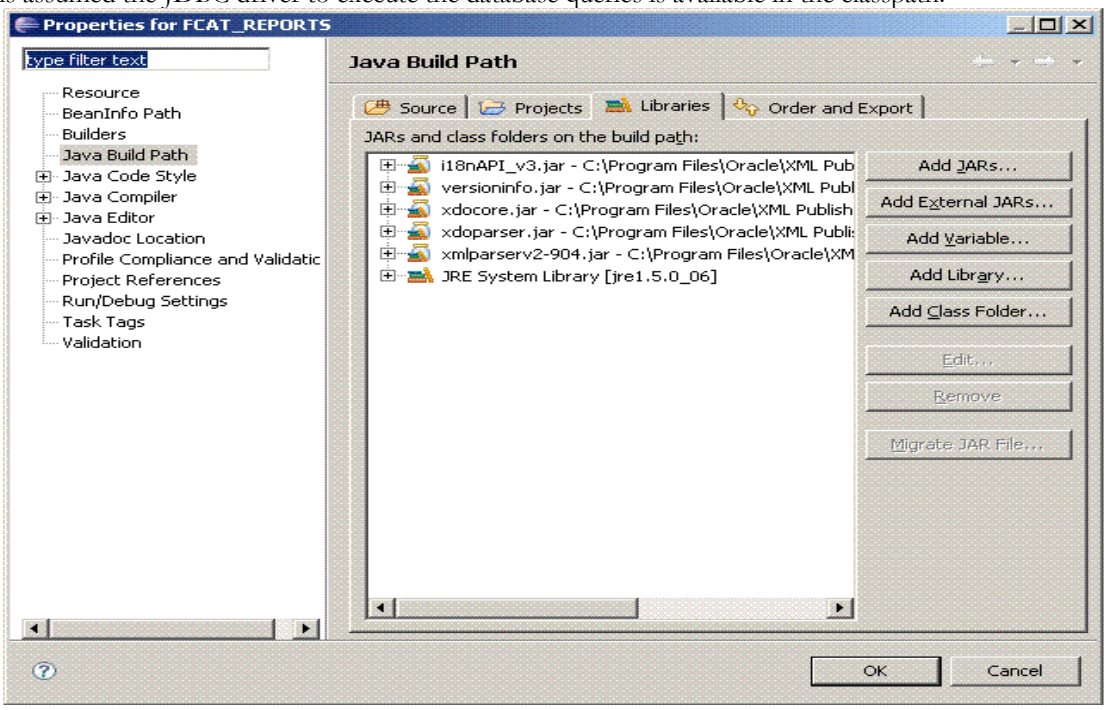
- The final zip will be of .rtf, .xsd, .xdo and .xlf.
- The tool takes arguments of source of zip, Application ID, Device ID, source language, target language and Encoding.

8 Dependent Java Libraries

The additional dependent Java libraries from the Oracle BI Publisher are required if reports are required to be formatted within Oracle FLEXCUBE Direct Banking. For normal processing as described in this document, the following libraries are required to be included in the classpath of the Oracle FLEXCUBE Direct Banking application.

ARCHIVE NAME	ADDITIONAL COMMENTS
xdocore.jar	
xmlparserv2-904.jar	
versioninfo.jar	
i18nAPI_v3.jar	
collections.jar	
bicmn.jar	
bipres.jar	
jewt4.jar	
xdb.jar	
xdoparser.jar	
xmlpserver.jar	
xerces.jar	
jaxrpc.jar	
axis.jar	
commons-logging.jar	
commons-discovery.jar	
soap.jar	
saaj.jar	

The above jar shall be available from the <<INSTALL_ROOT>>\Oracle\XML Publisher Desktop\Template Builder for Word\jlib folder from the Oracle XML Publisher Desktop installation. It is assumed the JDBC driver to execute the database queries is available in the classpath.



9 Web Service Interfaces with Oracle

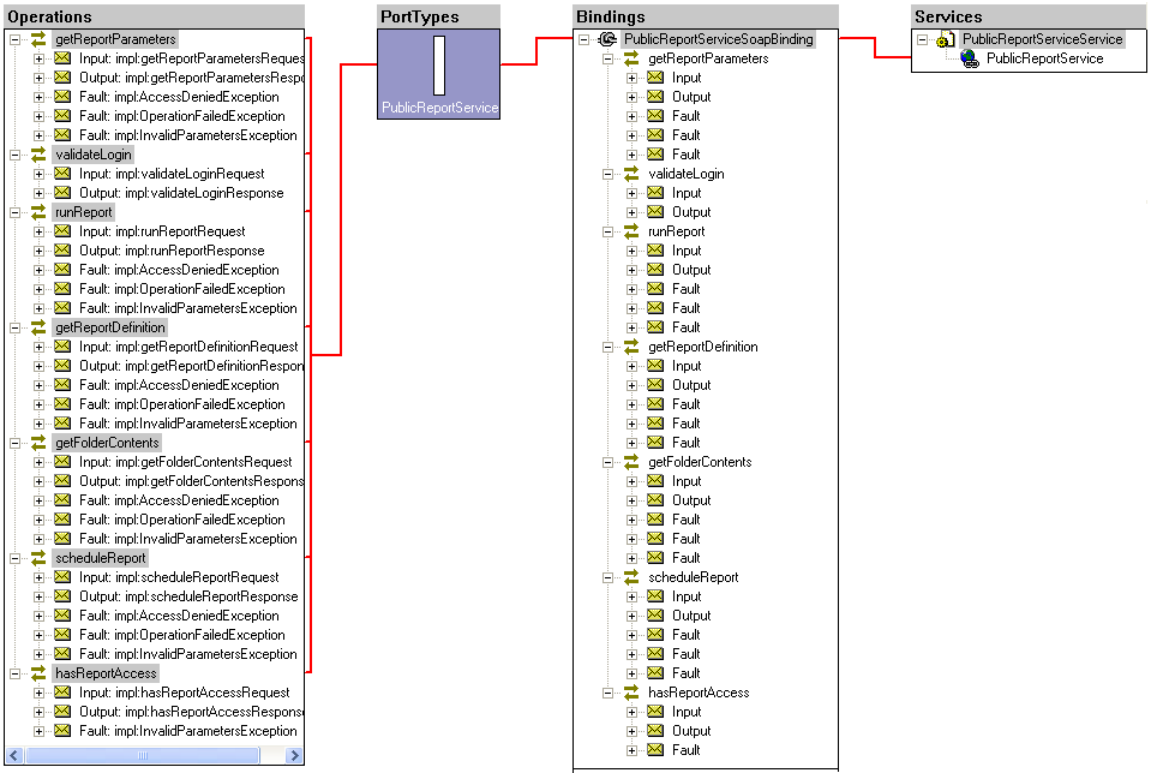
Oracle BI Publisher has provided a group of Web services to deal with BI Server. PublicReportService is one of the Web service to wrap the Oracle BI Publisher public APIs and is used in Oracle FLEXCUBE Direct Banking Report module.

Currently it supports following operations:

- Operation for validation of privileges
- Operation to get information about the reports and the repository.
- Operation to run and schedule reports

PublicReportService wsdl for reference:

In Oracle FLEXCUBE Direct Banking Module we have a Web Service Client which actually wraps the web service call logic for PublicReportService. So from application point of view, all communication with the BI Server is communicated through this Web service class (BIPWebServiceHelper) which actually delegates the entire request to PublicReportService.



10 References

The following documents should be used as reference for development and / or implementation of reporting within Oracle FLEXCUBE Direct Banking.

XDO5.6UserGuide.pdf	This is the user guide for the administration and use of the Oracle BI Publisher. The document explains the various functions within the reporting tool and should be used to understand the various features of the
XMLP5.5UserGuide.pdf	This is a user guide and help for the designer (XML Publisher Desktop) which is integrated within Microsoft Word to design the various reports within Oracle FLEXCUBE Direct Banking.
FC_Direct_Banking_Database_Design.doc	The design document for the data model details for definition of additional reports or low level database definitions within the application.
Template Builder for Word Tutorial.pdf	The user manual for the Oracle BI Publisher design tool which embeds in Microsoft Word. This tool should be used to understand the design features in Oracle BI Publisher.
Oracle_FCDB_Bank_Reports_Definition.doc	The list of Oracle FLEXCUBE Direct Banking Bank Reports that details the various canned reports and the details of the fields
Oracle_FCDB_Customer_Reports_Definition.doc	The list of Oracle FLEXCUBE Direct Banking Corporate Reports that details the various reports and the details of the fields