

BIP Report Integration
Oracle FLEXCUBE Investor Servicing
Release 12.1.0.0.0
[October] [2015]



Table of Contents

- 1. PREFACE 1-1
 - 1.1 AUDIENCE 1-1
 - 1.2 RELATED DOCUMENTS..... 1-1
 - 1.3 CONVENTIONS 1-1
- 2. INTRODUCTION 2-1
 - 2.1 HOW TO USE THIS GUIDE 2-1
- 3. GENERATION OF XDO FILE 3-1
- 4. DEVELOPING SCREENS FOR REPORT 4-1
 - 4.1 REPORT SCREENS DESIGN 4-1
 - 4.1.1 *Static Data Change for Reports Functions* 4-14
 - 4.2 COPY FILES TO BIP SERVER 4-14
 - 4.2.1 *Declaration of Parameters in Spec of the Package* 4-15
- 5. TEST REPORT 5-1

1. Preface

This document describes steps to integrate the BIP report created in BI Publisher with the FLEXCUBE IS Open Development environment.

1.1 Audience

The Report getting started book is intended for the FLEXCUBE Application Developers who perform the following tasks with BIP:

- Integrate the Report with FLEXCUBE IS function ID



This document assumes a given report RTF file and data template XML is already available.

Refer the document BIP Report Development Guide to create these files.

To Use this manual, you need conceptual and working knowledge of the below:

Proficiency	Resources
FLEXCUBE IS Development overview	Development Overview Guide
Open Development tool function ID development getting started	Getting Started
Open Development tool screen development	Function ID Development
Report development introduction	Report Getting started
BIP Report development	BIP Report Development Guide

1.2 Related documents

For more information on Reports development, see these resources:

- Development Overview Guide
- Report Getting started

1.3 Conventions

The following text conventions are used in this document:

Convention Meaning

boldface	Boldface type indicates graphical user interface elements (for example, menus and menu items, buttons, tabs, dialog controls), including options that you select.
-----------------	---

<i>italic</i>	italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates language and syntax elements, directory and File name, URLs, text that appears on the screen, or text that you enter.
	Indicates important information

2. Introduction

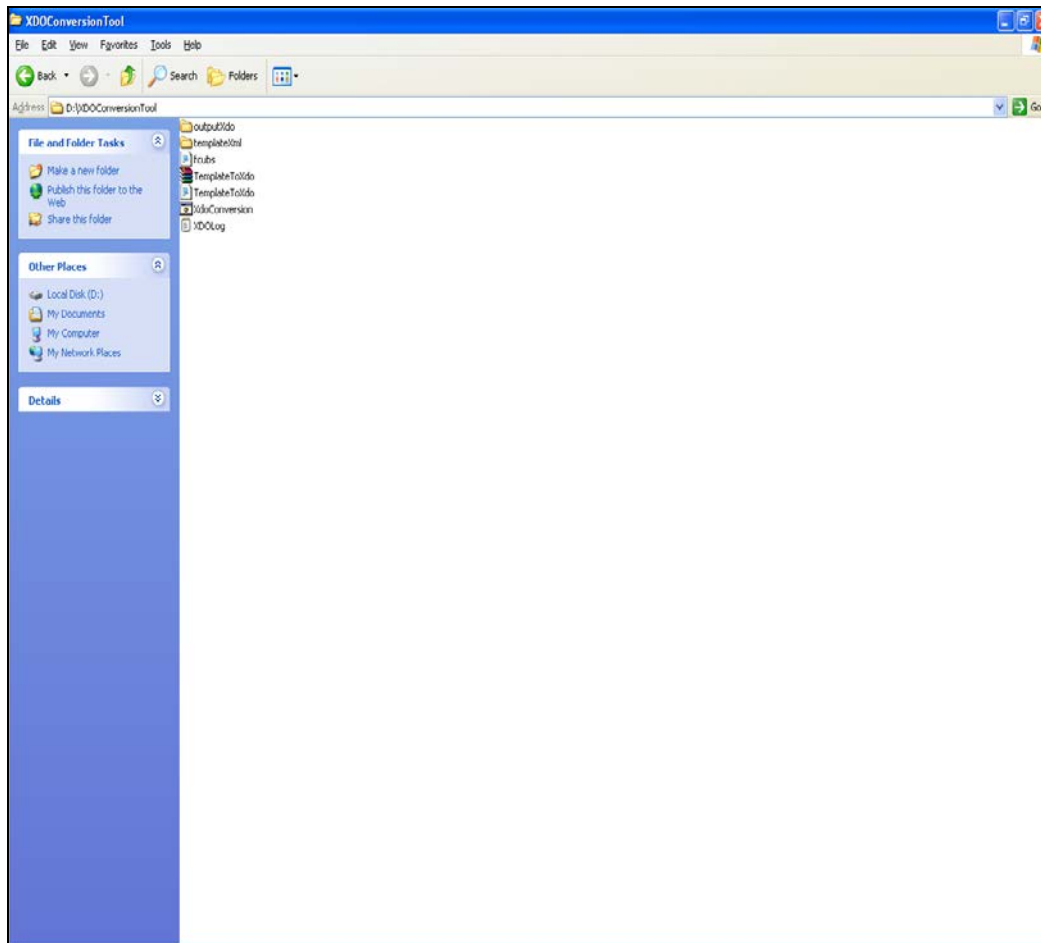
2.1 How to use this Guide

- [Chapter 2,"Introduction"](#)
- [Chapter 3,"Generation of XDO file"](#)
- [Chapter 4,"Developing Screens for Report"](#)
- [Chapter 5,"Test Report"](#)

3. Generation of XDO file

To generate the XDO file, you need XdoConversionTool. This section explains the steps to create the XDO file from the existing data template XML file

- XdoConversionTool setup look like below



- Edit Primary parameters in TemplateToXdo.properties file.

TEMPLATE_XML_PATH is the path where template xml file created is placed.

OUTPUT_PATH is where the XDO will be generated.

PRIMARY

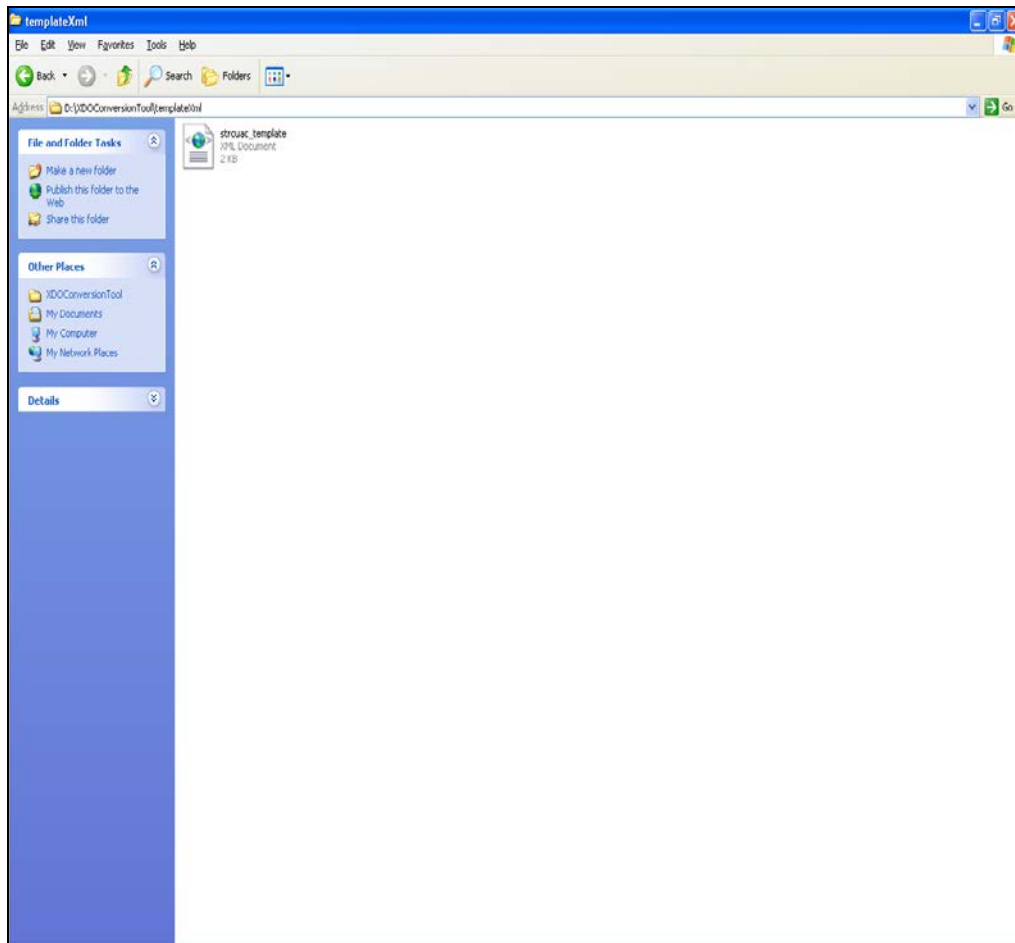
TEMPLATE_XML_PATH = D:\XdoConversionTool\templatexml

OUTPUT_PATH = D:\XdoConversionTool\xdo

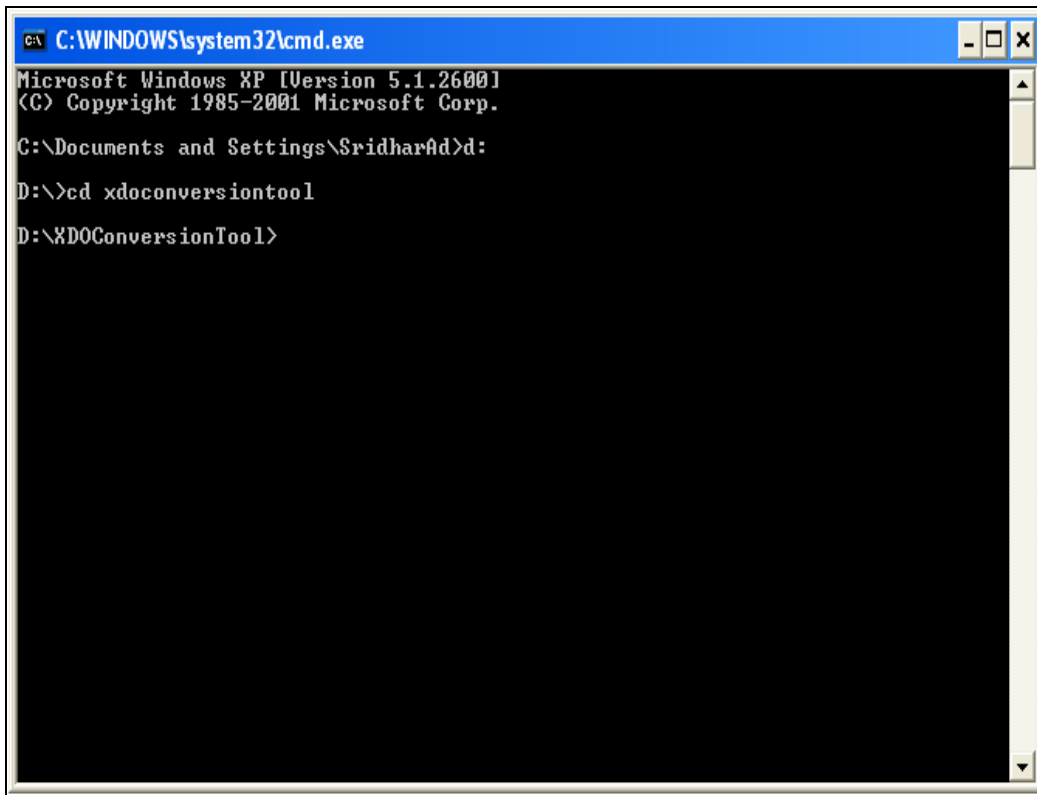
DEFAULT_DATA_SOURCE = FCI5dev

TEMPLATE_LABEL = General

- Copy your data template xml to path mention in TEMPLATE_XML_PATH.



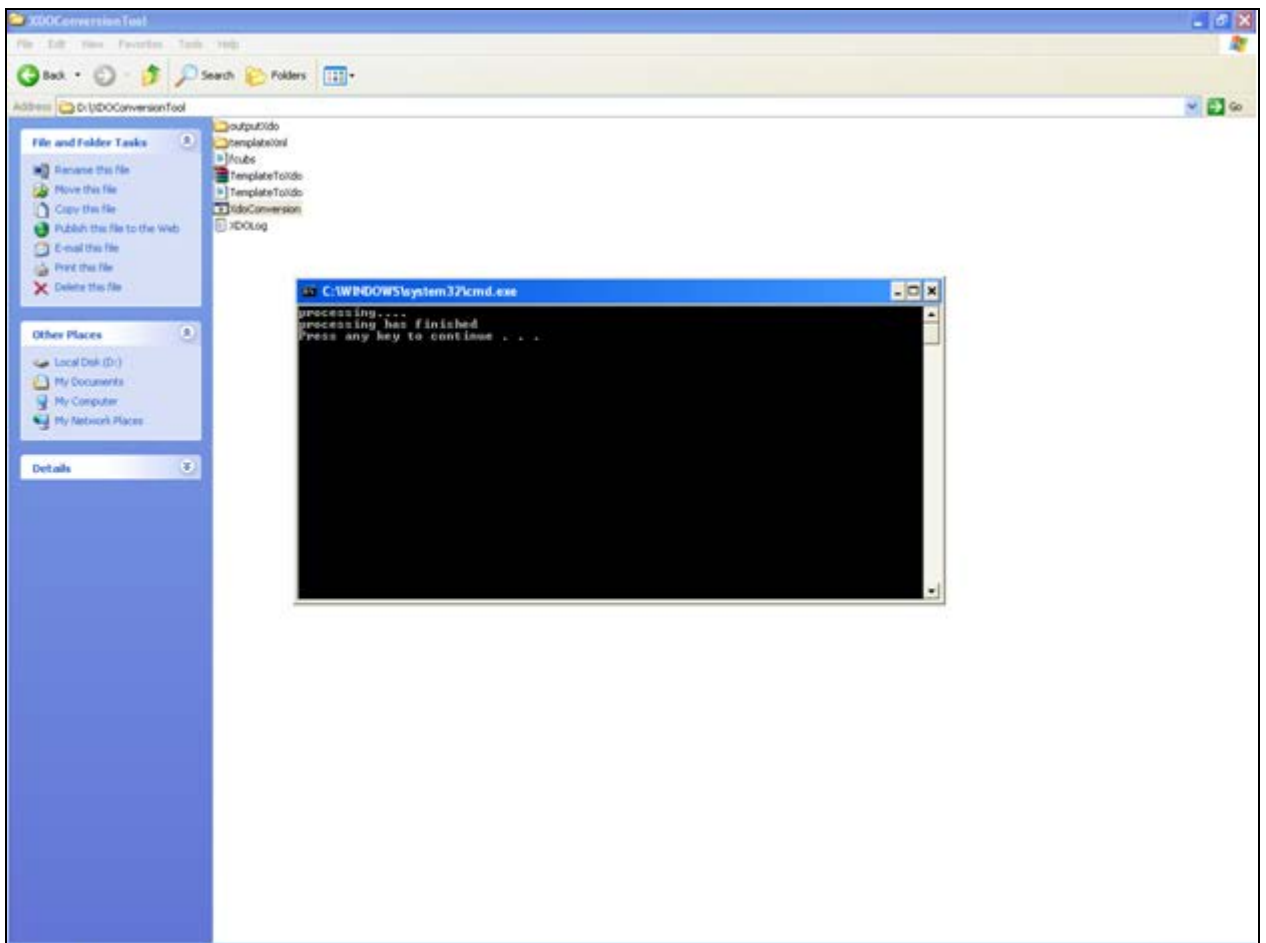
- Navigate to XDO tool conversion home directory in command prompt



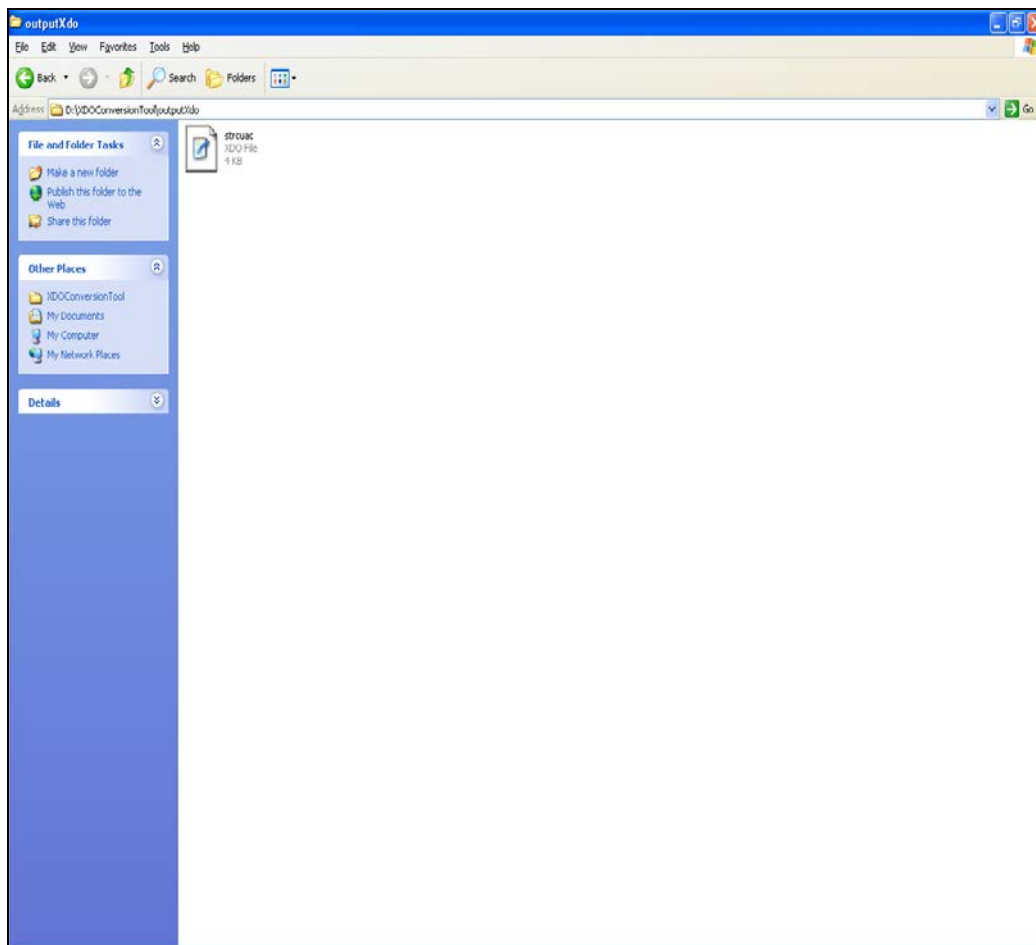
```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\SridharAd>d:
D:\>cd xdoconversiontool
D:\XDOConversionTool>
```


- Run XdoConversion.bat



- XDO will be created at OUTPUT_PATH



4. Developing screens for Report

This section explains the step to create the Open Development Report type function ID that integrates the given RTF and XDO file with FLEXCUBE IS screens.

4.1 Report Screens Design

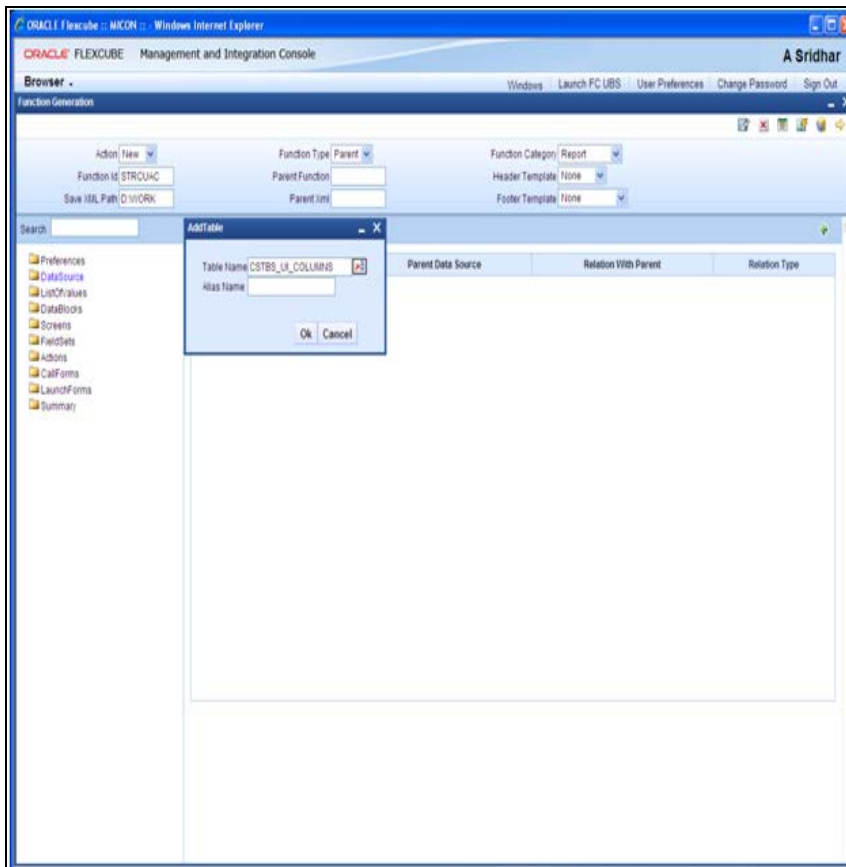
- Select function category as report

The screenshot shows the Oracle Flexcube Management and Integration Console. The main window is titled "Function Generation". The "Function Category" is set to "Report". The "Function ID" is "STRCUAC". The "Module" is "ST". The "Module Description" is "Static Maintenance". The "Function Type" is "Parent". The "Parent Function" is empty. The "Parent Item" is empty. The "Header Template" is "None". The "Footer Template" is "None". The "Save XML Path" is "D:\WORK".

The "Preferences" section is visible, showing a list of checkboxes for various preferences: Head Office Function, Auto End Of Day Aware, Logging Required, Auto Authorization, Tank Modifications, and Field Log Required. The "Module" is "ST". The "Module Description" is "Static Maintenance". The "Branch Program Id" is empty. The "Process Code" is empty. The "ClearCase Folder" is empty.

FunctionID	Module	Module Desc
STRCUAC	ST	Static Maintenance

- Select table name as CSTBS_UI_COLUMNS



- Select master data source as 'yes' and fill PK cols and PK Types

The screenshot displays the Oracle Flexcube Management and Integration Console interface. The top navigation bar includes the Oracle logo, the text 'FLEXCUBE Management and Integration Console', and the user name 'A Sridhar'. Below the navigation bar, there is a 'Function Generation' section with various dropdown menus and input fields for configuring a function. The main area is titled 'Data Source Details' and contains a search bar and a list of data sources on the left. The right side of the 'Data Source Details' section is configured for the 'CSTBS_UI_COLUMNS' data source. The 'Master' checkbox is checked, and the 'Relation Type' is set to 'One To One'. The 'Multi Record' checkbox is unchecked. The 'PK Cols' field is populated with 'CHAR_FIELD1', and the 'PK Types' field is populated with 'VARCHAR2'. The 'Parent' dropdown is set to 'CSTBS_UI_COLUMNS'. The 'Relation' dropdown is set to 'Normal'. The 'Where Clause' and 'Default Order By' fields are empty. The 'Type' dropdown is set to 'Normal', and the 'Mandatory' checkbox is unchecked.

Oracle FLEXCUBE Management and Integration Console

A Sridhar

Browser: Windows | Launch FC UBS | User Preferences | Change Password | Sign Out

Function Generation

Action: New | Function Type: Parent | Function Category: Report | Function ID: STRCUAC | Parent Function: | Header Template: None | Footer Template: None | Save XML Path: D:\WORK | Parent XML: |

Search: Data Source Details

Preferences | DataSource | CSTBS_UI_COLUMNS | ListOfValues | DataBooks | Screens | FieldSets | Actions | CallForms | LaunchForms | Summary

Data Source: CSTBS_UI_COLUMNS | Parent: | Master: Yes | Relation Type: One To One | Multi Record: No | PK Cols: CHAR_FIELD1 | PK Types: VARCHAR2 | Relation: | Where Clause: | Default Order By: | Type: Normal | Mandatory: ☐

- Add data columns for data source

The screenshot shows the Oracle Flexcube Management and Integration Console in a web browser. The user is logged in as 'A Sridhar'. The 'Function Generation' section is active, showing a 'New' action for a function named 'STRCUMC'. The function type is 'Parent', category is 'Report', and header/footer templates are set to 'None'. The save path is 'D:\WORK'.

The 'Data Source Field Details' section is visible, showing a search bar and a tree view of the data source structure. The tree view shows a folder 'CSTBS_LI_COLUMNS' containing several 'CHAR_FIELD' entries (CHAR_FIELD1 through CHAR_FIELD8). The 'Data Source Field Details' form is currently empty, with fields for 'Column Name', 'Data Type', 'Max Length', and 'Field Name'.

Column Name	Data Type	Max Length	Field Name
CHAR_FIELD1	CHAR44R2	1000	

- Enter query in LOV Query and click on populate

The screenshot shows the Oracle Flexcube Management and Integration Console interface. The top navigation bar includes links for Windows, Launch FC UBS, User Preferences, Change Password, and Sign Out. The user is logged in as A Sridhar.

The main section is titled "Function Generation" and contains several configuration fields:

- Action: New
- Function Type: Parent
- Function Category: Report
- Function Id: STRCUAC
- Parent Function: (empty)
- Header Template: None
- Save XML Path: D:\WORK
- Parent xml: (empty)
- Footer Template: None

Below these fields is the "List of Values Details" section. It includes a search bar and a table for defining the LOV query.

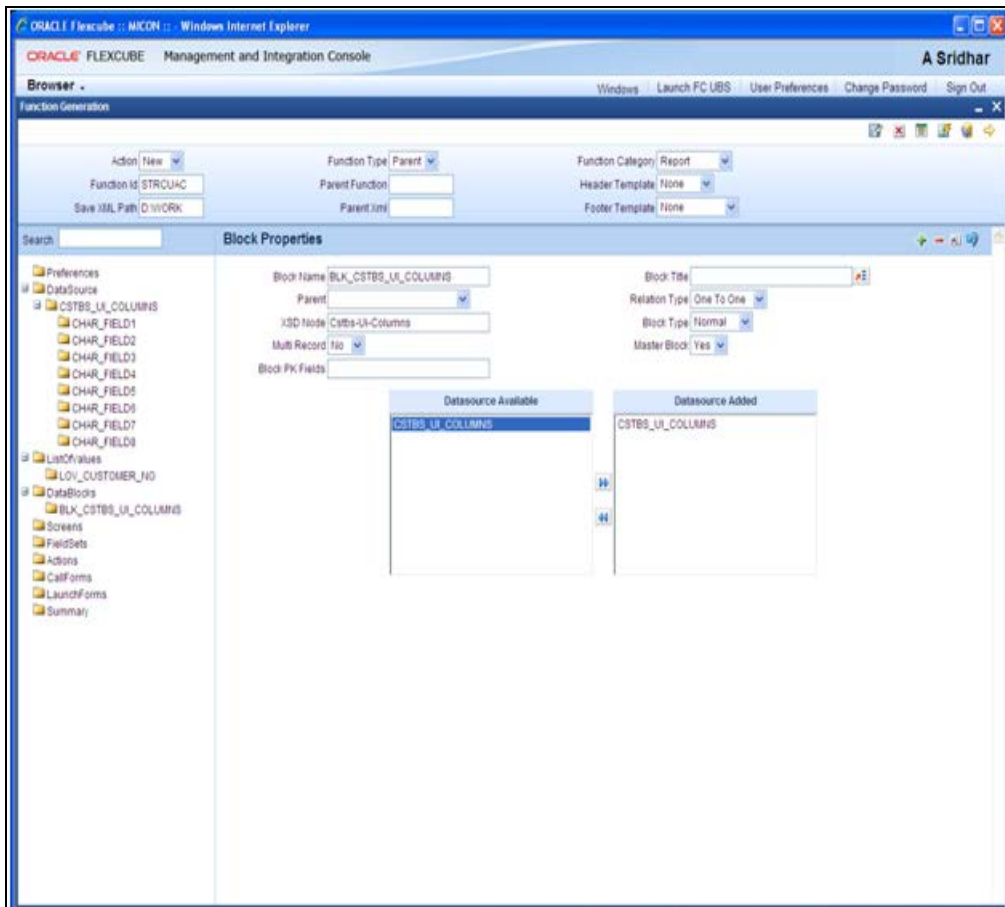
LOV Name: LOV_CUSTOMER_NO
 LOV Query: select cust_no from sttm_cust_account

Query Cols	DataType	Visible	Reln Fld	Reln Fld Type	Reln Col Label
☐ CUST_NO	VARCHAR2	Yes	Yes	TEXT	

A "Populate" button is located to the right of the table.

The left sidebar shows a tree view of the system structure, including folders for Preferences, DataSource, CSTBS_UI_COLUMNS, ListOfValues, and various other components.

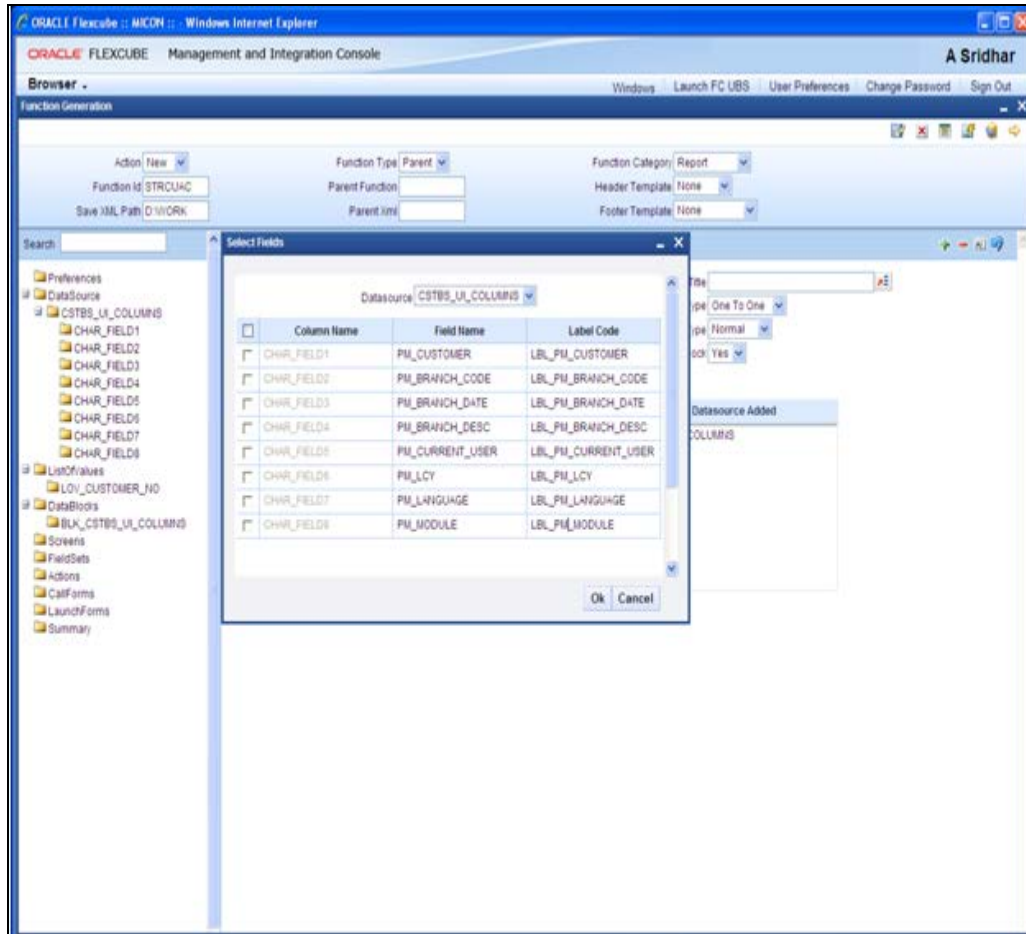
- Select master block as 'yes'



The table *CSTB_UI_COLUMNS* is used for report screen design. Columns can be selected from this table depending on the number and data types of “parameters” required for report generation.

Typically, in report screens there are many fields and some of them are required for pre processing and some parameters should be to send to BIP server for report generation. A new attribute “Report parameter” would be added to “Block Field Attributes” screen and this can be checked only for the fields which should be sent to BIP server. The report parameter name and the Block Field name should be same so that the parameters can be sent to BIP server automatically by FCIS Infrastructure.

- Add Block fields by right clicking on block and give the field names



- Specify field properties

ORACLE Flexcube :: MICON :: Windows Internet Explorer

ORACLE FLEXCUBE Management and Integration Console

A Sridhar

Browser - Windows Launch FC UBS User Preferences Change Password Sign Out

Function Generation

Action: New Function Id: STRCUCAC Save XML Path: D:\WORK

Function Type: Parent Parent Function: Parent Function Category: Report Header Template: None Footer Template: None

Search

Block Field Properties

* Field Name: PM_CUSTOMER
Field Label: LBL_PM_CUSTOMER
XSD Tag: PM_CUSTOMER
Display Type: Lov
Item Type: Database Item
Parent Field:
Related Block:
Related Field:
TextArea Rows:
Min Val:
Max Decimals:
LOV Name: LOV_CUSTOMER_NO
Fieldset Name:

* Data Type: Varchar2
DataSource: CSTBS_UI_COLUMNS
Max Length: 1000
* Field Size:
* Column Name: CHAR_FIELD1
Default Value:
Preview Value:
Accesskey Code:
TextArea Cols:
Max Val:
Mask Id:
Off Line LOV Name:
Image Source:

☐ Popup Edit Reqd
☒ Required
☒ Visible
☐ Input by LOV Only
☐ Calendar Text
☐ Select Multiple
☐ Uppercase Only
☒ LOV Validation Reqd
☐ Not Req In Xsd
☒ Report Parameter
☐ Read Only

Custom Attributes Events Bind Variables Return Fields

Return Fields Mapping

Query Column	Block Name	Return Fld Name
☐ CUST_NO	BLK_CSTBS_UI_COLUMNS	PM_CUSTOMER

- Select main screen checkbox and screen size as small

ORACLE Flexcube :: MICON :: Windows Internet Explorer

ORACLE FLEXCUBE Management and Integration Console A Sridhar

Browser . Windows Launch FC UBS User Preferences Change Password Sign Out

Function Generation

Action: New Function Id: STRCUCAC Save XML Path: D:\WORK

Function Type: Parent Parent Function: Parent Xref: Header Template: None Footer Template: None

Function Category: Report

Search

Screen Details

Screen Name: CYS_CSTBS_UI_COLL Screen Title: LBL_CUSTDETAILED Screen Size: Small Exit Button Type: Default Or Cancel

☒ Main Screen ☒ Visible

Populate + -

☐	Arg Name	Source Block	Source Field	Arg Value	Target Block	Target Field

Preferences
 Data Source
 CYS_CSTBS_UI_COLUMNS
 CHAR_FIELD1
 CHAR_FIELD2
 CHAR_FIELD3
 CHAR_FIELD4
 CHAR_FIELD5
 CHAR_FIELD6
 CHAR_FIELD7
 CHAR_FIELD8
 List of values
 LOI_CUSTOMER_NO
 Data Blocks
 BLK_CSTBS_UI_COLUMNS
 PM_CUSTOMER
 PM_BRANCH_CODE
 PM_BRANCH_DATE
 PM_BRANCH_DESC
 PM_CURRENT_USER
 PM_LCY
 PM_LANGUAGE
 PM_MODULE
 Screens
 CYS_CSTBS_UI_COLUMNS
 Field Sets
 Actions
 Call Forms
 Launch Forms
 Summary

- Specify the partition details

ORACLE Flexcube :: MICON :: Windows Internet Explorer

ORACLE FLEXCUBE Management and Integration Console A Sridhar

Browser - Windows Launch FC UBS User Preferences Change Password Sign Out

Function Generation

Action: New Function Type: Parent Function Category: Report
 Function ID: STRCUC Parent Function: Header Template: None
 Save XML Path: D:\WORK Parent XML: Footer Template: None

Search Section Details

Section Name: SEC_1 visible

Partition Details

Partition Si No	Partition Name *	Width	Sub-partitions
1	PART1	100	

Left sidebar tree:

- Preferences
- DataSource
 - CSTBS_UI_COLUMNS
 - CHAR_FIELD1
 - CHAR_FIELD2
 - CHAR_FIELD3
 - CHAR_FIELD4
 - CHAR_FIELD5
 - CHAR_FIELD6
 - CHAR_FIELD7
 - CHAR_FIELD8
- ListOfValues
 - LOV_CUSTOMER_NO
- DataBlocks
 - BK_CSTBS_UI_COLUMNS
 - PM_CUSTOMER
 - PM_BRANCH_CODE
 - PM_BRANCH_DATE
 - PM_BRANCH_DESC
 - PM_CREDIT_USER
 - PM_LOY
 - PM_LANGUAGE
 - PM_MODULE
- Screens
 - C/S_CSTBS_UI_COLUMNS
 - HEADER
 - BODY
 - TAB_MRN
 - SEC_1
 - FOOTER
- FieldSets
- Actions
- CalForms
- LaunchForms
- Summary

- Specify field set properties

ORACLE FLEXCUBE :: MICRON :: Windows Internet Explorer

ORACLE FLEXCUBE Management and Integration Console

A Sridhar

Browser - Windows Launch FC UBS User Preferences Change Password Sign Out

Function Generation

Action: New Function Type: Parent Function Category: Report

Function Id: STRCUCAC Parent Function: Header Template: None

Save XML Path: D:\WORK Parent Item: Footer Template: None

Search

Fieldset Properties

Fieldset Name: FST_CSTBS_UI_COLUMNS Screen Name: CYS_CSTBS_UI_COLUMNS

Fieldset Label: LRL_CUSTDETDETAILED Screen Portion: Body

Data Block: BLK_CSTBS_UI_COLUMNS Tab Name: TAB_MAIN

Multi Record: No View Type: Single Section Name: SEC_1

Fieldset Height: Partition Name: PART1

No Of Rows: Fieldset Width:

☐ Horizontal Fieldset

☐ ReadOnly

☐ Navigation Button

☒ Visible

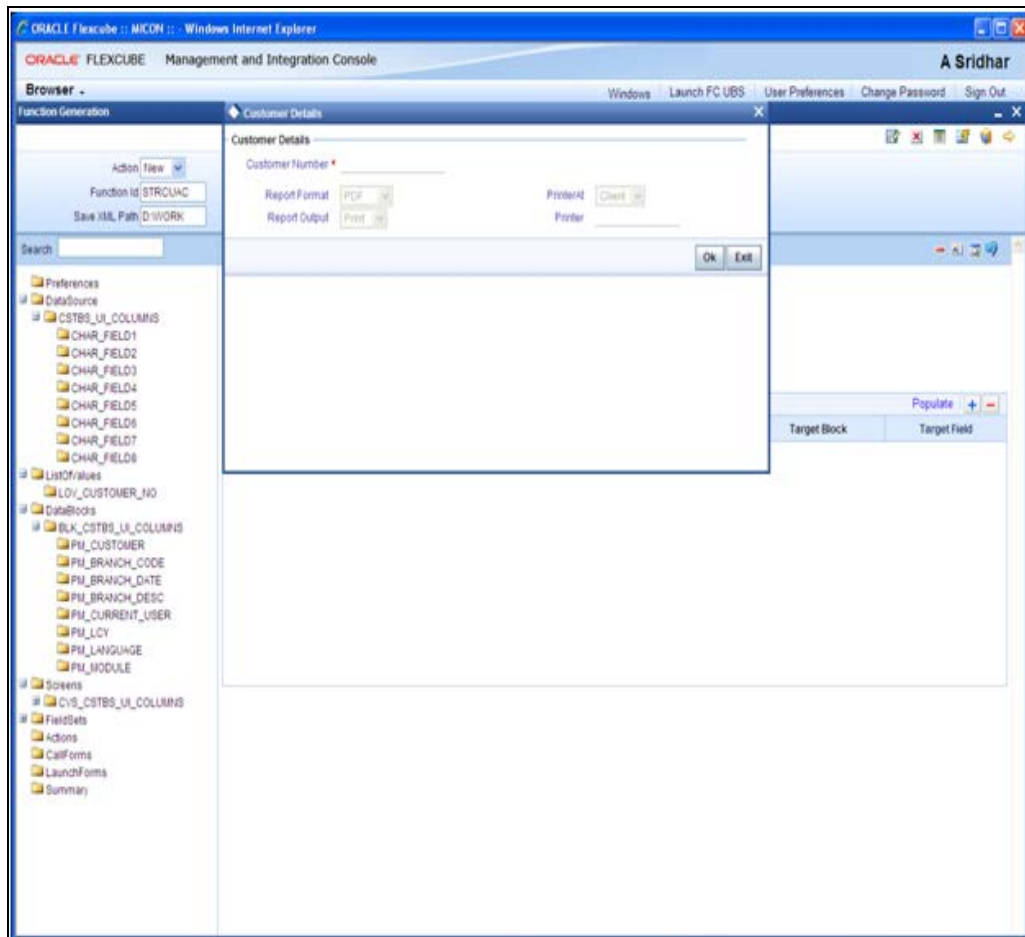
Data Block Fields

Field Set Fields	Subpartition Name
☐ PM_CUSTOMER	
☐ PM_BRANCH_CODE	
☐ PM_BRANCH_DATE	
☐ PM_BRANCH_DESC	
☒ PM_CURRENT_USER	
☐ PM_LCY	
☐ PM_LANGUAGE	
☐ PM_MODULE	

Left Panel Tree:

- Preferences
 - DataSource
 - CSTBS_UI_COLUMNS
 - CHAR_FIELD1
 - CHAR_FIELD2
 - CHAR_FIELD3
 - CHAR_FIELD4
 - CHAR_FIELD5
 - CHAR_FIELD6
 - CHAR_FIELD7
 - CHAR_FIELD8
 - ListOfValues
 - LOV_CUSTOMER_NO
 - DataBlocks
 - BLK_CSTBS_UI_COLUMNS
 - PM_CUSTOMER
 - PM_BRANCH_CODE
 - PM_BRANCH_DATE
 - PM_BRANCH_DESC
 - PM_CURRENT_USER
 - PM_LCY
 - PM_LANGUAGE
 - PM_MODULE
 - Screens
 - CYS_CSTBS_UI_COLUMNS
 - HEADER
 - BODY
 - TAB_MAIN
 - SEC_1
 - FOOTER
 - FieldSets
 - FST_CSTBS_UI_COLUMNS
 - Actions
 - CalForms
 - LaunchForms
 - Summary

- Preview the screen



- Save and Generate the files

ORACLE Flexcube :: MICON :: Windows Internet Explorer

ORACLE FLEXCUBE Management and Integration Console A Sridhar

Browser - Windows Launch FC UBS User Preferences Change Password Sign Out

Function Generation

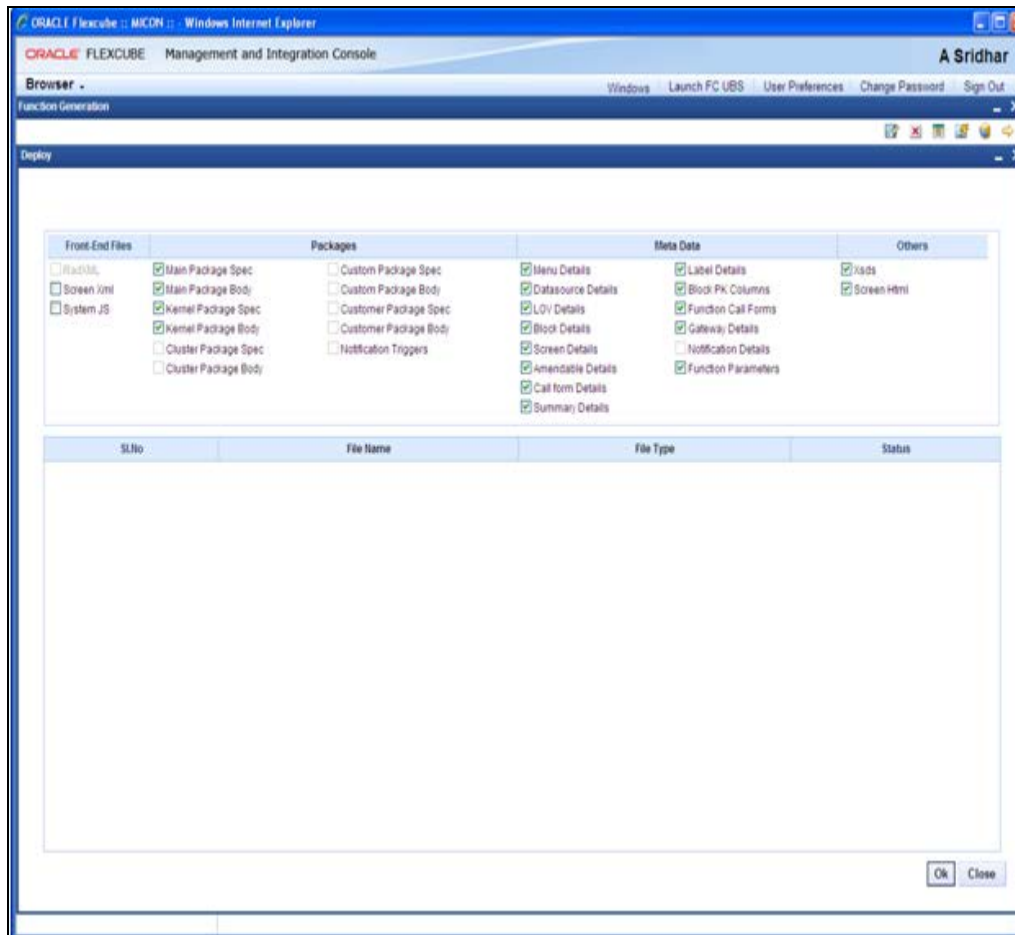
Generate

Front-End Files	Packages	Meta Data	Others
☒ RadOML	☒ Main Package Spec	☒ Menu Details	☒ xsds
☒ Screen.html	☒ Main Package Body	☒ Datasource Details	☒ Screen.html
☒ System.js	☒ Kernel Package Spec	☒ LOV Details	
	☒ Kernel Package Body	☒ Block Details	
	☒ Cluster Package Spec	☒ Screen Details	
	☐ Cluster Package Body	☒ Amendable Details	
		☒ Call form Details	
		☒ Summary Details	
	☐ Custom Package Spec		
	☐ Custom Package Body		
	☐ Customer Package Spec		
	☐ Customer Package Body		
	☐ Notification Triggers		
		☒ Label Details	
		☒ Block PK Columns	
		☒ Function Call Forms	
		☒ Gateway Details	
		☐ Notification Details	
		☒ Function Parameters	

SLNo	File Name	File Type	Status
1	STRCUAC.html	UML	Generated
2	STRCUAC_SYS.js	JS	Generated
3	STRCUAC__CYS_CSTBS_UI_COLUMNS__TAB_HEADER.html	HTML	Generated
4	STRCUAC__CYS_CSTBS_UI_COLUMNS__TAB_MAIN.html	HTML	Generated
5	STRCUAC__CYS_CSTBS_UI_COLUMNS__TAB_FOOTER.html	HTML	Generated
6	stpxs_strcuac_main.spc	SPC	Generated
7	stpxs_strcuac_kernel.spc	SPC	Generated
8	stpxs_strcuac_main.sql	SQL	Generated
9	stpxs_strcuac_kernel.sql	SQL	Generated
10	CSTB_FIELD_LABELS__STRCUAC.INC	INC	Generated
11	CSTB_OTHER_LABELS__STRCUAC.INC	INC	Generated
12	CSTB_LOV_INFO__STRCUAC.INC	INC	Generated
13	CSTB_SUMMARY_INFO__STRCUAC.INC	INC	Generated
14	STTB_AUDIT_PK_COLS__STRCUAC.INC	INC	Generated
15	CSTB_FIO_DATA_BLOCKS__STRCUAC.INC	INC	Generated
16	CSTB_FIO_DATA_SOURCES__STRCUAC.INC	INC	Generated

OK Close

- Deploy the files



- Deploy the generated UIXML and JS file in the server.

4.1.1 Static Data Change for Reports Functions

- The function ID for all reports will now have third character as 'R'
- The type string for report function ID in SMTB_MENU will be 'R'
- The routing type for report function ID in SMTB_MENU will be 'R'

4.2 Copy Files to BIP Server

- Copy XDO's and RTF files at the BIP server



BIP Server properties needs to be configured in FCIS INFRA properties file as below

```

217 NOTIFY_MDB_JMS_Q_DELIVERY_OPT      =2
218 NOTIFY_MDB_JMS_Q_TIME_TO_LIVE     =0
219 NOTIFY_MDB_JMS_Q_PRIORITY          =7
220
221 #NOTIFY_MDB_JMS_DEST_Q_ICF          =null
222 #NOTIFY_MDB_JMS_DEST_Q_PROVIDER_URL =null
223 #NOTIFY_MDB_JMS_DEST_Q_SECURITY_PRINCIPAL =null
224 #NOTIFY_MDB_JMS_DEST_Q_SECURITY_CREDENTIALS =null
225 NOTIFY_MDB_JMS_DEST_TCF             =NotifyTCF
226 NOTIFY_MDB_JMS_DEST_TOPIC_NAME      =NOTIFY_DEST_TOPIC
227
228 # properties moved from GateWay Properties ends
229
230
231 APPLICATION_TITLE                   =FLEXCUBE UBS Version 11.3.0.0.0.0.0
232 APPLICATION_COPYRIGHTS              =Copyright © 2011, Oracle and/or its affiliates. All rights reserved.
233 # FCJ: BODYLogin, FCIS: BODYFCISLogin, FGL: BODYFGLLogin
234 APPLICATION_IMAGE                   =BDYLogin
235
236
237
238 #####10.4 Changes: BIP SERVER PROPERTIES#####
239 REPORTS_ENABLED                     =Y
240 BIP_END_POINT                       =http://10.184.74.165:9704/xmlpserver/services/PublicReportService_v11
241 BIP_NAME_SPACE                      =http://xmlns.oracle.com/oxp/service/PublicReportService
242 BIP_USERNAME                        =r9e04zq+l/1orG4XTbwUfw==
243 BIP_PASSWORD                        =r9e04zq+l/1orG4XTbwUfw==
244 BIP_REPORT_FOLDER                   =FCReports
245 BIP_ADVICE_FOLDER                   =FCReports/Adv/
246 BIP_ADV_SPOOL_PATH                 =/oraint1/appsrvs/fcubs_logs/fcubs113/BrnDogs/ADV/
247 BRANCH_ADV_TYPE                     =NATIVE
248
249
250 #EMS PROPERTIES
251 EMS_EXT_QCF                         =EmsQcf
252 EMS_INT_QCF                         =EmsQcf
253 EMS_OUT_JMS_DLQ                     =NOTIFY_QUEUE_DLQ
254 EMS_IN_JMS_DLQ                      =NOTIFY_QUEUE_DLQ
255 EMS_IN_BKUP_QUEUE                   =
256 EMS_INIT_CTX_FACT                   =weblogic.jndi.WLInitialContextFactory
257 EMS_PRVDR_URL                       =t3://127.0.0.1:7001
258 EMS_QUEUE_PRINCIPAL                 =
259 EMS_QUEUE_CREDENTIALS               =2fb0x66Q$ug=
260 EMS_FILE_TRANSFER_MODE              =FTP

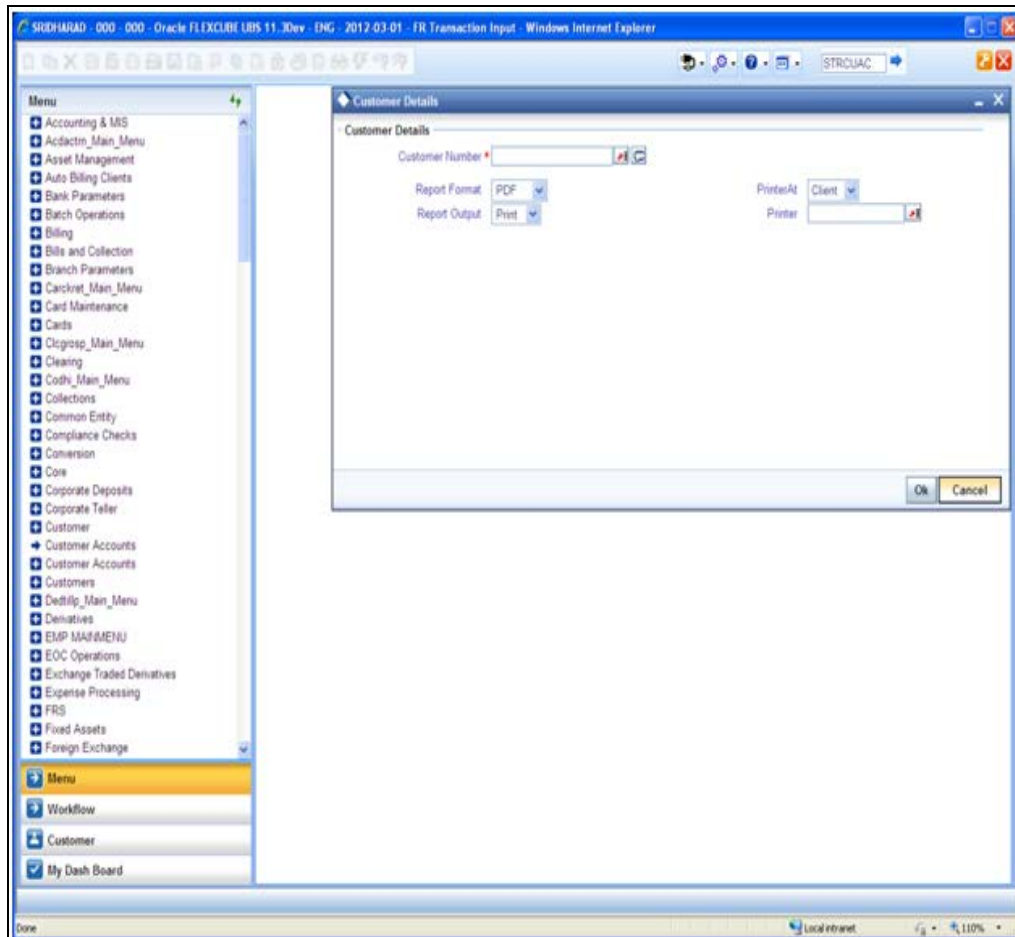
```

4.2.1 Declaration of Parameters in Spec of the Package

PM_BRANCH_CODE	VARCHAR2(3);
PM_BRANCH_DATE	VARCHAR2(11);
PM_BRANCH_DESC	VARCHAR2(35);
PM_CURRENT_USER	VARCHAR2(11);
PM_LCY	VARCHAR2(3);
PM_LANGUAGE	VARCHAR2(3);
PM_MODULE	VARCHAR2(2);
PRM_AEOD_KEY	VARCHAR2(30);
PM_SYSTIME	VARCHAR2(11);
PM_DATE_TIME	VARCHAR2(32767);
PM_CUSTOMER	VARCHAR2(20);

5. Test report

- Launch the Target FLEXCUBE URL
- Select the Report function ID that is developed

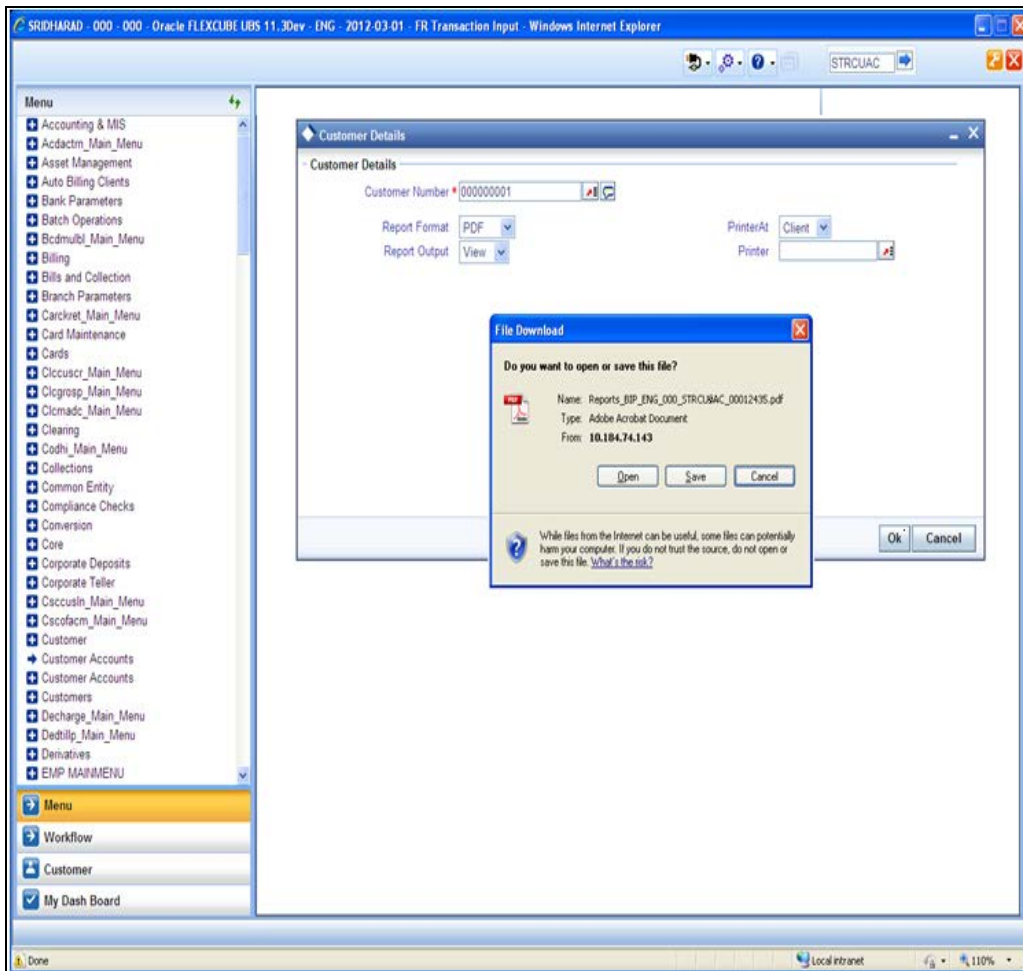


- Open Development Tool would automatically add the Report Options for all report screens

These report options are

- Report Format
- Report Output (Print, Spool, View)
- Print At (Client/Server)
- Printer ID

The report screen after data entry would call FCIS back end for any pre processing and upon receiving successful response from pre processing, request would be sent to BIP server for report generation.



- View report

Reports_BIP_ENG_000_STRCUAC_00012436[1].pdf - Adobe Reader

File Edit View Document Tools Window Help

2 / 3 93.3%

Customer Accounts

Branch	000	Branch Date	01-MAR-2012	Page	2
User Id	SRIDHARAD	Date & Time	26-APR-2011 09:25:15	Module	ST

CUST_NO	CUST_AC_NO	ACY_AVL_BAL
000000001	00000000101	0
000000001	00000000102	0
000000001	00000000103	0
000000001	00000000104	0
000000001	ACH00000103	0
000000001	00000000121	0
000000001	00000000120	0
000000001	INT00000102	0
000000001	00000000143	0
000000001	00000000154	0
000000001	066ACC0000011	0
000000001	00000000153	0
000000001	00000000173	0
000000001	00000000174	0
000000001	0661200000012	0
000000001	00000000179	-100
000000001	00000000145	0
000000001	00000000176	0
000000001	066ACC0000014	0
000000001	066ACC0000015	0
000000001	00100000122	0
000000001	03800000105	0
000000001	00000000144	-100
000000001	00000000177	0
000000001	00000000178	0
000000001	0661200000011	0
000000001	00000000118	0
000000001	00000000119	0



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[October] [2015]
Version 12.1.0.0.0

Oracle Financial Services Software Limited
Oracle Park
Off Western Express Highway
Goregaon (East)
Mumbai, Maharashtra 400 063
India

Worldwide Inquiries:
Phone: +91 22 6718 3000
Fax: +91 22 6718 3001
www.oracle.com/financialservices/

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