

BIP Report Integration
Oracle FLEXCUBE Investor Servicing
Release 14.1.0.0.0
[May] [2019]



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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

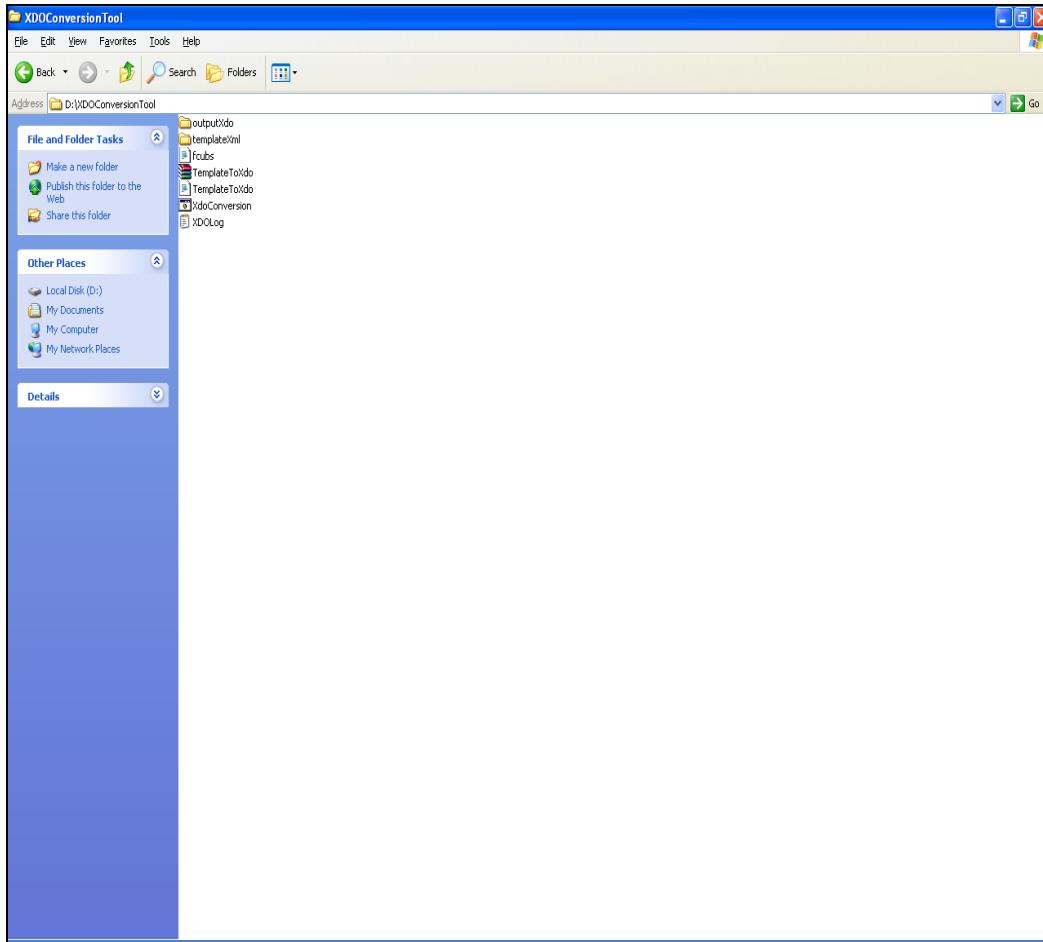
2.1 How to use this Guide

- [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.

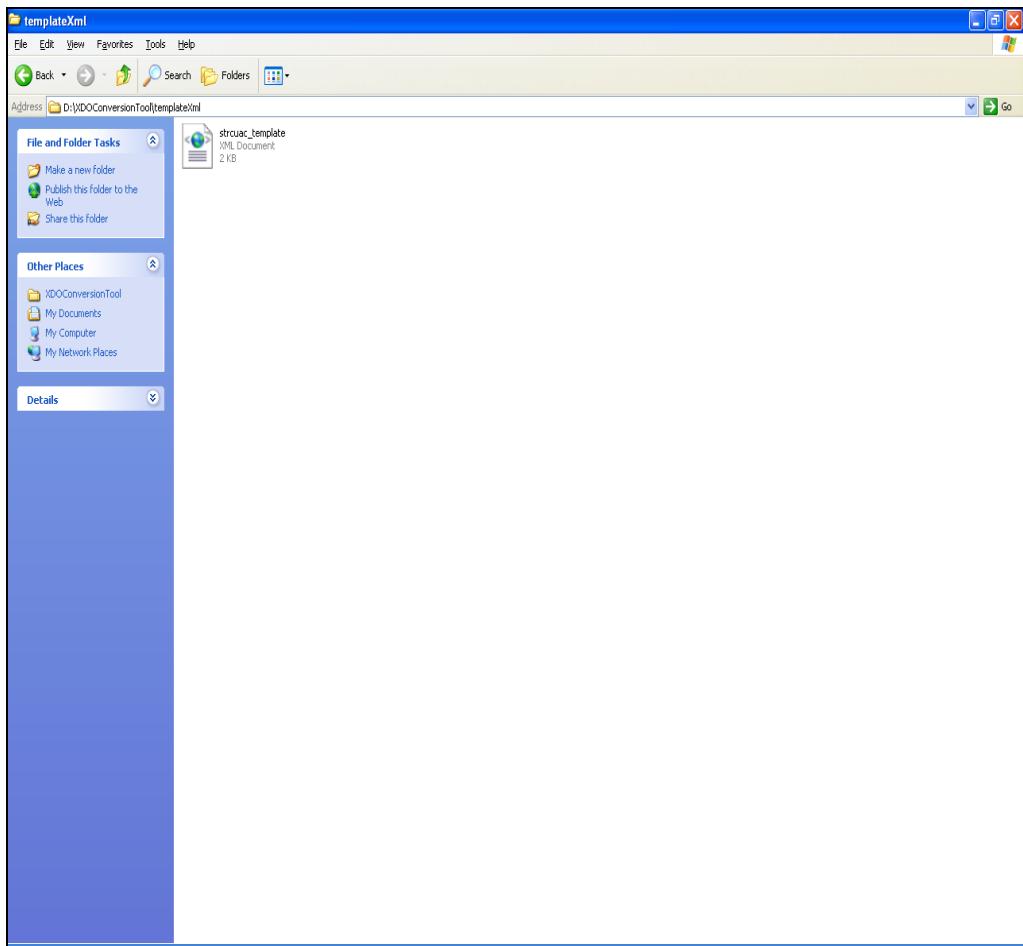
TEMPLATE_XML_PATH is the path where template xml file created is placed.

OUTPUT_PATH is where the XDO will be generated.

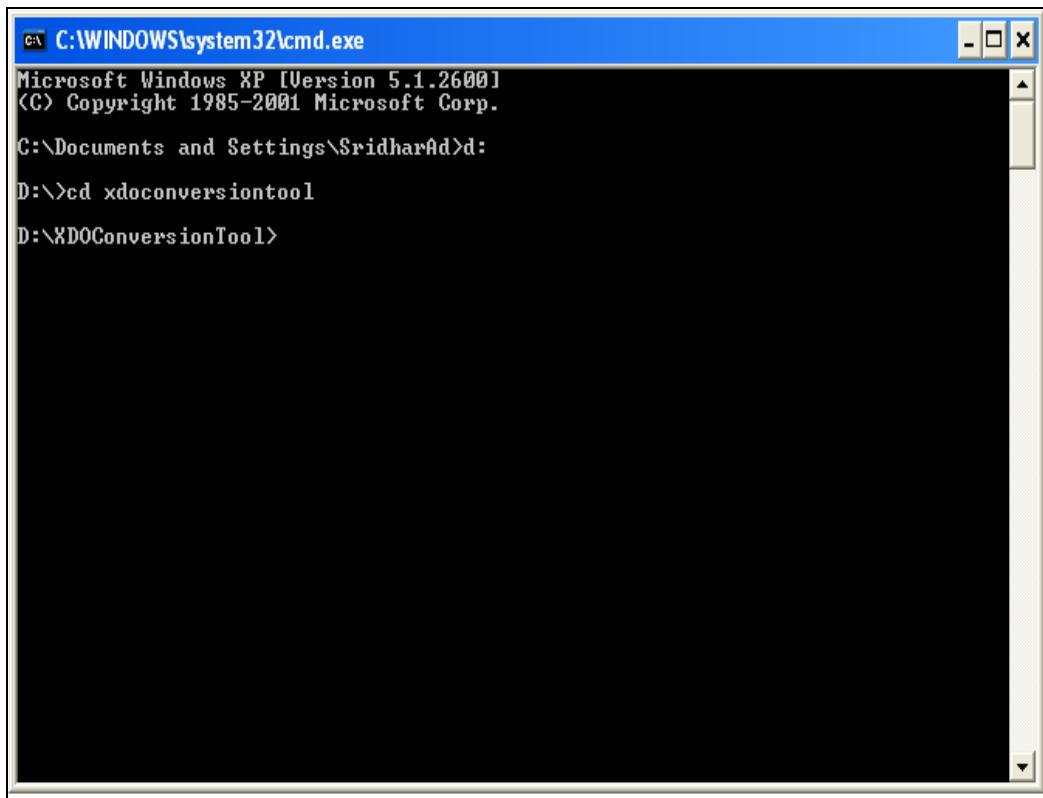
PRIMARY

```
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.

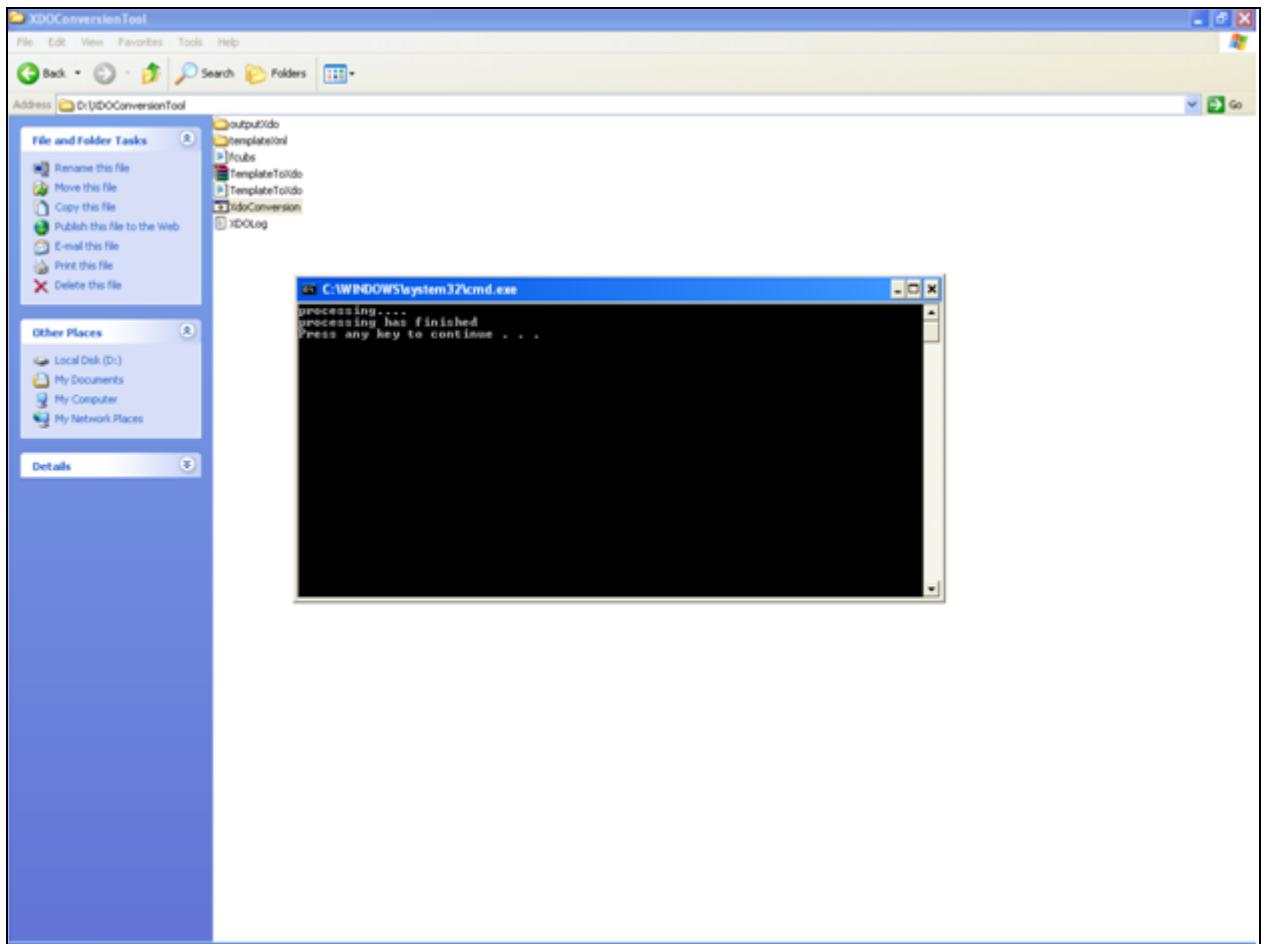


- Navigate to XDO tool conversion home directory in command prompt

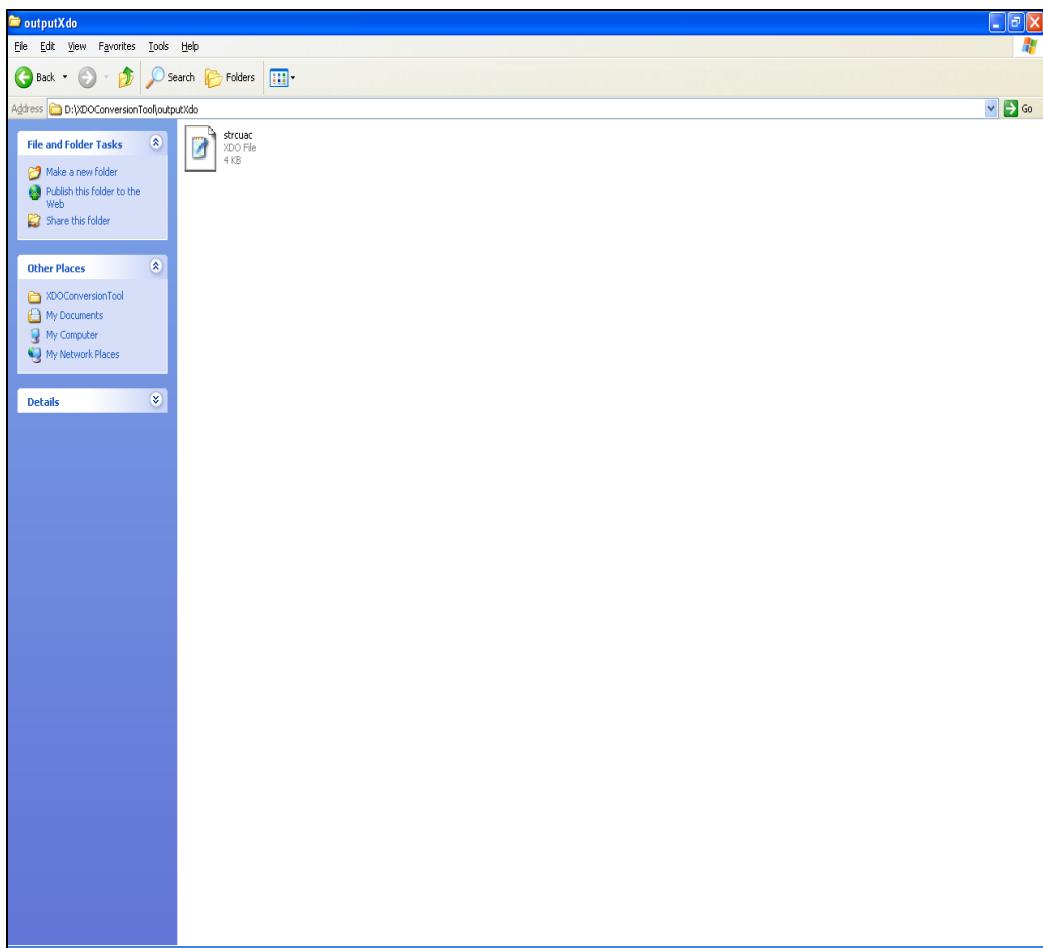


A screenshot of a Windows XP Command Prompt window titled "cmd C:\WINDOWS\system32\cmd.exe". The window shows the following text:
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\Sridhar\>d:
D:\>cd xdoconversiontool
D:\XDOConversionTool>

- Run XdoConversion.bat



- XDO will be created at OUTPUT_PATH

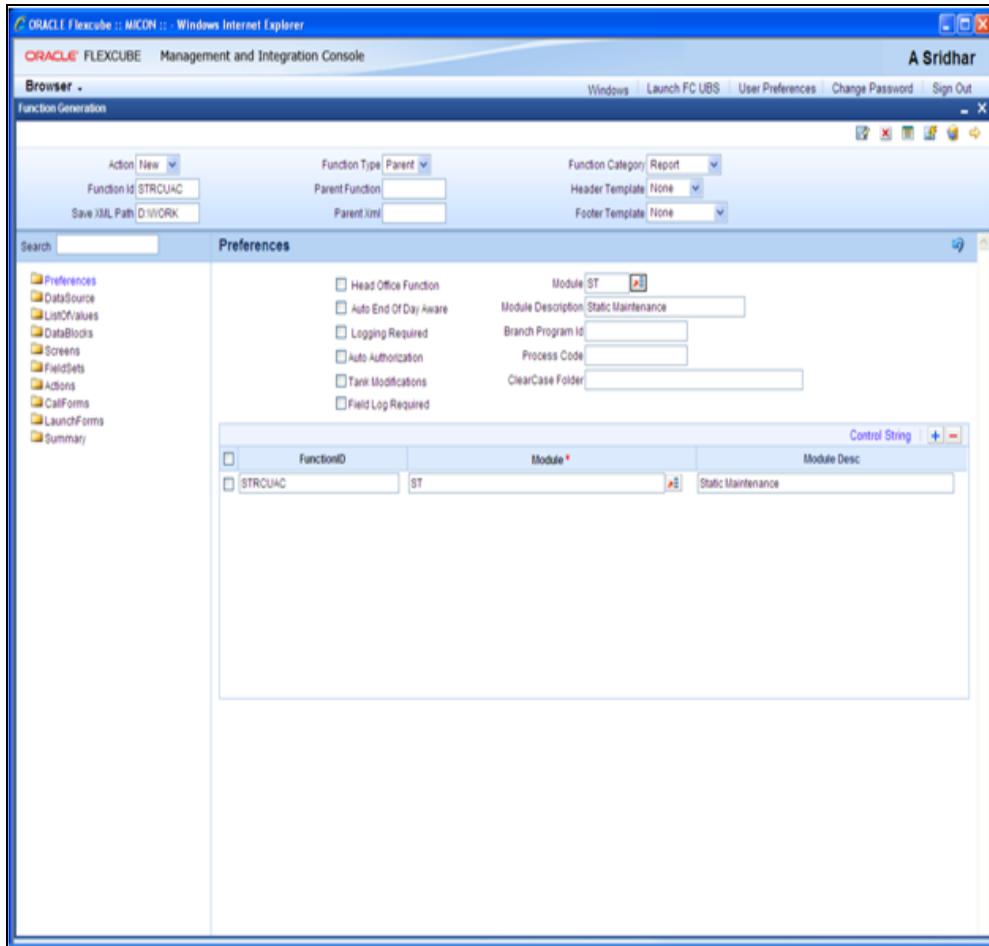


4. Developing screens for Report

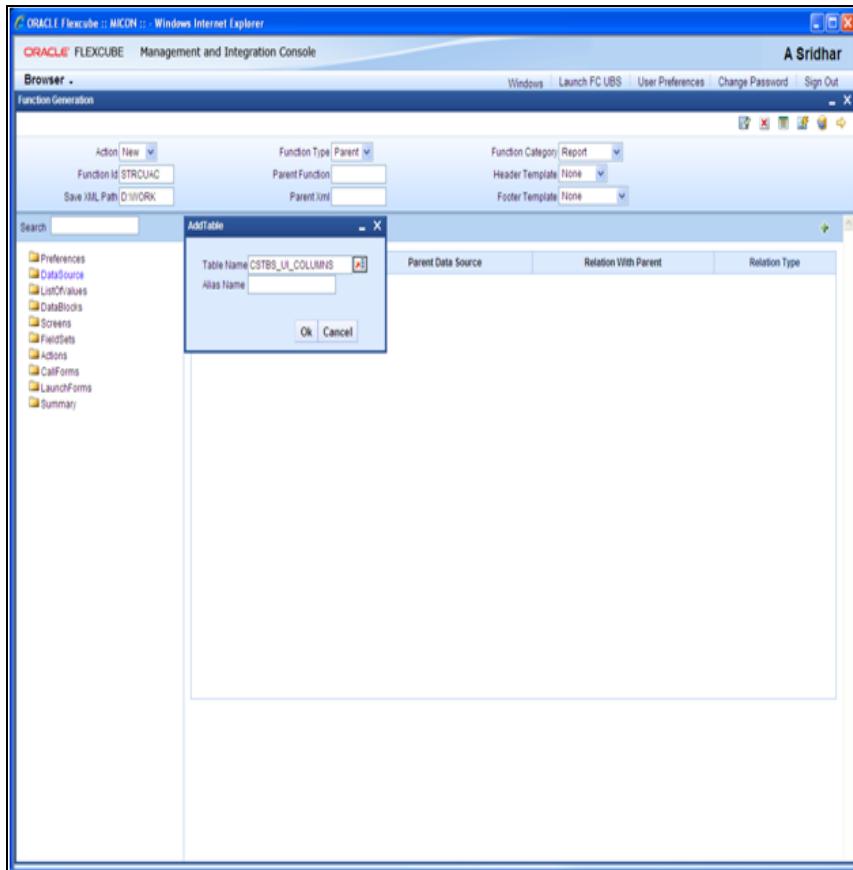
This section explains the step to create the Open Development Report type function ID that integrates the given RTF and XDO file with FLEXCUBE IS screens.

4.1 Report Screens Design

- Select function category as report



- Select table name as CSTBS_UI_COLUMNS



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

The screenshot shows the Oracle Flexcube Management and Integration Console interface. The title bar reads "ORACLE FLEXCUBE :: MICON :: Windows Internet Explorer". The main window is titled "Function Generation" and displays the "Data Source Details" configuration screen.

Function Generation

Data Source Details

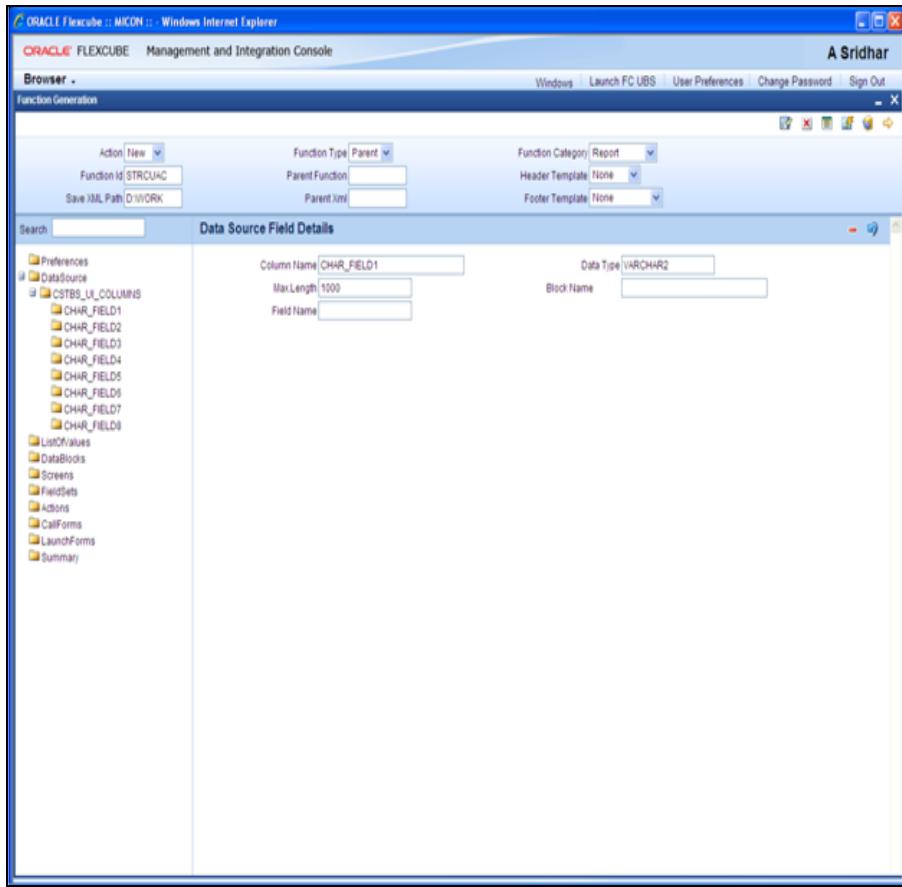
Configuration fields include:

- Action: New
- Function Type: Parent
- Function Category: Report
- Header Template: None
- Footer Template: None
- Function Id: STRUCAC
- Parent Function: (empty)
- Save XML Path: D\WORK
- Parent XML: (empty)
- Search: (empty)
- Data Source: CSTB95_UI_COLUMNS
- Master: Yes
- Relation Type: One To One
- Multi Record: No
- PK Col: CHAR_FIELD1
- PK Types: VARCHAR2
- Parent: (empty)
- Where Clause: (empty)
- Default Order By: (empty)
- Type: Normal
- Mandatory: (unchecked)

The left sidebar contains a navigation tree with the following items:

- Preferences
- DataSource
 - CSTB95_UI_COLUMNS
- ListValues
- DataBlocks
- Screens
- Fieldsets
- Actions
- CallForms
- LaunchForms
- Summary

- Add data columns for data source



- 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 identified as A Sridhar.

The main window title is "List of Values Details". On the left, there is a sidebar with a tree view containing nodes like Preferences, DataSources, CSTRB5_UI_COLUMNS, and ListOfValues. Under ListOfValues, there is a node for LOV_CUSTOMER_NO.

The main panel contains several input fields and dropdown menus:

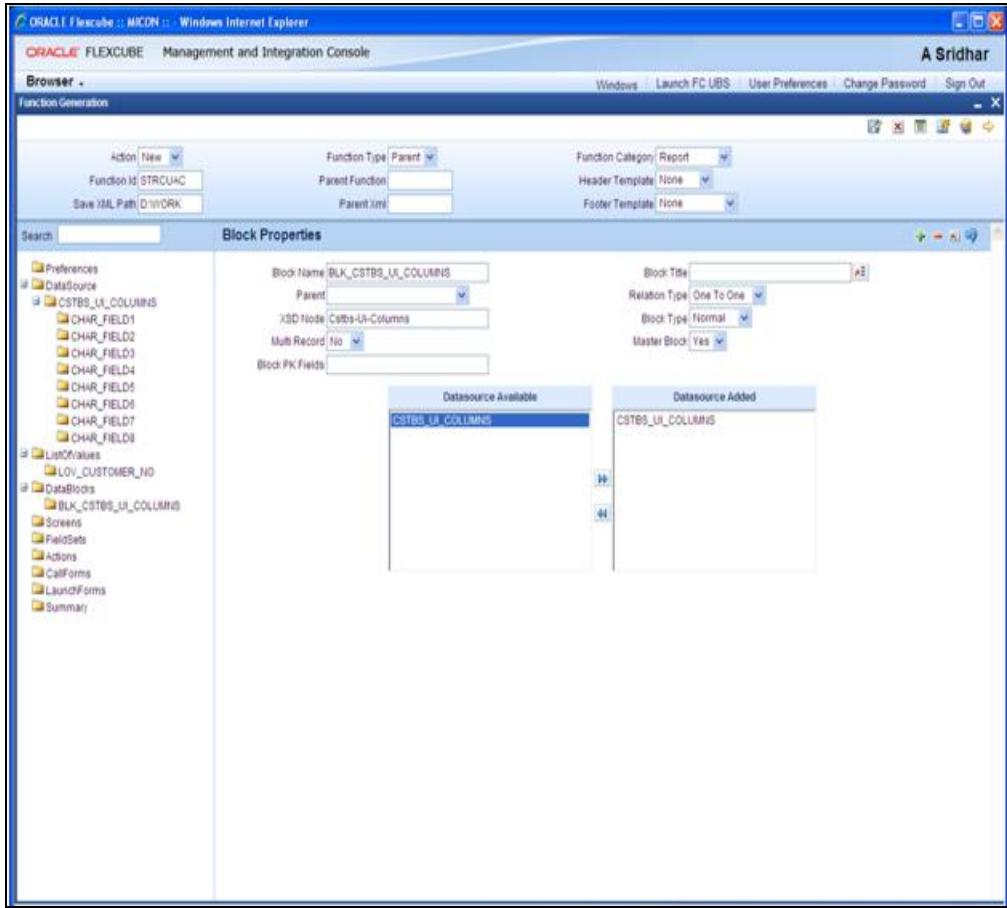
- Action: New
- Function Id: STRCUAC
- Save XML Path: D:\WORK
- Function Type: Parent
- Parent Function: (empty)
- Function Category: Report
- Header Template: None
- Footer Template: None

The LOV Name is set to "LOV_CUSTOMER_NO" and the LOV Query is "selected cust_no from strm_cust_account".

A table titled "Populate" is displayed, showing the following data:

	Query Cols	DataType	Visible	Rdn Fld	Redn Fld Type	RednCol Label
<input checked="" type="checkbox"/>	CUST_NO	VARCHAR2	Yes	Yes	TEXT	

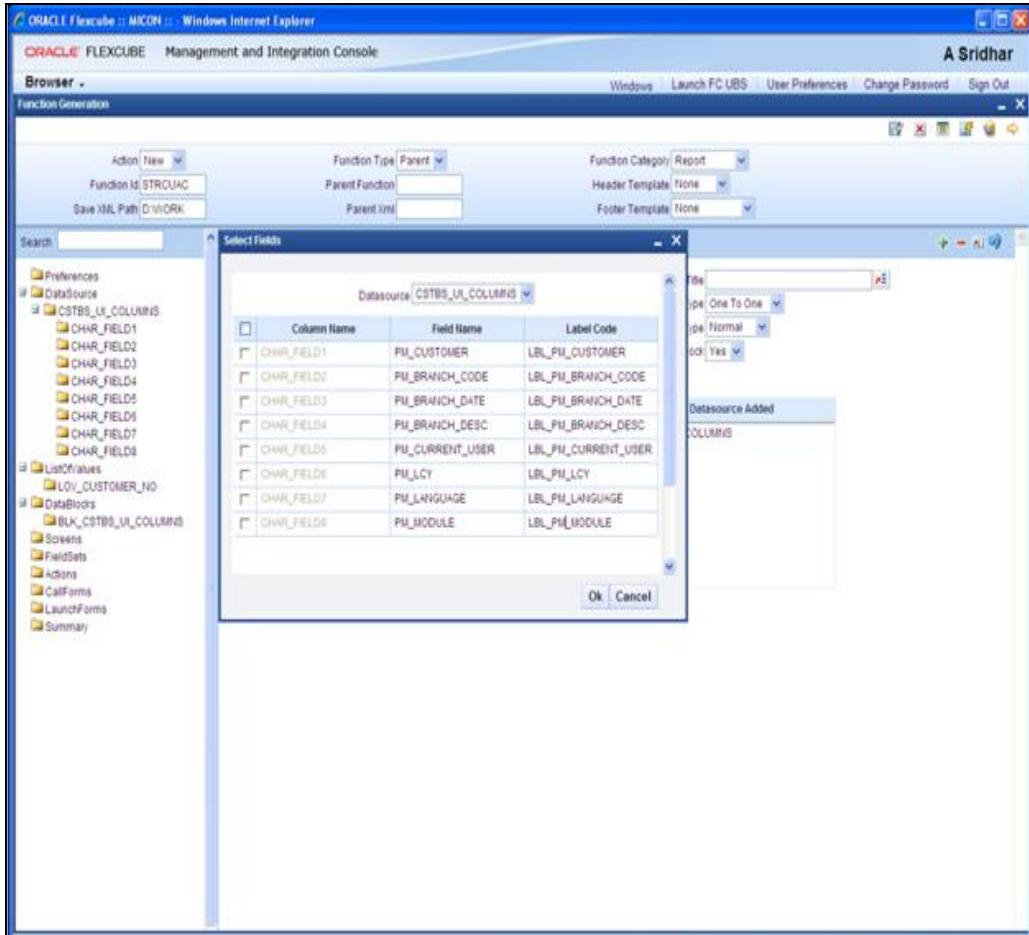
- Select master block as 'yes'



The table `CSTB9C` 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 sent 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

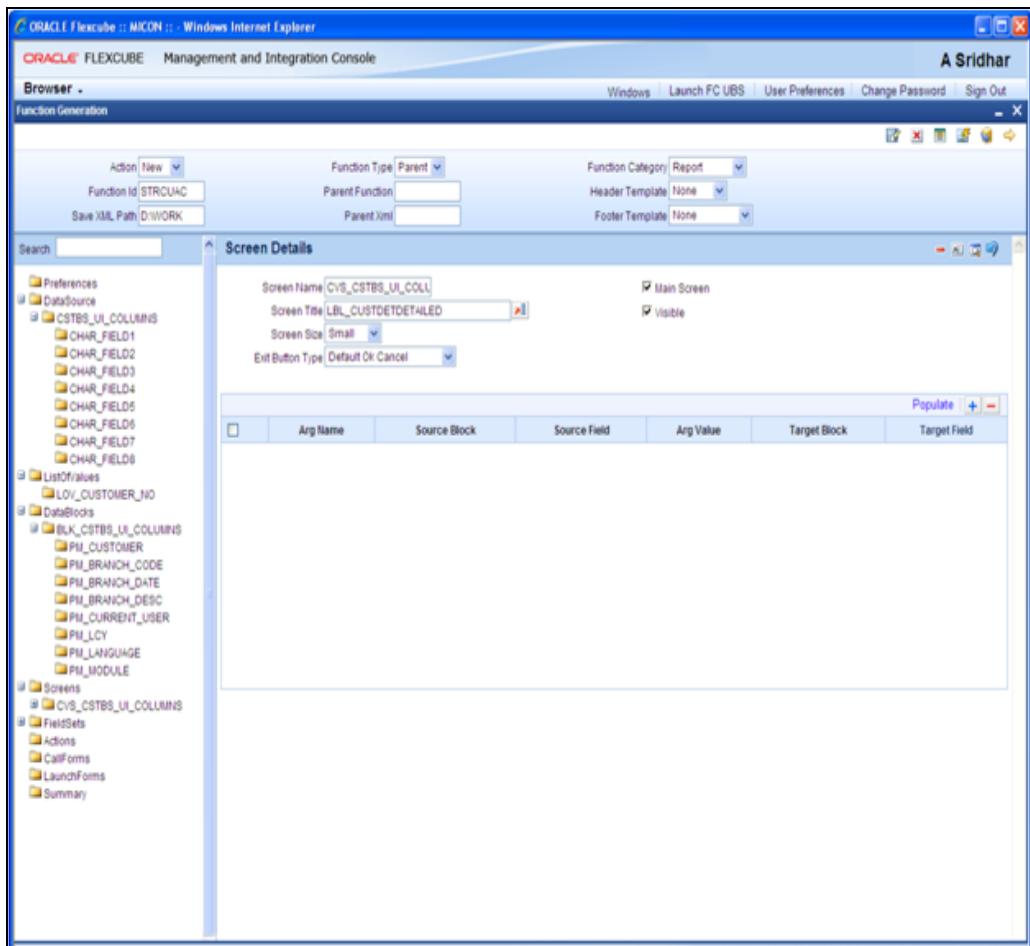
The screenshot shows the Oracle Flexcube Management and Integration Console interface. The main title bar reads "ORACLE FLEXCUBE :: MIDON :: Windows Internet Explorer". Below it, the sub-header says "ORACLE FLEXCUBE Management and Integration Console". The top right corner shows the user "A Sridhar". The menu bar includes "Windows", "Launch FC UBS", "User Preferences", "Change Password", and "Sign Out".

The central area is titled "Block Field Properties" for a field named "PM_CUSTOMER". The left sidebar lists various database objects like "CSTBS_UI_COLUMNS", "CHAR_FIELD1", etc. The main panel contains several configuration tabs: "Field Name" (PM_CUSTOMER), "Field Label" (LBL_PM_CUSTOMER), "XSD Tag" (PM_CUSTOMER), "Display Type" (LoV), "Item Type" (Database Item), "Parent Field" (None), "Related Block" (None), "Text Area Rows" (10), "Min. Val" (None), "Max. Decimals" (None), "Lov Name" (LOV_CUSTOMER_NO), "Field Name" (None), "Data Type" (Number), "DataSource" (CSTBS_UI_COLUMNS), "Max Length" (1000), "Field Size" (None), "Column Name" (CHAR_FIELD1), "Default Value" (None), "Preview Value" (None), "Accessibility Code" (None), "Text Area Cols" (None), "Max. Val" (None), "Mask Id" (None), "Off Line Lov Name" (None), "Image Source" (None). There are also checkboxes for "Required", "Visible", "Input by LoV Only", "Calendar Text", "Select Multiple", "Uppercase Only", "Lov Validation Req'd", "Not Req in Xsd", "Report Parameter", and "Read Only".

Below the main panel, there are tabs for "Custom Attributes", "Events", "Bind Variables", and "Return Fields". The "Return Fields Mapping" section shows a table:

Default From Lov Definition		
Query Column	Block Name	Return Fld Name
CUST_NO	BLK_CSTBS_UI_COLUMNS	PM_CUSTOMER

- Select main screen checkbox and screen size as small



- Specify the partition details

The screenshot shows the Oracle Flexcube Management and Integration Console interface. The title bar reads "ORACLE Flexcube :: MICON :: Windows Internet Explorer" and "ORACLE FLEXCUBE Management and Integration Console". The user "A Sridhar" is logged in.

The main window is titled "Function Generation". It has several input fields at the top:

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

Below these fields is a "Section Details" section. On the left is a tree view of project components:

- 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
 - CVS_CSTBS_UI_COLUMNS
 - HEADER
 - BODY
 - TAB_MAIN
 - SEC_1
 - FOOTER
- FieldSets
- Actions
- CallForms
- LaunchForms
- Summary

On the right, there is a "Partition Details" table:

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

- Specify field set properties

The screenshot shows the Oracle Flexcube Management and Integration Console interface. The title bar reads "ORACLE Flexcube :: MICON :: Windows Internet Explorer" and "A Sridhar". The main window is titled "Function Generation" and "Fieldset Properties".

Top Panel:

- Action: New
- Function Type: Parent
- Function Category: Report
- Header Template: None
- Footer Template: None

Left Sidebar (Tree View):

- Function Id: STRCUMC
- Save XML Path: D:\WORK
- Search: [Text Box]
- Nodes listed under Function Generation:
 - Preferences
 - DataSources
 - 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
 - CVS_CSTBS_UI_COLUMNS
 - HEADER
 - BODY
 - TAB_MAIN
 - SEC_1
 - FOOTER
 - FieldSets
 - FST_CSTBS_UI_COLUMNS
 - Actions
 - Calforms
 - LaunchForms
 - Summary

Fieldset Properties Dialog:

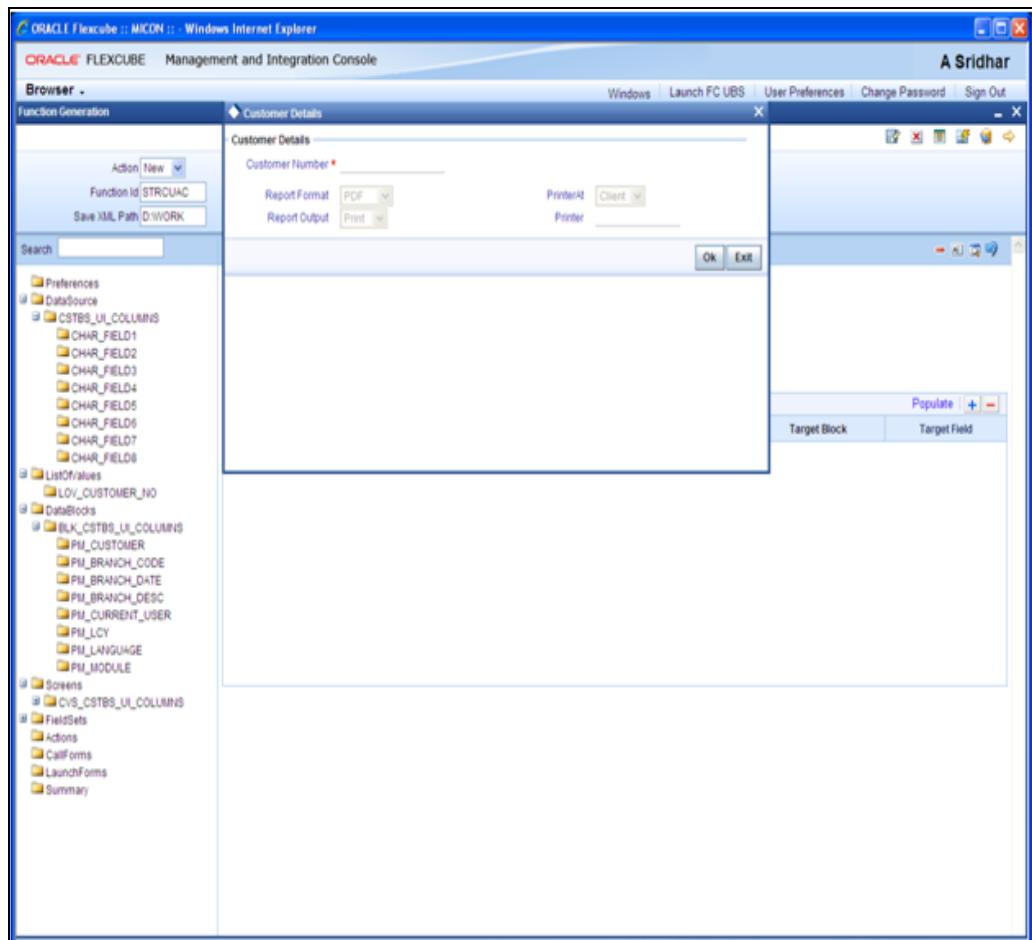
Fields in the dialog:

- Fieldset Name: FST_CSTBS_UI_COLUMNS
- Fieldset Label: LBL_CUSTDETDETAILED
- Data Block: BLK_CSTBS_UI_COLUMNS
- Multi Record: No
- View Type: Single
- Fieldset Height: [Text Box]
- No Of Rows: [Text Box]
- Screen Name: CVS_CSTBS_UI_COLUMNS
- Screen Portion: Body
- Tab Name: TAB_MAIN
- Section Name: SEC_1
- Partition Name: PART1
- Fieldset Width: [Text Box]
- Horizontal Fieldset:
- ReadOnly:
- Navigation Button:
- Visible:

Data Block Fields Table:

FieldSet Fields	Subpartition Name
PM_CUSTOMER	
PM_BRANCH_CODE	
PM_BRANCH_DATE	
PM_BRANCH_DESC	
PM_CURRENT_USER	
PM_LCY	
PM_LANGUAGE	
PM_MODULE	

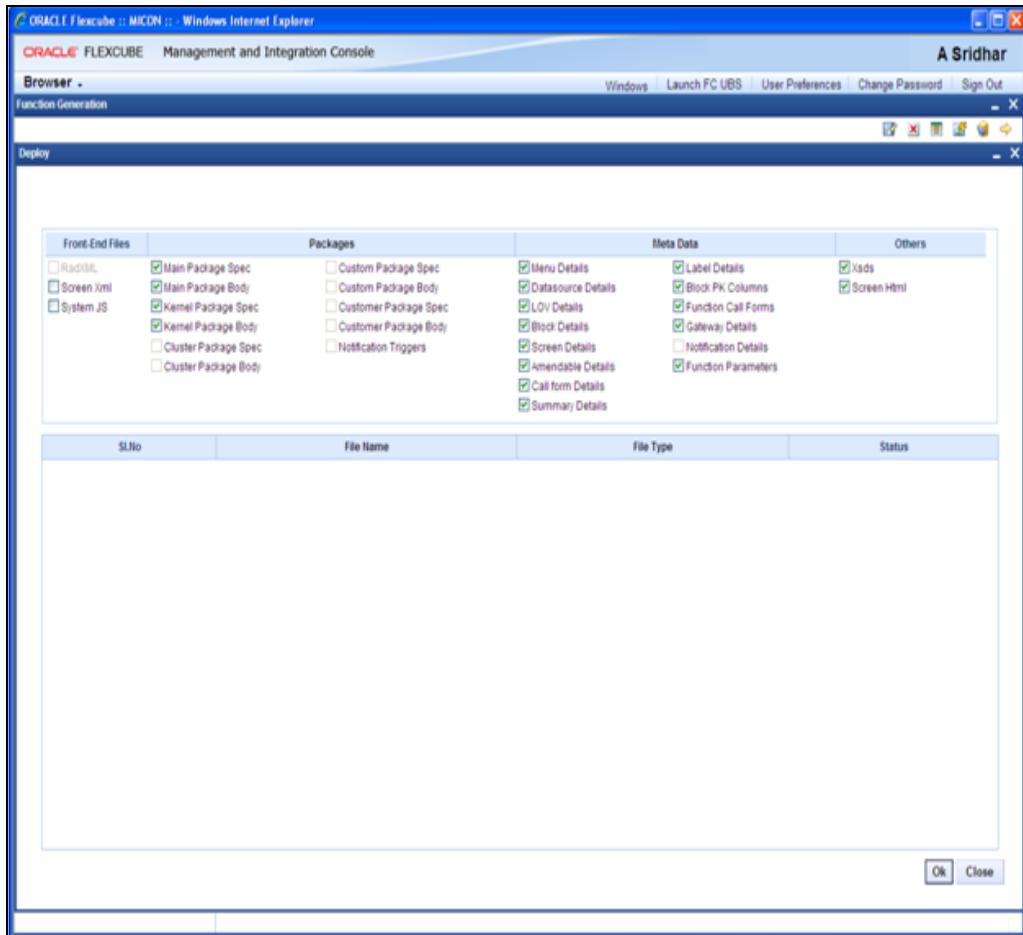
- Preview the screen



- Save and Generate the files

SLNo	File Name	File Type	Status
1	STRCUAC.xml	XML	Generated
2	STRCUAC_SYS.js	JS	Generated
3	STRCUAC_CVS_CSTBS_UI_COLUMNS_TAB_HEADER.I	HTML	Generated
4	STRCUAC_CVS_CSTBS_UI_COLUMNS_TAB_MAIN.I	HTML	Generated
5	STRCUAC_CVS_CSTBS_UI_COLUMNS_TAB_FOOTER.I	HTML	Generated
6	strk3_strcuac_main.spc	SPC	Generated
7	strk3_strcuac_kernel.spc	SPC	Generated
8	strk3_strcuac_main.sql	SQL	Generated
9	strk3_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_FID_DATA_BLOCKS__STRCUAC.INC	INC	Generated
16	CSTB_FID_DATA_SOURCES__STRCUAC.INC	INC	Generated

- 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

```

D:\MyWorkPlace\Installer_DEP\DEP\2504\fcubs.properties - Notepad++
File Edit Search View Format Language Settings Macro Run TextFX Plugins Window ?
new 3 fcubs.properties
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 =r9e04sq+1/lorG4XTbwWfw==
243 BIP_Password =r9e04sq+1/lorG4XTbwWfw==
244 BIP_Report_Folder =FCReports
245 BIP_Advice_Folder =FCReports/Adv/
246 BIP_ADV_SPOOL_PATH =/orain1/appsvrs/fcubs_logs/fcubs113/BrnDbgs/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 =2fb0x66QSug=
260 EMS_FILE_TRANSFER_MODE =FTP

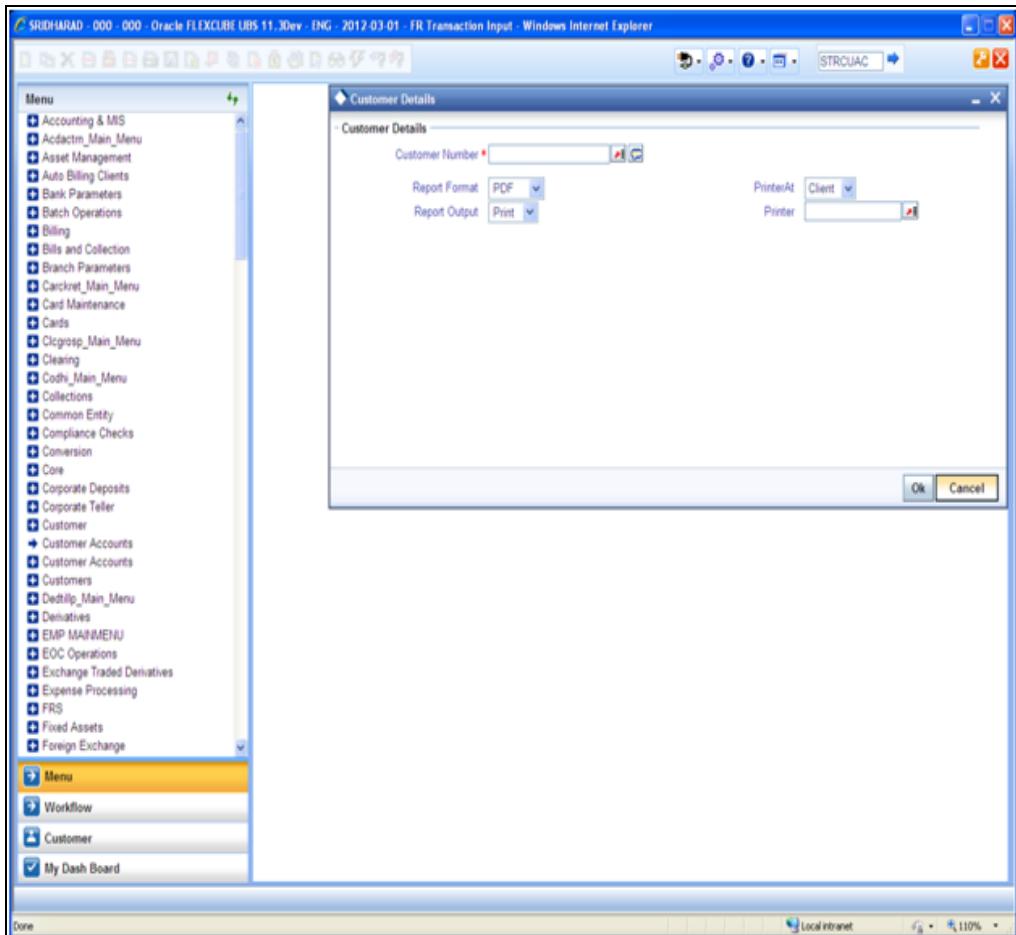
```

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

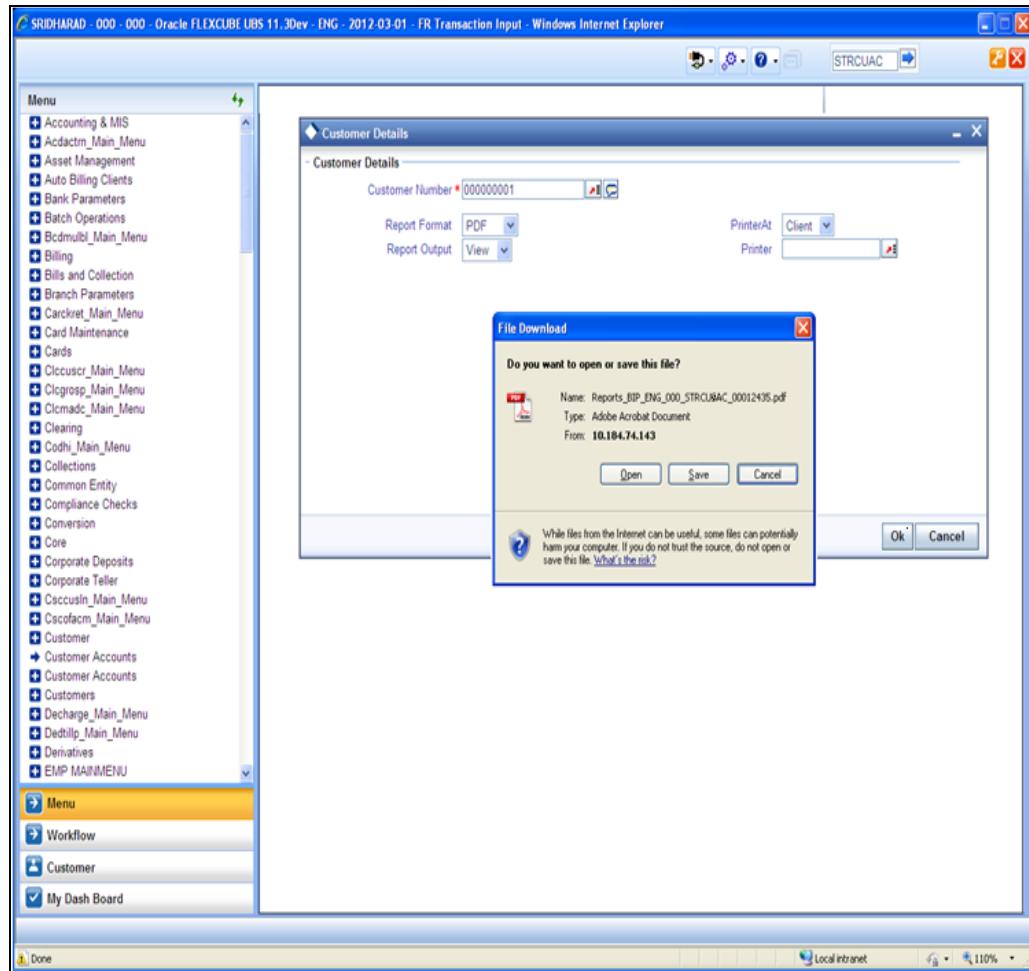


- Open Development Tool would automatically add the Report Options for all report screens

These report options are

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

The report screen after data entry would calls 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

The screenshot shows a PDF document titled "Customer Accounts" displayed in Adobe Reader. The header information includes Branch: 000, User Id: SRIDHARAD, Branch Date: 01-MAR-2012, Date & Time: 26-APR-2011 09:25:15, Page: 2, and Module: ST. The main content is a table with three columns: CUST_NO, CUST_AC_NO, and ACY_AVL_BAL. The table lists numerous customer account numbers, all of which have an available balance of 0.

CUST_NO	CUST_AC_NO	ACY_AVL_BAL
000000001	00000000101	0
000000001	00000000102	0
000000001	00000000103	0
000000001	00000000104	0
000000001	A0000000103	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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