

BIP Report Integration  
Oracle FLEXCUBE Universal Banking  
Release 12.0  
[May] [2012]  
Oracle Part Number E51465-01



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# 1. Preface

This document describes steps to integrate the BIP report created in BI Publisher with the FLEXCUBE UBS 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 UBS 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 UBS 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

<b>boldface</b>	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

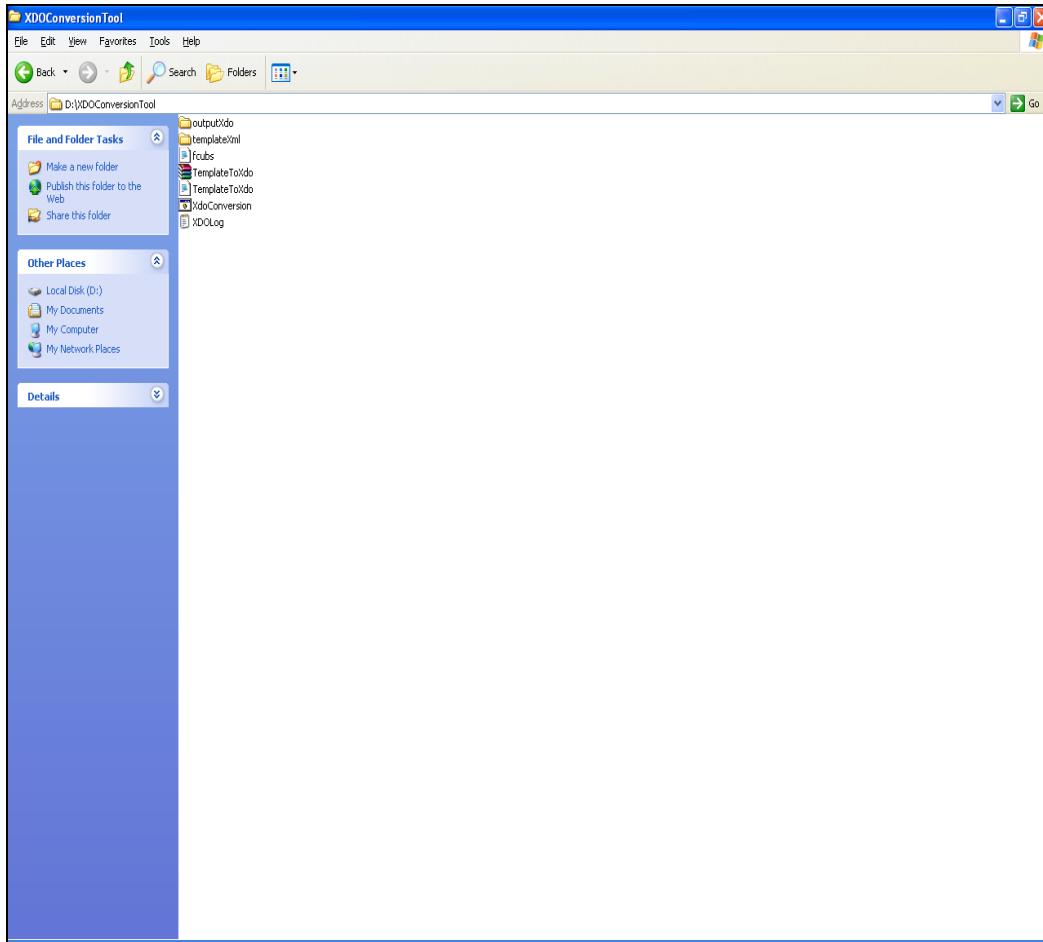
### 2.1 How to use this Guide

- [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.

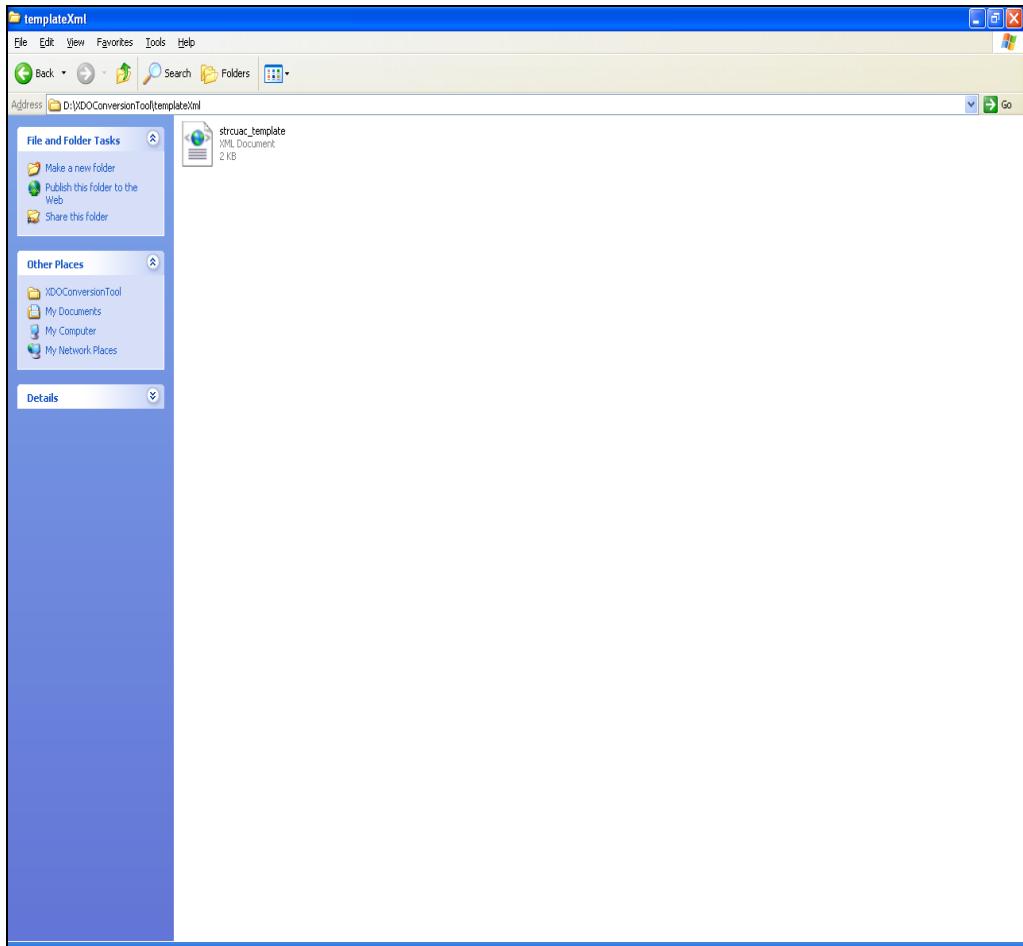
TEMPLATE\_XML\_PATH is the path where template xml file created is placed.

OUTPUT\_PATH is where the XDO will be generated.

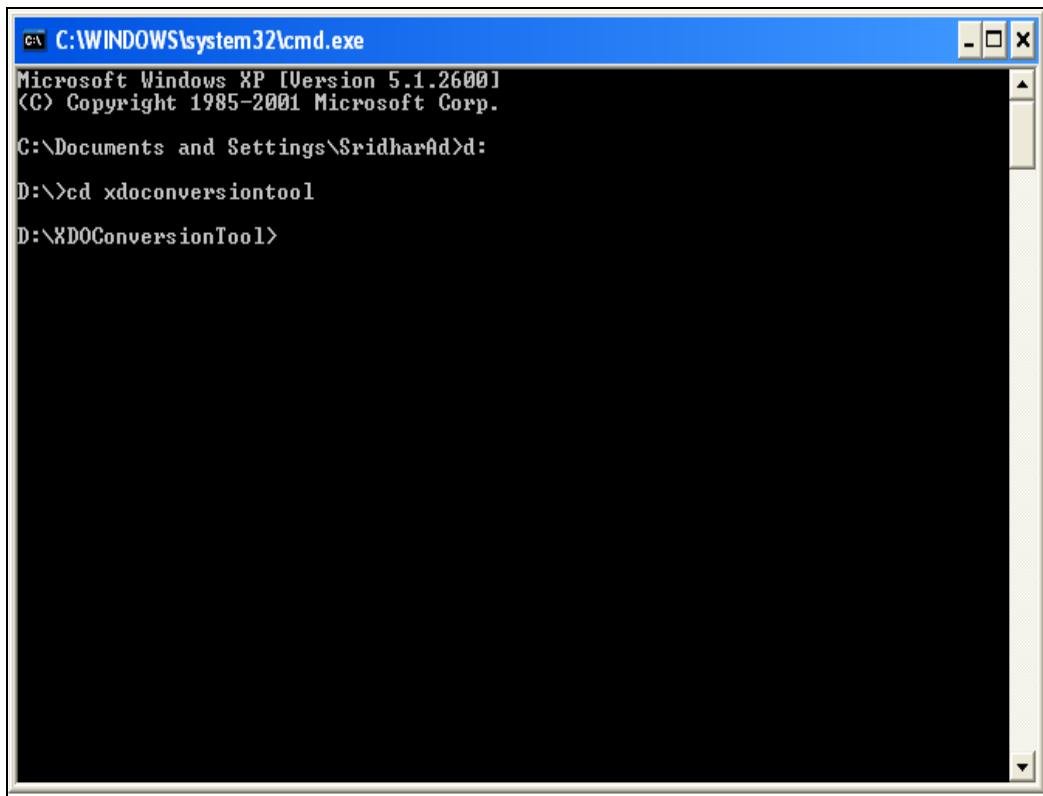
### PRIMARY

```
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.

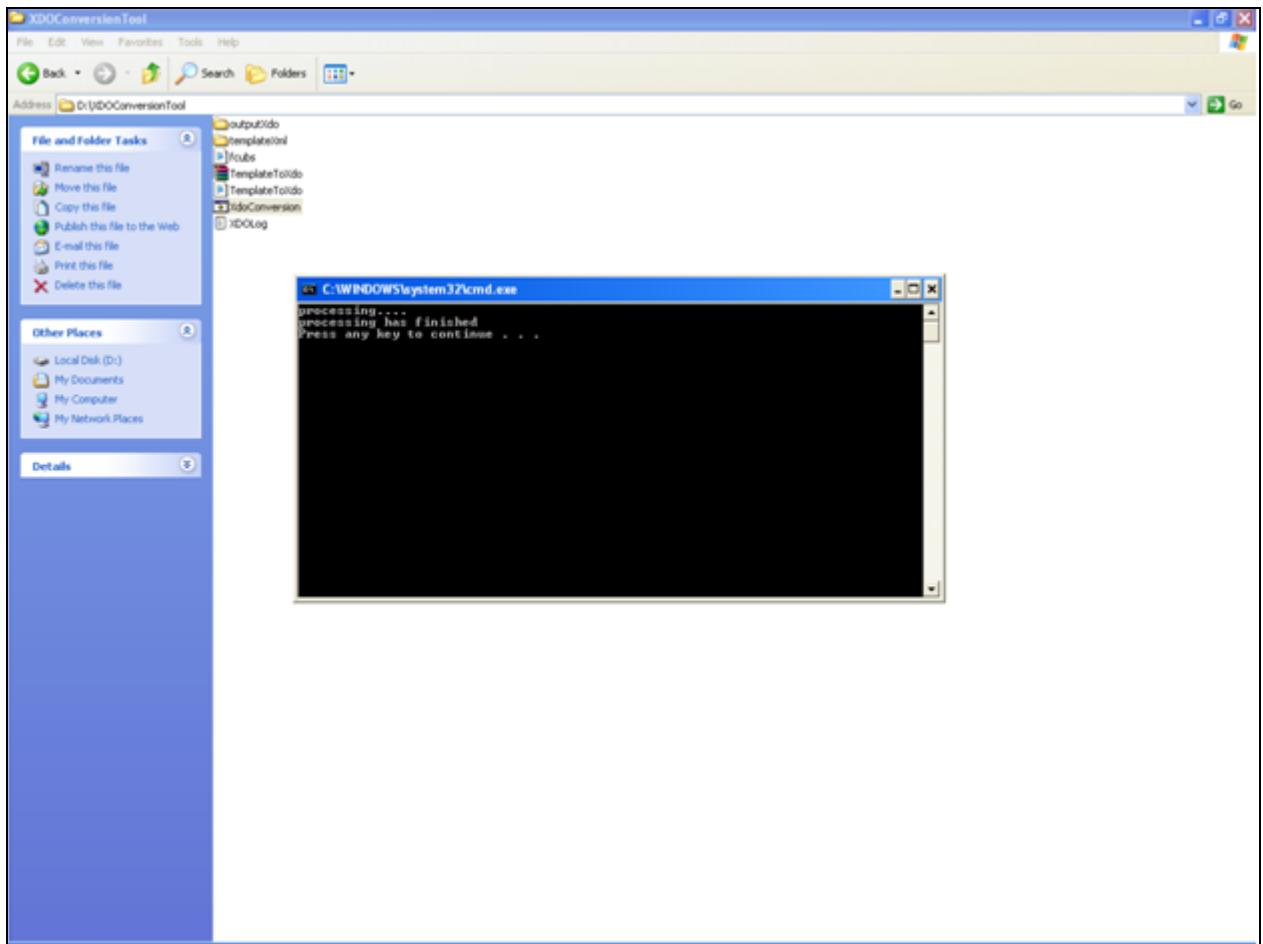


- Navigate to XDO tool conversion home directory in command prompt

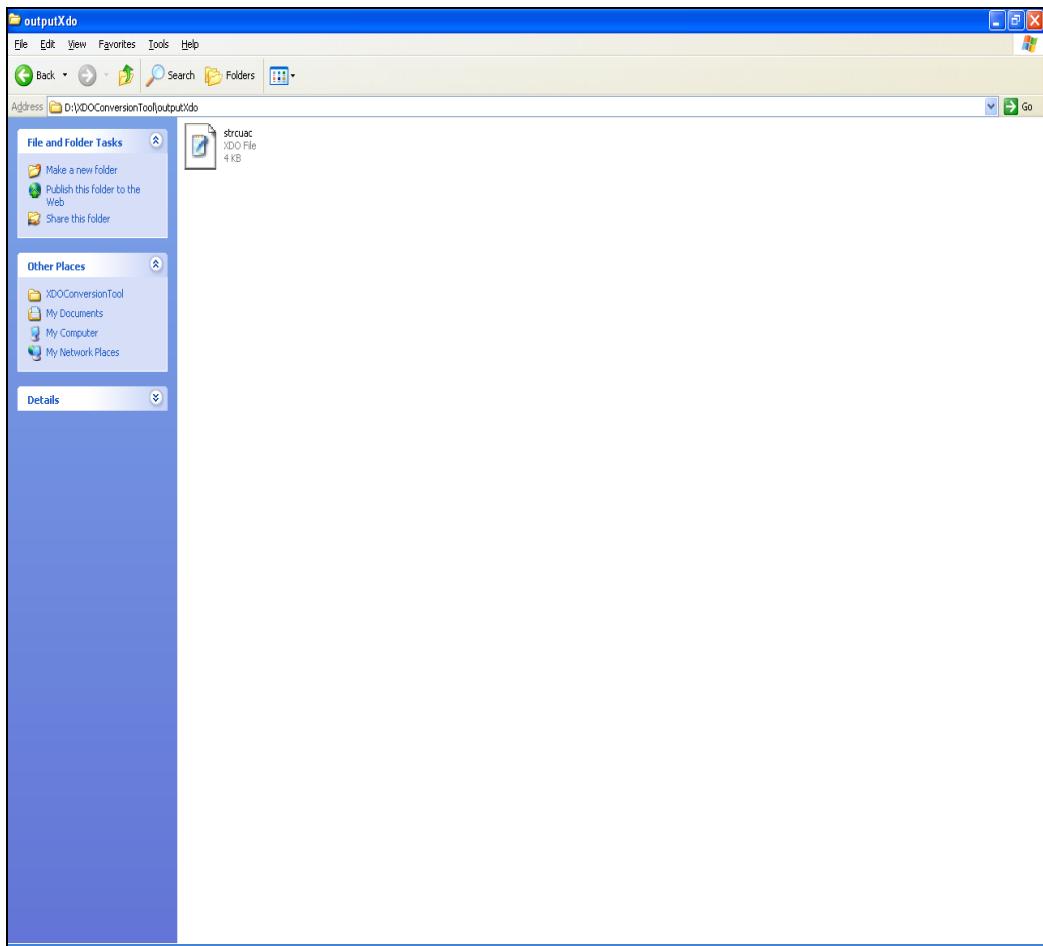


A screenshot of a Windows XP Command Prompt window titled 'cmd C:\WINDOWS\system32\cmd.exe'. The window shows the following text:  
Microsoft Windows XP [Version 5.1.2600]  
(C) Copyright 1985-2001 Microsoft Corp.  
C:\Documents and Settings\Sridhar\>d:  
D:\>cd xdoconversiontool  
D:\XDOConversionTool>

- Run XdoConversion.bat



- XDO will be created at OUTPUT\_PATH

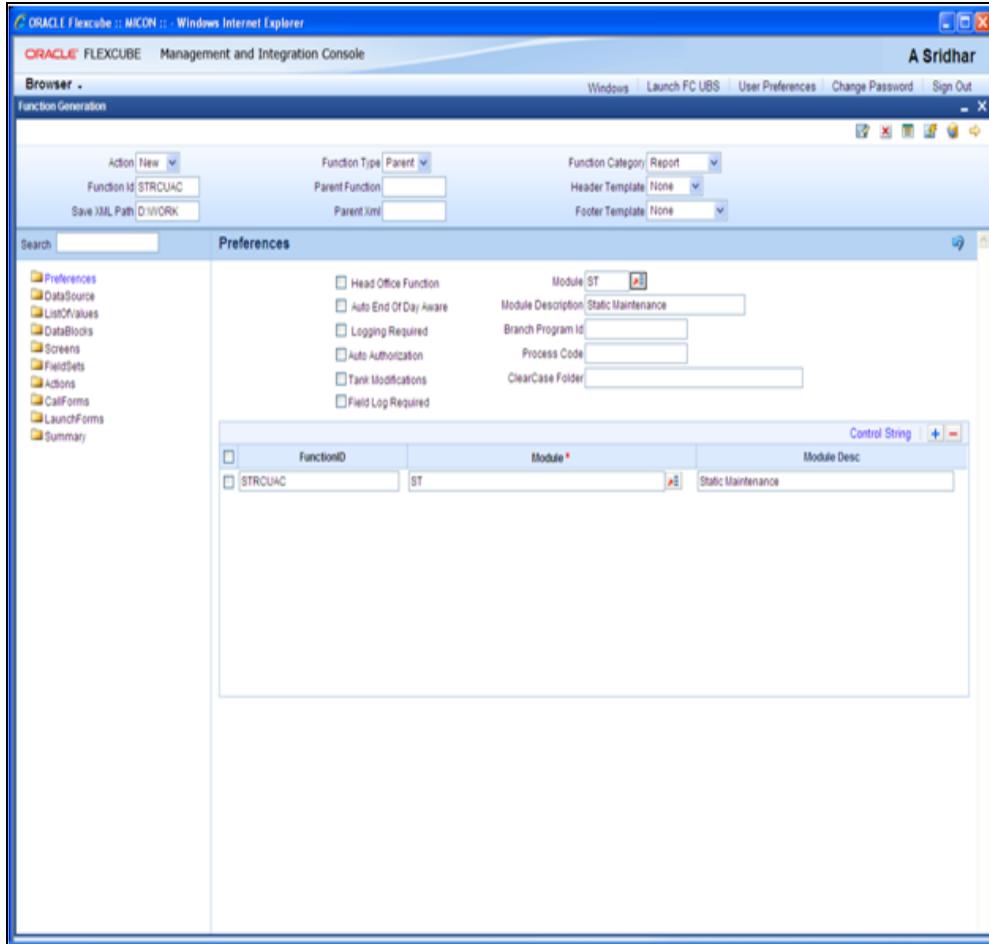


## 4. Developing screens for Report

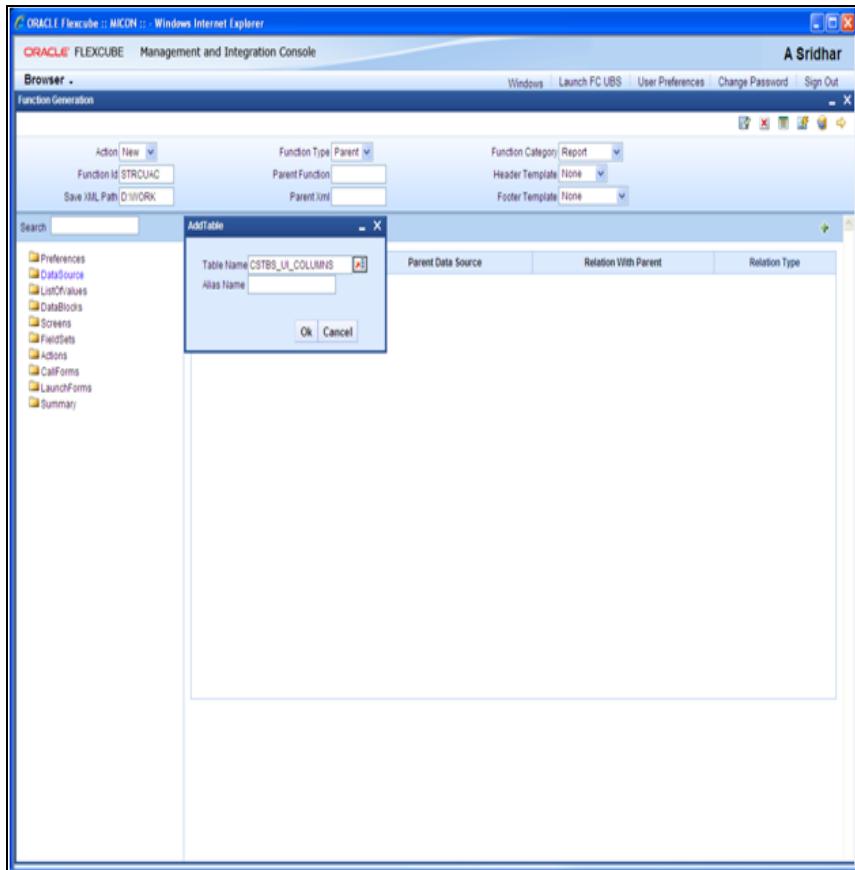
This section explains the step to create the Open Development Report type function ID that integrates the given RTF and XDO file with FLEXCUBE UBS screens.

### 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

Function Generation

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

Function Id: STROUAC | Parent Function: | Save XML Path: D:\WORK | Parent XML: |

**Data Source Details**

Data Source: CSTB95\_UI\_COLUMNS | Parent: |

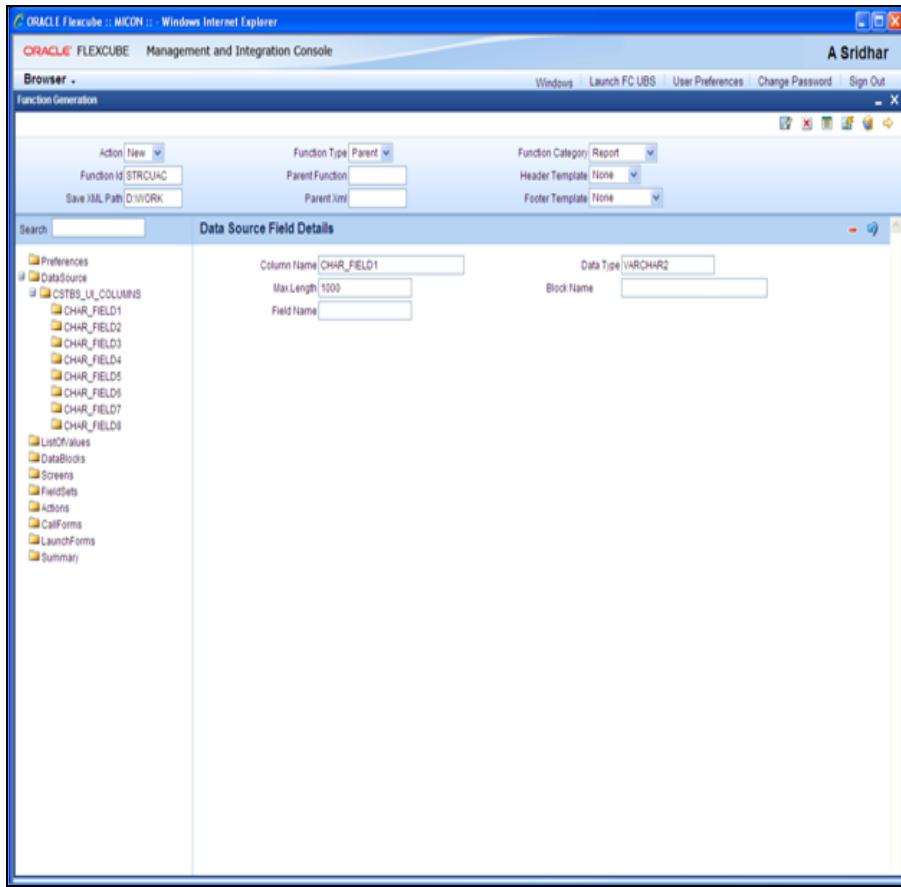
Master: Yes | Relation: | Where Clause: | Default Order By: |

PK Col: CHAR\_FIELD1 | Type: Normal | PK Types: VARCHAR2 | Mandatory:

Search: [ ]

Navigation: Preferences, Datasource, CSTB95\_UI\_COLUMNS, ListValues, Database, Screens, Fieldsets, Actions, CallForms, LaunchForms, Summary

- Add data columns for data source



- Enter query in LOV Query and click on populate

ORACLE FLEXCUBE :: MICON :: Windows Internet Explorer

ORACLE FLEXCUBE Management and Integration Console

A Sridhar

Browser - Function Generation

Action: New, Function Id: STRCUAC, Function Type: Parent, Function Category: Report, Header Template: None, Footer Template: None

Save XML Path: D:\WORK

Search: List of Values Details

LOV Name: LOV\_CUSTOMER\_NO

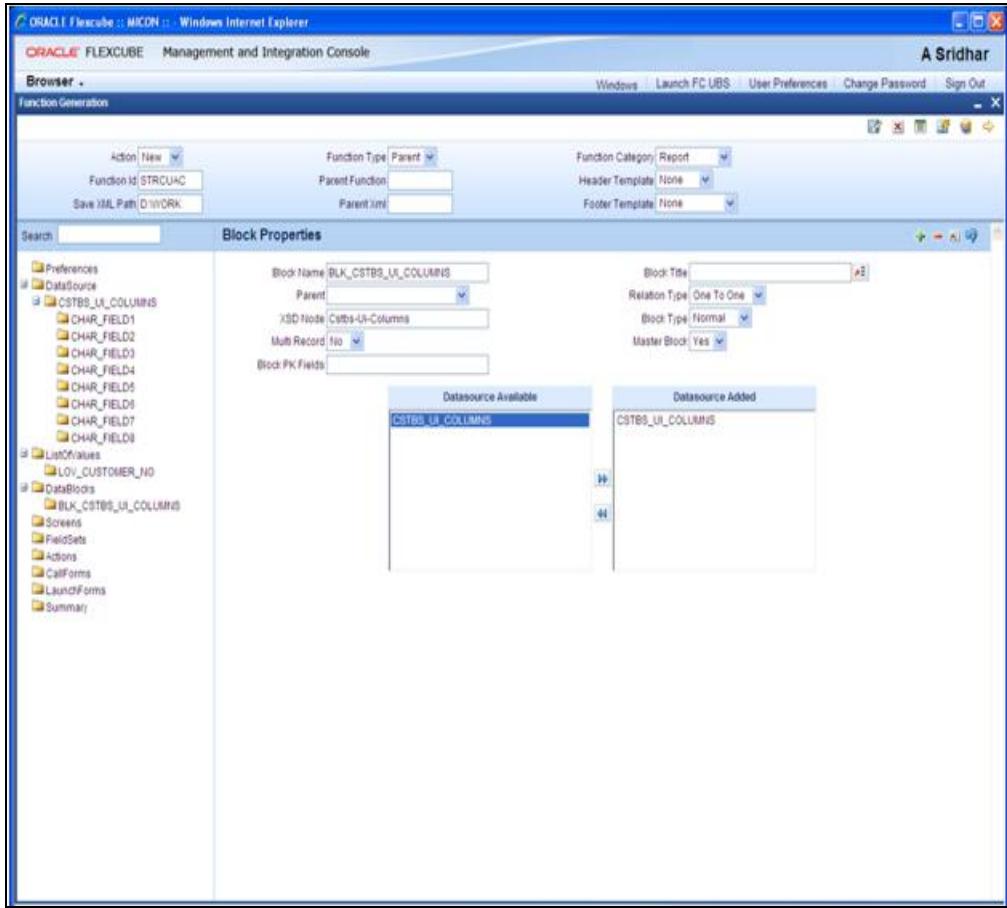
LOV Query: select cust\_no from strm\_cust\_account

Query Cols	DataType	Visible	Rdn Fld	Rdn Fld Type	RdnCol Label
CUST_NO	VARCHAR2	Yes	Yes	TEXT	

Populate

Preferences, DataSources, CSTRUI\_COLUMNS, CHAR\_FIELD1, CHAR\_FIELD2, CHAR\_FIELD3, CHAR\_FIELD4, CHAR\_FIELD5, CHAR\_FIELD6, CHAR\_FIELD7, CHAR\_FIELD8, ListValues, LOV\_CUSTOMER\_NO, DataBlocks, Screens, FieldSets, Actions, CallForms, LaunchForms, Summary

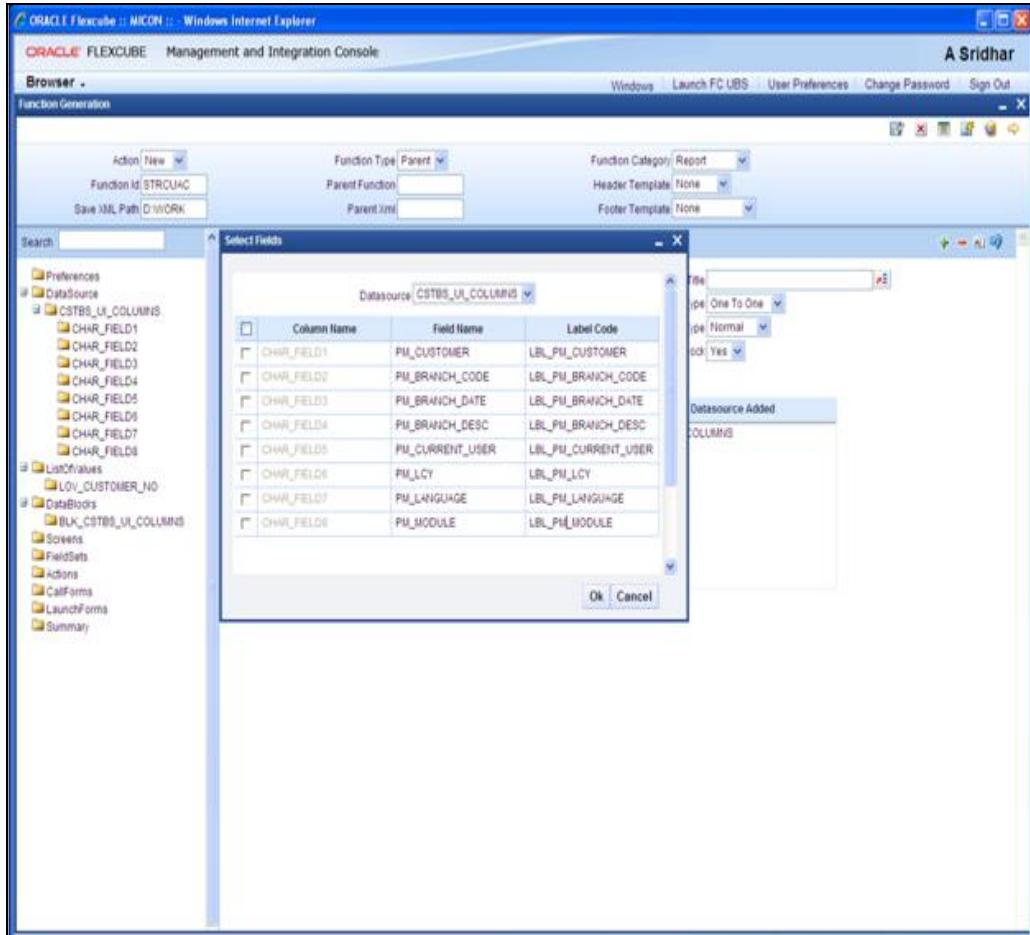
- Select master block as 'yes'



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 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 FCUBS 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 in a Windows Internet Explorer window. The title bar reads "ORACLE FLEXCUBE :: MIDON :: Windows Internet Explorer". The main window is titled "Function Generation" and shows the "Block Field Properties" dialog for a field named "PM\_CUSTOMER".

**Block Field Properties Dialog:**

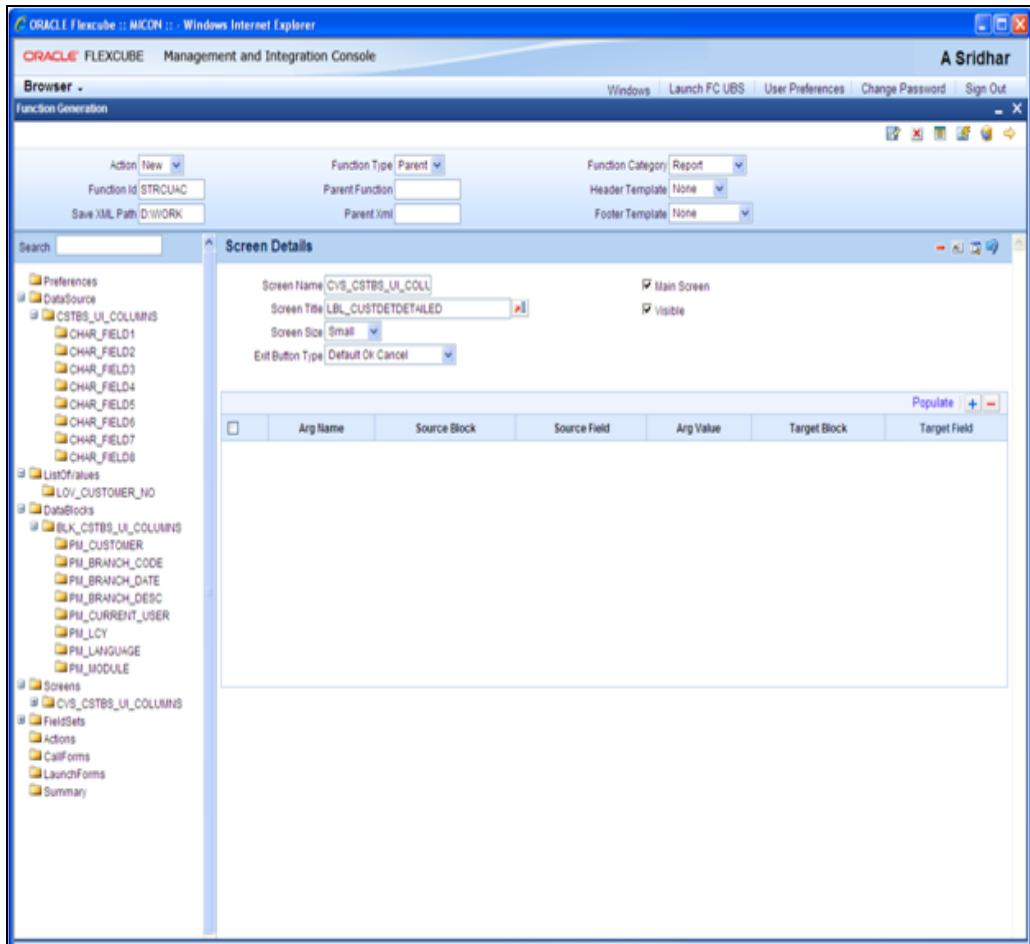
- General:**
  - Action: New
  - Function Id: STRCUC
  - Function Type: Parent
  - Function Category: Report
  - Header Template: None
  - Footer Template: None
- Field Properties:**
  - Field Name: PM\_CUSTOMER
  - Field Label: LBL\_PM\_CUSTOMER
  - XSD Tag: PM\_CUSTOMER
  - Display Type: Lov
  - Item Type: Database Item
  - Parent Field: (dropdown)
  - Related Block: (dropdown)
  - Related Field: (dropdown)
  - TextArea Rows: (dropdown)
  - Min. Val: (text box)
  - Max. Decimals: (text box)
  - LOV Name: LOV\_CUSTOMER\_NO
  - Field Name: (dropdown)
  - Data Type: Varchar2
  - DataSource: CSTBS\_UI\_COLUMNS
  - Max Length: 1000
  - Field Size: (dropdown)
  - Column Name: CHAR\_FIELD1
  - Default Value: (text box)
  - Preview Value: (text box)
  - Accessibility Code: (dropdown)
  - TextArea Cols: (text box)
  - Max. Val: (text box)
  - Mask Id: (dropdown)
  - Off Line LOV Name: (dropdown)
  - Image Source: (dropdown)
  - Pop-up Edit Read: (checkbox)
  - Required: (checkbox)
  - Visible: (checkbox)
  - Input by LOV Only: (checkbox)
  - Calendar Text: (checkbox)
  - Select Multiple: (checkbox)
  - Uppercase Only: (checkbox)
  - LOV Validation Req'd: (checkbox)
  - Not Req in Xsd: (checkbox)
  - Report Parameter: (checkbox)
  - Read Only: (checkbox)
- Buttons:** Custom Attributes, Events, Bind Variables, Return Fields (selected)
- Return Fields Mapping:**

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

**Left Sidebar:**

- Browser: Function Generation
- Function Id: STRCUC
- Save XML Path: D:\WORK
- Block Field Properties
- Search: (text box)
- 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
- Database
  - 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
- FieldSets
- Actions
- CalForms
- LaunchForms
- Summary

- Select main screen checkbox and screen size as small



- Specify the partition details

The screenshot shows the Oracle Flexcube Management and Integration Console. The title bar reads "ORACLE Flexcube :: MICON :: Windows Internet Explorer" and "ORACLE FLEXCUBE Management and Integration Console". The user is logged in as "A Sridhar". The main window is titled "Function Generation" and contains the following interface:

- Header:** Action (New), Function Type (Parent), Function Category (Report), Function Id (STRUCUD), Parent Function, Header Template (None), Save XML Path (D:\WORK), Parent XML, Footer Template (None).
- Section Details:** A tree view on the left shows various database objects:
  - 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

- Partition Details:** A table showing the partition configuration for the selected section.
 

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. The title bar reads "ORACLE Flexcube :: MICON :: Windows Internet Explorer" and "ORACLE FLEXCUBE Management and Integration Console". The user is logged in as "A Sridhar". The main window is titled "Fieldset Properties" and displays the configuration for a fieldset named "FST\_CSTBS\_UI\_COLUMNS".

**Fieldset Properties:**

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

**Fieldset Properties (Main):**

- Fieldset Name: FST\_CSTBS\_UI\_COLUMNS
- Fieldset Label: LBL\_CUSTDETDETAILED
- Screen Name: CYS\_CSTBS\_UI\_COLUMNS
- Screen Portion: Body
- Tab Name: TAB\_MAIN
- Section Name: SEC\_1
- Partition Name: PART1
- Horizontal Fieldset:
- ReadOnly:
- Navigation Button:
- Visible:
- Fieldset Height:
- Fieldset Width:
- No Of Rows:

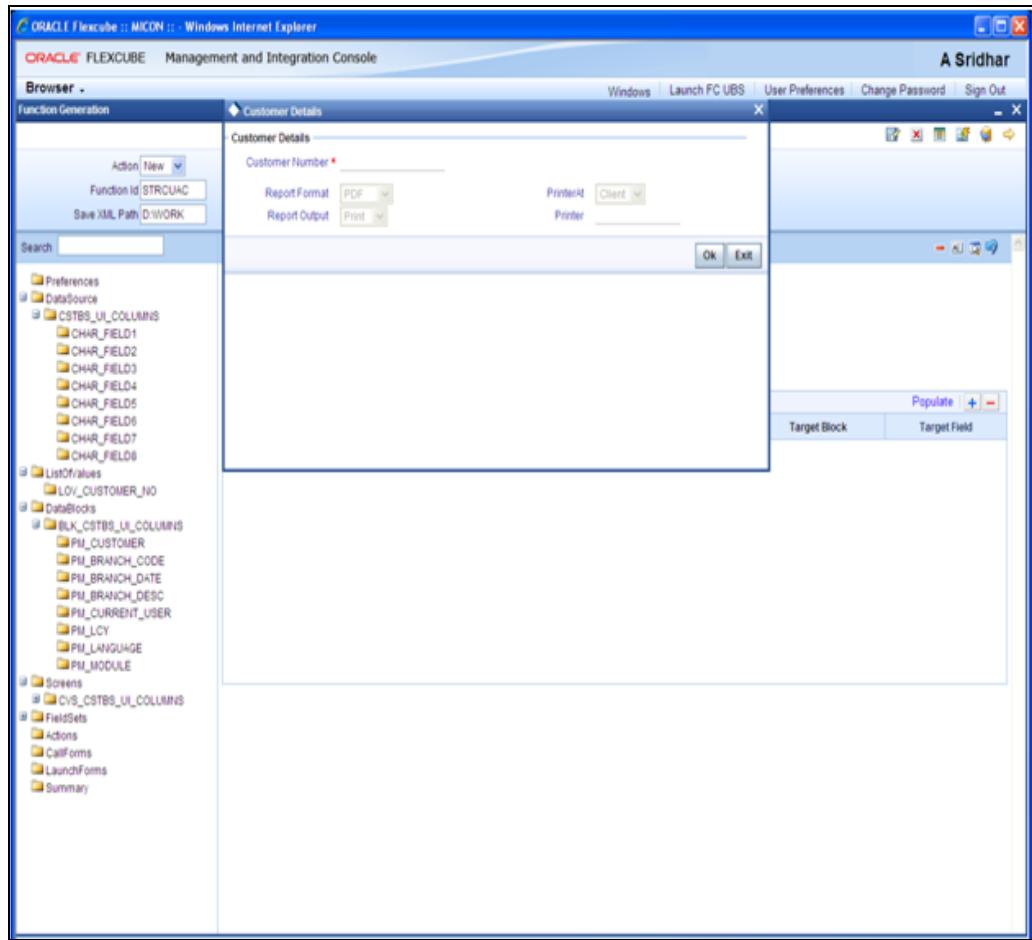
**Data Block Fields:**

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

**Left Sidebar (Tree View):**

- 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

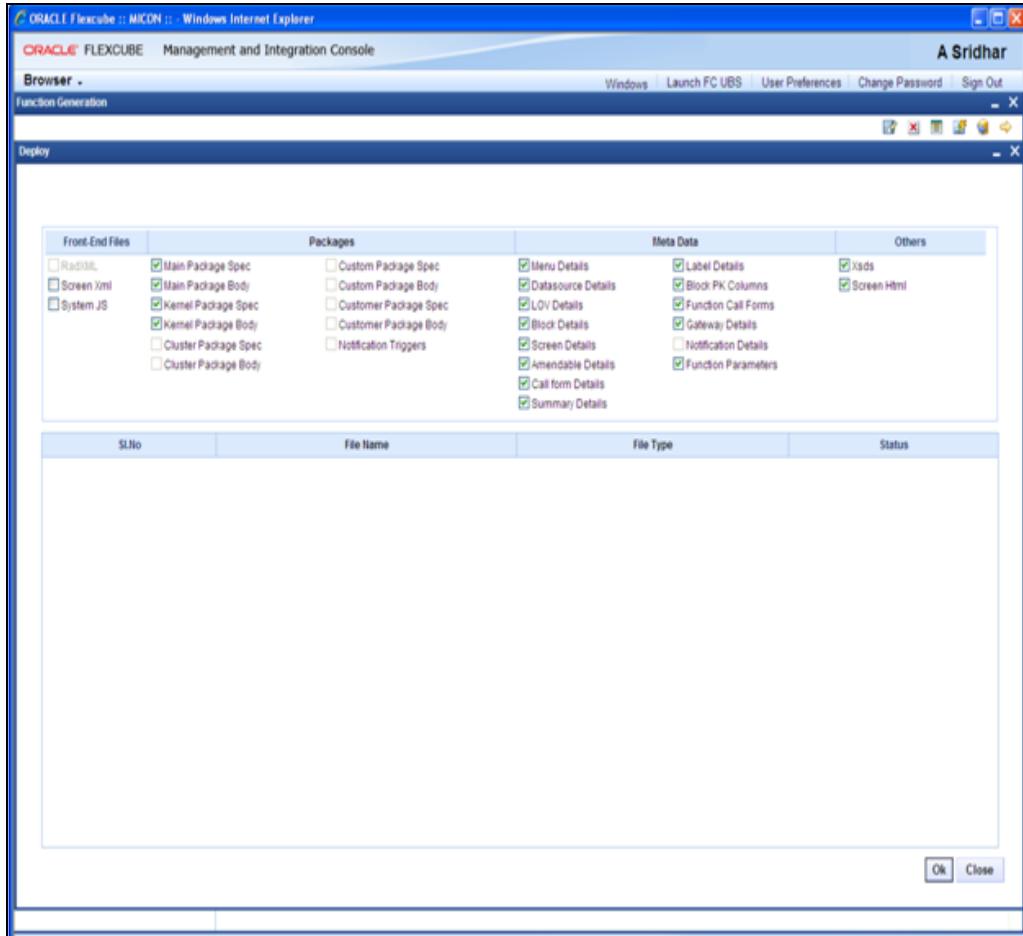
- Preview the screen



- Save and Generate the files

SLNo	File Name	File Type	Status
1	STRQUAC.xml	XML	Generated
2	STRQUAC_SYS.js	JS	Generated
3	STRQUAC_CVS_CSTBS_UI_COLUMNS_TAB_HEADER.I	HTML	Generated
4	STRQUAC_CVS_CSTBS_UI_COLUMNS_TAB_MAIN.I	HTML	Generated
5	STRQUAC_CVS_CSTBS_UI_COLUMNS_TAB_FOOTER.I	HTML	Generated
6	strks_strouac_main.spc	SPC	Generated
7	strks_strouac_kernel.spc	SPC	Generated
8	strks_strouac_main.sql	SQL	Generated
9	strks_strouac_kernel.sql	SQL	Generated
10	CSTB_FIELD_LABELS__STRQUAC.INC	INC	Generated
11	CSTB_OTHER_LABELS__STRQUAC.INC	INC	Generated
12	CSTB_LOV_INFO__STRQUAC.INC	INC	Generated
13	CSTB_SUMMARY_INFO__STRQUAC.INC	INC	Generated
14	STTB_AUDIT_PK_COLS__STRQUAC.INC	INC	Generated
15	CSTB_FID_DATA_BLOCKS__STRQUAC.INC	INC	Generated
16	CSTB_FID_DATA_SOURCES__STRQUAC.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**

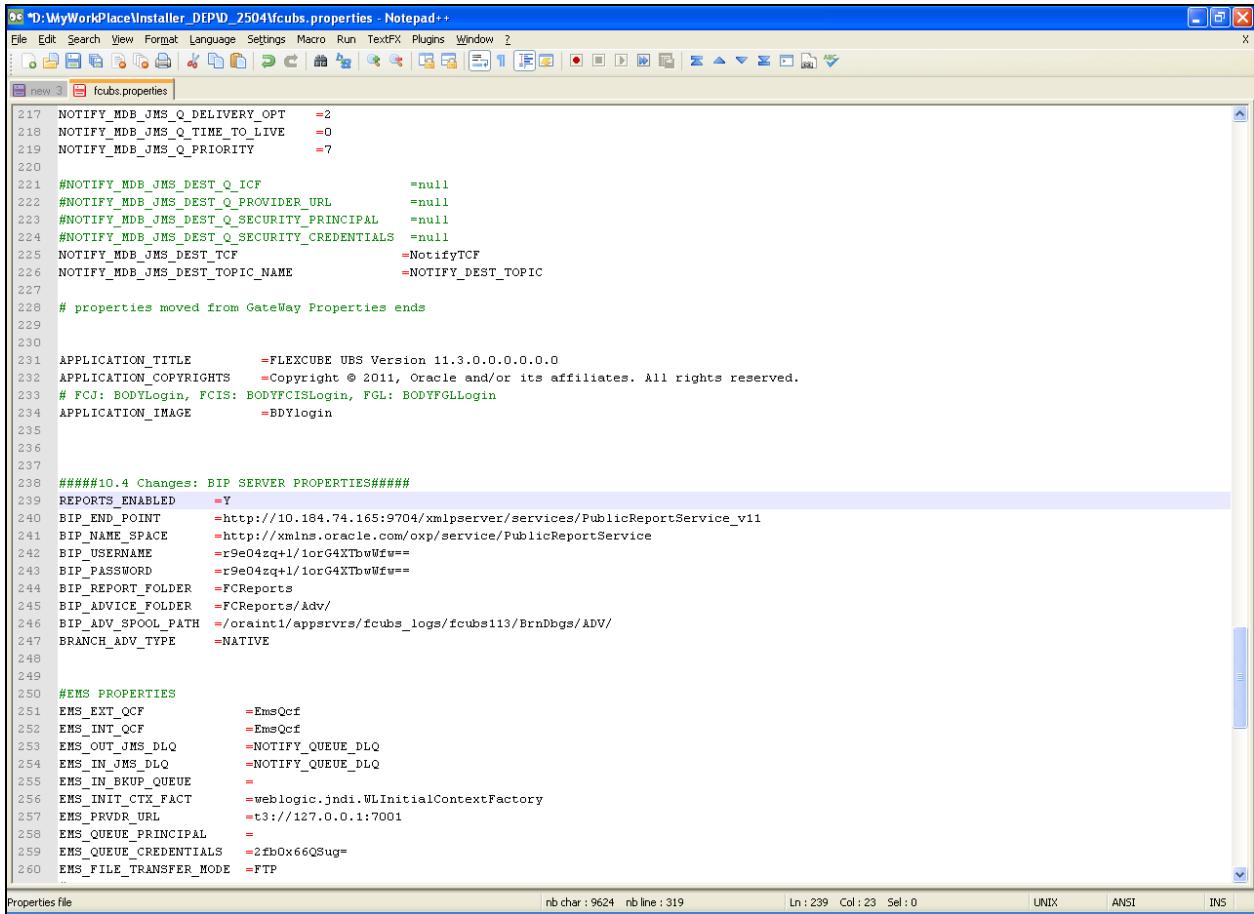
- The function ID for all reports will now have third character as 'R'
- The type string for report function ID in SMTB\_MENU will be 'R'
- The routing type for report function ID in SMTB\_MENU will be 'R'

#### **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 FCUBS 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 =r9e04sq1/l0rG4XTbwWfw==
243 BIP_PASSWORD =r9e04sq1/l0rG4XTbwWfw==
244 BIP_REPORT_FOLDER =FCReports
245 BIP_ADVICE_FOLDER =FCReports/Adv/
246 BIP_ADV_SPOOL_PATH =/orain1/appsvr1/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

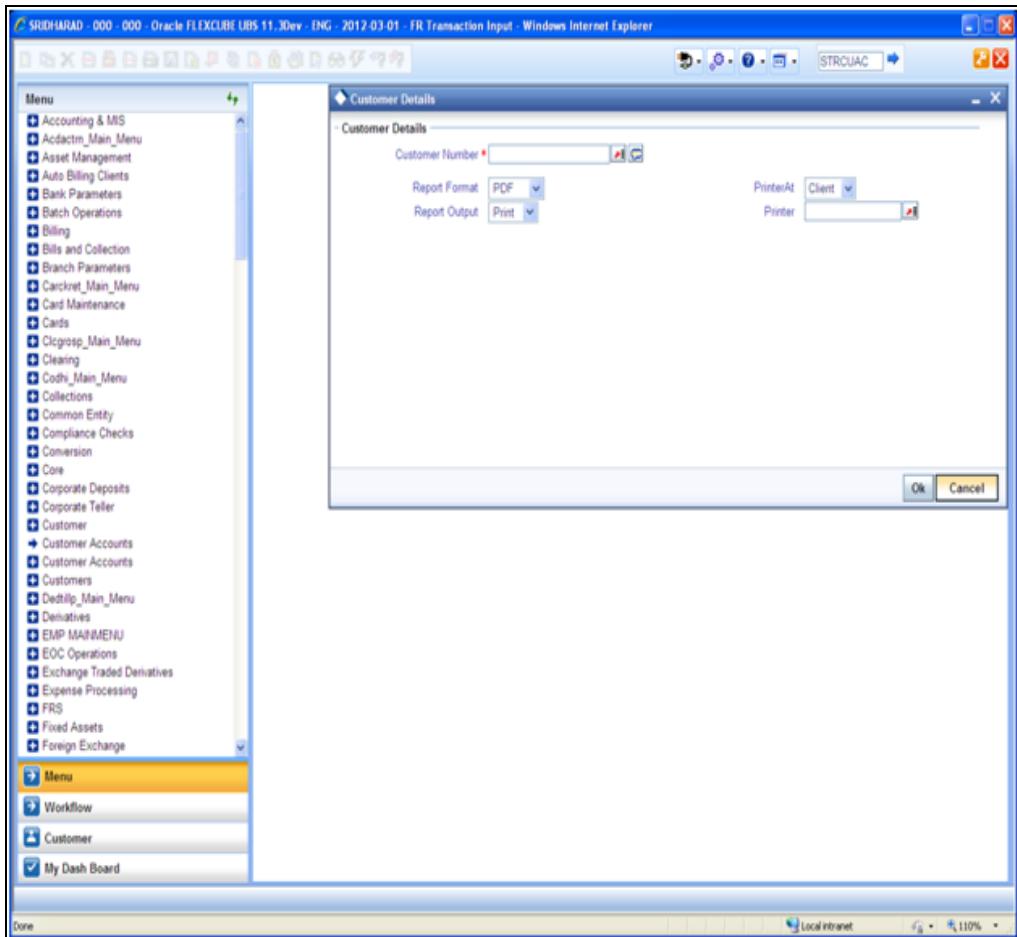
```

#### 4.2.1 Declaration of Parameters in Spec of the Package

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

## 5. Test report

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

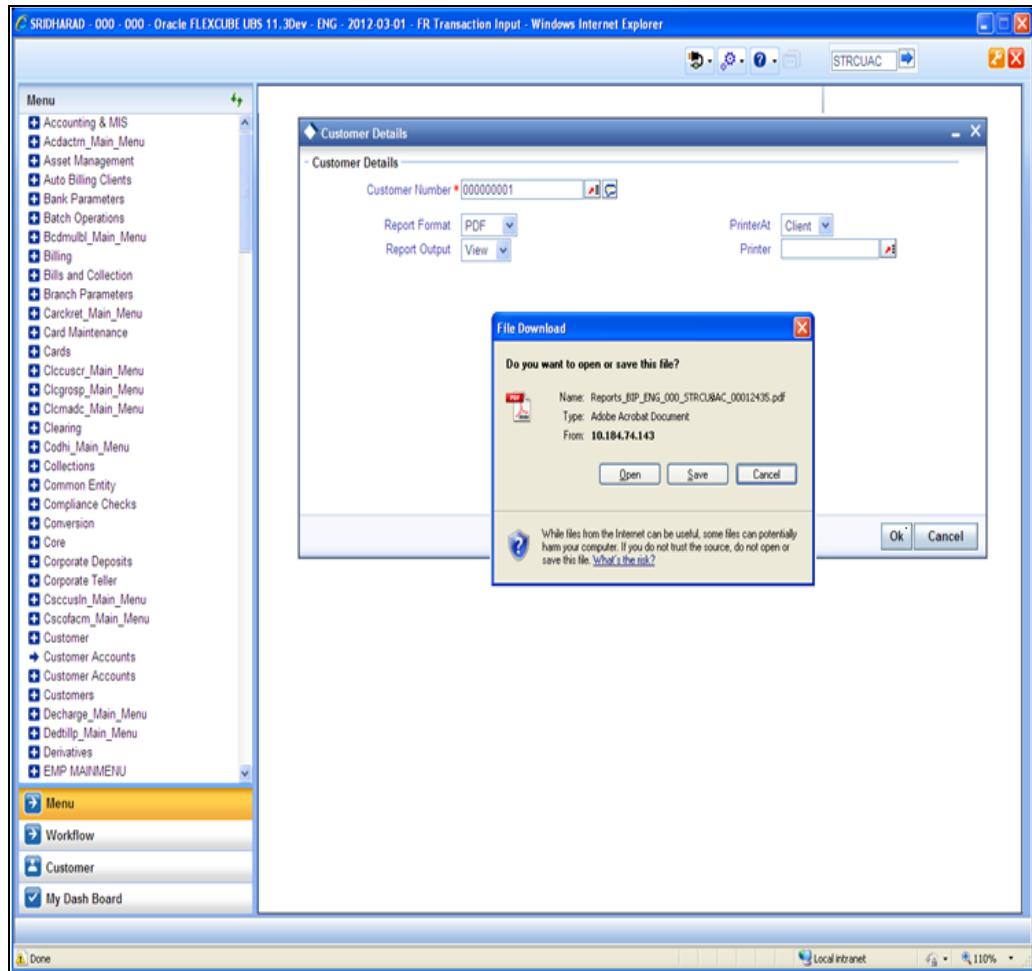


- Open Development Tool would automatically add the Report Options for all report screens

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 FCUBS 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% Find

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			



BIP Report Integration  
[May] [2012]  
Version 12.0

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