

BIP Report Integration
Oracle FLEXCUBE Investor Servicing
Release 14.4.0.0.0
[July] [2020]



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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

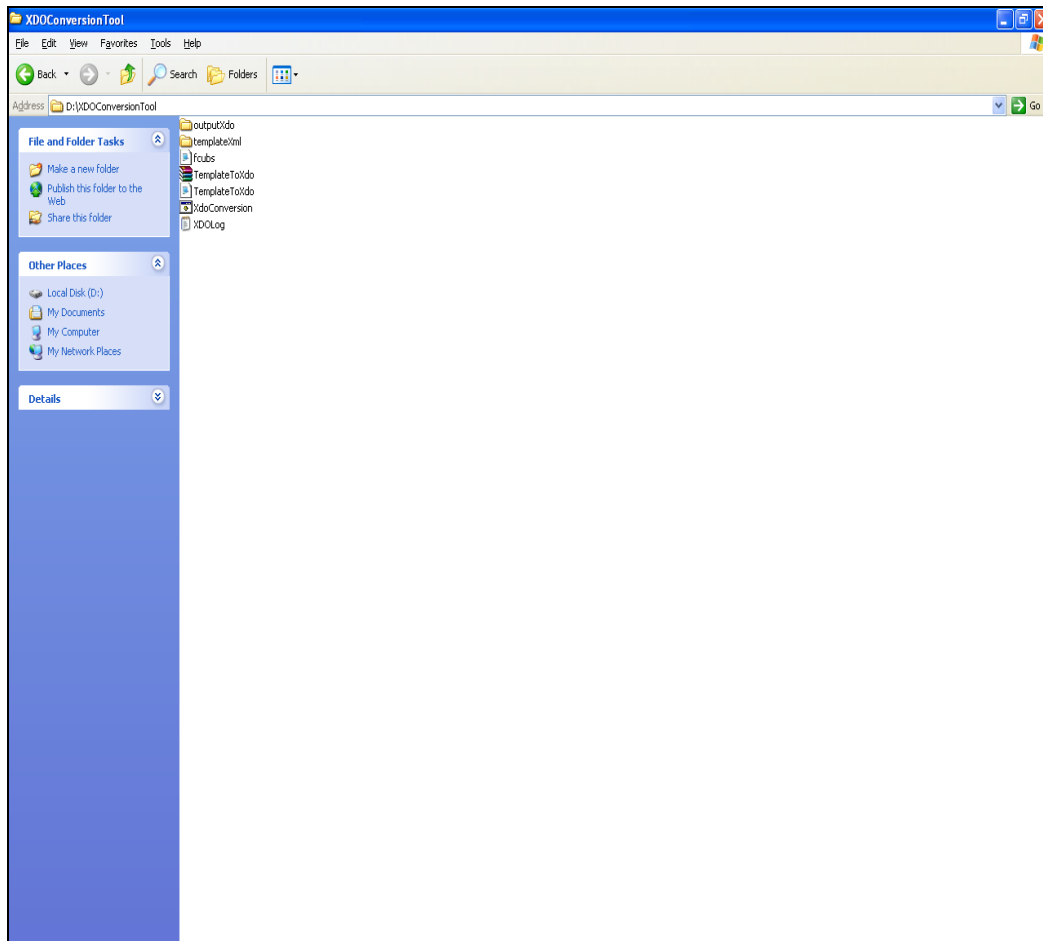
2.1 How to use this Guide

- [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

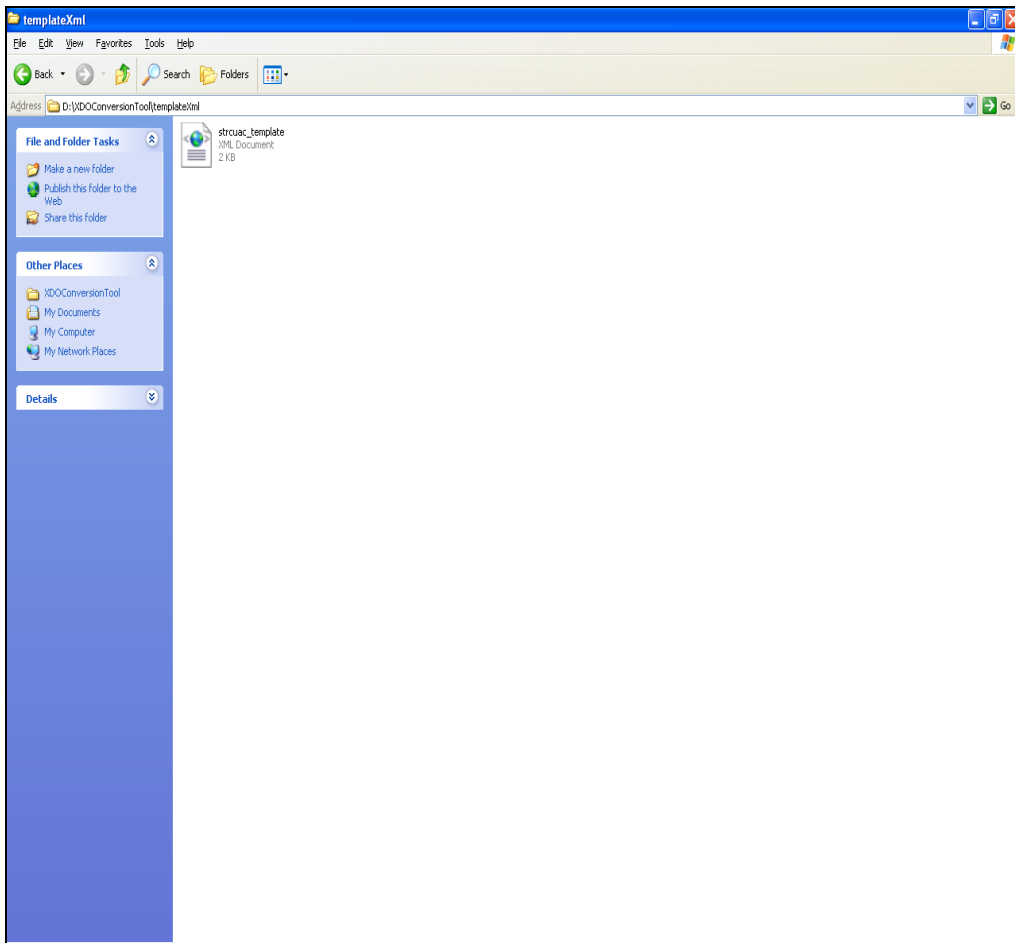
TEMPLATE_XML_PATH = D:\XdoConversionTool\templatexml

OUTPUT_PATH = D:\XdoConversionTool\xdo

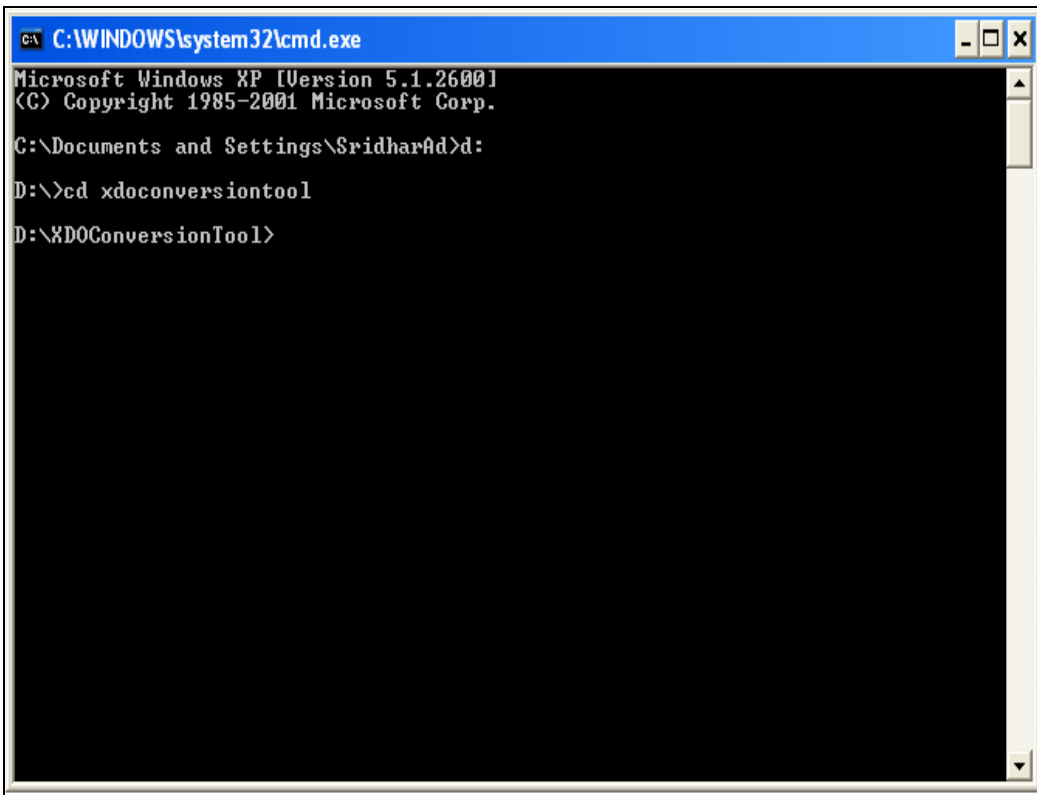
DEFAULT_DATA_SOURCE = FCI5dev

TEMPLATE_LABEL = General

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

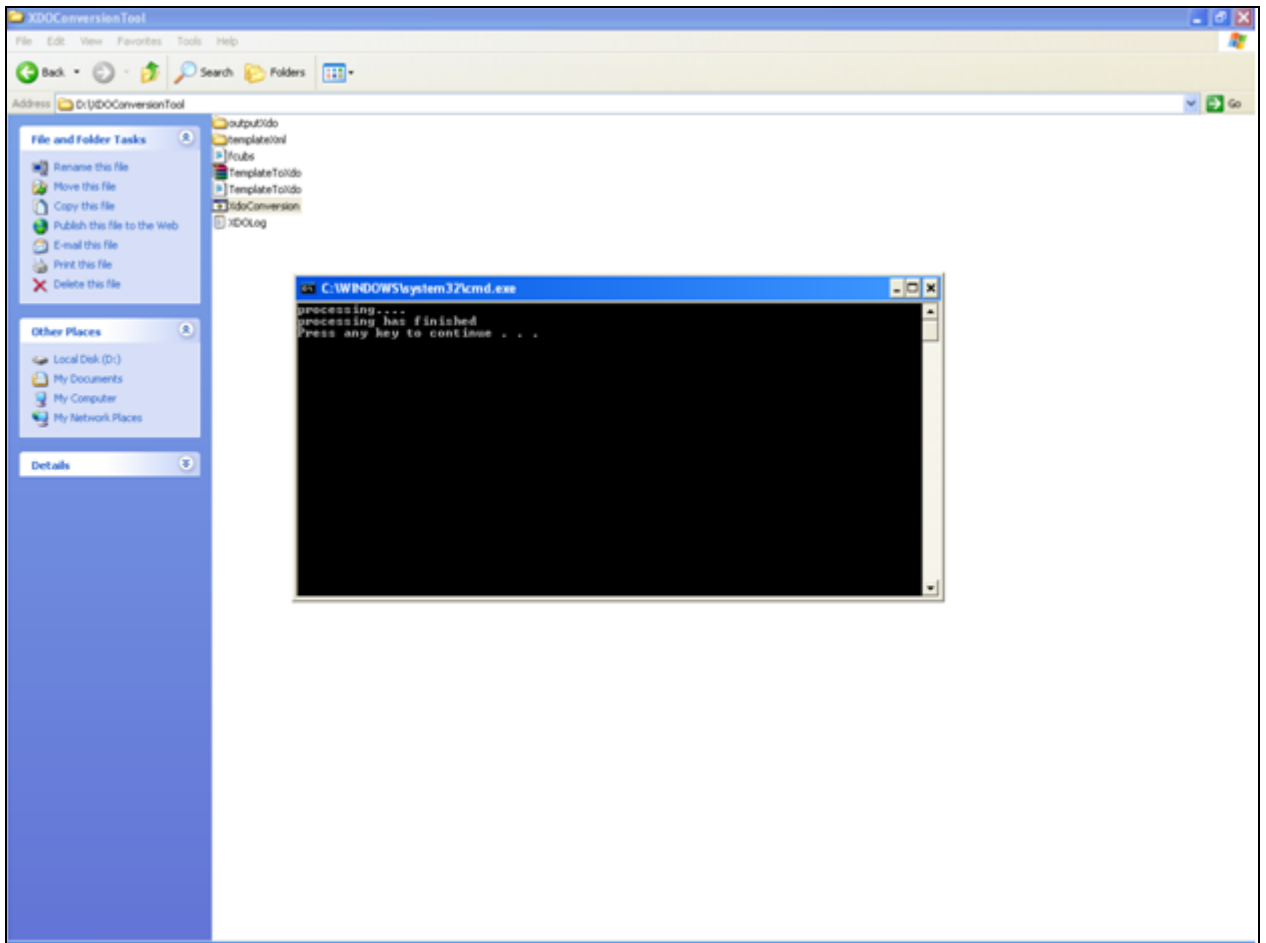


- Navigate to XDO tool conversion home directory in command prompt

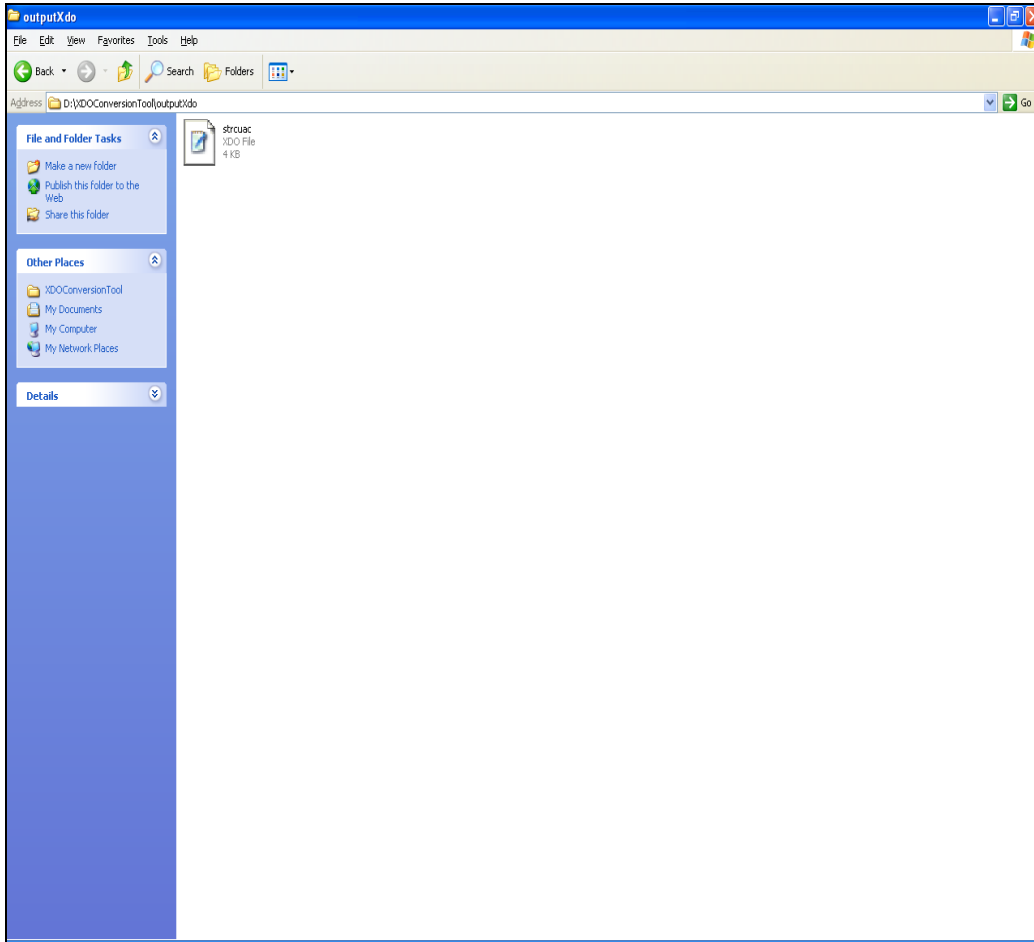


```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\SridharAd>d:
D:\>cd xdoconversiontool
D:\XDOConversionTool>
```


- 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 displays the Oracle Flexcube Management and Integration Console interface. The main window is titled "ORACLE FLEXCUBE Management and Integration Console" and shows the "Function Generation" screen. The user is logged in as "A Sridhar".

The "Function Generation" section includes the following 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

The "Preferences" section includes a search bar and a list of checkboxes for various preferences:

- Head Office Function
- Auto End Of Day Aware
- Logging Required
- Auto Authorization
- Tank Modifications
- Field Log Required

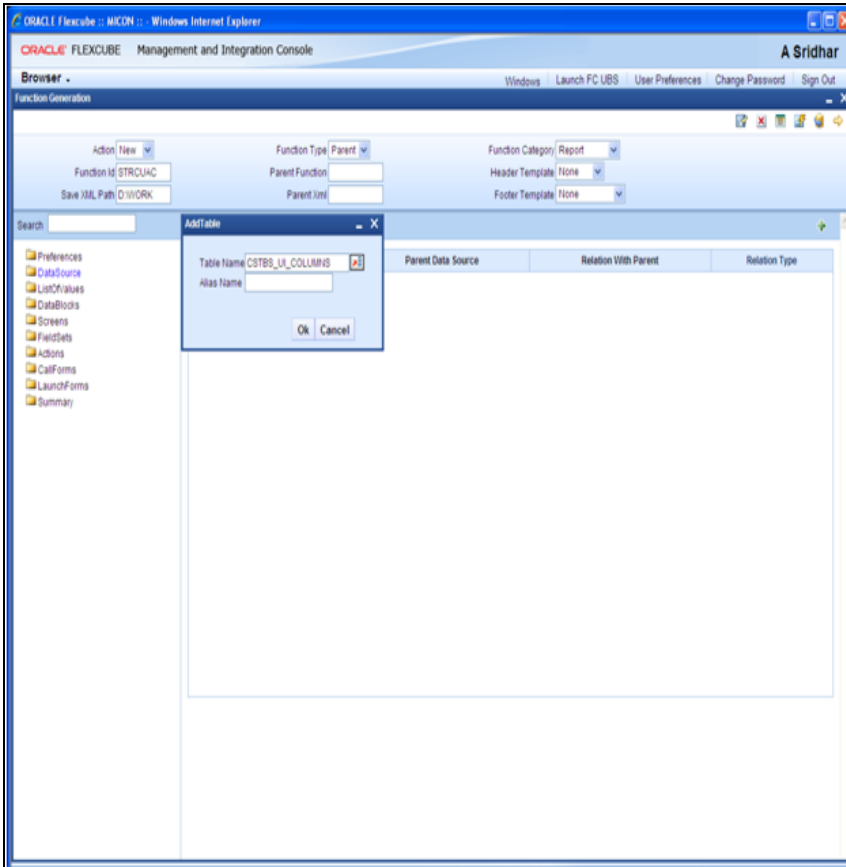
The "Module" section includes the following fields:

- Module: ST
- Module Description: Static Maintenance
- Branch Program Id: (empty)
- Process Code: (empty)
- ClearCase Folder: (empty)

The "Control String" section includes a table with the following data:

FunctionID	Module	Module Desc
STRCUAC	ST	Static Maintenance

- Select table name as CSTBS_UI_COLUMNS

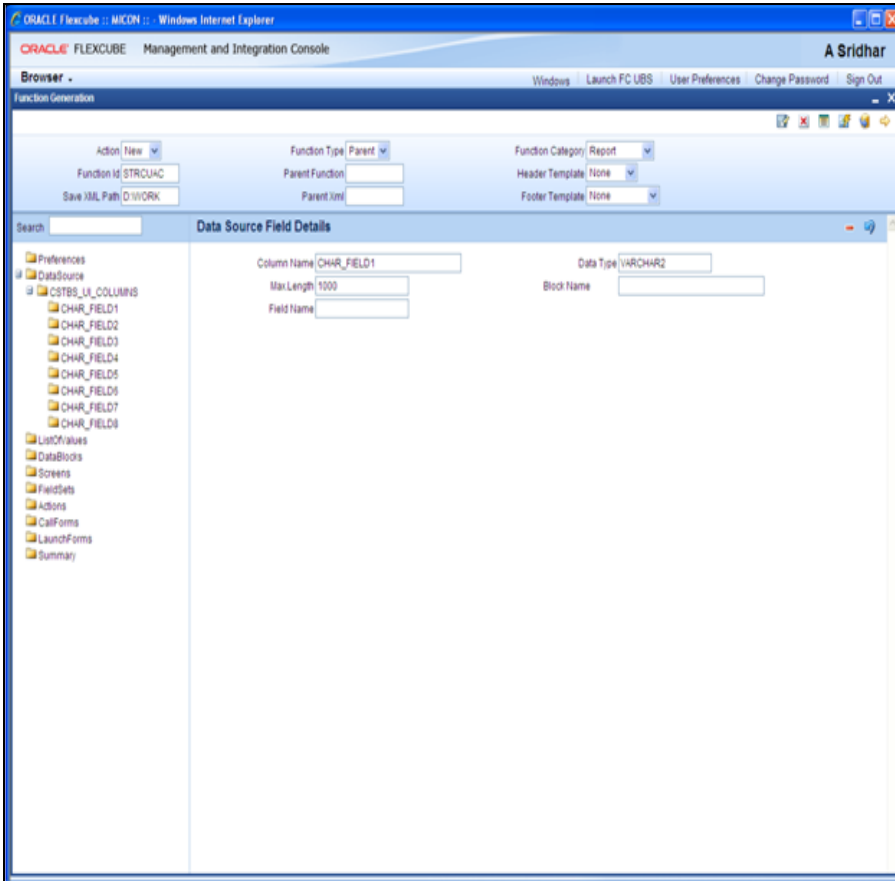


- Select master data source as 'yes' and fill PK cols and PK Types

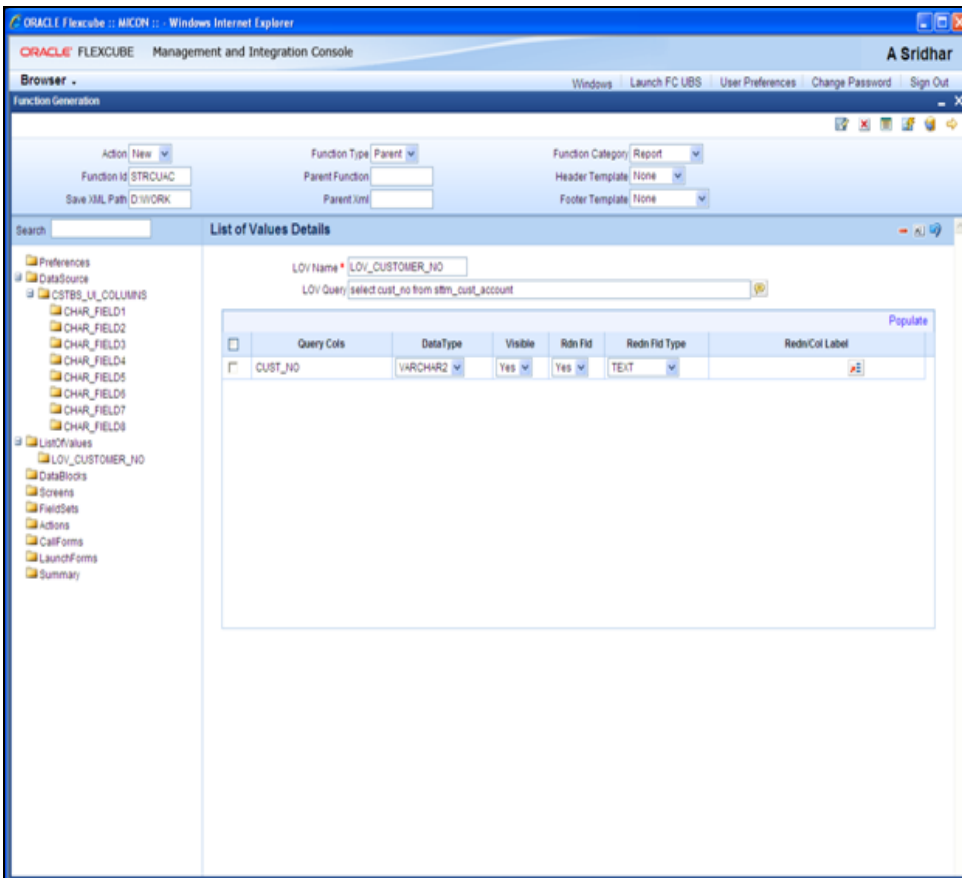
The screenshot displays the Oracle Flexcube Management and Integration Console interface. The main window is titled "Function Generation" and shows the "Data Source Details" configuration page. The interface includes a navigation menu on the left with options like Preferences, DataSource, ListOfValues, DataBooks, Screens, FieldSets, Actions, CallForms, LaunchForms, and Summary. The main content area is divided into several sections:

- Function Generation Header:** Contains fields for Action (New), Function Type (Parent), Function Category (Report), Function Id (STRCUCAC), Parent Function, Parent (xml), Header Template (None), and Footer Template (None).
- Data Source Details:** This section is the primary focus and includes:
 - Data Source: CSTBS_UI_COLUMNS
 - Master: Yes
 - Relation Type: One To One
 - Multi Record: No
 - PK Cols: CHAR_FIELD1
 - PK Types: VARCHAR2
 - Parent: (empty dropdown)
 - Relation: (empty dropdown)
 - Where Clause: (empty text box)
 - Default Order By: (empty text box)
 - Type: Normal
 - Mandatory: (unchecked checkbox)

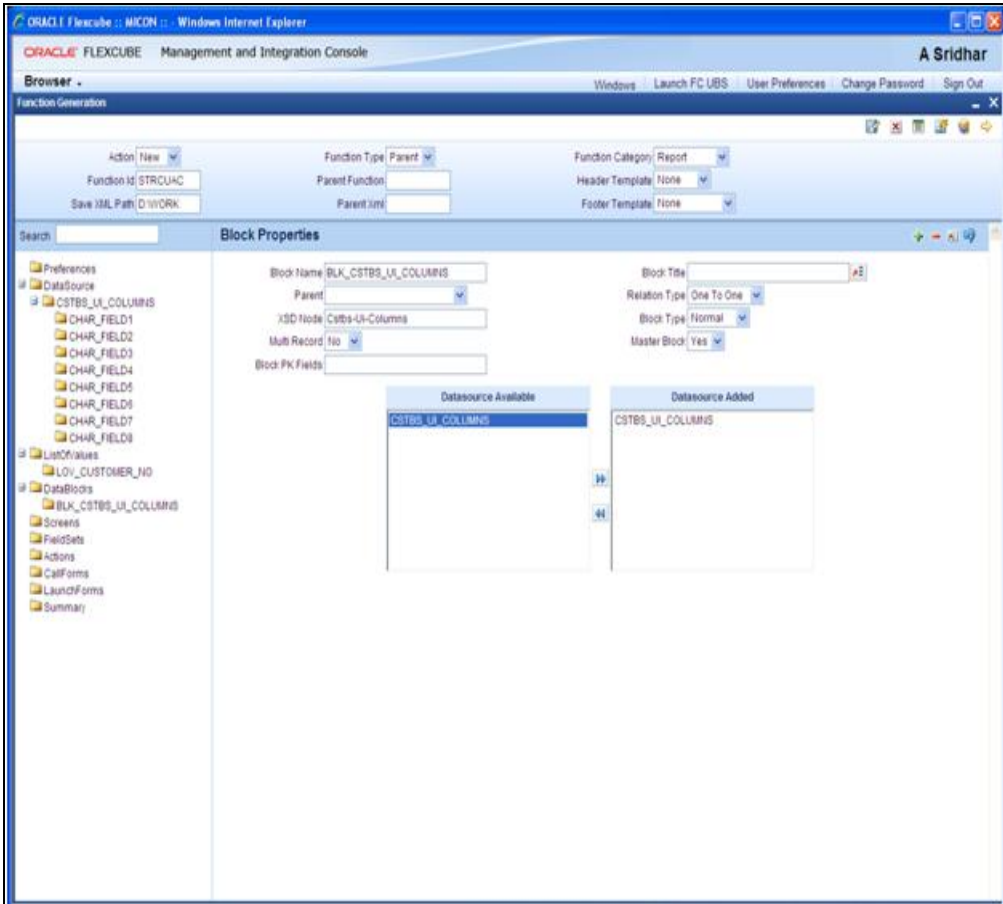
- Add data columns for data source



- Enter query in LOV Query and click on populate



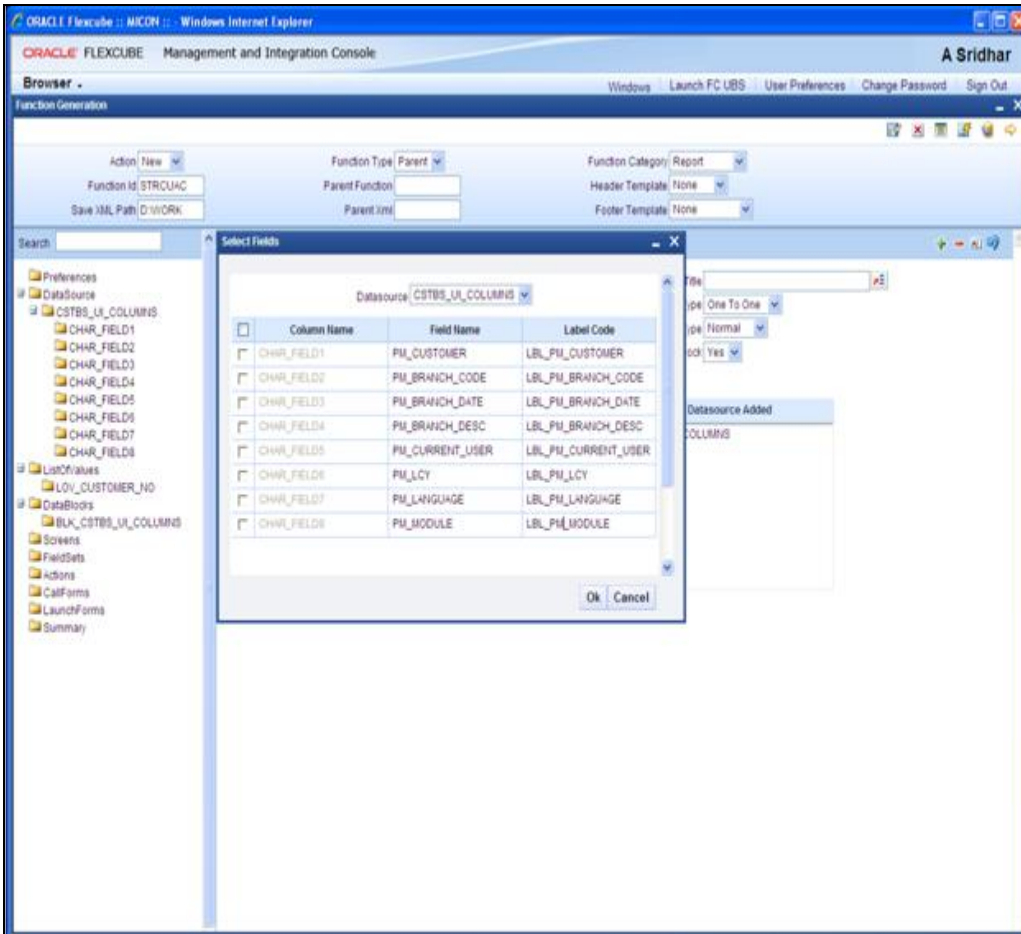
- Select master block as 'yes'



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

The screenshot shows the Oracle Flexcube Management and Integration Console interface. The main window is titled 'ORACLE FLEXCUBE Management and Integration Console' and 'A Sridhar'. The browser address bar shows 'ORACLE FLEXCUBE'. The interface includes a 'Function Generation' section with fields for Action (New), Function Id (STRCUCAC), Save XML Path (D:\WORK), Function Type (Parent), Parent Function, Parent Item, Function Category (Report), Header Template (None), and Footer Template (None).

The 'Block Field Properties' dialog is open, showing the following details for the field 'PM_CUSTOMER':

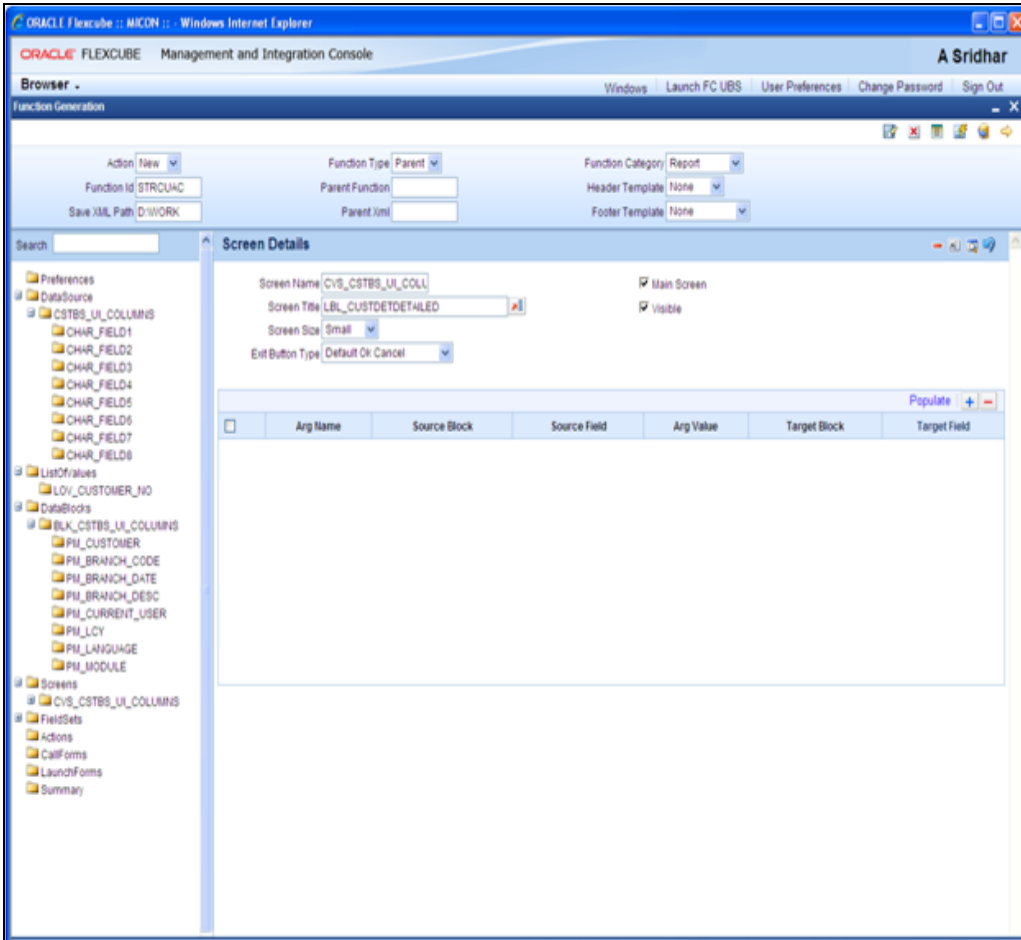
- Field Name: PM_CUSTOMER
- Field Label: LBL_PM_CUSTOMER
- XSD Tag: PM_CUSTOMER
- Data Type: varchar2
- Data Source: CSTBS_UA_COLUMNS
- Max Length: 1000
- Field Size: CHAR_FIELD1
- Column Name: CHAR_FIELD1
- Default Value:
- Preview Value:
- Accesskey Code:
- Text Area Col:
- Max Val:
- Mask Id:
- Off Line LOV Name:
- Image Source:

Additional properties include: Display Type (Lov), Item Type (Database Item), Parent Field, Related Block, Related Field, Text Area Rows, Min Val, Max Decimals, LOV Name (LOV_CUSTOMER_NO), and Fieldset Name. There are also checkboxes for 'Popup Edit Req', 'Required', 'Visible', 'Input by LOV Only', 'Calendar Text', 'Select Multiple', 'Uppercase Only', 'LOV Validation Req', 'Not Req In Xsd', 'Report Parameter', and 'Read Only'.

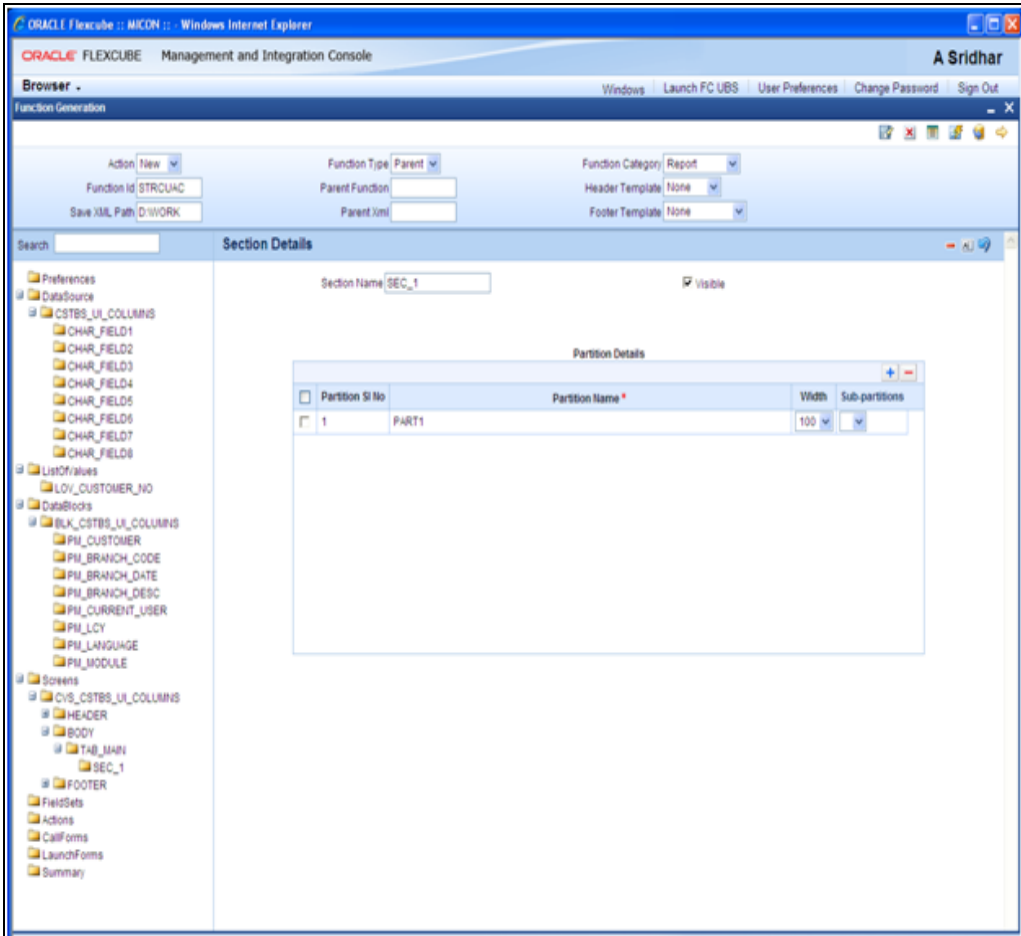
At the bottom, the 'Return Fields Mapping' section is visible, showing a table with the following data:

Query Column	Block Name	Return Id Name
<input checked="" type="checkbox"/> CUST_NO	BLK_CSTBS_UA_COLUMNS	PM_CUSTOMER

- Select main screen checkbox and screen size as small



- Specify the partition details



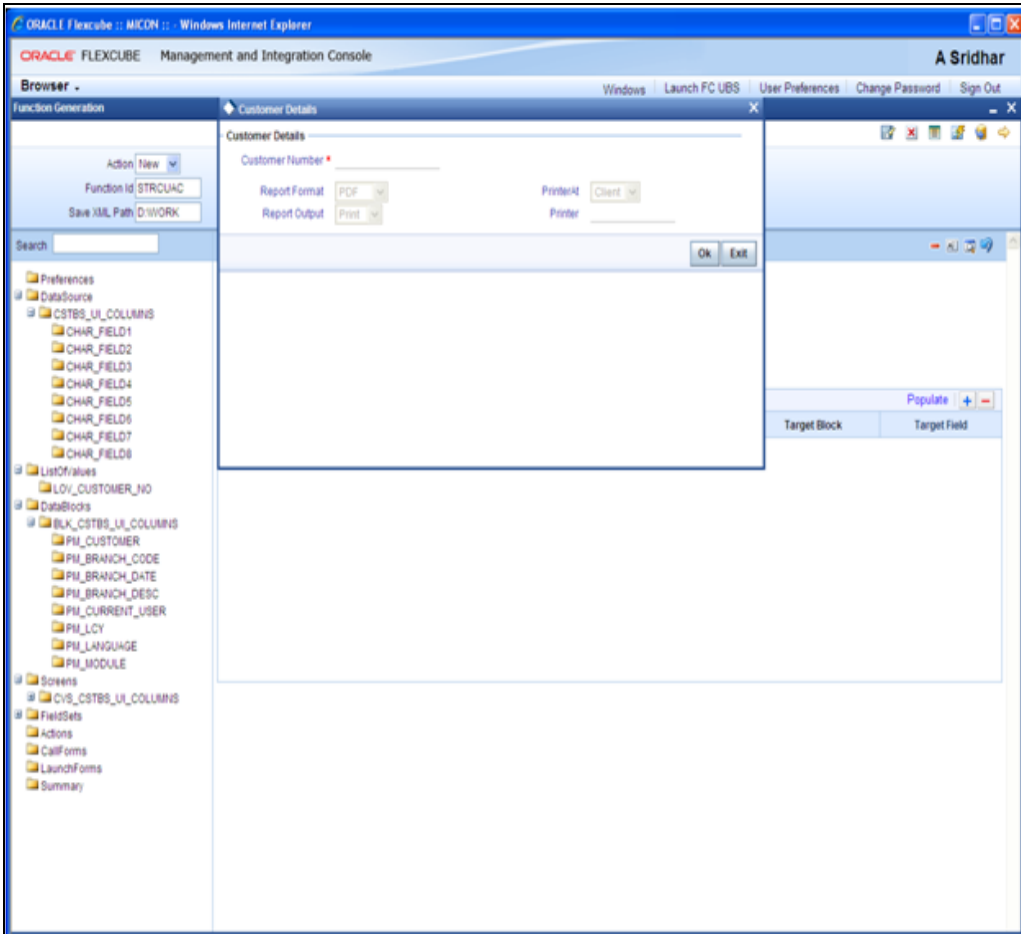
- Specify field set properties

The screenshot displays the Oracle Flexcube Management and Integration Console interface. The main window is titled "ORACLE FLEXCUBE Management and Integration Console" and shows a user named "A Sridhar". The interface is divided into several sections:

- Function Generation:** Contains fields for Action (New), Function Type (Parent), Function Category (Report), Function Id (STRCUAC), Parent Function, Header Template (None), Save XML Path (D:\WORK), Parent Xml, and Footer Template (None).
- Fieldset Properties:** The central configuration area with the following details:
 - Fieldset Name: FST_CSTBS_UI_COLUMN
 - Fieldset Label: URL_CUSTDETDETAILED
 - Data Block: BLK_CSTBS_UI_COLUMNS
 - Multi Record: No
 - View Type: Single
 - Fieldset Height: (empty)
 - No Of Rows: (empty)
 - Screen Name: Cvs_CSTBS_UI_COLUMNS
 - Screen Portion: Body
 - Tab Name: TAB_MAIN
 - Section Name: SEC_1
 - Partition Name: PART1
 - Fieldset Width: (empty)
 - Options: Horizontal Fieldset, Read Only, Navigation Button, Visible (checked).
- Data Block Fields:** A table with columns "FieldSet Fields" and "Subpartition Name". It lists several fields with checkboxes:

FieldSet Fields	Subpartition Name
<input type="checkbox"/>	PII_CUSTOMER
<input type="checkbox"/>	PII_BRANCH_CODE
<input type="checkbox"/>	PII_BRANCH_DATE
<input type="checkbox"/>	PII_BRANCH_DESC
<input type="checkbox"/>	PII_CURRENT_USER
<input type="checkbox"/>	PII_LCY
<input type="checkbox"/>	PII_LANGUAGE
<input type="checkbox"/>	PII_MODULE
- Left Navigation Tree:** Shows a hierarchical structure including Preferences, DataSource, CSTBS_UI_COLUMNS (with sub-items CHAR_FIELD1-8), ListOfValues, DataBlocks (with sub-items PII_CUSTOMER, PII_BRANCH_CODE, PII_BRANCH_DATE, PII_BRANCH_DESC, PII_CURRENT_USER, PII_LCY, PII_LANGUAGE, PII_MODULE), Screens (with sub-items Cvs_CSTBS_UI_COLUMNS, HEADER, BODY, TAB_MAIN, SEC_1, FOOTER), FieldSets (with sub-item FST_CSTBS_UI_COLUMNS), Actions, CallForms, LaunchForms, and Summary.

- Preview the screen

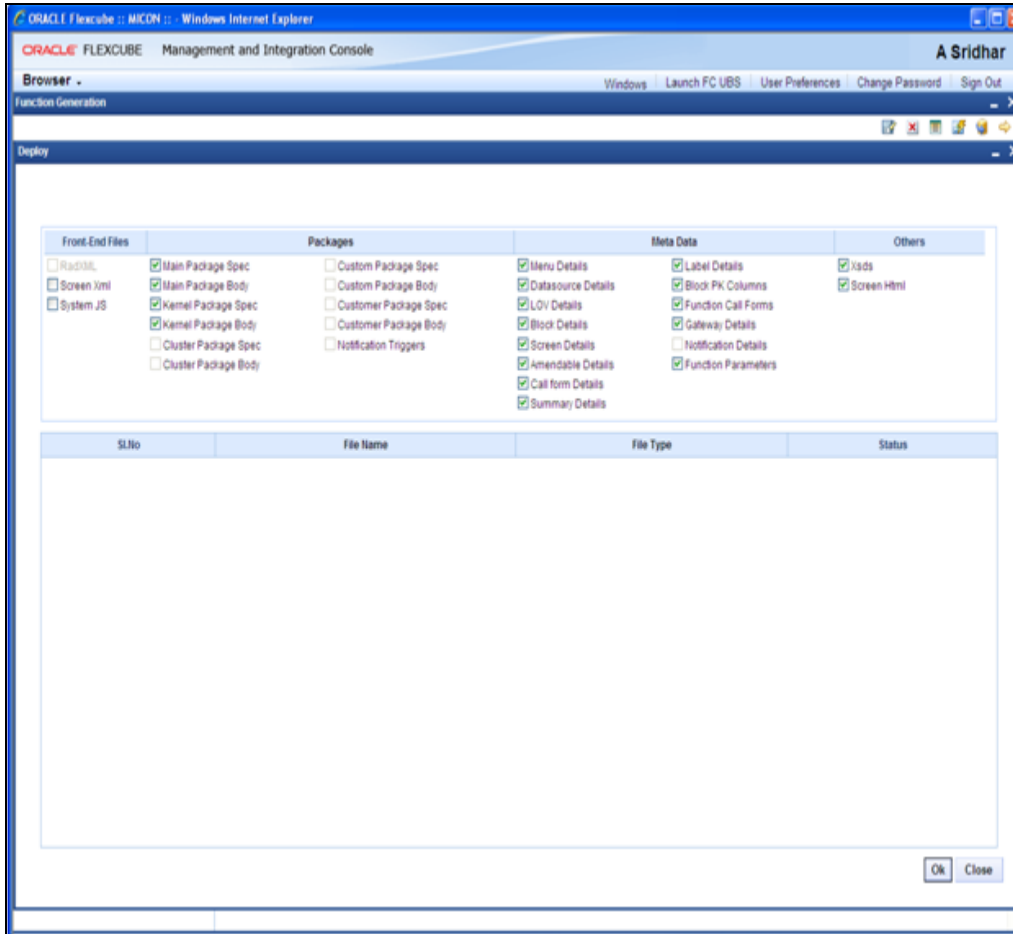


- Save and Generate the files

The screenshot shows the Oracle Flexcube Management and Integration Console. The 'Generate' dialog box is open, displaying options for generating various files. The 'Front-End Files' tab is selected, showing checkboxes for RadXML, Screen.xml, System JS, Main Package Spec, Main Package Body, Kernel Package Spec, Kernel Package Body, Cluster Package Spec, and Cluster Package Body. The 'Packages' tab shows checkboxes for Custom Package Spec, Custom Package Body, Customer Package Spec, Customer Package Body, and Notification Triggers. The 'Meta Data' tab shows checkboxes for Menu Details, Datasource Details, LOV Details, Block Details, Screen Details, Amendable Details, Call form Details, and Summary Details. The 'Others' tab shows checkboxes for Xsds and Screen.html.

SL/No	File Name	File Type	Status
1	STRCUAC.xml	UXML	Generated
2	STRCUAC_SYS.js	JS	Generated
3	STRCUAC__CIVS_CSTBS_UI_COLUMNS__TAB_HEADER.f	HTML	Generated
4	STRCUAC__CIVS_CSTBS_UI_COLUMNS__TAB_MAIN.html	HTML	Generated
5	STRCUAC__CIVS_CSTBS_UI_COLUMNS__TAB_FOOTER.f	HTML	Generated
6	spks_strouac_main.spc	SPC	Generated
7	spks_strouac_kernel.spc	SPC	Generated
8	spks_strouac_main.sql	SQL	Generated
9	spks_strouac_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	STB_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_DEPID_2504\fcubs.properties - Notepad++
File Edit Search View Format Language Settings Macro Run TextFX Plugins Window ?
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 =r9e04zq+1/1orG4XTbwUfu==
243 BIP_PASSWORD =r9e04zq+1/1orG4XTbwUfu==
244 BIP_REPORT_FOLDER =FCReports
245 BIP_ADVICE_FOLDER =FCReports/Adv/
246 BIP_ADV_SPOOL_PATH =/oraInt1/appsrvsr/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
Properties file nb char : 9624 nb line : 319 Ln : 239 Col : 23 Sel : 0 UNIX ANSI INS

```

4.2.1 Declaration of Parameters in Spec of the Package

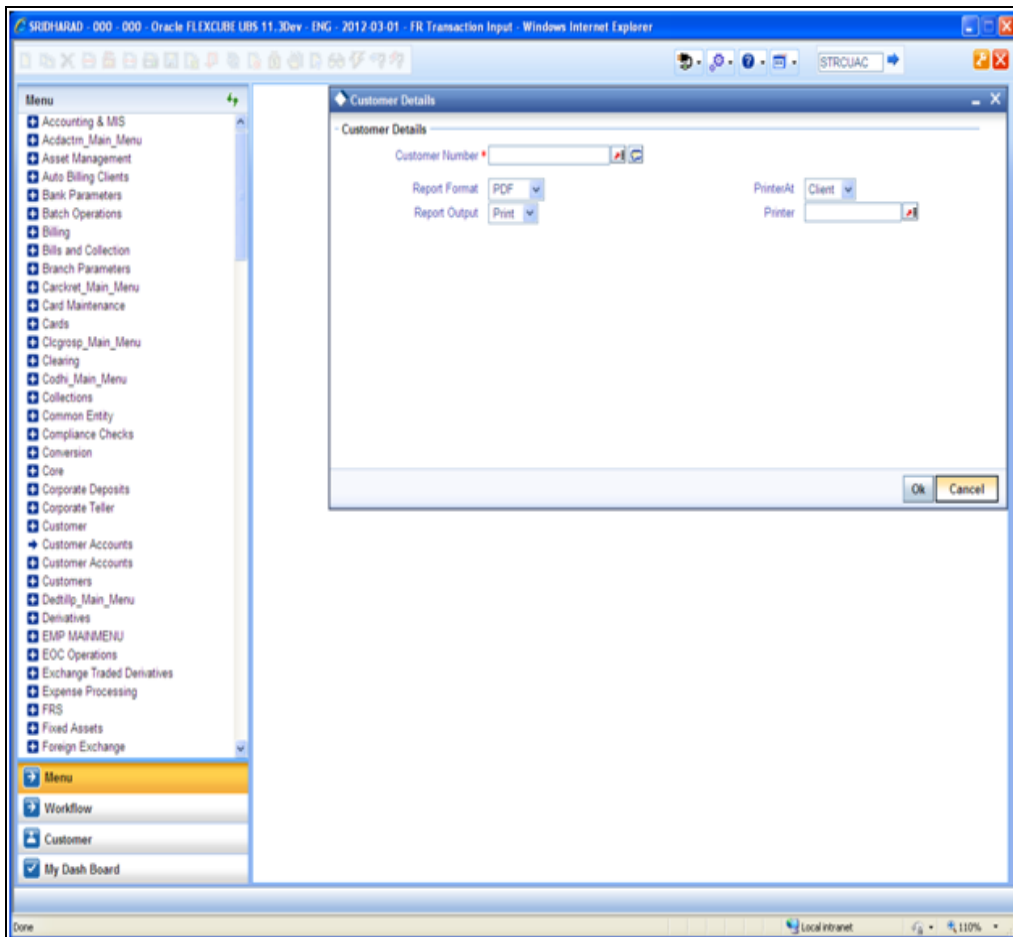
```

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

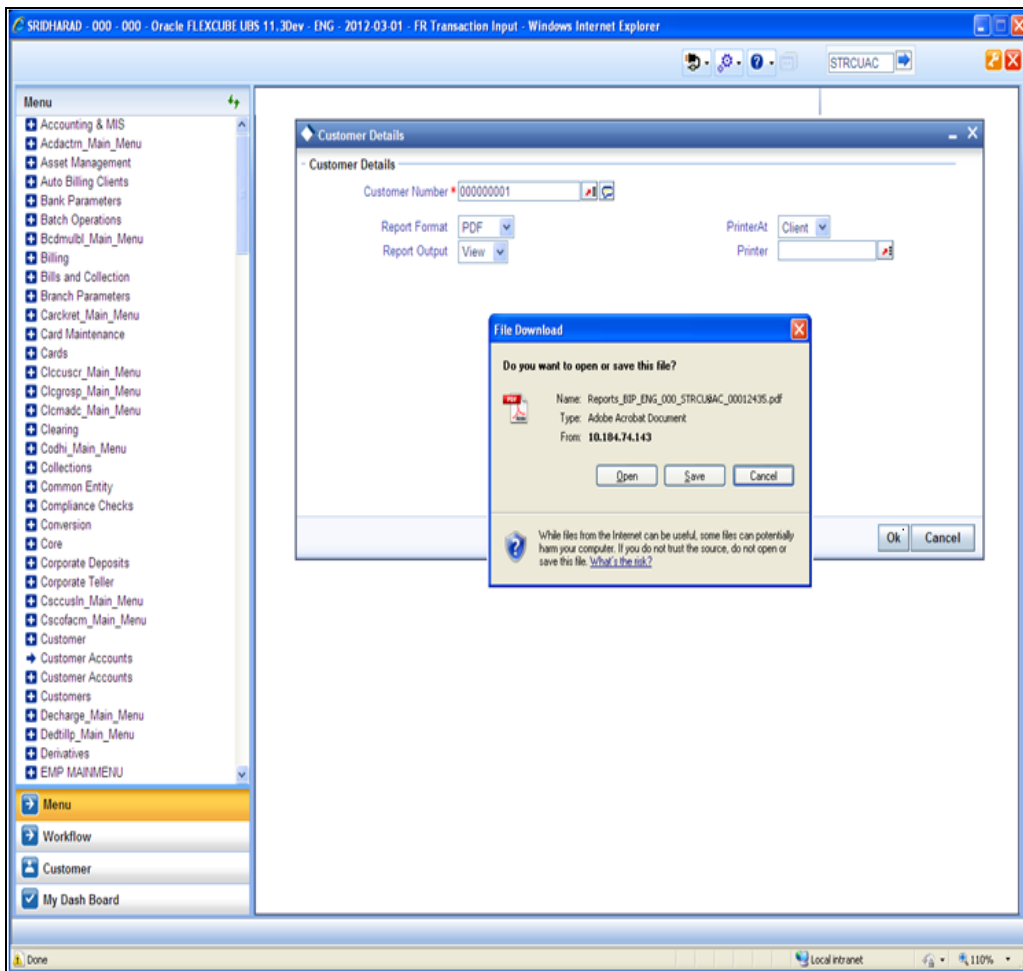


- Open Development Tool would automatically add the Report Options for all report screens

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% 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



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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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