

BIP Report Integration
Oracle FLEXCUBE Investor Servicing
Release 12.0
[June] [2012]
Oracle Part Number E51528-01



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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

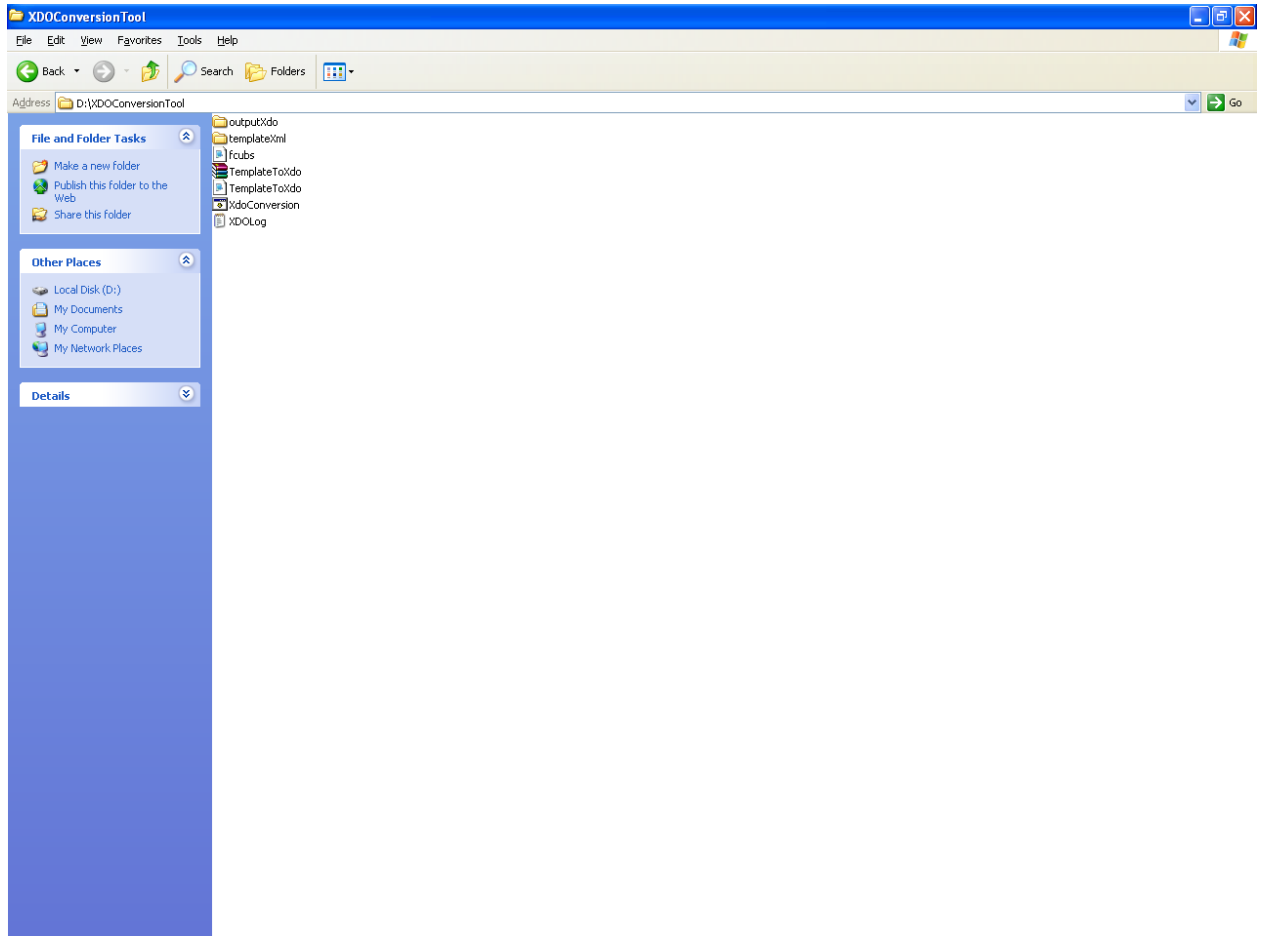
2.1 How to use this Guide

- [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

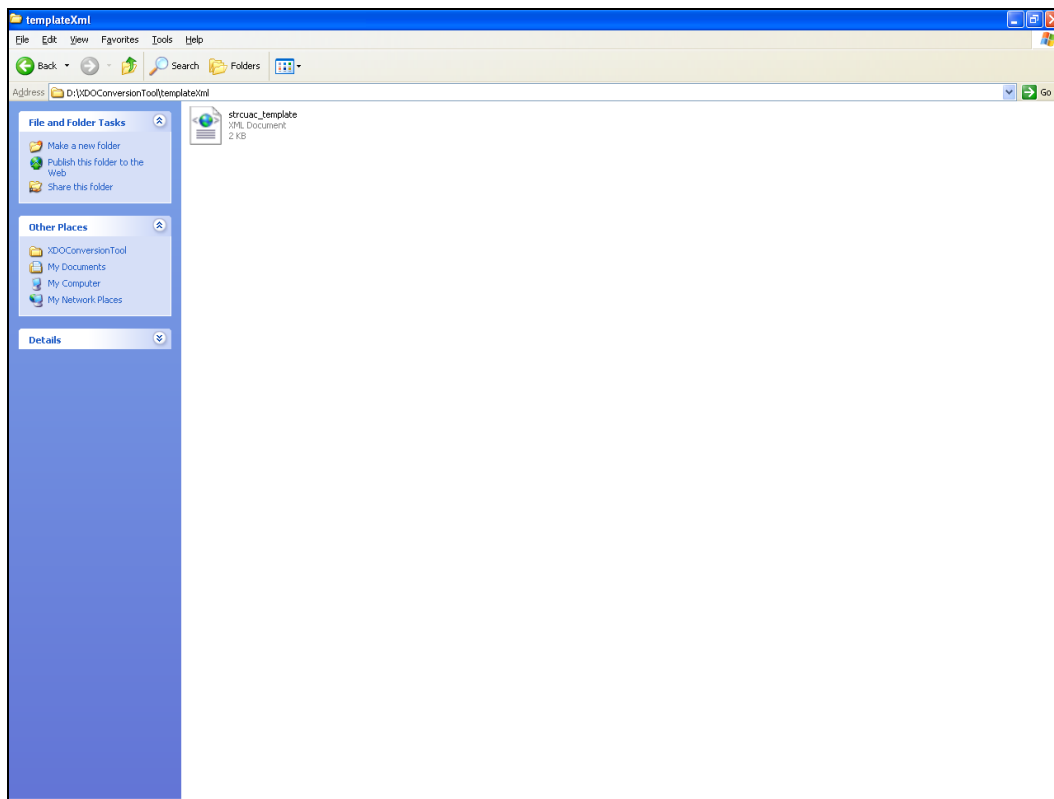
TEMPLATE_XML_PATH = D:\XdoConversionTool\templatexml

OUTPUT_PATH = D:\XdoConversionTool\xdo

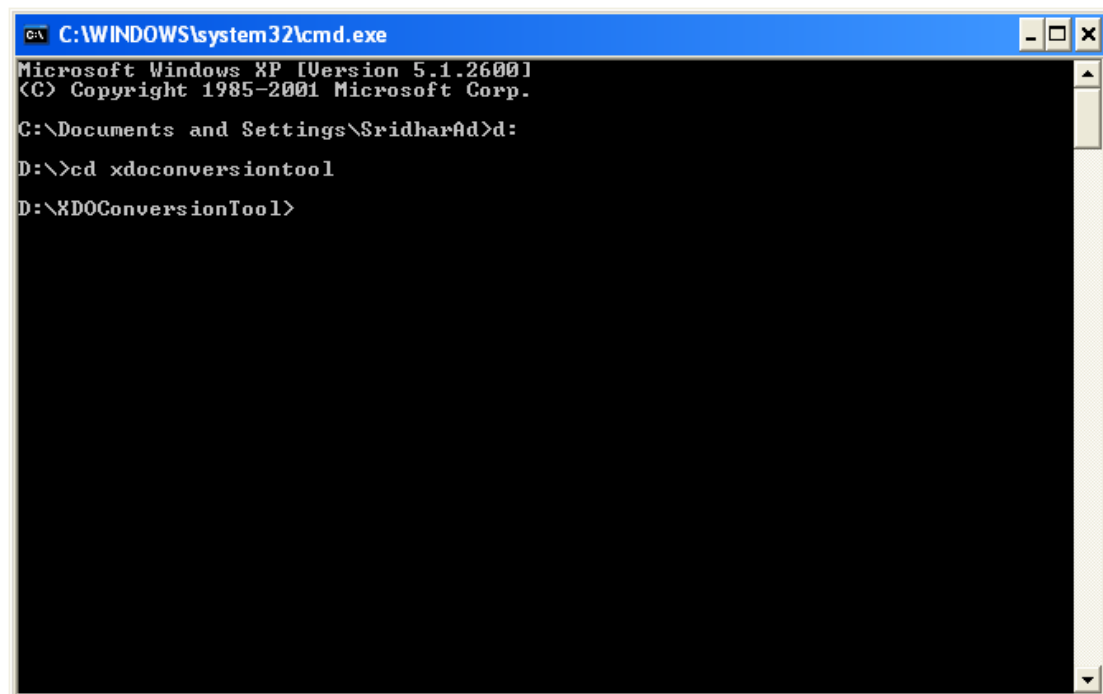
DEFAULT_DATA_SOURCE = FCI5dev

TEMPLATE_LABEL = General

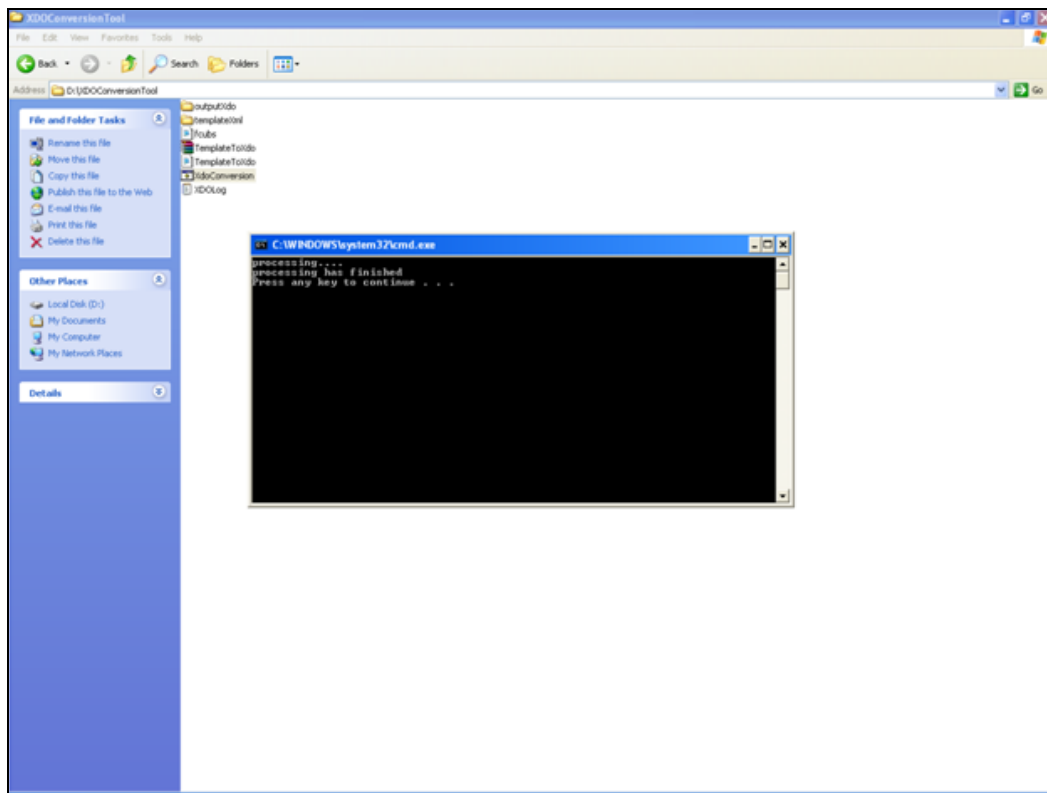
- Copy your data template xml to path mention in TEMPLATE_XML_PATH.



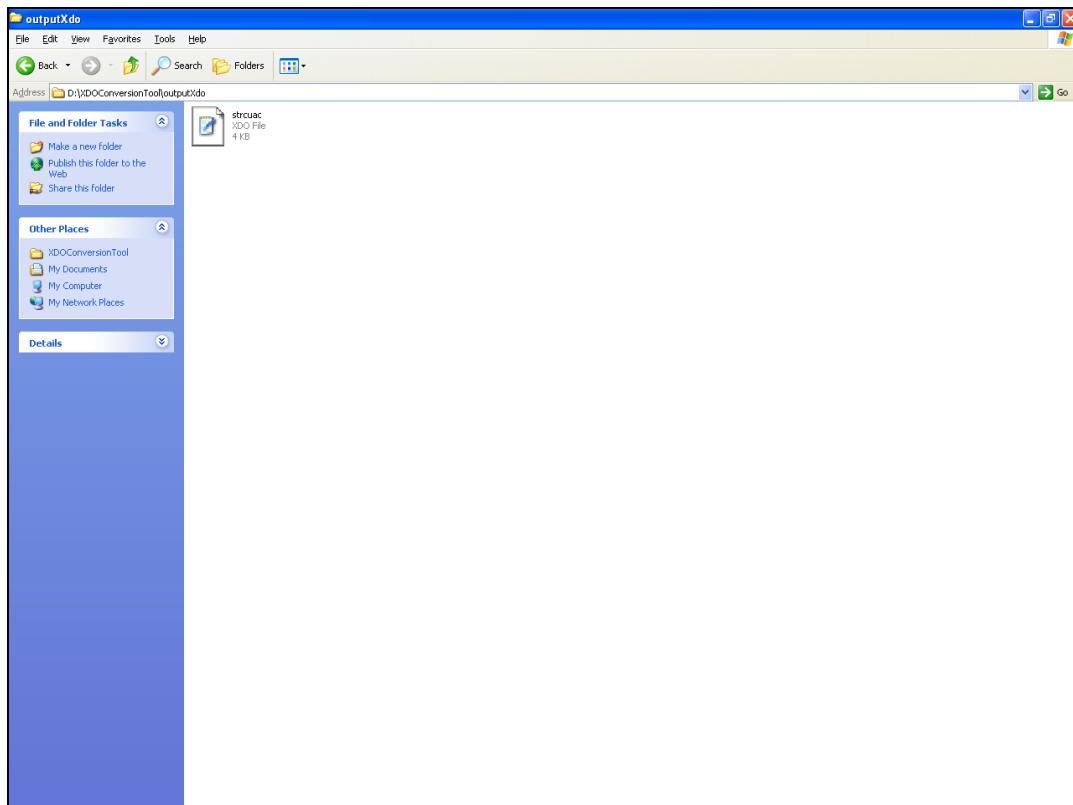
- Navigate to XDO tool conversion home directory in command prompt



- 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 "Action" is set to "New". The "Function ID" is "STRCUAC". The "Save XML Path" is "D:\WORK". The "Function Type" is "Parent". The "Parent Function" and "Parent XML" fields are empty. The "Function Category" is "Report". The "Header Template" and "Footer Template" are both "None".

On the left, there is a "Search" field and a tree view showing the following folders: Preferences, DataSource, ListOfValues, DataBlocks, Screens, FieldSets, Actions, CallForms, LaunchForms, and Summary.

The "Preferences" section on the right contains the following settings:

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

The "Module" is "ST". The "Module Description" is "Static Maintenance". The "Branch Program Id" and "Process Code" fields are empty. The "ClearCase Folder" field is empty.

At the bottom, there is a table with the following columns: FunctionID, Module, and Module Desc. The table contains one row:

FunctionID	Module	Module Desc
STRCUAC	ST	Static Maintenance

- Select table name as CSTBS_UI_COLUMNS

The screenshot shows the Oracle Flexcube Management and Integration Console. The 'Function Generation' page is active, displaying various configuration options. A modal dialog box titled 'AddTable' is open, allowing the user to specify the table name and alias. The 'Table Name' field is populated with 'CSTBS_UI_COLUMNS'. The background interface includes a search bar, a tree view on the left with categories like Preferences, DataSource, ListOfValues, DataBlocks, Screens, FieldSets, Actions, CallForms, LaunchForms, and Summary, and a main configuration area with fields for Action, Function Id, Save XML Path, Function Type, Parent Function, Parent Xml, Function Category, Header Template, and Footer Template.

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

The screenshot shows the 'Data Source Details' page in the Oracle Flexcube Management and Integration Console. The 'Data Source' is set to 'CSTBS_UI_COLUMNS'. The configuration includes 'Master' set to 'Yes', 'Relation Type' set to 'One To One', 'Multi Record' set to 'No', 'PK Cols' set to 'CHAR_FIELD1', 'PK Types' set to 'VARCHAR2', and 'Type' set to 'Normal'. There are also fields for 'Parent', 'Relation', 'Where Clause', 'Default Order By', and a 'Mandatory' checkbox. The left sidebar shows the 'DataSource' category selected under the 'Data' folder.

- Add data columns for data source

Oracle Flexcube Management and Integration Console - A Sridhar

Function Generation

Action: New | Function Type: Parent | Function Category: Report

Function ID: STRCUAC | Parent Function: | Header Template: None

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

Search: | Data Source Field Details

Column Name: CHAR_FIELD1 | Data Type: VARCHAR2

Max Length: 1000 | Block Name:

Field Name:

Left Sidebar Tree:

- Preferences
- Data Source
 - CSTBS_UI_COLUMNS
 - CHAR_FIELD1
 - CHAR_FIELD2
 - CHAR_FIELD3
 - CHAR_FIELD4
 - CHAR_FIELD5
 - CHAR_FIELD6
 - CHAR_FIELD7
 - CHAR_FIELD8
- List of Values
- Data Blocks
- Screens
- Field Sets
- Actions
- Call Forms
- Launch Forms
- Summary

- Enter query in LOV Query and click on populate

Oracle Flexcube Management and Integration Console - A Sridhar

Function Generation

Action: New | Function Type: Parent | Function Category: Report

Function ID: STRCUAC | Parent Function: | Header Template: None

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

Search: | List of Values Details

LOV Name: LOV_CUSTOMER_NO

LOV Query: select cust_no from atfm_cust_account

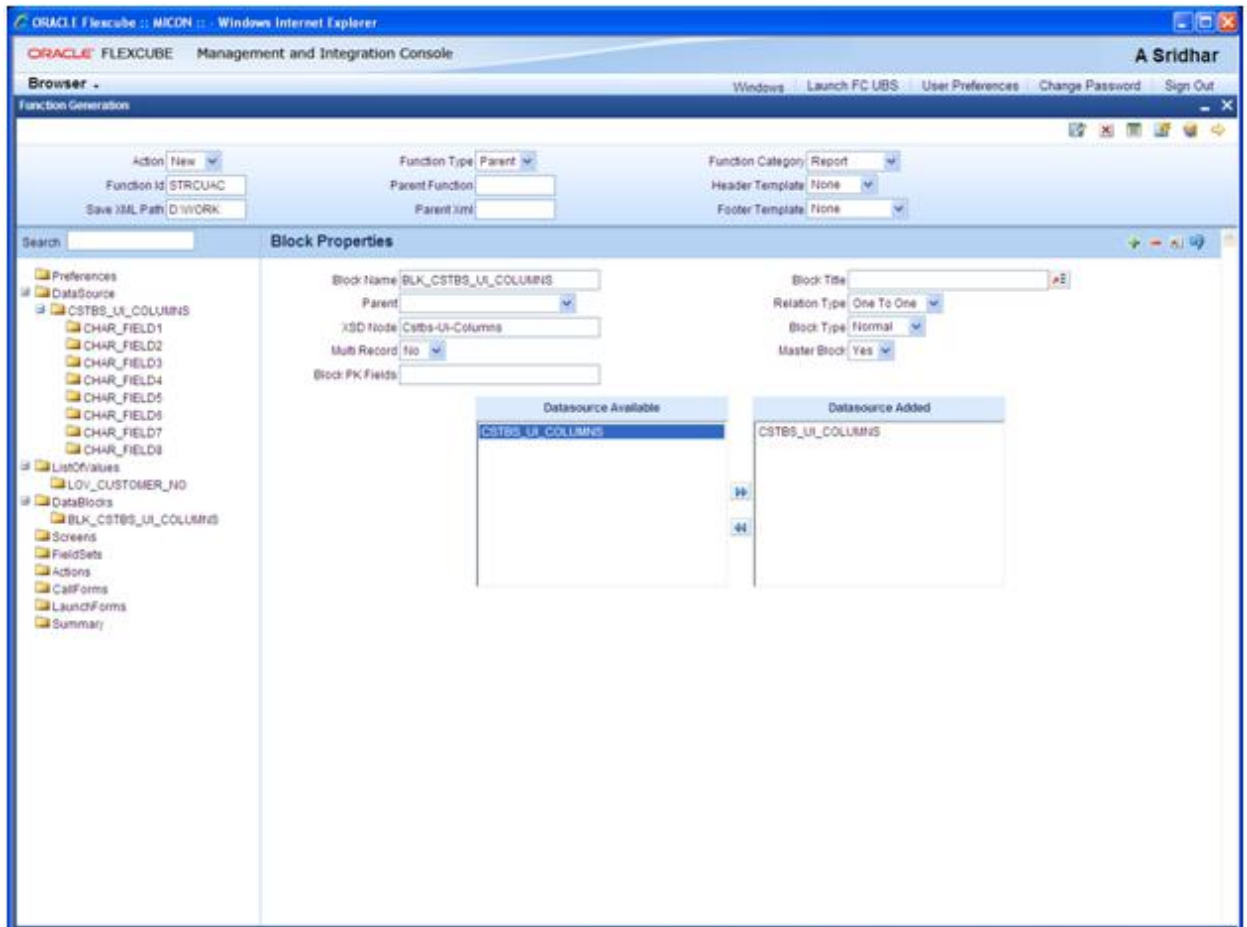
Populate

Query Cols	Data Type	Visible	Run Fid	Redn Fid Type	Redn/Col Label
CUST_NO	VARCHAR2	Yes	Yes	TEXT	

Left Sidebar Tree:

- Preferences
- Data Source
 - CSTBS_UI_COLUMNS
 - CHAR_FIELD1
 - CHAR_FIELD2
 - CHAR_FIELD3
 - CHAR_FIELD4
 - CHAR_FIELD5
 - CHAR_FIELD6
 - CHAR_FIELD7
 - CHAR_FIELD8
- List of Values
 - LOV_CUSTOMER_NO
- Data Blocks
- Screens
- Field Sets
- Actions
- Call Forms
- Launch Forms
- Summary

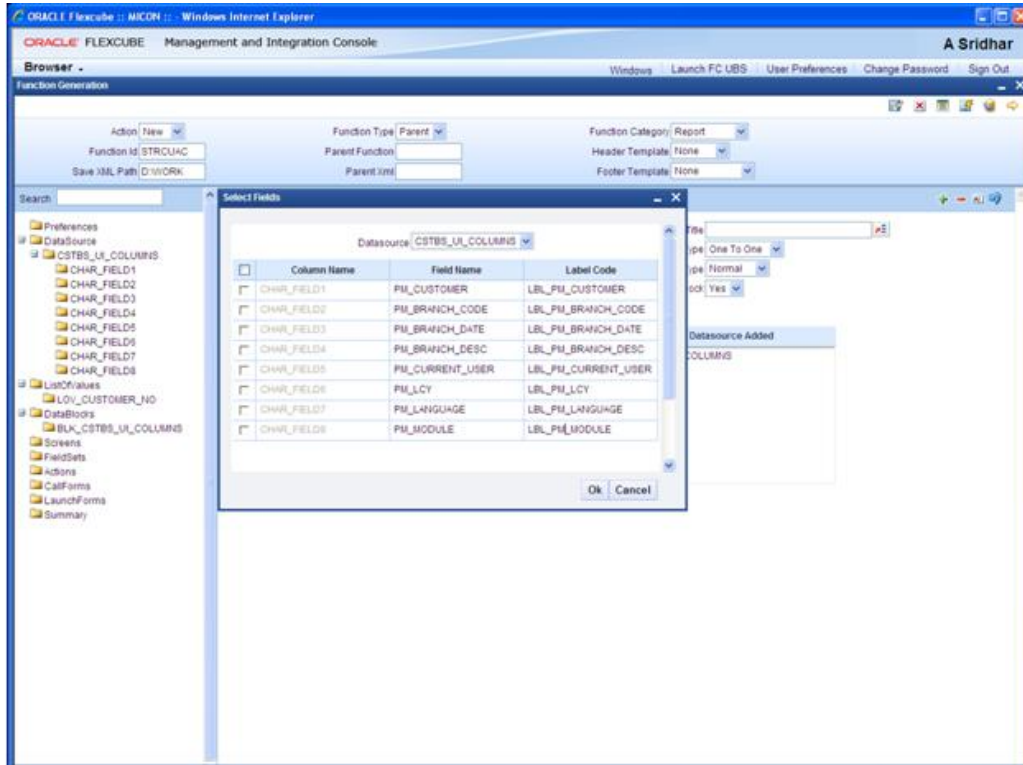
- Select master block as 'yes'



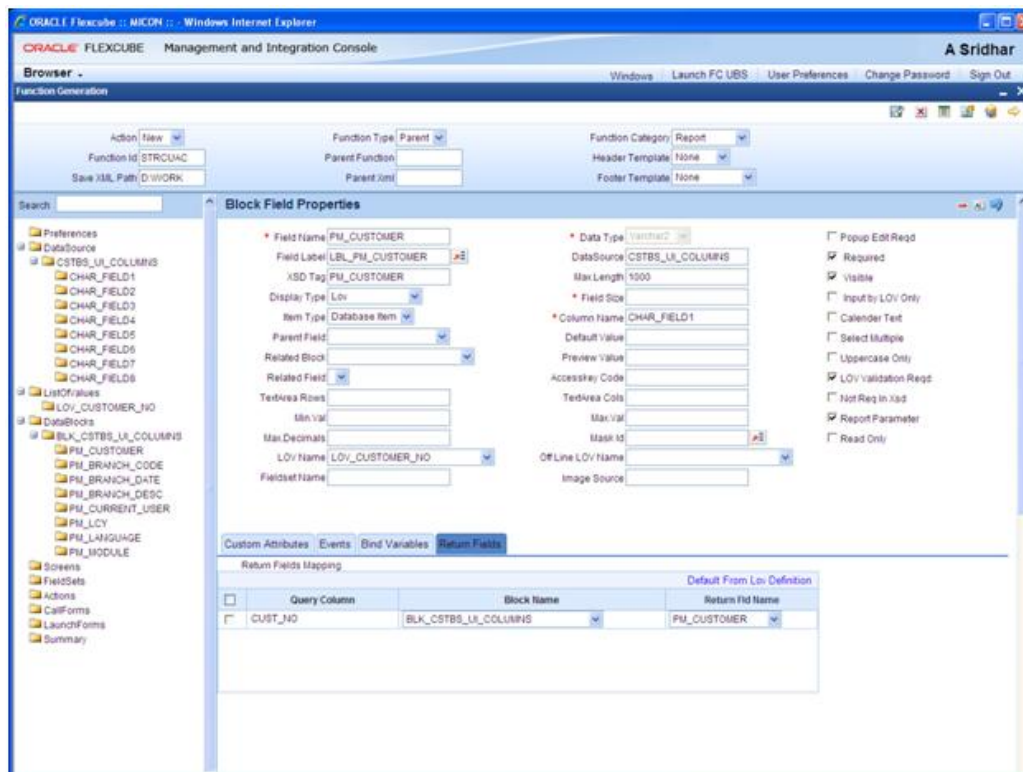
The table CSTB_UI_COLUMNS is used for report screen design. Columns can be selected from this table depending on the number and data types of "parameters" required for report generation.

Typically, in report screens there are many fields and some of them are required for pre processing and some parameters should be 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



- Select main screen checkbox and screen size as small

The screenshot shows the Oracle Flexcube Management and Integration Console. The 'Screen Details' section is active, displaying the following configuration:

- Screen Name: CYS_CSTBS_UI_COLL
- Screen Title: LBL_CUSTDETDETAILED
- Screen Size: Small
- Exit Button Type: Default Ok Cancel
- Function Type: Parent
- Function Category: Report
- Header Template: None
- Footer Template: None
- Save XML Path: D:\WORK
- Function ID: STRCUAC
- Parent Function: (empty)
- Parent XML: (empty)

On the left, a tree view shows the project structure, including 'Screens' and 'FieldSets'. The 'Main Screen' checkbox is checked, and the 'Visible' checkbox is also checked.

Arg Name	Source Block	Source Field	Arg Value	Target Block	Target Field
Populate					

- Specify the partition details

The screenshot shows the Oracle Flexcube Management and Integration Console. The 'Section Details' section is active, displaying the following configuration:

- Section Name: SEC_1
- Visible: checked

Below the section details, the 'Partition Details' table is shown:

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

The left tree view shows the project structure, including 'Screens' and 'FieldSets'. The 'SEC_1' section is selected under the 'BODY' tab.

- Specify field set properties

ORACLE FLEXCUBE Management and Integration Console

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

Function Generation

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

Function Type: Parent Parent Function: Parent.xml

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

Search: Fieldset Properties

Fieldset Name: FST_CSTBS_UI_COLUMN Fieldset Label: LBL_CUSTDETAILED

Data Block: BLK_CSTBS_UI_COLUMNS

Mult Record: No View Type: Single

Fieldset Height: No Of Rows:

Screen Name: CYS_CSTBS_UI_COLUMNS Screen Portion: Body Tab Name: TAB_MAIN Section Name: SEC_1 Partition Name: PART1

Fieldset Width:

Horizontal Fieldset: ☐ ReadOnly: ☐ Navigation Button: ☐ Visible: ☒

Data Block Fields:

Fieldset Fields	Subpartition Name
<input type="checkbox"/> PM_CUSTOMER	
<input type="checkbox"/> PM_BRANCH_CODE	
<input type="checkbox"/> PM_BRANCH_DATE	
<input type="checkbox"/> PM_BRANCH_DESC	
<input type="checkbox"/> PM_CURRENT_USER	
<input type="checkbox"/> PM_LCY	
<input type="checkbox"/> PM_LANGUAGE	
<input type="checkbox"/> PM_MODULE	

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
 - CallForms
 - LaunchForms
 - Summary

- Preview the screen

ORACLE FLEXCUBE Management and Integration Console

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

Function Generation

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

Customer Details

Customer Number *

Report Format: PDF Report Output: Print

Print/Client: Print

OK Exit

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
 - CallForms
 - LaunchForms
 - Summary

Populate: + -

Target Block: Target Field:

- 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
<input checked="" type="checkbox"/> RadSQL	<input checked="" type="checkbox"/> Main Package Spec	<input checked="" type="checkbox"/> Menu Details	<input checked="" type="checkbox"/> Xsds
<input checked="" type="checkbox"/> Screen Xml	<input checked="" type="checkbox"/> Main Package Body	<input checked="" type="checkbox"/> Datasource Details	<input checked="" type="checkbox"/> Block PK Columns
<input checked="" type="checkbox"/> System JS	<input checked="" type="checkbox"/> Kernel Package Spec	<input checked="" type="checkbox"/> LOV Details	<input checked="" type="checkbox"/> Function Call Forms
	<input checked="" type="checkbox"/> Kernel Package Body	<input checked="" type="checkbox"/> Block Details	<input checked="" type="checkbox"/> Gateway Details
	<input type="checkbox"/> Cluster Package Spec	<input checked="" type="checkbox"/> Screen Details	<input type="checkbox"/> Notification Details
	<input type="checkbox"/> Cluster Package Body	<input checked="" type="checkbox"/> Amendable Details	<input checked="" type="checkbox"/> Function Parameters
	<input type="checkbox"/> Notification Triggers	<input checked="" type="checkbox"/> Call form Details	
		<input checked="" type="checkbox"/> Summary Details	

SLNo	File Name	File Type	Status
1	STRCUAC.xml	UXML	Generated
2	STRCUAC_SYS.js	JS	Generated
3	STRCUAC_CVS_CSTBS_UI_COLUMNS__TAB_HEADER.f	HTML	Generated
4	STRCUAC_CVS_CSTBS_UI_COLUMNS__TAB_MAIN.html	HTML	Generated
5	STRCUAC_CVS_CSTBS_UI_COLUMNS__TAB_FOOTER.f	HTML	Generated
6	spks_strcuac_main.spc	SPC	Generated
7	spks_strcuac_kernel.spc	SPC	Generated
8	spks_strcuac_main.sql	SQL	Generated
9	spks_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

Ok Close

- Deploy 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

Deploy

Front-End Files	Packages	Meta Data	Others
<input type="checkbox"/> RadSQL	<input checked="" type="checkbox"/> Main Package Spec	<input checked="" type="checkbox"/> Menu Details	<input checked="" type="checkbox"/> Xsds
<input type="checkbox"/> Screen Xml	<input checked="" type="checkbox"/> Main Package Body	<input checked="" type="checkbox"/> Datasource Details	<input checked="" type="checkbox"/> Block PK Columns
<input type="checkbox"/> System JS	<input checked="" type="checkbox"/> Kernel Package Spec	<input checked="" type="checkbox"/> LOV Details	<input checked="" type="checkbox"/> Function Call Forms
	<input checked="" type="checkbox"/> Kernel Package Body	<input checked="" type="checkbox"/> Block Details	<input checked="" type="checkbox"/> Gateway Details
	<input type="checkbox"/> Cluster Package Spec	<input checked="" type="checkbox"/> Screen Details	<input type="checkbox"/> Notification Details
	<input type="checkbox"/> Cluster Package Body	<input checked="" type="checkbox"/> Amendable Details	<input checked="" type="checkbox"/> Function Parameters
	<input type="checkbox"/> Notification Triggers	<input checked="" type="checkbox"/> Call form Details	
		<input checked="" type="checkbox"/> Summary Details	

SLNo	File Name	File Type	Status
------	-----------	-----------	--------

Ok Close

- 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

```

D:\MyWorkPlace\Installer_DIPD_2504\fcubs.properties - Notepad++
File Edit Search View Format Language Settings Macro Run TextFX Plugins Window Help
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                    =BODYlogin
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+1/1orG4XTbwUfv==
243 BIP_PASSWORD                         =r9e04zq+1/1orG4XTbwUfv==
244 BIP_REPORT_FOLDER                   =FCReports
245 BIP_ADVICE_FOLDER                   =FCReports/Adv/
246 BIP_ADV_SPOOL_PATH                  =/oraint1/appsvcs/fcuba_logs/fcubs113/BrdBgs/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_PROVIDER_URL                    =t3://127.0.0.1:7001
258 EMS_QUEUE_PRINCIPAL                 =
259 EMS_QUEUE_CREDENTIALS               =zfb0x66Q8ug=
260 EMS_FILE_TRANSFER_MODE              =FTP

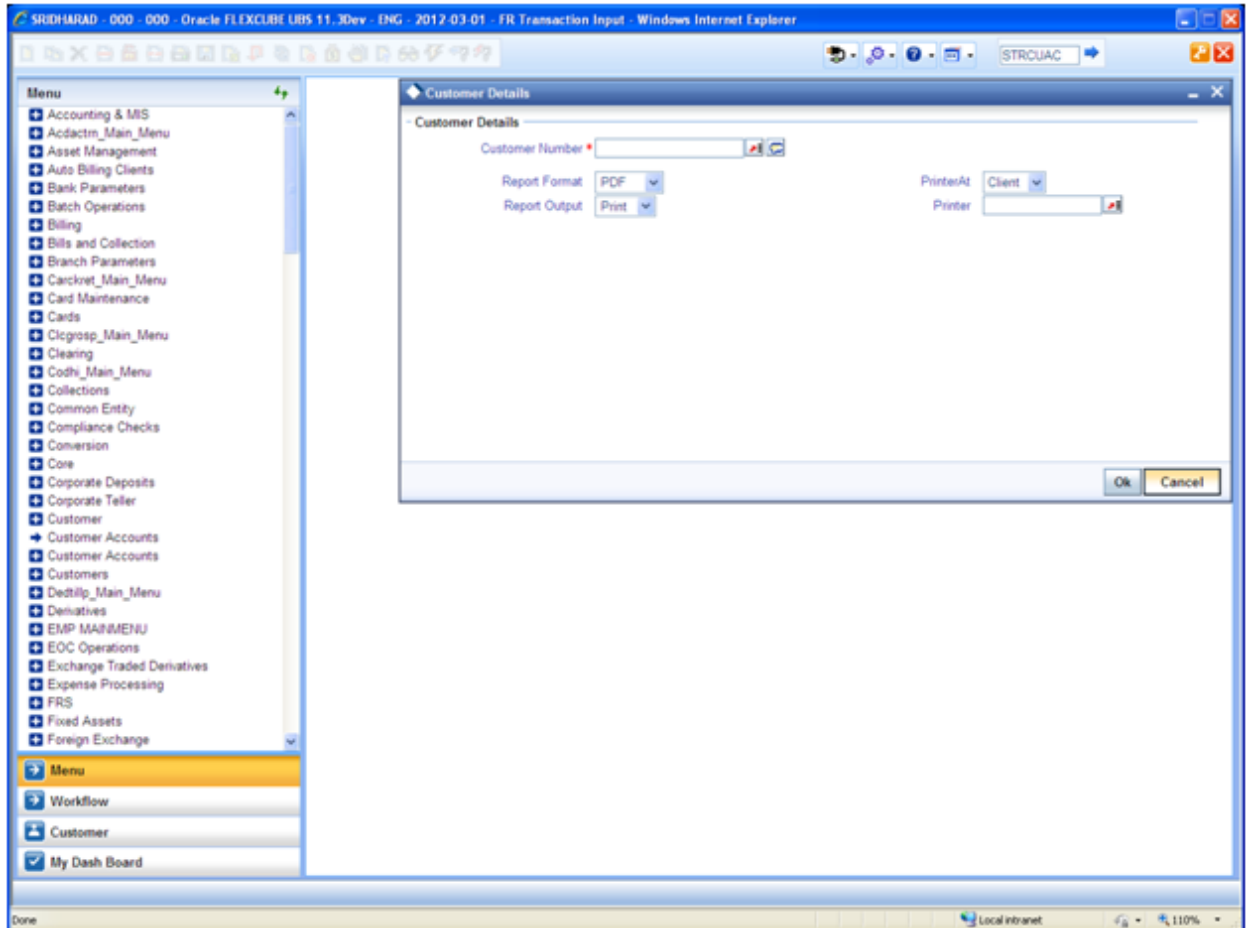
```

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

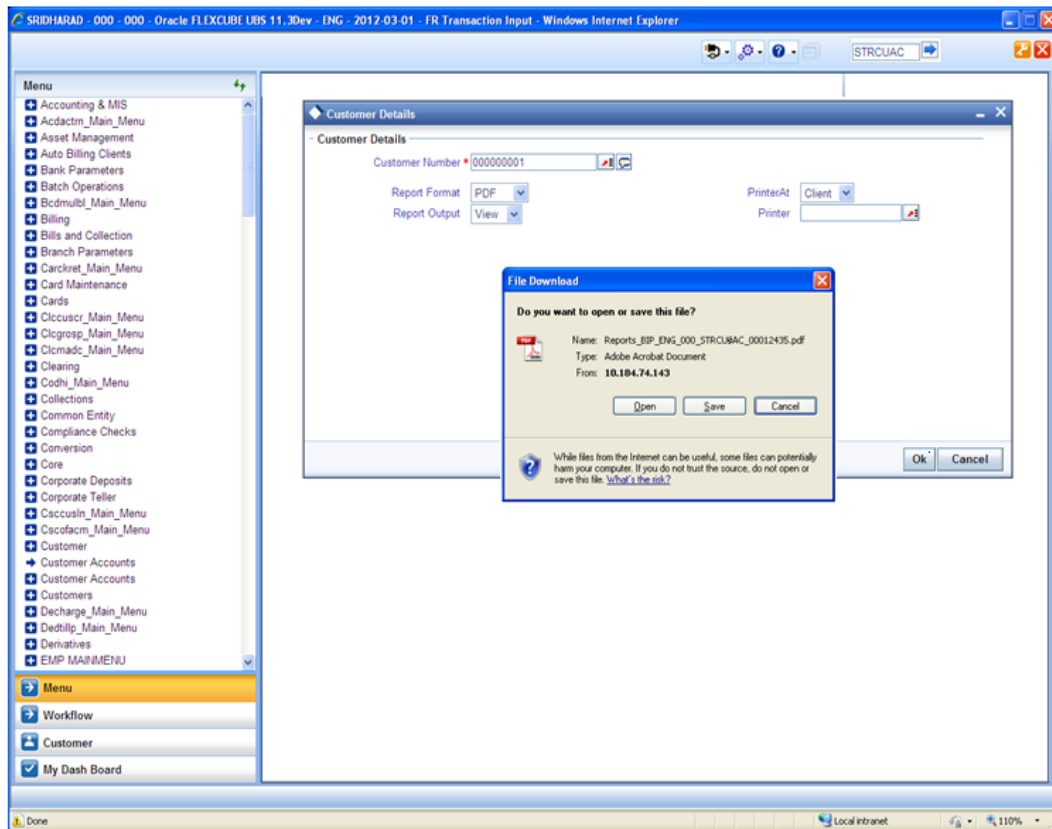


- Open Development Tool would automatically add the Report Options for all report screens

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 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



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