

Function ID Development II  
Oracle FLEXCUBE Investor Servicing  
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# 1. Preface

This document describes the concepts and helps reader to create screens using non extensible Open Development tool, to develop FLEXCUBE user interface screens.

## 1.1 Audience

The Non extensible Open Development Function ID Development book is intended for the FLEXCUBE Application Developers who perform the following tasks with Non Extensible Open Development tool:

- Develop the new screen ( also called as function ID)
- To modify the existing screen
- Bug Fixing the existing screen

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 Reference	Reference
Open Development Tool installation and setup guide	Installation and Setup

## 1.2 Related documents

For more information on Function ID Development, see these resources:


- Development Overview Guide
- Reference

## 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

## 1.4 **Pre-request**

- Target FLEXCUBE IS environment
- Non extensible Open Development environment with designated project and release details

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## 2. Introduction

### 2.1 How to use this Guide

The information in this guide includes:

- [Chapter 2, “Introduction”](#)

This is introduction section.

- [Chapter 3, “Manual Static data population”](#)

This section describes the prerequisites before creating a Function ID.

- [Chapter 4, “Header Information”](#)

This section describes the Header Credentials in detail.

- [Chapter 5, “Datasources”](#)

This section describes the steps required to get started with Function Creation.

- [Chapter 6, “List of Values”](#)

This section describes steps to add List Of Values definitions.

- [Chapter 7, “Screen Layout Design”](#)

This section describes the actions to be performed after adding Datasources.

- [Chapter 8, “Data Blocks”](#)

This section describes the steps required to design the Screen Layout.

- [Chapter 9, “Fieldsets”](#)

This section describes the steps required to map the Fields to specific locations in the Screen.

- [Chapter 10, “Callform”](#)

This section describes the callform details.

- [Chapter 11, “Actions”](#)

This section describes the amendable.

- [Chapter 12, “Summary”](#)

This section describes the steps to design the Summary Screen.

- [Chapter 13, “Open Development Tool Files Generation”](#)

This section describes steps to generate and deploy Open Development Tool Files.

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## 3. Manual Static data population

- This section explains the data base tables that need to be manually populated to start the Open Development screen development. Developer has to add data manually in the below tables.

### 3.1 Pre creation of Open Development Activity

Following tables need to be populated

#### 3.1.1 CSTB DATA DICTIONARY maintenance

Add rows in CSTB\_DATA\_DICTIONARY for Table/View and columns.

Column Name	Data Type	Data Length	Constraints
TABLE_NAME	VARCHAR2	50	PRIMARY
COLUMN_NAME	VARCHAR2	50	PRIMARY
LABEL_CODE	VARCHAR2	255	
FIELD_NAME	VARCHAR2	255	

#### 3.1.2 CSTB ITEM DESC maintenance

Add rows in CSTB\_ITEM\_DESC for all label code required.

Column Name	Data Type	Data Length	Constraints
LABEL_CODE	VARCHAR2	255	PRIMARY
LANGUAGE_CODE	VARCHAR2	3	
LABEL_TYPE	VARCHAR2	20	
LABEL_DESCRIPTION	VARCHAR2	4000	

#### 3.1.3 STTB PK COLS maintenance

Add rows in STTB\_PK\_COLS for tables that are part of data sources.

Column Name	Data Type	Data Length	Constraints
TABLE_NAME	VARCHAR2	30	PRIMARY
COLUMN_LIST	VARCHAR2	300	
DATA_TYPE_LIST	VARCHAR2	300	
DATA_LENGTH_LIST	VARCHAR2	100	

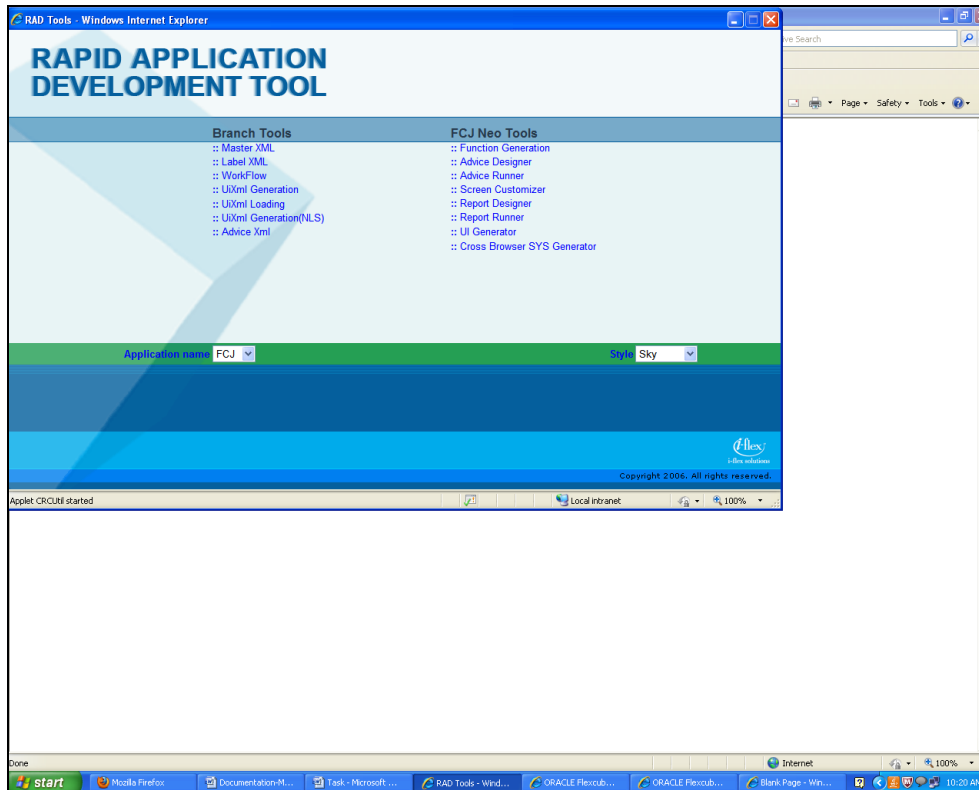
## 3.2 **Post creation of Open Development activity**

Following tables need to be populated:

- SMTB\_FUNCTION\_DESCRIPTION
- SMTB\_MENU,
- SMTB\_ROLE\_DETAIL
- SMTB\_FCC\_FCJ\_MAPPING

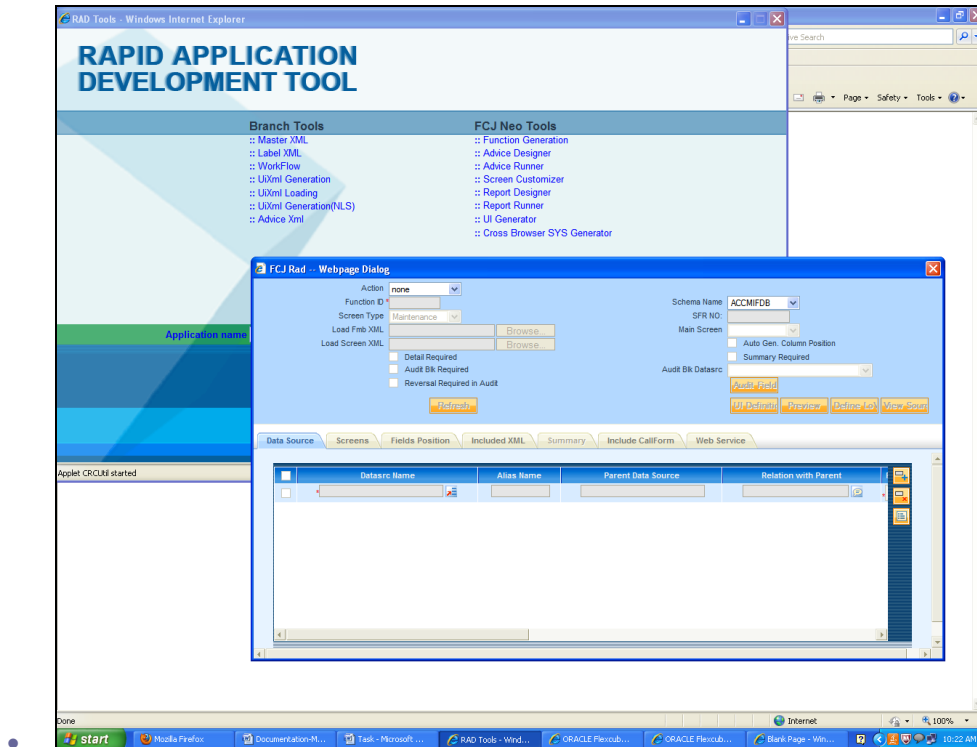
## 4. Header Information –Basic Information about the Screen

Open the Non extensible Open Development Tool.



- Click on *Function Generator* shown above and the below screen will appear.





## 4.1 Schema Name

Developer has to select the appropriate schema in which he wants to develop the screen.

## 4.2 Action

Select *New* if you want to develop a new screen and *load* for modification of existing screen.

## 4.3 Function ID

The name of function Id has to be defined according to standard conventions .

## 4.4 Screen Type

This can be either *Maintenance* or *Transaction* based on the Function ID being developed.

## 4.5 Language

This should be selected based on the language in which the screen is to be developed. Developer has to ensure that the Label information in the selected language is available in the selected schema.

## 4.6 File Save Path

Developer has to specify the location where he wants to save the file.

FCJ Rad -- Webpage Dialog

Action: New

Function ID: LER00074

Screen Type: Maintenance

Load Fmb XML: Browse...

Load Screen XML: Browse...

Schema Name: FCISDISTUT5

SFR NO:

Main Screen:

☐ Auto Gen. Column Position

☐ Summary Required

Audit Blk Datasrc:

Audit Field:

Refresh

UI Definitio Preview Define LoV View Sourc

Data Source Screens Fields Position Included XML Summary Include CallForm Web Service

Datasrc Name	Alias Name	Parent Data Source	Relation with Parent	Relat
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Version: 0.1b

Language: ENG

File Save Path:

☒ Create Old DevXml

☒ Create Language specific XML

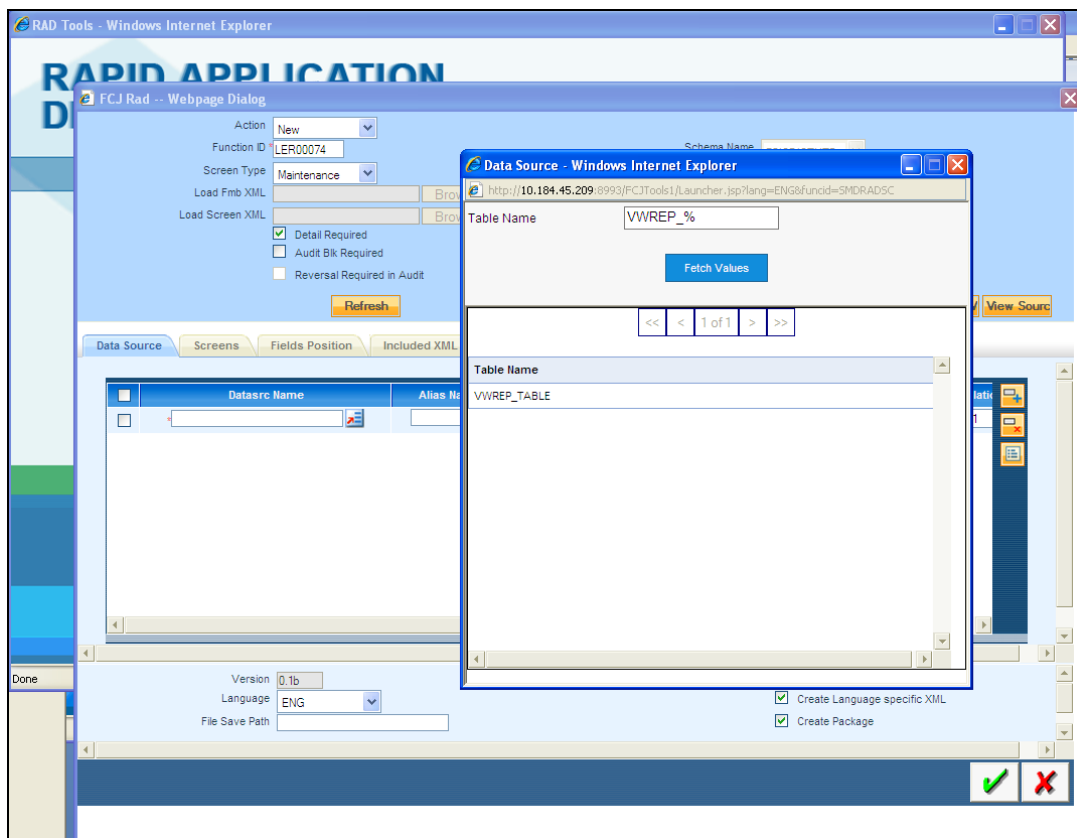
☒ Create Package

✓ ✗

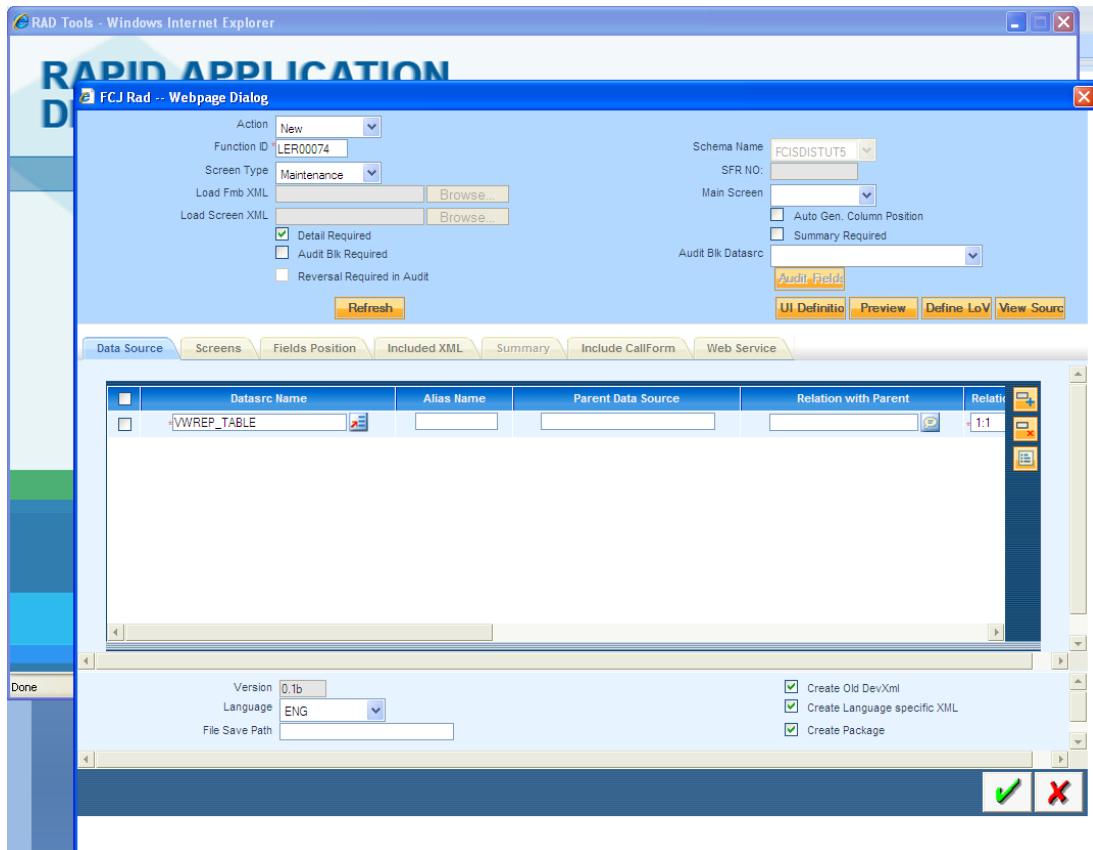
- If the summary screen is required for the function id, then the Summary Required check box should be checked.
- If the audit block has to get displayed for the detailed screen, then the Audit Blk Required check box should be checked.
- If the generation of the packages is not required, then the Create Package checkbox can be unchecked.
- Main screen tab has to be selected.

## 5. Data Sources

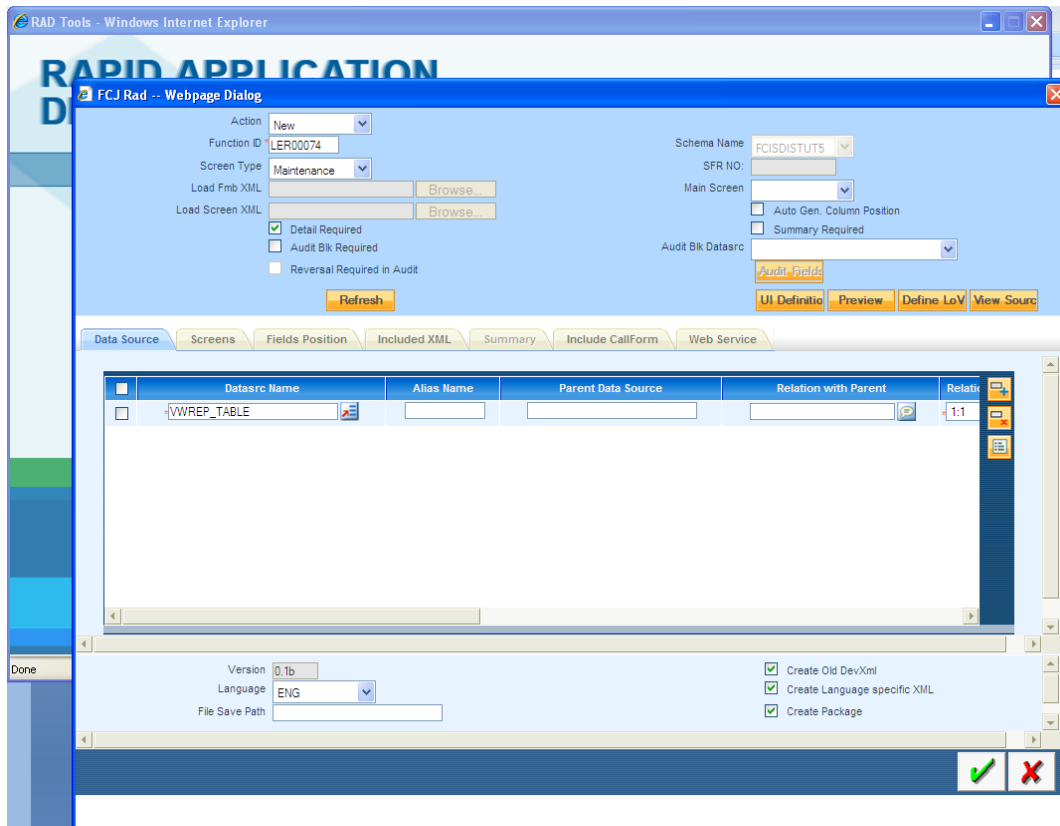
- Click on the *data source* tab.
- You can add one-one, one –many, query and view type data source by clicking on the plus button on the top right corner of screen.
- You have to mention the *Parent / Master* data source.
- For rest child data source you have to give the parent as well as relation with parent along with relation type depending on type of datasource.
- Add the default clause where needed.
- For query data source you need to tick the corresponding query checkbox. This type of datasource is required when description has to be added for fields.
- For *Summary data source* you need to tick the corresponding checkbox too. This type of datasource is required when you have *Summary* screen.
- Selecting Data Source



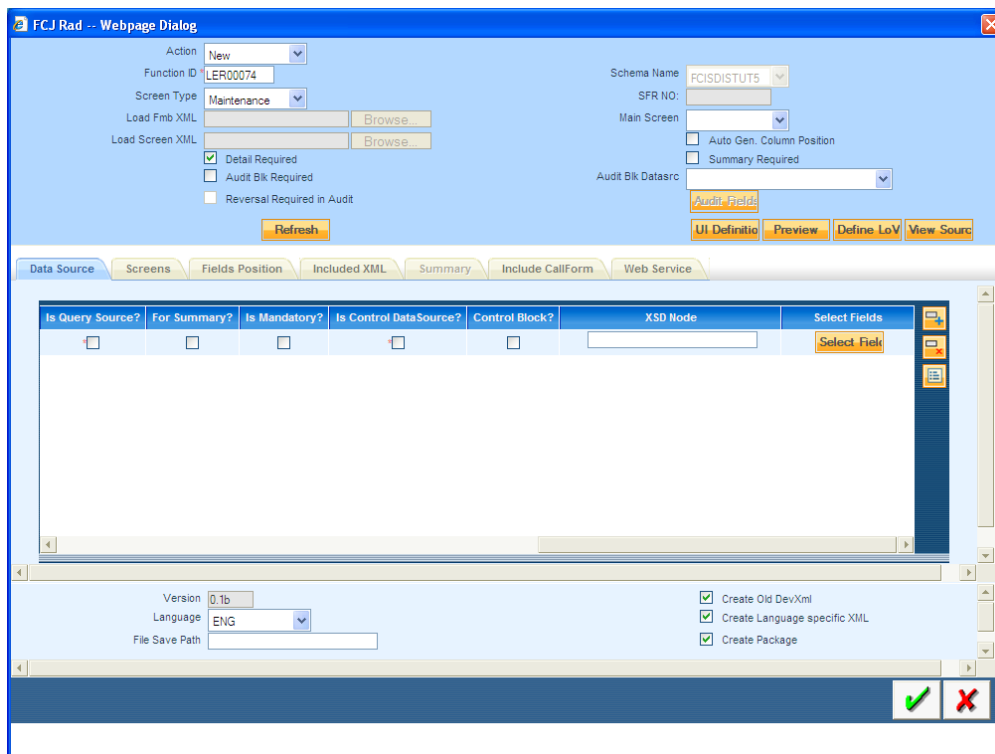
- Data Source Added



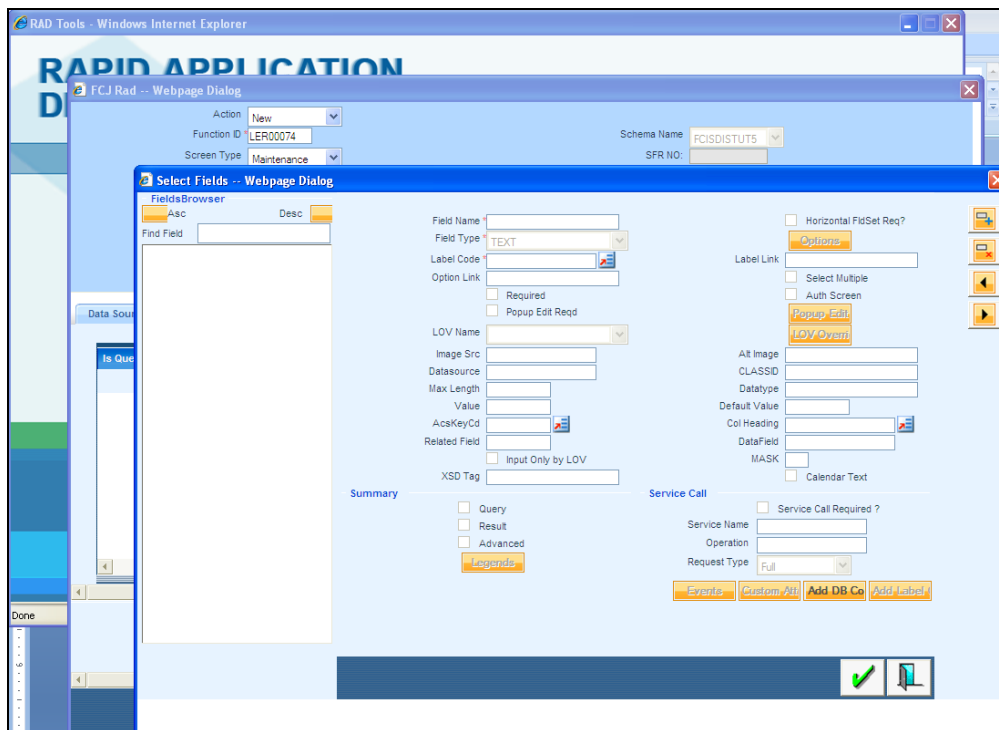
- Supposedly you need to access same fields of one datasource twice, than you need to create an *alias* of that data source. This is done by adding the same datasource again along with that you need to add a name in the alias column for that data source. In this way you can access those fields twice.
- For Alias Datasource



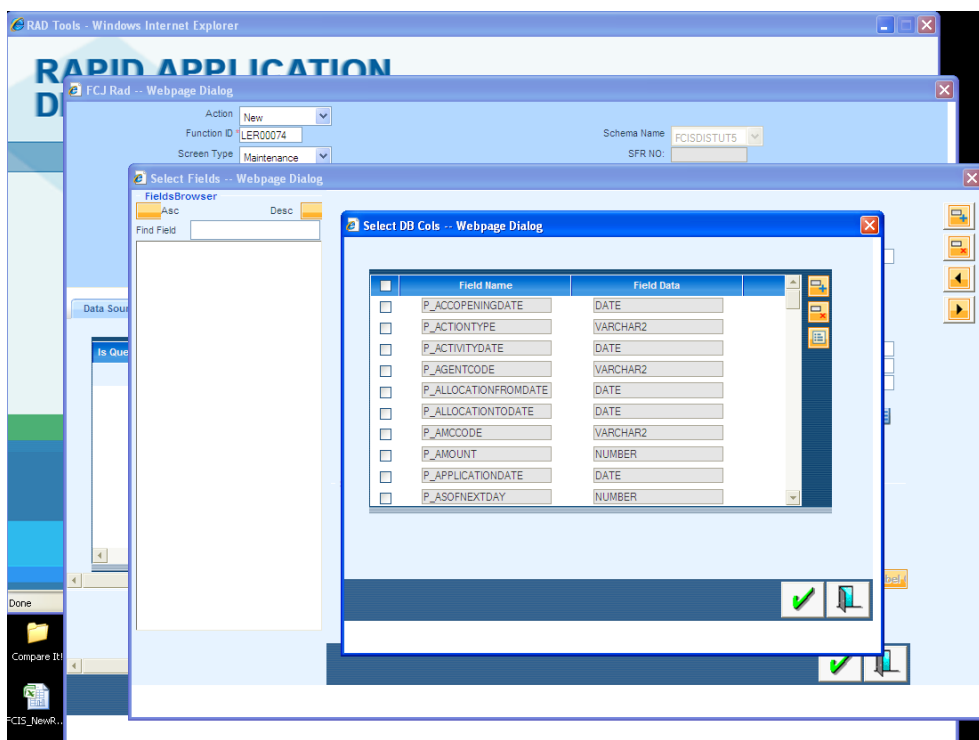
- The required fields in each datasource are added by clicking the *Select Field* button present at the right corner of the *datasource* tab.



- For adding Fields click *Add DB Cc*



- Select the required fields from the list



- You need to define their properties like field type, label, required and popup edit.
- If that field should also come in *Summary* screen than you need to tick the check boxes under summary heading. Query checkbox if you want that field to be used as query in summary. Result and Advanced when you want the field to be just present in summary screen.

- For creating a *fieldset* you need to click on plus button on the right corner of screen and give all details like name of field set and its location on screen. Please refer the “Fieldset” section for more details.

**Select Fields -- Webpage Dialog**

FieldsBrowser: Asc Desc, Find Field

Field Name: P\_ACCOPENINGDATE  
Field Type: TEXT  
Label Code: LBL\_P\_ACCOPENINGDATE  
Option Link: ☐ Required ☐ Popup Edit Req  
LOV Name:   
Image Src:   
Datasource: WWREP\_TABLE  
Max Length: 7  
Value:   
AcsKeyCd:   
Related Field:   
☐ Input Only by LOV  
XSD Tag:   
Summary: ☐ Query ☐ Result ☐ Advanced   
Service Call: ☐ Service Call Required?   
Service Name:   
Operation:   
Request Type: Full  
Events Custom Alt Add DB Co Add Label

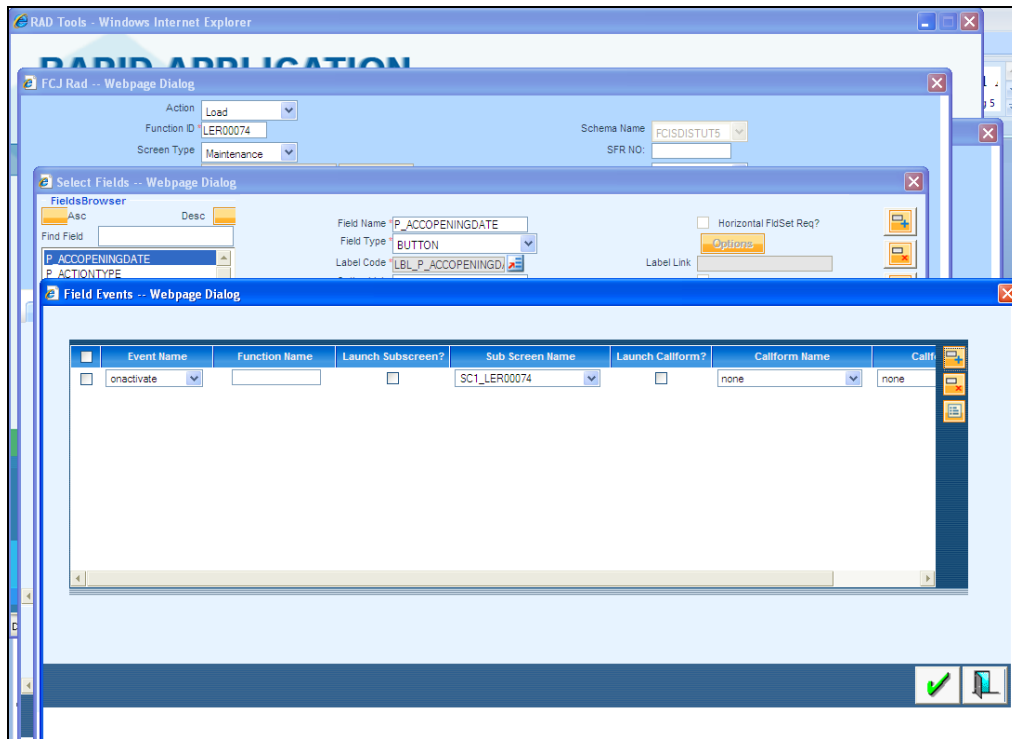
- If the field type is *SELECT* or *RADIO* than you need to click on options button. Following screen will popup where you need to add the sub-fields

**Radio Field Options -- Webpage Dialog**

Option Label	Option Value	Selected
LBL_FUNDTYPE	T	<input checked="" type="radio"/>
LBL_HFUNDTYPE	H	<input type="radio"/>

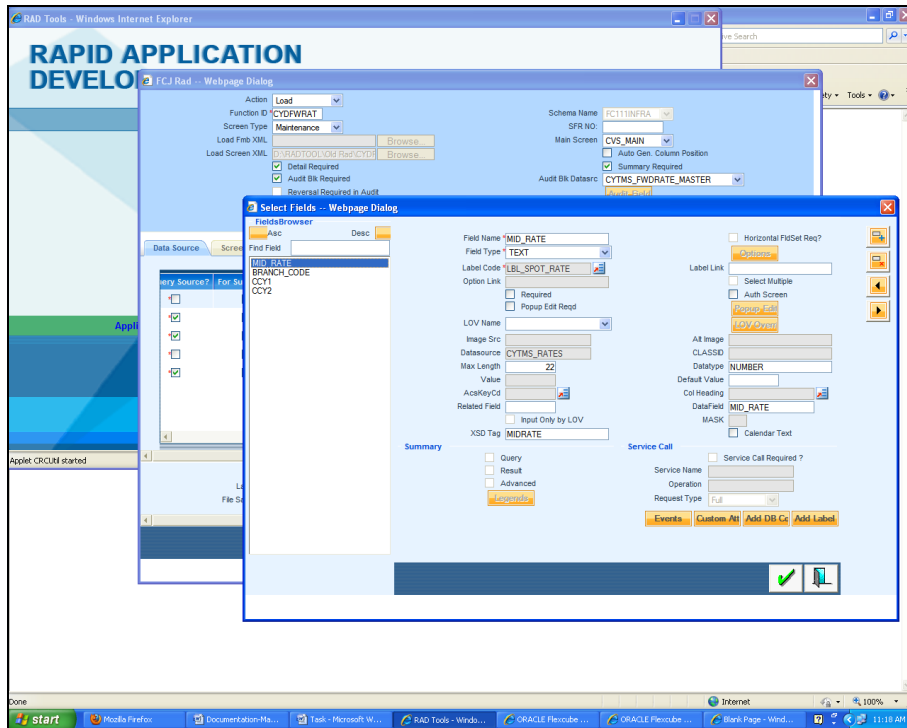
Options Select Multiple Add Label

- If the field type is *Button* than you need to click on plus button on the right top corner of screen to add a button and give all details. After that click on *events* button on lower right corner and add the description like Event Name , Function Name, Sub screen Name. These Buttons are created for *Sub Screen* and *query* buttons.



- Also, some *UI fields* such as Description may be required. In case of Query Data sources having some visible components (for example-MIDRATE below) as shown below, a UI field can be defined for the same by first clicking on the plus button on the right corner of screen and then giving the details. Generally UI Fields are not added in Non extensible Open Development since addition of query datasource is allowed in Non Extensible Open Development.





- The above step has to be followed for every datasource and its fields.

## 6. List Of Values (Lov)

- Click on the *Define LOV* option and another screen will popup.

The screenshot shows the 'FCJ Rad -- Webpage Dialog' window. The 'Action' is set to 'Load'. The 'Function ID' is 'LER00074'. The 'Screen Type' is 'Maintenance'. The 'Load Fmb XML' field has a 'Browse...' button. The 'Load Screen XML' field has a 'Browse...' button. The 'Detail Required' checkbox is checked. The 'Audit Bk Required' checkbox is unchecked. The 'Reversal Required in Audit' checkbox is unchecked. The 'Schema Name' is 'FCISDISTUT5'. The 'SFR NO.' is empty. The 'Main Screen' is 'SC1\_LER00074'. The 'Auto Gen. Column Position' checkbox is unchecked. The 'Summary Required' checkbox is unchecked. The 'Audit Bk DataSrc' is 'VWREP\_TABLE'. The 'Audit Fields' button is visible. The 'Refresh' button is visible. The 'UI Definition' button is visible. The 'Preview' button is visible. The 'Define LoV' button is visible. The 'View Source' button is visible. The 'Data Source' tab is selected. The 'Screens' tab is visible. The 'Fields Position' tab is visible. The 'Included XML' tab is visible. The 'Summary' tab is visible. The 'Include CallForm' tab is visible. The 'Web Service' tab is visible. The table below shows the configuration for the LOV.

Is Query Source?	For Summary?	Is Mandatory?	Is Control DataSource?	Control Block?	XSD Node	Select Fields
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="button" value="Select Field"/>

The 'Version' is '0.1b'. The 'Language' is 'ENG'. The 'File Save Path' is 'D:\Projects\1440\Ver00074\'. The 'Create Old DevXml' checkbox is checked. The 'Create Language specific XML' checkbox is checked. The 'Create Package' checkbox is checked. The 'OK' button is visible. The 'Cancel' button is visible.

- There you need to enter Lov Name , Lov Query and after entering the details you need to click the *populate* button. There you need to add all the LOv details for the populated fields. You need to even add *Bind Variables* for Lov .



Select Fields -- Webpage Dialog

FieldsBrowser

Asc

Desc

Find Field

P\_FUNDFAMILY

P\_FUNDID

P\_FUNDIDENTIFICATIONNUMBER

P\_HEADER\_DISPLAY

P\_HOLIDAYRULE

P\_ID

P\_INVESTORCATEGORY

P\_INVESTORSTATUS

P\_ISSUEID

P\_LAG

P\_LAGTYPE

P\_LEVELNUMBER

P\_LOADID

P\_LOISTATUS

P\_MARGIN

P\_MARKETVAULE

P\_MESSAGE

P\_MODULEID

P\_NUMBEROFDAYS

P\_NUMBEROFUNITS

P\_PAID

P\_PAYMENTDATE

P\_PAYMENTMODE

P\_PAYMENTNUMBER

P\_POLICYNUMBER

P\_PRODUCTID

P\_PROJECTIONTYPE

Field Name

P\_PRODUCTID

Field Type

TEXT

Label Code

LBL\_P\_PRODUCTID

Option Link

Required

Popup Edit Req

LOV Name

LOV\_PRODUCTID

Image Src

Datasource

VWREP\_TABLE

Max Length

10

Value

AcsKeyCd

Related Field

Input Only by LOV

XSD Tag

Horizontal FdSet Req?

Options

Label Link

Select Multiple

Auth Screen

Popup Edit

LOV Over

Alt Image

CLASSID

Datatype

VARCHAR2

Default Value

Col Heading

DataField

P\_PRODUCTID

MASK

Calendar Text

Summary

Query

Result

Advanced

Legends

Service Call

Service Call Required ?

Service Name

Operation

Request Type

Full

Events

Custom Att

Add DB Co

Add Label

## 7. Screen Layout

- You need to add screen name and its properties under this tab. Different type of possible screens are *main* screen , *summary* screen and *sub* screens.

The screenshot shows the 'FCJ Rad -- Webpage Dialog' window with the 'Screens' tab selected. The configuration includes:

- Action:** Load
- Function ID:** LER00074
- Screen Type:** Maintenance
- Schema Name:** FCISDISTUT5
- SFR NO:** (empty)
- Main Screen:** SC1\_LER00074
- Load Fmb XML:** D:\Projects\1440\Ver00074\... (with a 'Browse...' button)
- Load Screen XML:** D:\Projects\1440\Ver00074\... (with a 'Browse...' button)
- Detail Required:** ☒
- Audit Blk Required:** ☐
- Reversal Required in Audit:** ☐
- Audit Blk Datasrc:** VWREP\_TABLE
- Buttons:** Refresh, UI Definition, Preview, Define LoV, View Source

The 'Screens' tab table lists the following screen:

Screen Name	Screen Title	Screen Height	Screen Width	Screen Position	Screen Type
SC1_LER00074		516	780	Template	Small

At the bottom, there are fields for Version (0.1b), Language (ENG), File Save Path (D:\Projects\1440\Ver00074\), and checkboxes for 'Create Old DevXml', 'Create Language specific XML', and 'Create Package'.

Click on Tab button on the screen tab to define the sections and partitions required for a screen.

- Section* : horizontal division of screen.
- Partition* : Vertical division of screen.

Tab Type :

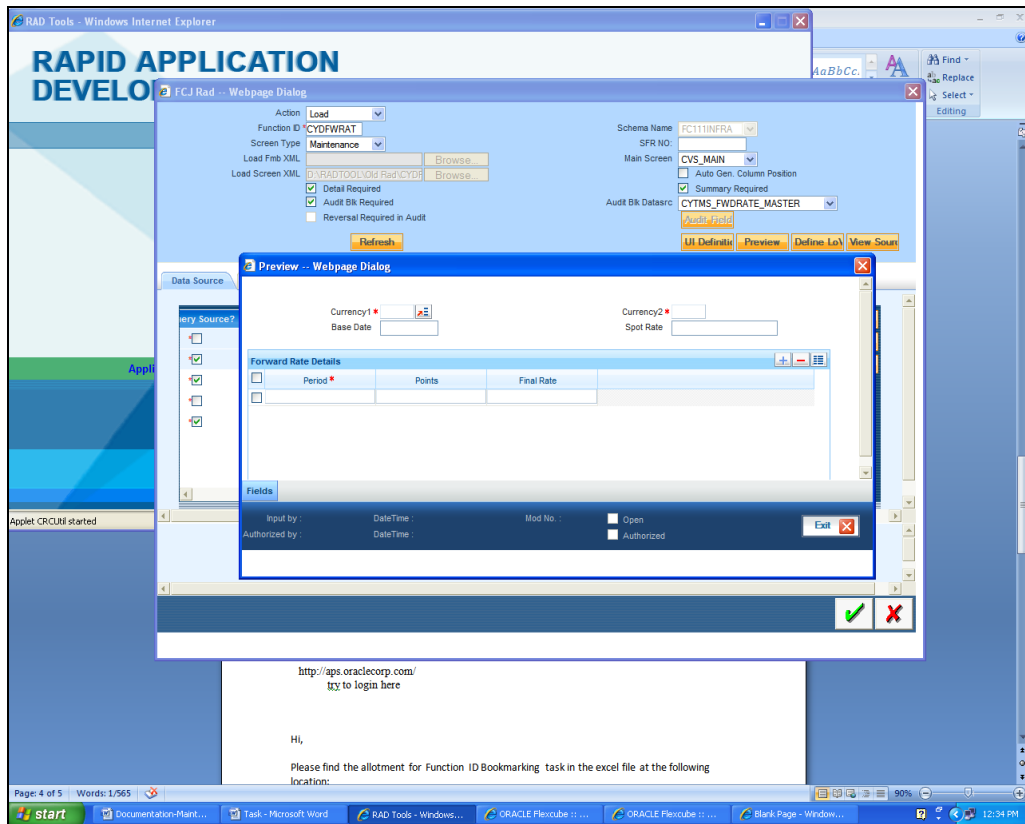
- Normal: For centre portion of screen.
- Header: For Upper portion of screen.
- Footer: For lower portion of screen.

If you are not going for default *Tab* populated than we need to add at least two tabs -Header and Normal .

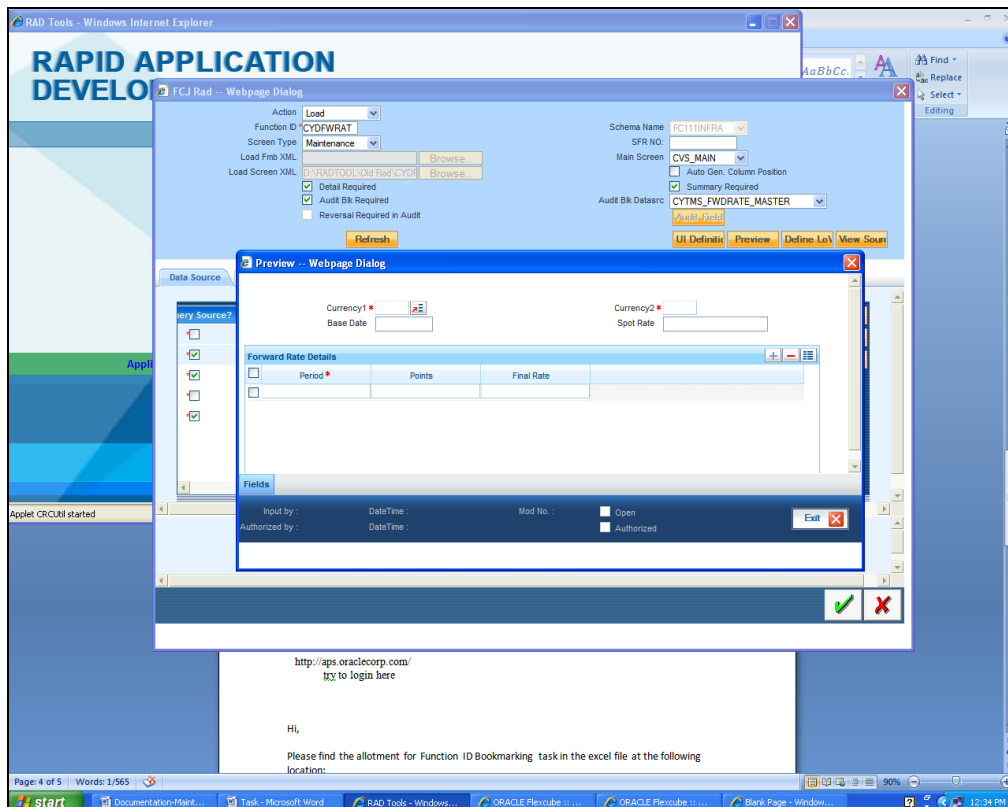
Screen Position:

- Template: For *Main* and *Sub* screens.
- Absolute: Only For *Summary* Screen.

In order to design the screen, we require the addition of sections. It can be seen from the preview below that we require two *sections* for this screen indicated in parenthesis.



- We also require two *partitions* for the first section as indicated by the arrows.



- The above information about screen layout can also be designed in the Open Development Tool by going to the screens tab and clicking on the “*Tabs*” button which is described further.

- Add Details of the Tab Added and after that click on *sections*.

- Add Number of Sections and after that click on *Partition* button.

SI No.	Tab ID	Section ID	Section Height	Partition
1	All	S1		Partition

- Add Number of Partition and after that click on *Sub Partition* Button.

Partition Name	Partition Width	Sub-Partition	Fieldset Req?	Fieldset Label
	100	Sub-Partitic	<input type="checkbox"/>	Fieldset Label

- Layout of screen is designed.
- Same steps has to be carried out for designing layout of all screens.



## 8. Data Block

- Click on The *data block* button under screen tab.

FCJ Rad -- Webpage Dialog

Action: Load  
Function ID: LER00074  
Screen Type: Maintenance  
Load Fmb XML: Browse...  
Load Screen XML: D:\Projects\1440\ler00074\ Browse...  
Detail Required: ☒  
Audit Bk Required: ☐  
Reversal Required in Audit: ☐  
Refresh

Schema Name: FCISDISTUTS  
SFR NO.: SC1\_LER00074  
Main Screen: SC1\_LER00074  
Auto Gen. Column Position: ☐  
Summary Required: ☐  
Audit Bk Datasrc: VWREP\_TABLE  
Audit Field:   
UI Definitio:  Preview:  Define LoV:  View Source:

Data Source Screens Fields Position Included XML Summary Include CallForm Web Service

Screen Height	Screen Width	Screen Position	Screen Type	Version Grouping?	Tab	Data Blocks	Preferences
516	780	Template	Small	<input type="checkbox"/>	Tab	Data Block	Preference

Version: 0.1b  
Language: ENG  
File Save Path: D:\Projects\1440\ler00074\  
Create Old DevXml: ☒  
Create Language specific XML: ☒  
Create Package: ☒

- Define *data blocks* and all its details and add the corresponding datasource for data block, view type, screen name and give the tab name, section , partition for the required fields.

Data Blocks -- Webpage Dialog

Attach Field

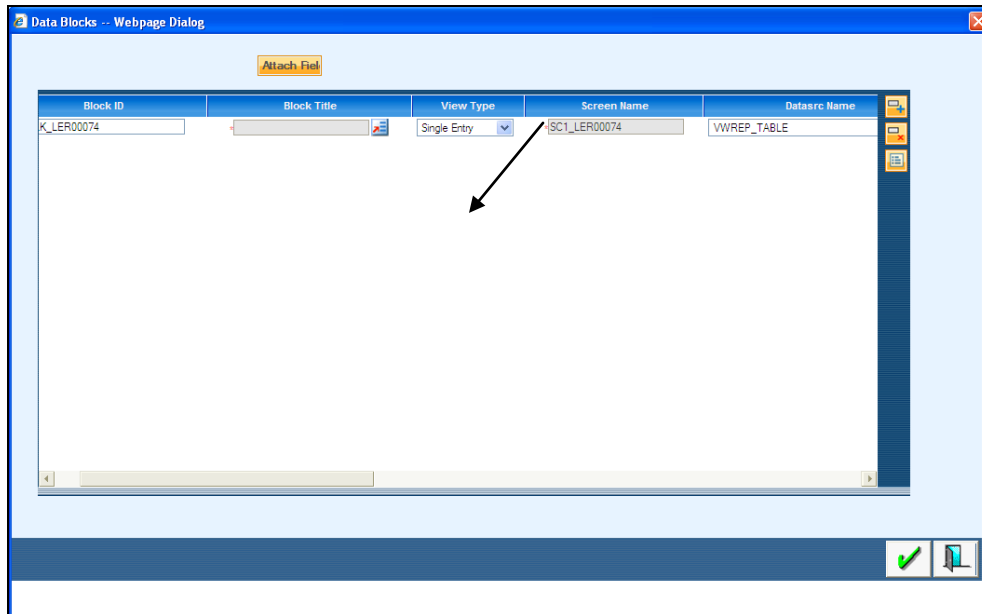
Block ID	Block Title	View Type	Screen Name	Datasrc Name
K_LER00074		Single Entry	SC1_LER00074	VWREP_TABLE

View Type:

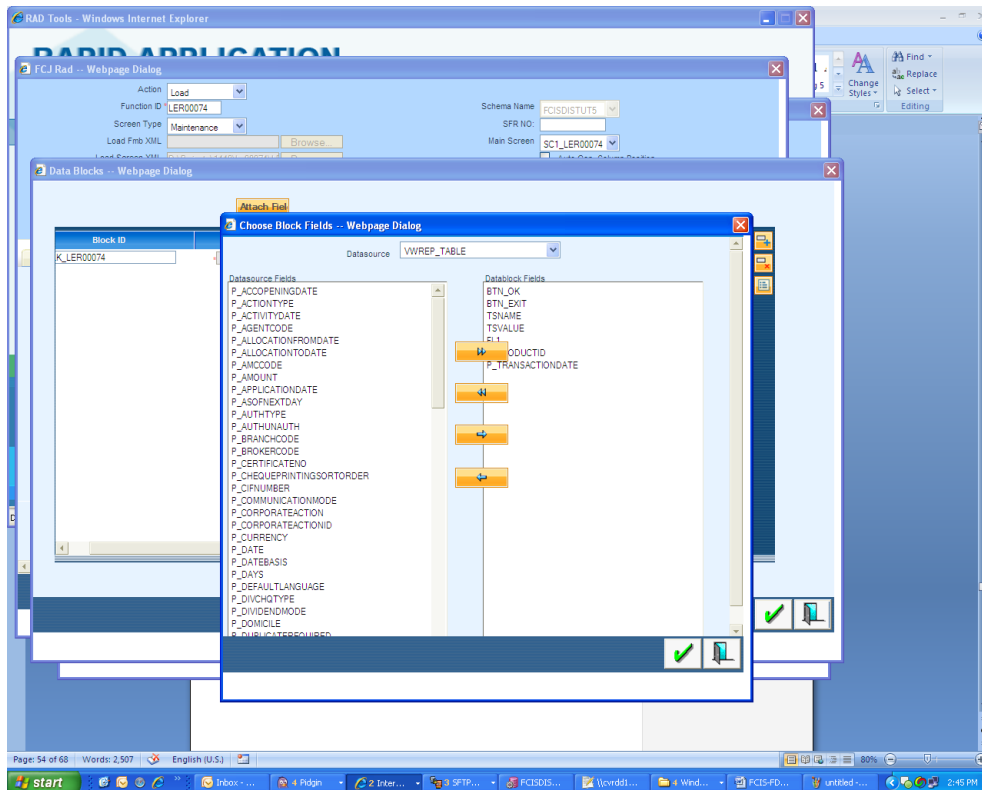
- Single Entry : For One –One Datasources

- Multiple entry : For One-Many Datasources.

Click on *Attach field* button to add fields to the data block



- From the list of fields you can select the required fields for data blocks.



- After that click on *field properties* button to add details .

- Give Tab name, Section, Partition and Sub partition for all fields. You need to also tick the check boxes like Amendable, Read only, Upper case depending on your requirement for all fields. Field size and Max Length also has to be given.

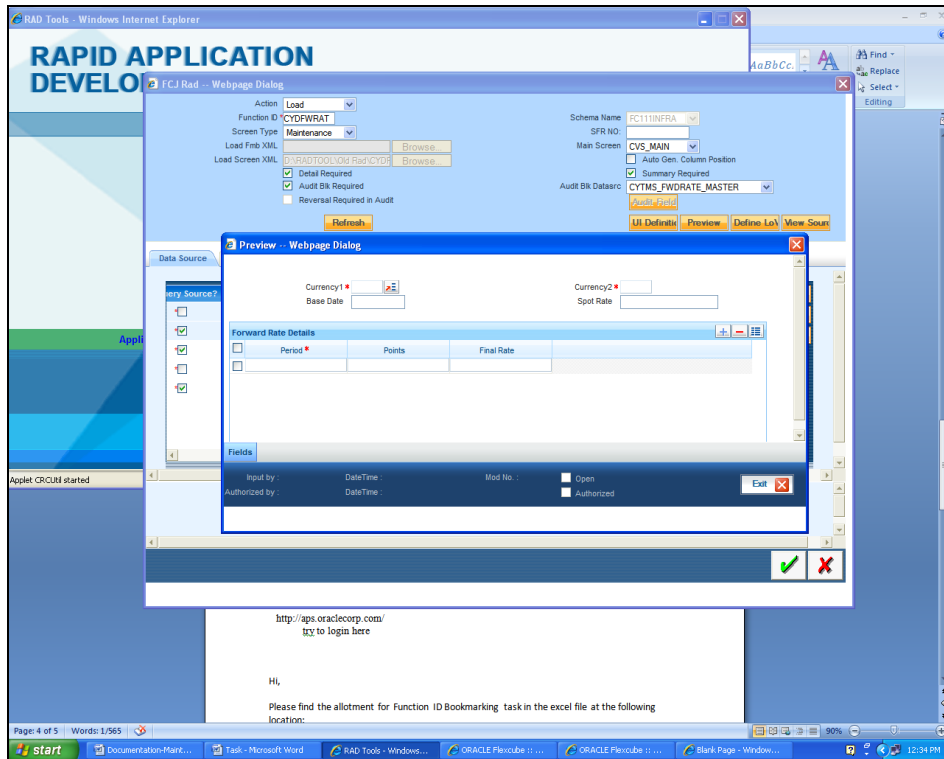
The screenshot shows the 'Block Fields -- Webpage Dialog' window. On the left is a 'FieldsBrowser' pane with a list of fields: BTN\_OK, BTN\_EXIT, TSNAME, TSVALUE, FL1, P\_PRODUCTID, and P\_TRANSACTIONDATE. The 'BTN\_OK' field is selected. The main area contains configuration fields for this field:

- Field Name:** BTN\_OK
- Field Type:** BUTTON
- Tab Name:** All
- Section Name:** S1
- SubPartition Name:** (empty)
- Disabled?:** ☐
- Upper Case:** ☐
- Height:** (empty)
- Field Size:** (empty)
- Query Col:** (empty)
- Show In:** (empty)
- Img Src:** Images/Ok.gif
- TxtArea Rows:** (empty)
- Field Row:** (empty)
- Position:** Bottom
- Amendable?:** ☐
- Label Code:** (empty)
- Label Link:** (empty)
- TAB INDEX:** (empty)
- Partition Name:** S1\_P1
- AcKeyCd:** (empty)
- ReadOnly?:** ☐
- Checked?:** ☐
- Width:** (empty)
- Abs Pos:** (empty)
- Max Length:** (empty)
- Result Col:** (empty)
- Alt Img:** (empty)
- TxtArea Cola:** (empty)
- Field Col:** (empty)
- Alignment:** Right
- Subsystem Depend?:** ☐
- Amount/Number Field Preferences:**
  - Min. Val:** (empty)
  - Max. Val:** (empty)
  - Related Field:** (empty)
  - Max. Decimals:** (empty)

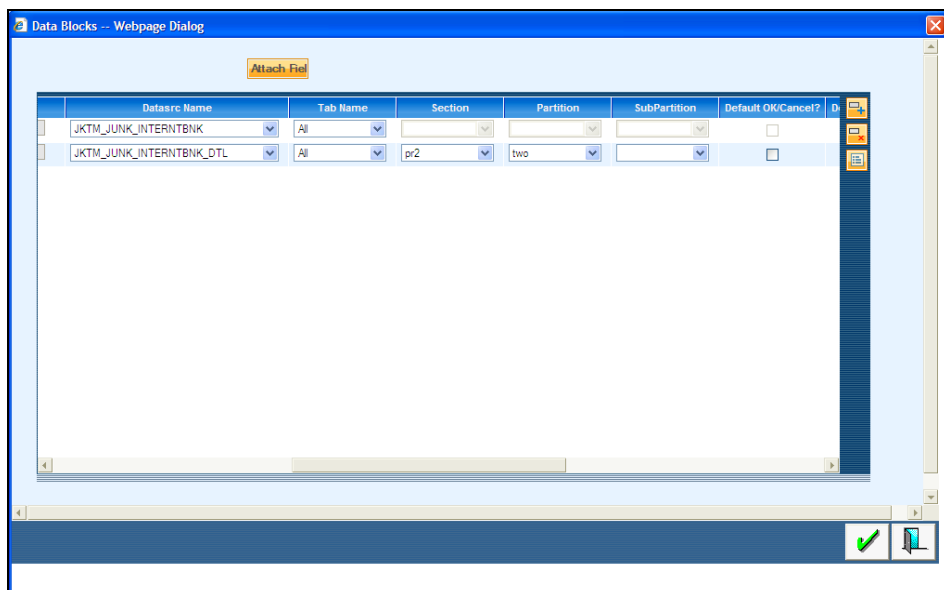
At the bottom right, there is an 'Add Fields' button and a status bar with a green checkmark and a printer icon.

## 9. Field Sets

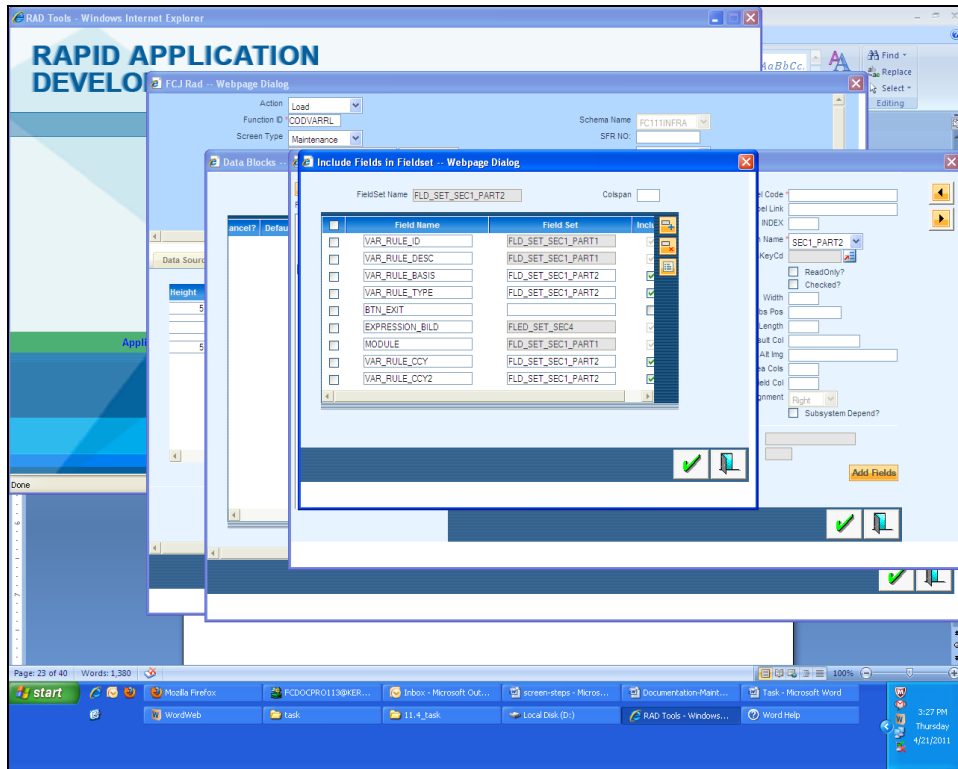
- The various *fieldsets* that are required have been pointed out in the screen below. For this example, we require three fieldsets named FST\_1, FST\_2 and FST\_3.



- Fieldsets has to created only for one-one datasource. Fieldsets are not required for one-many datasource.
- For one-many you need to give the tab, section, partition and sub partition details in the block screen itself.

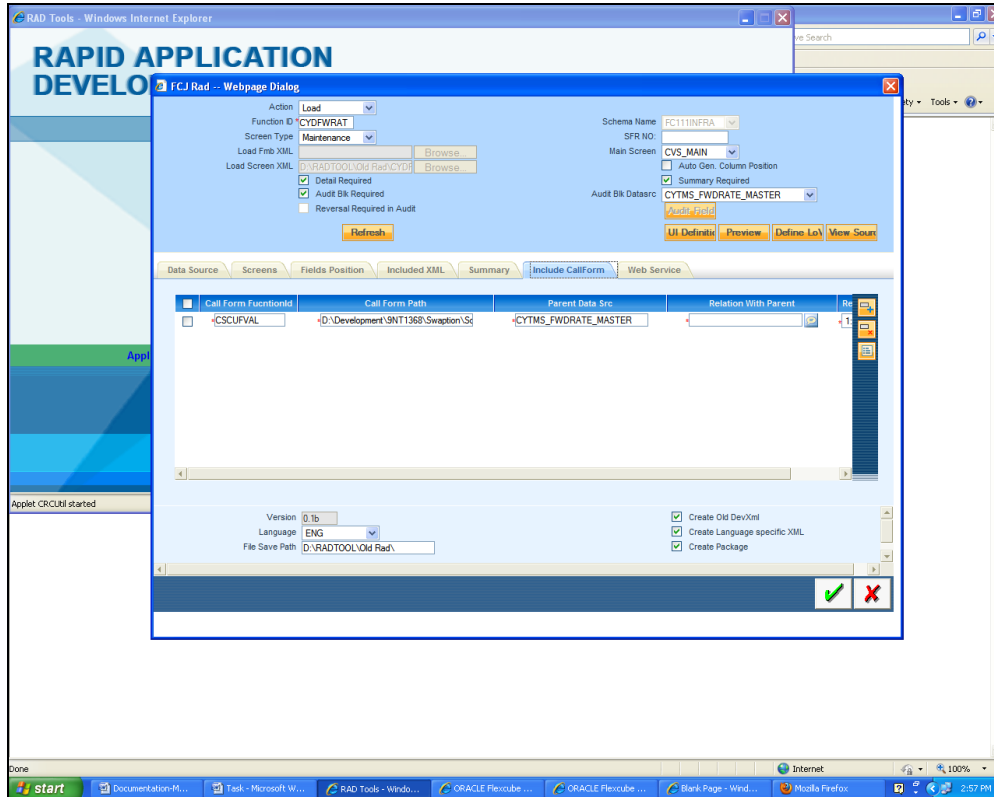


- Click Add fields on the lower right corner of screen and then a window will popup where you can add those columns which you want to group together in one field set, keeping in mind the vertical order in which they will appear on screen.
- You need to add Tab name, Section Name, Partition Name for 1-1 type of datasources fields inside the datablocks .



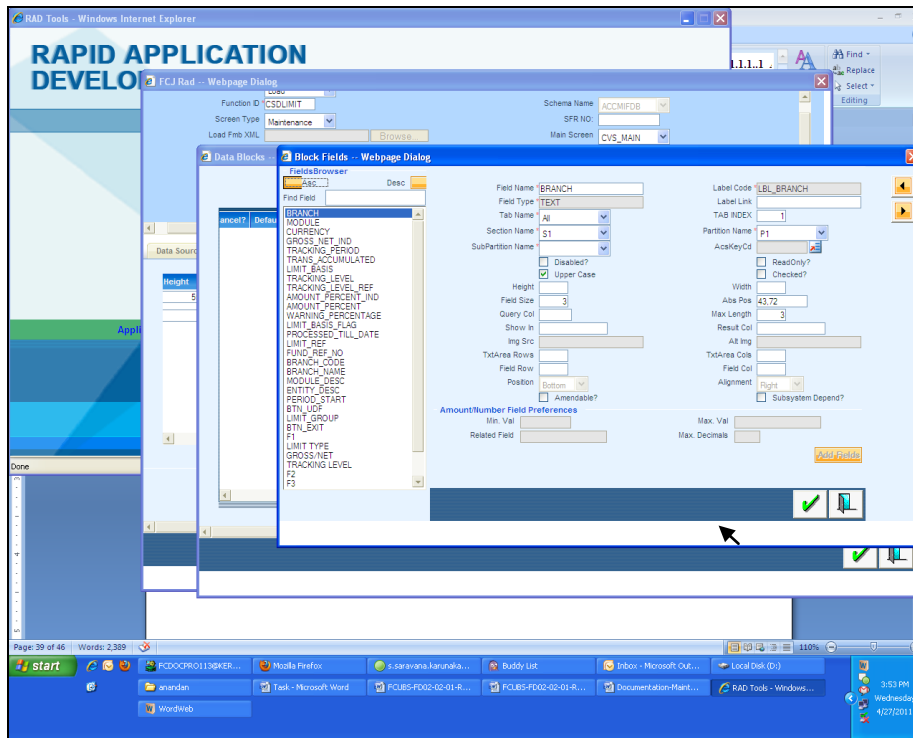
## 10. Call Forms

- The field button that appears on the lower left corner of preview screen is *callform*. Add the details of callform under this tab.

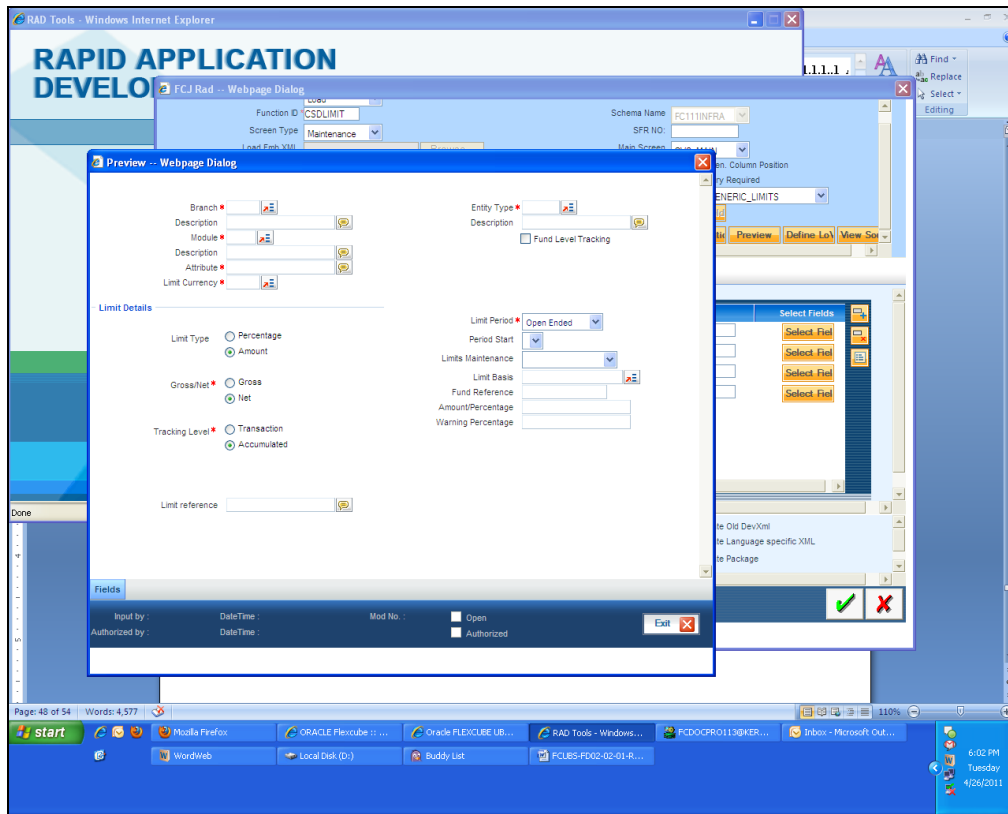


# 11. Actions

- In Non Extensible Open Development for actions when you go to datablock fields there you need to check the box of *Amendable*.



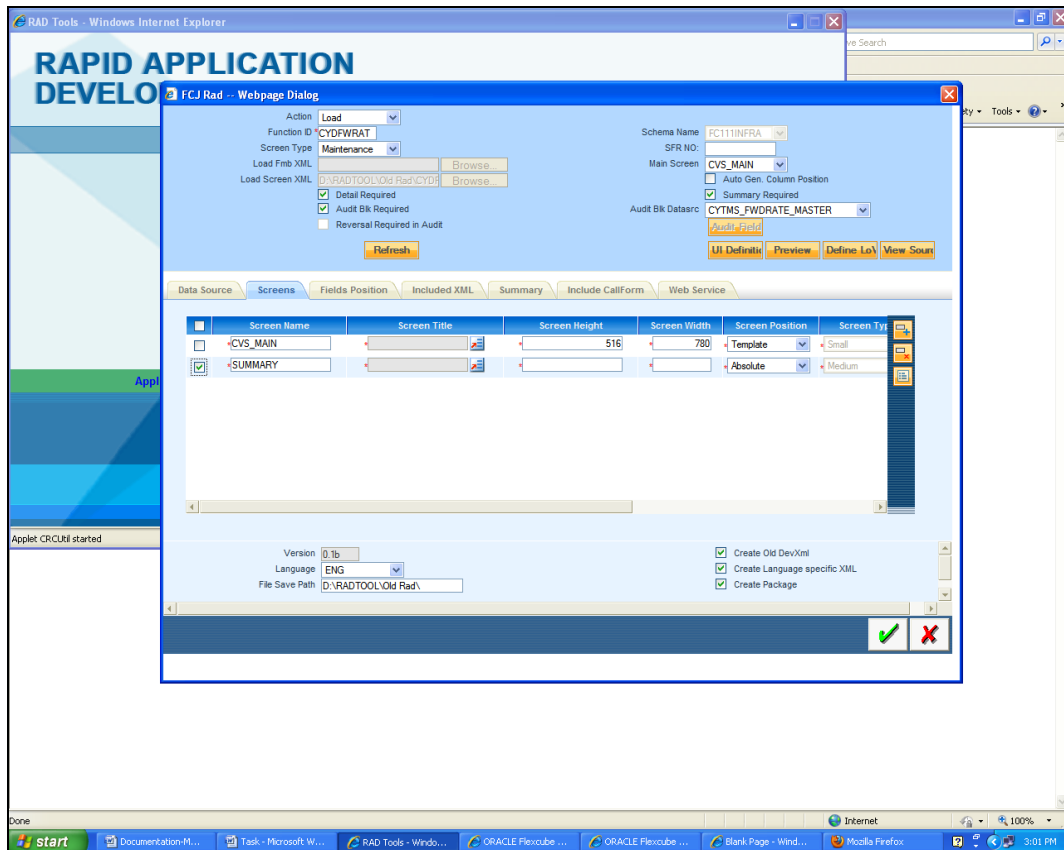
- This is the final preview of required screen.

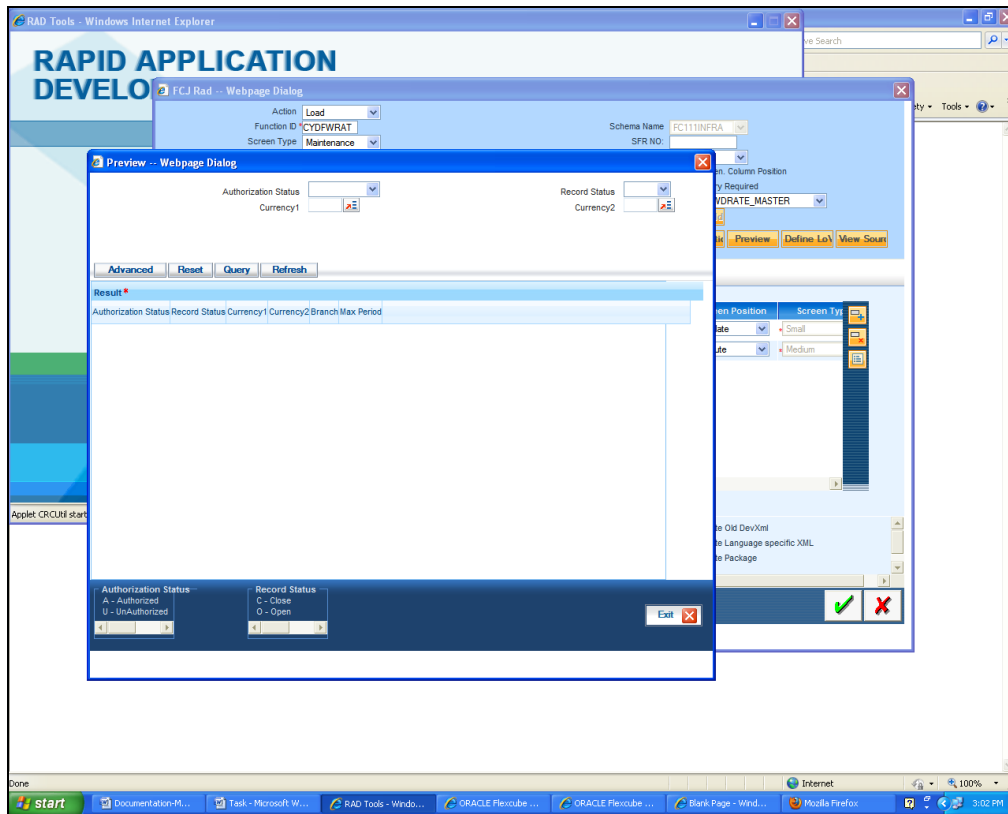




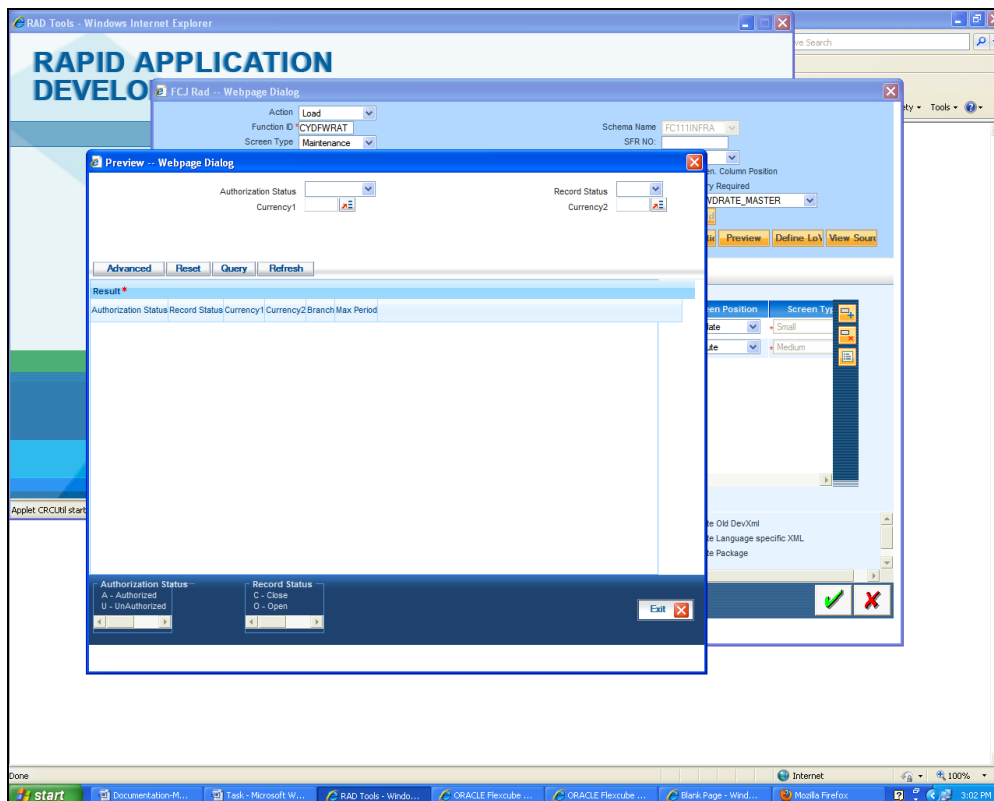
## 12. Summary

- The *summary* screen present in the Open Development can be accessed and selected through the Screens tab and then previewed using the Preview button.



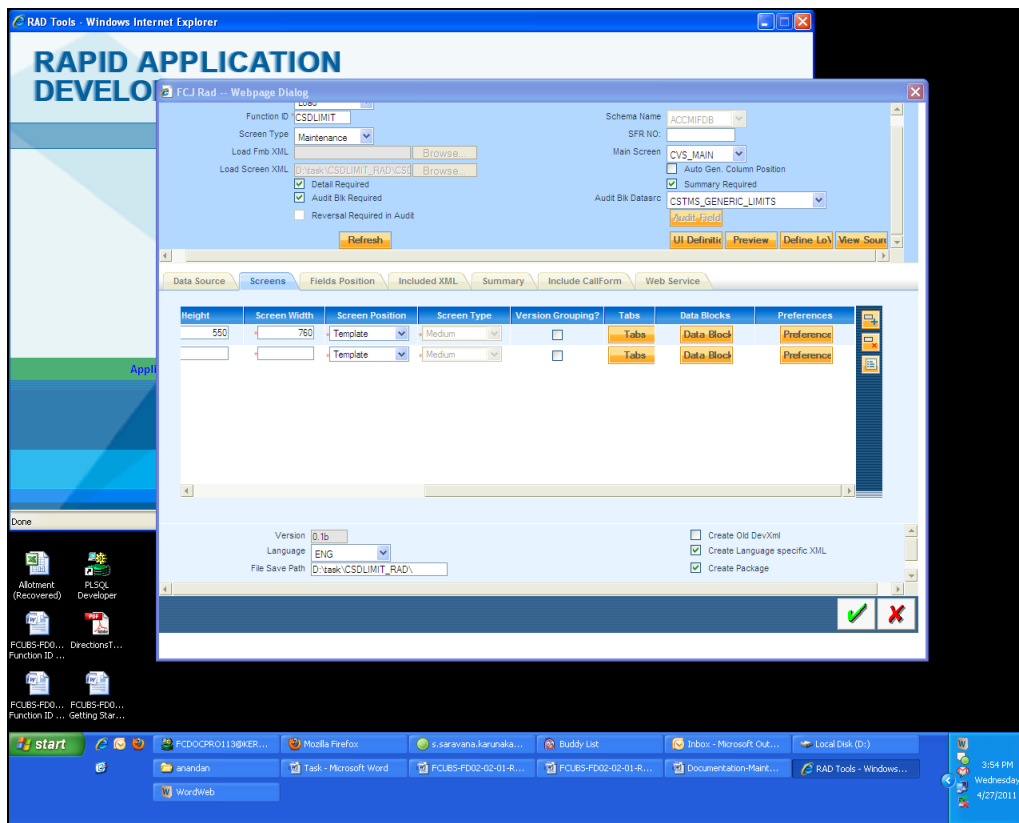


- Note that the fields indicated in the summary preview below are *query* fields and have been indicated in the screen below.



## 13. Non extensible Open Development File Generation

- Click on the green tick button on the bottom to *save and generate* the files.



Following files will be generated:

- SPC
- SQL
- Inc
- JS
- UIXML



**Notification Development**

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