

Development Workbench - Tracking Changes  
Oracle Banking Corporate Lending  
Release 14.5.3.0.0  
[Nov] [2021]



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# 1 Preface

This document describes the Tracking Changes available in Oracle FLEXCUBE Development Workbench for Universal Banking and guides the developers on how to use this feature

## 1.1 Audience

This document is intended for FLEXCUBE Application developers/users that use Development Workbench to develop various FLEXCUBE components.

To Use this manual, you need conceptual and working knowledge of the below:

| <i>Proficiency</i>                          | <i>Resources</i>   |
|---|--|
| FLEXCUBE Functional Architecture            | Training programs from Oracle Financial Software Services. |
| FLEXCUBE Technical Architecture             | Training programs from Oracle Financial Software Services. |
| FLEXCUBE Object Naming conventions          | <i>Development Overview Guide</i>                          |
| Working knowledge of Web based applications | Self Acquired  |
| Working knowledge of Oracle Database        | Oracle Documentations                                      |
| Working knowledge of PLSQL developer        | Respective vendor documents                                |
| Working knowledge of PLSQL & SQL Language   | Self Acquired  |
| Working knowledge of XML files              | Self Acquired  |

## 2 Introduction

### 2.1 How to use this Guide

The information in this document includes:

- [Chapter 2 , "Introduction"](#)
- [Chapter 3 , "View Changes "](#)
- [Chapter 4 , "Change Report"](#)

### 3 View Changes

View Changes allows the developer to see what exact change has been done in the radxml as part of the various nodes in the Workbench across different releases.

Track changes will show various changes done in each node in the radxml. It will highlight the nodes through the color. It shows the modified Data Sources, Data Source Fields, LOVs, Data Blocks, Block Fields, Call forms etc in Blue Color. And it shows the newly added Data Sources, Data Source Fields, LOVs, Data Blocks, Block Fields, Call forms etc in Green Color.

The main page of View changes looks like function generation page. Here in this page user is allowed to load a radxml. Then Workbench will show the all the changes done in the radxml across the release and release type accordingly with two different colors.

**Blue** indicates **modified**  
**Green** indicates **new**.

So using View changes in Development Workbench, user can easily identify the changes done in the radxmls across releases  
Across the release and release type.

#### 3.1 Process Steps

The starting page of the View changes will have only load button enabled and all the other buttons will be disabled at the beginning.

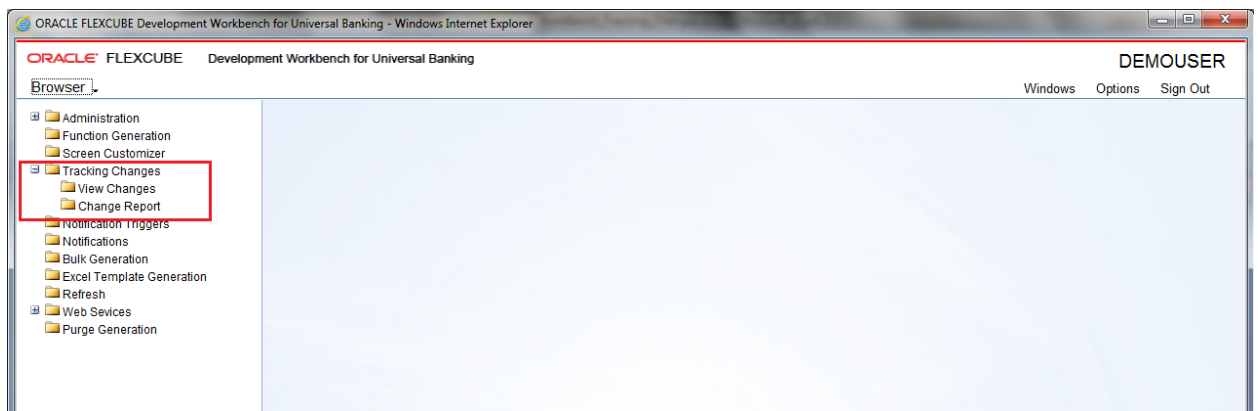


Fig 4.0 Development Workbench - View Changes link.

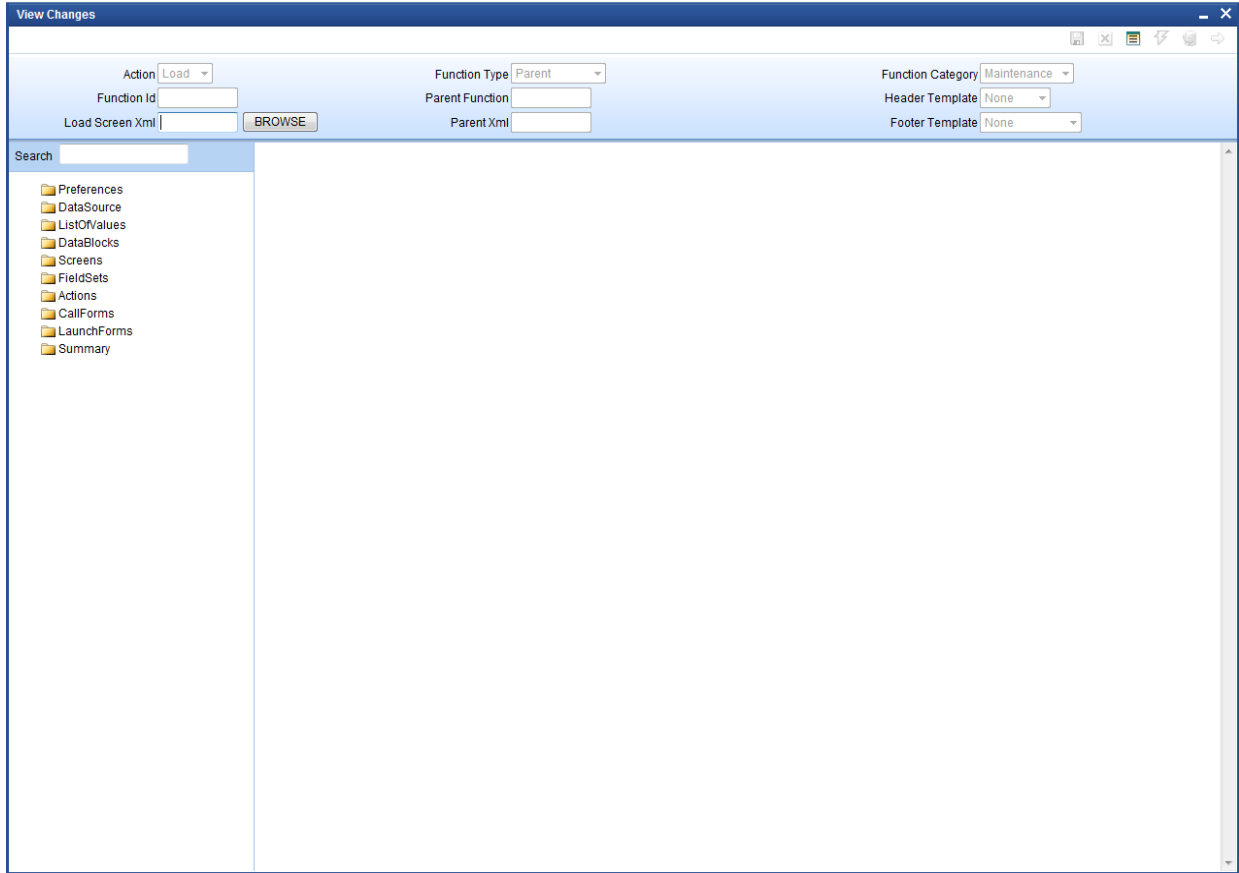


Fig 4.2 Development Workbench - View Changes page.

This page will allow user to load the radxml to view the changes in the radxml across releases and release types.  
Workbench allows viewing the changes done as part of Child or Cluster or Custom Release. Upon loading the Cluster or Custom or Child RAD xml, it shows the Modifications done as part Of Cluster or Custom or Child.

To load the radxml.

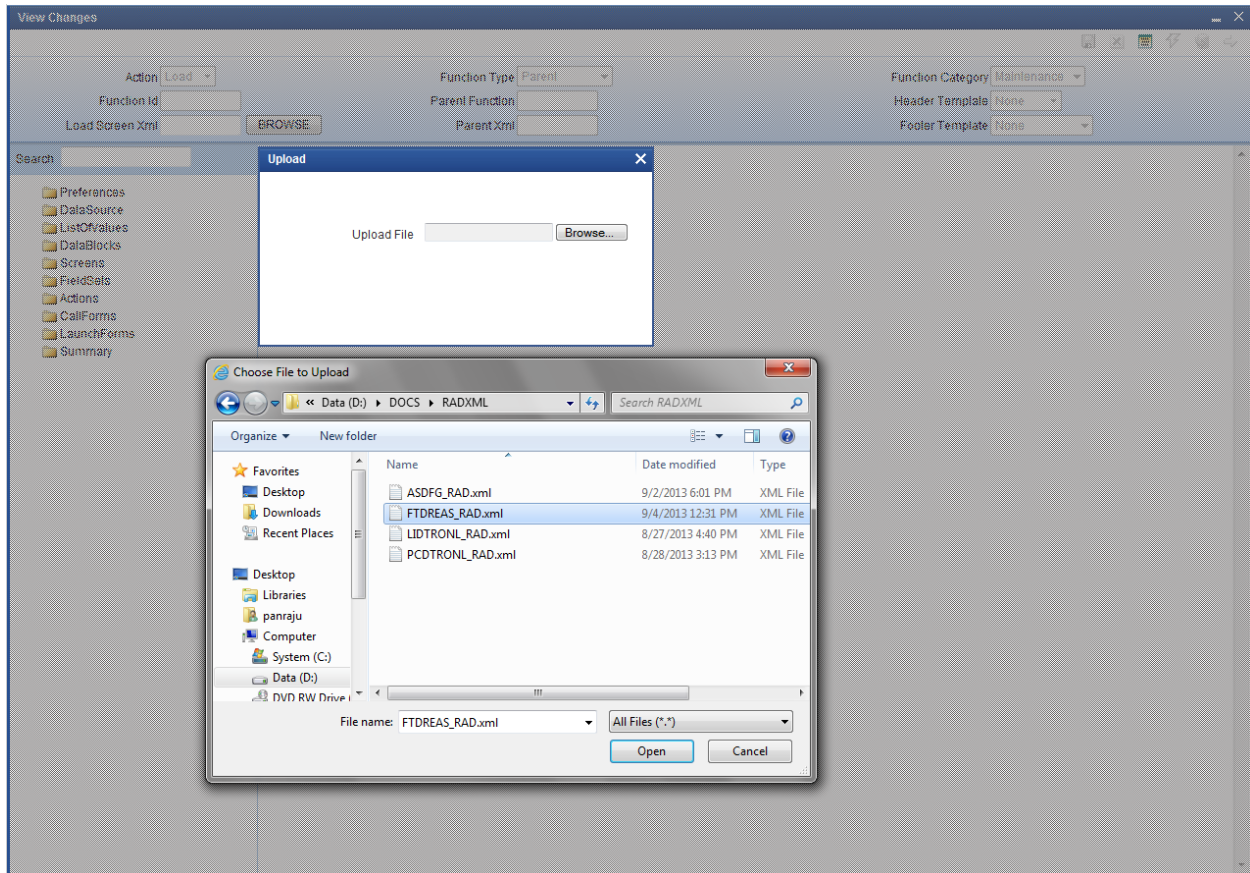


Fig 4.3 View Changes - loading radxml.

After loading the radxml one small window will pop up and will notify the details of the function id Like Function Type, Release Type.

Figure notifies that changes done in the radxml as part of Cluster Release will be highlighted

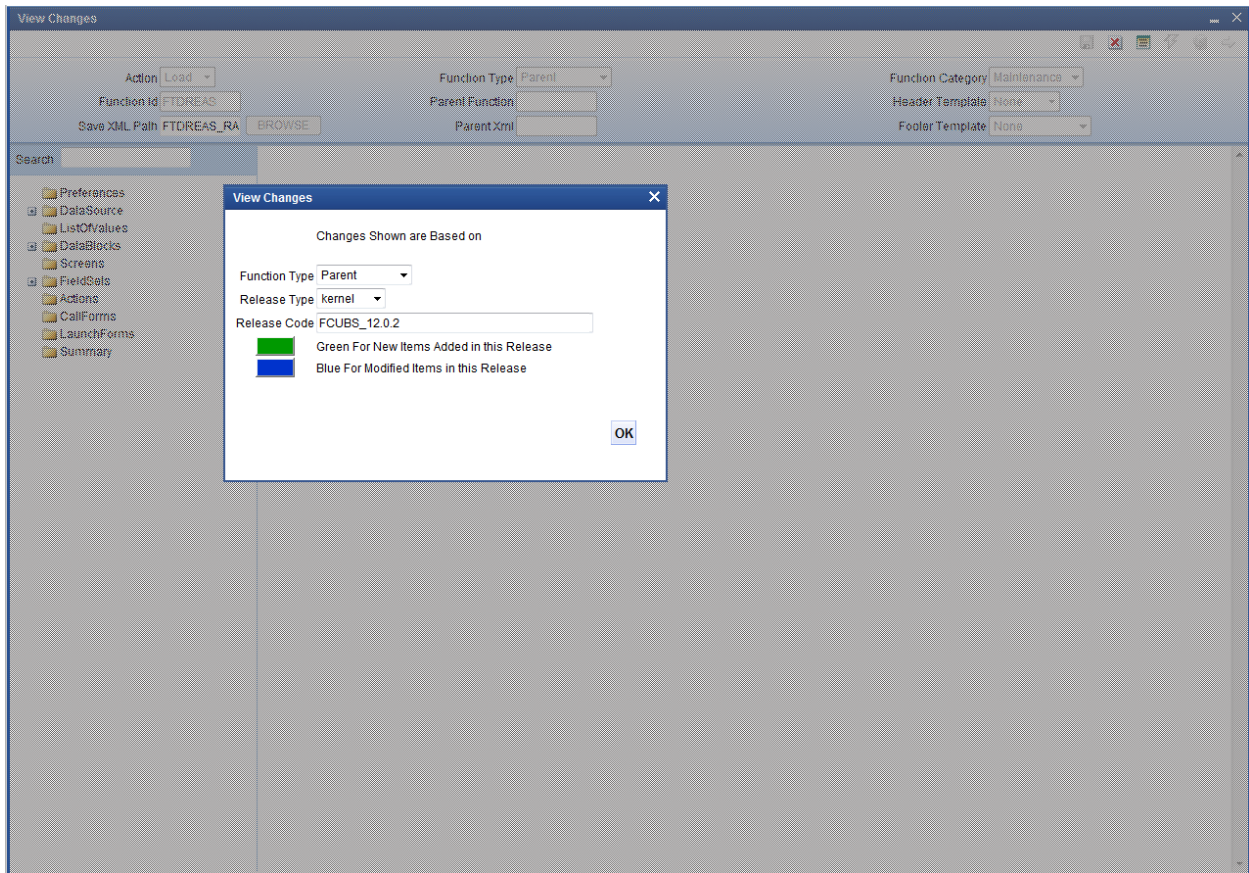


Fig 4.4 View Changes – Notifying the release type in which changes done

This will give brief details of what are the changes shown according to the release type. After loading the function id , Workbench will show the screen in the below format with blue and green accordingly.

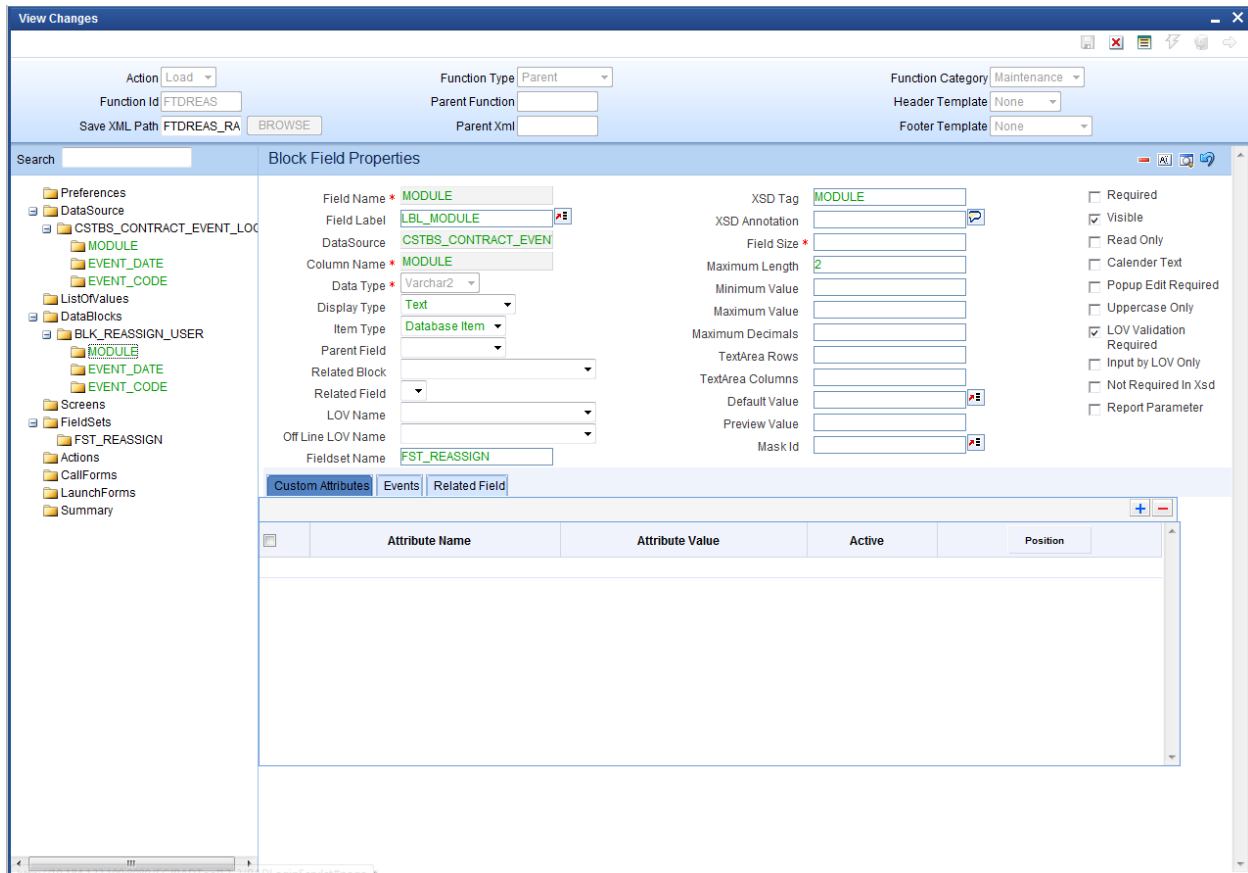


Fig 4.5 Highlighting the Changes done in Cluster Release

This will show the changes in the colors blue and green. Blue indicates modified and green indicates new, so in this function id.

One data source is modified (in blue color) while one block is newly added (in green color) as part of cluster release

## 4 Change Report

Change Report allows us to view the changes in the provided base and source list of radxml's, helps to get the changes done in the two radxml's across releases and release types.



View Changes Report allows the developer to see what exact change has been done in the radxml's as part of the various nodes in the Development Workbench across two different releases or release types.

It generates reports based on two formats

**Comparison Types:**

- 1. Function specific:** Compares Radxml's Based on the function name
- 2. Parent child:** Compares Radxml's Based on the parent child Relation

These are the nodes which are compared and report is generated based on the differences found in these below nodes of the two radxml's given in the list Radxml's.

**PREFERENCES, MENU\_DETAILS, DATASOURCES, COLUMNS, LOVS LOV\_DETAILS, DATA\_BLOCKS, BLOCK\_FIELDS, DATASOURCES\_ATTACHED, CUSTOM\_ATTRIBUTES, LOV\_RETURN\_FIELDS, LOV\_BIND\_VARS, FIELD\_EVENTS, LOV\_OFF\_LINE\_BIND\_VARS, LOV\_OFF\_LINE\_RETURN\_FIELDS, SCREENS, SCREEN\_ARGUMENTS, TABS, SECTIONS, PARTITIONS, FIELDSETS, FIELDSET\_FIELDS, SUMMARY, SUMMARY\_DETAILS, LAUNCHFORMS, CALLFORMS, ACTIONS, WEB\_SERVICES.**

### 4.1 Process Steps

View Changes Report process is explained taking STDCUSAC as example

From FCUBS\_11.3.0 and FCUBS\_11.4.0 Releases.

Click on View Change Report Node from Development Workbench landing page .

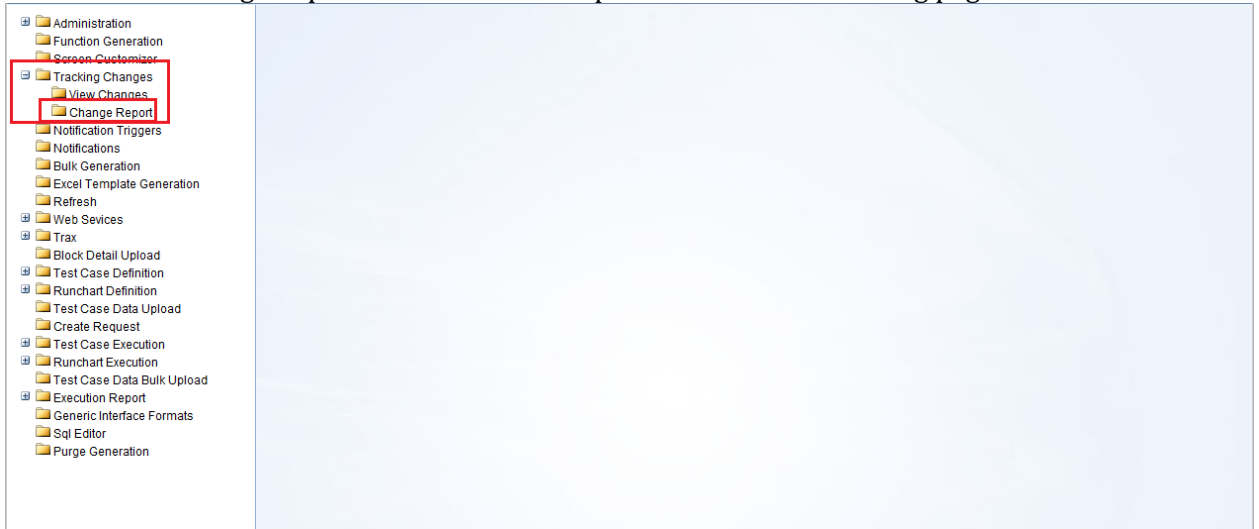


Fig 4.1.1: Development Workbench Landing Page

The following window will be launched

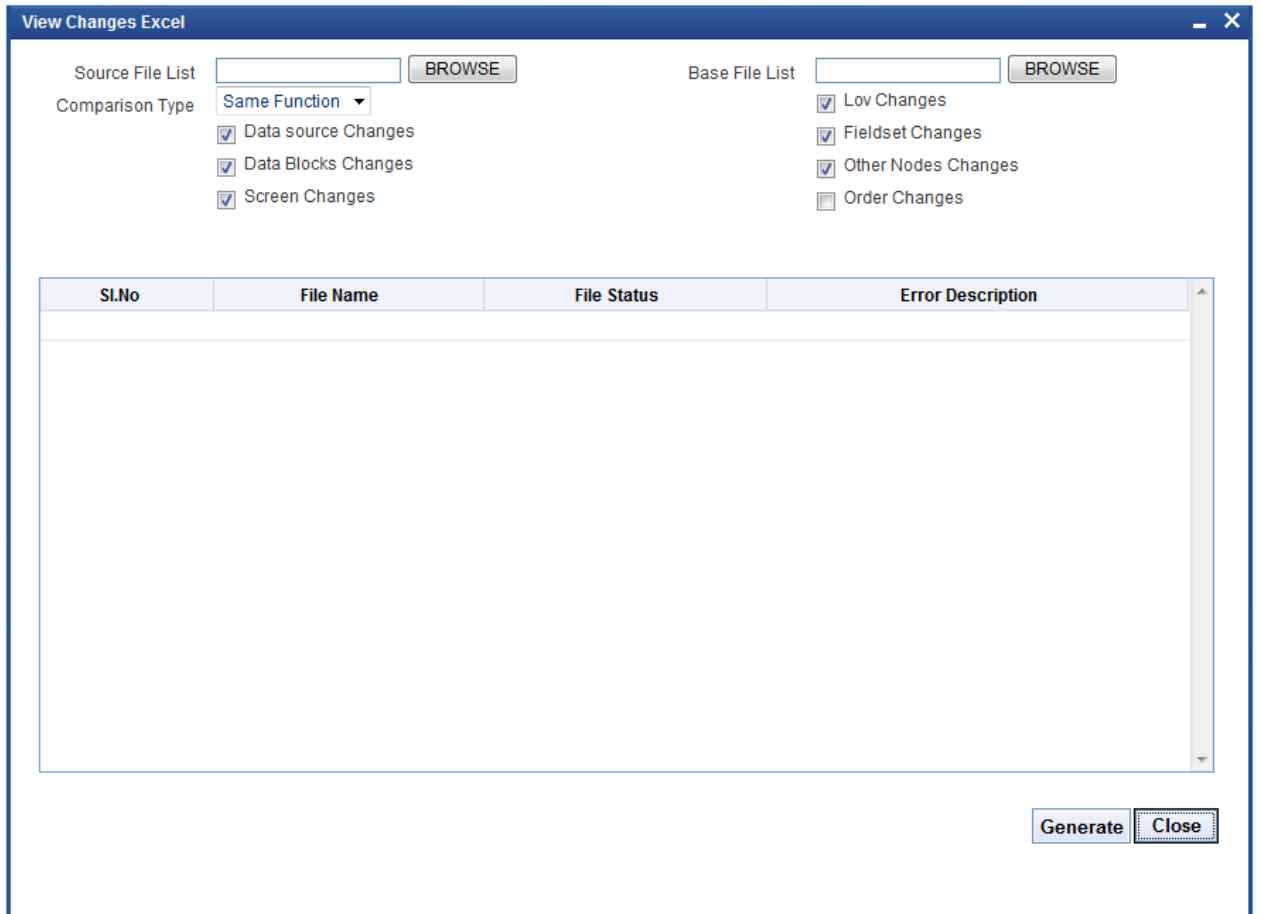


Fig 4.1.2: Development Workbench View Changes Report Screen

**Source File List:** Browse and select the text file containing source file list.

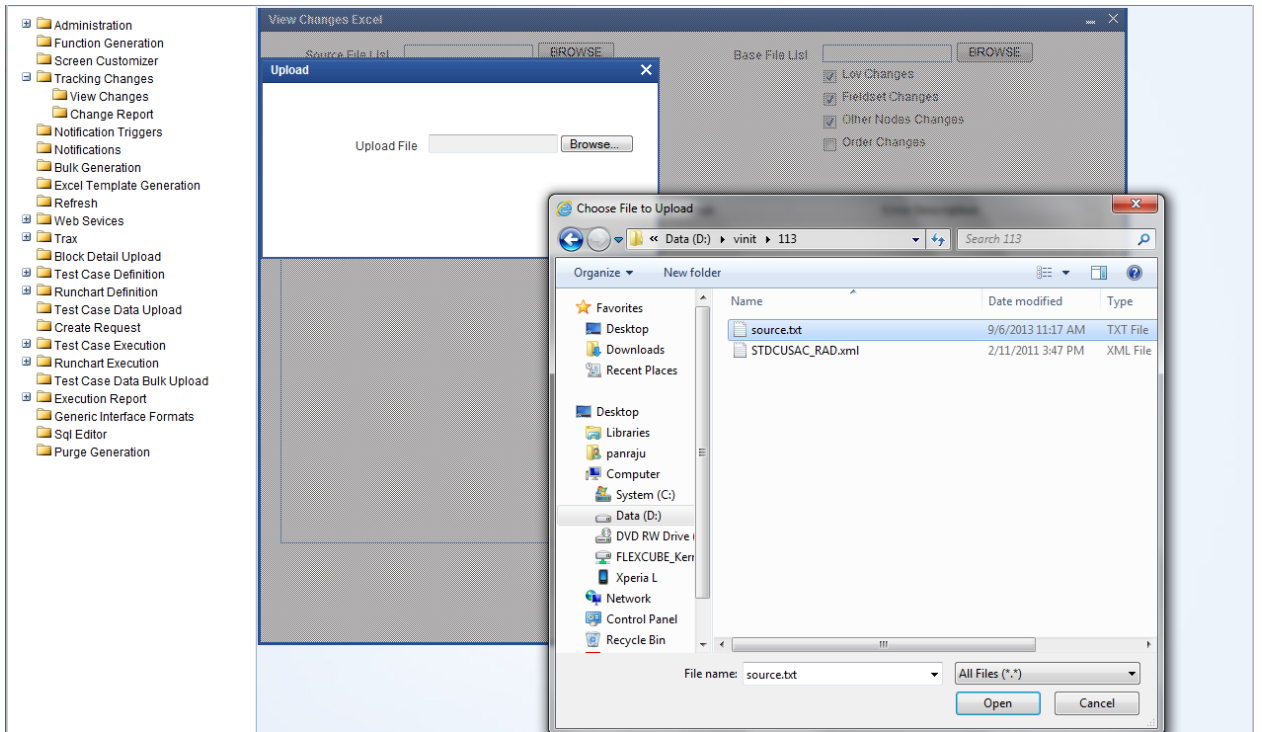


Fig 4.1.3: Selecting source file list text file for View Changes Report

Source File list is a text file which contains the absolute path of all the radxml's to be compared.

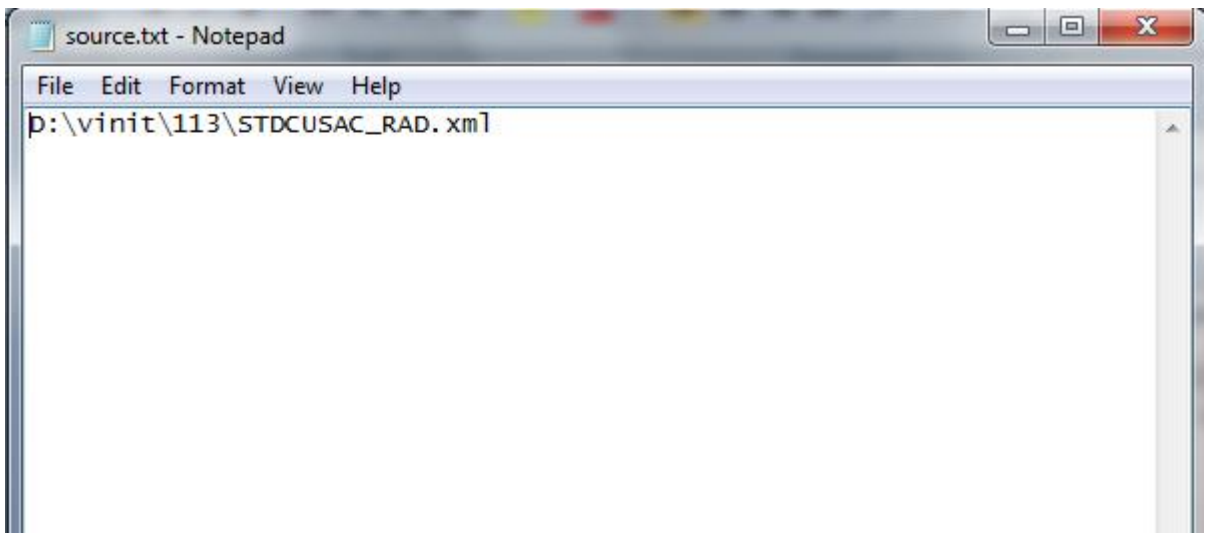


Fig 4.1.4: Content of source.txt file

The figure above shows the content of the source.txt file .Here STDCUSAC is the source radxml which has to be compared.

If View Changes Report of more than one function\_id is required, absolute path of each radxml has to be specified; each in a new line

**Base File List:** Browse and select the text file containing base file list

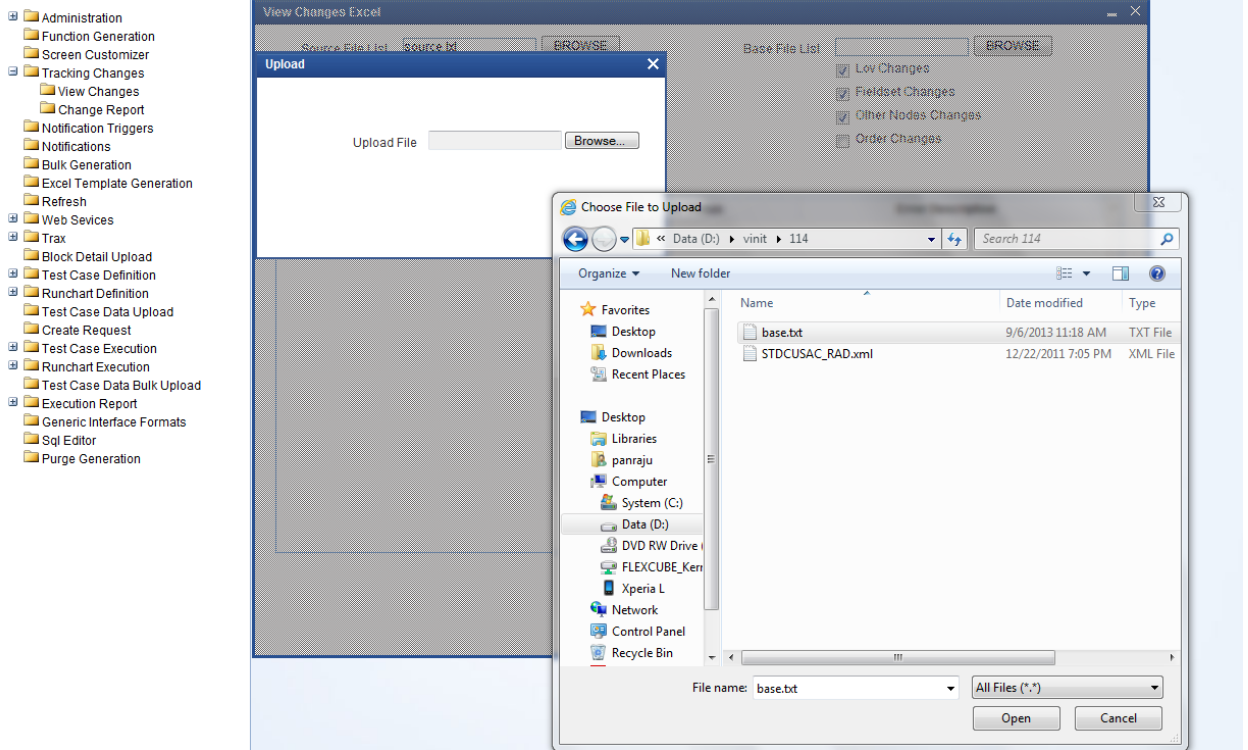


Fig 4.1.5: Selecting base file list text file for View Changes Report

Base File list is a text file which contains the absolute path of all the base radxml's to be Compared (here STDCUSAC is the base radxml)

If View Changes Report of more than one function\_id is required, absolute path of each base radxml has to be specified; each in a new line

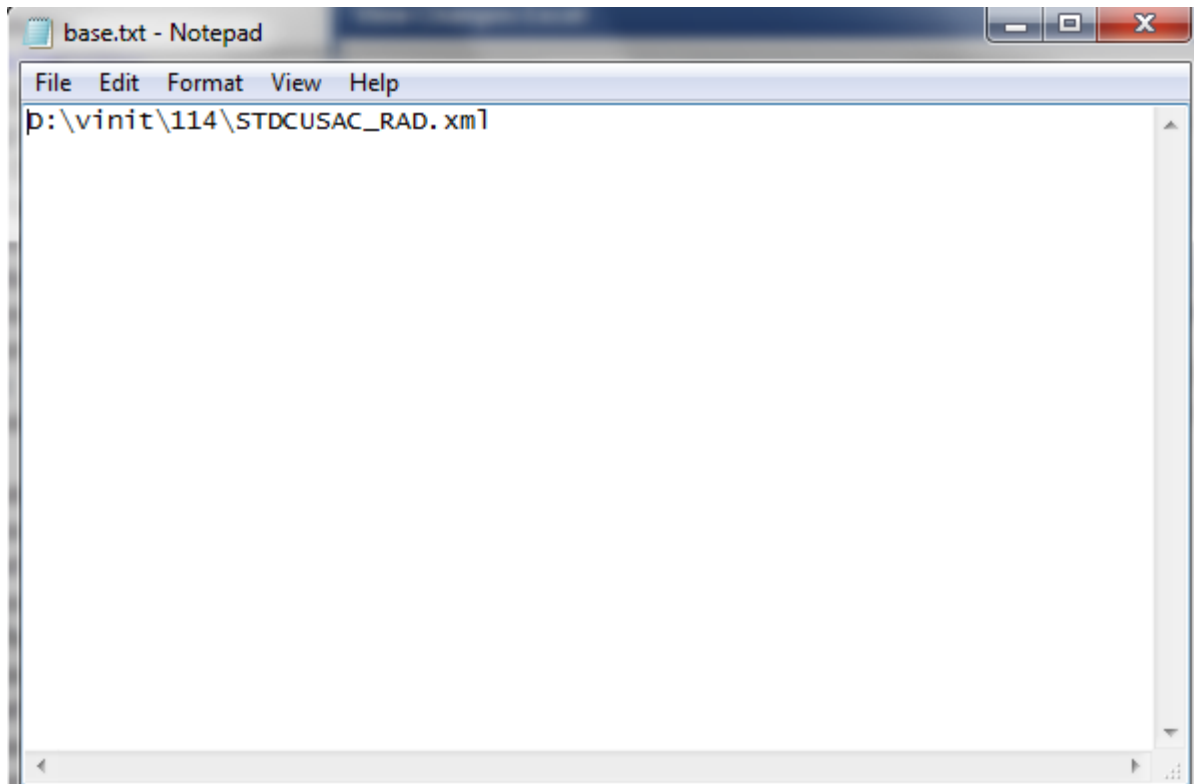


Fig 4.1.6: Content of base.txt file

**File Location:** Choose file location as client if the path provided is in the client machine.

**Comparison Type:** Choose Comparison type as Function Specific.

**Select Changes:** Check if required to compare the selected nodes also.

Click on Generate button on lower left portion of the screen and wait for the system to do the process.

Process time will vary depending on the number of files provided, size of each files etc

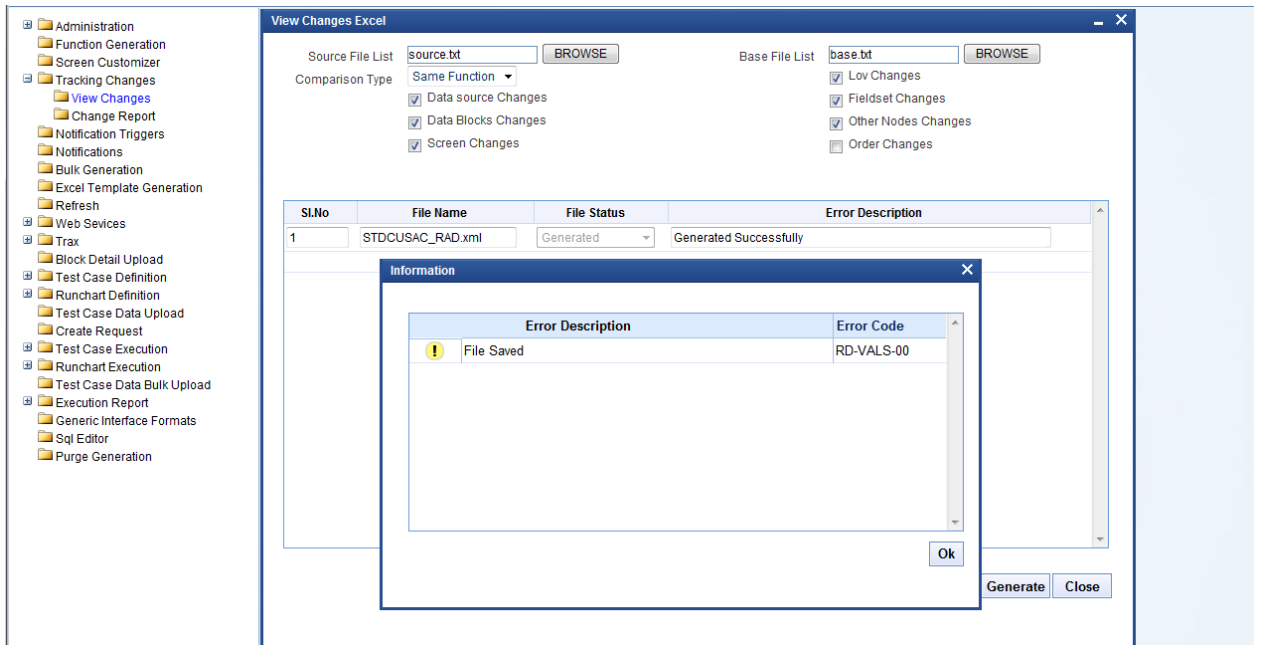


Fig 4.1.7: File Status after View Changes Report

After Completion of the process, status will be shown in the screen. File status will be generated successfully if comparison is successful.

**Generated Files:**

- 1) **Excel Report of Changes:** A war file named RAD will be created and will be shown after successful process of comparing, which will contain Excel files for the particular source radxml's.

PANDETIP\_FRONTEND\_LOG.txt

- 2) **Log Files :** Following log files will be generated

**i) View Comparison Log:** This contains the status of all the files Compared.

**ii) View Comparison Report:** This file can be used for troubleshooting.

All the nodes will be compared and will be painted in the excel sheet based upon the values of base and source list of radxml's, the values will be having 3 statuses

**NEW, MODIIFED, DELETED.**

Based on this status old and new values will be shown in the view changes report.

**4.2 Functionality Demonstration**

In the above View Changes Report process, **STDCUSAC** is compared with the latest **STDCUSAC**. The figure below shows the comparison of **STDCUSAC (FCUBS\_11.3.0)** and **STDCUSAC (FCUBS\_11.4.0)**.

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Fig 4.2.1: STDCUSAC screen copy right clause.

|                   | SOURCE                 | BASE         |
|-------------------|------------------------|--------------|
| FUNCTION_ID       | STDCUSAC               | STDCUSAC     |
| RELEASE_CODE      | FCUBSV.UM 11.2.0.0.0.0 | FCUBS_11.4.0 |
| RELEASE_TYPE      | KERNEL                 | KERNEL       |
| FUNCTION_TYPE     | P                      | P            |
| FUNCTION_CATEGORY | MAINTENANCE            | MAINTENANCE  |
|                   |                        |              |
|                   |                        |              |
|                   |                        |              |

Fig 4.2.2: STDCUSAC screen Header.

# PREFERENCES

| STATUS   | PREFERENCES | PROPERTIES          | OLD VALUE        | NEW VALUE |
|----------|-------------|---------------------|------------------|-----------|
| MODIFIED | MENU        |                     |                  |           |
|          |             | TXN BLOCK NAME      | BLK_CUST_ACCOUNT |           |
|          |             | TXN FIELD NAME      | BRN              |           |
|          |             | MULTI BRANCH ACCESS | Y                |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |
|          |             |                     |                  |           |

| STATUS   | MENU_DETAILS | PROPERTIES           | OLD VALUE | NEW VALUE           |
|----------|--------------|----------------------|-----------|---------------------|
| MODIFIED | STDCUSAC     |                      |           |                     |
|          |              | LBL FUNCTION DESC    |           | LBL_STDCUSAC_FNDESC |
|          |              | FUNCTION DESC        |           | Customer Accounts   |
|          |              | LBL FUNC MODULE DESC |           | Maintenance         |
|          |              |                      |           | LBL_STDCUSAC_MODULE |
| MODIFIED | STSCUSAC     |                      |           | -                   |
|          |              | LBL FUNCTION DESC    |           | LBL_STSCUSAC_FNDESC |
|          |              | FUNCTION DESC        |           | Customer Accounts   |
|          |              | LBL FUNC MODULE DESC |           | Summary             |
|          |              |                      |           | LBL_STSCUSAC_MODULE |
|          |              |                      |           | -                   |

Fig 4.2.3: STDCUSAC screen Preferences changes from previous release screen

The change report will compare the two function ids and will paint the excel sheet in the format above represented for the preferences node of the radxml's compared. Preferences will show the difference in the both versions of the releases. The nodes representing here are

**(PREFERENCES, MENU\_DETAILS)**



## Description:

change Report will compare two radxml's and will form one Dom which will have the nodes which will have the diff between two radxml's which has old value and new value.

Here in preferences, the status is the nodes are modified and the node modified is preferences the property of that node modified is Txn block name Old value is block\_cust\_account no and new value is null ,STDCUSAC (FCUBS\_11.3.0) radxml has no value and STDCUSAC (FCUBS\_11.4.0) has block\_cust\_account as Txn block Similarly for the other screens also the values will be painted as below fig.

## DATASOURCES

| 1  | A        | B                   | C             | D   | E   | F       | G               | H           |
|----|----------|---------------------|---------------|---|---|---------|-----------------|-------------|
| 1  | STATUS   | DATASOURCES         | PROPERTIES    | OLD VALUE   | NEW VALUE   |         |                 |             |
| 2  | MODIFIED | ICTMS_ACC_PR        |               | prod IN (SELECT product_code FROM ictms_product_definition WHERE product_type in ('T', 'P'))  | prod IN (SELECT product_code FROM ictms_product_definition WHERE product_type = 'T')  |         |                 |             |
| 3  |          |                     | DEFAULT WHERE |   |   |         |                 |             |
| 4  | MODIFIED | ACVWS_CRTUR_LMT_BAL |               | LIMIT_PRD = (SELECT LIMIT_PRD FROM STTM_TURNOVER_PERIODS WHERE LIMIT_CODE = p_wrk_stdcsac.v_sttms_cust_account.TRNOVER_LMT_CODE AND to_date(global.application_date) BETWEEN LIMIT_START_DATE AND LIMIT_END_DATE) | LIMIT_PRD = (SELECT LIMIT_PRD FROM STTM_TURNOVER_PERIODS WHERE LIMIT_CODE = p_stdcsac.v_sttms_cust_account.TRNOVER_LMT_CODE AND to_date(global.application_date) BETWEEN LIMIT_START_DATE AND LIMIT_END_DATE) |         |                 |             |
| 5  |          |                     | DEFAULT WHERE |   |   |         |                 |             |
| 6  |          |                     | DATASRC TYPE  | NORMAL  |   |         |                 |             |
| 7  |          |                     | CHILD DATASRC | N   |   |         |                 |             |
| 8  |          |                     |               |   |   | STATUS  | COLUMNS         | PROPERTIES  |
| 9  |          |                     |               |   |   | DELETED | BRANCH_CODE     | OLD VALUE   |
| 10 |          |                     |               |   |   |         |                 | COLUMN NAME |
| 11 |          |                     |               |   |   |         |                 | DATATYPE    |
| 12 |          |                     |               |   |   |         |                 | MAX LENGTH  |
| 13 |          |                     |               |   |   |         |                 | BLOCK NAME  |
| 14 |          |                     |               |   |   | DELETED | CUST_AC_NO      | BLK_STTMS   |
| 15 |          |                     |               |   |   |         |                 | NKAGES      |
| 16 |          |                     |               |   |   |         |                 | COLUMN NAME |
| 17 |          |                     |               |   |   |         |                 | DATATYPE    |
| 18 |          |                     |               |   |   |         |                 | MAX LENGTH  |
| 19 |          |                     |               |   |   | DELETED | COLLATERAL_TYPE | BLK_STTMS   |
| 20 |          |                     |               |   |   |         |                 | NKAGES      |
| 21 |          |                     |               |   |   |         |                 | COLUMN NAME |
| 22 |          |                     |               |   |   |         |                 | DATATYPE    |
| 23 |          |                     |               |   |   |         |                 | MAX LENGTH  |
| 24 |          |                     |               |   |   | DELETED | COLLATERAL      | BLK_STTMS   |
| 25 |          |                     |               |   |   |         |                 | NKAGES      |
| 26 |          |                     |               |   |   |         |                 | COLUMN NAME |
| 27 |          |                     |               |   |   |         |                 | DATATYPE    |
|    |          |                     |               |   |   |         |                 | MAX LENGTH  |

Fig 4.2.4: STDCUSAC screen Data Sources changes from previous release screen

The change report will compare the two function ids and will paint the excel sheet in the format above represented for the Data Sources node of the radxml's compared. Data Sources will show the difference in the both versions of the releases. The nodes representing here are

**(DATASOURCES, COLUMNS)**

### Order Changes:

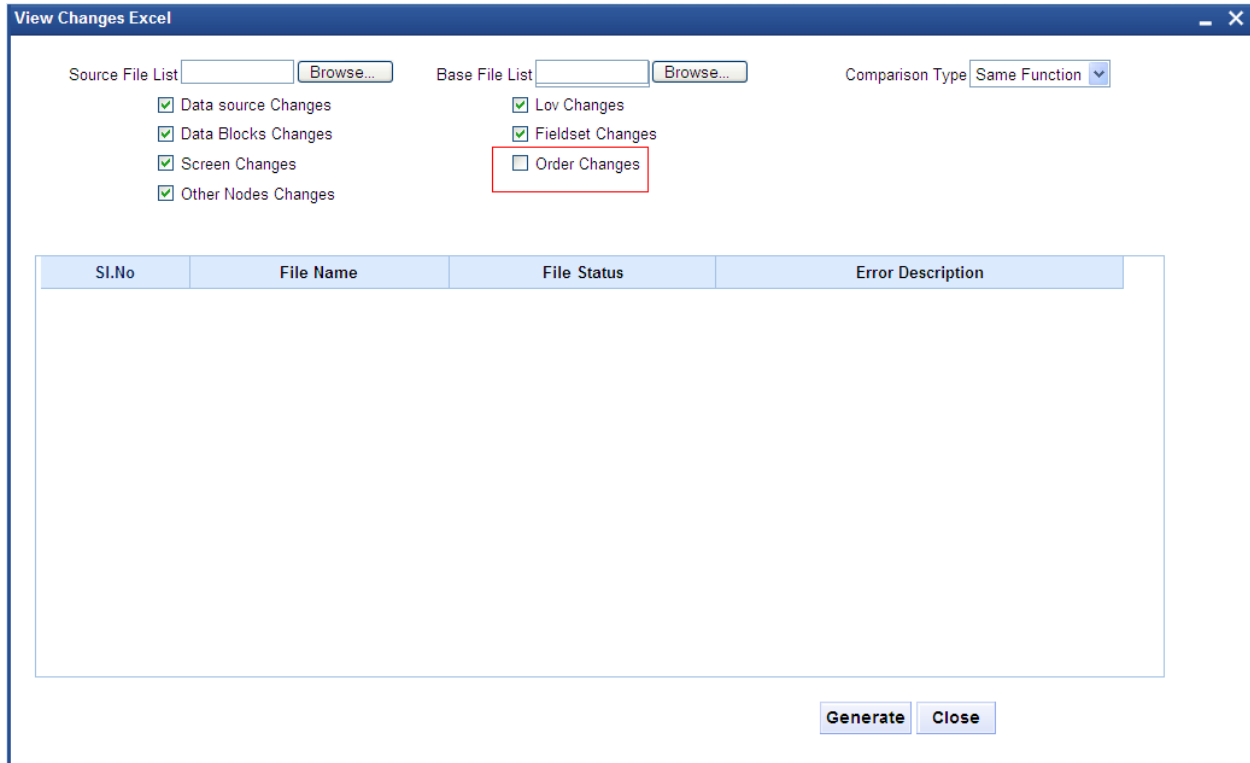


Fig 4.2.5: order changes in change report screen

On click of this order changes the nodes will also be compared for the order maintained in the radxml of respective releases. Mainly order changes will affect 3 nodes

**FIELD\_ORDER, FIELDSET\_ORDER, TAB\_ORDER, SEC\_ORDER, DATA\_BLK\_ORDER, BLK\_FIELD\_ORDER**

All the orders will be compared between sources and base radxml's and will be painted in the excel as below fig

One such example Comparing two radxml's with order changes required in the screen the comparison will include the above nodes in comparing the two radxml's.

### Order Changes screen for fieldsets:

| STATUS  | FIELDSETS          | PROPERTIES        | OLD VALUE | NEW VALUE      |
|---------|--------------------|-------------------|-----------|----------------|
| MODIFIE | FST_REVOLVING_LOAN |                   |           |                |
|         |                    | FIELDSET_SECTION  | SEC_PREF1 | SEC_PREF4      |
|         |                    | FIELDSET_PARTITIO | SEC_PART3 | SEC_PREF4_PART |
|         |                    | FIELDSET_VISIBLE  | Y         | N              |
|         |                    | FIELDSET_ORDER    | 59        | 0              |
| MODIFIE | FST_PRD            |                   |           |                |
|         |                    |                   |           |                |
|         |                    |                   |           |                |
| MODIFIE | FST_RML            |                   |           |                |
|         |                    |                   |           |                |
|         |                    |                   |           |                |
|         |                    |                   |           |                |
|         |                    |                   |           |                |
|         |                    |                   |           |                |

| STATUS   | FIELDSET_FIELDS | PROPERTIES  | OLD VALUE | NEW VALUE |
|----------|-----------------|-------------|-----------|-----------|
| MODIFIED | LEASE_TYPE      |             |           |           |
|          |                 | ACTIVE      | Y         | N         |
|          |                 | FIELD_ORDER | 8         | 0         |
| STATUS   | FIELDSET_FIELDS | PROPERTIES  | OLD VALUE | NEW VALUE |
| NEW      | ROLLALWD        |             |           |           |
|          |                 | FIELD_NAME  |           | ROLLALWD  |
|          |                 | ACTIVE      |           | Y         |
|          |                 | FIELD_ORDER |           | 2         |
| NEW      | PRDTYPE         |             |           |           |
|          |                 | FIELD_NAME  |           | PRDTYPE   |
|          |                 | ACTIVE      |           | Y         |
|          |                 | FIELD_ORDER |           | 3         |

Fig 4.2.6: order changes painted in excel sheet in change report screen



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