Development Workbench - Tracking Changes Oracle FLEXCUBE Universal Banking Release 14.5.4.0.0 Part No. F52800-01 [February] [2022]



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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.

Proficiency	Resources
FLEXCUBE Functional Architecture	Training programs from Oracle Financial Software Services.
FLEXCUBE Technical Architecture	Training programs from Oracle Financial Software Services.
FLEXCUBE Object Naming conventions	Development Overview Guide
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

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

# 2 Introduction

## 2.1 How to use this Guide

The information in this document includes:

- <u>Chapter 2 , "Introduction"</u>
- <u>Chapter 3 , "View Changes "</u>

• <u>Chapter 4 , "Change Report"</u>

## 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.

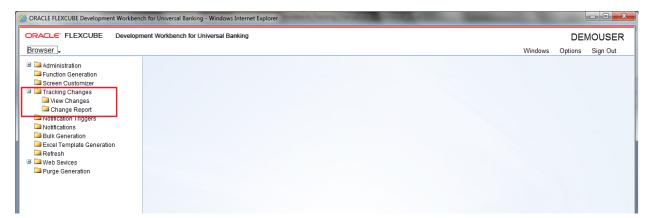


Fig 4.0 Development Workbench - View Changes link.

View Changes					_ ×
				🛛 🛛 🔳 🕫	
Action Load 👻 Function Id	Function Type Parent Function BROWSE Parent Xml	Parent •	Function Category Maintenance  Header Template None Footer Template None	]	
Search					*
Search  Preferences DataSource ListOV/alues Screens FieldSets CallForms Summary					
					Ŧ

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.

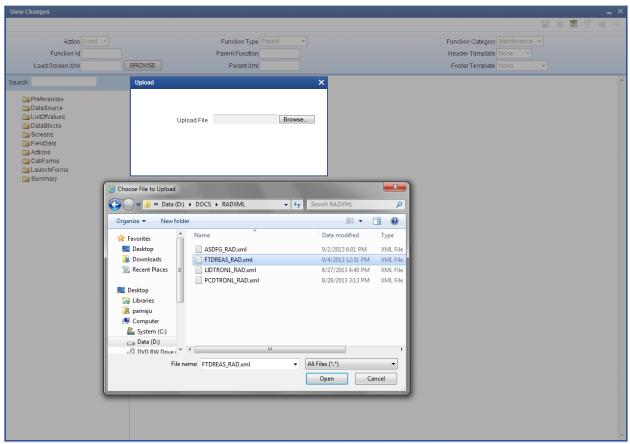


Fig 4.3 View Changes - loading radxml.

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

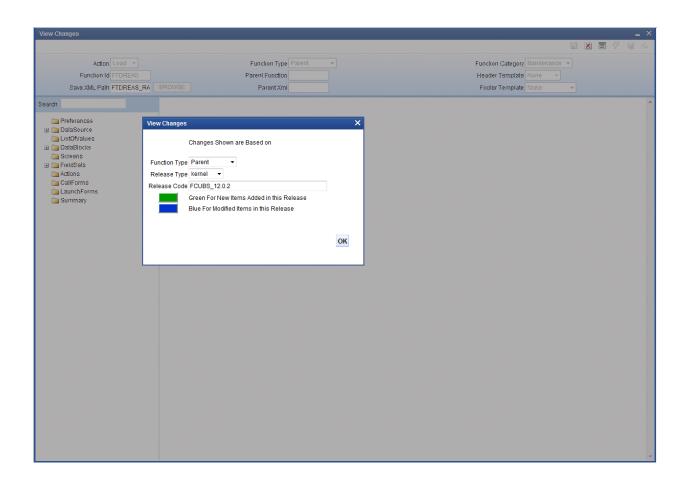
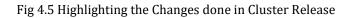


Fig 4.4 View Changes – Notifying the release type in which changes done

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.

View Changes				_ ×
				🖩 🗶 🗏 🖗 🤿
Action Load  Function Id FTDREAS Save XML Path FTDREAS_RA	Function Type Parent Parent Function BROWSE Parent Xml		Function Category Ma Header Template No Footer Template No	ne 🔻
Search	Block Field Properties			- 🛛 🗔 🖗 🔺
Preferences CTBS_CONTRACT_EVENT_LOU CTBS_CONTRACT_EVENT_LOU COULE EVENT_CODE LIGYONAUES COULE EVENT_CODE CUEVENT_DATE EVENT_DATE EVENT_CODE Streens FEIdSets FFIEdSets FFIEdSets SCATERASSIGN CaliForms CaliForms Summary	Field Name * MODULE	XSD Tag XSD Annotation Field Size * Maximum Length Minimum Value Maximum Dedmals TextArea Rowns TextArea Rowns Default Value Preview Value Mask Id	MODULE	Required Visible Read Only Calender Text Popup Edit Required. Uppercase Only LOV Validation Required in Xsd Required in Xsd Report Parameter
	DL ania San Jat fanna			·



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 is 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.

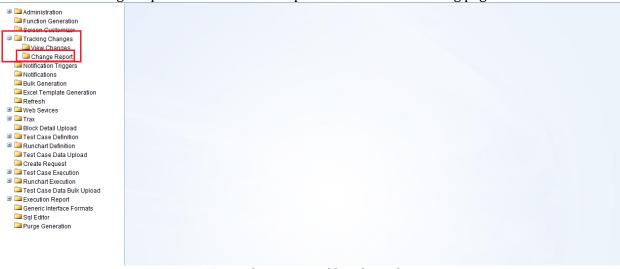


Fig 4.1.1: Development Workbench Landing Page

The following window will be launched

Vi	ew Changes Excel				_ ×
	Source File List Comparison Type	BROW Same Function ▼ ✓ Data source Changes ✓ Data Blocks Changes ✓ Screen Changes	SE Base File	List UV Changes V Fieldset Changes V Other Nodes Change Order Changes	BROWSE
	SI.No	File Name	File Status	Error Descrip	tion
					~
					Generate Close

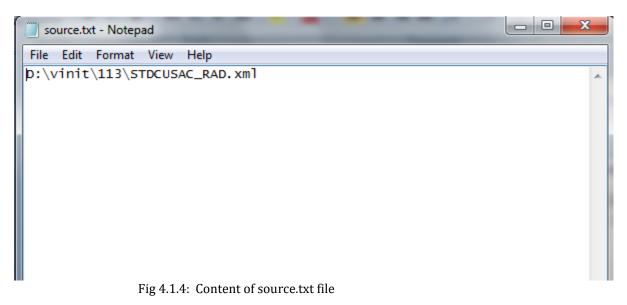
Fig 4.1.2: Development Workbench View Changes Report Screen

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

Administration     View Changes Excel		×
Function Generation	BROWSE Base File List	BROWSE
Screen Customizer		DROVADE.
Tracking Changes	Lov Changes	
🔤 View Changes	Fieldset Changes	
🗀 Change Report	Olher Nodes Changes	3
Diffication Triggers		
Dependence Operations Upload File	Browse Order Changes	
Bulk Generation		
Excel Template Generation		
Refresh	Choose File to Upload	×
🗉 🗀 Web Sevices		
🗄 🛄 Trax	C→ → → × × × × × × × × × × × × × × × × ×	Search 113 🔎
Block Detail Upload		
Test Case Definition	Organize 🔻 New folder	III 🔹 🛨 🚺 🔞
Runchart Definition	A Name	Date modified Type
Test Case Data Upload	A Pavorites	21
Create Request	📃 Desktop 📄 source.txt	9/6/2013 11:17 AM TXT File
Test Case Execution	Downloads STDCUSAC_RAD.xml	2/11/2011 3:47 PM XML File
Runchart Execution	Recent Places	
Test Case Data Bulk Upload	-	
Execution Report	E Desktop	
Generic Interface Formats		
Sql Editor	🕞 Libraries	
Purge Generation	🔒 panraju 🗧	
	🖳 Computer	
	System (C:)	
	🕞 Data (D:)	
	DVD RW Drive	
	FLEXCUBE_Ken	
	Xperia L	
	🗣 Network	
	3 Control Panel	
	🗑 Recycle Bin 🗸 🧃 🎹	
	File name: source.txt 👻	All Files (*.*)
		Open Cancel
	L L	

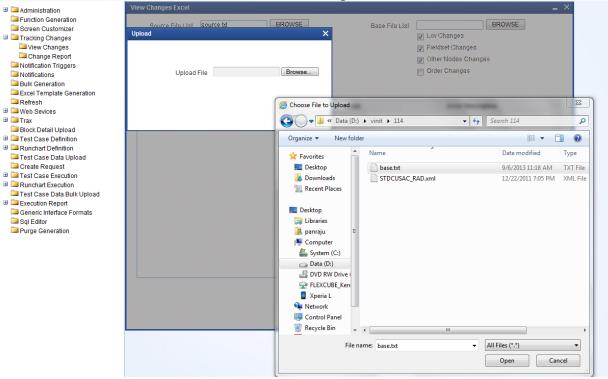
Fig 4.1.3: Selecting source file list text file for View Changes Report

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



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

	📃 ba	se.txt ·	- Notepad			X	
	File	Edit	Format	View	Help		
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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

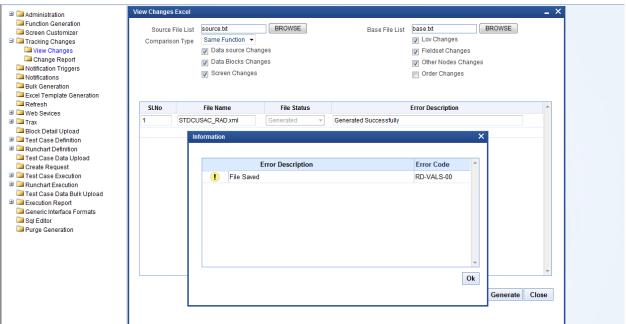


Fig 4.1.7: File Status after View Changes Report

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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	SOURCE	BASE
FUNCTION_ID	STDCUSAC	STDCUSAC
RELEASE CODE	FCUBSV.UM 11.2.0.0.0.0.0	FCUBS 11.4.0
RELEASE TYPE	KERNEL	KERNEL
FUNCTION TYPE	P	P
FUNCTION CATEGORY	MAINTENANCE	MAINTENANCE
—		

Fig 4.2.1: STDCUSAC screen copy right clause.

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
				Customer Accounts
		FUNCTION DESC		Maintenance
		LBL FUNC MODULE		LBL_STDCUSAC_MODULE
		DESC		_
MODIFIED	STSCUSAC			
		LBL FUNCTION DESC		LBL_STSCUSAC_FNDESC
				Customer Accounts
		FUNCTION DESC		Summary
		LBL FUNC MODULE		LBL_STSCUSAC_MODULE
		DESC		

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

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Clipboard	Font	t 6	Alignment		Style		Cells	Editi	
F9	▼ (* <i>f</i> x [	DELETED							
А	В	С	D	E	F	G		Н	
STATUS	DATASOURCES	PROPERTIES	OLD VALUE	NEW VALUE					
MODIFIED	ICTMS_ACC_PR		prod IN (SELECT						
			product code FROM	prod IN (SELECT					
			ictms_product_definition	product_code FROM					
			WHERE product_type in (	ictms_product_definition					
		DEFAULT WHERE	'l', 'P'))	WHERE product_type = 'I')					
NODIFIED	ACVWS_CRTUR_LMT_E	JAL	LIMIT PRD = (SELECT	LIMIT PRD = (SELECT					
			LIMIT_PRD = (SELECT	LIMIT_PRD = (SELECT					
				STTM TURNOVER PERIO	)				
			DS WHERE LIMIT_CODE						
			=	=					
			p_wrk_stdcusac.v_sttms_c						
			ust_account.TRNOVER_L MT_CODE_AND	CODE AND					
			to_date(global.application_						
			date) BETWEEN	date) BETWEEN					
			LIMIT_START_DATE AND						
		DEFAULT WHERE	LIMIT_END_DATE)	LIMIT_END_DATE)					
		DATASRC TYPE	NORMAL						
		CHILD DATASRC	N		STATUS	COLUMNS	PPOP	ERTIES	OLD VAL
					DELETED	BRANCH COD		ENTIES	OLD VAL
						-		MN NAME	BRANCH
							DATA	TYPE	VARCHA
							MAXI	LENGTH	3
							PL OC		BLK_STT
					DELETED	CUST AC NO	BLUC	K NAME	NKAGES
					DELETED	0001_A0_N0	COLU	MN NAME	CUST AC
							DATA		VARCHA
							MAXI	LENGTH	20
									BLK_STT
					DELETED			K NAME	NKAGES
					DELETED	COLLATERAL		MN NAME	COLLATE
							DATA		VARCHA
								LENGTH	1
									BLK_STT
							BLOC	K NAME	NKAGES
					DELETED	COLLATERAL	00111		COLLATE
							DATA	MN NAME	COLLATE VARCHA
								LENGTH	50

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:** 

View Changes Excel				_ ×
	Browse Data source Changes Data Blocks Changes Screen Changes Other Nodes Changes	Base File List Browse ✓ Lov Changes ✓ Fieldset Changes ☐ Order Changes	e Comparison Type Same Function 👻	
SI.No	File Name	File Status	Error Description	
			Generate Close	1

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			
	1.58 M	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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