Test Case Management Oracle FLEXCUBE Universal Banking Release 14.7.2.0.0 Part No. F92377-01 [November] [2023]

FINANCIAL SERVICES

Contents

1	Preface	.3
1.	1 Audience	.3
1.	2 Related Documents	.3
2	Introduction	
3	Overview of Test Case Management	
4	Login	
5	Home Page	
5.		
5.	2 Windows	.4
5.	3 Launch FC UBS	.4
5.	4 User Preferences	.5
5.	5 Change Password	.5
5.	6 Sign Out	.6
6	Block Detail Upload	.6
7	Excel Template Generation	
8	Test Case Definition	
9	Test Case Upload	
10	Create Request	
11	Test Case Execution	
12	Run Chart Master	
13	Run Chart Execution	
14	Derivation	
15	Migration of Data using TCM Tool	18

1 Preface

This document describes the Test Case Management module in Oracle FLEXCUBE Development Workbench for Universal Banking and guides the developers/testers on how to use this feature.

1.1 Audience

This document is intended for FLEXCUBE Application developers/users that use Developer 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:

1.2 Related Documents

<u>Development Workbench – Administration</u> <u>Development Workbench – Getting Started</u>

2 Introduction

This document provides information on:

- <u>Chapter 2 , "Introduction"</u>
- <u>Chapter 3</u>, "Overview of Test Case Management"
- <u>Chapter 4 , "Login"</u>
- <u>Chapter 5 , "Home Page"</u>
- <u>Chapter 6, "Block Detail Upload "</u>
- <u>Chapter 7 , "Excel Template Generation "</u>
- <u>Chapter 8 , "Test Case Definition"</u>
- <u>Chapter 9, "Test Case Upload"</u>
- <u>Chapter 10 , "Create Request"</u>
- <u>Chapter 11 , "Test Case Execution"</u>
- Chapter 12 , "Run Chart Master"
- Chapter 13, "Run Chart Execution"
- <u>Chapter 14</u>, "Derivation"
- <u>Chapter 15</u>, "Migration of Data using TCM Tool"

3 Overview of Test Case Management

This is a tool (provided as part of Developer Workbench), which can be used to save Test plans and to execute the test cases. This is very helpful for a Testing team, where they need not do maintenance for every release. User can execute the Run Charts & proceed with transactions.

In this tool, user can store FLEXCUBE Maintenance/Online Screens Test Cases into the database by uploading them in the form of Excel sheets to the TCM tool. These Test Cases can be logically grouped together to build a Run Chart to run all test cases with a single operation. Test Case Management system has been designed to automate the ITRs within each release. This tool would reduce lot of time and effort of the Testing team.

Below sections explain the common administrative features of Development Workbench. If user is already comfortable with these, chapter 4 and 5 can be skipped

Main functions of Development Workbench Admin User:

- Creating a new release
- Creating Release admin for the specific release

Main functions of Release Admin User:

➢ Creating User ID's

Main functions of TCM User:

- Block Detail Upload
- Test Case Definition
- ➢ Test Case Upload
- Create Request
- Test Case Execution
- > Run chart Definition
- Run Chart Execution

4 Login

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ORACLE'	
ORACLE FLEXCUBE Development Workbench for Universal Banking	
LOGIN	
Password	
Sign In	
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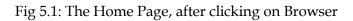
Fig 4.1: Login Screen

Only the Release Admin has rights to create new Users. Development Workbench Admin will create a new release and assign one user as Release admin for that release.

Note: User should make sure that the same User ID is created in FLEXCUBE as well.

5 Home Page

ORACLE' FLEXCUBE Development Workbench for Universal Banking		DEI	NOUSER
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Image: Seven Customizer Image: Seven Customizer			



5.1 Browser

In this screen user can view Menu by clicking on **Browser**.

5.2 Windows

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Test Case Master		_ >	<	
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Test Case ID * K Description				I I I 1 1
Eunction Id	Runchart Details			
Action Code				
Service Name	Runchart Code * Description	\$		
Operation Code	Doodhpiton			
Modification				+ -
Number		Sequence No	TC Code	^
				-
	Modification Number	Maker Id	Maker Date Stamp	
				Close

Fig 5.2.1: The open Windows

This is useful to swap between the windows.

5.3 Launch FC UBS

On click of this link the FCUBS Application is launched. The FCUBS link is given at the time of Release creation which can be modified at any stage of release by the release Admin.

ORACLE FLEXCUBE	Development Workbench for Universal Banking	DEMOUSER
Browser -	Windows	Options Sign Out
		User Preferences
		Change Password
		Launch FLEXCUBE UBS
		Accessibility neip
		About

Fig 5.3.1: Launch FCUBS

5.4 User Preferences

ORACLE FLEXCUBE Development Workbenc	h for Universal Banking - Windows Internet I	Explorer		
ORACLE' FLEXCUBE Developm	ent Workbench for Universal Banking			DEMOUSER
Browser -				Windows Options Sign Out
	Environment Code Language Save Mode Work Directory Excel format - Release Details Release Code: Release Type: - Environment Details Environment Description:	KERNEL FCDEV1202@FCUBSDEV	- X	User Preferences Change Password Launch FLEXCUBE UBS Accessibility Help About
			OK Cancel	

Fig 5.4.1: The User Preferences

This screen shows the current user release & schema details. User can get this information on clicking on User Preferences. User will also be able to Switch Between releases and Environments Using the User Preferences option, near the top right corner of the screen.

On clicking the Choose button, LOV buttons next to Release code and Environment code will appear and user can view the releases and the corresponding environments and can map accordingly.

5.5 Change Password

Change Password _ X
Old Password
New Password
Confirm Password
OK Cancel

Fig 5.5.1: The Screen to Change Password

User can change password by clicking on Change Password.

5.6 Sign Out

The user can sign Out of TCM. On Successful Sign Out, the Login Page is launched.

6 Block Detail Upload

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Excel Template Generation	*	
 Refresh Block Detail Upload Runchart Definition Test Case Data Duload Runchart Execution Runchart Execution Description Report Purge Generation 	Ť	
Upload	Close	

Fig 6.1: The Upload Block Details Screen

TCM internally requires the Blocks and fields Details of a function Id. These details can be extracted from the function Ids _RAD.xml through this screen. A text file containing the list of RAD XML's to be extracted has to be prepared along with all of its call forms. The text file should contain the absolute location of the RAD Xml.

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Fig 6.2: The List of RAD xmls

Note: To generate a text file which contains a list of RADXML file user has to follow these steps:

- Command Prompt > Specific folder where RADXMLS are stored >
- DIR / B / S > Files.txt

Tables: TCTM_BLOCK_DETAILS, TCTB_BLOCK_DETAILS, TCTM_FID_CALL_FORMS, TCTM_FID_FUNCTIONS, TCTM_BLOCK_IO_TAGS

Note: Block detail information needs to be re-generated every time there is a change in the source.

Call form has to be placed above the main function id in the source file list

7 Excel Template Generation

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But: Sensection Control Contro Control Control Control Control Control Contro	SI.No File Name	Sub Folder	File Status	Error Description		
				Generate	e	

Fig 7.1: The Excel template Generation Screen

Similar to block detail upload, a text file which contains the list of RADXMLS along with path, has to be uploaded here to get the excel templates.

Note: Excel template needs to be re-generated every time there is a change in the source after upload of the new block details.

8 Test Case Definition

ORACLE FLEXCUBE Development Workbench for Universal Banking - Windows Internet Explorer						
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Fig 8.1: The Test Case Master Screen

The first command button should be used to create a new test case. Fourth command button can be used to query data (Similar to F7 in FLEXCUBE) Fifth command button can be used to get the queried data (Similar to F8 in FLEXCUBE) Action Code: Can be used to New/Modify/Reverse/Liquidate/Auth/Close Tables: TCTM_TC_MASTER, TCTB_TC_MASTER

Note: Function Id and Action code combination is used to take care of FCUBS requests while Service Name and Operation Code is used to take care of Web Services requests.

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Notifications		Description							
Bulk Generation		Function ID	×1						
Excel Template Generation									
Refresh						<< < 1of1	> >>		
Web Sevices Block Detail Upload		Test Case Id	Description	Function Id	Action Code	Service Name	*		
Test Case Definition		TEST_SE01		SEDXDLNL	NEW				
Detailed		TC_CYDCRTYP_NEW	Current Rate Type	CYDCRTYP	NEW	FCUBSCcyService			
Summary		TC_CYDCRTYP	Current Rate Type	CYDCRTYP	NEW				
Test Case Data Upload		TC_FXDTRONL_NEW_	TC_FXDTRONL_NEW_	FXDTRONL	NEW				
Create Request Test Case Execution		TC_FXDLMNET_NEW	FXDLMNET_NEW	FXDLMNET	NEW				
Runchart Execution		Test0001	Test0001	MSDADFTP	NEW	FCUBSCNService	t		
Test Case Data Bulk Upload									
Execution Report									
Purge Generation									
							-		
	•		m				-F		
							Close		

Fig 8.2: The Summary Screen

Test Case Master	_ ×
	📄 🔚 🗙 T 😿 🚡 📂
- Test Case Details	
Test Case ID * TC_CYDCRTYP_NEW	
Description Current Rate Type	
Function Id CYDCRTYP	
Action Code NEW	
Service Name FCUBSCcyService	
Operation Code	
Reference Test Case	
Modification Number 2 Record Open Vaker Status Open Id DEMO	Maker Date 2013-02-28 20:26:39
	Close

Fig 8.3: The Detailed Screen

9 Test Case Upload

ORACLE FLEXCUBE Development Workbence	h for Universal Banking - Windows Internet Explorer			- O X
	nent Workbench for Universal Banking		DEI	MOUSER
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This is the screen to upload the respective excel template along with data. If multiple columns are there in Excel sheet, TCM will create multiple Test Cases.

For example:

TEST CASE: COUNTRY_CODES

If user uploads data with two columns – for INDIA & USA $% \label{eq:uploads}$

System will create 2 test cases as

- **COUNTRY_CODES_01** (this TC to create country INDIA)
- **COUNTRY_CODES-02** (this TC to create country USA)

Tables: TCTB_BLOCK_DATA, TCTM_BLOCK_DATA

	ゴ・(ビ・ 🎝 🦃 🕞 🔹	TCM_CYDCRTYP.xls [compatibility Mode	J - Microsoft Excel			
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	A	В	E	F	G	Н	
1-CYTI	MS RATE TYPE	Field Name	Field Value 1	Field Value 2	Field Value 3	Field Value 4	Field Value 5
!		Record No	1	2	3	4	5
1		Record Id	1	2	3	4	5
		Action Code	NEW	NEW	NEW	NEW	NEW
		Parent Record Id	1	2	3	4	5
		CCY_RATE_TYPE	STANDARD	CASH	BILLS	TC	DD
			STANDARD				
,		CCY_RATE_TYPE_DESC	RATE	Cash Transaction	BILLS RATE	TC RATE	DD RATE
	BS_FUNC_UDF_UPLOAD_DETAIL	Field Name	Field Value 1	Field Value 2	Field Value 3	Field Value 4	Field Value 5
0		Record No	1	2	3	4	5
1		Record Id	1	2	3	4	5
2		Action Code	NEW	NEW	NEW	NEW	NEW
3		Parent Record Id	1	2	3	4	5
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1							
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Fig 9.2: Excel sheet - to upload into TCM

Take note of following points while uploading excel sheet.

- i) The Parent Record Id in the Master Data block's sheet should be null
- ii) The Parent Record Id in Non-Master Blocks should not be null
- iii) All data needs to be input into the sheet as String only. I.e. for Date and Number fields, they need to be input with an apostrophe before the value. E.g. '2010/02/02 or '9087 etc
- iv) Excel sheet should be 2003 version (File extension name should be .xls)

Note: For proper display of excel sheet in browser, the user needs to ensure the following In Windows explorer Folder Options \rightarrow File Types

rolder Uptions	12		
General View File Types Offline Files			
Registered file types:			
Extensions File Types			
XLK Microsoft Office Excel Backup File		Edit File Type	? ×
State Add-In Microsoft Office Excel XLL Add-In			
XLM Microsoft Office Excel 4.0 Macro			
XLS Microsoft Office Excel 97-2003 Worksheet		ft Office Excel 97-2003 Worksheet	Change <u>I</u> con
Standard Contract Con			
XLSH Microsoft Office Excel HTML Document		Actions:	
SM Microsoft Office Excel Macro-Enabled Worksheet		New	New
New Delete		Open	<u>Idom</u>
		Print	Edit
		Open as Read-Only	
Details for "XLS" extension		Printto	Remove
Opens with: 💌 Microsoft Office Excel Change		Finico	
			Set Default
Files with extension XLS' are of type 'Microsoft Office Excel 97-2003 Worksheet'. To change settings that affect all 'Microso	0		
Office Excel 97-2003 Worksheet' files, click Advanced.	·	Confirm open after download	
		Always show extension	
Adyanced		Browse in same window	
		OK	Cancel
OK Cancel Ap	ylqo		

Fig 9.3: Browse in Same Window Checkbox

The Browse in Same Window Checkbox needs to be checked.

10 Create Request

The FLEXCUBE XML or Web service Xml can be viewed at this stage. The Xml is constructed from the Excel sheet that was uploaded in the previous stage. Only Execute Query operation is available.

11 Test Case Execution

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Fig 11.1: Test Case Execution screen

Once the data is uploaded successfully, test case can be executed from this screen.

Test Case ID: Each execution generates a unique reference number, which may be used later for viewing the status of execution

Source Type: Source type can be FLEXCUBE/Web Services, depending on whether the execution is to be done from FLEXCUBE or and external System.

Action on override: In case overrides occur for a function id, the user may either ignore those overrides, or stop the execution and give Error status.

Auto Authorization: On selecting this check box, executed records will as authorized records. Execution Status: This will show whether record is executed successfully or not. Tables: TCTB_TC_EXEC_MASTER,, TCTB_TC_CURR_DATA

12 Run Chart Master

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	t Workbench for Universal Banking		DEN	IOUSER
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Fig 12.1: Run Chart Master Screen

In this screen user can add multiple test cases and make a single Run Chart to execute at one shot. User has to enter sequence number, it's a mandatory. Tables: TCTM_RC_MASTER, TCTM_RC_TCS

Runchart Maste	r Summary				_ ×
	Runchart Id	1		Search	Reset
	Dup	chart Id	Da	scription	< 1of1 > >>
	RC_NEW	chartiu	RC_NEW	scription	FCUBS_1:
	RC_NEW1		RC_NEW1		FCUBS_1:
<		111			Close

Fig 12.2: Run Chart Summary with list of Run Charts along with Description

13 Run Chart Execution

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Administration Function Generation Screen Customizer Tracking Changes Notification Triggers Notifications Bulk Generation Excel Template Generation Refresh Bick Detail Upload Test Case Definition Detailed	Runchart Execution X - Runchart Execution Details X Execution Reference * X Number X Runchart Code * RC_NEW Description RC_NEW Start From Sequence		
Detailed Summary Test Case Data Upload Create Request Test Case Execution Detailed Summary Test Case Data Bulk Upload Execution Report Purge Generation	Sequence Execution Reference No Reference TC Code Source Type Exchange Override Authorize Status Req TC CCYDCRTYP Flexcube Ignore Unprocessed req r r Close		

Fig 13.1: Run Chart Execution Screen

User can execute the Run Chart in this screen. If user doesn't want execute with auto auth, user can uncheck the check box.

Once Run Chart is executed user can see the status in the screen itself.

Request: User can check request which has been received by TCM

Response: User can check the TCM response for the request on clicking this command button. In this screen user can find the status of the execution of individual test case and the reason for failure.

Note:

User can generate around 20 test-cases at a time. Tables: TCTB_RC_EXEC_MASTER, TCTB_TC_EXEC_MASTER,, TCTB_TC_CURR_DATA

Runchart Execution Summar	ny		_ ×
Exec Ref No Rc Code	>	[Search Reset
	Exec Ref No	Rc Code	<< < 10f1 > >>
RCEX130	63000000000	RC_NEW1	U
<			Close

Fig 13.2: Run Chart Execution Summary

14 Derivation

When the input for a test case is dependent on the output of another test case, the application facilitates usage of derivation to link the input to the output of another test case. For example to make a Run Chart of Contract Execution & Liquidation, in liquidation test case we have to enter Contract number instead we can put the path as below mentioned.

D:TESTCASENAME:BLOCKNAME:FIELDNAME

```
Example:
```

D:TC_FXDTRONL_NEW_CONTRACT_FSC2:BLK_CONTRACT_MASTER:CONTREFNNO

15 Migration of Data using TCM Tool

Migration of data between releases is subject to the following conditions:

- 1. If a screen is non -extensible in Release 1 and gets converted to an extensible screen in Release 2, then migration of data from Release 1 to Release 2 is not possible through the TCM tool.
- 2. If a non-extensible screen in Release 1 remains non-extensible in Release2, then migration of data through TCM Tool is possible.
- 3. If an extensible screen in Release 1 remains extensible in Release2, then migration of data through TCM Tool is possible.

The following are the steps to achieve the migration of data from Release1 to Release2:

- 1. Export the data using the export to excel functionality in FCUBS.
- 2. Create test cases in TCM (having Release1 sources) for the function id and upload the excel sheet.
- 3. Create Run Chart if required to sequence execution of the Test Cases.
- 4. Upload the new RADXMLs of Release 2 using the Block Detail Upload functionality.
- 5. Modify the test cases where there are changes in the field definition. During modification, the excel sheet would show the new fields with blank values. The TCM tool also provides a facility to make modification only for specific records/test cases.
- 6. Run the test case / run chart as appropriate. On execution, the modified data gets updated in the database.

If multiple releases is to be created in a single TCM schema, then data from the base release can be migrated to the child release during the creation of release.



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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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