# Development Workbench – Screen Development I Oracle FLEXCUBE Investor Servicing Release 14.7.3.0.0 Part No. F90302-01 [December] [2023]

FINANCIAL SERVICES

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# 1. Preface

# 1.1 Introduction

This document describes the process of FLEXCUBE Screen Development using Enterprise Limits and Collateral Management Development Workbench.

# 1.2 Audience

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

To Use this manua	l, you need	l conceptua	l and workin	g knowledge of	the below:

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 & SQL Language	Self-Acquired
Working knowledge of XML files	Self-Acquired
Essential knowledge on FLEXCUBE ODT	02-ODT Administration.docx 03-ODT Getting Started.docx

# 1.3 Related Documents

05-ODT Generation, Deployment and Release of files.docx 13-Development of Online Forms.docx 14-Development of Call Form.docx 15-Development of Launch Forms and Others Screens.docx 16-ODT Child and Screen Childs Concept and Design.docx

# 2. Introduction

### 2.1 How to use this Guide

The information in this document includes:

- Chapter 2 , "Introduction"
- Chapter 3, "Overview of Screen Development for Oracle FLEXCUBE"
- <u>Chapter 4 , "Header Information"</u>
- <u>Chapter 5 , " Preferences"</u>
- <u>Chapter 6, "Data Sources"</u>
- Chapter 7 , " Data Blocks"
- <u>Chapter 8 , " Screens"</u>
- Chapter 9 , " Field Sets"
- Chapter 10 , "LOVs"
- <u>Chapter 11 , " Call Forms"</u>
- <u>Chapter 12 , " Launch Forms"</u>
- Chapter 13 , " Actions"
- <u>Chapter 14 , "Summary"</u>
- <u>Chapter 15 , " Generation and Deployment of Files"</u>
- <u>Chapter 16 , " Appendix"</u>

# 3. Overview of Screen Development for Oracle FLEXCUBE

Oracle FLEXCUBE ODT provides the developer with a user friendly console for designing and developing screens for Oracle FLEXCUBE.

ODT assist developers in designing screens with the capability of generating front end scripting files, PL/SQL Packages, Static data scripts, XSDs, Excel templates and html files.

This generated code performs validations and does some processing which is common across screens in FLEXCUBE; only the Business logic specific to the screen has to be added by the Developer in back end and front end units.

### **Example**

Release Name: FC 11.3 Release Type: KERNEL, CLUSTER, CUSTOM ODT will generate all files and developers are supposed to add the business logic in designated units depending on the Release Type.

# 3.1 RADXml

ODT saves all the activities carried out by the developer in an xml file hereby referred to as **radxml**. Persistence of the screens is achieved through radxml. All the units required for the working of a screen can be generated from its radxml.

If some changes are required on the screen in a future release, the same radxml can be loaded and changes can be done on this radxml. ODT can segregate the changes done on different releases and saves the radxml accordingly.

Radxml will adhere to following naming convention

Function Id name + \_RAD.xml **Example:** FTDTRONL\_RAD.xml

# 3.2 Extensible Development

In extensible framework, any development on FLEXCUBE is classified as on any of the following stage (also referred to as release type)

#### i) KERNEL

This refers to the core product. *Example: FC 11.3* 

#### ii) CLUSTER

This refers to any region specific enhancements /developments done on top of the kernel product. The changes done in a cluster pack will be non-invasive to the kernel product. *Example:* FC 11.3 India cluster

iii) CUSTOM

Any enhancements required by the customer/bank are done on this level. It will be non-invasive of the changes done in kernel and cluster packs *Example:* Customizations for MODEL bank on FC 11.3 India cluster

ODT can segregate the changes done on different releases and saves the radxml accordingly. It generates the files depending on the release type and developers can add the business logic to the release type specific files. Thus the code remains non-invasive of the existing code.

# 3.3 Design Steps

Sequence of Steps to be followed while developing a screen in ODT is:

- 1. Identifying the data sources and their relations
- 2. Logically grouping the data sources into Data Blocks
- 3. Designing Screen Layout
- 4. Logically grouping the Block Fields into Field sets
- 5. Attaching Call forms and launch forms if any
- 6. Defining LOVs
- 7. Designing Summary
- 8. Defining Actions

Refer respective sections for detailed explanation of each step

# 3.4 Saving Radxml

While Development, save radxml at constant intervals. Click on save icon in the top right for having the work. Radxml would be saved in the user directory maintained.

# 4. Header Information

Login to the Oracle FLEXCUBE ODT using the credentials maintained (refer <u>02-ODT Administration.docx</u> for creating users) Map the session to the release and environment as required (Refer <u>03-ODT Getting Started.docx</u> for detailed

map the session to the release and environment as required (Refer <u>03-OD1 Getting Started.docx</u> for detailed explanation)

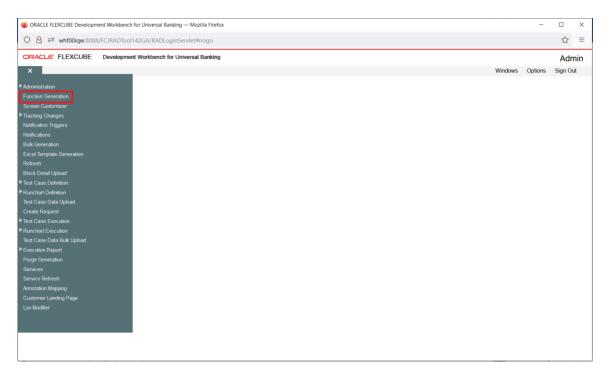
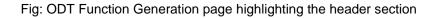


Fig: Oracle FLEXCUBE ODT Landing Page

Click on Function Generation node in the browser tree found in the Landing page of ODT. Function Generation window gets launched.

While creating a new function in ODT, below information needs to be provided in the Header section

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The Header portion of the Function Generation screens consists of the following fields:

# 4.1 Action

New and Load options are provided for this field.

For a new screen development, select the action as New; if an existing screen radxml has to be loaded for customization select Load option.

If the action is load then corresponding radxml has to be loaded using browser option in Save Xml Path; all the header information will get populated.

# 4.2 Function Id

If the Action is selected as New, the function Id name needs to be specified. Function Id is the unique name with which a screen is identified.

- Function Id name should follow the FLEXCUBE standard naming convention.
- Function Id name to have maximum length of 8 characters
- For detail screens the third character should be 'D'
- For call form function ids the third character should be 'C'
- First 2 characters should specify the module name for which the particular function id is used(recommended)
   Example:

For Funds Transfer Contract Input Screen name can be given as FTDTRONL. Here FT is the module (Funds Transfer), third letter D denotes it is a normal detail screen, and Length of the function Id is 8. If the action selected is Load, function Id field will be disabled. It will be picked up from the radxml which is loaded.

# 4.3 Save Xml Path

The label description of the field will change depending on the action .If the action is load, ODT attaches a Browse button to it so that user can browse the radxml and load it.

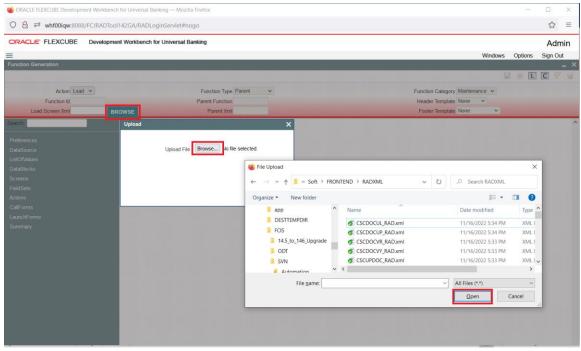


Fig: Loading of an Existing radxml in ODT

If the action is New, save xml path is optional. If provided, then the generated units will be saved in the path mentioned. Note that the value in the Save Xml Path will be used only if the Save Format is Client Path and if the User has given "CURRENT\_DIRECTORY" in the User Preferences→Work Directory.

# 4.4 Function Type

Function Type can be Parent or Child or Screen Child (based on the screen which has to be designed).
Parent: This is the default option and can be used for normal screen development.
Child: This option can be selected if the screen has to be the child of another screen; i.e. inherits all the properties of another screen which will be its parent. Properties can be modified in the child level.
Screen Child: This option can be selected if the screen has to be the screen child of another screen, i.e. it inherits all properties from its parent. Only screen layout changes can be done in the screen child screen.

Refer respective documents for detailed explanation on parent/child/screen child screens.

# 4.5 Parent Function

This field is applicable only if the function type is child/screen child and this field will be populated when the parent RAD xml is loaded. This is a read only field.

# 4.6 Parent Xml

This field is also applicable only if the Function type is child/screen child. If the Function Type is child/screen child user has to load the radxml of the Parent Function using browse button provided to this field. It is non editable field if the action is "Load".

# 4.7 Function Category

Provide Function category depending on the type of screen being developed. ODT provides the following options:

**Maintenance**: These screens are typically used to maintain static data used across the system. These screens include product definition function as well. *Example*: *Branch Parameters Maintenance* 

**Transaction:** These screens are typically used to capture contract related data. Any operations related to contracts are performed in these screens **Example:** Funds Transfer Contract Input screen

**Summary:** If only query operation is required for the particular function Id, then function category can be selected as Summary.

**Others:** If developer feels that existing handles provided in maintenance/transaction screens in extensible framework is inadequate (or not necessary) for the screen; screen can be designed as others. Note that all business logic would have to be manually written by the developer for others screen.

# 4.8 Header Template

A template can be selected for header. The following options are provided.

**None**: This is the default header and should be used for all screens except workflow screens.

**Process**: This template can be selected for workflow screens. The following Fields will be added to the header section as part of this template.

1) Workflow Reference

2) Priority

# 4.9 Footer Template

A template can be selected for footer. The following options are provided.

None: This is the default value

**Maint Audit**: This template can be used for maintenance screens. Ensure that master data source has the standard audit columns.

Maintenance audit column names and the corresponding block field names created by ODT is provided in the table below:

COLUMN NAME	BLOCK FIELD NAME
MAKER_ID	MAKER
MAKER_DT_STAMP	MAKERSTAMP
CHECKER_ID	CHECKER
CHECKER_DT_STAMP	CHECKERSTAMP
MOD_NO	MODNO
RECORD_STAT	RECSTAT
ONCE_AUTH	ONCEAUTH
AUTH_STAT	AUTHSTAT

Audit block field names are reserved filed names and hence cannot be used as the name of any other block field.

Note that when template is selected, ODT automatically adds the fields to Data Source and Blocks and adding these fields manually to data blocks results in erroneous behavior.

**Maint Process**: In this template along with maintenance audit fields System would automatically add a control block and Process related fields. This template can be used for workflow maintenance screens.

**Process:** Only process related Fields will be added to the Footer. This can be used for workflow transaction screens. As part of process template; previous remarks, remarks, outcome and audit block will be created in the footer.

# 5. Preferences

Function id level preferences like module, logging required, tanking modification Main menu, Sub-Menu1, Sub-Menu2 is maintained through Preferences screen in ODT.

The data maintained in Preferences Screen will be used for generating static data script for tables SMTB\_MENU, SMTB\_FUNCTION\_DESCRIPTION, SMTB\_ROLE\_DETAIL and SMTB\_FCC\_FCJ\_MAPPING.

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	Function Id	Module *	Module Description	Control String 🛨		

Fig: Preferences Screen in ODT Function Generation

### 5.1 Module

It captures the Module of the function id. Developer can choose module name from the list of values provided. List of values is populated based on the modules maintained in SMTB\_MODULE table of the business schema (current FLEXCUBE environment to which tool is mapped).

Module Code has to be provided mandatorily. Module name provided would be reflected in the script for SMTB\_MENU generated by ODT (in module column). This will also be considered while naming the packages generated by the tool. First two characters of the packages generated will be taken from the module code maintained.

### 5.2 Module Description

Module description gets defaulted based on the module code selected.

# 5.3 Head office Function

It captures whether the function is a head office function or not. It will be reflected in the static script for SMTB\_MENU in column HO\_FUNCTION.

If the function is a head office function, only query operation will be possible at all the other branches for the particular screen.

# 5.4 Logging Required

It captures whether logging is required for the function or not. This will also be reflected in script generated for SMTB\_MENU (column LOGGING\_REQD).

If this option is selected, all the request and response for the functionID will be logged in CSTB\_MSG\_LOG. This is used for View Change option.

# 5.5 <u>Auto Authorization</u>

It captures whether Auto Authorization is allowed for the function or not. This will also be reflected in script generated for SMTB\_MENU (column AUTO\_AUTH).

Note that auto authorization is possible only if it is allowed at function id level, user level and the branch level.

# 5.6 Tank Modification

It captures whether modification to be tanked for the function or not. This will be reflected in TANK\_MODIFICATIONS column of SMTB\_MENU table script.

If tank modification is enabled, then the record in that screen would be logged to logging tables and taken up for processing (*untanking*) in later stage during EOD operations. Currently this is applicable only for maintenance screens.

# 5.7 Field Log Required

It captures whether field Logging is required for the function or not. This will be reflected in the FIELD\_LOG\_REQD column in SMTB\_MENU.

If field log required is enabled, then all operations on the screen will be logged to logging tables (STTB\_FIELD\_LOG.STTB\_RECORD\_LOG etc.). Currently this is applicable only for maintenance screens.

# 5.8 Excel Export Required

This field captures whether option to export records from summary screen to excel is required

### 5.9 Multi Branch Access

It captures whether multi branch access is required for the function Id or not. This will be reflected in MULTIBRANCH\_ACCESS column of SMTB\_MENU table script generated.

If multi branch access is allowed, then records of different branches for the screen can be modified from a single branch.

# 5.10 Txn Block Name

It captures the transaction Block Name. This is applicable only if multi branch access is allowed for the screen. Select the block from the select list which contains the field for branch code.

# 5.11 Txn Field Name

It captures the transaction Field Name. This is applicable only if multi branch access is allowed for the screen. Select list provides all the block fields for the transaction block selected. Choose the field for branch code from the list.

Txn Block Name and Txn Field Name will be reflected in the system JavaScript file (SYS js) generated by ODT. Developer has to code for querying the records based on the branch code value of this field.

# 5.12 Branch Program ID

It captures branch program id for the function.

# 5.13 Process Code

This can be used to map which process needs to be initiated during screen launch. This is used for workflow screens.

# 5.14 SVN Repository URL

This is applicable only if integration to SVN (version control tool) is required. Path of the SVN repository till the module needs to be provided in this field.

In the multiple entry block, developer needs to maintain all the related function Id names for the screen. ODT will default the name of the function Id to the first row of the multiple entry along with the module maintained earlier.

If any other function id is required for the particular screen, developer has to add the row. **Example:** For FTDTRONL screen, developer designs a detail screen. He also wants to add one summary screen to the screen as well as gateway function Id for web services.

For this, he can add two new columns FTSTRONL (for summary) and FTGTRONL (for gateway operations) to the block as shown below.

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Fig: Maintaining menu details of a Function Id

Each row in this block will be reflected as one row in SMTB\_MENU, SMTB\_FUNCTION\_DESCRIPTION, SMTB\_ROLE\_DETAIL and SMTB\_FCC\_FCJ\_MAPPING.

### 5.15 Control String

Control String defines the operations which can be done on the particular screen.

Control String has to be maintained for function id. Select the function id for which control string has to be modified and click on Control String. All the available operations can be found. Check all the operations which have to be allowed for the particular function id and click OK.

Note that for summary screens, control string will be disabled. Normally control screens need to be provided only for the detailed screen.

REVERSE, ROLLOVER, CONFIRM, LIQUIDATE, HOLD operations are applicable only for transaction screens.

Control String will get reflected in the CONTROL\_STRING column in SMTB\_MENU for the particular function id. It will also be reflected in script for SMTB\_ROLE\_DETAIL.

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Fig: Maintaining control String for the function Ids

# 6. Data Sources

First step in developing Functions is to identify the tables and views involved in the Function being developed. Relations among these data sources and the types of these data sources have to be identified based on the functionality.

### 6.1 Creating a New Data Source

For creating new data source developer may either

i) Right click on the data source node in the tree and select Add option.

ii) Left click on the data source node in the tree. On the data source screen click Add Data Source icon on the top right of the screen.

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	UHRELATEDPARTIESTBL	UNITHOLDERTBL		One To Many 🗸		
	UHDELIVERYDETAILSTBL	UNITHOLDERTBL	UNITHOLDERTBL.UNITHOLDERID=UHDELIVER	One To Many 🗸		
	UHBENEFICIARIESTBL	UNITHOLDERTBL	UNITHOLDERTBL.UNITHOLDERID=UHBENEFIC	One To Many 🗸		
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Fig: Add Table window

Alias Name: If same table is used more than once in the design, developer can differentiate the same using different alias names.

Data source name will have table name appended with the alias name separated by \_\_\_. *Example:* If table name is CSTB\_UI\_COLUMNS and alias name is A Data source name will be CSTB\_UI\_COLUMNS\_A

### 6.1.1 Data Source Properties

Provide properties of the created data source.

#### Data Source

This is a read only field. Data source name will be defaulted to this field.

#### Master

This filed identifies whether this data source is the master data source for the screen. Every screen should have one (and only one) master data source.

#### **Relation Type**

Relation type can be selected for the selected data source with the parent, "One To One" or "One To Many". The relation should be one-to-many if the parent data source is Single Record entry and child data source is Multi Record.

#### Multi Record

This field tells about the type of data source in the screen, whether it is multiple Entry record or the single Entry Record data source,

Select the field value "Yes" or "No" accordingly. Master Data source cannot be of multi record type.

#### Pk Cols & Pk Type

PK Cols and PK types are mandatory. Provide the Primary key columns of the data source separated by tilde (~) in PK Col field and its corresponding data types in PK Col field(also separated by tilde) **Example:** If Pk Cols are CONTRACT\_REF\_NO (VARCHAR2) and VERSION\_NO(NUMBER), Pk Col can be provided as CONTRACT\_REF\_NO~VERSION\_NO and Pk Type can be provided as VARCHAR2~NUMBER

#### Parent

Parent data source has to be mentioned for all data sources except the master data source. Select List provides all the data sources created till that point .Developer can choose the data source from the list. For master data source, parent should not be provided.

#### Relation

Relation with parent has to be specified for all data sources except master data source. Keep the parent data source in the left side of the relation.

#### Example:

If parent is STTM\_CUSTOMER and child is STTM\_CUST\_ACCOUNT; and relationship is based on CUSTOMER\_NO and BRANCH\_CODE, it has to be provided as STTM\_CUSTOMER.CUSTOMER\_NO= STTM\_CUST\_ACCOUNT.CUSTOMER\_NO AND STTM\_CUSTOMER.BRANCH\_CODE= STTM\_CUST\_ACCOUNT.BRANCH\_CODE

Note that relationship can be only with parent maintained and the current data source; a third table cannot be introduced in the relationship. Only simple Relational operators and 'equal to' can be used in the relationship.

#### Where Clause

This is an optional field. If only selected records of a particular data source is required, then where clause can be provided. Keyword WHERE need not be provided.

**Example:** Where clause can be given as BRANCH\_CODE=GLOBAL.CURRENT\_BRANCH The values of where clause field will be used in generating the query statements for current data source. During query of the record, this clause will be added in fn\_sys\_query of the generated main package.

### 6.1.1.1 Default Order By

This is an optional field. This can be provided for multi record data sources. While querying they would be fetched in the order by clause provided. Keyword ORDER BY is not required. **Example:** If we want to order by EVNET\_SEQ\_NO, default order by can be provided as EVENT\_SEQ\_NO.

### 6.1.1.2 <u>Type</u>

Data source can be selected depending on the Type requirement of the screen design. Options provided are:

- Normal: Data from the screen will be persisted in the table. Code for persistence would be available in generated package
- **Query:** The data source can be used for only querying the data; ODT will generate packages without insert or update statements on this data source.
- **InOnly:** Tool will generate the packages without insert and update on this data .Request xml will contain the data source while response won't contain it.
- **Summary**: This data source can be used for summary and this data source will not be considered while generating the packages.

### 6.1.1.3 Mandatory

If at least one record has to be provided for this data source, then the data source can be provided as mandatory.

### 6.1.1.4 Upload Table

If adapter upload is required for the function ID, then data source should be mapped to its corresponding upload table.

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# 6.1.2 Data Source Columns

This is an information column; tool will not allow the user to change the value.

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### 6.1.2.1 <u>Max Length</u>

The max length of column will be defaulted while adding a column and it can be overwritten. This value will be considered for the field max length of the designed screen. It means, at the run time system will not allow the user to enter the text more than this length.

### 6.1.2.2 <u>Data Type</u>

This shows about data type of the column selected and value will be populated while adding the column, this is a non-editable field.

### 6.1.2.3 Block Name

It is an information field, if the field is added to a block, that block name will be populated here.

### 6.1.2.4 Field Name

It is an information field. This displays the data block field to which the column is mapped.

### 6.1.2.5 Upload Table Column

If adapter upload package is required, column name in the upload table to which this column is mapped has to be provided. If the field is left blank, then the column name in upload table will be assumed to be same as the data source column name.

### 6.1.2.6 Not Required in Upload table

If the particular column is not mapped to any upload table column, then this option has to be checked.

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Fig: Data Source Fields Properties

### 6.1.3 Data Source Columns

Below are the steps to be followed while creating data sources:

- 1. Identify the tables and views involved in the Function being developed.
- 2. Establish the hierarchy, Relation and Relation Types among these Data Sources.
- 3. Ensure that the correct and full relation is mentioned in the Relation.
- 4. Identify the type of Data Source. It could be Normal, Summary, in only or Query Source.
- 5. Ensure that there is only one master Data source for the Function.
- 6. Based on the number of records that the data source might have for the function ID, set Multi Record to Y/N.
- 7. System automatically defaults the PK Column information from STTB\_PK\_COLS while adding the data source. Based on the specific requirement of the function ID this can be modified.
- 8. If the data source is mandatory, i.e. if it is a multi-record data source and have to have at least one record or if it's a single record data source and is mandatory to have the record, check the mandatory flag.
- 9. In case there is a need to have a default where clause or order by clause, mention the same in the respective fields.

Follow the below practices while creating data sources for the screen.

• Table/View/Synonym Names should adhere to the standard FLEXCUBE naming conventions.

Tables or views should have 5th character as \_ (underscore). Name should not have underscores together (*Example: ACTB\_TEST\_ODT is wrong*).

Synonyms should have an 'S' appended before the first underscore of its table/view name.

**Example:** Synonym for ACTB\_DAILY\_LOG should be ACTBS\_DAILY\_LOG

- Avoid using views as much as possible. Don't create a view data source with type as NORMAL. This will result in insert statements on the view in the packages generated.
- Views can be used for query only purposes, i.e. select the data source type as query for views. These can be used for designing summary data sources or a query block.
- PK Cols and PK types need not be the same as the primary key of the tables. It depends on the design logic.
- If the data source is designed with relation type as 1:N with its parent ,then it should have at least one more Pk col than its parent (assuming relationship is based on pk cols).

### Example:

Assume STTM\_CUSTOMER is the parent data source (1:1) with Pk col as CUSTOMER\_NO; STTM\_CUST\_ACCOUNT is the child of STTM\_CUSTOMER with 1: N relation with parent .Here STTM\_CUST\_ACCOUNT should have at least 2 Pk Cols so that each record of the multi record can be uniquely distinguished.

CUSTOMER\_NO and ACCOUNT\_NO can be provided as Pk col so that each record can be identified with its account no.

Relationship can be STTM\_CUSTOMER.CUSTOMER\_NO= STTM\_CUST\_ACCOUNT.CUSTOMER\_NO

Parent data source has to be above all of its child data sources in the tree.

# 6.2 Deletion of Data Sources

Data sources can be deleted either

- i) by clicking the icon in top left of the data source screen or
- ii) by selecting delete option from the right click menu of the data source to be deleted

When a data source is deleted, all the references to that data source or its columns will also be deleted from the radxml, i.e. Data block fields referring to the particular data source column and all the references to those data block fields.

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Fig: Deleting a Data Source

Note that deletion of any element from radxml is allowed only if that element has been created in the current release. If the data source has been created in a previous release, then developer won't be allowed to delete the data source.

Similarly data source column alone can be deleted from the data source subjected to the condition mentioned above.

Proper care has to be done while designing data sources as redesigning would be impossible in a later release.

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Fig: Deleting Field from Data Source

# 7. Data Blocks

Data block is a logical grouping of fields from one or more data sources. In general, one data block will have only one data source; but in cases where the data in tables is logically related multiple data sources can be grouped into a single data block.

Once the Data source definition is complete, Block structure of the function id has to be determined based on the functionality of the screen.

# 7.1 Creation of a Data block

A new data block can be created either

- i) by clicking the icon in top left of the data block screen or
- ii) by selecting add option from the right click menu of the data block node

Both options are shown in the figure below:

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CVS_BENEFICIARYDTLS	LBL_BENIFICIARY_DET	Small 🗸	No 🗸		
CVS_MEMBERDTLS	LBL_MEMBER_DET	Small 🗸	No 🗸		
CVS_ALTLANGDTLS	LBL_ALT_LANG_DET	Small 🗸	No 🗸		
CVS_JOINTHOLDERDTLS	LBL_JOINT_DETAILS	Small 🗸	No 🗸		
CVS_NOMINEEDTLS	LBL_NOMINEE_DET	Small 🗸	No 🗸		
CVS_DIRECTOR	LBL_DIRECTORDTLS	Small 🗸	No 🗸		
CVS_TAXCOMPLIANCE	LBL_TAXCOMPLIANCE	Small 🖌	No 🗸		
CVS_MULTIPLETAXDETAILS	LBL_MULTIPLETAXDTLS	Small 🗸	No 🗸		
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Fig: Adding a New Data Block

Block Name has to be provided in the Add block screen which pops up. Click on Ok after giving the block name. Block Name has to adhere to following conventions.

- i) It has to start with BLK\_
- Block Name should not contain the table names which will be attached to the block .This is of high importance from security point of view as block name will be exposed in request and response xml.

**Example:** if data source name is FTTB\_CONTRACT\_MASTER, block name can be BLK\_MASTER; but not BLK\_FTTB\_CONTRACT\_MASTER

Add Block			×
Block	Name	BLK_	
		Ok Cancel	



### 7.1.1 Block properties

Provide properties for the created data block.

### 7.1.1.1 Data Block Name

This field will be defaulted with block name which is added. It is a non-editable field.

### 7.1.1.2 Block Title

Select the Title of the block from list of labels. If new label needs to be created, then create and select from the list. For multi record blocks, block title will be displayed in the screen preview superseding the Field Set title. For single record blocks, block titles are not of any significance and hence need not be provided.

### 7.1.1.3 <u>Parent</u>

Select the parent block from the select list. All the data blocks will be available in the Select list. All data blocks except master data block needs to have a parent data block.

### 7.1.1.4 <u>Xsd Node</u>

This field captures the xsd node name. ODT will use this name for generation of node in Xsd's. This field will be defaulted based on block Name (by removing BLK\_ and replacing \_ with -). If developer wishes to modify, he may do so.

### 7.1.1.5 <u>Xsd Annotation</u>

This field captures the annotation for the XSD node specified. Description of Block title label will be defaulted as Annotation which can be modified by the developer

### 7.1.1.6 <u>Multi Record</u>

Using this field developer can decide block type, whether the block is single entry block or multiple entry blocks.

Depending on this value, the field "data sources available" will be populated.

If the value is "Yes" the field "data source available" will be populated with data sources which have flag Multi record "Yes" and vice versa.

If the relation type is provided as one to one, multi record has to be yes and vice versa.

### 7.1.1.7 Block Pk fields

Primary key fields of the block have to be provided here. If more than one field forms the primary key, it has to be separated by  $\sim$ . This data is used for building change log of a screen.

### 7.1.1.8 <u>Relation Type</u>

The relation type with the parent data block has to be mentioned here. It can be One To One or One To Many.

### 7.1.1.9 Master Block

One master block is mandatory while designing the screen and using this flag you can define a block as master.

### 7.1.1.10 Block Type

Type of the block can be selected depends on the requirement, below are the description of the each type.

- **Control**: If the block is used only for UI purpose, and it is not required for processing in the backend, then the block can identified as Control type. Only control fields can be added to the Control block.
- **Normal:** This block will be used for normal processing .Request and response xml will contain this data block information.
- **Summary:** Block which is used for creating the summary screen. For normal request xml, this block won't be present in the request or response xml.

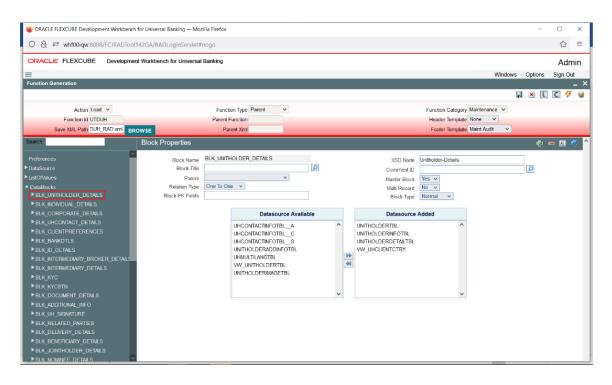


Fig: Data Block Properties

### 7.1.1.11 Data Sources available

Depending on the "Multi Record" flag, data sources will be populated. Then the required data sources can be attached to the block.

Validations for populating the data source:

Multi Record: Yes. →All the data sources which have "Multi Record" flag "YES" and "Relation Type" One To One

Multi Record: No. →All the Data source which have "Multi Record" No

While attaching Data Sources to Blocks, multiple data sources should be selected only if such data Sources can be functionally clubbed.

Example: CSTM\_PRODUCT and LCTM\_PRODUCT\_DEFINITION. Clubbing should not be arbitrary.

A single entry data source can be mapped to more than one data block while a multi record data source can be attached to only a single data block.

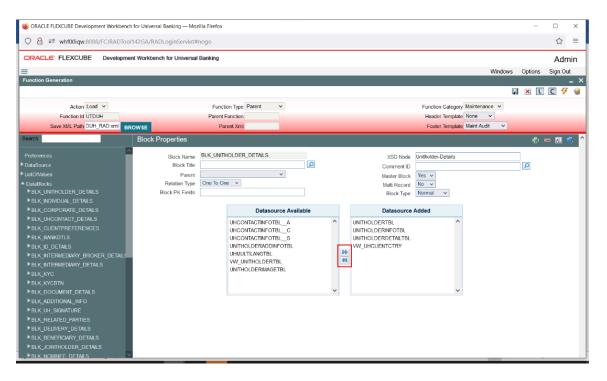
### 7.1.1.12 Data Sources Added

This list shows the data sources which can be attached to the particular data block. The data source shown depends on the value of multi record field.

From the available data sources, developer can add data sources he want to be part of this data block. Those will come under the list "Data source Added". He can also remove them from the data block. The buttons with arrow symbol are used for this addition and removal.

Note that one data source can be attached to more than one data block; but each data source column can be mapped to single data block field.

Data Sources added in one release would not be allowed to be removed in any future releases.





### 7.1.2 Data Block Fields

Data Block Fields are logical representation of the data source columns in the screen. Block fields can be added to a block either by:

- i) By selecting add fields option from the right click menu of the particular data block or
- ii) By clicking on add field icon on the top left of data block screen

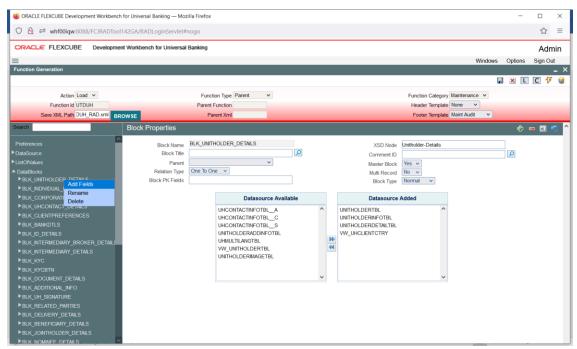


Fig: Adding Block Field to a Data Block

The screen as shown below is launched. ODT provides option to add two kinds of fields.

#### • Data Source Fields

These fields correspond to data source columns created in the radxml.

The select list provides the list of all data sources attached to the data block. On selecting a particular data source, all the data source columns which are not yet mapped to any block fields.

Se	elect	Fields & Add Ul Fields				×
Da	ataSo	urce fields UI Fields				
		Datasource	OLDERTBL V			
		Column Name	Field Name	Label Code	^	
		ACKNOWLEDGEMENTPRINT	ACKNOWLEDGEMENTPRINT	LBL_ACKNOWLEDGEMENTF		
					~	
					Ok	Cancel

Fig: Adding Data Source Fields to Data Block

Field Names and Label codes if maintained in CSTB\_DATA\_DICTIONARY will be defaulted. Otherwise, developer has to provide the field name as desired. Label codes will be defaulted based on the field name provided. Select all the fields which have to be included in the data block and click Ok.

#### • UI Fields

Ul fields are those which don't have a corresponding data source column .These fields won't be required as part of processing and hence won't be part of request or response xml. Usually fields like buttons, images, labels etc are defined as UI fields

A control data block can have only UI fields.

S	elect l	Fields & Add Ul Fields		×
Da	ataSou	rce fields UI Fields		
			+	-
		Field Name	Data Type	^
		BTN_DEFAULT	<b>~</b>	
			Date	
			Varchar2	
			Number DateTime	
			Date fille	
			Ok	Cancel
			OK	Gancer

Fig: Adding UI fields to Data Block

Adhere to the following conventions while defining new block field.

- Field Name should not be the same as the column name. This is important as field name will be visible in request and response xml.
- Avoid special characters in the field name (like underscore).

**Example:** if data source column name is CONTRACT\_REF\_NO, block field name can be CONTREFNO Provide the properties for the block field added.

### 7.1.2.1 Field Name

Name of the field will be defaulted from the field name provided during creation of block fields. It is a noneditable field.

### 7.1.2.2 Field Label

This is also defaulted during block field creation. This represents the label code for the field. Corresponding label description will be displayed for the particular field.

Label code and its description have to be maintained in CSTB\_LABELS. This can be achieved through ODT or by directly inserting scripts in the business schema.

This field is editable. If developer wishes to change the default label code, he may do so. LBL code entered manually should be in the below format: "LBL\_xsd tag Name"

### 7.1.2.3 XSD Tag

It will be defaulted when a field is added and whenever the label code gets modified. This value is used in the xsd's as xsd tag and same will be used for web service.

#### 7.1.2.4 XSD Annotation

Annotation for the xsd tag can be provided here. Description of the label code would be defaulted which can be modified by developer

### 7.1.2.5 <u>Display Type</u>

Pre-defined values are available in the select box for this field. Value can be selected on requirement. This specifies the HTML display pattern for the field.

Available options are:

#### • Amount

The display type can be defined as Amount if it displays an amount. The field will be formatted based on the currency which it picks from related block and Related Field.

#### Related block and Related Field values have to be mandatorily provided for Amount fields.

Related Field should come above the amount field in the screen and it should hold the currency value for the amount.

Block Field Propertie	S					- 🛛 🗔 🦻
Field Name * Field Label DataSource Column Name * Data Type * Display Type Item Type Parent Field Related Block Related Field LOV Name Off Line LOV Name Fieldset Name CLASSID	TRANSACTIONCURREN LBL_TRANSACTIONCUR CONSOLIDATEDTXNTBI TRANSACTIONCURREN Number V Amount V Database Item V BLK_TRANSACTION_DE TRANSACTIONCURREN FST_TRANSACTION_VAL	CYAA	Field Size <b>*</b> Maximum Length Minimum Value Maximum Value	TRANSACTIONCURRENCY, CMT_TRANSACTIONCURR 30 0 12 12		Required     Visible     Read Only     Calender Text     Popup Edit Required     Uppercase Only     LOV Validation Required     Input by LOV Only     Not Required In Xsd     Report Parameter     Format Required     Hot Key Required     Focus Required     Sant Holder Hot Key     Required
Custom Attributes Events	Related Field					
Attribute	Name	Attribute Value	Active	Move Up	Move Down	^

Fig: Defining an Amount Data Block Field

#### • Button

If the display type for the field is a button, display type has to be selected as button. Action to be performed on clicking the button should be provided in the events tab Button can launch a sub screen, launch form, call form or invoke a user defined JavaScript function.

Block Field Properties					- 🛛 🗔 🦻 🕯
Field Name * BTN_FINDUH		XSD Tag	FINDUH	]	Required
Field Label LBL_FINDUH	<b>Q</b>	Comment ID		ρ	Visible
DataSource		Field Size *		i —	Read Only     Calender Text
Column Name *		Maximum Length			Popup Edit Required
Data Type * 🗸 🗸 🗸 🗸		Minimum Value		]	Uppercase Only
Diopidy Type	<b>v</b>	Maximum Value		ĺ	LOV Validation Required
Item Type Control V		Maximum Decimals		]	Input by LOV Only
Parent Field	~	TextArea Rows		j	Not Required In Xsd
Related Block	~	TextArea Columns		]	Report Parameter
Related Field	~	Default Value		]	Hot Key Required
LOV Name	~	Preview Value			Focus Required
Off Line LOV Name	V			] 1	Exact Fetch
Fieldset Name FST_TRANSACTIC	IN_INFO	Mask Id			Joint Holder Hot Key Required
CLASSID					Requireu
Custom Attributes Events					
					+ -
Attribute Name	Attribute Value	Active	Move Up	Move Down	^

Fig: Defining Field as button

#### • Checkbox

Checkbox is used for displaying checkboxes. Attribute Name will be ON and OFF. Attribute values can be provided as per design

In the figure shown below:

ON (checked) corresponds to Y in table and OFF to N

Default value is selected as N

Block Field Propertie	es					- 🛛 🗔 🦃 🗅
Field Label DataSource Column Name *	RECEIVED LBL_RECEIVED KYCTRANSACTIONTBL RECEIVED Varchar2 CheckBox  Database Item FST_KYCDTLS_F1		XSD Tag Comment ID Field Size • Maximum Length Minimum Value Maximum Decimals TextArea Rows TextArea Columns Default Value Preview Value Mask Id		2	<ul> <li>Required</li> <li>✓ Visible</li> <li>Read Only</li> <li>Calender Text</li> <li>Popup Edit Required</li> <li>Uppercase Only</li> <li>LOV Validation Required</li> <li>Input by LOV Only</li> <li>Not Required In Xsd</li> <li>Report Parameter</li> <li>Format Required</li> <li>Hot Key Required</li> <li>Focus Required</li> <li>Exact Fetch</li> <li>Joint Holder Hot Key Required</li> </ul>
Custom Attributes Events						<b>+</b> -
Attribu	te Name	Y	Attribute Value	Activ Yes		Move D
OFF	٩			Yes		

Fig: Defining Field as Checkbox

#### • Date

If the field is of date type display type can be selected as Date.

DataSource KYC Column Name * REC Data Type * Date Display Type Date Item Type Date Parent Field Related Block Related Field LOV Name Off Line LOV Name	RECEIVEDDATE TRANSACTIONTBL EIVEDDATE		Comment ID Field Size *	RECEIVEDDATE CMT_RECEIVEDDATE 7		Required     Visible     Read Only     Calender Text     Popup Edit Required     Uppercase Only     LOV Validation Required     Input by LOV Only     Not Required Input by LOV Only     Not Required Nsd     Report Parameter     Format Required     Hot Key Required     Exact Fetch     Joint Holder Hot Key     Required
Custom Attributes Events						+ -
Attribute Name	e	Attribute Value	Active	Move Up	Move Down	^

Fig: Defining Field as Date

#### • Date Time

If the field displays both date and time, it can be selected as Date Time.

#### • File

If browser option is required for the field, then field has to be selected as file type. **Example:** If an excel sheet from the local machine needs to be selected, browser button has to be provided, so that user can browse the folders and select the file required.

#### Label

If the field is required only for displaying image or Label, it can be selected as Label. Normally UI fields are used for label display purpose.

Block Field Properties	;					- 🛛 🔯 🦻
Field Name * E	STN_UHSIG		XSD Tag	UHSIGNATURE		Required
Field Label	BL_UHSIGNATURE	P	Comment ID		ρ	Visible
DataSource			Field Size *			Read Only     Calender Text
Column Name *			Maximum Length			Popup Edit Required
Data Type * 💧	/archar2 🗸		Minimum Value			Uppercase Only
Display Type	Label 🗸		Maximum Value			LOV Validation Required
Item Type	Control 🗸		Maximum Decimals			Input by LOV Only
Parent Field		~	TextArea Rows			Not Required In Xsd
Related Block		~	TextArea Columns			Report Parameter Format Required
Related Field		~	Default Value			Hot Key Required
LOV Name		~				Focus Required
Off Line LOV Name		~	Preview Value			Exact Fetch
Fieldset Name	ST_UHFUND		Mask Id			Joint Holder Hot Key
CLASSID						Required
Custom Attributes Events						
						+ -
Attribute N	lame	Attribute Value	Active	Move Up	Move Down	^

Fig: Defining Field as Label

#### • LOV

If field value has to be selected through a LOV, display type has to be selected as LOV. LOV's have to be defined as explained in respective section.

LOV which has to be linked to the field has to be selected from the **LOV Name** select list. **Return Fields** and **Bind Variables** has to be mapped as shown in the figure below If input to field has to be done only through LOV, **Input By LOV Only** fields can be checked. If validation for the value entered by the user is required in server, (validating whether the value selected is part of the values fetched by LOV); **LOV validation Reqd** can be checked.

For branch screens, Offline LOV Name can also be attached.

DataSource Column Name • Display Type Item Type Parent Field Related Block Related Field LOV Name Off Line LOV Name Fieldset Name	LBL_ENTITYID TXNINTERMEDIARYTB	· · · · · · · · · · · · · · · · · · ·		XSD Tag Comment ID Field Size Maximum Length Minimum Value Maximum Value Maximum Decimals TextArea Rows TextArea Columns Default Value Preview Value Mask Id	ENTITYID CMT_ENTITYID 12 		Vupper LOV V Input b Not Re Report Forma Hot Ke Focus Exact	Dnly Jer Text Edit Required :ase Only alidation Required J LOV Only equired In Xsd : Parameter I Required y Required Required Fetch older Hot Key
CLASSID m Attributes Events II eturn Fields Mappin Query ( ENTITYTYPE ENTITYID ENTITYNAME PARENTENTITYNAM	Column	BLK_INTERM	EDIARY_DETAILS EDIARY_DETAILS EDIARY_DETAILS EDIARY_DETAILS EDIARY_DETAILS	Name v v v		<b>v</b> 1 <b>v</b>	Lov Definition	ea

Fig: Defining Field as LOV

#### • Mask

If the field has to be masked on tab out, then the display type can be selected as Mask **Mask ID** has to be selected which identifies the pattern of the mask applied

#### Password

If the display type has to be in Password form, display type can be selected as Password.

Radio

If the display type has to be radio button, it can be selected as Radio.

All the options for the Radio button have to be provided in the **Custom Attributes**. Label which should be displayed in the screen should be provided in attribute name and its corresponding storage value to attribute value.

Default value can also be provided.

Block Field Properties				- 🛛 🗔 🦃 🕯
Field Name       ALLOTED_FLAG         Field Label       LBL_ALLOTED_FLAG         DataSource       CONSOLIDATEDTXNTB         Column Name       ALLOTEDFLAG         Data Type       Varchar2         Display Type       Radio         Parent Field       Parent Field         Related Block          Coff Line LOV Name       FST_TRANSACTION_INF         CLASSID	× × ×	XSD Tag Comment ID Field Size Maximum Length Minimum Value Maximum Value Maximum Decimals TextArea Rows TextArea Rows TextArea Columns Default Value Preview Value Mask Id	ALLOTED_FLAG	Required         Visible         Read Only         Calender Text         Popup Edit Required         Uppercase Only         LOV Validation Required         Input by LOV Only         Not Required nXsd         Report Parameter         Format Required         Hot Key Required         Focus Required         Exact Fetch         Joint Holder Hot Key Required
Custom Attributes Events				
	] [ <u>1</u> ] [0	Attribute Value	Active Yes	<pre>+ - Move D ^ V V V</pre>

Fig: Defining Field as Radio button

#### Read Only Select

This is similar to Select Field; but the field will be non-editable to the user. Select options will be defaulted based on the developer's code.

#### • Restricted Text

This is similar to normal Text field but special characters (non-alpha numeric) won't be allowed to be input in a restricted Text field.

#### • Text

For a normal text field, display type can be selected as Text .This is the default display type.

#### • Text Area

If data to be entered for the field is large (>100 characters); It can be defined as Text Area type. Number of rows and columns required for the text area can be specified in **Text Area Rows** and **Text Area Cols.** 

Block Field Properti	es					- 🗷 🗔 🦃
Field Label DataSource Column Name	TRANSACTIONNUMBER  LBL_TRANSACTIONNUMBER  CONSOLIDATEDTXNTBL TRANSACTIONNUMBER  Varchar2  Text  Database Item  FST_TRANSACTION_INFO		XSD Tag Comment ID Field Size Maximum Length Minimum Value Maximum Decimals TextArea Rows TextArea Columns Default Value Preview Value Mask Id	16 		Required     Visible     Zalender Text     Opup Edit Required     Uppercase Only     LOV Validation Required     Input by LOV Only     Not Required In Xsd     Report Parameter     Format Required     Hot Key Required     Exact Fetch     Joint Holder Hot Key     Required
Custom Attributes Events		Attribute Value	Active	Move Up	Move Down	+ -

Fig: Defining Field as Text Area

#### • Select

If a select list is required for field, display type can be selected as Select. All the options for the Select List have to be provided in the **Custom Attributes**. Label which should be displayed in the screen should be provided in attribute name and its corresponding storage value to attribute value.

Block Field Properties			- 🛛 🗖 🇳
Field Name * TRANSACTION_MODE Field Label LBL_TRANSACTION_MODE DataSource CONSOLIDATEDTXITBL Column Name * TRANSACTIONMODE Data Type Varchar2 ~ Display Type Select ~ Item Type Database Item ~ Parent Field Related Block Related Field ~ LOV Name Off Line LOV Name Fieldset Name Fieldset Name CLASSID	DE Comment ID CA L Field Size + Maximum Length 1 Minimum Value Maximum Value Maximum Decimals V TextArea Rows TextArea Columns V Default Value V Preview Value	RANSACTION_MODE	Required     Visible     Read Only     Calender Text     Popup Edit Required     Uppercase Only     LOV Validation Required     Input by LOV Only     Not Required In Xsd     Report Parameter     Format Required     Hot Key Required     Exact Fetch     Joint Holder Hot Key     Required
Custom Attributes Events Related Field			
			+ -
Attribute Name	Attribute Value	Active Move U	p Move D
	A	Yes V	
	) U	Yes 🗸	
Percent	P	Yes 🗸 🔺	

Fig: Defining Field as Select List

# 7.1.2.6 <u>Item type</u>

The value of this field will be defaulted to **DATABASE** item, if the field has taken from the data source. If the field is a UI field, item type can be either CONTROL or DESC.

Item type can be provided as **CONTROL** for non-data fields like buttons, labels etc.

Item Type can be provided as **DESC** for control fields used for display of data.

**Example:** description of another data source column field

If the type is DESC parent field should be attached and the selected parent field should have a LOV attached to it.

And the current field should be one of the return fields of the attached LOV.

Block Field Properti	es					- 🛯 🗖 🌳
Field Name Field Label DataSource Column Name Data Type Display Type Item Type Parent Field Related Block Related Field LOV Name Off Line LOV Name Fieldset Name CLASSID			XSD Tag Comment ID Field Size • Maximum Length Minimum Value Maximum Value Maximum Decimals TextArea Rows TextArea Columns Default Value Preview Value Mask Id	HIDTXNDATE		Required     Visible     Read Only     Calender Text     Popup Edit Required     Uppercase Only     LOV Validation Required     Input by LOV Only     Not Required In Xsd     Report Parameter     Format Required     Hot Key Required     Exact Fetch     Joint Holder Hot Key     Required
Custom Attributes Events	Related Field					
						+ -
Attribut	e Name	Attribute Value	Active	Move Up	Move Down	^

#### Fig: Defining Field as Text

The field will be generated in the package and front end (SYS.js) only if the item type is Database item. CONTROL and DESC types are UI fields; hence won't be present in the generated packages.

# 7.1.2.7 <u>Text Area Rows</u>

This field is applicable only if display type is **Text Area**.

Number of rows required in the Text area can be provided here. This field allows the developer to increase the height of the Text Area in the screen.

# 7.1.2.8 <u>Text Area Columns</u>

This field is also applicable only for **Text Area** fields. Width of the text area can be provided. This field allows the developer to increase the width of the Text Area in the screen.

# 7.1.2.9 Related Block

This field is applicable if display type is **amount**. An amount field can be related to a particular currency field, and this field captures the block name where the currency field is present.

# 7.1.2.10 Related Field

This field is also applicable only if display type is Amount.

Subsequent to the above field (Related Block), a field can be selected as a related field for an amount field. Selected Block's (Related Block) fields will be available in the select box.

# 7.1.2.11 Parent Field

If the Item Type of the selected field is **Desc**, a parent field should be attached and the selected parent field should have a LOV attached to it. And the current field should be one of the return fields of the attached LOV.

**Note:** This feature is provided to avoid Query data sources and should be used for all description Fields. If a particular field is selected as "Description Field" in ODT, the LOV for the Parent field should not have any Control Item as a bind variable.

# 7.1.2.12 <u>Min Val</u>

Minimum value for a number field can be mentioned .ODT will generate validation for the minimum value of the field in the generated package as well as the frontend units.

# 7.1.2.13 <u>Max Val</u>

Maximum value for a number field can be mentioned .ODT will generate validation for the maximum value of the field in the generated package as well as the frontend units.

#### 7.1.2.14 <u>Max Decimals</u>

Max Decimals for a number or amount field can be provided here.

# 7.1.2.15 <u>LOV Name</u>

This is applicable only if the display type is LOV. LOV to be attached has to be selected from the select list.

Select List will contain all the LOVs defined by the developer for the particular screen plus **GLOBAL** LOVS.

**Global LOV** can be maintained across function id and same can be attached to a field. This will reduce development time. LOV can be selected from list of values attached to the field. These LOV are handled by the FLEXCUBE Infra.

Global LOVs are stored in CSTB\_LOV\_INFO with function id as COMMON.

# 7.1.2.16 Offline LOV Name

These LOV will be used by the Branch function id if the branch is in offline mode, offline LOV will be used. All the LOV will be populated which are defined in the LOV definition screen. Both offline and online LOV can be maintained for the same field.

#### **Offline Global LOV**

Defining of these LOV remains same as Global LOV, and functionality is same as offline LOV.

### 7.1.2.17 Field set Name

This is a non-editable field and is defaulted based on the field set to which the particular field is mapped.

### 7.1.2.18 <u>Data Type</u>

This is non editable field. This will be defaulted from the data type of the column to which the field is mapped. This has to be mandatorily provided.

### 7.1.2.19 Data Source

This is a non-editable field. This will default the table name of whose column is mapped to the particular field.

# 7.1.2.20 <u>Column Name</u>

This is a non-editable field. This will default the column name to which the particular field is mapped.

### 7.1.2.21 Max Length

The max length of column will be defaulted while adding a field and it can't be overwritten.

This value will be considered for the field max length of the designed screen. It means, at the run time system will not allow the user to enter the text more than this length.

The value of the field can be changed from data source column properties which will reflect in block field level as well.

#### 7.1.2.22 Field Size

Value will be defaulted while adding the field and same can be modified. This is the size which will reflect in the screen for the field.

### 7.1.2.23 Default Value

A default value can be given to the selected field, system will use the default value at the run time and default value will be stored in the generated front end unit, it will not available in the generated packages.

#### 7.1.2.24 <u>Preview Value</u>

In the Screen Preview, if developer wishes to see the preview with some data; a preview value can be provided.

# 7.1.2.25 <u>Mask Id</u>

This is used for enforcing some restrictions on the values that can be entered in some fields. The ids are present in sttb\_field\_mask. This is applicable only if the display type is **Mask**.

# 7.1.2.26 Popup Edit Required

This can be checked for long text entries. A pop up edit screen would come along with the field. Popup edit will be provided for all fields whose field size is larger than 20 by FLEXCUBE Infra

### 7.1.2.27 <u>Required</u>

If the field is mandatory, this checkbox can be checked .This will force the user to enter value in this field. Asterisk (\*) character would come along with the field in the screen.

#### 7.1.2.28 <u>Visible</u>

If the field is required for processing; but not to be shown in the screen .then it can be made invisible.

#### 7.1.2.29 Input by LOV Only

This is applicable only for LOV fields. This will force the user to use the LOV button to input the value instead of key in the value.

### 7.1.2.30 Calendar Text

This is applicable if the fields has to be placed close to each other as in a calendar.

#### 7.1.2.31 Upper Case Only

If the field value has to be in Uppercase only, this option can be checked. This will convert the field value to Uppercase on tab out of that field in FLEXCUBE.

#### 7.1.2.32 LOV Validation Required

This is applicable only for LOV fields. If validation for the value input in LOV field is required, this option can be checked.

#### 7.1.2.33 Not Required in XSD

If the field is not to be included in XSD, then this option can be checked.

#### 7.1.2.34 Read Only

This will restrict the user from entering value to the field. Filed can be made non editable by checking this option.

# 7.1.2.35 <u>Custom Attributes</u>

Attribute Name and values for SELECT, RADIO, CHECKBOX and READ ONLY SELECT fields has to be provided here.

- Attribute name corresponds to the Label Code whose description will appear in the screen.
- Attribute Value is the corresponding value which will be stored in the backend for the corresponding attribute.
- Active ODT does not allow the deletion of attribute elements if created in an earlier release. Hence if an attribute is no longer required, the attribute can be made inactive.
- **Position:** Ordering of the attributes in the list can be manipulated using Position field. Position numbers can be modified. After changing the position values, position button has to be clicked; which will arrange all attributes in the new order.

Block Field Properties					- 🛛 🗔 🦈 🗅
Field Name FEECALCULATIONBASIS Field Label LBL_FEECALCULATIONB DataSource W_CONSTXNTBL Column Name FEECALCULATIONBASIS Data Type Char ~ Display Type Select ~ Display Type Database Item ~ Parent Field Related Block Related Field ~ LOV Name Off Line LOV Name Fieldset Name FST_FEEDTLS CLASSID	XSD Tag Comment ID Field Size • Maximum Length Minimum Value Maximum Decimals TextArea Rows TextArea Rows TextArea Columns Default Value Preview Value Mask Id	FEECALCULATIONBASIS 1 F F			Required  Visible Read Only Calender Text Popup Edit Required Uppercase Only CUV Validation Required Input by LOV Only Not Required In Xsd Report Parameter Format Required Hot Key Required Focus Required Scat Fetch Joint Holder Hot Key Required
Custom Attributes Events Related Field					+ -
Attribute Name     Fund Base Currency	 tribute Value		Active Yes v	Move Up	Move D
Transaction Currency			Yes 🗸		V

Fig: Defining Custom attributes for a Select Field

# 7.1.2.36 Exact fetch

If a field is Lov field, we can check the option of exact fetch required as shown below. If a particular field is attached with an enabled exact fetch value, while searching using this field, user has to provide the exact value of that field as it is present in the database otherwise the system will show a message of invalid value.

# 7.1.2.37 Hot Key Required

If User wants to provide hotkey functionality to a field then Hotkey required checkbox need to be checked corresponding to that field.

# 7.1.2.38 Focus Required

If a field is read only field then the focus doesn't come on this field once it is launched in FLEXCUBE. Focus required will bring the focus to the corresponding read only fields. If User wants to provide focus required functionality to a field then focus required checkbox need to be checked corresponding to that field.

Block Field Properties				- 🛛 🗔 🦻 🔒
Field Name • FEECALCULATIONBASIS Field Label LBL_FEECALCULATIONBASIS DataSource VW_CONSTXITBL Column Name • FEECALCULATIONBASIS DataType Char ~ Display Type Select ~ Item Type Database Item ~ Parent Field ~ Related Block ~ Related Field ~ LOV Name ~ Off Line LOV Name ~ Fieldset Name FST_FEEDTLS CLASSID ~	XSD Tag Comment ID Field Size * Maximum Length Minimum Value Maximum Decimals TextArea Rows TextArea Rows TextArea Columns Default Value Preview Value Mask Id	FEECALCULATIONBASIS	Popu Uppe LOV Input Not R Repo Form V Hot K V Focus	e Only der Text p Edit Required rcase Only Validation Required by LOV Only tequired In Xsd rt Parameter at Required s Required s Required t Fetch Holder Hot Key
Custom Attributes Events Related Field				
			+ -	]
Attribute Name	Attribute Value	Active	Move Up Move D	
Fund Base Currency		Yes v		
Transaction Currency		Yes v		

# 7.1.2.39 Events

Events tab needs to be input if the field type is **BUTTON.** 

**Event Name:** A pre-defined java script event can be attached to the field and same can be selected. Usually, *onclick* event is selected.

**Function Name:** A function name should be mentioned for event, same function should be maintained in the function id java script or in the infra java script files. This function will be invoked on the event mentioned earlier on the field.

Note: Function Name needs to be mentioned only if event type is either NORMAL or SUBFUNCTION.

#### Event Type:

Event Type can be

- Call form: If on click of the button a call form has to be launched
- Launch form: If on click of the button a launch form has to be launched
- Sub screen: If on click of the button a Sub Screen has to be launched
- **Normal:** if on click of the button, a JavaScript function has to be invoked which is mentioned in Function Name field. Normal buttons have to be placed in a field set for them to appear in the screen.

- **Sub Function**: This is used in Process Flow screens to invoke sub functions.
- **Button Screen**: it specifies in which screen button is to be placed. This is not required for Normal buttons.

**Call Form Name:** If the button is of Call form/Launch form type, the name of the call form/launch form which has to be launched should be mentioned here.

All the attached call forms .Launch forms which are active will appear in the Select List

**Screen Name:** For Sub Screen, call form, Launch Form type buttons; this field specified the name of the screen which will be launched.

Custo	m Attributes Events						
						+	-
	Event Name	Function Name	Event Type	Button Screen	CallForm Name	Screen Name	^
	onclick 🗸	fn_SettlementDetails()	Subscreen v	CVS_IPO5 V	· ·	CVS_SETTLEM	

# 7.1.2.40 Bind Variables

m Attributes Events Bind Variables Return Fields Related Field ind Variables Mapping		Default From Lov Defini	tion
Block Name	Bind Variable	Data Type	^
BLK_TRANSACTION_DETAILS ~	FUNDID ~	STRING	
BLK_TRANSACTION_DETAILS V	TRANSACTION_DATE ~	DATE	
BLK_TRANSACTION_DETAILS ~	TRANSACTION_TYPE -	STRING	
BLK_TRANSACTION_DETAILS V	UNITHOLDER_ID V	STRING	

# 7.1.2.41 <u>Return Fields</u>

Bind Variables and return fields are required for LOV fields. Refer section on LOVS for detailed explanation.

	m Attributes Events Bind Variables Return F	Related Field		
F	Return Fields Mapping		Default From Lov Definition	วท
	Query Column	Block Name	Return Field Name	^
	COMPONENTID	BLK_TRANSACTION_DETAILS V	FROMFUND_PRICEE V	
	COMPONENTDESC	· · · · ·	· ·	
	DEFAULTPRICEBASE	BLK_TRANSACTION_DETAILS	<b>v</b>	
	SOURCEINDICATOR	v	· ·	
<ul> <li>Image: A start of the start of</li></ul>	EFFECTIVEDATE	<b>v</b>	~	

# 7.2 Guidelines and Best Practices

Below points to be noted while creating data blocks:

1. All Block Names Should start with BLK\_ and the remaining portion of the block name should be same as the XSD node of the Block Name in Upper case and '\_' replaced with '-'. *Avoid naming the block name same as that of the table name* 

- 2. Blocks also would have hierarchy and has to be chosen correctly.
- 3. Block Types are similar to data source types with an additional type 'Control'.
- After adding a block, ODT defaults the XSD node. Node name would be Block name without BLK\_ and in Sentence case. Also '\_' will be replaced with'-'.
- 5. Parent block should be chosen from the list based on the hierarchy.
- 6. Similar to data sources, block also can be either Multi Record or single record type.
- 7. Block Title has to be selected from the LOV.
- 8. Relation type has to be mentioned as 'One to One' or 'One to Many'.
- 9. One and only one block should be selected as Master Block.

Note the following while attaching data sources to a data block

- 1. The same data source can be selected in multiple blocks. However in case of Multi record data sources, ODT allows the developer to attach the data source to only one block.
- 2. One Multi Record block can have multiple data sources provided all of these data sources have strict **one to one relation.**
- 3. In case of multiple data sources in a single data block, it is important to ensure that the data in the attached data sources is functionally related and more importantly, a row in one table would definitely have a row in other attached data sources as well. Otherwise the generated code inserts records in all the tables always and this would result in lot of dummy records in the database.
- Parent data block has to be above its child data block in the browser tree. Developer has the option to rearrange the order of the blocks in the tree (by drag and drop).
   Note that if block or block fields are re arranged, all units will have to be regenerated

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Fig: Rearranging Block field Order by drag and drop

Below are some of the important points to be noted while giving field properties:

- 1. Avoid using UI fields as LOV bind variables.
- 2. Avoid using separate Query data sources for single description fields. Use Description type UI fields for Description fields.
- 3. Ensure that Related Block and Field are given for Amount Fields. *Ensure that related currency fields are placed above the amount fields in the browser tree.*
- 4. In case the field is not required in XSD, check not Required XSD. There are cases where the field is a primary key field in a child block and does not need to be repeated in Child block. For example, the field PRODUCT\_CODE in Product forms is not required in any Block other than once in the master block.

# 7.3 Deletion of a Data Block

Data Block can be deleted either by:

- i) Selecting the delete option from the right click menu of the data block or
- ii) By clicking on the delete icon in top right of the particular data block screen.

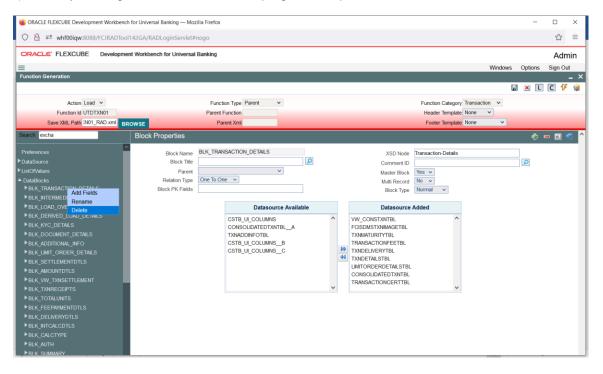


Fig: Deleting a Data Block

Deletion of data block will also delete all the references to any of its block fields. I.e. it may remove any of its fields attached to a field set; or the block fields used in the summary screen.

Note that ODT will allow deleting the data block only if it is created in the same release .Data blocks created in any previous release cannot be deleted.

# 7.3.1 Deletion of Block Field

Block field can also be deleted provided it satisfied the condition above. The process is similar to the deletion of data source columns. All the references to the deleted block field will also be deleted.

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Fig: Deleting a Data Block Field

Since deletion of data block or block fields is not allowed in later releases, it is advised to take proper care while designing data blocks for the screen

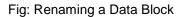
All the units needs to be regenerated after deletion of a data block or a block field

# 7.3.2 Renaming of Data Block

Data Block can be renamed either by:

- i) By clicking on the rename option from the right click menu of the data block or
- ii) By clicking on the rename icon on top right portion of the data block screen.

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Renaming of data block will also rename all the references to the data block. **Example:** Summary data block if renamed will reflect in the summary node also Note that ODT will allow renaming the data block only if it is created in the same release. Data blocks created in any previous release cannot be renamed.

# 7.3.3 Renaming Of Block Field

Block field can also be renamed provided it satisfied the condition above. The process is similar to the deletion of data source columns. All the references to the renamed block field will also be renamed.

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Fig: Renaming of Block Field

Since renaming of data block or block fields is not allowed in later releases, it is advised to take proper care while designing data blocks for the screen.

All the units need to be regenerated after renaming of a data block or a block field.

# 8. Screens

After designing Data sources and Blocks, Design the screen layout based on the requirement.

# 8.1 Creating a New Screen

A new screen can be created either by

- i) Selecting add option from the right click menu of the Screen node or
- ii) Clicking on Add Screen icon in top right of the Screen Node screen.

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CallForms	CVS DELIVERYDTLS	LBL DELIVERYDETAILS	Small v	No v			
aunchForms	CVS_INTCALCDTLS	LBL_INTEREST_DETAILS	Medium ~	No v			
	CVS AUTHORIZE	LBL AUTHORIZE1	Medium ~	No v			
	CVS REVCODEPOPUP	LBL_REVERSAL1_CODE	Small v	No 🛩			
	CVS_BULK_REVERSAL	LBL_REVERSALCODE	Small v	No v			

#### Fig: Adding a New Screen

Provide the Screen Name in the Add Screen window:

Add Screen		×
Screen Name	CVS_ Ok Cancel	

Fig: Add Screen window

Screen Name has to Screen Name should start with 'CVS\_'. *Example:* CVS\_PREFERENCES

# 8.1.1 Screen Properties

Provide the properties of the screen as required:

# 8.1.1.1 <u>Screen Name</u>

This field value will be defaulted when screen is added and it is a non-editable field.

# 8.1.1.2 <u>Screen Title</u>

This field will have a label code for the screen title to be displayed. Label code can be selected from list of values button .The label specified will appear in the Title bar of the Screen.

### 8.1.1.3 Main Screen

This field identifies whether the screen created is the main screen for the particular function id. FLEXCUBE function id should have one Main Screen. Only the main screen will be launched from the FLEXCUBE when the function id is launched. Other screens have to be launched from the main screen by placing buttons on the main screen.

# 8.1.1.4 <u>Visible</u>

Screens can be made invisible if it not intended to be used. The screens created in any previous release cannot be deleted. Hence visible flag has to be unchecked to achieve the same.

# 8.1.1.5 <u>Screen Size</u>

Depending on the number of fields in the screen, developer can choose the size of the screen. Options provided are small, medium and large.

# 8.1.1.6 Exit Button Type

This field describes the EXIT and OK buttons for the screen. These buttons are found in the bottom right corner of the screen.

If only CANCEL button is required, select Default Cancel.

If both OK and CANCEL buttons are required, select Default OK Cancel

If OK, REJECT and CANCEL buttons are required, select Default Ok Reject cancel.

**Example:** contract authorization screens

een Details					- 🗷 [	D 🧐
Screen Name Screen Title Screen Size Exit Button Type	5	Q ~ ~	Main Screen     OBIEE     Visible     Query Required     Query all Img Required			
					+ -	
Argument Name	e Source Block	Source Field	Argument Value	Target Block	Target Field	
					~	
					>	

#### Fig: Screen Properties

# 8.1.1.7 <u>Screen Arguments</u>

Screen Arguments are parameters that can be passed to the screen on launching the screen. If on launch of the screen, some of the fields needs to be populated based on the screen from which it is launched, screen arguments can be used.

#### 8.1.1.7.1 Arg Name

This field identifies the name of the argument. This is mandatory field for a screen argument.

#### 8.1.1.7.2 Source Block

This is optional. This is used if developer wants to pass arguments between two screens in the same function id. The value from one block field (usually present as part of the parent screen) can be passed as screen argument to another block field (usually present as part of the current screen). Here the parent block field is identified using source block and source field. Source Block identifies the block name in which the source field is present. Select List provides the list of

#### 8.1.1.7.3 Source Field

all data blocks added in the function id.

Source Field identifies the field name whose value will be passed as the screen argument to the screen. Select List provides list of all fields in the source block selected.

#### 8.1.1.7.4 Arg Value

If the argument value is hard coded, then this can be specified in this field. *If argument value is specified, then source block and source field is not required.* 

*For example:* action codes can be passed as screen arguments which will be hardcoded like EXECUTEQUERY.

#### 8.1.1.7.5 Target Block

Target block represents the block containing the field to which argument value is assigned .This block should be part of the screen. Select list provides the list of all data blocks defined in the function Id.

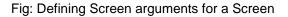
#### 8.1.1.7.6 Target Field

Target Filed identifies the field to which the argument will be passed. Select List provides the list of all fields in the target block.

#### 8.1.1.7.7 Active

Screen Arguments defined in an earlier release cannot be deleted. Instead, developer can make it as inactive which serves the same purpose.

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# 8.1.2 <u>Tabs</u>

When a developer creates a screen in the ODT, Tool will create three default portions in the screen:

- Header
- Body
- Footer

FLEXCUBE screens are divided into three portions, Header, Body and Footer and the all portions can have tabs.

Each portion will have default tabs. Along with these default tabs developer can create more tabs as required.

Following default tabs are provided:

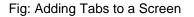
- i) For Header portion : TAB\_HEADER
- ii) For Body Portion : TAB\_MAIN
- iii) For Footer Portion :TAB\_FOOTER

These tabs should not be deleted by the developer.

For creating new tabs, developer can either

- Select add tab option from the right click menu of the screen portion (header/body)/footer) node.
- Clicking on add tab icon on the top right portion of screen portion screen.

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▲ CVS_IPOSUBMAIN		
▲ BOD Add		
► TAB_INTERMEDIARY		
TAB_ADDINFO		
► TAB_LIMITDTLS		
► FOOTER		
CVS_SETTLEMENTDETAILS		
CVS_TXNRECEIPTDTLS		
CVS_FEEPAYMENTDTLS		
CVS_DELIVERYDTLS		



Provide the name of the tab in the add tab screen. Tab Name should start with TAB\_. *Example: TAB\_PREFERENCES* 

#### 8.1.2.1 Tab Properties

Provide the properties for the tab as required.

#### 8.1.2.1.1 Screen Name

This is a non-editable and will be defaulted from the screen name of which the tab is included

#### 8.1.2.1.2 Tab Name

This is non editable and it shows the name of the tab provided during creation of the screen

#### 8.1.2.1.3 Tab Label

Label Code for the tab can be maintained here. Description of the Label will appear as Tab Title in the screen.

#### 8.1.2.1.4 Tab Type

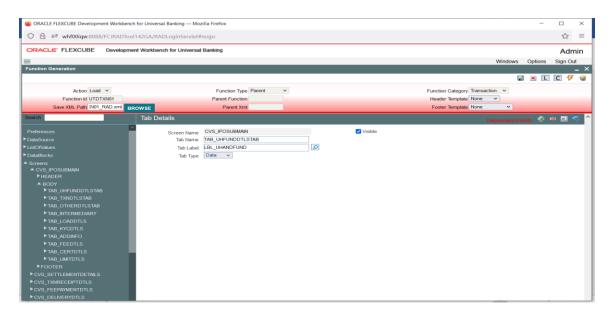
Tab type as data or service. Tab Type is Data for Normal case. If any call form has to be embedded in the tab (**Example:** Branch Screens), this can be selected as Service

#### 8.1.2.1.5 Visible

Tabs can be made invisible if it is not intended to be used. Note: The tabs created in any previous release cannot be deleted, so visible flag has to be unchecked to achieve the same.

#### 8.1.2.1.6 Dependent Fields

If the tab type is service, this comes into picture. This is used to map the fields in the main screen to which this field is dependent.





#### 8.1.2.2 Sections and Partitions

Sections has to be created for each tab .Number of sections can vary depending upon the design requirement .All tabs should have at least one section

Partitions should be added to each section. Number of partitions that can be added to a screen depends on the screen size

When partitions are again divided, we get sub partitions

Sections can be created either by:

- i) Selecting add section option from the right click menu for the Tab or
- ii) By clicking on Add Section icon in top right of the Tab screen.

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▶ ListOfValues	Tab Label LBL_UHANDFUND					
▶ DataBlocks	Tab Type Data 🗸					
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▲ CVS_IPOSUBMAIN ► HEADER						
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TAB UHFUNDDTLSTAP						
SEC_UHFUND Add						
► TAB_TXNDTLSTAB Delete Rename						
► TAB_OTHERDTLSTA						
TAB_INTERMEDIARY						
► TAB_LOADDTLS						
► TAB_KYCDTLS ► TAB_ADDINFO						
► TAB_ADDINEO ► TAB_FEEDTLS						
TAB CERTDILS						
► TAB_LIMITDTLS						
► FOOTER						
► CVS_SETTLEMENTDETAILS						
► CVS_TXNRECEIPTDTLS						
► CVS_FEEPAYMENTDTLS						

Fig: Adding a Section to a Tab

Add Section		×
Section Name	SEC_	
	Ok Cancel	

Fig: Adding Section window

Provide the name of the section in add section window. Section Name should start with SEC\_. *Example:* SEC\_ONE

Section Name

This field will be defaulted based on the section name provided while creation. It is a non- editable field.

Collapse

If the section has to be made collapsible, this option can be checked

• Visible

If the sections are not required in the screen, it can be made invisible. Note: sections created in previous releases cannot be deleted. Hence it can be made invisible to achieve the same.

Multiple Section

Fieldset attached to this section will allow only multi entry block fields to be mapped to this fieldset. Mapping for single entry block will not be allowed if multiple section option is selected. If multiple section features is to be provided for a section then this option can be selected.

Sec	tion Details									-	x 🧐	^
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	Partition Details								+ -	1		
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									~			

#### Fig: Section Properties

#### 8.1.2.2.1 Partition Details

Partitions can be added to the section.

The number of partitions allowed on a section depends on screen type and screen portion.

- i) For Large screen, a section in the body or header can have a maximum of 3 partitions.
- ii) For Large Screens, a section in the footer can have a maximum of 4 partitions.
- iii) For all medium and small screens, a maximum of 2 partitions is allowed.

Number of partitions mentioned above is including any sub partitions if defined; i.e. if partition is divided into 2 sub partitions; it will be treated as 2 partitions by the system.

• Partition SI No

This will used to identify the partition by the system. It will be defaulted by the tool. Numerical value which increments by one.

Partition Name

This can be provided by the developer.

• Width

Width of the partition will be defaulted by the Tool depending on the number of partitions. *Example: If 2 partitions, width of each will be defaulted to 50.* 

#### • Sub Partitions

Each partition can be subdivided into sub partition provided it does not breach the maximum partitions allowed.

#### 8.1.2.2.2 Multiple Screens in Same Function Id

Multiple Screens can be designed within a single function Id.



Fig: Multiple Screens in a Function Id

While launching the function Id from FLEXCUBE; the main screen will be launched.

Buttons has to be placed in the main screen. Button Events to be maintained such that on clicking the button, sub screens will be launched. The button events maintained for the button can be seen in the below figure. Screen name is mentioned as the screen to be launched and the button screen is the screen where button is placed.

Block Field Propertie	es							- 🗷 🗔 🦻
Field Name - Field Label DataSource Column Name - Display Type Item Type Parent Field Related Biock Related Field LOV Name Fieldset Name CLASSID			Maxi Mi Maximu Te TextAi	XSD Tag Comment ID Field Size • mrum Length mrum Value m Decimals «Area Rows rea Columns Default Value review Value Mask Id	FINDUH			Required Visible Read Only Calender Text Popup Edit Required Uppercase Only LOV Validation Required nput by LOV Only Not Required In Xsd Report Parameter Format Required Hot Key Required Focus Required Exact Fetch Joint Holder Hot Key Required
Custom Attributes Events	Function	Namo	Event Type	Button S	CallEr	orm Name	+ Screen Name	
Onclick	fn_FindUH()		Normal V	CVS_IPOS				

Fig: Button Events for Launching Sub Screen

# 8.2 Guidelines and Best Practices

Follow the below practices while designing screens:

- A function Id should have one main screen.
- Screen Name should start with 'CVS\_'.
- Every screen will have three portions called Header, Body and Footer. Developer should not delete these portions.

While creating tabs, note the following

- FLEXCUBE architecture does not support multiple tabs in footer portion of the screen.
- If the screen does not have multiple tabs, then only the TAB\_MAIN needs to be used. TAB\_HEADER should not contain any sections in this scenario.
- If the screen is multi tabbed, TAB\_HEADER and TAB\_MAIN should be used while designing. TAB\_HEADER denotes the header portion of the screen and TAB\_MAIN should contain the main tab fields.
- TAB\_HEADER, TAB\_FOOTER and TAB\_MAIN should not be deleted by the developer.
- If any templates are chosen for footer, TAB\_FOOTER need not be manually designed.
- Order of Tabs/Sections in the screen can be re arranged by re arranging them in the tree by drag and drop

# 8.3 Deletion of Screens

Screens can be deleted either by:

- i) Selecting the delete option from the right click menu of the Screen or
- ii) By clicking on the delete icon in top right of the particular Screen

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Action Load ~		unction Type Parent	~		Function Ca	tegory Transaction v			
Function Id UTDTXN01		rent Function			Header Te	mplate None V			
Save XML Path (N01_RAD.xml	BROWSE	Parent Xml			Footer Te	mplate None	<u>~</u>		
Search	Screen Details							💌 🗔	
Preferences	Screen Name CVS_	POSUBMAIN		Main Screen					
	Screen Title		P	OBIEE					
	Screen Size Large		~	Visible					
	Exit Button Type Defa	lt Ok Cancel	~	Query Required	quired				
				,, g					
CVS_SET							+ -		
CVS_TXNF	Argument Name	Source Block	Source Field	Argument Value	Target Block	Target Field	Active ^		
CVS_FEEFAIMENTETES		Source Diock	Source Freid	Algument falle	narget block	langeet lend	Active		
CVS_DELIVERTURES									
► CVS_AUTHORIZE									
► CVS_REVCODEPOPUP									
CVS_BULK_REVERSAL									
							~		

Fig: Deleting a Screen

Any reference to the particular screen in any field set will also be reset to null.

Tabs and Sections can also be deleted in a similar way.

Note that ODT will allow deletion of elements only if it is created in the same release. Otherwise tool will throw error as show below:

Information	
Information Description	Information Code
Elements from previous releases cannot be deleted	
	_
	Ok

Fig: Error Window during Deletion of Previous Release Elements

# 8.3.1 Visible Flag

If in a future release, if the screen/tab/section needs to be removed, it can be made invisible; i.e. uncheck the visible flag.

Visible flag is available at Screen, Tab and Section level.

Note the following when making a screen invisible.

- If a screen is made invisible, all its tabs and sections will also be made invisible. Any field set which is placed in the particular screen will also be made invisible.
- If the same screen is again made visible, tabs and sections still remain invisible. Developer has to manually change the tabs and sections to visible.
  - Field sets also have to be made visible manually.

This is done so that so that if the fields attached to invisible field sets was attached to some other field set, then the particular field set should not be made visible as it will result in more than one field set containing same field.

Note the following when making tab as invisible:

- If a tab is made invisible, all the sections under that tab will also be made invisible. Also any field set placed in the particular tab will also be made invisible.
- If the tab is again made visible, all the sections under that tab still remains invisible. Field sets also remain invisible. Developer has to manually make the section and field sets visible as per requirement.
- Tab can be made visible only if its screen is visible. Otherwise it throws error.

Similarly when a section is made invisible, all the field sets placed in the section will also become invisible. But when it is again made visible, field sets till remain invisible. Section can be made visible only if the corresponding screen and tab is visible.

# 8.4 <u>Renaming Of Screens</u>

Screens can be deleted either by:

- i) Selecting the rename option from the right click menu of the Screen or
- ii) By clicking on the rename icon in top right of the particular Screen

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Save XML Path N01_RAD.xml BRC	OWSE	Parent Xml			Footer Te	mplate None	~			
Search	Screen Details							-	2	s ^
Preferences * DataSource * DataSource * DataStocks * Screens * CVS_IPOSMANAL * CVS_IP	Screen Title Large	ROSUBMAIN It Ok Cancel Source Block	Source Field	Main Screen OBEE Vivable Vivable Ouery Address Argument Value		Target Field	Active	•		

# Fig: Renaming of Screen

Renaming of the screen will also be reflected in any reference to the particular screen in the Radxml. Note that renaming of screens would be allowed only if they were created in the same release. Tabs and sections can be renamed in a similar way.

# 9. Field Sets

Field set is a logical set of fields which would appear together in one partition of the screen layout. The blocks in a Field should be grouped as Field sets to make them appear on specific locations on the screen.

# 9.1 Creating a New Field Set

A new field set can be created either by:

- i) Selecting Add Field Set option from the right click menu of the Field set Node or
- ii) Clicking on the Add Field set icon in top right corner of the Field Set Screen

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unction Generation						Thildons	options	Cigir	0.04
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Function Id UTDTXN01	Pa	rent Function			Header Temp	late None V			
Save XML Path (N01_RAD.xml	BROWSE	Parent Xml			Footer Temp	late None V			
Search	Fieldset Summary								ł
Preferences									
DataSource	Fieldset Name	Screen Name	Screen Portion	Tab Name	Section Name	Partition Name	^		
.istOfValues DataBlocks	FST_SET_NAV	CVS_SETTLEMENTDET,	Body 🗸	TAB_MAIN	SEC_NAVIGATION	SEC_NAVIGATION_3			
Screens	FST_TRANSACTION_INFO	CVS_IPOSUBMAIN	Header 🗸	TAB_TXNHEADERTAB	SEC_TXN01_SC1_T1_S	TXN01_SC1_T1_S1_P1			
FieldSet	FST_TRANSACTION_VALUE	CVS_IPOSUBMAIN	Header 🗸	TAB_TXNHEADERTAB	SEC_TXN01_SC1_T1_S	TXN01_SC1_T1_S1_P3			
FST	FST_UHFUND	CVS_IPOSUBMAIN	Body 🗸	TAB_UHFUNDDTLSTAB	SEC_UHFUND	TXN01_SC1_T2_S1_P1			
FST_TRANSACTION_INFO	FST_TXNDTLS_F1	CVS_IPOSUBMAIN	Body ~	TAB_TXNDTLSTAB	SEC_TXNDTLS	TXN01_SC1_T3_S1_P1			
FST_TRANSACTION_VALUE	FST_TXNDTLS_F2	CVS_IPOSUBMAIN	Body 🗸	TAB_TXNDTLSTAB	SEC_TXNDTLS_S1	TXN01_SC2_T3_S2_P1			
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FST_TXNDTLS_F1	FST OTHER	CVS IPOSUBMAIN	Body V	TAB OTHERDTLSTAB	SEC OTHER	TXN01_SC1_T4_S1_P1			
FST_TXNDTLS_F2 FST_TXNDTLS_F3	FST_FEEDTLS	CVS_IPOSUBMAIN	Body ~	TAB FEEDTLS	SEC_FEEDTLS	TXN01_SC1_T9_S1_P1			
FST_OTHER	FST TXNINTERMEDIARY	CVS IPOSUBMAIN	Body ~	TAB INTERMEDIARY	SEC TXNINTERMEDIAR	TXN01_SC1_T5_S1_P1			
FST FEEDTLS	FST BTNLOADDET	CVS IPOSUBMAIN	Body v	TAB LOADDTLS	SEC BTNLOADDET	PART 1			
	FST LOADDTLS F1	CVS IPOSUBMAIN	Body ~	TAB LOADDTLS	SEC LOADDTLS S1	TXN01_SC1_T6_S1_P1	_		
FST_BTNLOADDET	FST LOADDTLS F2	CVS IPOSUBMAIN	Body v	TAB LOADDTLS	SEC LOADDTLS S2	TXN01 SC2 T6 S2 P1	_		
	FST KYCDTLS F1	CVS IPOSUBMAIN	Body V	TAB KYCDTLS	SEC KYCDTLS S1	TXN01 SC1 T7 S1 P1			
FST_LOADDTLS_F2	FST_KYCDTLS_F2	CVS IPOSUBMAIN	Body v	TAB KYCDTLS	SEC_KYCDTLS_S1	TXN01_SC1_T7_S1_P1			
FST_KYCDTLS_F1	FST KYCDTLS F3	CVS IPOSUBMAIN	Body V	TAB_KYCDTLS	SEC KYCDTLS S3	TXN01 SC3 T7 S3 P1			
FST_KYCDTLS_F2 FST_KYCDTLS_F3	FST ADDINFO	CVS IPOSUBMAIN	Body v	TAB ADDINFO	SEC ADDINFO	TXN01_SC1_T8_S1_P1			
-rsi_kiobits_rs		CVS_IPOSUBMAIN	Body V		SEC LIMITOTUS	TXN01_SC1_T11_S1_P1			



Add FieldSet		×
FieldSet Name FST_		
	Ok Cancel	
	Fig: New Field Set window	

Standard naming convention for field sets is FST\_< Descriptive Code of the Field Set>. *Example:* FST\_VERSION

# 9.1.1 Field Set Properties

Provide the Field Set properties as required.

# 9.1.1.1 Field Set Name

This is a non-editable field. Value is defaulted from the field set name provided during creation.

#### 9.1.1.2 Field Set Label

All field sets can have a title to them, and same can be mentioned in this field as label code. Label code can be selected using the list of values attached to the field. In the screen Field Set Title will appear as title for a field set.

# 9.1.1.3 Data Block

Data block has to be selected from select list. Select list provides the list of all data blocks in the radxml. Developer can attach fields of the data block selected to the field set. Note that data block Name cannot be modified in a future release.

### 9.1.1.4 <u>Multi Record</u>

This is a non-editable field. This will be defaulted based on the type of data block selected. If data block is of type multi record, field will be set to yes; otherwise to No.

#### 9.1.1.5 <u>View Type</u>

View type option will be enabled only if multi record is yes.

If multi record is No, View Type is defaulted to Single.

If multi record is yes, developer can choose the view type as either Single or Multiple View.

In Multiple View type, multi records are displayed in a table grid format.

In **Single View** type, only one record will be displayed at time. Navigation buttons will be provided for viewing the next record.

### 9.1.1.6 <u>Field Set height</u>

Developer can provide the height of the field set. This is optional field FLEXCUBE will calculate the standard height of the field set depending on the number of fields and size of screen etc. Here ODT provides developer a provision to override the standard settings.

# 9.1.1.7 <u>No Of rows</u>

If **view type is multiple**, then number of rows in the multiple tables can be decided using 'No of rows' field. This is optional field, Tool will default to **15 rows**, if the field value is null.

# 9.1.1.8 Field Set Type

Three options are there

- 1) **Normal:** This option will be for the normal field sets.
- 2) Image Set: If a fieldset is Image fieldset then this option needs to be chosen.
- Version: If a fieldset represents version control field set then the field set type should be version. If Field set Type is Version then the Selected Block must have below mentioned fields
  - VERNO
  - LASTVERNO

Note: Option for Manual selection of fields will not be provided.

# 9.1.1.9 <u>Screen Name</u>

This field captures the name of the screen where the particular field set to be added. Select List provides the list of all Screens created in the Radxml.

### 9.1.1.10 <u>Screen Portion</u>

Select the Screen Portion where the field set has to be placed.

# 9.1.1.11 <u>Tab Name</u>

Select the tab name where the field set has to be placed. Select List will contain all the tabs defined in the screen mentioned above.

#### 9.1.1.12 <u>Section Name</u>

Select the section in the tab provided earlier to which the field set has to be placed. Select List provides all the sections defined in the Tab mentioned above.

#### 9.1.1.13 Partition Name

Select the partition in the section mentioned above where the field set will be placed.

#### 9.1.1.14 Horizontal Field Set

A field set can be horizontal if this flag is selected. A horizontal field set will have fields horizontally arranged, where as in normal field sets all the fields will be arranged vertically by default.

# 9.1.1.15 <u>Read Only</u>

This is applicable only field set is attached to multi record data block. The entire block can be made read only be selecting this checkbox.

#### 9.1.1.16 Navigation Button

This is applicable only for if multi record is yes and selected view type is Single. If this check box is selected, tool will add previous and next buttons to the screen.

This can be used for navigating multiple records in a single view type.

# 9.1.1.17 <u>Visible</u>

If a field set is no longer required, it can be made invisible.

Note that ODT does not allow developer to delete a field set if it is created in a previous release. Instead the same functionality can be achieved by making it invisible.

Fieldset Prop	perties								- 🗷 🧐 🔷
Fields Da Mult Vi	set Name set Label ata Block ti Record iew Type et Height Of Rows	FST_TRANSACTION_VALUE LBL_TRANSACTION/ALUE BLK_TRANSACTION_DETAILS  No  Single				Screen Portion Tab Name	Normal CVS_IPOSUBMAIN Header TAB_TXNHEADER SEC_TXN01_SC1 TXN01_SC1_T1_S		<ul> <li>Horizontal Fieldset</li> <li>ReadOnly</li> <li>Navigation Button</li> <li>Navigation Button Full Width</li> <li>✔ Visible</li> </ul>
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		WBALANCE		ÞÞ		PERCENTAPPLI		<b>v</b>	-
		OOFUNITS		44		BTNENRICH			-
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			~						
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# 9.1.2 Attaching Field to a Field Set

Once the data block and the screen details (up to partition) in which field set has to be placed is identified, fields can be attached to the field set.

#### Data Block Fields

This List Select box provides all the block fields of the data block mentioned which is not yet attached to any *visible* field set. Any of the fields available in the data block fields can be moved to the field set fields by selecting and clicking on the *move arrows*. Similarly any attached field can be removed from the field set by moving it back to data block fields.

#### **Field Set Fields**

This contains the list of all fields which is attached to the field set. The order of the fields in this grid signifies **the order** in which it will be displayed in the screen.

Fields can be re arranged as per requirement.

If the partition mentioned in the field set properties is divided into sub partitions,

Then **the sub partition** in which the particular field has to come has to be selected from the sub Partition list

# 9.2 Guidelines and Best Practices

Follow the below guidelines while designing Field Sets:

- 1. Ensure that proper Label Code is given as title and make sure that the same is available in CSTB\_LABELS.
- 2. Select the Screen, Section and partition and the Block from which the field set as to be created.
- 3. Select the fields into field set from the left text area (data block fields) to right and give the appropriate Sub partition number wherever applicable.
- 4. In case the field set has to be horizontal, check the Horizontal Field set Check box.
- 5. For multi record field sets (either single view or multiple entry view), check the Read only Check box to avoid +/- buttons. Note that checking this check box would only stop the user from adding and deleting records. System would still allow modifying the fields of a row based on whether or not they are read only.

# 9.3 Deletion of Field Set

Field Set can be deleted either by

- i) Selecting the delete option from right click of menu of the field set node or
- ii) By clicking on delete field set icon in top right corner of the field set screen.

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Function Id UTDTXN01		Parent Function				Header Template				
Save XML Path (N01_RAD.xml	ROWSE	Parent Xml				Footer Template	None	•		
arch	Fieldset Properties						<u>.</u>		- 🛛	1
references	~	FST_SET_NAV				Nemal		Horizontal		-
ataSource	Fieldset Name Fieldset Label	FST_SET_NAV	כ		set Type en Name	Normal CVS_SETTLEMENTDETAILS	~	ReadOnly	rielusei	
tOfValues		BLK_VW_TXNSETTLEMENT	~		n Portion	Body	~	Navigation	Button	
taBlocks	Multi Record	Yes v	-		ab Name	TAB MAIN	~	Navigation Width	Button Fu	ull
reens	View Type	Single v			on Name	SEC_NAVIGATION	~	Visible		
ieldSets	Fieldset Height			Partiti	on Name	SEC_NAVIGATION_3	~			
EST SET NAV	Number Of Rows									
FST_TRAN Rename										
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FST_TXNDTLS_F1			CK Fleids		Field	ISet Fields Subpartition Nam	e			
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		THIRDPARTYADRESSLINE1								
		THIRDPARTYADRESSLINE2		44						
FST_TXNINTERMEDIARY		THIRDPARTYADRESSLINE3		44						
FST_BTNLOADDET		THIRDPARTYADRESSLINE4 THRIDPARTYBICCODE								
		THRIDPARTYBICCODE								
FST_LOADDTLS_F2		THIRDPARTYSTATE								
		TRANSFERBRANCHCODE		~						
FST_KYCDTLS_F2										
FST_KYCDTLS_F3										
										_

Fig: Deletion of Field set

Note that deletion of field set is allowed only if the field set is created in the same release.

#### 9.3.1 Visible Flag

If the field set is no longer required in any future release, then the field set can be made invisible. This serves the same purpose as deleting the field set.

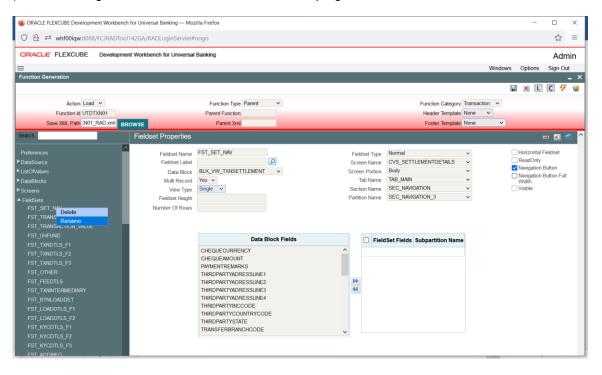
Note the following while making field set as invisible:

- When a field set is made invisible, all the field set properties will be disabled. Developer won't be able to add any new field to an invisible field set; but he will be allowed remove field from the field set fields.
- If he makes the field set visible again, System validates whether the Screen, Tab and section in which the field set is placed is visible. If any of them is not, the system throws error.
- When the field set is made visible, system checks whether any of the fields attached to this field set has been re used in any other field set . If any fields are found to be attached to any other visible field set, it won't allow making the field set visible.

# 9.4 Renaming of Field Set

Field Set can be renamed by either:

- i) Selecting the rename option from the right click menu of the particular Field Set or
- ii) Clicking on the Rename Field Set Icon in Top right corner of the Field Set Screen



Rename RAD Field	d Set	×
New Value	FST_	
	Ok Cancel	

Fig: Renaming of Field Set

Note that renaming of field set is allowed only if the field set is created in the current release.

# 10. LOVs

FLEXCUBE supports two type of List of Values (LOVs):

#### i) Global LOVs

These are LOVS defined in the system which can be used across all the functions. Global LOVs are stored in **CSTB\_LOV\_INFO** with function id as **COMMON**.

#### ii) Local LOVs

These are defined particular to the function Id. They are defined in the function Id and can be attached to any field in the function Id as per requirement.

## 10.1 Defining LOVs

Developer can define a new LOV either by:

- i) Selecting Add LOV option from the right click menu of the LOV node or
- ii) By clicking on the Add LOV icon in top right portion of the LOV grid screen.

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Function Id UTDTXN01	Parent Function	Header Template None V		
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Search	List Of Values Summary			\$
Preferences DataSource				
istOfValues	Lov Name	Lov Query		
lataBl. Add	LOV_TXNSUBTYPE	SELECT paramvalue, paramtext from paramstbl where paramcode = decode(?,'01','TXNSUBTYPEIPO', '02','TXNSUBTYPEPU		
	LOV_FUND	SELECT A FUNDID, A FUNDIDENTIFICATIONNUMBER, A FUNDNAME, A FUNDBASECURRENCY FROM FUNDDEMOGRAPHIC		
	LOV_SOURCE	select sourceid from sourcetbl		
	LOV_TXNCURRENCY	SELECT CURRENCYCODE, CURRENCYNAME FROM CURRENCYTBL		
	LOV_ADDINFO	Select * from (Select AddInfoValidValue Value,AddInfoValidValueDescription Description From AddinfoValidValuesTbl Where ADDI		
	LOV_ENTITYID	SELECT * FROM VW_TXNBROKERS WHERE ENTITYTYPE = ?		
Summary	LOV_UHBANK	SELECT DefaultDetails,ENTITYID,DECODE(AccountType,'S','Custodian','Clearing Agent') AccountType,AccountNumber,Accour		
	LOV_DELIVERYADD	SELECT AddressType, ParamText AddressTypeDesc,AddressLine1,AddressLine2,AddressLine3,AddressLine4,ZipCode,Country		
	LOV_DEFBANK	SELECT BRANCHCODE ACCOUNTNUMBER, ACCOUNTTYPE, ACCOUNTNAME FROM UHBANKDETAILSTBL WHERE UNIT		
	LOV_UHFEEBANK	SELECT BANKCODE, BRANCHCODE FROM UHBANKDETAILSTBL WHERE UNITHOLDERID = ?		
	LOV_PRICEBASIS	select * from table(sfGetPriceBasis(?,?,?,?))		
	LOV_CERTNO	SELECT CERTIFICATENUMBER, NOOFUNITS FROM FUNDCERTIFICATETBL WHERE FUNDID = ? AND UNITHOLDERID = ?		
	LOV_REVERSALCODE	SELECT PARAMVALUE, PARAMTEXT FROM PARAMSTBL WHERE PARAMCODE = 'REVERSALCODE' and paramlanguage=		
	LOV_CAMPAIGN	Select distinct a Campaigncode, a Campaignname From CampaignHeaderTbl a where ? between a startdate and a enddate and		
	LOV_BEN	SELECT beneficiaryid FROM UHBENEFICIARIESTBL where unitholderid = (select unitholderid from unitholdertbl where UNITHO		
	LOV_ACCNUMBER	SELECT DECODE(DEFAULTDETAILS, 0, 'W, 'Y') DEFAULTDETAILS, BANKCODE, BRANCHCODE, ACCOUNTTYPE, SWIFTF		
	LOV_BANK	SELECT BANKCODE, BANKNAME FROM BANKTBL WHERE BANKCODE = PARENTBANKCODE		
	LOV BRANCH			

Fig: Adding a new LOV

Provide the LOV name in the Add LOV screen. LOV name should start with LOV\_. *Example:* LOV\_COUNTRY

LOV	×
LOV Name LOV_	

Fig: Add LOV window

## 10.1.1 LOV Name

This is non editable field. It will be defaulted based on the LOV name provided while creating LOV.

### 10.1.2 <u>LOV Query</u>

LOV query has to be provided in this field. **Bind variables** for the LOV have to specified as '**?**'. Bind variables are the parameters whose values are required as input for executing the query during run time

**Example:** SELECT CUSTOMER\_TYPE FROM STTM\_CUSTOMER WHERE CUSTOMER\_NO=? Here value for Customer No is to be passed as parameter.

### 10.1.3 LOV Column Details

Click on **Populate** button. This will default all the columns which will come in the output of the LOV query. *Example:* for the above query, it will populate only one row with Query Cols value as CUSTOMER\_TYPE

#### 10.1.3.1 Query Cols

This is a non-editable field. This will be populated by the system on clicking of Populate button. All the columns from the query result will be populated as query cols.

#### 10.1.3.2 Data Type

This row will also be defaulted based on the LOV query. Data type of the query cols has to be provided here.

#### 10.1.3.3 <u>Visible</u>

Result Column of the LOV can be made invisible by specifying in this column.

#### 10.1.3.4 <u>Reduction Field</u>

A field can be made as reduction of non-reduction by using this flag.

If the field is a **reduction field**, then in the LOV screen in FLEXCUBE, user will have to filter the list of values based on the reduction fields.

#### 10.1.3.5 <u>Reduction Field Type</u>

Display type of the reduction field can be specified here .Display type of the reduction field can be either of the below given values:

- TEXT
- CHECK BOX
- RADIO
- SELECT

#### 10.1.3.6 <u>Reduction/Column Label</u>

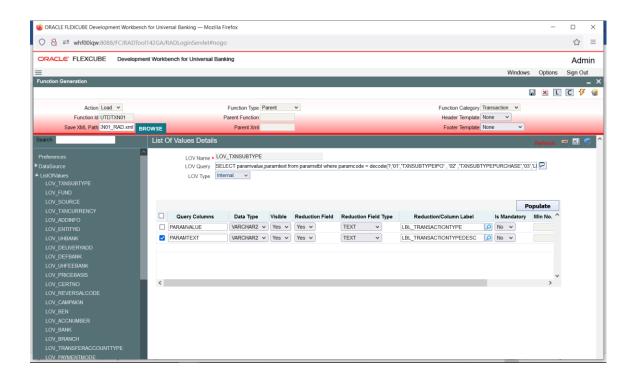
The reduction fields should be provided with proper labels so that it description comes in the LOV screen. Label Codes has to be mandatorily maintained for the functioning of LOV screen. Figure below explains the meaning of reduction labels:

#### 10.1.3.7 <u>Is Mandatory</u>

If the reduction field id selected as 'YES', ODT will allow to select 'Is mandatory' option for a particular column. If 'Is mandatory' is selected as yes, ODT will ask for minimum search character length. By default the value is 3. If field is mandatory and minimum search character length is given as n, then while searching, user has to enter minimum of n characters in order to search a particular value otherwise the system will show error message.

#### 10.1.3.8 Minimum Search Character length

If 'Is mandatory' is selected as 'YES', then only ODT will allow to enter values for Min search character length. By default the value is 3. Any value less than 3 will not be accepted. ODT will show alert message in case of any rule violation. Once the value for Minimum search character length field is provided, user has to enter minimum character length to fetch a value corresponding to that return field. Figure below explains the 'Is mandatory' and min search char length.



bel Code Label Code Label Description	%LBL_FIELD%		
Laber Description		Search Res	set
Label Code		< < 3of22 > > Label Description	>
	,	Field Number 1	
LBL_FIELD_NUMBER_1 LBL_FIELD_NUMBER_10		Field Number 10	
LBL FIELD NUMBER 11		Field Number 11	
LBL FIELD NUMBER 12		Field Number 12	
LBL FIELD NUMBER 13		Field Number 13	
LBL FIELD NUMBER 14		Field Number 14	
LBL FIELD NUMBER 15		Field Number 15	
LBL_FIELD_VAL_155		Field Value 155	
LBL_FIELD_VAL_156		Field Value 156	
LBL_FIELD_VAL_157		Field Value 157	
LBL_FIELD_VAL_158		Field Value 158	
LBL_FIELD_VAL_159		Field Value 159	
LBL_FIELD_VAL_16		Field Value 16	
LBL_FIELD_VAL_160		Field Value 160	
LBL_FIELD_VAL_161		Field Value 161	
			~

Fig: Sample LOV Screen illustrating Reduction Fields

# 10.2 Attaching LOV to Block Field

LOVs have to be attached to the block field as per requirement. In the block field, select the **display type** as LOV.

## 10.2.1 LOV name

Select List will contain both Local and Global LOVs. Developer has to select the LOV as required for the field.

## 10.2.2 Input by LOV Only

This field has to be checked if the field has to input through LOV only

## 10.2.3 LOV Validation Regd

If validation for the entered value is required against the values fetched from LOV query, this checkbox can be checked.

## 10.2.4 Bind Variables

Bind variables defined in the LOV query has to be mapped to corresponding data block field.

During LOV query execution, the value of these data blocks will be picked up in place of bind variables (?).

Click on button **Default from LOV Definition.** Number of rows corresponding to the number of bind variables in the query will be created.

Below details has to be maintained in bind variable tab:

**Block Name:** The block which contains the bind variable block field has to be selected from the list of all data blocks.

**Bind Variable:** The block field which is the bind variable has to be selected from list of fields of the block selected.

**Data Type**: The data type of the bind variable has to be mentioned here. This can be STRING, DATE and NUMBER etc.

If more than one bind variable is present in the LOV query, bind variables has to be provided in the same order as it appears in the LOV query.

Block Field Propertie	95				= 🛛 🗔 🧐
Field Label DataSource Column Name *	TRANSACTION_SUBTYPE LBL_TRANSACTION_SUBTYF CONSOLIDATEDTXNTBL TRANSACTIONSUBTYPE Varchar2 v Lov v Database Item v Control Control Contr	XSD Tag Comment ID Field Size • Maximum Length Minimum Value Maximum Decimals TextArea Rows TextArea Rows TextArea Columns Default Value Preview Value Mask Id	TRANSACTION_SUBTYPE CMT_TRANSACTIONTYPE 1 1		Required     Visible     Read Only     Calender Text     Popup Edit Required     Uppercase Only     LOV Validation Required     Input by LOV Only     Not Required In Xsd     Report Parameter     Format Required     Hot Key Required     Exact Fetch     Joint Holder Hot Key     Required
	Bind Variables Return Fields Related Field				
Bind Variables Map	ing			Default From Lov E	Definition
	Block Name	Bin	d Variable	Data Type	^
	N_DETAILS V	TRANSACTION_T	YPĮ ✓	STRING	_
L					
-					

Fig: Attaching LOV to a Block Field: Specifying bind variables

#### 10.2.5 <u>Return Fields</u>

Information regarding the return fields has to be provided in the Return Fields Tab. Developer has to map the block fields to which the selected values from LOV should be assigned. Click on button **Default from LOV Definition**. All Query Cols will be defaulted based on the LOV definition.

**Query Column:** This will be defaulted by the system based on the LOV definition on clicking default button.

**Block Name:** Provide the Block Name which contains the field to which the particular coulmn value has to assigned.

**Return Fid Name:** Select the data block field to which the result will be assigned. All the query Cols need not have a return field.

In the figure below AC\_GL\_NO is mapped to CRACC field. Therefore the value of result column AC\_GL\_NO from the selected record will be defaulted to CRACC field.

Bloo	ck Field Propertie	es							- 🛛 🗔 🦻
	Field Name *	TRANSACTION_SUBT	YPE		XSD Tag	TRANSACTION_SL	IBTYPE	Re	equired
	Field Label	LBL_TRANSACTION_S	SUBTYF 🔎		Comment ID	CMT TRANSACTIC	NTYPE 🔎	Vi:	
	DataSource	CONSOLIDATEDTXNT			Field Size *				ead Only
	Column Name *	TRANSACTIONSUBTY	PE		Maximum Length	1			alender Text opup Edit Required
		Varchar2 🗸			Minimum Value				opercase Only
	Display Type	Lov v			Maximum Value				DV Validation Required
	Item Type	Database Item 🗸			iximum Decimals			🗌 Ing	out by LOV Only
	Parent Field		~	Ma				_	ot Required In Xsd
	Related Block		~		TextArea Rows				eport Parameter
	Related Field	~		Т	extArea Columns			_	ormat Required
	LOV Name	LOV_TXNSUBTYPE	~		Default Value			_	ot Key Required
	Off Line LOV Name		~		Preview Value			_	act Fetch
	Fieldset Name	FST_TRANSACTION_I	NFO		Mask Id				int Holder Hot Key
	CLASSID							Re	equired
sto	m Attributes Events	Bind Variables Return F	ields Related Field						
F	Return Fields Mappi	ng					Defaul	It From Lov Definition	n
	Query (	Column		Block Na	me		Return Fie	ld Name	^
	PARAMVALUE		BLK_TRANSACTI	ON_DETAILS	~	T	RANSACTION_SUE	3. ~	
	PARAMTEXT		BLK_TRANSACTI	ON_DETAILS	×	5	UBTYPEDESCRIP	TV	

Fig: Attaching LOV to a Block Field: Specifying Return Fields

LOV Details will be generated in the script for CSTB\_LOV\_INFO which needs to compile in the FLEXCUBE schema for functioning of LOVs.

# 10.3 Guidelines and Best Practices

Note the following points while defining LOVs:

- Avoid using in line views.
- Avoid order by clause, as the same can be chosen by the user at run time.
- Select proper Label Codes and ensure that the same are available in CSTB\_LABELS.

# 10.4 Deletion and Renaming of LOVs

Deletion and Renaming of LOVs can be done provide they are created in the same release. Procedure for deletion/renaming is similar to those of data blocks explained in previous sections.

# 11. Call Forms

Call forms are function Id's that do processing which is common across many screens. Call forms cannot be launched independently. They need to be launched from another function Id. Third letter of the function id will be C for a call form. Most of the sub systems of contract screens are designed as call forms. *Example:* Settlement Screen, tax details etc.

# 11.1 Attaching Call Forms

Call forms to be attached to a function Id has to be maintained in the Call form node. Developer can add Call form by clicking on the 'add (+)' button.

RACLE FLEXCUBE Development Workbenc	-					٥
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<					Windows Options	Sign O
iction Generation						
					🔛 🗶 L	С 7
Action Load V		Function Type Parent V		Function Category Trans	action 🗸	
Function Id UTDTXN01		Parent Function		Header Template None	~	
Save XML Path (N01_RAD.xml	BROWSE	Parent Xml		Footer Template None	~	
rch						
eferences				-	Dependent Fields + -	
aSource	Function ID	Parent Data Block	Parent DataSource	Relation	31	
OfValues		BLK_TRANSACTION_DETAILS	✓ CONSOLIDATEDTXNTBL ✓	CONSOLIDATEDTXNTBL.TRANSACTIO		
aBlocks		BLK_TRANSACTION_DETAILS	✓ CONSOLIDATEDTXNTBL ✓	CONSOLIDATEDTXNTBL.TRANSACTIO		
eens	UTCPAYDT	BLK_TRANSACTION_DETAILS	✓ CONSOLIDATEDTXNTBL ✓		One To One 🗸	
dSets						
Forms						

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						Windows	Options	Sign C
ction Generation								
							×L	C 7
Action Load V	Functio	on Type Parent	~			Function Category Transaction		
Function Id UTDTXN01	Parent F	unction				Header Template None V		
Save XML Path 3N01_RAD.xml	ROWSE	ent Xml				Footer Template None		
ch								
ferences						Screen Arguments Dependent Fields		
aSource	Relation	Relation Type	Callform Screen		Active	Rest Relation With Parent	^	
OfValues	DLIDATEDTXNTBL.TRANSACTIO				Yes v			
aBlocks	DLIDATEDTXNTBL.TRANSACTION		~		Yes 🗸			
	DLIDATEDTXNTBL.TRANSACTIO	One To One 🗸	~	Button 🗸	Yes 🗸			
Forms								

#### Fig: Attaching Call Forms to the Function Id

#### 11.1.1 Function Id

Provide the call form name which has to be attached to the main screen here.

#### 11.1.2 Parent Data Block

Parent data source has to be mentioned for the call form master data source. In most cases this would be the master data source of the main function itself.

#### 11.1.3 <u>Relation Type</u>

Relation type between the parent data source and call from master data source has to be provided here. Note that relation type **has to be One to One** as Multi Record Master Blocks are not supported for call forms.

#### 11.1.4 <u>Call form Screen</u>

The screen name of the call form that has to be launched has to be mentioned here. In most cases, this will be the main screen of the call form.

#### 11.1.5 <u>Display Type</u>

Call form type has to be specified as either button or the tab name. In case of button, a **button** needs to be created and the Call form's name has to be mentioned in Call form field for the button events.

Block Field Propertie	es					- 🛛 🗔 🦻 🗅
Field Name *	BTN_FINDUH		XSD Tag	FINDUH		Required
Field Label	LBL_FINDUH		Comment ID			Visible
DataSource			Field Size *		_	Read Only
Column Name *	s		Maximum Length			Calender Text
Data Type *	× ~		Minimum Value			Uppercase Only
Display Type	Button ~		Maximum Value			LOV Validation Required
Item Type	Control 🗸		Maximum Decimals		i C	Input by LOV Only
Parent Field		~				Not Required In Xsd
Related Block		<b>~</b>	TextArea Rows		-	Report Parameter
Related Field	~		TextArea Columns			Format Required
LOV Name		~	Default Value			Hot Key Required
Off Line LOV Name		~	Preview Value			Exact Fetch
Fieldset Name	FST_TRANSACTION_INFO		Mask Id			Joint Holder Hot Key
CLASSID						Required
Custom Attributes Events						
					[	+ -
Event Name	Function Name	Even	t Type Button S	creen CallForm Nam	e Screen Name	^
🗹 onclick 🗸	fn_FindUH()	Normal	V CVS_IPOS	v v		

Fig: Maintaining button events for launching Call form screens

**Tab type** of call form is currently for Branch screens only and in which case no button is required and Oracle FLEXCUBE infra would handle the same and embeds the call form under the mentioned tab.

## 11.1.6 <u>Active</u>

Call forms from previous releases cannot be deleted. So, if they are not required, it can be turned off.

## 11.1.7 <u>Screen Arguments</u>

Whenever a Sub-Screen or Call form is launched from a main screen, there would be a necessity to send a value from calling function to the call form. This can be provided in the screen arguments window. Select the call form and click on Screen argument window .It will launch the screen argument window as shown below:

Source Block     Source Field     Argument Value       BLK_TRANSACTION_DETAILS     REFERENCE_NUMBER						Populate F	lese
BLK_TRANSACTION_DETAILS V REFERENCE_NUMBER V	Argument Name	Source Block		Source Field		Argument Value	
	JSERREF	BLK_TRANSACTION_DETAILS	<b>v</b> [	REFERENCE_NUMBER	~		
				_			_

Fig: Passing Screen Arguments to Call Form Screen

The window allows user to enter Screen Argument Name, and select Source block and field from which the value has to be taken. The user also has an option to directly give the value for the Screen Argument in the Argument value field.

Click on the **Populate** button. This will default the screen arguments for the call form as maintained in CSTB\_CALL\_FORM\_NODES table for the particular call form.

Reset button takes the screen to the initial state. All the entries made will be deleted.

#### Argument Name:

This will be defaulted based on the screen arguments specified for call form main screen maintained in CSTB\_CALL\_FORM\_NODES.

#### Source Block & Source Field:

Provide the block Name and source field of the function id whose value will be passed to the screen argument mentioned.

#### Argument Value:

If the screen argument value is to be hard coded, then value can be mentioned in this field. In this scenario, source block and source field need not be mentioned.

### 11.1.8 Dependent Fields

Subsystems may depend on the value provided in fields in main function id or in another subsystem. **Example:** 

For funds transfer contract input screen, account details are provided in the main function id. On clicking of the settlement subsystem, settlements will be defaulted based on the accounts mentioned in the main screen. So settlement subsystem is dependent on the account fields. It may also depend on the taxes applicable which are provided in another subsystem for the same .i.e. Tax subsystem.

Hence if dependent fields are changed, subsystem needs to be defaulted based on the latest values yet again before saving.

This can be achieved by maintaining the dependent fields and subsystems for a particular subsystem in **Dependent On** screen. FLEXCUBE Infra will handle the subsystem to be picked up accordingly.

As shown in the below figure, dependent fields in the main function id has to be mentioned in Fields table. Block Name and Filed Name has to be mentioned to identify the exact field. Any other subsystems (call forms) on which it is dependent can be mentioned in Services table.

Deper	ndends On	×
Field	ds	
		Populat
	Block Name	Field Name
	BLK_TRANSACTION_DETAILS V REFE	RENCE_NUMBER
Ser	vices	
	Populate	+ -
	Service	^
	UTCTXNPA V	-
		_
		~
	Ok	Cancel

Fig: Maintaining Dependent Fields Information for a Call Form

# 11.2 Guidelines and Best Practices

Note the following points while attaching call form to a screen.

- A maintenance Call form should be attached only to a maintenance function. Similarly, only transaction call forms can be attached to a transaction screen.
- Static Scripts for CSTB\_CALL\_FORM\_NODES and SMTB\_MENU generated by the Call Form Radxml has to be compiled in the FLEXCUBE schema before attaching that call form to any screen. Call form details are populated based on the maintenance in these tables.
   Therefore ensure that data is present in CSTB\_CALL\_FOR\_NODES and SMTB\_MENU for all the attached call forms.

# 12. Launch Forms

Launch Forms are function ids which can be launched from another screen for data view purpose. No processing can be done on Launch Form screen data as done in Call form. Launch Form is like any other normal function id and it can be launched independently.

Example: Screen for viewing accounting entries for a transaction

# 12.1 Attaching Launch Forms

Launch Forms to be attached to a function Id has to be maintained in the Launch Form node. Developer can add Launch form by clicking on the 'add (+)' button.

ର 🖧 🗝 whf00iqw:8088/FCJRADTool142GA/RAD			☆ =
			= مح Admir
			Windows Options Sign Out
Action Load 🗸	Function Type Parent V		ction Category Transaction V
Function Id UTDTXN01	Parent Function		ader Template None v
Save XML Path N01_RAD.xml BROWSE	Parent Xml	Fo	ooter Template None 🗸
Inch Launch	Form Details		si i i i i i i i i i i i i i i i i i i
eferences			
taSource			Screen Arguments +
tOfValues		_	
ItaBlocks	Function	a ID	Active Type
	rdfnbal.		Yes V Launch Form V
ldSets			
tions			
llForms			
unchForms			
immary			
			~
			•

Fig: Attaching Launch forms to a Function Id

#### 12.1.1 Function Id

Name of the Launch Form function id to be attached has to be specified here.

#### 12.1.2 <u>Active</u>

Launch Forms attached in one release cannot be removed in a future release. Instead, active flag can be set as NO to achieve the same.

### 12.1.3 <u>Screen Arguments</u>

Launch Form is used for query purpose only. Thus primary key and the action code have to be passed on to the Launch form screen on launching Launch Form.

Select the launch Form and click on **Screen Arguments** button. Following screen will be launched.

С	all Fo	orm Arguments			×
				F	Populate Reset
		Argument Name	Source Block	Source Field	Argument Va ^
		UHID	BLK_TRANSACTION_DETAILS V	UNITHOLDER_ID V	
		ACTION_CODE	~	~	EXECUTEQUEF
					~
					Ok Cancel

Fig: Passing Screen Arguments to Launch Form

Click **Populate** button to default the screen arguments. Note that the Screen arguments for the Launch Form have to be maintained in CSTB\_CALL\_FORM\_NODES table.

#### **Argument Name:**

This will be defaulted based on the screen arguments specified for Launch Form main screen maintained in CSTB\_CALL\_FORM\_NODES.

#### Source Block & Source Field:

Provide the block Name and source field of the function id whose value will be passed to the screen argument mentioned.

#### Arg Value:

If the screen argument value is to be hard coded, then value can be mentioned in this field. In this scenario, source block and source field need not be mentioned.

### 12.1.4 Attaching Launch form to Main Screen Using Button

Launch forms can be launched by clicking on button placed in the main screen. Button events have to be maintained such that Launch Form will be launched on clicking it. Refer the below figure for reference:

Block Field Propertie	es						- 🛛 🗔 🦃 🗅
Field Label DataSource Column Name / Display Type Item Type Parent Field Related Field LOV Name Off Line LOV Name	DataSource Column Name * Data Type * Display Type Button v Item Type Control v Parent Field Related Block v Related Field v LOV Name v Line LOV Name v		Max Mi Maximu Te TextA	XSD Tag Comment ID Field Size * mum Length nimum Value ximum Value um Decimals xtArea Rows rea Columns Default Value review Value Mask Id	ALLOCATIONTBL		Required         Visible         Read Only         Calender Text         Popup Edit Required         Uppercase Only         LOV Validation Required         Input by LOV Only         Not Required In Xsd         Report Parameter         Format Required         Hot Key Required         Focus Required         Exact Fetch         Joint Holder Hot Key         Required
Custom Attributes Events							+ -
Event Name	Function N	lame	Event Type	Button Se	creen CallForm Nan	ne Screen Name	^
onclick 🗸	fnAllocDtls()		Callform v	CVS_IPOS	UTCTXNAD V	CVS_ALLOCD	
L							
							~

Fig: Maintaining Button Event for launching Launch Form screen

## 12.2 Guidelines and Best Practices

Note the following points while attaching Launch Forms:

• Entry has to be made manually in CSTB\_CALL\_FORM\_NODES for the launch form. Script won't be generated by the Tool while designing the Launch Form. Hence it has to be inserted manually providing the screen arguments as maintained for Launch Form main screen.

Launch Forms are used only for querying data. Hence ACTION\_CODE has to be passed as a screen argument with argument value as EXECUTEQUERY and the Primary Key values for querying in launch Form screen should be passed as the other parameters.

# 13. Actions

Web Service related information and FLEXCUBE amendable fields details are captured in the actions screen.

# 13.1 Web Service Information

### 13.1.1 XSD Type identifier

A unique descriptive code should be given in this field, which would describe the nature of the Function. *For example 'LCProd' For LC Product Definition Form Screen Layout Design* 

#### 13.1.2 <u>Service name</u>

Appropriate Web service name should be selected here. LOV will fetch the service names maintained in *gwtm\_operation\_master* 

## 13.1.3 Operation Id

This is the key using which the Web service operation code would be derived. For example of Operation *Id is 'Product' Operation Code for 'QUERY' would be 'QueryProduct'.* 

Note that this should be given in Sentence case and should be unique within the service. Ensure that correct operation id is given i.e. in case of LC Product Operation id can be 'Product'. It need not be 'LCProduct'. In case of multiple products/contracts there under the same service, for example in Exchange traded derivates module, Operation Id for Deal product can 'DealProd' and for Margin product 'MarginProd' etc.

## 13.1.4 Action Code

Pre-defined actions will be available for the action code. These are the operations which are available in the FLEXCUBE.

For maintenance, type of function system enables the below action codes only:

- QUERY
- NEW
- MODIFY
- AUTHORIZE
- DELETE
- CLOSE
- REOPEN
- SUMMARYQUERY

For transaction Screens all the action would be enabled.

#### 13.1.5 <u>Operation Code</u>

If the web service is selected, the operation code will be defaulted and operation code will be the combination of action code and Operation Id and same operation code will be used to perform operations for web service.

If developer wants custom specific Operation Code names, he can provide so. For this double click on particular action code, operation code field for that action code will be enabled. Developer can modify the operation code now

## 13.1.6 Action Stage Type

For multistage actions, it should be checked. *If any field has to made amendable during the particular operation, action stage type has to be checked for the particular action* 

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						1450	dows Options	Sign (	
						VVIII	adws Options		Vui 77 (s
Action Load V			Type Parent V		Function Category		/		
Function Id UTDTXN01		Parent Fun			Header Template				
Save XML Path N01_RAD.xml	BROWSE	Paren	t Xml		Footer Template	None	~		
earch	Form Actions								-
	XSD Type I	dentifier IPOSubscriptio	on	Service Name FC	SIPOSubscription	n	Q		
DataSource	Oper	ration Id IPOSubscriptio	on	XSD Module Folder					
		Rest Enab		Rest Service Name	OSubscription				
lataBlocks		Fine Graine Required	ed Service						
icreens ieldSets cctions									
	Web Service	Action Code	Operation Code	Action Stage Type	Rest Enabled	Amendables	Comment Coc		
ctions CallForms	Web Service	Action Code	Operation Code QueryIPOSubscription	Action Stage Type	Rest Enabled	Amendables Amendables			
ctions IallForms aunchForms				•			Comments		
actions CallForms aunchForms		QUERY	QueryIPOSubscription			Amendables	Comments Comments		
ctions IallForms aunchForms		QUERY	QueryIPOSubscription CreateIPOSubscription			Amendables Amendables	Comments Comments Comments		
ctions IallForms aunchForms		QUERY NEW MODIFY	QueryIPOSubscription CreateIPOSubscription ModifyIPOSubscription			Amendables Amendables Amendables	Comments Comments Comments Comments		
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ctions IallForms aunchForms		QUERY NEW MODIFY AUTHORIZE DELETE	QueryIPOSubscription           CreateIPOSubscription           ModifyIPOSubscription           AuthorizeIPOSubscription			Amendables Amendables Amendables Amendables Amendables	Comments Comments Comments Comments Comments		
ctions IallForms aunchForms		QUERY NEW MODIFY AUTHORIZE DELETE CLOSE	QueryIPOSubscription           CreateIPOSubscription           ModifyIPOSubscription           AuthorizeIPOSubscription			Amendables Amendables Amendables Amendables Amendables Amendables	Comments Comments Comments Comments Comments Comments		
ctions allForms aunchForms		QUERY NEW MODIFY AUTHORIZE DELETE CLOSE REOPEN	QueryIPOSubscription CreateIPOSubscription ModifyIPOSubscription AuthorizeIPOSubscription DeleteIPOSubscription			Amendables Amendables Amendables Amendables Amendables Amendables Amendables	Comments Comments Comments Comments Comments Comments Comments		
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Heizets Lefons Jalforms Aunmary		QUERY NEW MODIFY AUTHORIZE DELETE CLOSE REOPEN REVERSE ROLLOVER CONFIRM	QueryIPOSubscription CreateIPOSubscription ModifyIPOSubscription AuthorizeIPOSubscription DeleteIPOSubscription			Amendables Amendables Amendables Amendables Amendables Amendables Amendables Amendables Amendables Amendables	Comments Comments Comments Comments Comments Comments Comments Comments		

Fig: Maintaining Web Services Information for a Function Id

# 13.2 Amendable Field Information

Button amendable against each action would capture the amendable information for each action. It is mandatory to give the amendable information for applicable actions for web services to function normally.

Amendable information is not just for 'Modification' and for all the applicable actions. For example in a transaction screen, for QUERY action amendable information could be Oracle FLEXCUBE Reference number, User Reference Number and External reference Number. It is not necessary to just have the Primary key in the XSD as external systems might query contracts based on any of these reference numbers.

At a block level user has to specify All Records, Delete allowed, New allowed and Mandatory. This information is used by the Tool to generate scripts and code accordingly.

### 13.2.1 <u>All Records</u>

If All records is checked, System expects the full data every time; i.e. in case of a multi record block if there are 10 records and 1 record has to be modified, external systems still should sent the remaining 9 records with the old data.

#### 13.2.2 <u>New Allowed</u>

This indicates whether a new record can be added or not, in this block as part of this action.

### 13.2.3 <u>Delete Allowed</u>

This indicates whether a record can be deleted or not, in this block as part of this action.

#### 13.2.4 <u>Mandatory</u>

This flag indicates whether the node is mandatory to be sent from external systems. This flag would be used to set the Min Occurs Flag in XSDs for that operation.

Amendable Details --QUERY × DataBlock Fields Data Blocks New Allowed Delete Allowed All Records Mandatory BLK TRANSACTION DETAILS BLK INTERMEDIARY DETAILS BLK\_LOAD\_OVERRIDE\_DETAILS Amendable Field Name BLK\_DERIVED\_LOAD\_DETAILS FUNDID  $\checkmark$ BLK\_KYC\_DETAILS UNITHOLDER ID BLK\_DOCUMENT\_DETAILS TRANSACTION\_DATE BLK\_ADDITIONAL\_INFO TRANSACTIONNUMBER ~ BLK\_LIMIT\_ORDER\_DETAILS SUB PAYMENTMODE BLK\_SETTLEMENTDTLS STATUSFLAG BLK AMOUNTDTLS MODULED\_ID BLK\_VW\_TXNSETTLEMENT PAYMENT\_MODE BLK\_TXNRECEIPTS BLK TOTALUNITS TRANSACTION\_TYPE BLK FEEPAYMENTDTLS ALLOTED\_FLAG BLK\_DELIVERYDTLS GROSSAMTIN\_FBCCY BLK\_INTCALCDTLS NETAMTIN\_FBCCY BLK\_CALCTYPE SETTLEMENTAMTIN\_TXNCCY BLK AUTH SETTLEMENTAMTIN FBCCY ----Ok Cancel

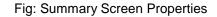
Generated code also would perform validations based on the above preferences.

Fig: Maintaining Amendable Fields Information

# 14. Summary

Summary screen can be designed using ODT if applicable.

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Search	Summary Details												⇒ ^
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## 14.1 Designing Summary Screen

### 14.1.1 <u>Title</u>

Summary screen title can be maintained here using a label code, and label code can be selected from the list of values attached to the field.

#### 14.1.2 Data Block

A block has to be selected as Summary Block. This block can be either one of the Single record blocks of the function or a block of type Summary. In most cases Master Block itself can be used for Summary also and if the requirement is to show some other information a new summary type block can be created and can be used.

## 14.1.3 Data Source

Captures the data source name of the summary, on which query should happen for summary. This will also be the data source attached to the summary data block.

### 14.1.4 <u>Summary Type</u>

Summary Type can be of:

Summary

This is the default option. For a normal summary screen to a function id, this option can be used.

Query

This is defunct.

Bulk Authorization

Checkbox option will be provided in the Summary screen. User will have the option to select multiple records in the summary screen at the same time and process it.

Example: Bulk authorization screen

• Upload

### 14.1.5 <u>Summary Screen Size</u>

Captures the size of the summary screen

### 14.1.6 Default Where Clause

This field captures the default where clause for summary query.

#### 14.1.7 <u>Default Order By</u>

This field captures the default order by clause for summary query.

#### 14.1.8 Multi Branch Where Clause

This screen is applicable only if multi branch access is checked for the screen in Preferences node. This field captures the summary where clause for multi branch screens.

#### 14.1.9 Main Summary Screen

Specifies the main form to be launched on clicking on a record from Summary Result. This is applicable only for Dashboard screens

#### 14.1.10 Summary Web Services Required

Specifies whether a web service for summary screen is required. SUMMARYQUERY action in Actions screen has to be selected as well for enabling web services for summary screen

#### 14.1.11 Data Block Fields

All the block fields present in the summary data block will appear in the text area to the left. Developer can select the block fields required in the summary screen and move it to the right.

#### Field name:

The required fields in the summary grid result can be moved to the right from data block fields.

#### **Query Field:**

Check the 'Query' for fields that need to appear in Query portion of the Summary screen. Note that maximum number of Query fields for any screen is 12.

#### LOV Name:

If the query option is checked, the properties button will be enabled, then on click of the button below screen will launch where LOV name and its corresponding return and bind variables can be defined, even min search char length details can also be mentioned here.

Summa	ary Details			>
Min	Char Details			
	Min search char length			
Lov	Details			
	LOV Name	.OV_TXNSUBTYPE V		
Return	Fields Bind Variables			
	Return Fields Mapping	3	Default From Lov Definition	1
	Query Column	Block Name	Return Field Name	^
	PARAMVALUE	BLK_SUMMARY	v) v	
	PARAMTEXT	BLK_SUMMARY	v v	
	<b></b>			
				~
			Ok Ca	ancel

#### 14.1.12 Fields Ordering

Order of the fields in the summary screen can be rearranged.

Here all the query fields will be shown to the developer in one table while all the fields in result set will be shown in another table. Order of fields in both tables can be changed by the developer as per requirement.

Title	e	2	Default Where Clause	TRANSACTIONTYF	PE = '01'	$\mathbf{P}$	
Data Blocks	BLK_SUMMARY V		Default Order By			$\sim$	
Data Source	e VWTXNSUMMARY ~		Multi Branch Where	TRANSACTIONTYF	PE = '01'	$\sim$	
Summary Type	e Bulk Authorization V		Clause				
Summary Screen Size			Main Summary Screen				
	Criteria Based Search			WebServices R	equired		
Block Fields Custor	m Buttons Fields Ordering						
_							
	Query Fields				^		
	Query Fields	Order	Resultset Field	S Ord	er		
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#### 14.1.13 Custom Buttons

Buttons can be added to summary screen using "Custom Buttons" Tab of the summary screen of Oracle FLEXCUBE Enterprise Limits and Collateral Management Development Workbench, same is shown below:

#### Number of Rows:

Adding buttons to the summary screen can be of any number, and buttons can be arranged in more than one row.

Max number of rows is 5.

#### Number of Buttons/Row

Number of Buttons per row can be maintained.

#### **Field Name:**

This refers to the button name which is placed in the summary screen.

#### Label:

Label Code for the button.

#### **Function Name:**

JavaScript function which would be invoked on clicking the particular button is maintained here. Normally, this function would be written in the release specific JavaScript file.

ummary Details						
Title			ρ	Default Where Clause	TRANSACTIONTYPE = '01'	
Data Blocks	BLK_SUMMARY	~	-	Default Order By		
Data Source	VWTXNSUMMARY	~		Multi Branch Where	TRANSACTIONTYPE = '01'	
Summary Type	Bulk Authorization	~		Clause		
Summary Screen Size	Medium	~		Main Summary Screen		
	Criteria Based Sear	ch			WebServices Required	
Number of Rows	1		Numb	per of Buttons/Row		
Number of Rows	1		Numb	per of Buttons/Row		
Number of Rows	1 Field Name		] Numt		Function Name	+ -
Number of Rows	1 Field Name	LBL_C	1		Function Name	•
		LBL_(	Lai	bel		+ E
BTN_FIND_UH	1	LBL_4	Lai	bel	fn_summary_FindUH()	
BTN_FIND_UH BTN_BULK_AUTH	1	LBL_4	Lal GETUH	bel P	fn_summary_FindUH() fn_BulkAuthorize('BULKAUTH')	

Fig: Adding Custom buttons to a Screen

Preview of the Summary screen with different ordering of query fields and result set fields are shown below.

Find UH Authorize Delete Reverse Override							
Transaction Number   Fund ID   Currency of Expression   Transaction   Transaction   Transaction Mode   Not Selected   Dealing Date   Transaction Status   records per page 15 < 1 of 1 1 Go to Page   ecords per page 15 < 1 of 1 1 Go to Page Authorization Status Reference Number Fund ID Unit Holder ID Output Currency Imultiple Imultiple Imultiple Page 15 < 1 of 1 Page Page 16 < 1 of 1 Page Page 10 of 1 of 1 Page Page 10 of 1 o	Execute Query 💐 Advanced	Search 🔊 Reset 🔀 Cle	ear All				
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cords per page 15 1 of 1 1 of 1 Go to Page Authorization Status Record Status Status Transaction Number Reference Number Fund ID Unit Holder ID Cur Id UH Authorize Delete Reverse Override							
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# 14.2 Guidelines and Best Practices

Note the following points while designing summary screen:

- Maximum number of Query Fields allowed for a summary screen is 12.
- For Maintenance screen, if summary data block and master data block are not the same, care should be taken so that name of the primary key fields of both the blocks should be the same.

# 15. Generation and Deployment of files

Once the screen development is over, files have to be generated. Use generate 📓 icon to generate files.

Once the files are generated, they have to be deployed in the FLEXCUBE environment for testing.

Refer <u>05-ODT Generation, Deployment and Release of files.docx</u> for detailed explanation.

After deployment of generated units, function id can be launched from the FLEXCUBE console.

Unit testing of the function id can be carried out and any custom code can be added for additional functionality.

# 16. Appendix

## 16.1 Screen Preview

Screen Preview gives the preview of the screen as it appears in the FLEXCUBE. It helps the developer to track the screen design changes much faster during development phase.

Preview of a screen can be viewed either by:

- 1) Clicking on the Preview icon present in the top right portion of the Screen or
- 2) By selecting preview option from right click menu option of the particular screen.

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Fig: Previewing a Screen

The preview of the screen as shown by the Tool is shown below:

<b>\</b>							×
New	Enter Query						
Transactio	on Information			Tran	saction Value		^
	Unit Holder ID	* Find UH	Transaction Number Transaction Currency		Transaction Mode * Amount ~		
	Fund ID		Reference Number		Units Applied Amount Applied		
Order Rec	r Received Date revent Time Zone Transaction Date Payment Mode Mode Description	*	Order Received Time (HH24.M) Transaction Type Description Transaction Category Description		Percent Applied Enrich Transaction Reset Transaction		
UH And F	und Transaction	Other Intermediary Load	d Override KYC And Document Ad	d Info Fee Payment Certificate Limit C	Order		
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Settlemer	nt Details   Red	ceipt Details   Project Al	location Details   Allocation Detai				
	Input By uthorized By		DateTime DateTime	Mod No Authorization Status Unauthorized ~ Record Status Open ~		Ok	Exit

Fig: Sample Preview of a Screen

By double clicking on any field in the Preview, developer can navigate directly to the particular data block field.

# 16.2 Locate Field

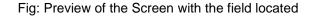
Locate Field Feature is helpful in determining the position of a field in a screen. For locating a block field in the screen, select locate field option from the right click menu of the data block field.

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REF_TYPE SCRIPBASED TRANSACTIONCURRENCY REFERENCE NUMBER									

Fig: Locating a Field in Screen

Preview of the screen containing the field will be launched and the position of the particular field will be highlighted in green background colour.

ORACLE FLEXCUBE Development Workbe	ench for Universal Banking — Mozilla Firefox						_3		×
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Order Received Date							-		-
Irder Received Time Zone			Enrich Tran	saction					
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# 16.3 Label Code Maintenance

Label Codes needs to be maintained in CSTB\_LABELS (in the current environment language) for proper generation of files by ODT.

Label Codes can be maintained in the FLEXCUBE through ODT itself.

Click on Label code Icon 🗐 found in the top right portion of the screen. Label Code maintenance screen will be launched.

				_
4	Label Code	Label Description	<< < 0 of 0 > Label Type	>> + - Operation ^
2	LBL_REFNO	Reference Number	Field Label	Insert v
-			Field Label	Insert
			Block Title Fieldset Title Screen Title LOV Column Heading Tab Heading Button Label Field Option	Update
				v
		Fetch All Labels	Fetch Missing Labels De	ploy Exit

Fig: Label Code Maintenance Screen

Label Codes can be maintained through this screen. Screen provides option to deploy the label codes directly to FLEXCUBE schema.

#### 16.3.1 Maintaining a New Label Code

For maintaining a new label code, add a new label code as required in **Label Code** field. Label code should start with **LBL\_.** Provide the description of the field in **Label description** field. **Label Type** can be selected based on the requirement. Select the **Operation** as **Insert** 

Click on **Deploy** button. ODT will insert the label code provided to CSTB\_LABELS. Language code will be taken from the language code of the current environment code.

More than one label code can be deployed at one time.

Note the following while creating new label codes:

- 1) Label Code should start with LBL\_
- 2) Label Code should not contain any special characters except underscore(\_)

#### 16.3.2 <u>Maintaining Missing labels</u>

Developer can fetch the missing labels for the screen by clicking on **Fetch Missing Labels** button. All the label codes present in the function id which is not maintained in CSTB\_LABELS will be fetched and displayed in the table. Developer can provide proper description and deploy the label codes.

#### 16.3.3 Fetch All Label Codes for the Screen

On clicking **Fetch All Labels** button, all the label codes used in the function Id will be displayed in the table. Developer can update the label description of any field he wishes.

### 16.3.4 Updating an existing Label

Fetch all Labels used in the function Id. Change the Label Description of the label codes for which update has to be done. Change the **Operation** to **Update**. Check the checkbox and click on Deploy. The selected label codes will be updated.

## 16.4 Search Feature

Search Feature allows the developer to locate an element in tree easily. It is useful while browsing a function id with many nodes.

Key In the string you want to find, ODT will search for the exact match of the string. If exact match is not found, then first n character search will be done. The first match will be highlighted in green and tree moves to the location.

Next Occurrence of the same string can be found by pressing Enter or Down Arrow key.

Figure shows an example for search feature:



Fig: Illustration of Search Feature

# 16.5 Undo Feature

Undo feature allows the developer to undo all the changes done in a particular screen of ODT.

Represents undo icon. On clicking of Undo icon the field values will be restored to the values before visiting the screen.



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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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