

Development Workbench Gateway and LOV Enhancer
Oracle Banking Treasury Management

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1 Preface

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

1.1 Audience

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

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

<i>Proficiency</i>	<i>Resources</i>
FLEXCUBE Functional Architecture	Training programs from Oracle Financial Software Services.
FLEXCUBE Technical Architecture	Training programs from Oracle Financial Software Services.
FLEXCUBE Object Naming conventions	<i>Development Overview Guide</i>
Working knowledge of Web based applications	Self Acquired
Working knowledge of Oracle Database	Oracle Documentations
Working knowledge of PLSQL & SQL Language	Self Acquired
Working knowledge of XML files	Self Acquired
Essential knowledge on FLEXCUBE ODT	<i>02-ODT Administration.docx</i> <i>03-ODT Getting Started.docx</i>

1.2 Related Documents

04-Development_WorkBench_Screen_Development-I.docx

2 Overview of Gateway 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 12.1

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.

2.1 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: STDCULND_RAD

2.2 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 Actions

Refer respective sections for detailed explanation of each step

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

2.2.1 Design Process:

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

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

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

2.2.2 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.

2.2.3 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 report screens the third character should be 'R'
- 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).

2.2.4 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.

2.2.5 Gateway Specific changes

Design of screen will be as any other normal maintenance screen, only change with in preference user has to select the screen as gateway. Below mentioned screen will help in better understanding.

Fig 2.2.5.1: Preferences Screen

Once gateway screen checkbox is selected then in generation screen only front-end units, xsd's and INC's will only be generated. Below screen shows generation screen.

Fig 2.2.5.2: Generation Screen

User has to generate the above selected units and has to deploy in FCUBS. Code has to be written in gateway flow to make this screen work. For generation and design please use 04-Development_WorkBench_Screen_Development-I.docx.

3 Overview of LOV Enhancer

Lov Enhancer is used to map Lov's of Screens to External or Combined Lovs.

3.1 External Lov

Lov of a screen is mapped to External Lov. Where all the data populated and data fetched in the lov will be from external system. User has to simply select the lov as External in the screen. Below screen will help in better understanding.

The screenshot shows the 'Lov Enhancer' application window. At the top, there is a 'Function ID' field with the value 'STD0IF'. Below this is a table with columns for 'Lov Id' and 'Internal/External/Combined'. The table lists 20 LOVs, each with a checkbox on the left and a dropdown menu on the right. The dropdown menu for the first LOV, 'LOV_ACCOUNT', is open, showing 'External' selected. The other LOVs have 'Internal' selected. At the bottom right, there are 'Generate' and 'Close' buttons. A 'Populate' button is also visible at the top right of the table area.

	Lov Id	Internal/External/Combined
☐	LOV_ACCOUNT	External
☐	LOV_ACCOUNT_OFF	External
☐	LOV_ADDRESS_CODE	Internal
☐	LOV_AML_CUST_GRP	Internal
☐	LOV_AMTCCY1	Internal
☐	LOV_BUSINESS_ACT	Internal
☐	LOV_CHG_GRP	Internal
☐	LOV_CHKLST	Internal
☐	LOV_CLG_GRP	Internal
☐	LOV_CLSCCY	Internal
☐	LOV_ALG_ID	Internal
☐	LOV_BIC	Internal
☐	LOV_COLLATERAL_TYPE	Internal
☐	LOV_COUNTRY	Internal
☐	LOV_CREDIT_RATING	Internal
☐	LOV_CURRENT_EMPLOYER	Internal
☐	LOV_CUSTPREFIX1	Internal
☐	LOV_CUSTPREFIX2	Internal
☐	LOV_CUST_CAT	Internal

Fig 3.1.1: Lov Enhancer Screen External

3.2 Combined Lov

User can use combination of lovs from external and internal. Where we will provide details of external Lov's bind variable and reduction field details. Please check the below screen.

The screenshot displays the 'Lov Enhancer' application window. A modal dialog titled 'External Lov Mapping Details' is open. Inside the dialog, the 'Lov Details' section contains the following fields: LOV Name (LOV_AML_CUST_GRP), Function ID Name (STDCIF), External LOV Name (LOV_EXT_AML_CUST), and LOV Function Name (fn_function()). Below this, there are tabs for 'Reduction Fields' and 'Bind Variables'. The 'Bind Variables' tab is active, showing a 'Bind Variables Mapping' section. This section has two lists: 'Bind Variables Available' containing 'BIND1' and 'Bind Variables Mapped' also containing 'BIND1'. Navigation arrows are between the lists. At the bottom of the dialog are 'Ok' and 'Cancel' buttons. In the background, a table is visible with columns for 'Internal/External/Combined' and rows for selecting LOV types (external, internal, combined) for multiple fields. Buttons for 'Populate', 'Combined Details', 'Generate', and 'Close' are also present.

Fig 3.2.1: Lov Enhancer Screen Combined

Here user will provide details for external LOV.

When generated after the modifications, INC will be generated with below kind of data

```
UPDATE CSTB_LOV_INFO SET LOV_TYPE = 'E' WHERE FUNCTION_ID='STDCIF' AND  
LOV_ID IN ('LOV_ACCOUNT','LOV_ACCOUNT_OFF')
```

/

```
UPDATE CSTB_LOV_INFO SET LOV_TYPE = 'C' WHERE FUNCTION_ID='STDCIF' AND  
LOV_ID IN ('LOV_AML_CUST_GRP')
```

/

```
DELETE CSTB_CMB_LOV_INFO A WHERE A.FUNCTION_ID IN ('STDCIF');
```

```
INSERT INTO CSTB_CMB_LOV_INFO (FUNCTION_ID, LOV_ID, EXTERNAL_LOV_ID,  
LOV_FUNCTION, REDUCTION_LIST, BIND_LIST) VALUES  
(STDCIF,'LOV_AML_CUST_GRP','LOV_EXT_AML_CUST','fn_function()','1~')
```

/

```
COMMIT;
```

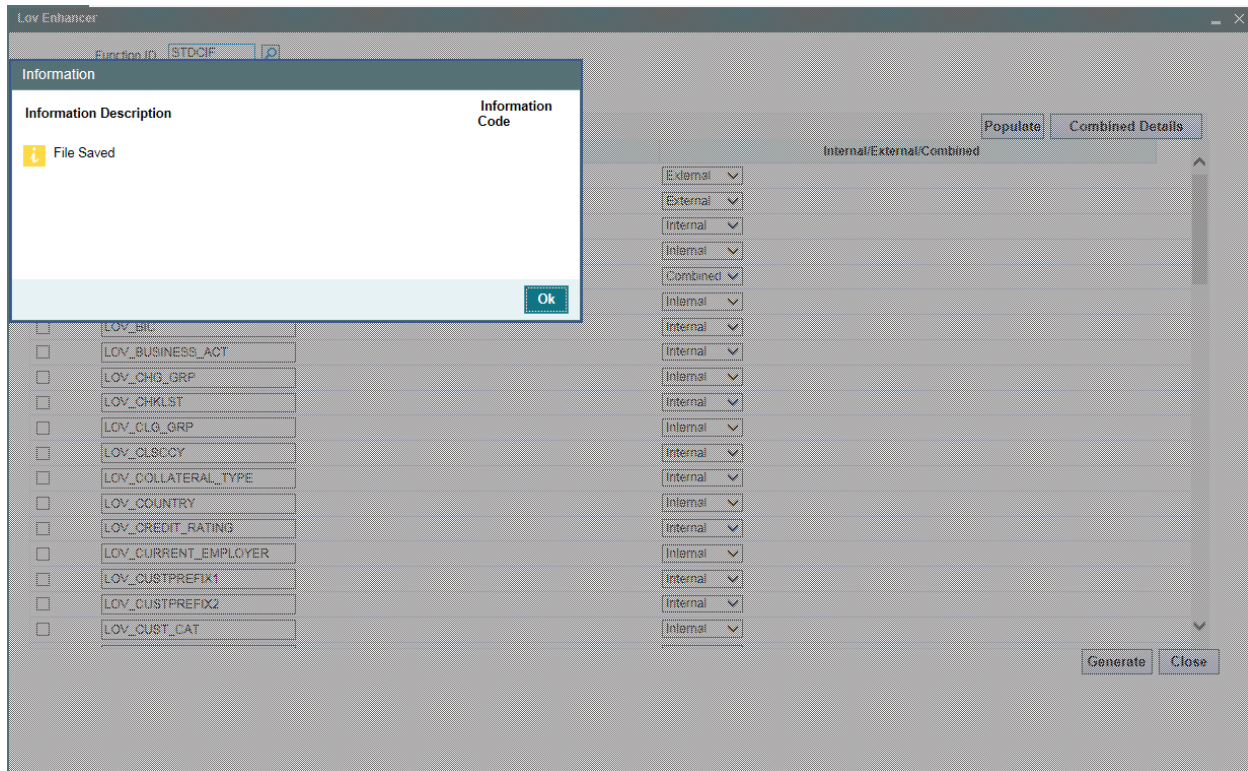


Fig 3.2.3: Generation Screen



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