

Oracle® Banking Treasury Management

Development of Online Forms



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ORACLE®

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Preface

This document describes the steps to develop the notification XML and notification trigger using Oracle FLEXCUBE Development Workbench.

- [Purpose](#)
- [Audience](#)
- [Documentation Accessibility](#)
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- [Diversity and Inclusion](#)
- [Basic Actions](#)
- [Related Documents](#)
- [Conventions](#)
- [Screenshot Disclaimer](#)
- [Acronyms and Abbreviations](#)
The list of the acronyms and abbreviations used in this guide are as follows:
- [Symbols and Icons](#)
The lists of symbols, buttons and shortcut key that are used in the application to perform various tasks are covered in this topic.
- [Prerequisite](#)

1.1 Purpose

This manual is designed to help FLEXCUBE Application developers/users to familiarize with ORACLE FLEXCUBE Development Workbench.

1.2 Audience

This guide is intended for the following User/User Roles:

Table 1-1 Audience

Role	Function
Back office data entry clerk	Input functions for funds
Back office managers/officers	Authorization functions
Product Managers	Product definition and authorization
End of day operators	Processing during end of day / beginning of day

1.3 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

1.4 Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at [Critical Patches](#), [Security Alerts and Bulletins](#). All critical patches should be applied in a timely manner to ensure effective security, as strongly recommended by [Oracle Software Security Assurance](#).

1.5 Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

1.6 Basic Actions

Table 1-2 Basic Actions

Action	Description
Approve	Used to approve the initiated report. This button is displayed, once the user click Authorize .
Audit	Used to view the maker details, checker details, and report status.
Authorize	Used to authorize the report created. A maker of the screen is not allowed to authorize the report. Only a checker can authorize a report, created by a maker.
Close	Used to close a record. This action is available only when a record is created.
Confirm	Used to confirm the performed action.
Cancel	Used to cancel the performed action.
Compare	Used to view the comparison through the field values of old record and the current record. This button is displayed in the widget, once the user click Authorize .
Collapse All	Used to hide the details in the sections. This button is displayed, once the user click Compare .
Expand All	Used to expand and view all the details in the sections. This button is displayed, once the user click Compare .
New	Used to add a new record. When the user click New , the system displays a new record enabling to specify the required data.

Table 1-2 (Cont.) Basic Actions

Action	Description
OK	Used to confirm the details in the screen.
Save	Used to save the details entered or selected in the screen.
View	Used to view the report details in a particular modification stage. This button is displayed in the widget, once the user click Authorize .
View Difference only	Used to view a comparison through the field element values of old record and the current record, which has undergone changes. This button is displayed, once the user click Compare .
Unlock	Used to update the details of an existing record. System displays an existing record in editable mode.

1.7 Related Documents

For more information refer to the Oracle Banking manuals on:

- Development of Launch Forms and Others Screens
- Enterprise Collaterals User Guide
- Enterprise Limits and Collaterals Common User Guide

1.8 Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1.9 Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes.

1.10 Acronyms and Abbreviations

The list of the acronyms and abbreviations used in this guide are as follows:

Table 1-3 Acronyms and Abbreviations

Acronyms	Abbreviations
CIF	Customer Information File

Table 1-3 (Cont.) Acronyms and Abbreviations

Acronyms	Abbreviations
CASA	Current Account and Savings Account
DDA	System that holds the CASA account and balances
ELCM	Enterprise Limits and Collateral Management
ECA	External Credit Approval
FCUBS	Oracle FLEXCUBE Universal Banking Solution
GW	Gateway
HTTP	Hyper Text Transfer Protocol
ID	Identification Number
Mark EOTI	Mark End of Transaction Input
Mark TI	Mark Transaction Input
OFSA	Oracle Financial Services Analytical Applications
ORMD	Oracle Revenue and Billing Management
PK	Primary Key
RDBMS	Relational Data Base Management System
SMS	Security Services
UI	User Interface
VD	Value Date
XML	Extensible Mark-up Language
XSD	XML Schema Definition
XSLT	Extensible Stylesheet Language Transformations

1.11 Symbols and Icons

The lists of symbols, buttons and shortcut key that are used in the application to perform various tasks are covered in this topic.

Table 1-4 Symbols and Icons

Icons	Function
	Perform search
	Minimize
	Navigate to the next record
	Navigate to the previous record
	Toggle OFF
	Toggle ON
	Delete
	Click this icon to add a new row.

Table 1-4 (Cont.) Symbols and Icons

Icons	Function
	Click this icon to delete an existing row.
	List view
	Maximize
	Navigate to the first record
	Navigate to the last record
	Advance search
	Search record
	Save the record
	Reset the record
	Clear the record

Table 1-5 Symbols and Icons - Audit Details

Icons	Function
	A user
	Branch details
	Date and Time

1.12 Prerequisite

Specify the **User ID** and **Password**, and login to **Home** screen.

2

Overview of Online Form

This topic provides an overview of Online forms.

Online Forms are function Id's (screens) used to create Contracts for respective modules. Same contracts can be processed further for Payments, Availments, Amendments, Re-assignments, and Authorizations using Online forms.

All the transaction processing in Oracle FLEXCUBE Universal Banking is carried out through Online screens. Online form screens should be launched independently.

On launching the Online form screen, the user must input the respective values to create the contract. The form may have different user-defined actions like Product-Default, Enrich, and Subsystem-Pickup while creating a contract. Once all the user-defined actions are performed user finally has to save the contract.

An LC contract is an instruction wherein a customer requests the bank to issue, advise, or confirm a credit letter for a trade transaction. An LC substitutes a bank's name and credit for the parties involved. The bank thus undertakes to pay the seller/beneficiary even if the remitter fails to pay.

Thus for each module, we should develop different function Id's for creating contracts and other online forms for other operations like Payments, Availments, Amendments, Reassignments, and Authorizations.

Below are the list of LC contract function ID's:

- LCDTRONL - Contract Input
- LCDAMEND - Amend Confirmation Input
- LCDAVMNT - Availment Input
- LCDTRPAY - Payment Input
- LCDTRANF - Transfer Input
- LCDEPMNT - Manual Liquidation Input
- LCDTREAS - Contract Reassign
- LCDTRAUT - Amend Confirmation Input



Note:

The above function ID's are given as an example only.

3

Screen Development

The design and development of an Online Form function id are similar to any other function ids.

This topic describes the following sub-topics:

- Function Generation
- Preferences

For more information, refer to [Development Workbench - Screen Development](#)

Function Generation

On the **Development Workbench Home Screen**, click on **Function Generation**.

Figure 3-1 Function Generation

The screenshot shows the 'Function Generation' window. At the top, there is a red header bar with several fields: 'Action' (set to 'New'), 'Function Id' (with a text input field containing 'LOGICNL'), 'Function Type' (set to 'Parent'), 'Function Category' (set to 'Transaction'), 'Header Template' (set to 'None'), and 'Footer Template' (set to 'None'). Below the header bar, there is a search bar and a list of navigation items: Preferences, DataSource, ListOfValues, DataBlocks, Screens, FieldSets, Actions, CallForms, LaunchForms, and Summary. The main area of the window is currently empty.

The following fields are required to be provided for creating an Online Form.

- Function ID
- Function Category
- Footer Template
- Function Type



Note:

For more information on fields, refer to [#unique_26](#) field description table.

Preferences

On the **Function Generation** screen menu, click on **Preferences**.

Figure 3-2 Preferences

The following information is required to setup the preferences for an Online Form.

- Module
- Module Description
- Script for the following tables is generated by Workbench (menu details), which are essential for launching an Online screen.
 - SMTB_MENU
 - SMTB_FCC_FCJ_MAPPING
 - SMTB_FUNCTION_DESCRIPTION
 - SMTB_ROLE_DETAILS

Note:

The Online screens type string will be generated as **O** in the **SMTB_MENU** table.

- Transaction-specific action codes must be checked in the control string, whichever is applicable. For example, LIQUIDATE, ROLLOVER, REVERSAL etc.

Note:

For more information on fields, refer to **Preference (xref)** field description table.

DataSource

On the **Function Generation** screen menu, click on **DataSource**.

While creating the data sources, the following information is required.

- Master Data Source has to be a single entry data source.
- Logical Relationships has to be maintained for all data sources except the parent.
- Provide PK Cols and PK types for all data sources. If the data source is a multi-record block, then make sure it has at least one more pk than its parent which helps to identify each record of multi-record block uniquely.
- Minimize the use of views in the data sources. System-generated upload logic (fn_sys_upload_db) is not called within the system package for transaction screens. It is up to the developer to decide whether the system generated code can be used or not. If views are used in data sources, then this function should not be used by the developer.
- Usually, a separate view can be used for the summary purpose for online forms. This view will have all the fields required to be displayed in summary. For example, LCVWS_FCJ_CONTRACT_SUMMARY

Note:

Max length of the data source field can be modified as per requirement.

DataBlocks

Determine the block structure for the function id. Define Data Blocks as per the design.

Figure 3-3 Block Properties

The screenshot displays the 'Block Properties' dialog box. At the top, there are fields for 'Action' (New), 'Function Id', 'Save XML Path', 'Function Type' (Parent), 'Parent Function', 'Parent Xml', 'Function Category' (Maintenance), 'Header Template' (None), and 'Footer Template' (None). Below these is a search bar and a tree view on the left containing 'Preferences', 'DataSource', 'CSTB_NGUL_REGISTRY', 'ListOfValues', 'DataBlocks' (selected), 'BLK_', 'Screens', 'FieldSets', 'Actions', 'CallForms', 'LaunchForms', and 'Summary'. The main area is divided into two sections: 'Block Properties' and 'Datasource Properties'. The 'Block Properties' section includes 'Block Name' (BLK_), 'Block Title', 'Parent', 'Relation Type' (One To One), and 'Block PK Fields'. The 'Datasource Properties' section includes 'XSD Node', 'Comment ID', 'Master Block' (No), 'Multi Record' (No), and 'Block Type' (Normal). At the bottom, there are two lists: 'Datasource Available' containing 'CSTB_NGUL_REGISTRY' and an empty 'Datasource Added' list, with arrows for moving items between them.

While creating data blocks:

- Master Data block has to be a single entry data source.
- Provide XSD node name if the block is normal and is required in gateway request.
- Block order and block field order can be changed by re-arranging blocks and block fields in the browser tree (drag and drop).

 Note:

All units will have to be regenerated if block or block field order is changed (including xsd's)

- Related currency fields should be placed above the amount field in the tree.

While attaching block fields to data blocks note the following:

- If the field is not required in XSD, check not Required XSD.
- Ensure that Related Block and Field are given for Amount Fields.
- Minimize the use of query data sources by using DESC fields wherever possible.

 Note:

Query data sources is rarely required for an Online Form screen, as launch form can be used for query only screens.

- The master block should contain reserved field names like TXNSTAT, AUTHSTAT, and SUBSYSSTAT (this is not shown). These are reserved field names that are essential for an online form. These will be used by Oracle FLEXCUBE Universal Banking Infra while processing. Normally TXNSTAT and AUTHSTAT are added as part of the footer of the screen.

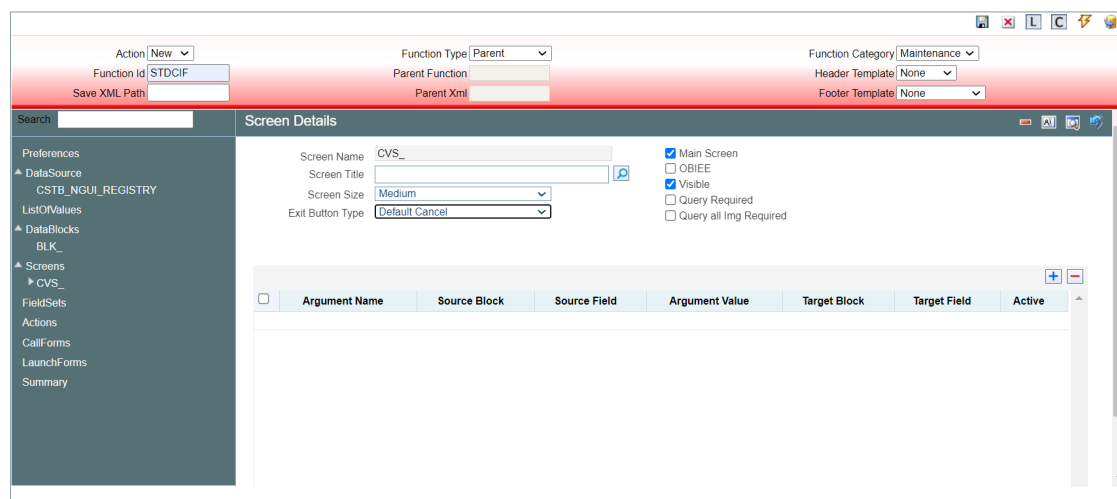
Table 3-1 Block Properties

COLUMN NAME	BLOCK FIELD NAME
CONTRACT_STATUS	TXNSTAT
AUTH_STATUS	AUTHSTAT
SUBSYSTEM_STAT	SUBSYSSTAT

Screens

Based on the requirement, design the screen.

Figure 3-4 Screen Details



While creating the screens note the following.

- One screen should be identified as the main screen.

Add Tabs, Sections and partitions as per the screen design.

When creating tabs and sections for the screen, note the following:

- If the screen does not have multiple tabs, only the TAB_MAIN needs to be used. TAB_HEADER should not contain any sections in this scenario.
- Normally Online forms are large screens with multiple tabs. In this case, all the tabs need to be used. TAB_HEADER should contain the header information. TAB_MAIN should be the first tab in the body. Other tabs have to be added in the body portion as required.
- The developer often designs footers for Online forms. Provide sections in TAB_FOOTER as required.

Note:

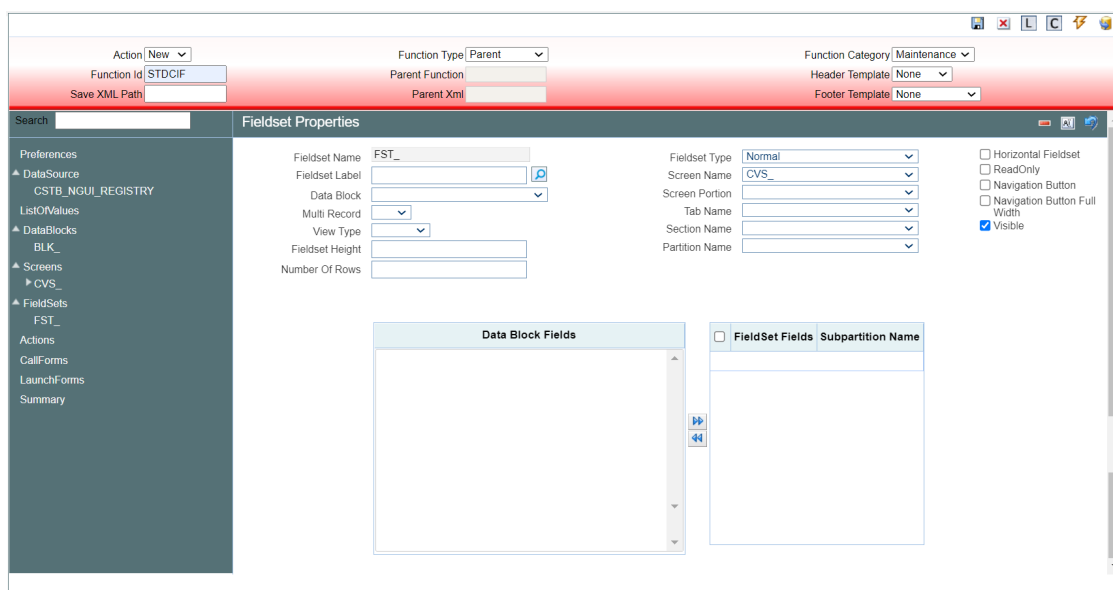
In large screens, footer supports four partitions while other portions support three partitions.

- If required, multiple screens can be designed.

FieldSets

Create Fieldsets and attach the fields to the field sets as required.

Figure 3-5 Fieldset Properties



The screenshot displays the 'Fieldset Properties' dialog box. At the top, there are tabs for 'Action' (set to 'New'), 'Function Type' (set to 'Parent'), and 'Function Category' (set to 'Maintenance'). Below these are fields for 'Function Id' (STDCIF), 'Parent Function', 'Parent Xml', 'Header Template' (None), and 'Footer Template' (None). The main area is divided into two panes: 'Data Block Fields' and 'FieldSet Fields'. The 'Data Block Fields' pane is currently empty. The 'FieldSet Fields' pane shows a table with columns 'FieldSet Fields' and 'Subpartition Name'. On the right side of the dialog, there are checkboxes for 'Horizontal Fieldset', 'ReadOnly', 'Navigation Button', 'Navigation Button Full Width', and 'Visible' (which is checked). The left sidebar shows a tree view with 'FieldSets' expanded, showing 'FST_'.

When attaching field to a field set, note the following

- If a field is not required in the screen but kept as hidden and value defaulted, the field must be made invisible and attached to a field set. If it is not attached to any fields set, the screen HTML won't contain the field and may result in a script error while accessing the field.

Actions

Mention the web service and amendable information in Actions Screen.

While maintaining web services and amendable information, note the following.

- Online forms will generate Type XSD and Message XSD. Operation-specific message xsd's will be generated. For example, name of the xsd generated will be:
 - LC-Contract-Types.xsd (Type XSD for LC Contract)
 - LC-CreateContract-Req-Full-MSG.xsd (Create Message XSD for LC Contract)
 - LC-CreateContract-Req-IO-MSG.xsd (Create Message XSD for LC Contract)
 - LC-CreateContract-Res-Full-MSG.xsd (Create Message XSD for LC Contract)
 - LC-CreateContract-Res-PK-MSG.xsd (Create Message XSD for LC Contract)
- Operation Id and Operation Code need to be maintained for the above reasons.
- Amendable information has to be maintained similar to any other function ids.

Launch Forms

Launch Forms can be attached to Online form screen.

Figure 3-6 Launch Form Details

The screenshot shows the 'Function Generation' application window. The top bar contains several input fields and dropdowns: 'Action' (New), 'Function Id' (empty), 'Function Type' (Parent), 'Parent Function' (empty), 'Parent Xml' (empty), 'Function Category' (Maintenance), 'Header Template' (None), and 'Footer Template' (None). Below this is a 'Search' bar and a 'Save XML Path' button. The left sidebar lists various components: Preferences, DataSource, ListOfValues, DataBlocks, Screens, FieldSets, Actions, CallForms, LaunchForms, and Summary. The main area is titled 'Launch Form Details' and contains a table with the following structure:

Function ID	Active	Type
☒	Yes	Launch Form

There is also a 'Screen Arguments' section with a '+' and '-' icon.