

Oracle FLEXCUBE UBS - ELCM Integration

Oracle FLEXCUBE Universal Banking

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Oracle FLEXCUBE UBS - ELCM Integration User Guide
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1. Preface

1.1 Introduction

This document helps you acquaint with the information on inter-connecting Oracle FLEXCUBE Universal Banking System (FCUBS) with Enterprise Limits and Collateral Management (ELCM).

Besides this user manual, while maintaining the interface related details, you can invoke the context sensitive help available for each field in FCUBS. This help describes the purpose of each field within a screen. You can obtain this information by placing the cursor on the relevant field and striking the <F1> key on the keyboard.

1.2 Audience

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

| Role | Function |
|-------------------------------|--|
| Back office data entry Clerks | Input functions for maintenance related to the interface |
| End of day operators | Processing during end of day |
| Implementation Teams | For setting up integration |

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>.

1.4 Organization

This chapter is organized into following chapters:





| Chapter | Description |
|-----------|--|
| Chapter 1 | <i>Preface</i> gives information on the intended audience. It also lists the various chapters covered in this User Manual. |
| Chapter 2 | <i>Oracle FCUBS - ELCM Integration</i> explains the integration between Oracle FLEXCUBE Universal Banking and Enterprise Limits and Collateral Management. |
| Chapter 3 | <i>Annexure</i> provides the details of supported and unsupported functionalities of ELCM. |

1.5 Acronyms and Abbreviations

| Abbreviation | Description |
|--------------|--|
| System | Unless and otherwise specified, it always refers to Oracle FLEXCUBE Universal Banking system |
| FCUBS | Oracle FLEXCUBE Universal Banking System |
| ELCM | Enterprise Limits and Collateral Management |
| SYNC | Synchronous |
| ASYNC | Asynchronous |
| XML | Extensible Markup Language |

1.6 Glossary of Icons

This user manual may refer to all or some of the following icons.

| Icons | Function |
|---|-------------|
|  | Exit |
|  | Add row |
|  | Delete row |
|  | Option List |

1.7 Related Information Sources

Along with this user manual you may also refer the following related resource:

- Oracle FLEXCUBE Universal Banking Installation Manual
- Common Core - Core Entities and Services User Guide
- Core Services User Guide

2. Oracle FCUBS - ELCM Integration

Banks extend various credit facilities like limits to its customers depending on their requirements. Based on the bank's business model and their target customers they have one of the following scenarios:

- Banks extending basic credit facilities to customers like overdraft or small loans who will prefer to manage the limits within the core banking system (Standalone FCUBS installation)
- Banks dealing with corporates who require trade finance and treasury that requires limit to be routed through dedicated system to manage the collateral and limit details

This chapter contains the following sections:

- [Section 2.1, "Scope"](#)
- [Section 2.2, "Prerequisites"](#)
- [Section 2.3, "Integration Process"](#)

2.1 Scope

This section contains the following topic:

- [Section 2.1.1, "FCUBS Installation Modes"](#)

2.1.1 FCUBS Installation Modes

This document talks about two types of FCUBS installation modes. They are:

- FCUBS with No External Limits - For this installation mode limit support is within FCUBS through local facility and local collateral
- FCUBS with External Limits - The integration supports the following modes of FCUBS - Limits installation:
 - Standalone Limits system with FCUBS - SYNC Method
 - Standalone Limits system with FCUBS - ASYNC Method
 - Componentized limits installation - SYNC Method
 - Componentized limits installation - ASYNC Method
 - Embedded Limit Installation with FCUBS

| Details | Standalone | | Componentized | | Embedded (5) |
|-------------------------|----------------|----------------|---------------|--------------|--------------|
| | SYNC (1) | ASYNC (2) | SYNC (3) | ASYNC (4) | |
| Data Storage | Different DB | Different DB | Same DB | Same DB | Same DB |
| Deployment | Different App. | Different App. | Same App. | Same App. | Same App. |
| Mode Interface | Web Services | Web Services | Web Services | Web Services | JDBC/ POJO |
| Limit Response Handling | Online | Deferred | Online | Deferred | Online |

2.2 Prerequisites

Set up Oracle FLEXCUBE Universal Banking Application. ELCM user will have read-only access to this application. The access is provided only to particular extraction tables.

Refer the 'Oracle FLEXCUBE Universal Banking Installation' manual.

2.3 Integration Process

This section contains the following topics:

- [Section 2.3.1, "Installation Modes"](#)
- [Section 2.3.2, "Integration Maintenance and Processing"](#)

2.3.1 Installation Modes

The following installation modes are described in the upcoming sections:

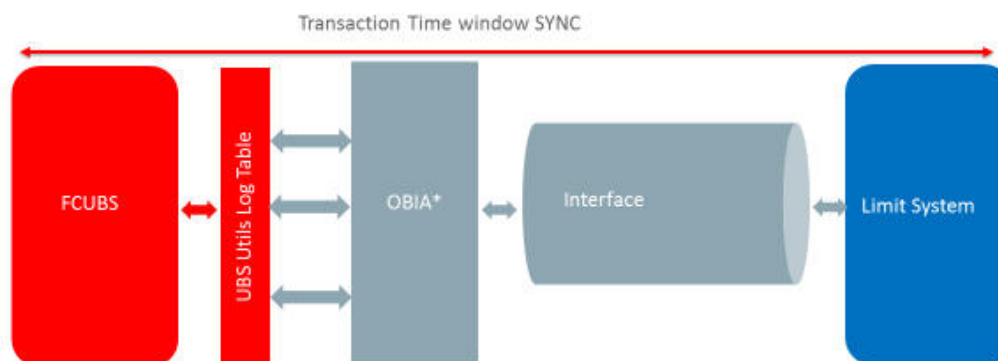
- ASYNC Installation for Standalone and Componentized
- SYNC Installation for Standalone and Componentized
- Embedded Limit Installation with FCUBS

2.3.1.1 ASYNC Installation (Standalone and Componentized)

If the mode of limits installation is selected as ASYNC (Standalone/Componentized), the limits requests will be logged with Limits Pending Status in FCUBS Limits Queue. These pending limits requests are picked by a job to form the webservices XML requests. The status of the limit request will be updated in FCUBS based on the external limits response. The status can be Approved, Rejected or Timed-out. FCUBS will authorize the transactions that are in Approved status.

ASYNC Installation Architecture

FCUBS –Limits-Transaction- SYNC Flow

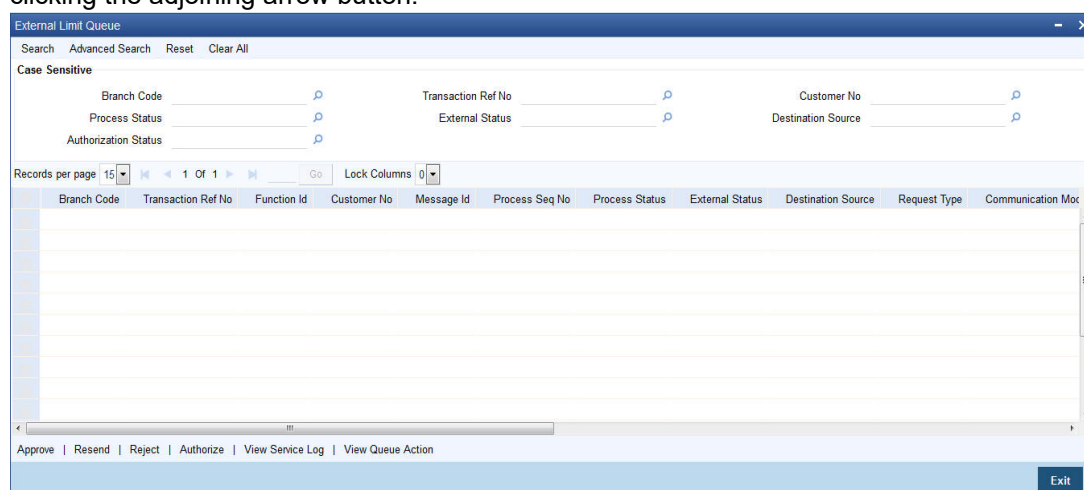


* Oracle Banking Interface Adaptor

Limit Processing Queue

You can query and perform manual actions on external limit requests using Limit Processing Queue screen. This screen supports user action only on timed out requests. You can invoke

this screen by typing 'SQSEXLMT' in the top right corner of the Application toolbar and clicking the adjoining arrow button.



You can view records based on any or all of the following criteria:

- Branch Code
- Process Status
- Authorization Status
- Transaction Ref No
- External Status
- Customer No
- Destination Source

Select any or all of the parameters for a query and click 'Search' button. The records meeting the selected criteria are displayed.

External Limit Queue supports user actions only on a timed out request. A limit request is moved to 'Timed-out' status based on the time out parameter maintained. If response is not received from the external system within the given time, the status is marked as timed out. The following actions are allowed on a timed out requests:

- Approve - Manual approval of external limits
- Reject - Manual rejection of external limits
- Authorize - Authorization of external limits approval or reject done from queue
- Resend - Resend of timed-out request

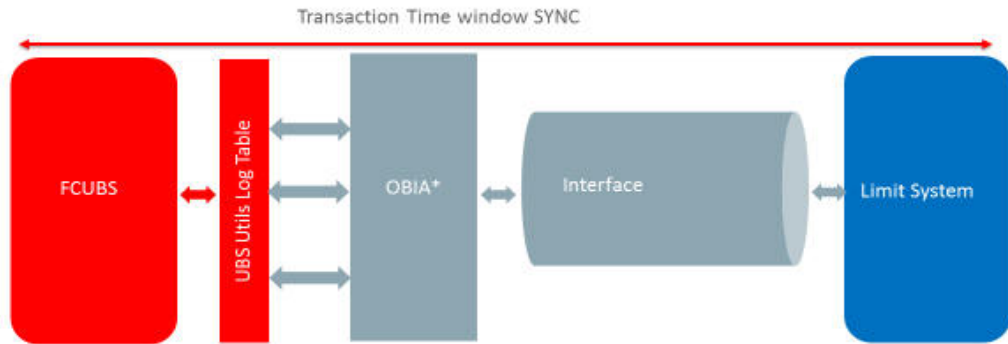
2.3.1.2 **SYNC Installation (Standalone and Componentized)**

If the mode of limits installation is selected as SYNC (Standalone/Componentized):

- the limit transactions are processed in the transaction time window
- FCUBS creates the limit request during the transaction and sends it to the external limit system
- the response received from the external limit system along with the overrides and errors are displayed to the user during the transaction
- the user can approve the limits overrides and proceed with the transactions from FCUBS

SYNC Installation Architecture

FCUBS –Limits-Transaction- SYNC Flow



* Oracle Banking Interface Adaptor

2.3.1.3 Embedded Limit Installation with FCUBS

If mode of installation is selected as embedded limits installation, then FCUBS and ELCM are installed as embedded system. All the limit utilization will be processed online and the response is provided to the user in the transaction window.

2.3.2 Integration Maintenance and Processing

The following sections describes the integration maintenance and processing in detail. You can maintain external services using 'External Service Maintenance' screen. You can invoke this screen by typing 'IFDEXSER' in the top right corner of the Application toolbar and clicking the adjoining arrow button.

The screenshot shows the 'External Service Maintenance' application window. At the top, there is a 'New' button and an 'Enter Query' field. The main form contains several fields: 'External System *' (a dropdown menu), 'External System Type' (a dropdown menu with 'Default' selected), 'External User *' (a text input field), 'External System AppID' (a text input field), 'Read Time Out (In Seconds)' (a text input field), 'Connection Time Out (In Seconds)' (a text input field), 'Retry Count' (a text input field), 'Archival Days' (a text input field), and a 'Rest Service Secured' checkbox. Below the form is a table with columns: 'Type', 'Service Name', 'WS Endpoint URL', 'Rest Service Context', 'Rest Service IP', and 'Rest S'. The table is currently empty. At the bottom of the window, there are fields for 'Maker', 'Date Time', 'Mod No', 'Record Status', 'Checker', 'Date Time', and 'Authorization Status'. There are 'Ok' and 'Exit' buttons in the bottom right corner.

You can maintain the following in this screen:

External System

Specify the external system, Alternatively, you can select the external system from the option list. The list displays all valid values maintained in the system.

Description

The system displays the description based on the external system selected.

External System Type

The system defaults the External System Type.

External User

Specify the external user.

Type

Select the type from the drop-down list.

External System AppID

Specify the External System AppID.

Service Name

Specify the service name. Alternatively, you can select the service name from the option list. The list displays all valid service name maintained in the system.

WS Endpoint URL

Provide WS endpoint URL.

Rest Service Context

The system displays the rest service context.

Rest Service IP

The system displays the rest service IP.

Rest Service Pattern

The system displays the rest service pattern.

Read Time Out (In Seconds)

Specify the web service read time out in seconds.

Connection Time Out (In Seconds)

Specify the web service connection time out in seconds.

Retry Count

Specify the retry count for reprocessing the records.

Archival Days

Specify the archival days.

Rest Services Secured

Select the check box.

2.3.2.1 Installation Parameters

You can select the required external limit setup mode and communication mode during installation.

Limit Setup Mode (ELCM SETUP MODE)

The following parameters can be used for limit setup mode:

- N - Should be used for No External Limit setup (default)
- S - Standalone UBS - Limits setup/ Componentized Limits setup

- E - Embedded UBS Limit setup

External Limit Interface Mode (UBS_EL_COMM_MODE)

The following parameters can be used for external limit interface mode:

- A - Asynchronous
- S - Synchronous

This is applicable for Standalone UBS - Limits setup/ Componentized Limits setup.

2.3.2.2 FCUBS with No External Limits Installation

If FCUBS is installed with no external limits:

- Local facility can be created using 'External Facilities Maintenance' (STDCRFAC) screen
- Local collateral can be created using 'Local Collateral Maintenance' (STDCOLAT) screen
- Linkage can be done at customer account and module level as applicable
- FCUBS does the utilization tracking and validations for local facilities and collaterals

2.3.2.3 FCUBS with External Limits Installation

If FCUBS is installed with external limits, then:

- following limit details are replicated from external system to FCUBS:
 - Liability details
 - Customer liability linkage
 - Facility details
 - Collateral details
 - Collateral pool details
- local collateral can be created using the 'Local Collateral Maintenance' (STDCOLAT) screen
- linkage is done at customer account and module level
- for local facility and collateral FCUBS tracks the limit balances and performs the validations, and hands over the utilisation to the external system
- you can also link global limits as applicable based on the data replicated from external system
- for non-local limit types, FCUBS does the limit processing based on the external system response.
- in case of Batch operation FCUBS posts the utilisation to external limits as Force Post

2.3.2.4 Retry mechanism for core replication

Currently Scheduler picks the Record which is having the PROCESS_STATUS value as 'A' and 'U' and EXT_STATUS is 'U' while replication to core system.

As per existing Mechanism FCUBS replication is happening for Request type M & U (Maintenance and Utilization).

Request Type M (Maintenance)

Scheduler picks all the failed records either technical or Functional in below filter criteria:

- PROCESS_STATUS is A,P and EXT_STATUS is T (Time out Occur scenario).

- PROCESS_STATUS is E,F and EXT_STATUS is U (Unhandled exception before web service call itself)

Request Type U (Utilization)

Scheduler picks the technical failure records only for retry mechanism such as request time out or service Maintenance problems. The system will not consider functional Failure records.

- PROCESS_STATUS is F,E and EXT_STATUS is U (Unhandled exception before web service call itself)
- PROCESS_STATUS is P and EXT_STATUS is T (Time out Occur scenario).

Salient Points

- During the process of Core Replication, the system will increase the Retry count each time whenever Failure happens while Processing Records.
- If the retry count is more than the maintained parameter value, the system will not consider the record for the retry process even if the status is Failure
- This is a technical retry only. For functional failure, the user needs to do the necessary corrections and then do a Manual Retry.
- For Example- If there is a wrong field value / mandatory field is not populated, the retry will fail for the maximum retry count. Post this the user has to monitor such cases, correct the same, and then do a manual retry through the front-end screen.

3. Annexure

3.1 List of Integration Features

For details on features that are supported and unsupported in FCUBS and ELCM, refer the excel sheet [Limit_Changes.xlsx](#)

4. Function ID Glossary

I

IFDEXSER2-4

S

SQSEXLMT 2-3