# Oracle FLEXCUBE UBS - External Accounting Interface Oracle FLEXCUBE Universal Banking

Release 14.5.5.0.0

Part No. F56689-01

May 2022



Oracle FLEXCUBE UBS - External Accounting Interface User Guide 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

Phone: +91 22 6718 3000 Fax: +91 22 6718 3001

https://www.oracle.com/industries/financial-services/index.html

Copyright © 2007, 2022, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

# **Contents**

1.	Pre	face		1-1	
	1.1	Introdu	uction	1-1	
	1.2	Audier	nce	1-1	
	1.3	Documentation Accessibility			
	1.4	4 Organization			
	1.5	Acrony	yms and Abbreviations	1-2	
	1.6	Glossa	ary of Icons	1-2	
	1.7	Relate	d Information Sources	1-2	
2.	Ora	cle FC	UBS - External Accounting Interface	2-1	
	2.1	Scope		2-1	
	2.2	Prerec	puisites	2-1	
	2.3	Integra	ation Process	2-1	
		2.3.1	Account Service Validations	2-1	
		2.3.2	Multiple Account Service Validations	2-2	
		2.3.3	Handling External Credit Approval (ECA) Requests	2-2	
		2.3.4	Triggering Accounting Entries to FCUBS	2-7	
		2.3.5	Processing Account Statements	2-11	
		2.3.6	Multi Currency Accounts	2-11	
		2.3.7	Handling MIS for External Product Processor	2-11	
		2.3.8	Notify ECA/EA status for pending ECA/EA	2-12	
3.	Ora	cle FC	UBS - Integration with OBLM	3-1	
	3.1	Scope		3-1	
	3.2	Prerec	puisites	3-1	
	3.3	Integra	ation with OBLM	3-1	
		3.3.1	Enhancing ECA to create a RTL Block	3-1	
		3.3.2	Enhancing ECA to Close a RTL Block	3-4	
		3.3.3	Enhancing EA for EA> ECA Block amount or EA without ECA	3-4	
		3.3.4	Enhancing Internal Transaction	3-4	
		3.3.5	OFCUB-OBLM Interface Processing	3-5	
4.	Anr	nexure		4-1	
	4.1		nting Hand-off from External System to FCUBS		
5	Fun			5_1	

# 1. Preface

# 1.1 Introduction

This document helps you to get acquainted with the information on inter-connecting Oracle FLEXCUBE Universal Banking System (FCUBS) with the External Product Processor.

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 <u>Documentation Accessibility</u>

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	Preface gives information on the intended audience. It also lists the various chapters covered in this User Manual.		
Chapter 2	Oracle FCUBS - External Accounting Interface explains the integration between Oracle FLEXCUBE Universal Banking and External Product Processor.		
Chapter 3	Annexure - provides the details of data exchange.		
Chapter 4	Function ID Glossary has alphabetical listing of Function/ Screen IDs used in the module with page references for quick navigation.		



# 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
ILM	Integrated Liquidity Management
Source System	Oracle FLEXCUBE Universal Banking System (FCUBS)

# 1.6 Glossary of Icons

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

Icons	Function
×	Exit
+	Add row
J	Delete row
٥	Option List

# 1.7 Related Information Sources

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

- Oracle FLEXCUBE Universal Banking Installation Manual
- Procedures User Manual
- CASA User Manual



# 2. Oracle FCUBS - External Accounting Interface

The integration between the Oracle FLEXCUBE Universal Banking System (FCUBS) and an External Product Processor enables processing external accounting entries in Oracle FLEXCUBE through external product processors.

This chapter contains the following sections:

- Section 2.1, "Scope"
- Section 2.2, "Prerequisites"
- Section 2.3, "Integration Process"

# 2.1 Scope

This section describes the scope of the integration with respect to FCUBS and an External Product Processor. Oracle FLEXCUBE allows processing external accounting entries to FCUBS. The system updates the customer account and ledger balances for the external product transactions.

The FCUBS accounting module will handle the ECA requests from external systems and processes the external transactions. The following accounting stages are impacted due to the external interface changes:

- Account service validations (EAC check)
- ECA request for accounts and related operations
- Debit transactions from external systems (ECA)
- · Credit transactions from external systems
- Notify ECA/EA status for pending ECA/EA

# 2.2 <u>Prerequisites</u>

Set up Oracle FLEXCUBE Universal Banking Application and the other external product processor interacting with FCUBS.

Refer the 'Oracle FLEXCUBE Universal Banking Installation' manual.

# 2.3 Integration Process

This section contains the following topic:

- Section 2.3.1, "Account Service Validations"
- Section 2.3.2, "Multiple Account Service Validations"
- Section 2.3.3, "Handling External Credit Approval (ECA) Requests"
- Section 2.3.4, "Triggering Accounting Entries to FCUBS"
- Section 2.3.5, "Processing Account Statements"
- Section 2.3.6, "Multi Currency Accounts"
- Section 2.3.7, "Handling MIS for External Product Processor"
- Section 2.3.8, "Notify ECA/EA status for pending ECA/EA"



## 2.3.1 Account Service Validations

The system performs account related validations for external transactions based on the requests. The response of these requests will be send to the external system.

FCUBS validates the status of the accounts based on the debit credit indicator send in the request. The account service validation request from the external system will be handled by 'QueryCustAccVal' interface.

For account related validations, the account validation services with credit indicator will be used. System performs the following validations on the accounts:

- Check unauthorized accounts
- Check closed accounts
- Check frozen status of CIF / account
- Check pending primary party change
- Check no debit marked for account
- Check no credit marked for account
- Check dormancy status of account
- Check debit interest due on account
- Check debit transactions if customer has become major and if age proof not submitted

If these account related validations are maintained as an override, then the request will be approved. If the validations are configured as an error, then the request will be rejected.

- If debit or credit indicator is specified as 'None' (N), only the account service validations like unauthorized account, closed account will be performed.
- If debit or credit indicator is specified as 'Debit' (D), then debit related validations like No debit, CIF minor, dormancy etc will be performed.
- If debit or credit indicator is specified as 'Credit' (C), credit related validations like No credit, dormancy will be performed.
- If debit or credit indicator is specified as 'Both' (B), then both credit and debit account service validations will be performed.

If any account validation fails, then the failure response will be send to the external system.

# 2.3.2 Multiple Account Service Validations

The system performs validations on multiple accounts for external transactions based on the request. The response of this request will be sent to the external system.

The new service CreateEACAccVal in 'FCUBSAccService' does the same validations on multiple accounts like QueryCustAccVal in 'FCUBSAccService' does for single account.

In multiple account related validations, if validation returns override, the validation is considered successful. If validation returns error it fails. In case of Dual Auth (error type is D), validation is treated as override and returns success.

Validation can be checked from both Gateway Service and ReST service.

# 2.3.3 <u>Handling External Credit Approval (ECA) Requests</u>

In this stage, the system performs account balance check and validations for the debit transactions. The debit transactions from external system will be processed through ECA. The



amount requested for debit will be blocked in the account and the response will be send to the external system.

The system performs the following in this stage:

- If any account related validations fails and is configured as an override, then ECA will be approved. If it is configured as an error, ECA will be rejected.
- If the account validations are passed, then available balance check is done in the
  account. Balance check will take account level limits (TOD, Uncollected Limits, Daylight
  Limits) also into consideration for ECA approval. Minimum balance check will be
  performed on accounts during ECA block.
- If the total available balance is greater than or equal to ECA amount, system creates an amount block for ECA amount and ECA will be approved. If the available balance is less than ECA amount then ECA request will be rejected.
- If ECA account is linked to ELCM, an account balance check is performed based on the
  total available amount. If the available balance is less than ECA amount, system will
  look for limits availability and will perform limit utilization. An amount block will be
  created for the full ECA amount. ECA reference number will be generated for each ECA
  request.
- Amount block created through external systems, will be shown under ECA blocked amount (ACY\_ECA\_BLOCKED\_AMT) in account balance table (sttm\_account\_balance). The 'Blocked Amount' field in STDCUSAC will display consolidated amount blocked through FCUBS or external systems.
- If the account has sweep facility enabled and is opted in the request, then the sweep
  processing will be done based on the ECA request. If the ECA request is sent with
  sweep required, system will perform sweep for the amount required. By default, sweep
  required will be 'No' for the requests.
- If the ECA amount is more than account balance post sweep, limit amount will be utilized for the remaining amount, if available.
- ECA external request reference is captured in request and system sends the ECA block reference in the ECA approval.
- Any ECA requests which are received during EOD will be processed. If the block results in any sweep entries it will be tanked.
- If one or more of the accounts under a request have failed for ECA block, ECA block will be done for the remaining accounts and account wise response will be returned.
- A tag 'UPDASERRIFANYFAIL' will be given to stop ECA block for the entire request, if any of the account has failed for ECA block. If the tag UPDASERRIFANYFAIL has value 'No' in the request, system will do the ECA block for the remaining accounts and only the ones with error will be failed. A success response will be given in this case against the ECA request. If tag UPDASERRIFANYFAIL is 'Yes', entire ECA request sent under create external ECA reference number will be rejected, even if one account fails for ECA block. A failure response will be given in this case against the ECA request.
- System will support partial block, if partial block tag is yes in the ECA Request. If
  account has lesser balance than the requested ECA amount, system will approve to the
  extent of available amount and the response will be send with the approved amount.
- If the partial release tag is No, partial request will not be allowed, ECA should be utilized
  in full. By default partial blocking will be No for the requests, if not sent by external
  systems.
- On ECA approval, account withdrawable balance will be reduced to the extent of ECA approved amount.
- Minimum ECA block amount maintained at account class (sttm\_account\_class) will be validated for the ECA block amount. If partial block is allowed, then system will first check whether amount is greater than the minimum ECA amount on account class level.



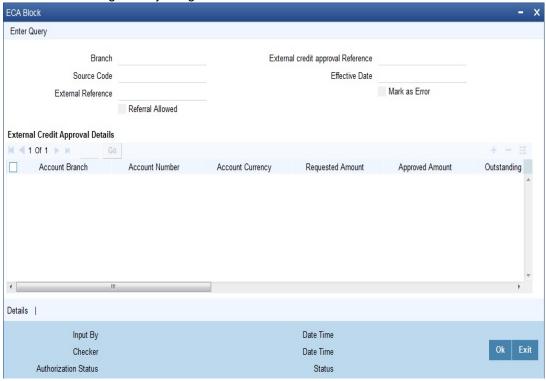
- If block amount is more than Minimum ECA block amount, but less than the available amount at the account, then error will be thrown for insufficient balance.
- If ECA debit request is rejected, the placed ECA block will not be released automatically. The external system has to send ECA Undo request to release the ECA block.
- You can do an ECA debit for lesser amount than the approved amount. The system will
  release the amount for full and do the debit for lesser amount that is requested. The
  balance amount will be released to the customer account.
- ECA debit can be done for lesser amount multiple times against an ECA block. This will be send as partial ECA debit request.
- You can also do an ECA debit for a bigger amount than the approved amount. When
  the ECA amount exceeds the approved amount the ECA block will be closed and the
  system performs account validations on the debit account for the excess amount. If the
  account does not hold balance for the additional amount, the entire ECA debit requested
  for the current transaction will fail.
- Effective date will be defaulted to application date for ECA block creation.
- TD and CL accounts will not be allowed in ECA creation.
- If Referral Allowed is set as 'Yes' and any dual auth/multi auth error is raised during ECA
  creation, then the transactions are parked in to the respective queue (OVDAUDEF and
  STDTREFQ) for further processing and sent pending status to the External system.
- 'OVDAUDEF' screen can be used to authorize/reject the transaction in case of dual authorization. And 'STDTREFQ' screen can be used to authorize/reject the transactions in case of multi authorization errors.
- When dual/multi auth queue records are authorized, then the ECA status becomes active. When the dual/multi auth queue records are rejected, then ECA status will be marked as an error.
- If dual auth queue records are rejected, then the pending approvals in the multi auth queue will get auto rejected for the same transactions or viz versa.

### 2.3.3.1 Viewing ECA Block Details

The system creates an ECA amount block on an account when an ECA request is approved. This blocked amount is used for ECA debit and will be active till the approved amount is debited or ECA request is cancelled. The interface 'CreateEcablk' will perform the ECA block request. You can view the ECA Block details in ECA block screen. The system allows you to only query the details in this screen. Other operations are not allowed in this screen. You can



invoke this screen by typing 'CADECABL' in the field at the top right corner of the Application toolbar and clicking the adjoining arrow button.



Click 'Enter Query' to specify and view the following details:

#### **Branch**

The system displays the current branch code.

#### **Source Code**

The system displays the source code passed in the request.

#### **External Reference**

Specify the external reference number.

#### **ECA Reference**

Specify the ECA reference number.

#### **Effective Date**

The system displays the effective date.

### **Referral Allowed**

Select this option to specify Referral Allowed.

### Mark as Error

If 'Mark as Error' is enabled then the complete ECA request will be rejected even if one account fails in the validation.

### **ECA Details**

The following ECA details are displayed based on the query:

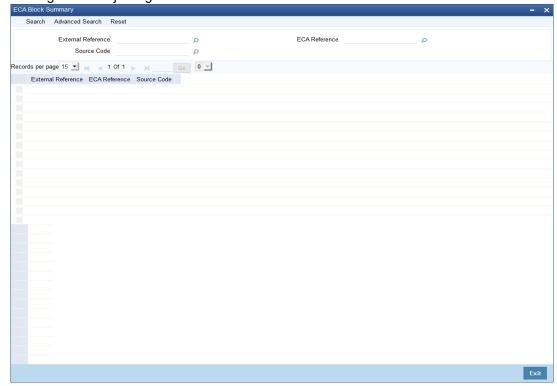
- Account Branch
- Account Number
- Account Currency



- Requested Amount'
- Approved Amount
- Outstanding Amount
- Status
- Remarks
- Sweep Required
- Partial Block Required
- Partial Release Allowed

### 2.3.3.2 <u>Viewing ECA Block Details</u>

You can view details of ECA Block through 'ECA Block Summary' screen. You can invoke this screen by typing 'CASECABL' the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.



You can search records based on the following parameters:

- External Reference
- Source Code
- ECA Reference

Click on 'Search' button with or without entering any of the above search parameters. All records matching the search criteria are displayed. To view a particular record double click on the desired record displayed in the list of records. The following details pertaining to each record is displayed:

- External Reference
- ECA Reference
- Source Code



### 2.3.3.3 Cancelling ECA Request

The system allows you to cancel an approved and active ECA request. On cancellation request the system will release the amount block created on ECA block.

The system performs the following if cancellation of ECA is requested:

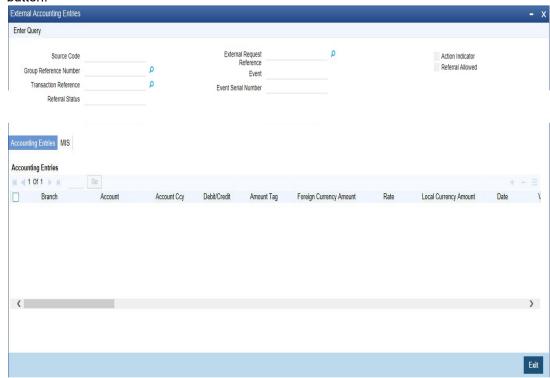
- ECA amount block created on block will be marked as Cancelled on ECA Undo.
- If any sweep transaction is executed on ECA block it will be reversed.
- If any ELCM utilization is done during ECA block, it will be de-utilized if line is revolving.
- Any debit request on the cancelled ECA request will be rejected.
- Partial cancellation of ECA request is not possible with Undo ECA option.
- Once the cancel ECA is successful, the confirmation will be provided in response against the Undo reference number.

### 2.3.3.4 ECA Undo and Query Block Interface

The interface 'CloseEcablk' and 'QueryEcablk' will perform ECA undo request and query the status of ECA transactions respectively. The system displays the approved amount, outstanding ECA amount ECA status etc for queried ECA external reference number.

### 2.3.4 Triggering Accounting Entries to FCUBS

The external systems can trigger accounting entries to FCUBS through external accounting interface 'CreateExtAccEcaEntries'. This interface will do all the customer account validations during accounting. All the entries posted from the product processors will be passed as an authorized entry. You can view the external accounting entries passes using 'External Accounting Entries' screen. The system allows you to only query the details in this screen. Other operations are not allowed in this screen. You can invoke the screen by typing 'IFDEXACC' in the top right corner of the Application toolbar and clicking the adjoining arrow button.



Click 'Enter Query' to specify and view the following details:



#### **Source Code**

The system displays the source code passed in the request.

#### **Group Reference Number**

Specify the group reference number generated for accounting handoff. All the entries under one handoff is treated under a group reference number.

#### **Transaction Reference**

Specify the transaction reference number specified in the ECA debit request. Alternatively, you can select the transaction reference from the option list. The list displays all valid options.

#### **External Reference Number**

Specify the external reference number. Alternatively, you can select the external reference number from the option list. The list displays all valid options.

#### **Event**

The system displays the vent passed in ECA debit request.

#### **Event Serial Number**

The system displays the event serial number generated on accounting hand-off.

#### **Referral Status**

The system displays the referral status.

#### **Action Indicator**

Check this box to indicate if the MIS send by the external product processor is new.

#### **Referral Allowed**

Select this option to specify Referral Allowed.

If 'Referral Allowed' is set as 'Yes' and any dual/multi auth error raised during EA, then the transaction inserted to the respective queue (OVDAUDEF and STDTREFQ) for further processing.

If dual/multi auth queue is authorized, then the EA status become authorized. If it is rejected, then the EA status will be marked as error/failed.

Click 'Execute Query' to view the following accounting entry and MIS details:

#### **Accounting Entries**

- Branch
- Account
- Account Ccy
- Debit/Credit
- Amount Tag
- Foreign Currency Amount
- Rate
- Local Currency Amount
- Date
- Value Date
- Event
- Event Serial Number
- Related Account



- Related Reference
- Related Customer
- ECA Reference
- Block Release Status
- Module
- External Reference Number
- MIS Head
- Instrument Code
- Product
- Available Balance Check Required
- Intra Day Release
- Availability Information
- Consider for Cover Sweeps
- Escrow Processing
- Cheque Mandatory
- Consider for Account Activity
- Salary Credit
- Component type for transaction
- Consider For Turnover Limit
- Anti Money Laundering Required
- Available Balance Update Through PPC
- Transaction Narrative
- Swift Code
- Transaction Code
- Debit Override Tracking
- Credit Override Tracking
- AML Product Category
- End Table

### FCUBS will process the following on the external entries:

- Account and GL validations for the entry posting
- Account and GL balance updation
- Account statement processing
- Release of ECA Block for ECA based debit
- Inter branch entry posting, if transaction branch and account branch are not same
- CYPO entries processing, if account currency and local currency are not same
- Release of dormancy on entry posting
- Sweep entry related processing
- Updation of instrument status, if debit is against an instrument number
- ELCM limit updation

### **MIS Details**

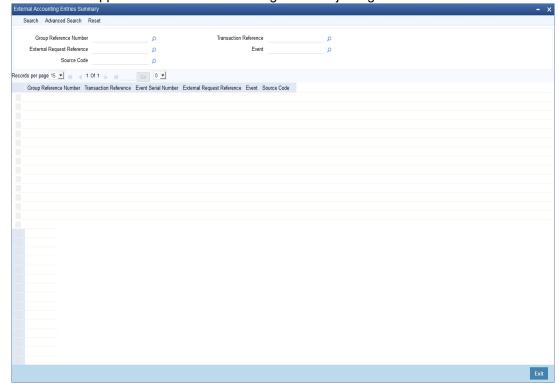
- MIS Group
- Unit Reference



- Branch Code
- Customer
- Product
- Processed Flag
- Unit Type
- Link to Group
- Currency
- Related Account
- Related Reference
- MIS Head
- Rate Code
- Spread
- Rate Type
- Profit Method
- Exchange Rate
- Refinance Rate
- Pool Code
- Cost Code
- Transaction MIS
- Composite MIS
- Fund MIS

## 2.3.4.1 <u>Viewing External Accounting Entry Details</u>

You can view details of External Accounting Entries through 'External Accounting Entries Summary' screen. You can invoke this screen by typing 'IFSEXACC' the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.





You can search records based on the following parameters:

- Group Reference Number
- External Reference Number
- Source Code
- Transaction Reference
- Event

Click on 'Search' button with or without entering any of the above search parameters. All records matching the search criteria are displayed. To view a particular record double click on the desired record displayed in the list of records. The following details pertaining to each record is displayed:

- Group Reference Number
- Transaction Reference
- Event Serial Number
- External Reference Number
- Event
- Source Code

## 2.3.5 **Processing Account Statements**

The product processors has to send all the required details for processing the account statement. Transaction narratives 'TXNNARRATIVE' in the request will be displayed as statement narrative against respective external entries. The statement date will be the application date for transactions originating from external systems.

# 2.3.6 Multi Currency Accounts

The external product processors can view the authorized multi currency accounts of FCUBS. Multi currency accounts are identified with account class 7. The external product processor can fetch the real accounts based on the multi currency accounts and transaction currency. The transaction received from the external product processors are processed at FCUBS.

The external product processors can query the real accounts using 'Real Account Derivation' screen. You can invoke this screen by typing 'STDMCYRL' in the top right corner of the Application toolbar and clicking the adjoining arrow button.



You can query with the following to derive the real account number:

- Multi Currency Account Number
- Currency



# 2.3.7 Handling MIS for External Product Processor

Oracle FLEXCUBE considers transactions from external product processors for MIS. Using the exposed service of external accounting, MIS details are sent to FCUBS. If there is any change in the MIS details that is sent for an account/transaction, then the modification flag is sent along with the accounting entries by the external product processor and the existing MIS details will be updated with changed MIS details in FCUBS.

### 2.3.8 Notify ECA/EA status for pending ECA/EA

When the ECA/EA request is sent with referral allowed = Y, there is a possibility for the status of the ECA/EA to be in pending in the synchronous response sent to the external system. The final status and other details for the ECA/EA is communicated in two ways:

- 1. ReST Service
- 2. Notification

For option 1, a record should be maintained in the External Payment System Maintenance screen (IFDEPSMT) screen with Service Code ECANotification or EANotification for ECA and EA respectively along with Rest URL for the web service exposed by the external system to consume the final status of the ECA/EA. The job FCNOTIFICATION should be configured for this.

For option 2, the notification will be triggered when the record is not maintained in an External Payment System Maintenance screen (IFDEPSMT) with Service Code ECANotification or EANotification for ECA and EA (Service code may not be right, Notif or Notification Code) respectively if the NOTIF job is configured. The notification can be seen in the NOTIFY\_DEST\_QUEUE with NOTIF\_CODE: NOTIF\_IF\_ECA.

The other necessary maintenances for this are done in the screens Notification Enroute Maintenance (GWDNTFEN) and Notifications Installed Maintenance (GWDNTFIN)s



# 3. Oracle FCUBS - Integration with OBLM

The integration between the Oracle FLEXCUBE Universal Banking System (FCUBS) and an External Product Processor enables sending requests for amount blocks and gets Credit from OBLM to get funds for ECA, EA and Internal Transactions.

This chapter contains the following sections:

- Section 3.1, "Scope"
- Section 3.2, "Prerequisites"
- Section 3.3, "Integration with OBLM"

# 3.1 <u>Scope</u>

FLEXCUBE will be able to send requests for Amount blocks and get Credit from OBLM to get funds for ECA, EA and Internal Transactions.

# 3.2 Prerequisites

Oracle FLEXCUBE Universal Banking Application and OBLM application is required.

# 3.3 Integration with OBLM

This chapter contains the following sections:

- Section 3.3.1, "Enhancing ECA to create a RTL Block"
- Section 3.3.2, "Enhancing ECA to Close a RTL Block"
- Section 3.3.3, "Enhancing EA for EA> ECA Block amount or EA without ECA"
- Section 3.3.4, "Enhancing Internal Transaction"
- Section 3.3.5, "OFCUB-OBLM Interface Processing"

# 3.3.1 Enhancing ECA to create a RTL Block

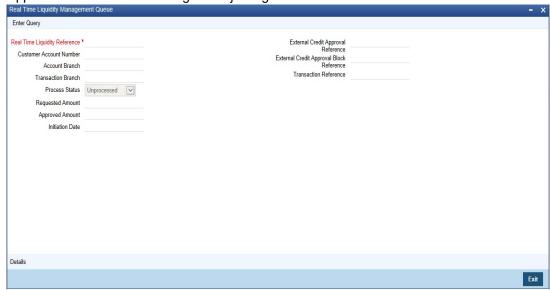
- CreateEcablk Gateway Service has a tag Referral Allowed. Only when this tag is sent as Y, partial release allowed is N and Real Time Liquidity Enabled Flags are checked at account level that calls OBLM to satisfy the ECA block.
- While creating an ECA block if the funds available in the Withdrawable balance is not sufficient, it will mark the ECA as Pending and create a RTL block with RTL Requested amount = ECA Requested Amount - Withdrawable balance.
- The Withdrawable balance available is blocked and a record is inserted into the RTL queue with status 'Unprocessed to be picked up and sent to OBLM.
- When a transaction is inserted into the RTL queue, an override is displayed.
- The ECA status and ECA block status is marked as 'Pending' until it gets a response from OBLM.
- The records with status Unprocessed is picked up and the Rest Service for creation of RTL Block by OBLM will be invoked.
- The status in the RTL queue is updated to 'Initiated'/'Error' based on the response for the Rest Service.
- When OBLM sends an Error:



- System will try to utilize the withdrawal balance to get the required block amount. If that is not sufficient, then the system will try to utilize the account limit/facility to get the required block amount.
- If the system is able to block the required funds from account limits/ facility the ECA block is made a success and RTL queue will be updated to 'Blocked'.
- Else, it is updated as a Failure and RTL queue will be updated to "Failure".
- A new Webservice CreateRTLResponse is developed for OBLM to send the response for the RTL request initiated:
  - When OBLM sends a full success, the status in the RTL queue will be updated to 'Blocked'.
  - When OBLM sends a Partial Success, then the system will try to utilize the withdrawal balance to get the required block amount. If that is not sufficient, then the system will try to utilize the account limit/facility to get the required block amount. If the system is able to block the required funds from account limits/ facility the ECA block is made a success and RTL queue will be updated to 'Blocked'. Else, it is updated as a Failure and RTL queue will be updated to 'Undo'.
  - When OBLM sends a Failure, then the system will try to utilize the withdrawal balance to get the required block amount. If that is not sufficient, then the system will try to utilize the account limit/facility to get the required block amount. If the system is able to block the required funds from account limits/ facility the ECA block is made a success and RTL queue will be updated to 'Failure'.
- The amount blocked by RTL is added to the ECA approved block amount and outstanding block amount and to RTL Blocked amount.

### 3.3.1.1 Real Time Liquidation Queue

Screen IFDRTLQU (Real time Liquidation Queue) has been newly introduced. This can be used to Query the status of the RTL Request that has been sent/going to be sent to OBLM. You can invoke this screen by typing 'IFDRTLQU' in the field at the top right corner of the Application toolbar and clicking the adjoining arrow button.



Click 'Enter Query' to specify and view the following details:

#### **Real Time Liquidity Reference**

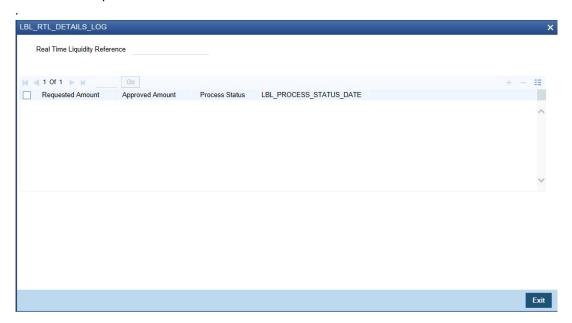
Specify the RTL reference number.

The following RTL details are displayed based on the query:



- Account Branch
- Account Number
- Transaction Branch
- Process Status
- Requested Amount
- Approved Amount
- Initiation Date
- External Credit Approval Reference Number
- External Credit Approval Block Reference Number
- Transaction Reference Number

The details button will open a sub-screen which will display the log details for all the statuses of the RTL Request



The following RTL log details are displayed based on the query:

- Real Time Liquidity Reference Number
- Requested Amount
- Approved Amount
- Process Status
- Process Status DateEnhancing ECA to modify a RTL Block
- ModifyEcablk Gateway Service will have a tag Referral Allowed. Only when this tag
  is sent as Y, partial release allowed is N and Real Time Liquidity Enabled Flags is
  checked at account level that calls OBLM to satisfy the ECA block.
- ModifyEcablk can result in either Creation of RTL block or Modify of RTL block.
- The Withdrawable balance available is blocked and a record is inserted into the RTL queue with status 'Modify' for Modify of RTL block and 'Unprocessed' for Creation of RTL Block to be picked up and sent to OBLM.
- When a transaction is inserted into the RTL queue, an override is displayed.
- The ECA status and ECA block status will be marked as 'Pending' until it gets a response from OBLM.
- The records with status 'Unprocessed/Modify' will be picked up and the Rest Service for creation of RTL Block by OBLM will be invoked.



- The status in the RTL queue will be updated to 'Initiated'/'Error' based on the response for the Rest Service.
- When OBLM sends an Error, then the system will try to utilize the withdrawal balance
  to get the required block amount. If that is not sufficient, then the system will try to utilize
  the account limit/facility to get the required block amount. If the system is able to block
  the required funds from account limits/ facility the ECA block is made a success RTL
  queue will be updated to 'Blocked'. Else it is updated as a Failure and RTL queue will
  be updated to 'Failure'.
- A new Webservice CreateRTLResponse will be developed for OBLM to send the response for the RTL initiated request.
- When OBLM sends a full success, the status in the RTL queue will be updated to 'Blocked'.
- When OBLM sends a Partial 'Success'/Failure', then the system will try to utilize the withdrawal balance to get the required block amount. If that is not sufficient, then the system will try to utilize the account limit/facility to get the required block amount. If the system is able to block the required funds from account limits/ facility the ECA block is made a success and RTL queue will be updated to Blocked. Else,, it is updated as a 'Failure' and RTL queue will be updated to 'Undo' or 'Failure' for Creation of RTL Block and 'Modify'/ or 'Blocked' for modify of RTL block.
- The amount blocked by RTL is added to the ECA approved block amount and outstanding block amount and to RTL Blocked amount.

# 3.3.2 Enhancing ECA to Close a RTL Block

CloseEcablk Gateway Service is enhanced to internally Close a RTL Block which was created for the ECA block.

# 3.3.3 Enhancing EA for EA> ECA Block amount or EA without ECA

- CreateExtAccEcaEntries Gateway Service will have a tag Referral Allowed. Only when
  this tag is sent as Y, partial release allowed is N for the ECA linked and Real Time
  Liquidity Enabled Flags is checked at account level, that calls OBLM to satisfy the EA.
- When an EA is received by FCUBS if the EA amount is greater than ECA block amount or if EA is sent without ECA, and the required amount is greater than the Withdrawable balance, System will create an Internal ECA which will in turn call create RTL block.
- When a transaction is inserted into the RTL queue, an override is displayed.
- After receiving a response for the Internal RTL block, one can use Limits, Facility or go overline to satisfy the EA.

### 3.3.4 Enhancing Internal Transaction

- Transactions arising from modules for which referral allowed is Y can go to RTL to get the funds required.
- When a EA is received by FCUBS if the EA amount is greater than ECA block amount or if EA is sent without ECA, and the required amount is greater than the Withdrawable balance, System will create an Internal ECA which will in turn call create RTL block.
- When a transaction is inserted into the RTL queue, an override is displayed.
- After receiving a response for all the Internal RTL blocks raised for the transaction, one can use Limits, Facility or go overline to satisfy the EA.

### RTL supports below modules:

- SI Standard Instructions
- FX Foreign Exchange
- BC Bills and Collections



- LC,- Letters of Credit
- DE Data Entry
- CD Corporate Deposit
- FS FX Settlement
- IB Islamic Bills and Collections
- LI Islamic Letter Of Credits
- MC Islamic Money Market
- SR Securities Repo and Reverse Repo

# 3.3.5 OFCUB-OBLM Interface Processing

New API will be introduced to interface OFCUB with OBLM and the communication will be done using Rest Service.

User may refer to PM Integration document for IFDEPSMT maintenance.(External system maintenance (IFDEPSMT)) that is maintained for RTL integration with the External System type 'Liquidity Management.'



# 4. Annexure

# 4.1 Accounting Hand-off from External System to FCUBS

An external system can request for debit or credit to an account or GL in FCUBS through the interface.

The following major values will be passed as part of debit request for accounting hand-off:

Values	Description	Mandatory
MODULE	Module which is sending for accounting handoff	Yes
TRN_REF_NO	Transaction reference number for debit / credit	No
EVENT_SR_NO	Event serial no for Dr / Cr leg	Yes
EVENT	Event against which accounting to be posted	Yes
AC_BRANCH	Branch for accounting handoff	Yes
AC_NO	Account to which Debit / Credit to be done on accounting handoff	Yes
AC_CCY	Currency of the account	Yes
DRCR_IND	Account to be debited / credited on accounting handoff	Yes
AMOUNT_TAG	Amount tag against which accounting to be posted	Yes
LCY_AMOUNT	Local ccy amount for accounting handoff	Yes
ECAREFNO	ECA reference no generated for each request under a ECA create external reference no	Yes (Man- datory for ECA Debits only)
FCYAMT	Fcy amount for accounting hand- off, Mandatory, if Account cur- rency is Fcy.	No
EXCHRATE	If Ccy is Fcy, then exchange rate and Lcy amount tags are mandatory.	No
BLOCKRELEASES- TATUS	Block release status to be set as F - Full debit; P – For partial debit (Only if partial release is allowed).	Yes



Values	Description	Mandatory	
TRN_DT	Transaction date on which accounting to be posted. It's a non mandatory field, if not provided, accounting would be posted to current system date.	No	
VALUE_DT	Value date on which accounting to be posted. It's a non mandatory field, if not provided, would be defaulted to current system date.	No	
TXNNARRATIVE	Transaction narrative captured as part of request will be displayed in account statement.	No	

The following values will be passed as part of accounting handoff for accounting posting:

Values	Description	Default value	Possible values	Mandatory
CHEQUE_MANDATORY	If debit to happen against an account based on the instrument no, then cheque mandatory to be Y.	N	Y/N	No
INSTRUMENTCODE	If cheque mandatory is Yes, then instrument code to be mandatory in the request. Based on that, the chq no would be updated to used in FLEXCUBE system.	Null	Valid instru- ment number	No
AVAILBALREQD	If balance checked to happen as part of ECA debit, this flag to be Y.	Y	Y/N	No
AVLINFO	Balance will be updated immediately / move to uncollected balance (for credit transaction alone) based on the value provided.	I - Imme- diate	I - Imme- diate- V - On value Date	No
INTRADAYRELEASE	If Available info is I and intraday release is Y, then funds will be in Uncollected, to be cleared on intraday batch run.	N	Y/N	No



Values	Description	Default value	Possible values	Mandatory
ESCROW	If Escrow is set as Y, then on EAC credit, amount would be blocked, if it's against a project account.	N	Y/N	No
CONSFORACCACTIVITY	To make the account undormant on ECA processing, then consider for account activity to be sent as Y in request.	Y	Y/N	No
CONSFORTRNOVER	To restrict the maximum amount to be credited to an account, this flag to be sent as Y in the request.	N	Y/N	No
SWEEPREQD	If ECA debit is made more than requested amount and if sweep is Yes, then excess debit will be covered from cover accounts, if available balance isn't sufficient to cover excess debit.	N	Y/N	No
DEBIT_OVER- RIDE_TRACKING	If account is set for Debit override, if this tag has value B / O, then debit override will be displayed.	В	В/О	No
CREDIT_OVER- RIDE_TRACKING	If account is set for Credit override, if this tag has value B / O, then credit override will be displayed.	В	В/О	No
DONTSHOWINSTMT	If during reversal request of external entries, reversal entries to be excluded from account statement, then DONTSHOW-INSTMT should be Y.	N	Y/N	No



Values	Description	Default value	Possible values	Mandatory
EVENTSRNOTOBEREVD	If during reversal request of external entries, event slr no to be reversed should be sent in request.	Null	Valid event slr no	Yes (for reversal request)
TRNCODE	If transaction code is sent as part of request, it will be stored in the ACT-B_ENTRIES_TRN-CODE_DETAILS table	Null	Transac- tion Code	No
SWIFT_CODE	If SWIFT_CODE is sent as part of request, then it will be displayed in the SWIFT account statement.	Null	Valid SWIFT code	No
ACTIONINDICATOR	Indicates the MIS is for Modification or New	Null	'N' or 'M'	Yes
TAG61SUPPINFO	If the transaction is used for SWIFT message supplementary information will be send in this tag.	Null		
USERREFNO	User reference number used for Advice and SWIFT message.	Null		
ISREVERSAL	Indicate the transaction from external process is for reversal or not.	Null	R or Null	
BANKREFNO	Bank reference num- ber used for SWIFT message	Null		
ADDLINFO	Additional information used for Advice and SWIFT message.	Null		

## Note

Transaction code is not mandatory for external entry hand-off.



The following values will be passed as part of accounting handoff for accounting posting for MIS:

Values	Description	Default value
BRNCD	Transaction Branch Code	Null
CALCMETH1	Calculation Method	Null
CCY	Currency	Null
COMPMIS1	Composite MIS code 1	Null
COMPMIS2	Composite MIS code 2	Null
COMPMIS3	Composite MIS code 3	Null
COMPMIS4	Composite MIS code 4	Null
COMPMIS5	Composite MIS code 5	Null
COMPMIS6	Composite MIS code 6	Null
COMPMIS7	Composite MIS code 7	Null
COMPMIS8	Composite MIS code 8	Null
COMPMIS9	Composite MIS code 9	Null
COMPMIS10	Composite MIS code 10	Null
COSTCD1	MIS Cost Code 1	Null
COSTCD2	MIS Cost Code 2	Null
COSTCD3	MIS Cost Code 3	Null
COSTCD4	MIS Cost Code 4	Null
COSTCD5	MIS Cost Code 5\$	Null
CUSTOMER	Customer Number	Null
FUNDMIS1	Fund MIS Code 1	Null
FUNDMIS2	Fund MIS Code 2	Null
FUNDMIS3	Fund MIS Code 3	Null
FUNDMIS4	Fund MIS Code 4	Null
FUNDMIS5	Fund MIS Code 5	Null
FUNDMIS6	Fund MIS Code 6	Null
FUNDMIS7	Fund MIS Code 7	Null
FUNDMIS8	Fund MIS Code 8	Null
FUNDMIS9	Fund MIS Code 9	Null



Values	Description	Default value
FUNDMIS10	Fund MIS Code 10	Null
GRPREFNO	Group reference number to indicate the group of Transaction doe which the MIS is applicable.	Null
MISGRP	MIS group	Null
MISGRPCOMP	Composite MIS group	Null
MISGRPFUN	Fund MIS group	Null
MISGRPTXN	Transaction MIS group	Null
MISHEAD	MIS head	Null
POOLCD	Pool Code	Null
PROCESSED- FLAG	MIS Processed Flag	Null
PRODUCT	Product code	Null
RATEFLG	Rate flag for MIS processing	Null
REFRATE	Ref rate for MIS	Null
REFRATECD	Ref rate code for MIS	Null
REFRATETYP	Ref rate type for MIS	Null
REFSPREAD	Ref spread	Null
REFXRATE	Ref exchange rate	Null
RELACC	Related account number	Null
RELET- ED_REFER- ENCE	Related reference number for MIS	Null
RGREL		Null
TXNMIS1	Transaction MIS code 1	Null
TXNMIS2	Transaction MIS code 2	Null
TXNMIS3	Transaction MIS code 3	Null
TXNMIS4	Transaction MIS code 4	Null
TXNMIS5	Transaction MIS code 5	Null
TXNMIS6	Transaction MIS code 6	Null
TXNMIS7	Transaction MIS code 7	Null



Values	Description	Default value
TXNMIS8	Transaction MIS code 8	Null
TXNMIS9	Transaction MIS code 9	Null
TXNMIS10	Transaction MIS code 10	Null
UNITREFNO	Reference number ,either account number or contract ref number base to the MIST type.	Null
UNITTYPE	Unit type ,to indicate Account MIS or contract MIS	Null



# **5. Function ID Glossary**

С	I
CADECABL2-4	IFDEXACC2-7
CASECABL2-6	IFDEPSMT 2-12
G	IFDRTLQU3-2
	IFSEXACC2-10
GWDNTFEN 2-12	
GWDNTFIN 2-12	S
	STDMCYRL2-11

