Oracle FLEXCUBE UBS - Oracle FLEXCUBE Payments Integration Oracle FLEXCUBE Universal Banking

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Oracle FLEXCUBE UBS - Oracle FLEXCUBE Payments Integration User Guide Oracle Financial Services Software Limited Oracle Park

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1. Preface

1.1 Introduction

This document helps you get acquainted with the information on inter-connecting Oracle FLEXCUBE Universal Banking System (FCUBS) with Oracle FLEXCUBE Payments (PM).

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 <u>Audience</u>

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 - Payments Integration</i> explains the integration between Oracle FLEXCUBE Universal Banking and Oracle FLEXCUBE Payments.



Abbreviation	Description		
System	Unless and otherwise specified, it always refers to Oracle FLEXCUBE Universal Banking system		
FCUBS	Oracle FLEXCUBE Universal Banking Sys- tem		
PM	Oracle FLEXCUBE Payments		
Source System	Oracle FLEXCUBE Universal Banking Sys- tem (FCUBS)		
FX	Foreign Exchange		

1.5 Acronyms and Abbreviations

1.6 Glossary of Icons

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

lcons	Function
×	Exit
+	Add row
-	Delete row
Q	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
- Foreign Exchange User Manual
- General Ledger User Manual



2. Oracle FCUBS - Payments Integration

The integration between the Oracle FLEXCUBE Universal Banking System (FCUBS) and Oracle FLEXCUBE Payments (PM) allows you to trigger notification during creation, modification or authorization of Customer, Customer Account, Currency Rate, GL Code and Transaction Code. The integration also allows you to provide response to the external system request on exchange rate lookup and utilization, de-utilization of an FX contract.

The integration allows FCUBS modules to request the External payment System for outgoing payment processing SWIFT Payment Message (Customer Transfer and Bank Transfer) generation, Foreign Currency Instrument issuance and Stop Payment message generation.

This chapter contains the following sections:

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

2.1 <u>Scope</u>

This section describes the scope of the integration with respect to FCUBS and PM. This section contains the following topics:

- Section 2.1.1, "Generating Notifications for External Systems"
- Section 2.1.2, "Exchange Rate Lookup and Utilization/De-utilization of FX Contract"
- Section 2.1.4, "Integration with External System for International Instruments (DD/BC)"

2.1.1 Generating Notifications for External Systems

You can generate notification to an external system if the following details are created, modified or authorized in FCUBS:

- Customer
- Customer Account
- Currency Rate
- GL Code
- Transaction Code

2.1.2 Exchange Rate Lookup and Utilization/De-utilization of FX Contract

You can process exchange rate lookup and utilization or de-utilization on an FX contract linked to an external payment system. The system hands over the process response along with the exchange rate details to the external system.

2.1.3 Integration with External System for Outgoing Payment

FCUBS modules interfaces with External Payment System for outgoing payment processing and SWIFT Payment Message (Customer Transfer and Bank Transfer)

2.1.4 Integration with External System for International Instruments (DD/BC)

Branch instrument screens involving International Instrument (Demand Draft /Bankers Cheque) will interface with External System for 'MT110 - Advice of Cheque(s)' and 'MT111 - Request for Stop Payment of a Cheque' message generation.



2.2 <u>Prerequisites</u>

Set up Oracle FLEXCUBE Universal Banking Application and Oracle FLEXCUBE Payments Application.

Refer the 'Oracle FLEXCUBE Universal Banking Installation' manual.

2.3 Integration Process

This section contains the following topic:

- Section 2.3.1, "Notification Handoff to External System"
- Section 2.3.2, "FX Linked to External Payment System"
- Section 2.3.3, "Integration with External System for Outgoing Payment and Message Generation"

2.3.1 Notification Handoff to External System

Notification framework in FCUBS is used to communicate the business event in FCUBS to external systems. Depending on the event an XML message is send to external system queues.

You can trigger notification message to an external system when the following details are created or modified on authorization:

- Customer
- Customer Account
- Currency Rate
- GL Code
- Transaction Code

The system generates a notification when the above created or modified details are authorized.

2.3.2 FX Linked to External Payment System

You can process exchange rate lookup and utilization or de-utilization request if an FX contract is linked to an external payment system.

Processing Exchange Rate Lookup Request

- The external system sends a request to FCUBS to process exchange rate lookup of a linked FX contract.
- The system provides the FX rate as request response.

Processing Utilization Request

- The external system sends a message to FCUBS to process utilization on the linked FX contract.
- The incoming utilization request is picked by FCUBS and the system generates the process response along with the FX exchange rate and hands over to the external system through the queue.



Processing De-utilization Request

- To reverse a payment the external system sends message to FCUBS to process deutilization on the linked FX contract.
- The source system picks the incoming message of de-utilization request and generates the de-utilization details as response along with the exchange rate details.

2.3.3 <u>Integration with External System for Outgoing Payment and Message</u> <u>Generation</u>

The integration allows FCUBS modules to request External Payment System for outgoing payment processing and SWIFT Payment Message (Customer Transfer and Bank Transfer) generation. The integration also allows FCUBS Branch instrument screens to request External Payment System for 'MT110 - Advice of Cheque(s)' and 'MT111 - Request for Stop Payment of a Cheque' message generation.

Maintaining External System

You can capture the details of external payment system in External System Maintenance screen. You can invoke this screen by typing 'IFDEPSMT' in the top right corner of the Application toolbar and clicking the adjoining arrow button.

Exte	mal System Mainte	enance							
Nev	/ Copy Close	Unlock	Enter Query						
		Externa	System * EXTRTL				External System Type *	Liquidity Management *	
		De	escription RTL transaction			Read	I Time Out (In Seconds)	70	
	Inter	System B	ridge GL * 261377770		Connection Time Out (In Seconds) Archival Days			50	
		Source	System * FCUBS						
			Entity ID * ENTITY_ID1						
1	1 Of 1 🕨 🕅								+ - =
	Service Code	9	Service Name	Operation Code	Web Service User O	ption	Web Service User	Rest/W	eb Service URL
~	InitiateRTLBlock	Ŧ	InitiateRTLBlock	InitiateRTLBlock	Contract User		AB	http://10.184.155.74:9010/api-gate	way/oblm-rtl-services/initia
	ModifyRTLBlock	۲	ModifyRTLBlock	ModifyRTLBlock	Contract User		AB	http://10.184.155.74:9010/api-gate	way/oblm-rtl-services/Modi
	PostRTL	٣	PostRTL	PostRTL	Contract User		AB	http://10.184.155.74:9010/api-gate	way/oblm-rtl-services/Post
	UndoRTLBlock	٣	UndoRTLBlock	UndoRTLBlock	Contract User		AB	http://10.184.155.74:9010/api-gate	way/oblm-rtl-services/Und
	Maker AB		Date	Time: 2018-06-28 12:11:37	Mod No		2	Record Status Open	Exit
	Checker AB		Date	Time: 2018-06-28 12:11:37			Au	thorization Status Authorized	

You can maintain the following details in this screen:

External System

Specify the name of the External Payment System.

Description

Give a brief description on External Payment System specified.

Inter System Bridge GL

Specify the Bridge GL account for Inter System Accounting. Alternatively, you can select the Inter System Bridge GL from the option list. The list displays all valid options.

Source System

Specify the name of the source system.



Entity ID

Specify the entity ID. Current Entity value is defaulted and this value can be changed

External System Type

Select the type of external system from the drop-down list. The list displays the following options:

- Payments
- Loans
- Liquidity Management

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.

Archival Days

Specify the number of archival days required.

Service Code

Select the service code from the drop-down list. The list displays the following options:

- GenPayMessage This indicates single payment service for outgoing payment
- GenLoanMessage This enables user to input details specific to Loan External System. This option can be selected only if the External System Type is selected as 'Loans'.
- GenIInstrIssue This indicates the instrument issuance service
- CreateDDOutService This creates a direct debit contract to OBPM
- GenInstrStop This indicates instrument stop payment service
- InitiateRTLBlock This indicates Create RTL Block request
- ModifyRTLBlock This indicates Modify RTL Block request
- UndoRTLBlock This indicates Undo RTL Block request
- PostRTLBlock This indicates requesting OBLM to credit the blocked RTL amount.

•

The options GenPayMessage, GenInstrIssue and GenDDMessag can be selected only if the External System Type is selected as 'Payments'.

Service Name

Specify the web service name.

Operation Code

Specify the web service operation code.

Web Service User Option

Select the web service user option from the drop-down list. The list displays the following values:

- Contract User the user saving or authorizing the contract
- Predefined User the user defined in 'Web Service User' field

Web Service User

Specify the web service user ID. This field is applicable only if 'Web Service User Option' is selected as 'Predefined User'.



Rest/Web Service URL

Specify the Rest/web service URL.

You can view the external payment system maintenance details in 'External Payment System Summary' screen. You can invoke the summary screen by typing 'IFSEPSMT' in the top right corner of the Application toolbar and clicking adjoining arrow button.

External Payment System Queue

You can view the details of payment request sent or to be send to an external payments system through 'External Payment System Queue' screen. You can invoke this screen by typing 'IFDEPSQU' in the top right corner of the Application toolbar and clicking the adjoining arrow button.

External Payment System Queue	Detalled		- *
Enter Query			
Queue Reference Number*		Contract Reference Number	
External Payment System		Initiating Module	
Source Reference Number		Event Sequence Number	
Customer Reference Number		Amount Tag	
Process Status	Not Authorized	¥	
Main Parties Parties Other D	etails		
Host Code		Service Code	
Service Level Proprietary		Source Code	
Transaction Branch		WebService User	
Initiation Date		Customer No	
Requested Execution Date		Debtor Details	
Activation Date	YYYYAMADD	Customer Name	
Transfer Type	Customer 👻	Account Number	
Transfer Currency		Account Currency	
Transaction Amount		Account Branch	
Error Information Notifications			
			Exit

Queue Reference Number

Specify the queue reference number and click 'Execute Query' to view the details of payment request sent to external payment system.

Process Status

The system displays the process status. The list displays the following options:

Process Status	Description
Not Authorized	Contract initiated and the payment request is unauthorized
Un Processed	Payment request pending for processing
Web Service Con- nection TimeOut	Web service call, timed out during payment request processing
Payment Approved	Payment request initial validation is successful and request is accepted
Payment Rejected	Payment request initial validation is failed and request is rejected
Payment Pro- cessed	All payment processing is completed and request is successfully processed



Repair	Payment request moved to repair queue due to exception in payment life-cycle
Contract Cancelled	Contract initiated and the payment request is reversed
Future dated	Payment contract not yet initiated. Future value dated payment request.
Payment Cancelled	Payment contract cancelled from one of the queue in external payment system
Acknowledgement Received	Acknowledgment (ACK) received from payment network
Negative Acknowl- edgement Received	Negative acknowledgment (NACK) received from payment network

Click 'Error Information' button to view Error Information screen. This screen displays the error or warning codes and messages received as response for the payment request.

Queue Reference Number				
Error Messages				
Response Type	Information 🗸			
Response Details				
				Evit
				Exit



Click 'Notifications' button to view the notifications screen. This screen displays the notification details received from the external payment system

Notification Information		>
External Payment System Reference Number		
Notification Information		
📢 🚽 1 Of 1 🕨 🕅 🛛 🖓		+ - =
Notification Reference Number	Process Status Maker ID	
		^
		~
		Exit

Process Status

The system displays the process status. The drop-down list displays the following options:

Process Status	Description
Un Processed	Notification is pending for processing
Processed	Notification processed successfully
Processing Failed	Notification processing failed due to unex- pected failure
Improper Notification	Notification received is not in proper format
Empty Notification	Empty notification received

FCUBS-OBPM Integration Maintenance for Outgoing Payments and Message Generation

Oracle FLEXCUBE supports integration with Oracle Banking Payments (OBPM) for outgoing payments and message generation. You have to maintain the following details in FCUBS for integrating with OBPM for outgoing payments and message generation:

- For outgoing payments, maintain active records for the service code 'GenPayMessage' in External Payment System Maintenance (IFDEPSMT) screen. In the detailed section of this screen maintain OBPM Single Payment Service details as below:
 - Rest/Web Service URL Provide the Rest API URL of OBPM Single Payment Service
- For MT110 Advice of Cheque(s), maintain active records for the service code 'GenInstrIssue' in External Payment System Maintenance (IFDEPSMT) screen. In the detailed section of this screen maintain OBPM Single Payment Service details as below:
 - Service Name PMInstrumentIssueService
 - Operation Code CreateInstrumentIssue
 - Web Service User Option Choose the preferred option



- Web Service User Provide the User to be used in Gateway request
- Rest/Web Service URL Provide the WDSL URL of OBPM Single Payment Service
- For MT111 Request for Stop Payment of a Cheque, maintain active records for the service code 'GenInstrStop' in External Payment System Maintenance (IFDEPSMT) screen. In the detailed section of this screen maintain OBPM Single Payment Service details as below:
 - Service Name PMInsStopPayService
 - Operation Code CreateInsStopPay
 - Web Service User Option Choose the preferred option
 - Web Service User Provide the User to be used in Gateway request
 - Rest/Web Service URL Provide the WDSL URL of OBPM Single Payment Service

Exte	rnal Payment Syste	em Mainter	iance				- >
Sav	e						
	Extern	al System *	OBPM				
	Description External Payment System						
	Inter System Bridge GL * 261377771			Q			
Source System * OFCUB			OFCUB				
Read Time Out (In Seconds) 10			10				
Con	Connection Time Out (In Seconds) 10						
•	1 Of 1 🕨 🖬	Go					+ - =
~	Service Code		Service Name	Operation Code	Web Service User Option	Web Service User	
~	GenPayMessage	PMSingleF	aymentService	CreateSinglePayment	Predefined User		http://10.184.1! ^
•			ш				
	Maker		Date Time:	Mod No	Record	Status	
	Checker		Date Time:		Autho	ization Status	Cancel

- You have to maintain gateway preferences for the following source codes in 'External System Functions' (GWDETFUN) screen for the Service Name 'FCUBSEPSService' with Operation Code 'CreateEPSNotification' to receive the notifications from OBPM:
 - FCUBSCL
 - FCUBSRT
 - FCUBSTD
 - For all FCUBS corporate modules where outgoing payment is initiated, the source code will be 'FCUBS<Module-ID>'. For example, the source code for FX module will be 'FCUBSFX'.
- In 'Upload Source Preference Maintenance' (CODUPLDM) screen, Post Upload Status field value should be selected as 'Authorized'.

Save					
Source Code *	FCUBSCL	Q			
Module Code *	IF	Q			
Error Handling			Post Upload		
On Error *	Reject			Status * Authorized	
On Override *	Ignore			Purge Days	
On Repairable Exception	Reject			Allow Deferred Processing	
On Queue Exception	Reject			Deletion Allowed	
nation ID Profession					
Inclidit ID Preference					
Maker	Date Time:		Mod No	Record Status	Cand
Chacker	Date Time:			Authorization	Cunc



The following scheduler jobs configured for the integration should be run during the integration:

- EPSGENPAYMENT Scheduler job for processing Payment request
- EPS_NOTIFICATION Scheduler job for processing OBPM notifications

For maintenance required for OBPM, please refer the Oracle Banking Payments Manual 'Codeployed Setup User Guide'.

External Payment System Queue History

You can view the details of external payment request in 'External Payment System Queue History' screen. You can invoke this screen by typing 'IFDEPSQH' in the top right corner of the Application toolbar and clicking the adjoining arrow button.

nter Query			
Queue Reference Number *		Contract Reference Number	
External Payment System		Initiating Module	
Source Reference Number		Event Sequence Number	
Customer Reference Number		Amount Tag	
Process Status	Not Authorized	* Archival Date	
Main Parties Parties Other D	etails	Sanica Coda	
Service Level Proprietary		Service Code	
Transaction Branch		WebService User	
Initiation Date		Customer No	
Requested Execution Date		Debtor Details	
Activation Date		Name	
Transfer Type	Customer -	Account Number	
Transfer Currency		Account Currency	
		Account Branch	
Transaction Amount			

Click 'Enter Query' to view the archived records along with the archival date.



3. Function ID Glossary

C CODUPLDM2-8

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IFDEPSMT	 -3
IFDEPSQH	 -9
IFDEPSQU	 -5

