Trade Finance – Oracle Banking Payments Integration Oracle Banking Trade Finance

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Oracle Banking Trade Finance – Oracle Banking Payment Integration User Guide
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1. Preface

1.1 Introduction

This document helps you acquaint with the information on inter-connecting Oracle Banking Trade Finance (OBTF) with Oracle Banking Payments (OBPM).

Besides this user manual, while maintaining the interface related details, you can invoke the context sensitive help available for each field in OBTF. 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	This chapter helps you co-deploy Oracle Banking Trade Finance & Oracle Banking Payments product in a single instance.
Chapter 3	Function ID Glossary provides has alphabetical listing of Function/Screen ID's used in the module with page references for quick navigation.



1.5 Acronyms and Abbreviations

Abbreviation	Description
OBTF	Oracle Banking Trade Finance
ОВРМ	Oracle Banking Payments
WSDL	Web Services Description Language
EA	External Accounting

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
٥	Option List

1.7 Related Information Sources

This user manual must be used in conjunction with the following Oracle Banking Trade Finance user manuals:

- Bills and Collections User Manual
- Letters of Credit User Manual



2. Trade Finance - Payments Integration

The integration between OBTF and OBPM enables banks to do the following:

- Outgoing payment message processing
- Bill Liquidation on external request from OBPM

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, "Integration Scope"

2.1.1 Integration Scope

The following are the integration scope of OBTF with OBPM:

- Outgoing payment message processing,
 - OBTF initiates the request for outgoing payment message to OBPM on bill liquidation and LC creation.
 - OBTF during transaction creation initiates the request for outgoing payment messages to OBPM. Few scenarios include Bills Liquidation and LC creation based on the transfer type selected in the settlement instructions.

Transfer type selected can be "Bank Transfer" or "Customer Transfer" to initiate payment request to OBPM.

- Outgoing payment
 - System to populate export Bill details to common core.
 - System to provide an EAC and an EA web service, to be consumed by OBPM.
 - On receiving an incoming MT202, OBPM validates the "Tag21-Related Reference Number" if the tag values matches with bill number in common core OBPM will initiate an EAC request to OBTF. In turn OBTF validates the bill reference number and responds to OBPM.
 - On receiving a success EAC response OBPM will initiate an EA request to OBTF. In turn OBTF trigger bill liquidation on a received reference.

2.2 **Prerequisites**

This section contains the following topics:

- Section 2.2.1, "Prerequisites in Oracle Banking Trade Finance"
- Section 2.2.2, "Prerequisites in Oracle Banking Payments"
- Section 2.2.3, "Prerequisites in Common Core OBTF and OBPM"



2.2.1 Prerequisites in Oracle Banking Trade Finance

The prerequisites in OBTF for this integration are as follows:

- > The parameter 'PAYMENT_PROCESSOR' in CSTB_PARAM should be 'E' (External) for OBTF to interface with OBTF.
- Maintain an active record in Trade Finance External System Maintenance screen (IFDTFEPM) with field external system type as "Payments" for different service codes with all required fields in the detailed section of this screen

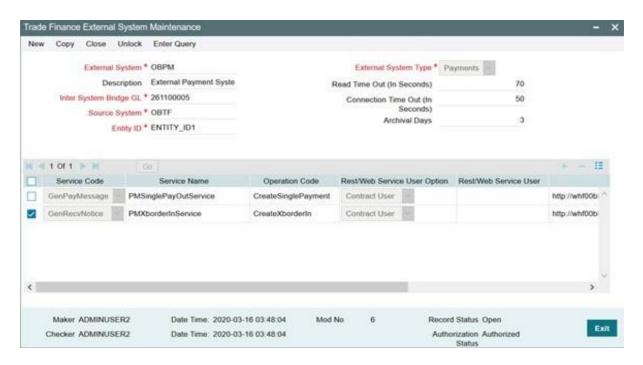
For outgoing payments, maintain the service code as "GenPayMessage" with Single Payment Service details as below: Bridge GL to be maintained in Inter System Bridge GL

Field	Description
External System	Should be source code of external system e.g.: 'OBPM'
Inter System Bridge GL	Bridge GL between OBTF and OBPM
Source System	OBTF
Entity Id	Entity Id used between OBTF and OBPM interaction
External System Type	Payments
Read Time Out	Read Time out in OBPM
Connection Time Out	Connection wait time at OBTF for the Payment request initiated
Archival Days	Number of days to archive the payment messages

Service1 - Single Payment Service		
Field	Description	
Service Code	GenPayMessage	
Service Name	PMSinglePayOutService	
Operation Code	CreateSinglePayment	
Rest/Web Service Choose Contract User / Predefined User User Option		
Rest/Web Service Mention user in case of Predefined User User		
Rest/Web Service URL	Mention http URL of OBPM http://ip:portnumber//PMReST/obpmrest/payments/singlepayout	

Service2 - Inbound Cross Border Payments	
Field	Description
Service Code	GenRecvNotice
Service Name	PMXborderInService
Operation Code	CreateXborderIn
Rest/Web Service User Option	Choose Contract User / Predefined User
Rest/Web Service User	Mention user in case of Predefined User
Rest/Web Service URL	Mention http URL of OBPM http://ip:portnumber/PMReST/obpmrest/payments/xborderin





> Maintain the External System Functions (GWDETFUN) for the below Source codes

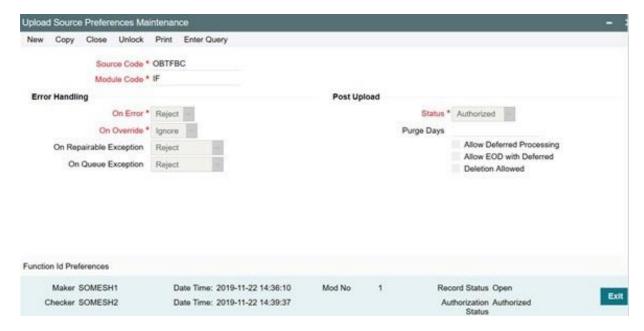
Field	Suggested values
External System	OBTF <module code=""></module>
Function	IFGTFPNO
Action	NEW
Service Name	OBTFEPSService
Operation Code	CreateEPSNotification



In Upload Source Preference Maintenance screen (CODUPLDM), Post Upload Status field value should be selected as "Authorized".



Field	Suggested values
Source Code	OBTF
Module Code	BC/LC/Specific Module Codes
On Error	Reject
On Override	Ignore
Post Upload Status	Authorized



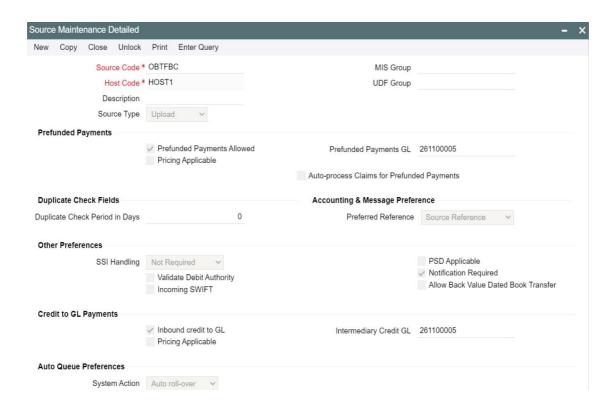
- Upload BIC directory and ensure that the same are listed at ISDBICDE, which OBTF will use, to transact payments.
- Below are the scheduler jobs configured for the Integration. Make sure that these jobs are running using SMSJOBBR screen.
 - TFEPSGENPAYMENT Scheduler job for processing the Payment request
 - TFEPS_NOTIFICATION Scheduler job for processing OBPM notifications
- Make sure that the below ADF file is executed in the database schema. This file contains the JSON template for the OBPM Single Payment Service
 - TFGenPayMessage.ADF
- Refer Core Services User Manual, for the other Day 0 maintenances to be done for OBTF.

2.2.2 <u>Prerequisites in Oracle Banking Payments</u>

The prerequisites in Oracle Banking Payments for this integration are as follows

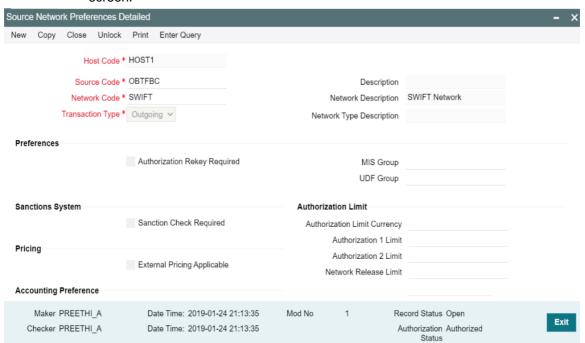
You Maintain the Source code with which OBTF will hand off payment requests at PMDSORCE- Source maintenance screen.





Following are the source codes OBTF uses to initiate payment request:

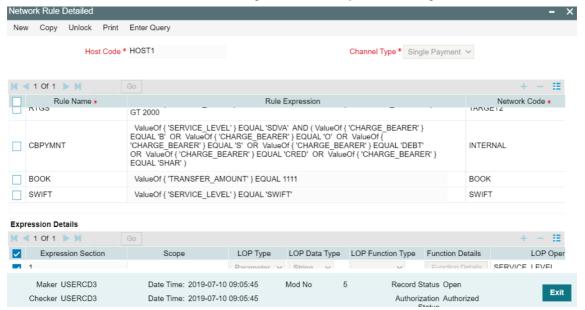
- For all OBTF modules where outgoing payment or receive notice is initiated, the source code is OBTF <Module-ID>. For example, the source code for the BC module is OBTFBC.
- Each record maintained in Source Maintenance Detailed screen (PMDSORCE) should have the below preferences:
 - Pre-funded Payments GL or Intermediary Credit GL should match Inter System Bridge GL maintained in Trade Finance External System Maintenance screen (IFDTFEPM) of OBTF.
- obplace This Inter System Bridge GL should be available for both OBTF & OBPM.
 - Maintain the OBTF Source-specific preferences for each network at PMDSORNW screen.



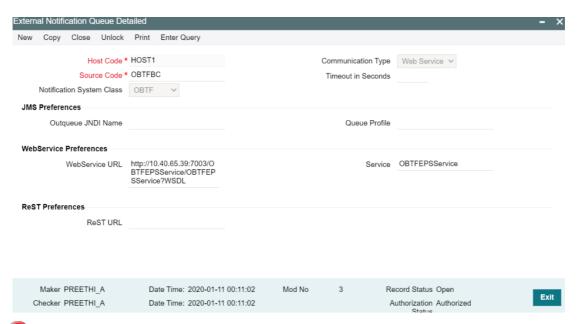


The preference for various payment networks via which OBTF will initiate a payment request needs to be maintained on this screen for the same Source codes as in the previous Section.

- OBPM should maintain appropriate Network Rule maintenance (PMDNWRLE)
 to route the OBTF request to the respective network. Based on the Payment
 type, OBTF system will send one of the values (LCL or SWIFT) in Service
 Level Proprietary field, which further will be used to build the network rules,
 - LCL Local clearing payments
 - SWIFT Messages SWIFT Payment messages



The OBTF Source specific notification preferences for each network at PMDEXTNT screen.



The notification is a call from OBPM to the OBTF Webservice - OBTFEPSService that needs to be deployed. The gateway external system setup is required to be done for source code mentioned in the above screen shot. It is important to give the Notification System class as OBTF and communication mode as Web Service.



2.2.3 Prerequisites in Common Core OBTF and OBPM

The following common core maintenances need to perform for Integration.

- Customer Maintenance Create the customers in STDCIFCR
- Account Maintenance Create Accounts (CASA / NOSTRO) in STDCRACC
- General Ledger Maintenance Create a General Ledger in STDCRGLM.
- > Transaction code Maintenance Create the Transaction code in STDCRTRN
- ➤ OBPM to use OBTF Dates Maintain IS_CUSTOM_DATE parameter as 'Y' in cstb_param table. By this, OBPM will use Today from sttm_dates as the transaction booking date.
- Note: Above point is applicable only to Co-Deployed setups between OBTF and OBPM.
- Other Payments Maintenances Refer Oracle Banking Payments Core User Manual, for the other Day 0 maintenances.

For detailed information on above mentioned screens, refer to Oracle Banking Payments Core User Manual

2.3 Integration Process

This section contains the following topics:

- Section 2.3.1, "Installation Modes"
- Section 2.3.2, "Integration Processing"

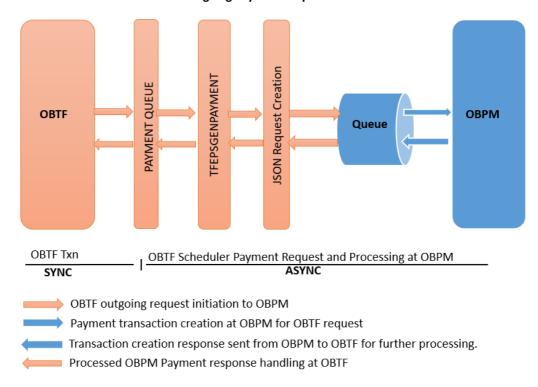
2.3.1 Installation Modes

The following installation modes are described in the upcoming sections:

- ASYNC Processing,
 - > In OBTF a transaction is created with payment message initiation to OBPM system.
 - > TFEPSGENPAYMENT scheduler fetches records from Queue and handovers to OBPM.
 - In OBPM a transaction is created and response is sent to OBTF
 - OBTF updates the queue references accordingly.

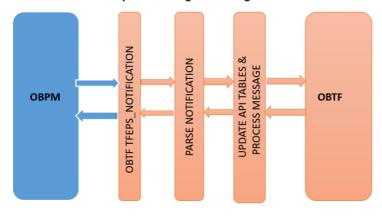


OBTF Outgoing Payment Request



- Upon successful transaction creation at OBPM, OBPM decides in sending notification to OBTF.
- Once OBTF receives notification, OBTF parses notification, extracts payment message and updates the message CLOB of the OBTF transaction.
- Upon notification updated at OBTF, OBPM receives the OBTF processed status and updates the external system (OBTF) processed status at OBPM.

Notification and Payment Message Processing at OBTF



OBPM initiates notification to OBTF in turn OBTF extract and process messages

AYSNC

Upon successful transaction at OBPM, OBPM decides and sends notification to OBTF

OBTF receives notification, parses it, updates the API tables and appends parsed message in OBTF transaction

OBTF sends the response back to OBPM after parsing and updating at OBTF

Notification received status at OBTF will be updated in OBPM



2.3.2 Integration Processing

This section contains the following topics:

- Section 2.3.2.1, "OBTF Payment Request Initiation"
- Section 2.3.2.2, "External Payment System Queue"
- Section 2.3.2.3, "External Payment System Queue History"
- Section 2.3.2.4, "External Bill Liquidation"

2.3.2.1 OBTF Payment Request Initiation

In OBTF during the creation of Bills and collections / Letter of credit transactions user the provision to do the following or system based on the product setup and settlement instructions maintained for the parties shall do the following

- a) After settlement pickup of a OBTF transaction, In settlement instructions component to be selected and navigate to the Payment details tab. E.g.: BILL_LIQ_AMTEQ
- b) In Payment details tab choose "Payment By" as "Message" and choose the "Transfer Type" as either "Bank Transfer" or "Customer Transfer". Provide other required details any for "Details of Charge", "Sender to Receiver Information", etc...
- Visit parties and provide required information about the parties involved like Account details and address details.
- d) Visit Other Details and choose "Bank Operation Code"

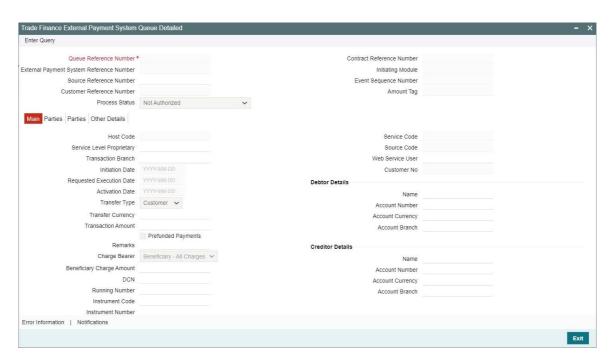
Refer following documents for making trade transactions and understanding on settlement instructions.

- Settlements User Guide
- Bills and Collections User Guide Section 6.1.4 Settlement
- Islamic Bills and Collections User Guide Section 5.3.6 Specify Settlement Instructions
- Letters of Credit User Guide Section 7.2.2 Reverse LC Liability Settlements portion
- Islamic Letters of Credit User Guide Section 7.2.1 Islamic LC Contract Availment - Settlements portion

2.3.2.2 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 'IFDTFPQU' in the top right corner of the Application toolbar and clicking the adjoining arrow button.





Queue Reference Number

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

Process Status

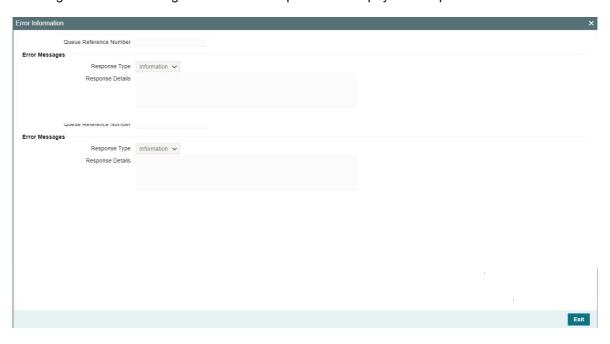
The system displays the process status. The list displays the following options:

Process	Description
Not Authorized	Contract initiated and the payment request is unauthorized
Un Processed	Payment request pending for processing
Web Service Connection Timeout	Web service call, timed out during payment request processing
Payment Approved	Payment request initial validation is successful andrequest is accepted
Payment Rejected	Payment request initial validation is failed and request is rejected
Payment Processed	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

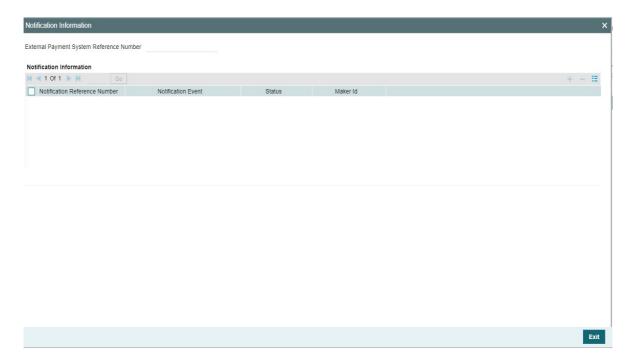


Negative Acknowledgement	Negative acknowledgment (NACK) received from
Received	payment network

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



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





Process Status

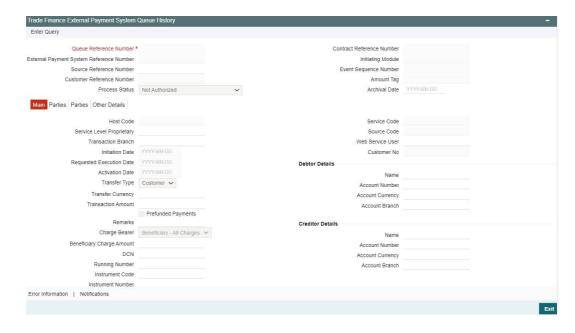
The system displays the process status. The list displays the following options:

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

2.3.2.3 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.

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



2.3.2.4 External Bill Liquidation

The following are the integration scope of OBTF with OBPM for external bill liquidation:

External Bill Entries

On export bill creation Bill related details will be exposed to common core system screen External Trade Contract Input (STDCRTRD) using common core service FCUBSCoreentitiesService and operation CreateExternalTrade. OBPM system uses the common core External Trade Contract Input data for an Incoming MT202 to Bills.

OBPM calls the OBTF webservice OBTFEPSService and operation QueryEXTBCContract to validate the bill. OBPM calls OBTF webservice OBTFEPSService and operation CreateExtBCEcaEntries for posting accounting entries. Once OBPM calls OBTF for accounting entries OBTF will initiate the Bill liquidation based on the OBPM request.



Provider	Service Name	Operation Code	Consumer
Common Core	FCUBSCoreentitiesService	CreateExternalTrade	OBTF
Common Core	FCUBSCoreentitiesService	ModifyExternalTrade	OBTF
Common Core	FCUBSCoreentitiesService	QueryExternalTrade	OBTF,OBPM

➤ EAC web service to validate the provided account number (Bill reference number). System to validate the availability of bill reference number along with the bill status and bill currency of received bill reference number(<CUST_AC_NO>) on receiving EAC request and respond with success or failure status(Synchronous response).

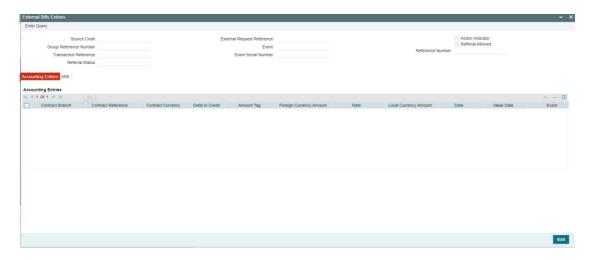
Provider	Service Name	Operation Code	Consumer
OBTF	OBTFEPSService	QueryEXTBCContract	ОВРМ

- ➤ EA web service to process liquidation on the provided account number (Bill reference number). System to initiate liquidation event on receiving EA request and respond with the success status. Asynchronous liquidation event will be triggered on the received reference number (<ACNO> of EA request).
- External Bill Entries to view the details of EA request and screen External Bill Liquidation Query to view the EA response and to retry the external bill liquidation in case of EA failure based on the parameter Maximum Retry count at Bills and Collection Branch Parameter.

Provider	Service Name	Operation Code	Consumer
OBTF	OBTFEPSService	CreateExtBCEcaEntries	ОВРМ

Refer Common Core - Core Entities and Services User Guide and BC User Manual for Bills Liquidation user manual.

You can view the details of external bill entries through 'External Bill Entries' screen. You caninvoke this screen by typing 'IFDEXBIL' in the top right corner of the Application toolbar and clicking the adjoining arrow button.



Existing accounting entries on liquidation events continues where as it debits bridges GL and



credits customer account.

Click Accounting Entries to view the accounting entries for the external bill event.

The details of the accounting entries that were passed for the event are viewed here. The accounting entries that are passed depend on the type of bill processed.

The following information is provided for account entries:

- Contract Branch
- Contract Reference
- Contract Currency
- Debit or Credit
- Amount Tag
- Foreign Currency Amount
- Rate
- Local Currency Amount
- Date
- Value Date
- Event
- All MIS details that were allowed will also be displayed.

External Bill Liquidation Query and Retry

External Bill Query screen allows the user to resolve the technical failures in case of EArequest. Whenever an EA request is received from Payments through GW Webservice, Liquidation gets triggered by OBTF.

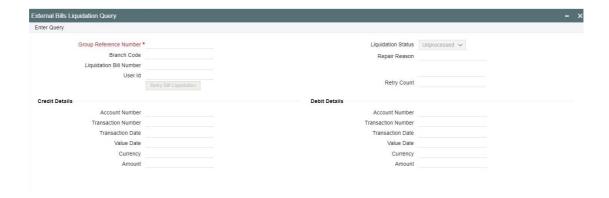
If Liquidation triggered by OBTF did not processed successfully, then retry liquidation provided in IFDEXLIQ to be enabled for repaired process records.

On click of retry liquidation external liquidation to be triggered automatically till the retry count provided in "Bills Branch Parameter maintenance" screen.

If external liquidation from external system is failed corresponding Bill should not be allowedfor further operations except Query and Copy.

You can view the details of bill liquidation request through 'External Bill Liquidation Query' screen. You can invoke this screen by typing 'IFDEXLIQ' in the top right corner of the Application toolbar and clicking the adjoining arrow button.







Liquidation Status

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

Liquidation Status	Description
Un Processed	Bill liquidation is pending for processing
Processed	Bill liquidation processed successfully
Processing Failed	Bill liquidation processing failed due to unexpected failure
Improper Notification	Bill liquidation received is not in proper format
Empty Notification	Bill liquidation notification received



3. Function ID Glossary

CODUPLDM5	PMDNWRLE	8
GWDETFUN5	PMDSORCE	6, 7
IFDEPSQH14		,
IFDEXBIL15	SMSJOBBR	6
IFDEXLIQ16	STDCIFCR	9
IFDEXLIQ'16	STDCRACC	9
IFDTFEPM4, 7	STDCRGLM	9
IFDTFPQU11	STDCRTRD	14
ISDBICDE6	STDCRTRN	9
PMDEXTNT8	TFEPSGENPAYMENT	6. 9

