FCUBS-OBPM Integration Setup Guide

# Oracle FLEXCUBE Universal Banking

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Oracle Banking Payments FCUBS-OBPM Integration Setup Guide
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# 1. Introduction

## 1.1 About This Manual

This manual is designed to help with Integration for a Co-deployed Set-up of Oracle Banking Payments with Oracle FLEXCUBE Universal Banking.

## 1.2 Audience

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

| Role | Function |
|---|---|
| Implementation & IT Staff | Implementation & Maintenance of the Software |

## 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 manual is organized into the following chapters:

| Chapter | Description |
|---|---|
| **Chapter 1** | Information about this Manual is specified in this section |
| **Chapter 2** | This chapter helps you co-deploy Oracle FLEXCUBE Universal Banking & Oracle Banking Payments product in a single instance. |

## 1.5 Glossary

This User Manual may refer to the following terms:

| Abbreviation | Description |
|---|---|
| **FCUBS** | Oracle FLEXCUBE Universal Banking |
| **OBPM** | Oracle Banking Payments |

# 2. Integration Guide

## 2.1 Introduction

You can integrate Oracle Banking Payments product (OBPM) with Oracle FLEXCUBE Universal Banking product (FCUBS). The specific steps needed on the co-deployed installation of these two products and specific maintenances needed are briefed on this document.

## 2.2 Installation guide

Refer to Installation guide for understanding the property file and installation bat files used for integration between FCUBS and OBPM.

**Web-logic set-up**

**Deployments:**

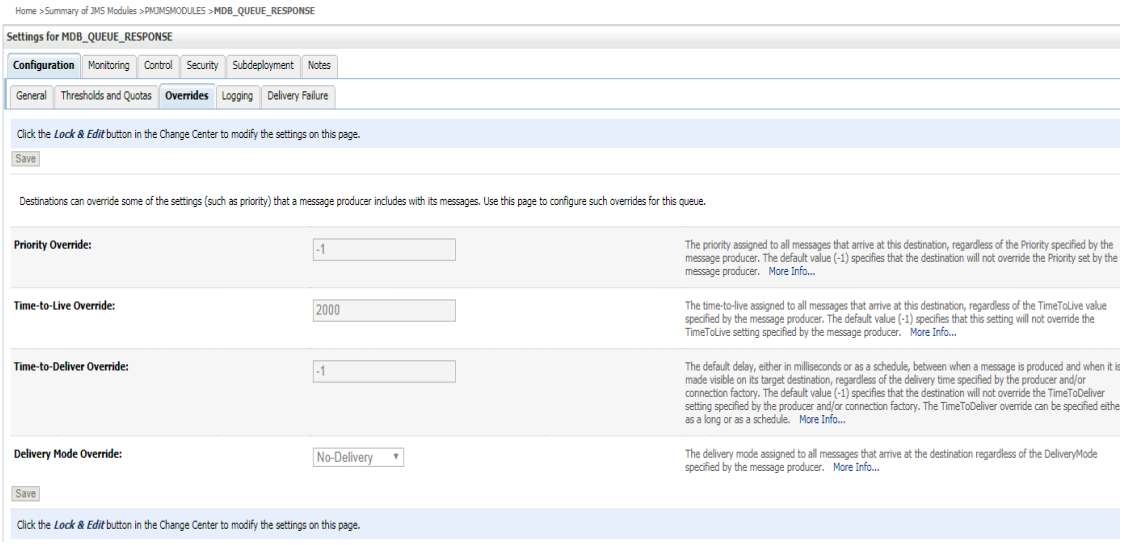
Following ears to be deployed for the FCUBS Gateway support through JMS:

- GW EJB
- GW MDB

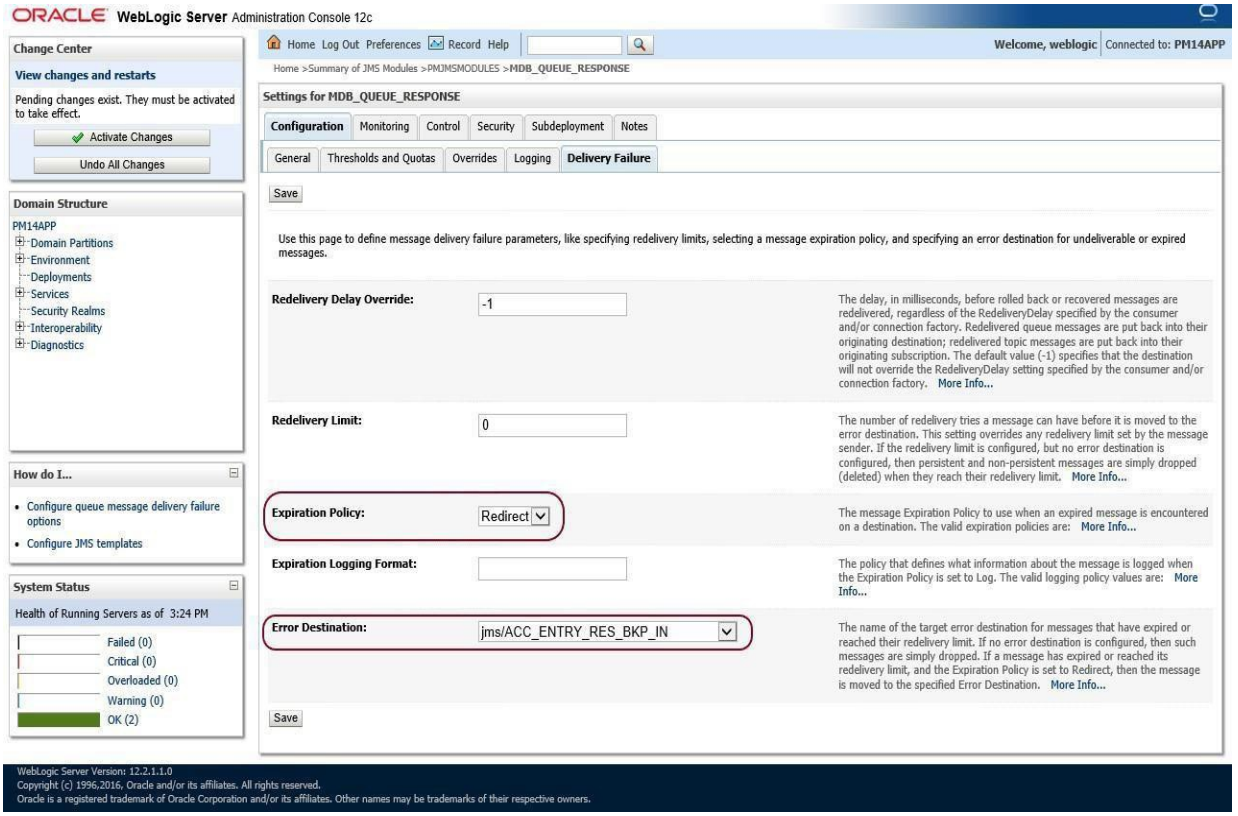
**Queue Maintenance:**

- MDB_QUEUE
- MDB_QUEUE_RESPONSE -with Expiry Policy as Redirect and error destination as jms/ACC_ENTRY_RES_BKP_IN in Delivery Failure. Keep Redelivery Limit as zero and "Time-to-Live Override" value as 2000.

To set the "Time-to-Live Override" property, navigate to MDB_QUEUE_RESPONSE -> Configuration-> Overrides Tab



To set the “Error Destination”, “Expiration Policy” and “Redelivery Limit” properties, navigate to MDB_QUEUE_RESPONSE Configuration Delivery Failure tab.




## Maintenance for Gateway:

### GWDETFUN - Gateway External system function maintenance

STOP Ensure the Gateway setup for following services are maintained in FCUBS for external source system as FCUBS:

| Service Name | Operation Code(s) |
|---|---|
| FCUBSAccService | QueryCustAccVal |
| FCUBSCAService | CreateEcablk<br>CloseEcablk |
| FCUBSIFService | CreateExtAccEcaEntries |

Source: FCUBS and User: SYSTEM

### CODUPLDM - Upload Source Preferences maintenance

STOP Ensure Upload Source preference setup for following modules are maintained in FCUBS for external source system as FCUBS:

| Module | Post Upload Status |
|---|---|
| IF | Authorized |
| CA | Authorized |

## 2.3 Maintenances to be done in FCUBS

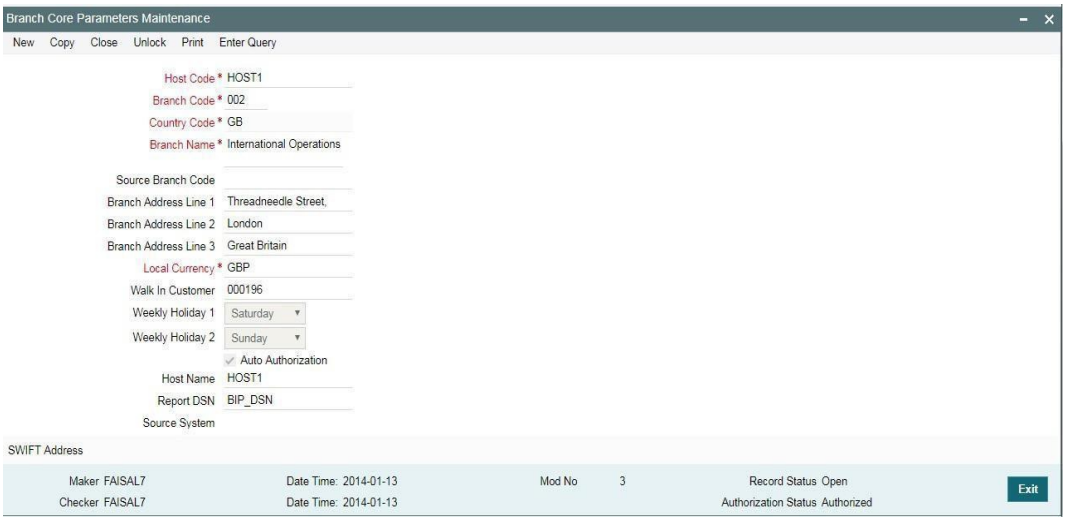
This section describes the specific maintenances, needed in Oracle FLEXCUBE Universal Banking (FCUBS) to install & integrate the same with Oracle Banking Payments (OBPM).

### 2.3.1 Branch Maintenance

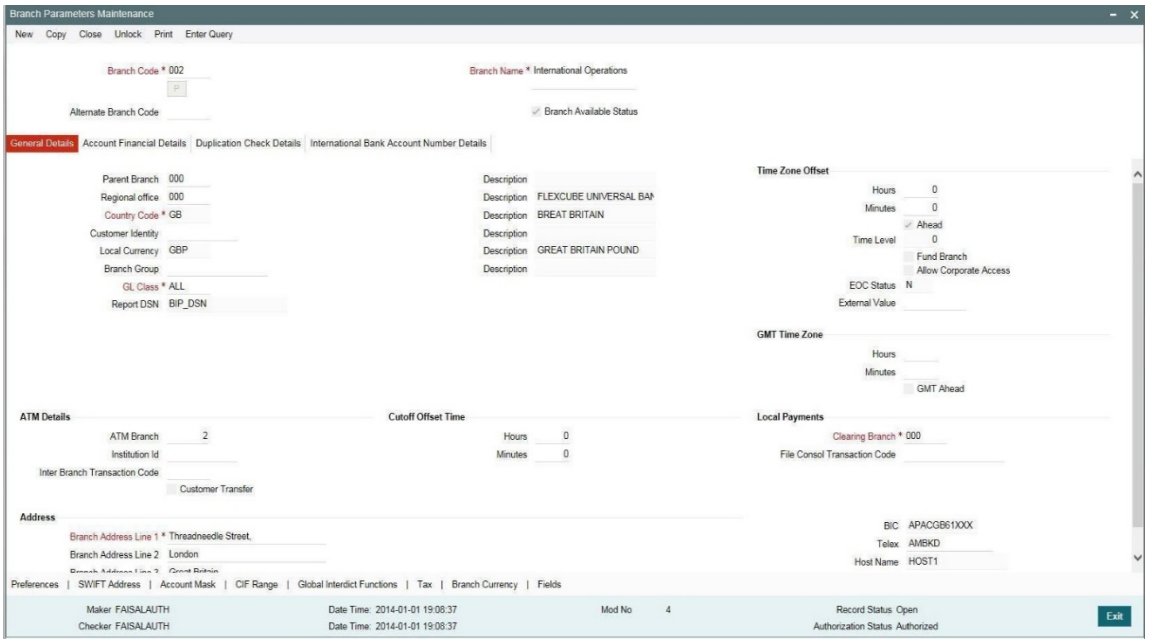
Create branch in STDCRBRN screen in FCUBS.

Specify a host for every branch created. (To maintain Host time zone, refer OPBM Payments Core User Manual).

A pair of branches which could transact inter-branch payments, should be maintained under the same host.



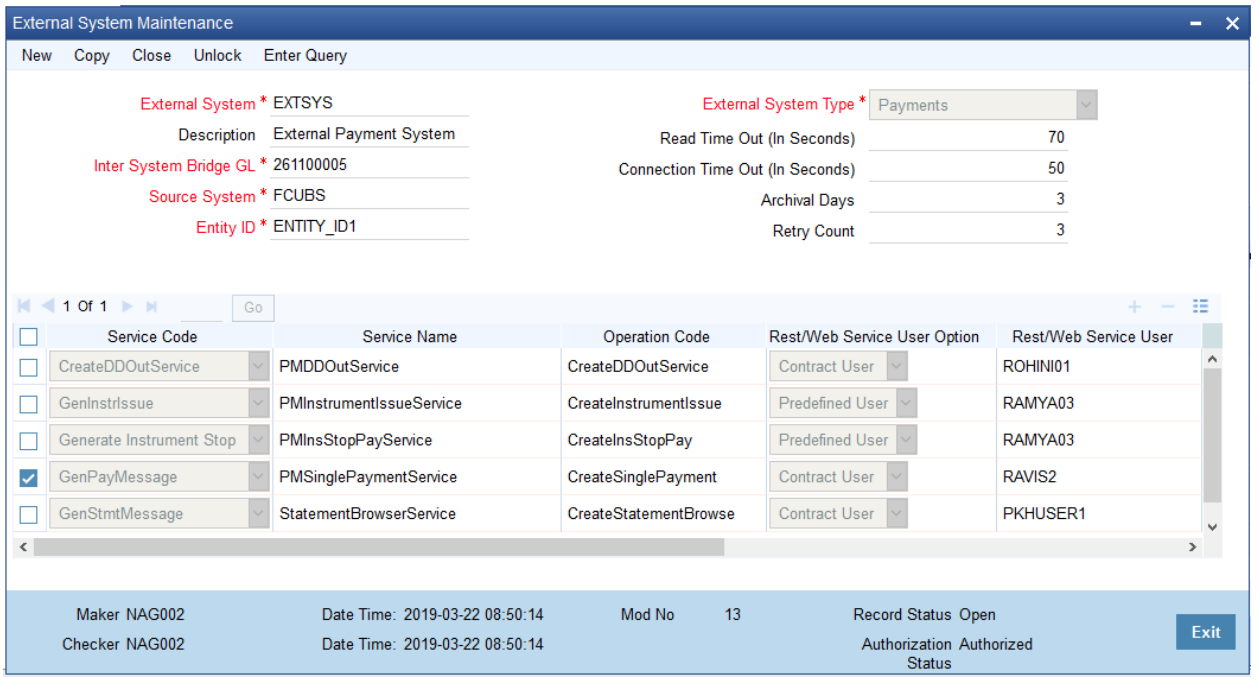

In addition, map the branch code created above, in STDBRANC screen, and maintain the branch parameters.



### 2.3.2 External Payments System Maintenance

Maintain an active record in External System Maintenance screen (IFDEPSMT) with field external system type as “Payments” for different service codes with all required fields in the detailed section of this screen

- For MT110 - Advice of Cheque(s), maintain the service code as 'GenInstrIssue' with OBPM Instrument Issuance Service details as below:
    - Service Name - PMInstrumentIssueService
    - Operation Code - CreateInstrumentIssue
    - Rest/Web Service User Option - Choose the preferred option
    - Rest/Web Service User - Provide the User to be used in Gateway request.
    - Rest/Web Service URL - Provide the WDSL URL of OBPM Instrument Issuance Service.
- For MT111 - Request for Stop Payment of a Cheque, maintain the service code as 'GenInstrStop' with OBPM Instrument stop Service details as below:
    - Service Name - PMInsStopPayService
    - Operation Code - CreateInsStopPay
    - Rest/Web Service User Option - Choose the preferred option
    - Rest/Web Service User - Provide the User to be used in Gateway request
    - Rest/Web Service URL - Provide the WDSL URL of OBPM Instrument Stop Service
- For Outgoing Collections - Request for DD Creation, maintain the service code as ‘CreateDDOutService’ as below:
    - Service Name - PMDDOutService
    - Operation Code - CreateDDOutService
    - Rest/Web Service User Option - Choose the preferred option
    - Rest/Web Service User - Provide the User to be used in Gateway request
    - Rest/Web Service URL - Provide the WDSL URL of OBPM
- For CoverMatching, maintain the service code as “GenStmtMessage” with OBPM statement browser Service details as below:
    - Service Name – StatementBrowserService
    - Operation Code - CreateStatementBrowse
    - Rest/Web Service User Option – Choose the preferred option
    - Rest/Web Service User – Provide the User to be used in the Rest request
    - Rest/Web Service URL Service - Provide the WEB Service URL of OBPM Statement Browser Service
- For Outward Clearing, maintain the service code as “InitiateOutCLGReq” with OBPM Outward clearing service details as below:
    - Service Name – InitiateClgTxn
    - Operation Code – CreateClearingRequest
    - Rest/ Web Service User Option – Choose the preferred option
    - Rest/ Web Service User – Provide the User to be used in the Rest request
    - Rest/Web Service URL Service - Provide the Rest Service URL of OBPM outclg
- For DD/BC instrument issue, maintain the service code as “InitiateInstrReq” with OBPM Instrument Issue service details as below:
    - Service Name – InitiateInstrTxn
    - Operation Code – Createinstrumentissue
    - Rest/ Web Service User Option – Choose the preferred option
    - Rest/ Web Service User – Provide the User to be used in the Rest request
    - Rest/Web Service URL Service - Provide the Rest Service URL of OBPM instrument issue

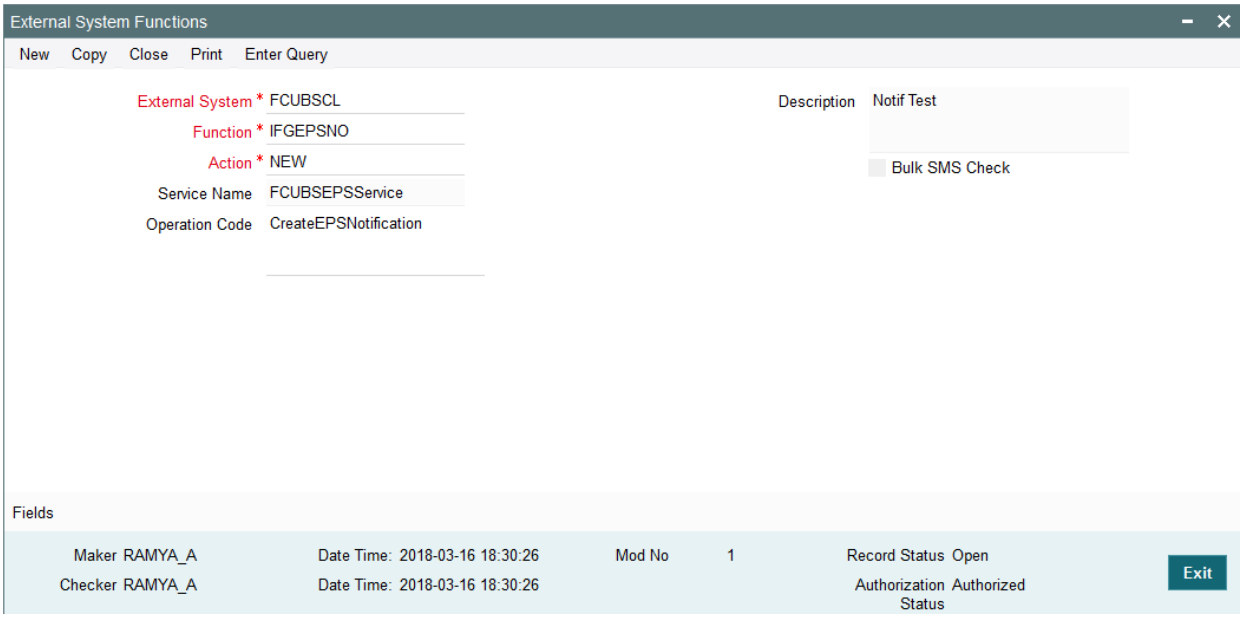



### 2.3.3 External System Functions Maintenance

- Maintain the gateway preferences for the below Source codes for the service name "FCUBSEPSService" with operation code "CreateEPSNotification" to receive the notifications from OBPM
  - FCUBSCL
  - FCUBSRT
  - FCUBSTD

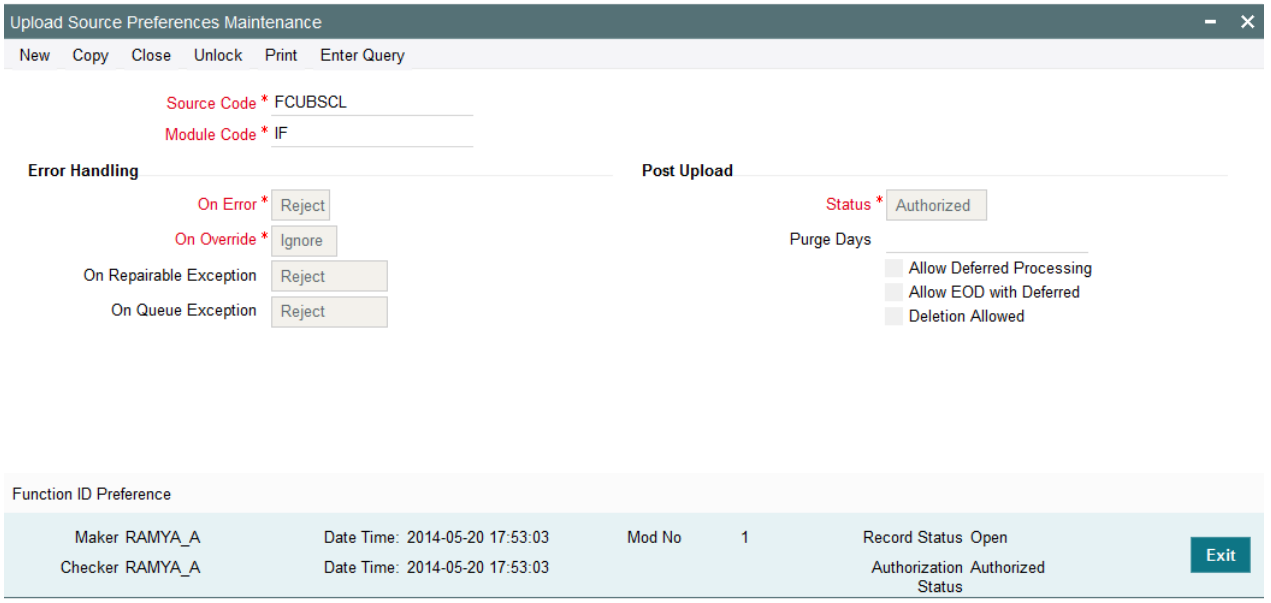
  For all FCUBS corporate modules where outgoing payment is initiated, the source code will be "FCUBS <Module-ID>". For example, the source code for FX module will be "FCUBSFX"

- Maintain the gateway preferences for the below Source codes for the service name "PMDDOutService" with operation code "CreateDDOutService" to receive the notifications from OBPM
  - FCUBSCL




### 2.3.4 Upload Source Preference Maintenance

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



Below are the scheduler jobs configured for the integration. Make sure that these jobs are running.

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

EPSSTATEMENTPROCESS- Scheduler job for processing Cover Matching

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

- GenPayMessage.ADF

### 2.3.5 BIC Maintenance

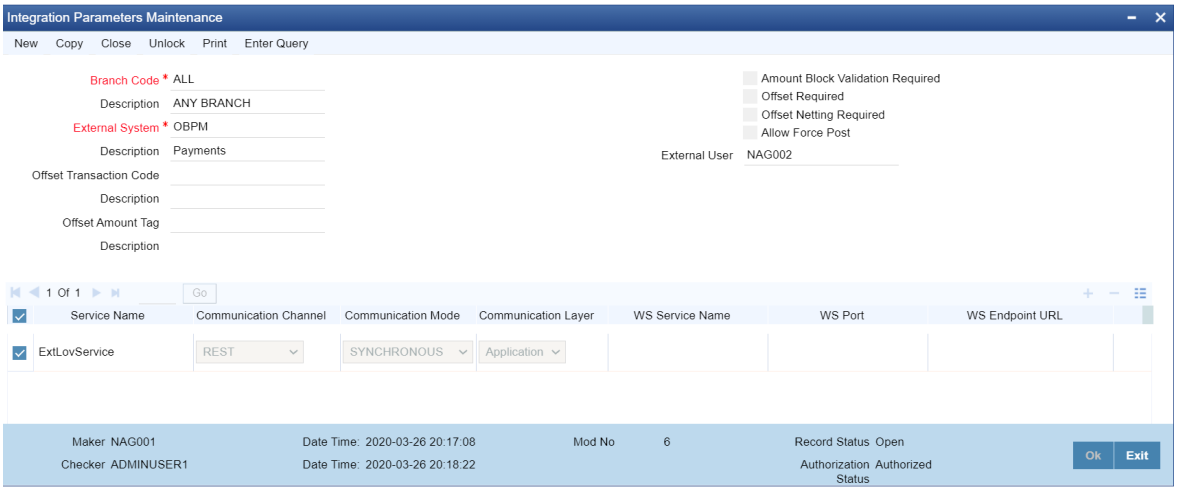
Upload BIC directory & ensure that the same are listed at ISDBICDE, which FCUBS will use, to transact payments.

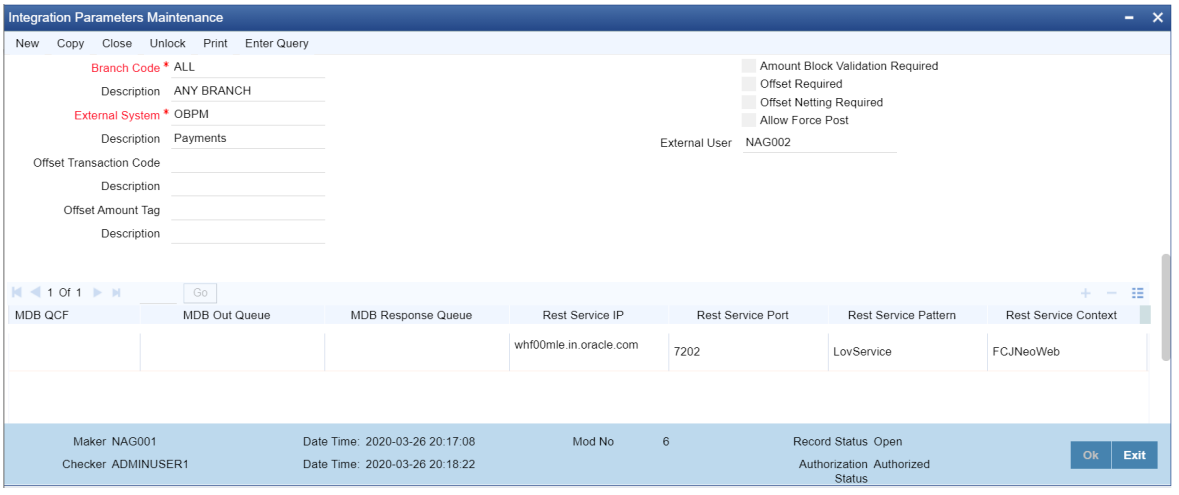
### 2.3.6 Other Common Maintenances

Refer FCUBS Core User Manual, for the other Day 0 maintenances to be done in FCUBS.

### 2.3.7 Integration Parameter Maintenance

Maintain the Integration parameter maintenance as below for the external LOV to work at the IFDINPRM screen.



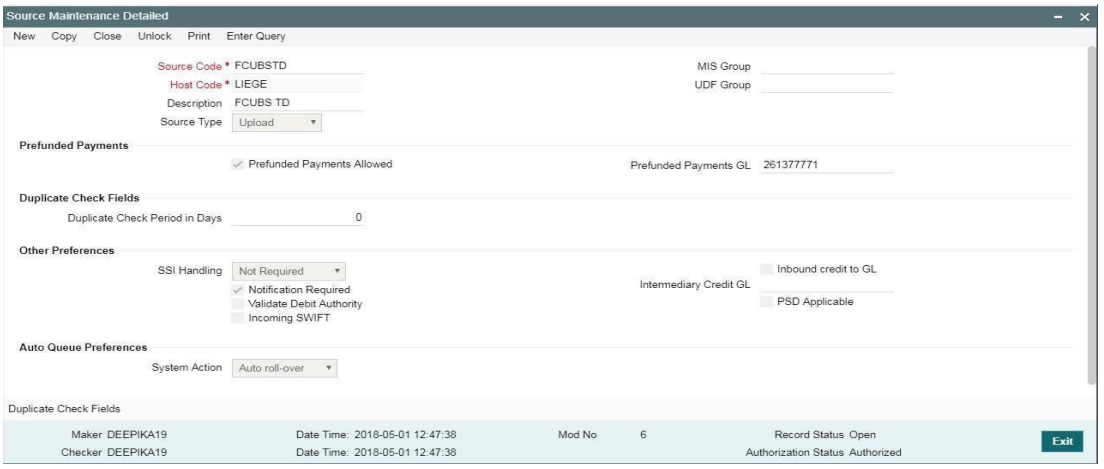




## 2.4 Maintenances to be done in OBPM

This section describes the specific maintenances needed in Oracle Banking Payments (OBPM) to install & integrate the same with Oracle FLEXCUBE Universal Banking (FCUBS).

### 2.4.1 Source Maintenance

Maintain the Source code with which FCUBS will handoff payment requests at PMDSORCE- Source maintenance screen.




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

- 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".

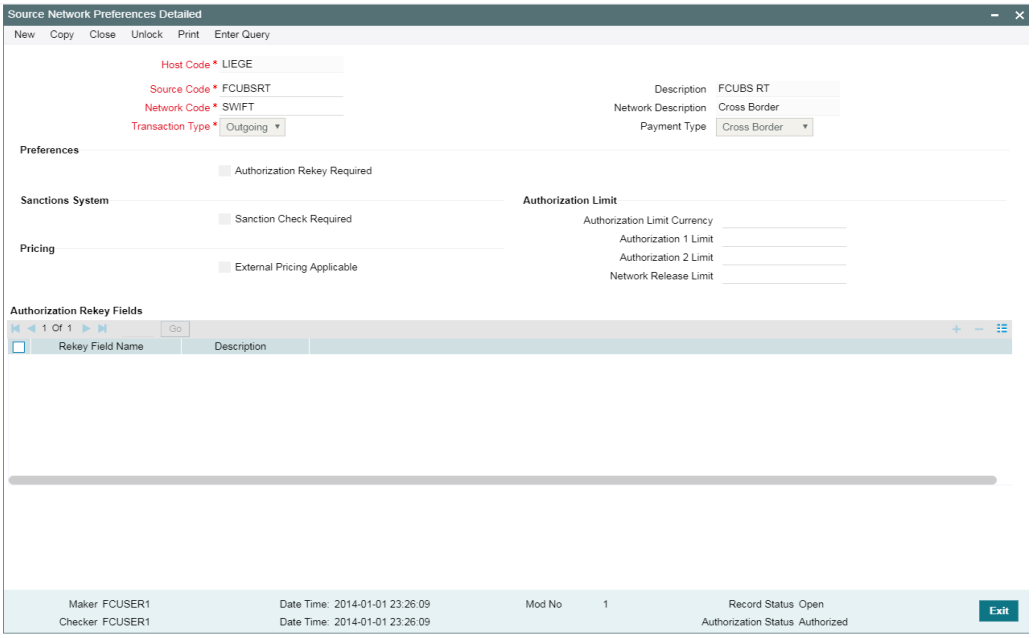
Each record maintained in Source Maintenance Detailed screen (PMDSORCE) should have the below preferences:

- Prefunded Payments GL should match Inter System Bridge GL maintained in External Payment System Maintenance screen (IFDEPSMT) of FCUBS.
- To initiate a payment for Loan disbursement / Deposit maturity etc. FCUBS will credit the funds in an intersystem bridge GL. This is needs to be maintained as Prefunded GL in OBPM.

This GL should be maintained in FCUBS & replicated to OBPM.

### 2.4.2 Source Network Preference Maintenance

Maintain the FCUBS Source specific preferences for each network at PMDSORNW screen.

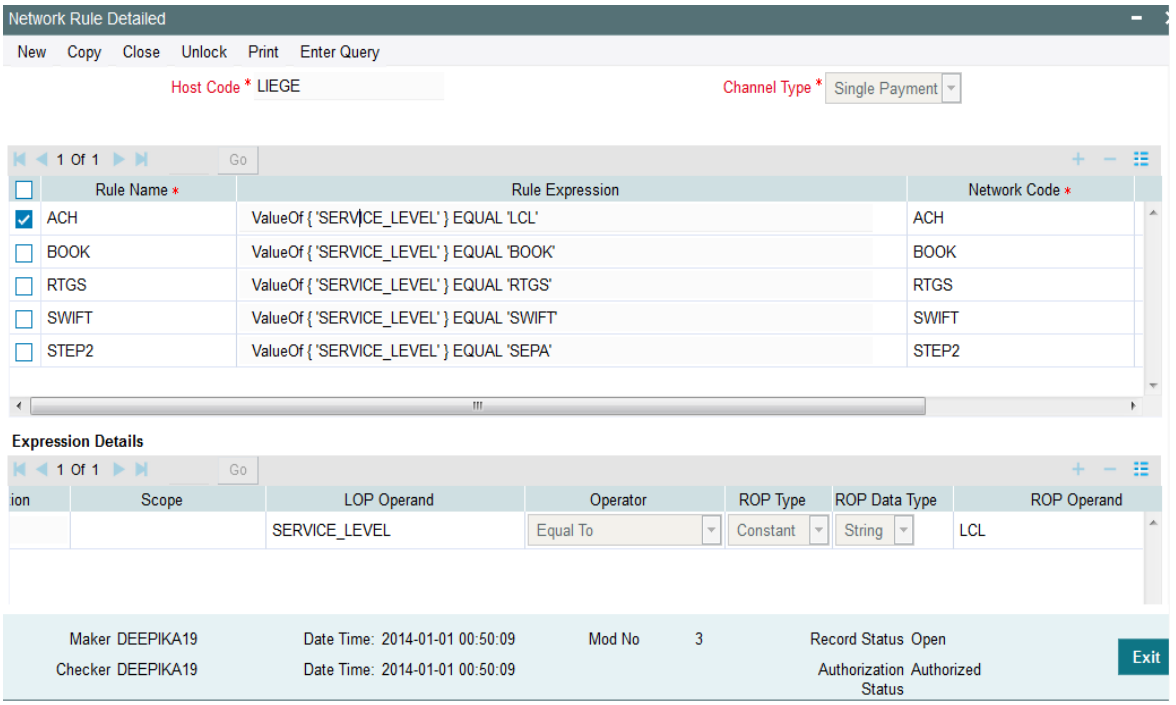



The preference for various payment networks via which FCUBS will initiate a payment request needs to be maintained on this screen for the same Source codes as in the previous Section.

### 2.4.3 Network Rule maintenance

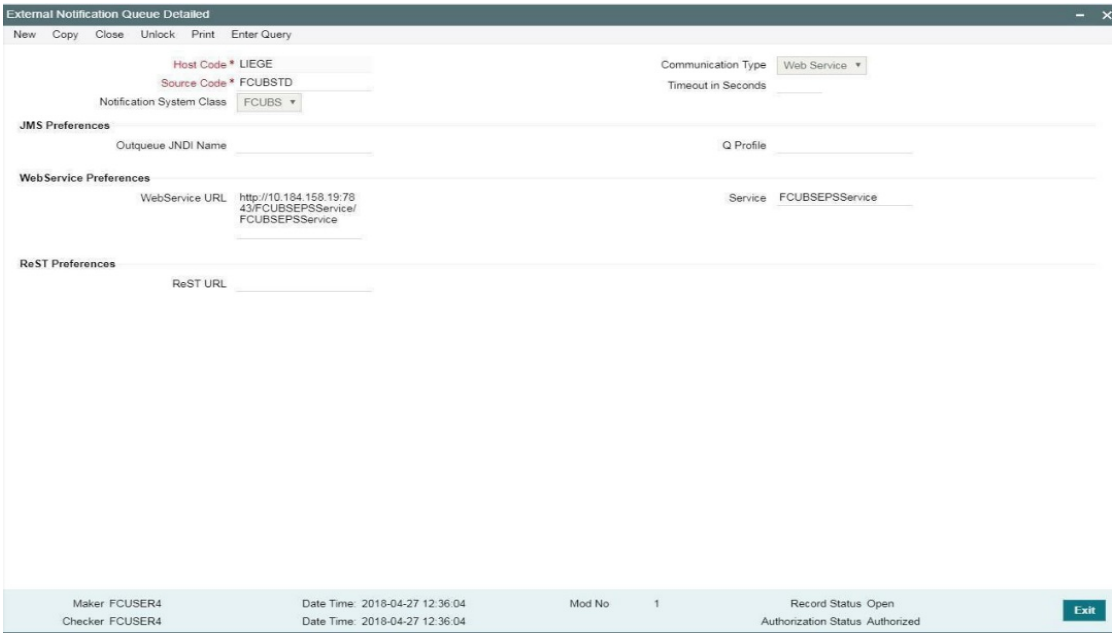
OBPM should maintain appropriate Network Rule maintenance (PMDNWRLE) to route the FCUBS request to the respective network.

- Based on the Payment type, FCUBS system will send one of the values (LCL, SWIFT, RTGS) in Service Level Proprietaryfield, which further will be used to build the network rules,
    - LCL- Local clearing payments
    - SWIFT - SWIFT Payment messages
    - RTGS - RTGS Payment messages




## 2.4.4 Notification maintenance

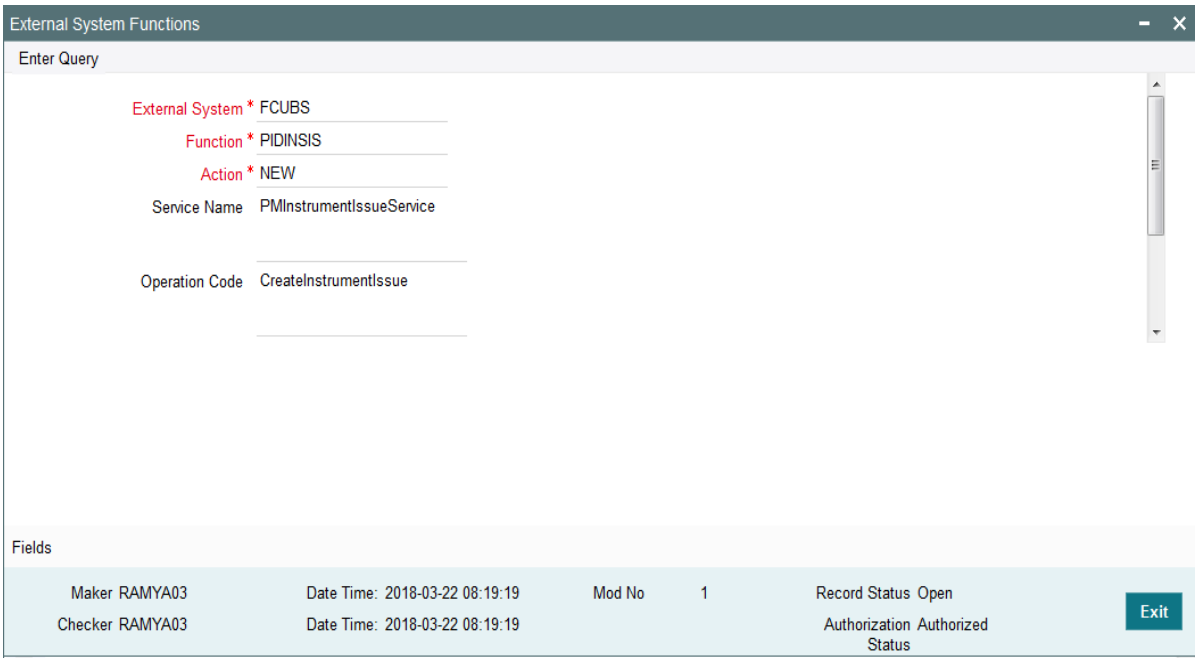
Maintain the FCUBS Source specific notification preferences for each network at PMDEXTNT screen.



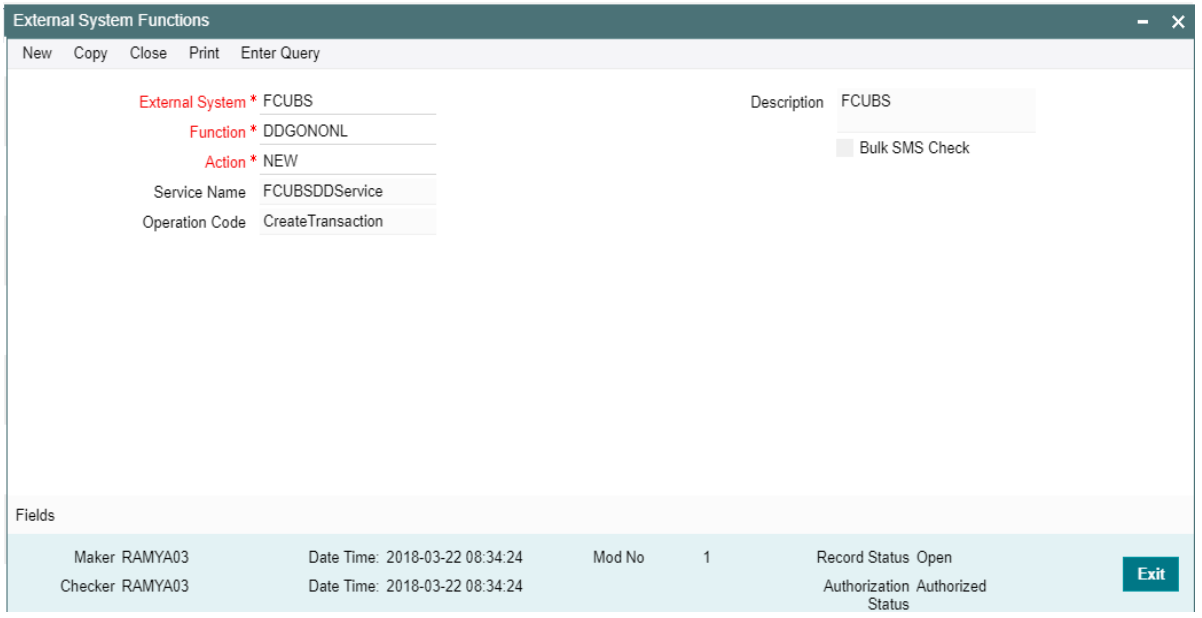

The notification is a call from OBPM to the FCUBS Webservice – FCUBSEPSService that needs to be deployed. The gateway external system setup is required to be done for source code mentioned in the above screen shot. It is important to give the Notification System class as FCUBS and communication mode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

## 2.4.5 External System Functions Maintenance

1. Maintain the gateway preferences for the Source System which is maintained in the Source system field of External Payment System Maintenance screen (IFDEPSMT) in FCUBS, for the service names “PMInstrumentIssueService” and “PMInsStopPayService” with their respective operation codes.

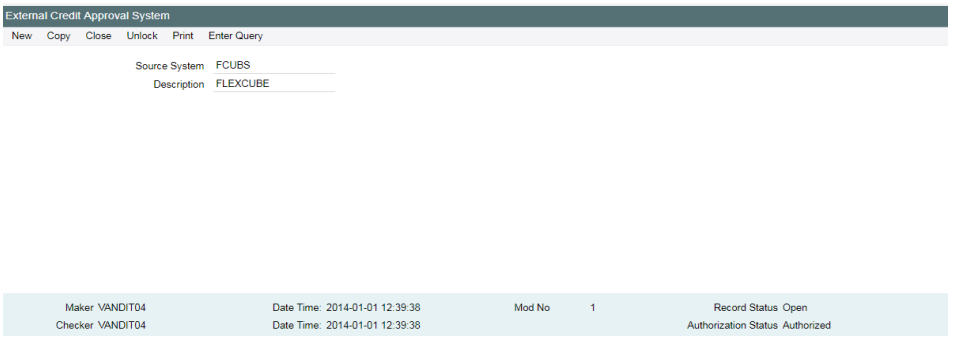



2. The service names “FCUBSDDServices” and “Create Transaction” with their respective operation codes.

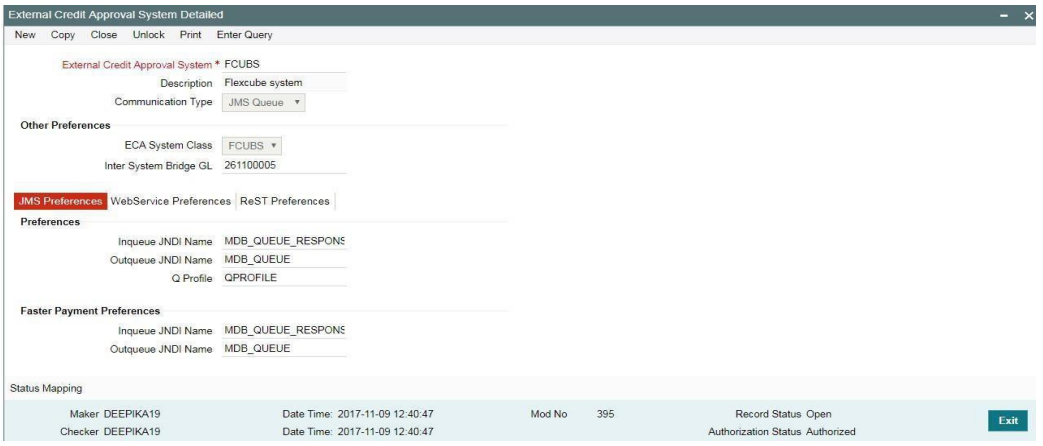


## 2.4.6 ECA System Maintenance

Create External Credit Approval Check system as 'FCUBS' in STDECAMT screen.

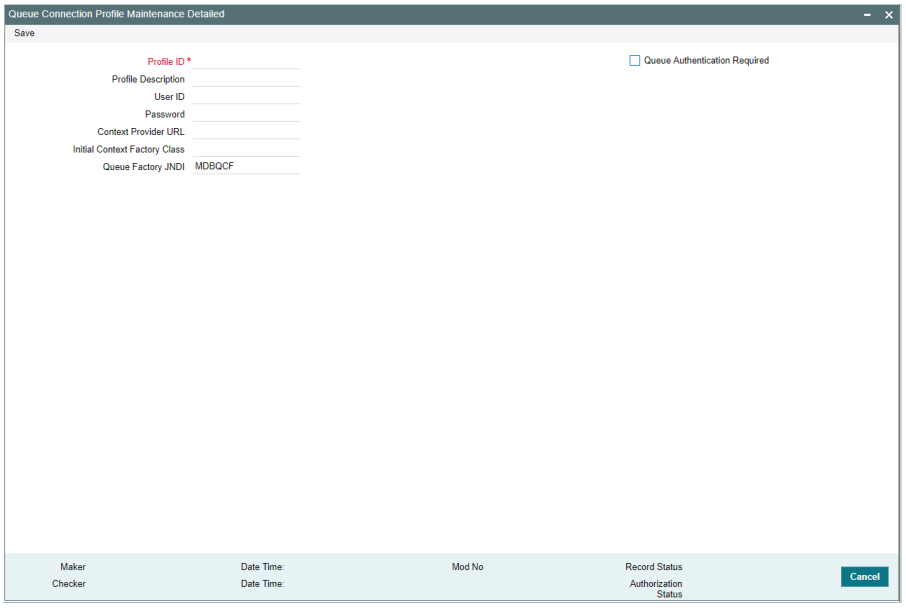



Map the ECA system 'FCUBS' in the PMDECAMT.




Maintain the In queue JNDI Name as MDB_QUEUE_RESPONSE, Outqueue JNDI Name as MDB_QUEUE & Q Profile – as per the MDB Queue created on the App Server as in Section 2.2. Q Profile should be the IP Address where the JMS Queue has been created. The OBPM System will post the ECA request to UBS via these MDB queues. Maintain Queue Profile in

'PMDQPROF'



Queue profile requires the context provider URL of the Application Server where the queue is created. All other parameters are same as mentioned above.

OBPM build the ECA request with details mentioned in section 2.2 and post to MDB_QUEUE. FCUBS via GW MDB pulls the gateway request and call internally the ECA block process to create or undo the ECA block. Once the process is completed, the FCUBS post the response via gateway infra to MDB_QUEUE_RESPONSE.

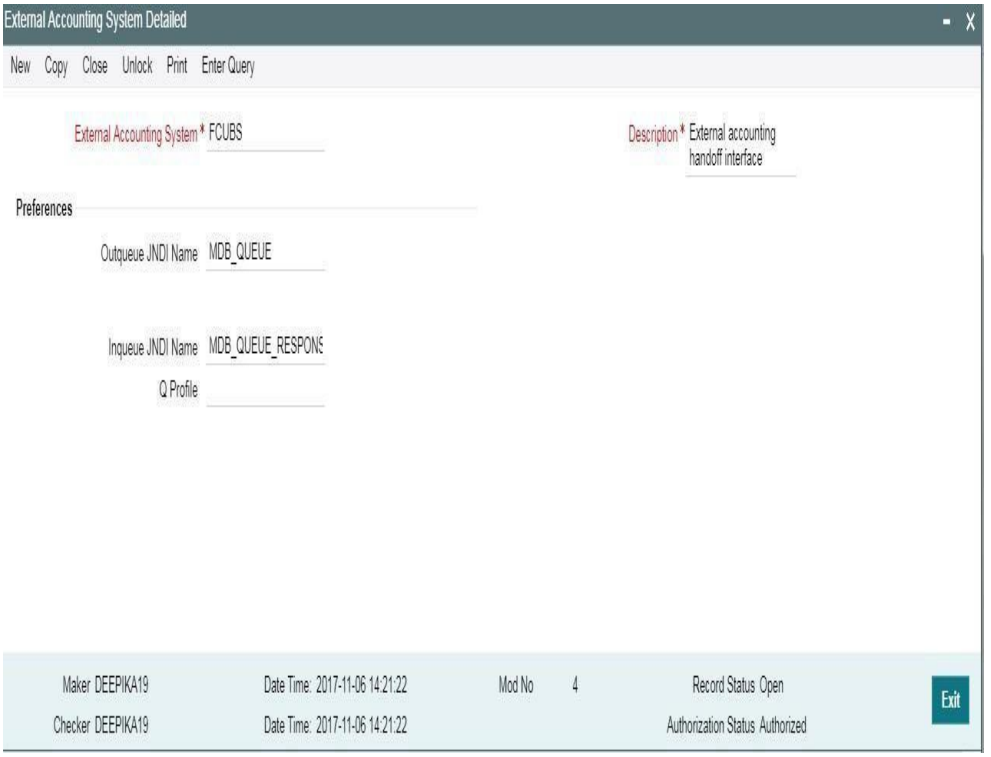
MDB_QUEUE_RESPONSE is configured with a redelivery Queue as jms/ACC_ENTRY_RES_BKP_IN mentioned in section 2.2. This Queue internally pulls the response via OBPM MDB to complete ECA processing in OBPM.

Following are the Services and Operations used by OBPM to post in to FCUBS

- FCUBSAccService – QueryCustAccVal (Operation)
- FCUBSCAService – CreateEcablk, CloseEcablk (Operation)

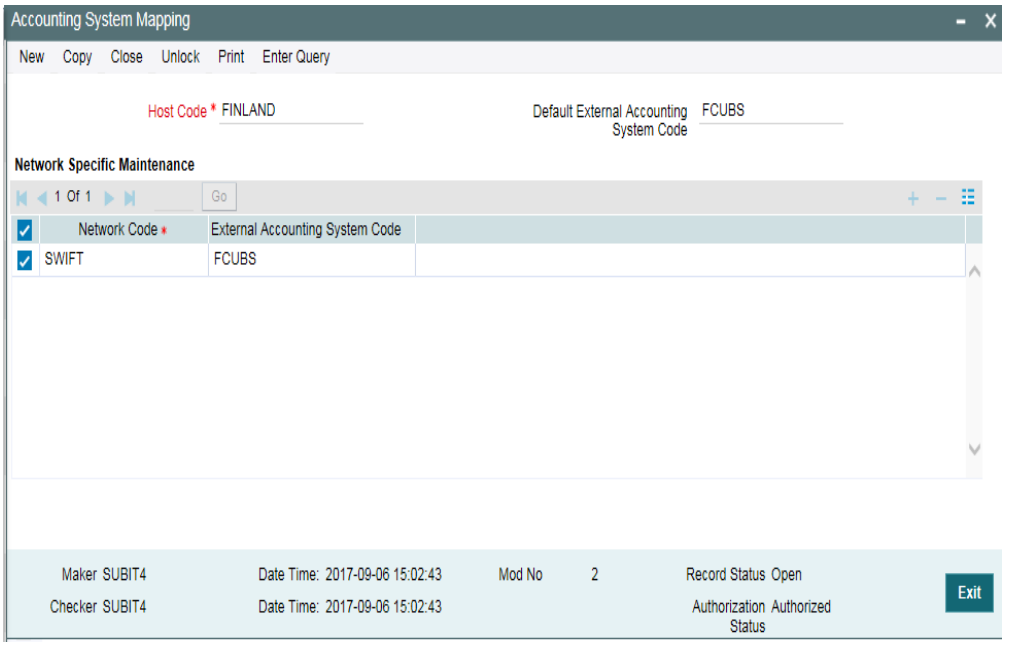
### 2.4.7 Accounting System Maintenance

Maintain the accounting system as 'FCUBS' in PMDACCMT.




Maintain the In queue JNDI Name as MDB_QUEUE_RESPONSE, Outqueue JNDI Name as MDB_QUEUE & Q Profile (refer section 2.4.5).The OBPM system will post the Accounting handoff request to FCUBS via these MDB queues.

Maintain Account System Mapping for the Accounting System and Networks (PMDACMAP)




OBPM build the Accounting Handoff request with details mentioned in section 2.2 and post to MDB_QUEUE. FCUBS via GW MDB pulls the gateway request and calls internally the External Accounting request. Once the process is completed, FCUBS posts the response via gateway infra to MDB_QUEUE_RESPONSE.

MDB_QUEUE_RESPONSE is configured with a redelivery Queue as jms/ACC_ENTRY_RES_BKP_IN mentioned in section 2.2. This Queue internally pulls the response via OBPM MDB to complete Accounting Handoff processing in OBPM.

Following is the Service and Operation used by OBPM to post in to FCUBS:

FCUBSIFService - CreateExtAccEcaEntries(Operation)

### 2.4.8 Customer Maintenance

Create the customers in FCUBS system, which will be automatically replicated and displayed at STDCIFCR in OBPM.

Creation of CIF, its amendments, closure & re-open status will get auto replicated to OBPM, with the latest data.

### 2.4.9 Account Maintenance

Create the accounts (Normal / Nostro type) in FCUBS system which will be automatically replicated and displayed at STDCRACC in OBPM.

Creation of accounts, its amendments, closure & re-open status will get auto replicated to OBPM with the latest data.

### 2.4.10 General Ledger Maintenance

Create the General Ledger in FCUBS system which will be automatically replicated and displayed at STDCRGLM in OBPM.

Creation of General Ledgers, its amendments, closure & re-open status will get auto replicated to OBPM with the latest data.

### 2.4.11 Transaction code Maintenance

Create the transaction code in FCUBS system which will be automatically replicated and displayed at STDCRTRN in OBPM.

Creation of transaction codes, its amendments, closure & re-open status will get auto replicated to OBPM with the latest data.

### 2.4.12 OBPM to use FCUBS Dates

Maintain IS_CUSTOM_DATE parameter as 'Y' in cstb_param table. By this, OBPM will use the 'Today' from sttm_dates as the transaction booking date.

This parameter value should be modified to N in Production environment.

### 2.4.13 Other Payments Maintenances

Refer OPBM Payments Core User Manual, for the other Day 0 maintenances to be done.

## 2.5 FAQ's

This section describes the FAQ's for the scenarios noticed on accounting handoff between Oracle Banking Payments & Oracle FLEXCUBE Universal Banking systems, on the Co-deployed set-up.

1. **Accounting handoff is in Pending status:**

   OBPM isn't able to post the accounting entries to UBS accounting jms queue. If in the PM debugs, shows failed to initialize jndi factory, check the following in PMSSYSPM – System parameters:
   - PM.CTX.FACTORY - weblogic.jndi.WLInitialContextFactory
   - PM_CTX_PROVIDER – Provider URL** of the app server

   a. (** Provider URL will be the http URL of the app URL. E.g.: if Application URL is https://hostname:9011/FCJNeoWeb/ , then provider URL will be t3://hostname:9010)
   b. In PMDQPROF screen – Q profile – Specify the correct Initial factory & provider URL (same as above). QCF should be MDBQCF. Ensure this MBDQCF is configured in WebLogic.
   c. Update the Provider URL in Pmtm_job_param & pmtm_system_parameters tables.
   d. Do restart the application after the above changes.

2. **Accounting handoff is in Requested status:**

   The accounting is passed successfully by OBPM, but response from UBS system is not received yet.
   a. Check the MDB settings as indicated above & MDB gateway log.
   b. Check gwtm_in_log & gwtm_out_log tables for the exception details & message CLOB. The correlation ID in the accounting request XML of the transaction will be key between the two systems.

3. **Accounting handoff is in Rejected status:**
   Accounting entries handed off by OBPM has been rejected by UBS.
   a. In OBPM application front end, go to the view transaction (PXDOVIEW / PBDOVIEW/ PADOVIEW), query the transaction. Click on View Q action. In Queue action log the sub screen, selecting the Accounting Response row, Click View response. Check the error & take corrective action as below:
   b. If error is “No data found for source combination” → Maintain in GWDETFUN a record for source code FCUBS & CreateExtAccEcaEntries (NEW) combination.
   c. If error is “User doesn’t have rights to perform operation” → Maintain in SMDUSRDF, for SYSTEM user, add roles for the respective branch.
   d. Additionally, ensure the below maintenance are done:
      i. Maintain Source as FCUBS in CODSORCE
      ii. Maintain Source Preference for FCUBS Source and IF Module in CODUPLDM
      iii. Set Correlation pattern in GWDETSYS as Correlation ID. Not Message ID.

**Relevant debugs to be analyzed:**

MDB_Kernel11.1_gwlog _<Date>.log : GW MDB Log
SYSTEM<Branchcode>: Db Dbg