Oracle® Banking Liquidity Management

Integration Guide

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Preface

Introduction

This guide describes the information on integration service recommendations for Oracle Banking Liquidity Management.

Audience

The guide is intended for IT department or administrators deploying Oracle Banking Virtual Account Management and third party or vendor software. Some information is relevant to IT decision makers and users of the application are also included.

> **Note:**
>
> Readers are expected to have basic operating system, network, and system administration skills with awareness of vendor/third-party software and knowledge of Oracle Banking Virtual Account Management application.

This manual is organized as follows:

Table 1 List of Topics

Topics	Description
Steps to configure Service Providers for Oracle Banking Liquidity Management	This topic helps you to configure Service Providers for Oracle Banking Liquidity Management.
Integration Services	This topic helps you to Integrate services with Oracle Banking Liquidity Management.
Inbound APIs	This topic provides the information about the Inbound Service APIs of Oracle Banking Liquidity Management.
Events	This topic provides the information about the Events of Oracle Banking Liquidity Management.
File Upload	This topic provides the information about the File Upload features supported by Oracle Banking Liquidity Management.
FOP Advices	This topic provides the information to configure the FOP template for Advices.

Scope

Read Sections Completely

Each section should be read and understood completely. Instructions should never be blindly applied. Relevant discussion may occur immediately after instructions for an action, so be sure to read whole sections before beginning implementation.

Understand the Purpose of this Guidance

The purpose of the guidance is to provide necessary integration services for Oracle Banking Liquidity Management.

Limitations

This guide is limited in its scope to integrate services guidelines for developers.

1

Steps to configure Service Providers for Oracle Banking Liquidity Management

This topic describes the systematic instructions to configure the service providers for Oracle Banking Liquidity Management.

The user should maintain the below functional activities to configure the service providers for Oracle Banking Liquidity Management.

- Initial Setup
  This topic describes the Initial Setup Process to perform Configuration for Oracle Banking Liquidity Management Service Providers.
- Service Providers
  This topic provides the information about the Service Providers.
- Consumer Services
  This topic provides the information about the Consumer Services.
- Configure Service Providers
  This topic describes the configure the service providers for Oracle Banking Liquidity Management.
- Configuring Consumer Services
  This topic describes the configure the Consumer Services for Oracle Banking Liquidity Management.

1.1 Initial Setup

This topic describes the Initial Setup Process to perform Configuration for Oracle Banking Liquidity Management Service Providers.

Follow the below steps to configure Oracle Banking Routing Hub:

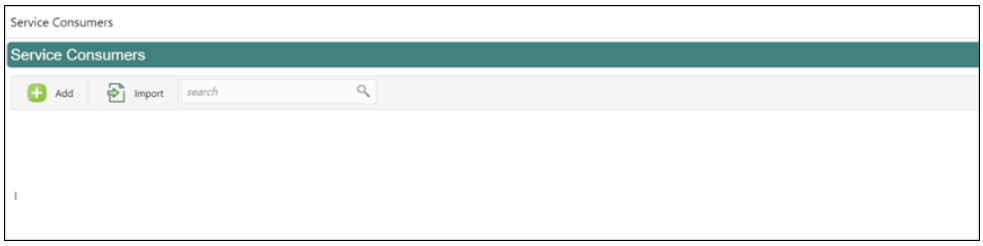
1. Download the **OBLM_Consumer.json** configuration file in case it is not done during installation setup

   > **Note:**
   >
   > Ignore below steps 3 & 4 if the files that are already imported during installation.

2. On **Core Maintenance** menu, Click **Routing Hub**. Under **Routing Hub**, click **Service Consumers**.

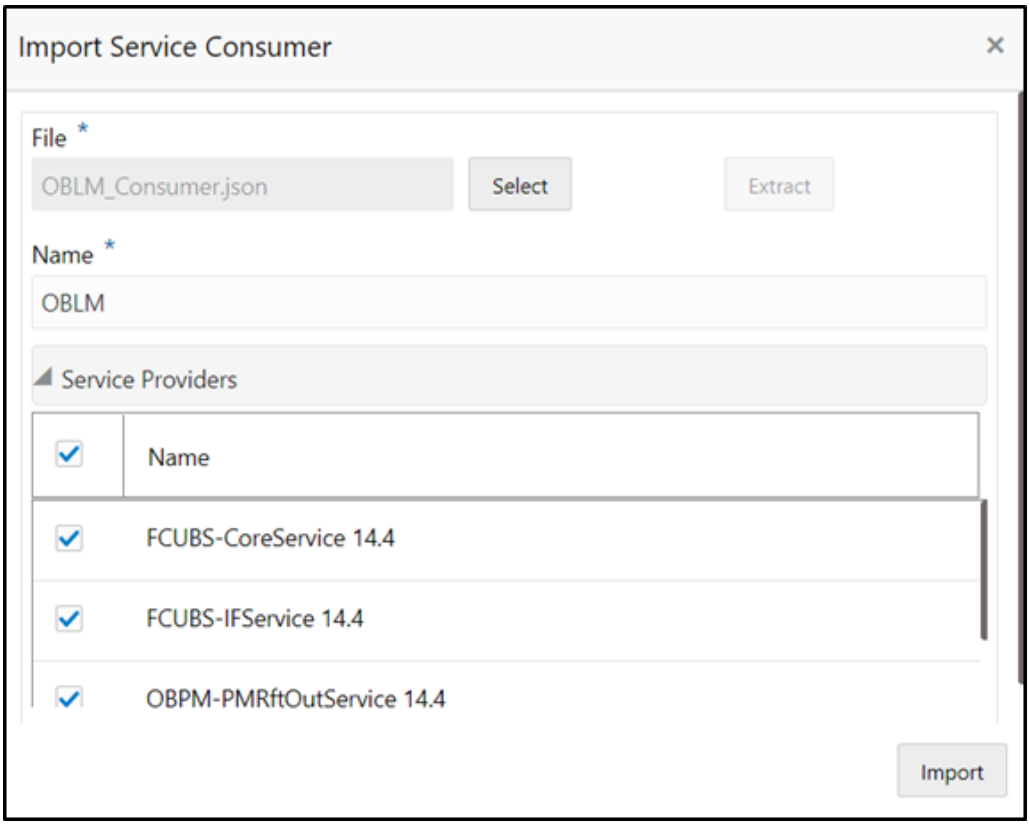
   The **Service Consumers** screen displays.

Figure 1-1 Service Consumers



3. Click **Import** button, select file **OBLM_Consumer.json**
4. Click the **Extract** button and then select all the service providers
5. Click the **Import** button.

Figure 1-2 Import Service Consumers

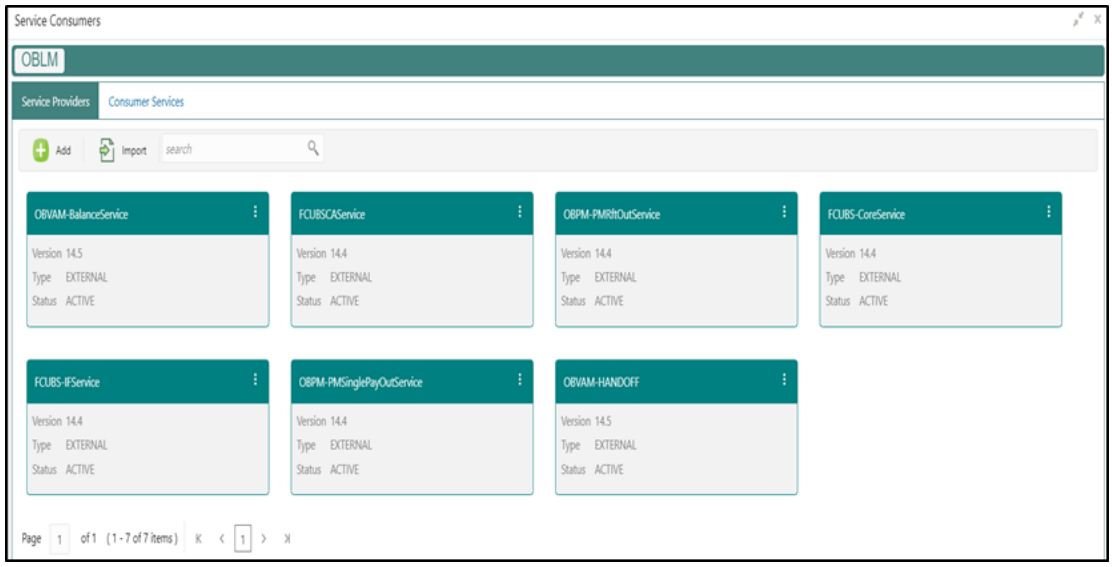


1.2 Service Providers

This topic provides the information about the Service Providers.

Oracle Banking Liquidity Management Service Providers.

Figure 1-3 Service Providers

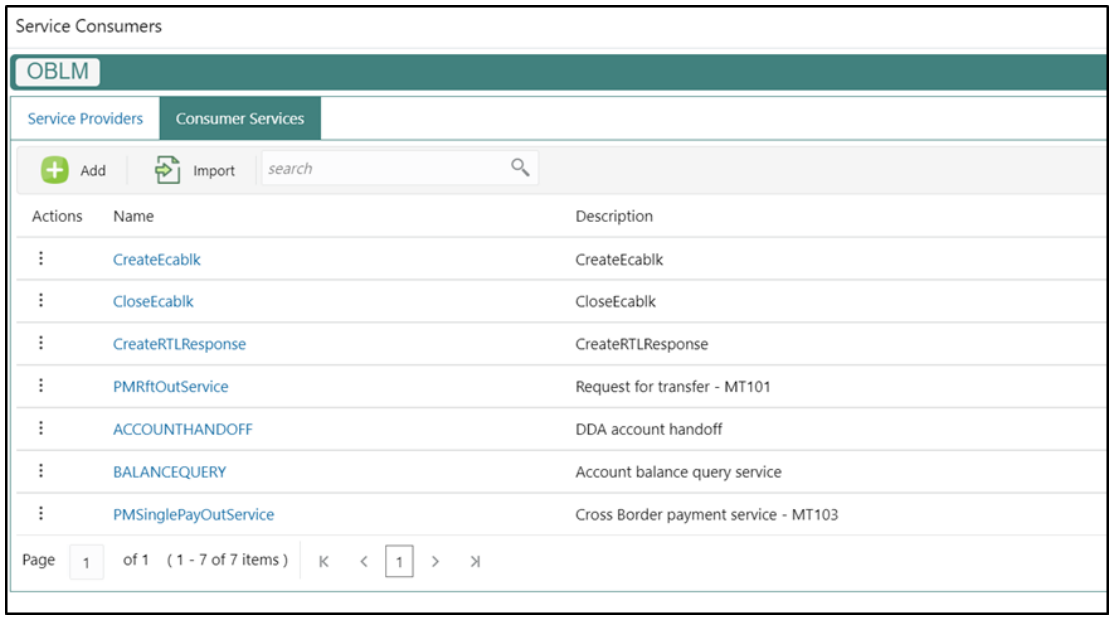


1.3 Consumer Services

This topic provides the information about the Consumer Services.

Oracle Banking Liquidity Management Consumer Services.

Figure 1-4 Consumer Service



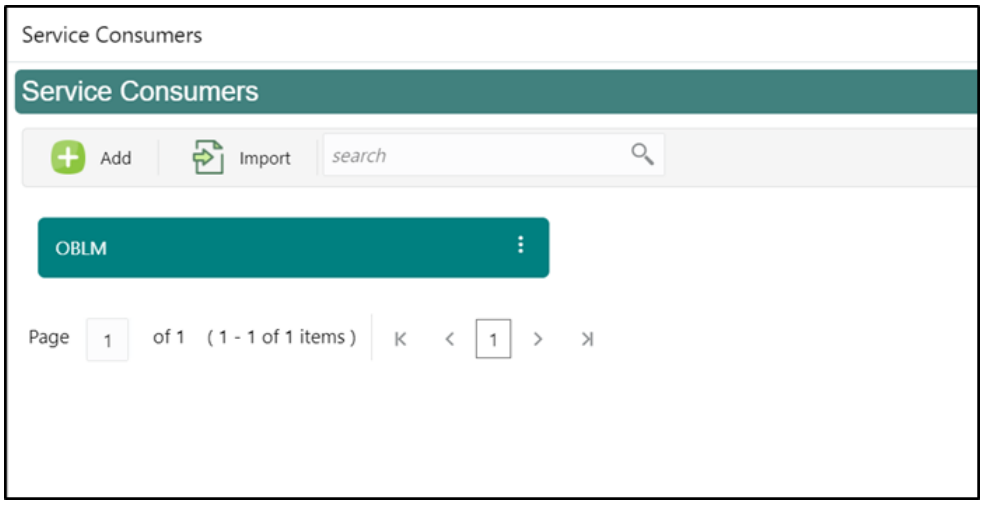
1.4 Configure Service Providers

This topic describes the configure the service providers for Oracle Banking Liquidity Management.

1. Click on consumer **OBLM**.

   The **Service Consumers** screen appears.

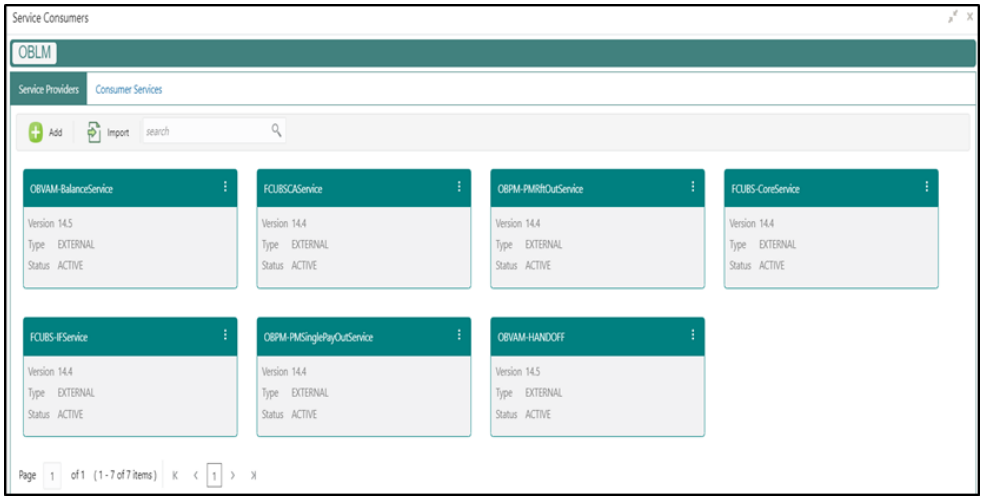
Figure 1-5 Consumer OBLM



2. Click on any service providers (For example **FCUBS-IFService**).

   The **OBLM Service Provides** screen appears.

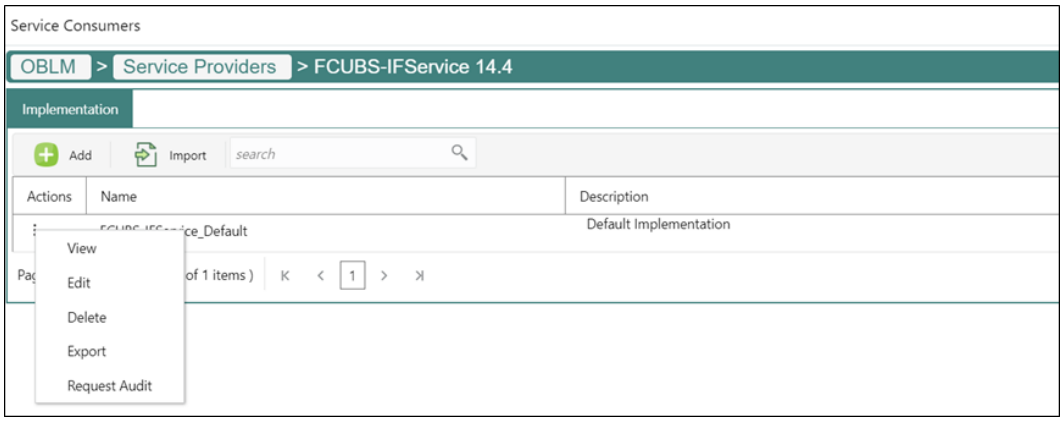
Figure 1-6 OBLM Service Providers



3. Click **Actions** icon and select **Edit**.

   The **Service Consumer** screen appears.

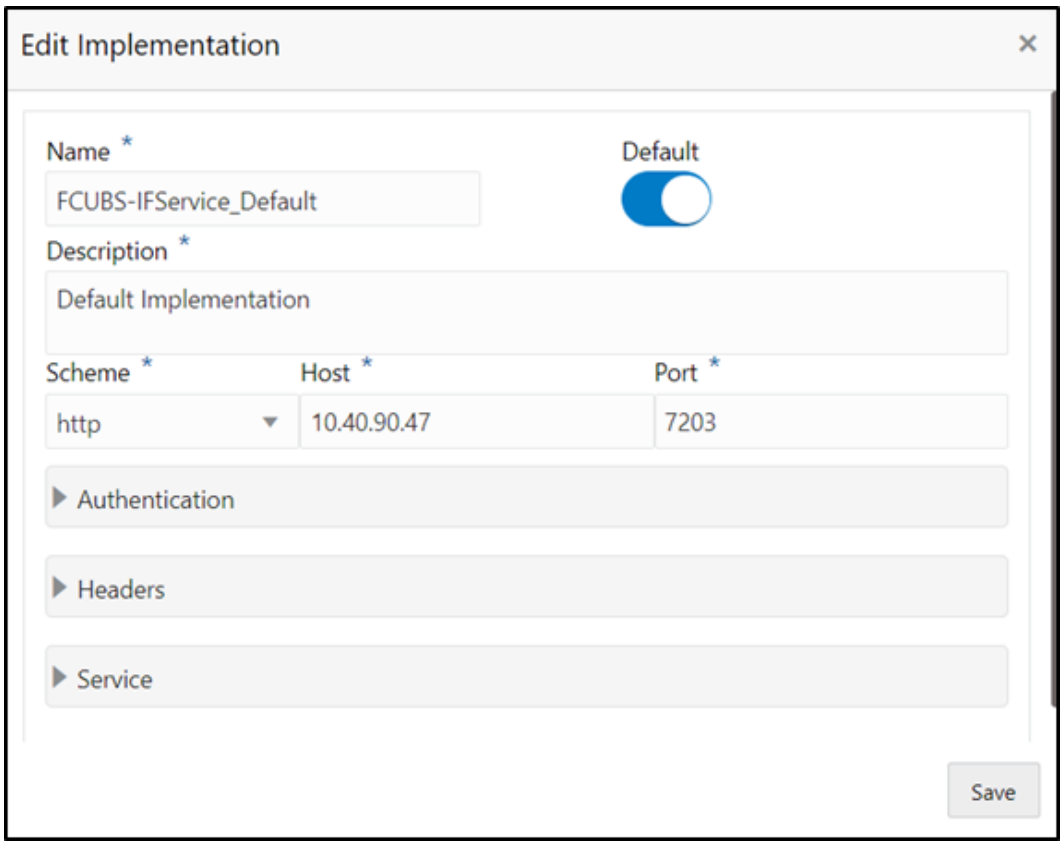
Figure 1-7 Service Consumers Screen



4. Update the **Host** and **Port No.** of **FCUBSIFService** webservice and click **Save**.

   The **Edit Implementation** screen appears.

Figure 1-8 Edit Implementation



5. Repeat the step 2 to 4 for all other service providers and update appropriate **Host** & **Port No.**.

1.5 Configuring Consumer Services

This topic describes the configure the Consumer Services for Oracle Banking Liquidity Management.

- Oracle Banking Virtual Account Management
  This topic describes the configure of consumer service for Oracle Banking Virtual Account Management.

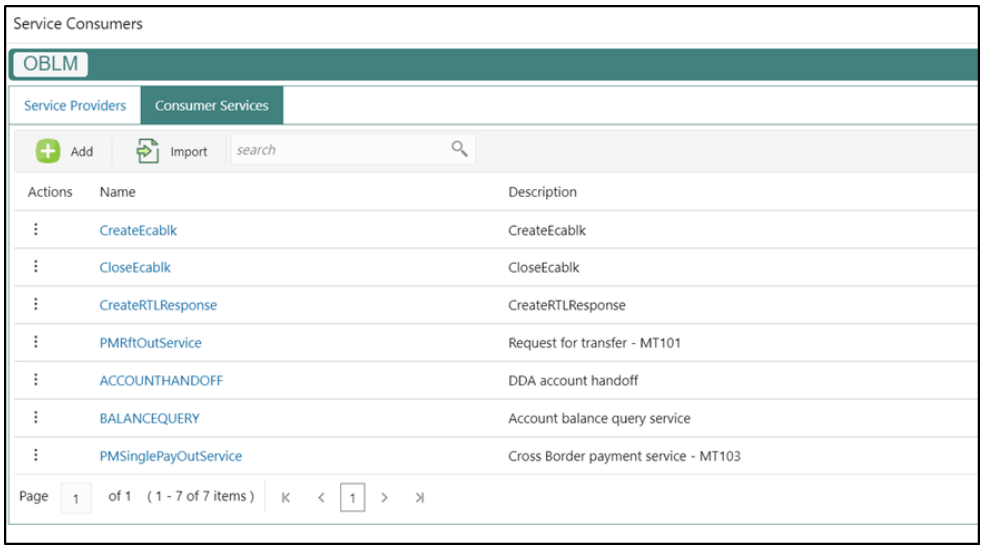
1.5.1 Oracle Banking Virtual Account Management

This topic describes the configure of consumer service for Oracle Banking Virtual Account Management.

1. Select **BALANCEQUERY** from Consumer Services.

   The **Consumers Service List** screen appears

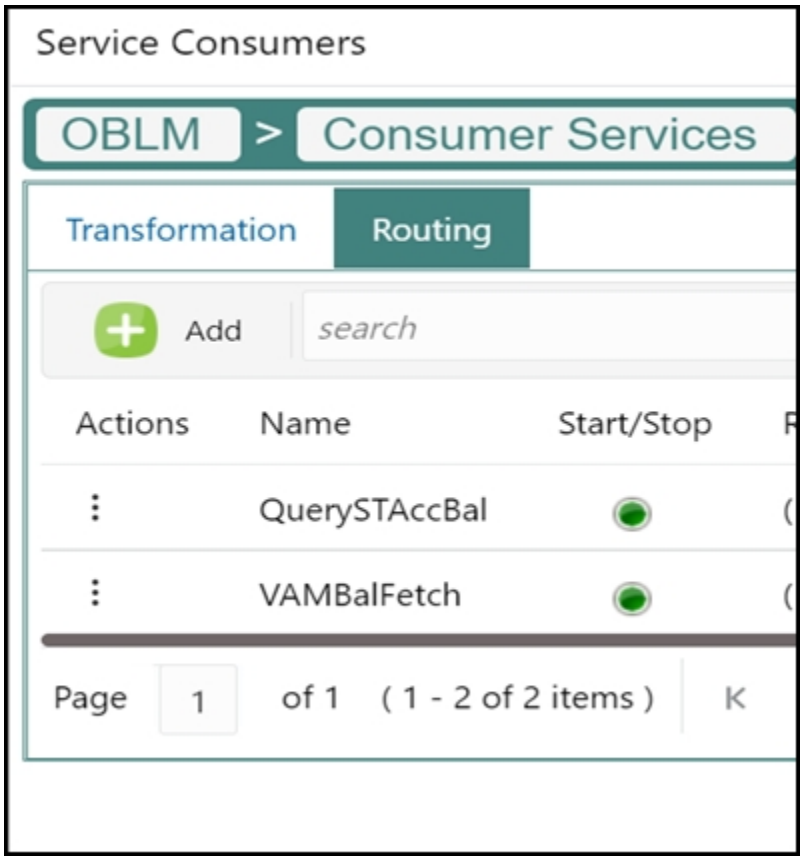
Figure 1-9 Consumers Service List



2. From the **Routing** menu, click **Action** icon of **VAMBalFetch** and then click **Edit**.

   The **Routing** Menu screen appears.

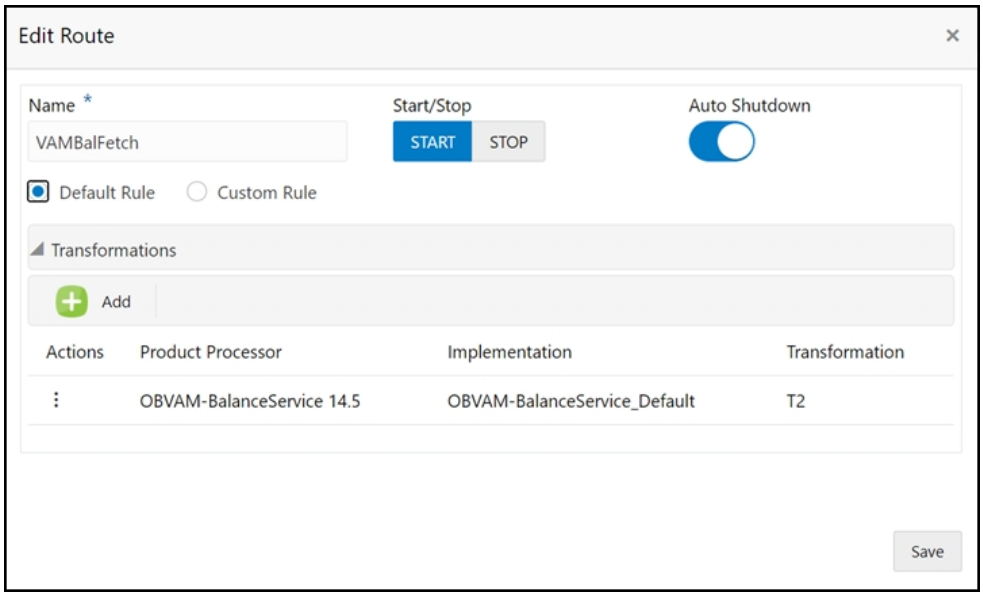
Figure 1-10 Routing Menu



3. Under the **Transformation** tab, click **Action** icon of **OBVAM-BalanceService** and then click **Edit**

   The **Edit Route** screen appears.

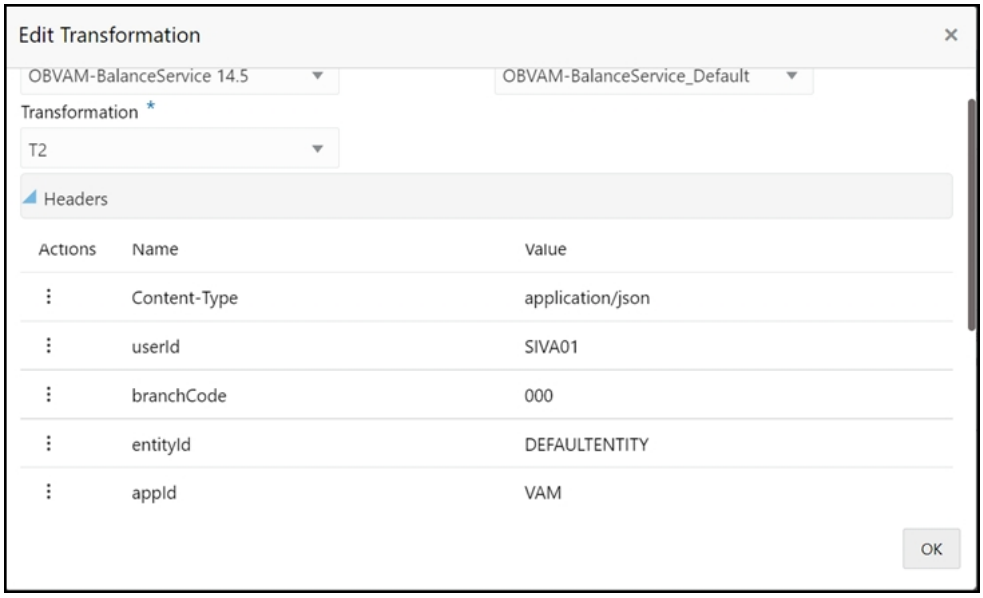
Figure 1-11 Edit Route



4. Click **Action** icon and Click **Edit** to edit the headers.

   The **Edit Transformation** screen appears.

Figure 1-12 Edit Transformation



5. Repeat the steps 2 to 4 to add headers for **OBVAM ACCOUNTIGHANDOFF**.

2
Integration Services

This topic describes about the integration services of Oracle Banking Liquidity Management.

This topic contains the following subtopics:

- Oracle FLEXCUBE Universal Banking Integration
  This topic provides the integration account management for Oracle FLEXCUBE Universal Banking.
- Payments Integration
  This topic describes about the payment integration Oracle Banking Liquidity Management.
- Oracle Banking Virtual Account Management Integration
  This topic provides the integration account management for Oracle Banking Virtual Account Management.
- Oracle Banking Digital Experience Integration
  This topic provides the integration of digital experience for Oracle FLEXCUBE Universal Banking.
- Oracle Banking Routing Hub - RTL Integration
  This topic provides the RTL integration for Oracle Banking Routing Hub.
- Request Payload Samples
  This topic describes about the payload sample request for Oracle Banking Liquidity Management Integration.

2.1 Oracle FLEXCUBE Universal Banking Integration

This topic provides the integration account management for Oracle FLEXCUBE Universal Banking.

Oracle FLEXCUBE Universal Banking services listed below are required forOracle Banking Liquidity Management integration. Make sure that the following services are available before the implementation:

Table 2-1 List of Integration Services

Sl.No	Provider System	Service URL	Service Description	Remarks
1	FCUBS	http://host:port/FCUBSCoreService/FCUBSCoreService?WSDL	Balance Fetch	Service API which is used to Fetch Balance from FCUBS
2	FCUBS	http://host:port/FCUBSIFService/FCUBSIFService?WSDL	Accounting Hand-off	Service API which is used for Accounting Hand off to FCUBS
3	FCUBS	http://host:port/FCUBSTDService/FCUBSTDService?WSDL	TD Contract Hand-Off	Service API which is used for Investment Sweep - TD to FCUBS

Table 2-1 (Cont.) List of Integration Services

Sl.No	Provider System	Service URL	Service Description	Remarks
4	FCUBS	http://host:port/ FCUBSMMService/ FCUBSMMService?WSDL	MM Contract Hand-Off	Service API which is used for Investment Sweep - MM to FCUBS
5	FCUBS	http://host:port/ FCUBSCAService/ FCUBSCAService?WSDL	CreateEcablk	Service API which is used for Create RTL blocks request
6	FCUBS	http://host:port/ FCUBSCAService/ FCUBSCAService?WSDL	CreateExtAcc EcaEntries	Service API which is used for Accounting Hand off to FCUBS RTL
7	FCUBS	http://host:port/ FCUBSCAService/ FCUBSCAService?WSDL	CreateRTLRe sponse	Service API which is used for RTL status update
8	FCUBS	http://host:port/ FCUBSCAService/ FCUBSCAService?WSDL	initiateRtlTxn	Service API which is used for Initiate RTL Block
9	FCUBS	http://host:port/ FCUBSCAService/ FCUBSCAService?WSDL	modifyRtlTxn	Service API which is used for Modify RTL Block
10	FCUBS	http://host:port/ FCUBSCAService/ FCUBSCAService?WSDL	undoRtl	Service API which is used for Undo RTL block
11	FCUBS	http://host:port/ FCUBSCAService/ FCUBSCAService?WSDL	postRtl	Service API which is used for Post RTL block

2.2 Payments Integration

This topic describes about the payment integration Oracle Banking Liquidity Management.

Table 2-2 Payments Integration

Sl.No	Provider System	Service URL	Service Description	Remarks
1	OBPayment s	http://host:port/ PMRftOutService / PMRftOutService?WSDL	Transfer Request-MT101	Service API which is used for MT101 Initiation Request
2	OBPayment s	http://host:port/ PMSinglePayOutService/ PMSinglePayOutService? WSDL	Payment Initiation-MT103	Service API which is used for MT103 Initiation Request
3	OBPayment s	http://host:port/ PMSinglePayOutService BookTransfer / PMSinglePayOutService BookTransfer?WSDL	Payment Initiation-Book Transfer	Service API which is used for Book Transfer Initiation

2.3 Oracle Banking Virtual Account Management Integration

This topic provides the integration account management for Oracle Banking Virtual Account Management.

Table 2-3 Oracle Banking Virtual Account Management Integration

Sl.No	Provider System	Service URL	Service Description	Remarks
1	OBVAM	http://host:port/api-gateway/obvam-account-services/service/sweepandvaluedatedbalance	Balance Fetch	Service API used for Balance Fetch
2	OBVAM	http://host:port/api-gateway/obvam-transaction-journal-services/service/txns	Accounting Hand-off	Service API which is used for Accounting Hand off to OBVAM

Vamlm Account Event:

- A Kafka event is raised on creation/modification of a Virtual Account with Liquidity Management Allowed flag as yes.
- This event is consumed at Oracle Banking Liquidity Management which creates the customer if not already present and the virtual accounts.

2.4 Oracle Banking Digital Experience Integration

This topic provides the integration of digital experience for Oracle FLEXCUBE Universal Banking.

Table 2-4 Oracle Banking Digital Experience Integration

S.No	Consumer System	Service URL	Service Description	Remarks
1	OBDX	http://host:port/api-gateway/oblm-maintenance-services/account?isNotional=N&customerId={customerId}	(GET) API to fetch Internal accounts	{customerId} – replace with actual customerId
2	OBDX	http://host:port/api-gateway/oblm-maintenance-services/branch	(GET) API to fetch Branch details	-
3	OBDX	http://host:port/api-gateway/oblm-cash-concentration-services/instruction	(GET) API to fetch Instruction Details	-
4	OBDX	http://host:port/api-gateway/oblm-maintenance-services/frequency	(GET) API to fetch Frequency Details	-
5	OBDX	http://host:port/api-gateway/oblm-maintenance-services/currency	(GET) API to fetch Currency details	-

Table 2-4 (Cont.) Oracle Banking Digital Experience Integration

S.No	Consumer System	Service URL	Service Description	Remarks
6	OBDX	http://host:port/api-gateway/oblm-structure-services/structure?customerId={customerId}	(GET) API to fetch structure details	{customerId} – replace with actual customerId
7	OBDX	http://host:port/api-gateway/oblm-structure-services/structure/{id}?customerId={customerId}&version=latest	(GET) API to fetch latest version of structure based on keyID	{customerId} – replace with actual customerId {id} – ID of structure which needs to be fetched
8	OBDX	http://host:port/api-gateway/oblm-sweep-services/sweepmonitor?customerId={customerId}&bookDateTo={bookDateTo}&bookDateFrom={bookDateFrom}&structureId={structureId}	(GET) API to fetch Sweep Logs for structures	Date format for bookDateFrom and bookDateTo is YYYY-MM-DD {strucureId} – StructureId for which sweep log is fetched
9	OBDX	http://host:port/api-gateway/oblm-dashboard-services/scheduledsweeps?fromDate={fromDt}&toDate={toDt}&customerId={customerId}	(GET) API to fetch Upcoming structures Sweep	Date format for fromDt and toDt is YYYY-MM-DD
10	OBDX	http://host:port/api-gateway/oblm-pool-services/pool/log?customerId={customerId}&bookDateTo={bookDateTo}&bookDateFrom={bookDateFrom}&structureId={structureId}&filterBy={status}	(GET) API to fetch Pool structure logs	-
11	OBDX	http://host:port/api-gateway/oblm-sweep-services/sweepservice/executesweepobdx	(POST) API to execute structure sweep manually	Refer to **Oracle Banking Digital Experience** section in Request Payload Samples for sample request payload
12	OBDX	http://host:port/api-gateway/oblm-structure-services/structure/createExternal	(POST) API to create Structure	Refer to **Oracle Banking Digital Experience** section in Request Payload Samples for sample request payload
13	OBDX	http://host:port/api-gateway/oblm-structure-services/structure/modifyExternal	(POST) API to Modify Structure	Refer to **Oracle Banking Digital Experience** section in Request Payload Samples for sample request payload

Table 2-4 (Cont.) Oracle Banking Digital Experience Integration

S.No	Consumer System	Service URL	Service Description	Remarks
14	OBDX	{{HOST}}/api-gateway/vamlm-charge-services/service/chargeInquiry?fromDate={{date}}&toDate={{date}}&applicationCode=LMCHG&realCustomerNo={{customernumber}}	(GET) API to fetch charge details	-
15	OBDX	{{HOST}}/api-gateway/vamlm-charge-services/service/ chargedefinition	(GET) API to get all valid chargedefinition. This endpoint will be used to Get all valid chargedefinition maintenance records.	-

2.5 Oracle Banking Routing Hub - RTL Integration

This topic provides the RTL integration for Oracle Banking Routing Hub.

Table 2-5 RTL Integration

S.No	Provider System	Service URL	Service Description	Remarks
1	OBRH	http://host:port/FCUBSIFService/FCUBSIFService?WSDL	CreateExtAccEcaEnteries	Service API which is used for Post RTL Blocks
2	OBRH	http://host:port/FCUBSCAService/FCUBSCAService?WSDL	CloseEcablk, CreateRTLResponse, CreateEcablk	Service API which is used for initiate Undo and Post RTL blocks.
3	OBRH	http://host:port/FCUBSTDService/FCUBSTDService?WSDL	CreateTDCustAccFS	Service API which is used to create term deposit customer account.
4	OBRH	http://host:port/OBTRMMService/OBTRMMService?WSDL	CreateMMContractFS	Service API which is used to create money market contract.

Note:

Update the configuration with required host and port to connect with the required Oracle FLEXCUBE Universal Banking environment.

2.6 Request Payload Samples

This topic describes about the payload sample request for Oracle Banking Liquidity Management Integration.

Oracle FLEXCUBE Universal Banking

Oracle FLEXCUBE Universal Banking Balance Fetch

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:fcub="http://fcubs.ofss.com/service/FCUBSCoreentitiesService">
   <soapenv:Header/>
   <soapenv:Body>
   <FCUBS_REQ_ENV>
       <FCUBS_HEADER>
           <SOURCE>$fcubsheader.source</SOURCE>
           <UBSCOMP>FCUBS</UBSCOMP>
           <USERID>$fcubsheader.userid</USERID>
           <BRANCH>$fcubsheader.branch</BRANCH>
               <MODULEID>PX</MODULEID>
               <SERVICE>PMRftOutService</SERVICE>
               <OPERATION>CreateRftOut</OPERATION>
               <DESTINATION>FCUBS</DESTINATION>
         </FCUBS_HEADER>
       <FCUBS_BODY>
          <Master-IO>
            <REFNO>$fcubsbody.masterIO.refno</REFNO>
    #foreach($extSysAccountDetails in $fcubsbody.masterIO.input)
            <Input>
         <ACCNO>$.tag57AWIOPT</ACCNO>
               <TRNDT>$.tag57AWIBIC</TRNDT>
                <BALANCETYPE>$.tag59ACC</BALANCETYPE>
            </Input>
    #end
          </Master-IO>
               </FCUBS_BODY>
</FCUBS_REQ_ENV>
```

Oracle FLEXCUBE Universal Banking Accounting Handoff

```
<FCUBS_REQ_ENV>
               <FCUBS_HEADER>
                   <SOURCE>$fcubsheader.source</SOURCE>
                   <UBSCOMP>FCUBS</UBSCOMP>
                   <MSGID>$fcubsheader.msgid</MSGID>
                     <CORRELID>$fcubsheader.correlid</CORRELID>
                   <USERID>$fcubsheader.userid</USERID>
                   <BRANCH>$fcubsheader.branch</BRANCH>
                     <MODULEID>PX</MODULEID>
                     <SERVICE>PMRftOutService</SERVICE>
                     <OPERATION>CreateRftOut</OPERATION>
                     <SOURCE_OPERATION>NEW</SOURCE_OPERATION>
```

```
                  <SOURCE_USERID>$fcubsheader.sourceuserid</SOURCE_USERID>
               <DESTINATION>$fcubsheader.destination</DESTINATION>
                  <MULTITRIPID>$fcubsheader.multitripid</MULTITRIPID>
                  <FUNCTIONID>$fcubsheader.functionid</FUNCTIONID>
                  <ACTION>NEW</ACTION>
                  <PASSWORD></PASSWORD>
               </FCUBS_HEADER>
               <FCUBS_BODY>
                   <Acc-Entry-Master-Full>

         <UNIQUEEXTREFNO>$fcubsbody.accEntryMasterFull.uniqueextrefno</
UNIQUEEXTREFNO>
                  <TRNREFNO>$fcubsbody.accEntryMasterFull.trnrefno</
TRNREFNO>
                    #foreach($AcctEntrydetailsdetails in
               $fcubsbody.accEntryMasterFull.accEntryDetails)
                  <Acc-Entry-Details>
                  <DRCRIND>AcctEntrydetailsdetails.drcrind</DRCRIND>
                  <TRNREFNO>AcctEntrydetailsdetails.trnrefno</TRNREFNO>
                  <EVENT>AcctEntrydetailsdetails.event</EVENT>
                  <EXCHRATE>AcctEntrydetailsdetails.exchrate</EXCHRATE>
                  <EVENTSRNO>AcctEntrydetailsdetails.eventsrno</EVENTSRNO>
                  <VALUEDT>AcctEntrydetailsdetails.valuedt</VALUEDT>
                  <MODULE>AcctEntrydetailsdetails.module</MODULE>
                  <AMTTAG>AcctEntrydetailsdetails.amttag</AMTTAG>
                  <ACCCY>AcctEntrydetailsdetails.acccy</ACCCY>
                  <FCYAMT>AcctEntrydetailsdetails.fcyamt</FCYAMT>
                  <ACBRANCH>AcctEntrydetailsdetails.acbranch</ACBRANCH>
                  <ACNO>AcctEntrydetailsdetails.acno</ACNO>
                  <RELATEDACCOUNT>relatedaccount</RELATEDACCOUNT>
                  <LCYAMT>AcctEntrydetailsdetails.lcyamt</LCYAMT>
                  <TRNCODE>AcctEntrydetailsdetails.trncode</TRNCODE>
                 </Acc-Entry-Details>
                   #end
                   </Acc-Entry-Master-Full>
               </FCUBS_BODY>
         </FCUBS_REQ_ENV>
```

CreateEcablk(RTL)

```
<?xml version="1.0" encoding="UTF-8"?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
   <env:Header />
   <env:Body>
      <CREATEECABLK_FSFS_REQ
xmlns="http://fcubs.ofss.com/service/FCUBSCAService">
         <FCUBS_HEADER>
            <SOURCE>EXTSYS</SOURCE>
            <UBSCOMP>FCUBS</UBSCOMP>
            <USERID>$body.userId</USERID>
            <BRANCH>$body.branch</BRANCH>
            <SERVICE>FCUBSCAService</SERVICE>
            <OPERATION>CreateEcablk</OPERATION>
         </FCUBS_HEADER>
```

```
         <FCUBS_BODY>
            <Eca-Master-Full>
               <CREATEEXTREFNO>$body.createExtRefNo</CREATEEXTREFNO>
               <UPDASERRIFANYFAIL>N</UPDASERRIFANYFAIL>
               <BRN>$body.branch</BRN>
               <REFERRALALLOWED>N</REFERRALALLOWED>
               <Eca-Detail>
                  <CUSTACNO>$body.custAcNo</CUSTACNO>
                  <CUSTACBRN>$body.branch</CUSTACBRN>
                  <CUSTACCCY>$body.custAcCcy</CUSTACCCY>
                  <PARTIALBLKREQD>Y</PARTIALBLKREQD>
                  <REQBLKAMT>$body.reqBlkAmt</REQBLKAMT>
               </Eca-Detail>
            </Eca-Master-Full>
         </FCUBS_BODY>
      </CREATEECABLK_FSFS_REQ>
   </env:Body>
</env:Envelope>
```

CloseEcablk(RTL)

```
<?xml version="1.0" encoding="UTF-8"?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
   <env:Header />
   <env:Body>
      <CLOSEECABLK_FSFS_REQ xmlns="http://fcubs.ofss.com/service/
FCUBSCAService">
         <FCUBS_HEADER>
            <SOURCE>EXTSYS</SOURCE>
            <UBSCOMP>FCUBS</UBSCOMP>
            <USERID>$body.userId</USERID>
            <BRANCH>$body.branch</BRANCH>
            <SERVICE>FCUBSCAService</SERVICE>
            <OPERATION>CloseEcablk</OPERATION>
         </FCUBS_HEADER>
         <FCUBS_BODY>
            <Eca-Master-Full>
               <UNDOEXTREFNO>$body.undoExtRefNo</UNDOEXTREFNO>
               <ECAREFNO>$body.ecaRefNo</ECAREFNO>
               <Eca-Detail>
                  <CUSTACNO>$body.custAcNo</CUSTACNO>
                  <CUSTACBRN>$body.custAcBrch</CUSTACBRN>
               </Eca-Detail>
            </Eca-Master-Full>
         </FCUBS_BODY>
      </CLOSEECABLK_FSFS_REQ>
   </env:Body>
</env:Envelope>
```

CreateRTLResponse(RTL)

```
<?xml version="1.0" encoding="UTF-8"?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
   <env:Header />
```

```
   <env:Body>
      <CREATERTLRESPONSE_FSFS_REQ xmlns="http://fcubs.ofss.com/service/
FCUBSCAService">
         <FCUBS_HEADER>
            <SOURCE>EXTSYS</SOURCE>
            <UBSCOMP>FCUBS</UBSCOMP>
            <USERID>$body.userId</USERID>
            <BRANCH>$body.branch</BRANCH>
            <MODULEID>IF</MODULEID>
            <SERVICE>FCUBSCAService</SERVICE>
            <OPERATION>CreateRTLResponse</OPERATION>
            <SOURCE_OPERATION>CreateRTLResponse</SOURCE_OPERATION>
            <FUNCTIONID>IFDRTLRS</FUNCTIONID>
            <ACTION>NEW</ACTION>
            <MSGSTAT>$body.msgStat</MSGSTAT>
         </FCUBS_HEADER>
         <FCUBS_BODY>
            <Rtl-Queue-Full>
               <DDATXNREF>$body.ddaTxnRef</DDATXNREF>
               <RTLREFERENCENO>$body.rtlReferenceNo</RTLREFERENCENO>
               <TXNAMNT>$body.txnAmnt</TXNAMNT>
               <TXNCCY>$body.txnCcy</TXNCCY>
               <RTLSTATUS>$body.rtlStatus</RTLSTATUS>
               <RTLSTATUSMESSAGE>$body.rtlStatusMessage</RTLSTATUSMESSAGE>
            </Rtl-Queue-Full>
         </FCUBS_BODY>
      </CREATERTLRESPONSE_FSFS_REQ>
   </env:Body>
</env:Envelope>
```

Oracle Banking Virtual Account Management

Balance fetch

```
{
  "sweepandVDBalanceServiceRequestDto": [
    {
      "virtalAccountNumber": "string",
      "valueDate": "string"
    }
  ]
}
```

Handoff

```
{
  "sourceCode": "string",
  "sourceReferenceNo": "string",
  "vatRequestDetServiceDTO": [
    {
      "drCrInd": "string",
      "txnAccount": "string",
      "txnAccountBrn": "string",
      "txnCcy": "string",
```

```
      "txnAccountCcy": "string",
      "amtInTxnAccCcy": 0,
      "txnAmount": 0,
      "txnCode": "string",
      "valueDate": "string",
      "exchRate": 0,
      "reconRefNo": "string",
      "addlText": "string",
      "ecaOrBlockRefNo": "string",
      "ddaOffset": "string",
      "forceDebit": "N",
      "blkReleaseStatus": "string"
    }
  ]
}
```

Oracle Banking Payments

PMRftOutService - MT101

```
<FCUBS_REQ_ENV>
        <FCUBS_HEADER>
            <SOURCE>$fcubsheader.source</SOURCE>
            <UBSCOMP>FCUBS</UBSCOMP>
            <MSGID>$fcubsheader.msgid</MSGID>
            <CORRELID></CORRELID>
            <USERID>$fcubsheader.userid</USERID>
            <BRANCH>$fcubsheader.branch</BRANCH>
            <MODULEID>PX</MODULEID>
            <SERVICE>PMRftOutService</SERVICE>
            <OPERATION>CreateRftOut</OPERATION>
            <SOURCE_OPERATION>NEW</SOURCE_OPERATION>
              <SOURCE_USERID></SOURCE_USERID>
             <DESTINATION></DESTINATION>
              <MULTITRIPID></MULTITRIPID>
              <FUNCTIONID></FUNCTIONID>
              <ACTION></ACTION>
              <PASSWORD></PASSWORD>
        </FCUBS_HEADER>
        <FCUBS_BODY>
           <Msg-Out101-Full>
             <REFERENCE_NO>$fcubsbody.msgOut101IO.referenceno</
REFERENCE_NO>
         <HOST_CODE>$fcubsbody.msgOut101IO.hostcode</HOST_CODE>
         <BRANCH_CODE>$fcubsbody.msgOut101IO.branchcode</BRANCH_CODE>
         <CUSTOMER_NO>$fcubsbody.msgOut101IO.customerno</CUSTOMER_NO>
         <RECEIVER>$fcubsbody.msgOut101IO.receiver</RECEIVER>
         <TAG28D_MSGINX>$fcubsbody.msgOut101IO.tag28DMSGINX</
TAG28D_MSGINX>
         <TAG28D_MSGTOT>$fcubsbody.msgOut101IO.tag28DMSGTOT</
TAG28D_MSGTOT>
         <TAG50_ORD_OPT>$fcubsbody.msgOut101IO.tag50ORDOPT</
TAG50_ORD_OPT>
         <TAG50_ORD_ACC>$fcubsbody.msgOut101IO.tag50ORDACC</
TAG50_ORD_ACC>
```

```
         <TAG50_ORD_ADD1>$fcubsbody.msgOut101IO.tag50ORDADD1/add1</
TAG50_ORD_ADD1>
         <TAG50_ORD_ADD2>$fcubsbody.msgOut101IO.tag50ORDADD2</TAG50_ORD_ADD2>
         <TAG50_ORD_ADD3>$fcubsbody.msgOut101IO.tag50ORDADD3</TAG50_ORD_ADD3>
         <TAG30>$fcubsbody.msgOut101IO.tag30</TAG30>
         <TAG25>$fcubsbody.msgOut101IO.tag25</TAG25>
         <SOURCE_CODE>$.</SOURCE_CODE>
     #foreach($msgoutdetails in $fcubsbody.msgOut101IO.msgOut101Detail)
    <Msg-Out101-Detail>
       <TAG57_AWI_OPT>$msgoutdetails.tag57AWIOPT</TAG57_AWI_OPT>
            <TAG57_AWI_BIC>$msgoutdetails.tag57AWIBIC</TAG57_AWI_BIC>
            <TAG59_ACC>$msgoutdetails.tag59ACC</TAG59_ACC>
            <TAG59_ADD1>$msgoutdetails.tag59ADD1/add1</TAG59_ADD1>
            <TAG71A>$msgoutdetails.tag71A</TAG71A>
            <TAG23E_LINE1>$msgoutdetails.tag23ELINE1</TAG23E_LINE1>
            <TAG32B_CCY>$msgoutdetails.tag32BCCY</TAG32B_CCY>
            <TAG32B_AMOUNT>$msgoutdetails.tag32BAMOUNT</TAG32B_AMOUNT>
        </Msg-Out101-Detail>
    #end
    </Msg-Out101-Full>
        </FCUBS_BODY>
    </FCUBS_REQ_ENV>
```

PMSinglePayOutService - MT103

```
<FCUBS_REQ_ENV>
        <FCUBS_HEADER>
            <pms.SOURCE>$fcubsheader.source</pms.SOURCE>
            <pms.UBSCOMP>FCUBS</pms.UBSCOMP>
            <pms.MSGID>$fcubsheader.msgid</pms.MSGID>
            <pms.CORRELID></pms.CORRELID>
            <pms.USERID>$fcubsheader.userid</pms.USERID>
            <pms.BRANCH>$fcubsheader.branch</pms.BRANCH>
            <pms.MODULEID>PX</pms.MODULEID>
            <pms.SERVICE>PMRftOutService</pms.SERVICE>
            <pms.OPERATION>CreateRftOut</pms.OPERATION>
            <pms.SOURCE_OPERATION>NEW</pms.SOURCE_OPERATION>
              <pms.SOURCE_USERID>$fcubsheader.sourceuserid</
pms.SOURCE_USERID>
             <pms.DESTINATION>$fcubsheader.destination</pms.DESTINATION>
              <pms.MULTITRIPID>$fcubsheader.multitripid</pms.MULTITRIPID>
              <pms.FUNCTIONID>$fcubsheader.functionid</pms.FUNCTIONID>
              <pms.ACTION>$fcubsheader.action</pms.ACTION>
              <pms.PASSWORD>$fcubsheader.password</pms.PASSWORD>
        </FCUBS_HEADER>
<FCUBS_BODY>
    <pms:CstmrCdtTrfInitn>
         <pms:GrpHdr>
            <pms:MsgId>$fcubsbody.cstmrCdtTrfInitn.grpHdr.msgId</pms:MsgId>
<pms:CreDtTm>$fcubsbody.cstmrCdtTrfInitn.grpHdr.creDtTm</pms:CreDtTm>

<pms:Authstn>$fcubsbody.cstmrCdtTrfInitn.grpHdr.authstn</pms:Authstn>

<pms:NbOfTxs>$fcubsbody.cstmrCdtTrfInitn.grpHdr.nbOfTxs</pms:NbOfTxs>
```

```
<pms:InitgPty>$fcubsbody.cstmrCdtTrfInitn.grpHdr.initgPty</
pms:InitgPty>
     </pms:GrpHdr>
         <pms:PmtInf>
<pms:PmtInfId>$fcubsbody.cstmrCdtTrfInitn.pmtInf.pmtInfId</
pms:PmtInfId>
            <pms:PmtMtd>$fcubsbody.cstmrCdtTrfInitn.pmtInf.pmtMtd</
pms:PmtMtd>
            <pms:PmtTpInf>
<pms:InstrPrty>$fcubsbody.cstmrCdtTrfInitn.pmtInf.pmtTpInf.instrPrty</
pms:InstrPrty>
               <pms:SvcLvl>
<pms:Cd>$fcubsbody.cstmrCdtTrfInitn.pmtInf.pmtTpInf.svcLvl.cd</pms:Cd>
               </pms:SvcLvl>
               <pms:CtgyPurp>
<pms:Cd>$fcubsbody.cstmrCdtTrfInitn.pmtInf.pmtTpInf.ctgyPurp.cd</
pms:Cd>
               </pms:CtgyPurp>
            </pms:PmtTpInf>
<pms:ReqdExctnDt>$fcubsbody.cstmrCdtTrfInitn.pmtInf.reqdExctnDt</
pms:ReqdExctnDt>
            <pms:Dbtr>
               <pms:Nm>$fcubsbody.cstmrCdtTrfInitn.pmtInf.dbtr.nm</
pms:Nm>
               <pms:PstlAdr/>
               <pms:Id>
                  <pms:OrgId>
                     <pms:ClrSysMmbId/>
                     <pms:Othr>
<pms:Id>$fcubsbody.cstmrCdtTrfInitn.pmtInf..dbtr.id.orgId.othr.id</
pms:Id>
                        <pms:SchmeNm>
<pms:Cd>$fcubsbody.cstmrCdtTrfInitn.pmtInf.dbtr.id.orgId.othr.schmeNm.c
d</pms:Cd>
                        </pms:SchmeNm>
                     </pms:Othr>
                  </pms:OrgId>
               </pms:Id>
            </pms:Dbtr>
            <pms:DbtrAcct>
               <pms:Id>
                  <pms:Othr>
<pms:Id>$fcubsbody.cstmrCdtTrfInitn.pmtInf.dbtrAcct.id.othr.id</pms:Id>
                  </pms:Othr>
               </pms:Id>
<pms:Ccy>$fcubsbody.cstmrCdtTrfInitn.pmtInf.dbtrAcct.ccy</pms:Ccy>
            </pms:DbtrAcct>
            <pms:DbtrAgt/>
            <pms:DbtrAgtAcct>
               <pms:Id>
                  <pms:Othr/>
               </pms:Id>
            </pms:DbtrAgtAcct>
            <pms:CdtTrfTxInf>
```

```
                <pms:PmtId>
<pms:InstrId>$fcubsbody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.pmtId.instrId</
pms:InstrId>
<pms:EndToEndId>$fcubsbody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.pmtId.endToEnd
Id</pms:EndToEndId>
                </pms:PmtId>
                <pms:Amt>
                   <pms:InstdAmt
Ccy="USD">$fcubsbody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.amt.instdAmt</
pms:InstdAmt>
                   <pms:EqvtAmt/>
                </pms:Amt>
                <pms:CdtrAgt/>
                <pms:CdtrAgtAcct>
                   <pms:Id>
                      <pms:Othr/>
                   </pms:Id>
                </pms:CdtrAgtAcct>
                <pms:Cdtr>
<pms:Nm>$fcubsbody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.cdtr.nm</pms:Nm>
                   <pms:PstlAdr/>
                </pms:Cdtr>
                <pms:CdtrAcct>
                   <pms:Id>
                      <pms:Othr>
<pms:Id>$fcubsbody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.cdtrAcct.id.othr.id</
pms:Id>
                      </pms:Othr>
                   </pms:Id>
                </pms:CdtrAcct>
             </pms:CdtTrfTxInf>
             <pms:Misdetails/>
          </pms:PmtInf>
          <pms:GrpTlr>
<pms:TxnBranch>$fcubsbody.cstmrCdtTrfInitn.grpTlr.txnBranch</pms:TxnBranch>
<pms:HostCode>$fcubsbody.cstmrCdtTrfInitn.grpTlr.hostCode</pms:HostCode>
<pms:SourceCode>$fcubsbody.cstmrCdtTrfInitn.grpTlr.sourceCode</
pms:SourceCode>
<pms:NetworkCode>$fcubsbody.cstmrCdtTrfInitn.grpTlr.networkCode</
pms:NetworkCode>
          </pms:GrpTlr>
       </pms:CstmrCdtTrfInitn>
       </FCUBS_BODY>
       </FCUBS_REQ_ENV>
```

Oracle Banking Digital Experience

Execute Sweep Structure

```
{
           "overRidePending": "N",
           "allowMbccAccountPair": "N",
            "mode": "A",
           "structureList": [
                 {
```

```
            "structureId": "ST20217167444516010503",
            "versionNumber": 1
        }
                ]
}
```

3
Inbound APIs

This topic provides the information on the set of inbound APIs provided by Oracle Banking Liquidity Management.

Refer to the **REST API Documentation** for the inbound API details.

4
Events

This topic provides list of events in Oracle Banking Liquidity Management.

Oracle Banking Liquidity Management provides the below-listed events.

Table 4-1 List of Events

S.No	Topic	Purpose	Avro Schema
1	sweep-success (S)	Event is generated when a sweep is successful	**Sweep Events**
2	sweep-error (E)	Event is generated when a sweep has error	
3	sweep-pending (P)	Event is generated when a sweep is pending	
4	sweep-handOff (H)	Event is generated when a sweep is hand off	
5	structure-created	Event is generated when a structure is created	**Structure Events**
6	structure-created and Authorized	Event is generated when a structure is created and authorized	
7	structure-modified	Event is generated when a structure is modified	
8	structure-modified and Authorized	Event is generated when a structure is modified and authorized	
9	structure-closed	Event is generated when a structure is closed	
10	structure-closed and Authorized	Event is generated when a structure is closed and authorized	
11	structure-reopen	Event is generated when a structure is reopened	
12	structure-reopen and Authorized	Event is generated when a structure is reopened and authorized	
13	structure-expiry	Event is generated when a structure is expired	
14	vamlm.bankchargeeventrequest	Event is generated when Bank is authorized	**Vamlm Account**
15	vamlm.branchchargeeventrequest	Event is generated when Branch is authorized	
16	vamlm.structurechargesnotification	Event is generated when Structure is authorized	
17	vamlm.pricingmapnotification	Event is generated when Customer is authorized	

Table 4-1 (Cont.) List of Events

S.No	Topic	Purpose	Avro Schema
18	lm.accountnotification	Event is generated when account is authorized	
19	lm.vamlmaccountnotification	This is a consumer topic for LM to auto create customer/ account, which consumes events published by VAM on creation of customer/account	
20	lmx_tb_events_log	All the above events that needs to be published from the oblm-services will be stored in this event log	**Event Message**

> **Note:**
>
> Click on the links to download the avro files.

5

File Upload

This topic describes about the File Upload features for Oracle Banking Liquidity Management.

Oracle Banking Liquidity Management provides a facility for bulk upload of the below features.

- Account Setup File Upload
- VD Balance File Upload
- Bank Setup File Upload
- Branch Setup File Upload
- Country Definition File Upload
- Currency Cutoff File Upload
- Currency Definition File Upload
- Customer Setup File Upload
- Interface Setup File Upload
- Sweep Instruction File Upload

> **Note:**
>
> Refer to the **File Upload User Guide** for the more details.

6
FOP Advices

This topic provides a facility to generate the advices using a template created in Apache FOP Oracle Banking Liquidity Management.

This topic contains the following subtopics:

- Prerequisites
  This topic provides the information of Prerequisites.
- Template Upload Process
  This topic describes about process of uploading the report template for Oracle Banking Liquidity Management.
- Generate Advices
  This topic describes about generating advices for Oracle Banking Liquidity Management.

6.1 Prerequisites

This topic provides the information of Prerequisites.

1. Create a new schema for PLATO-REPORT-SERVICE in your domain.
2. Ensure that the datasource is created in weblogic server:

Data Source	Weblogic Server	Schema
PLATOCMC	Jdbc/CMNCORE	Plato Common Core Server
PLATOSMS	jdbc/sms	Plato-SMS-Server
REPORTSERVICE	jdbc/REPORTSERVICE	Plato-Report-Service-Server

3. Enter the below properties in the plato-config-deploy.env file:

```
flyway.domain.placeholders.report-service.hostname= <http://
<REPORT_SERVICE_HOSTNAME>:<REPORT_SERVICE_PORT>

flyway.domain.placeholders.report-service.server.port=<REPORT_SERVICE_PORT>

flyway.domain.placeholders.report-service.domain.jndi=jdbc/REPORTSERVICE

flyway.domain.placeholders.report-service.template-metadata-directory=/
scratch/OBMA/report-service/template_metadata

flyway.domain.placeholders.report-service.output-directory=/scratch/OBMA/
report-service/output/

flyway.domain.placeholders.report-service.fop-config-file=/scratch/OBMA/
report-service/fop.xconf
```

> **Note:**
>
> Refer to ***Oracle Banking Microservices Platform Foundation Installation Guide*** for a detailed explanation.

4. Create the folder structure mentioned in Step 3.
5. Download fop.xconf file and Save in the directory: /scratch/oblm/report-service.
6. Restart plato-config-service.
7. Deploy plato-report-services. Once the plato-report-service deployed successfully, make sure that the below tables created in the PLATO-REPORT-SERVICE schema.
   - ERTB_MSGS
   - flyway_schema_history
   - OBMA_DOCUMENT_STORE
   - OBMA_EXTRACTOR_CONFIG
   - OBMA_REPORT_LOG
   - OBMA_TEMPLATE_IMAGE
   - OBMA_TM_REPORT_METADATA
   - OBMA_TM_TEMPLATE_IMAGE
   - OBMA_TM_TEMPLATE_METADATA
   - OBMA_TW_REPORT_METADATA
   - OBMA_TW_TEMPLATE_IMAGE
   - OBMA_TW_TEMPLATE_METADATA
8. Deploy oblm-report-services.
9. Once the oblm-report-services is deployed, ensure the below table is added in LMR schema.
   - LMR_TB_ADVICE

6.2 Template Upload Process

This topic describes about process of uploading the report template for Oracle Banking Liquidity Management.

For Template Upload process, refer to **Report Template** in ***Oracle Banking Microservices Platform Foundation User Guide***.

Table 6-1 Naming Convention - Report Template

Report Name	Report Template
OBLM-Interest-Paid-Advice	**Interest Paid Advice.xsl**
OBLM-Interest-Reallocation-Advice	**Interest Reallocation Advice.xsl**
OBLM-Simulation-Sweep-Advice	**Simulation Sweep Report.xsl**
OBLM-Simulation-Pool-Advice	**Simulation Pool Advice.xsl**

> **Note:**
>
> For Naming convention of Report names refer to Create Report Linkage in ***Oracle Banking Microservices Platform Foundation User Guide***.

> **Note:**
>
> Click on the link to download the report template.

6.3 Generate Advices

This topic describes about generating advices for Oracle Banking Liquidity Management.

User can generate the Interest Paid Advice and Interest Reallocation Advice in **Advices** screen of Oracle Banking Liquidity Management.

Simulation Sweep Advice and **Simulation Pool Advice** is generated in **Simulation Summary** screen under Simulation menu in Oracle Banking Liquidity Management.

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