

Integration Guide

Oracle Banking Liquidity Management

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Oracle Banking Liquidity Management Integration Guide

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1 About this manual

1.1 Purpose

This guide provides integration service recommendations for Oracle Banking Liquidity Management.

1.2 Audience

This guide is primarily intended for Developers for Oracle Banking Liquidity Management and third party or vendor software's. Some information may be relevant to IT decision makers and users of the application are also included. Readers are assumed to possess basic operating system, network, and system administration skills with awareness of vendor/third- party software's and knowledge of Oracle Banking Liquidity Management application.

1.3 Scope

1.3.1 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.

1.3.2 Understand the Purpose of this Guidance

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

1.3.3 Limitations

This guide is limited in its scope to integration services guideline for developers.

1.4 List of Topics

This guide is organized into the following topics:

Topics	Description
Oracle FLEXCUBE Universal Banking Integration	This topic helps you to Integrate Oracle FLEXCUBE Universal Banking with Oracle Banking Liquidity Management.
Payments Integration	This topic helps you to Integrate Oracle Banking Payments with Oracle Banking Liquidity Management.
Oracle Banking Virtual Account Management Integration	This topic helps you to Integrate Oracle Banking Virtual Account Management with Oracle Banking Liquidity Management.
Oracle Banking Digital Experience Integration	This topic helps you to Integrate Oracle Banking Digital Experience with Oracle Banking Liquidity Management.
Oracle Banking Routing Hub Integration	This topic helps you to Integrate Oracle Banking Routing Hub with Oracle Banking Liquidity Management.

2 Steps to configure Service Providers for Oracle Banking Liquidity Management

2.1 Initial Setup

Follow the below steps to configure Oracle Banking Routing Hub:

1. Save and import the configuration file attached below in case it is not done during installation set-up.



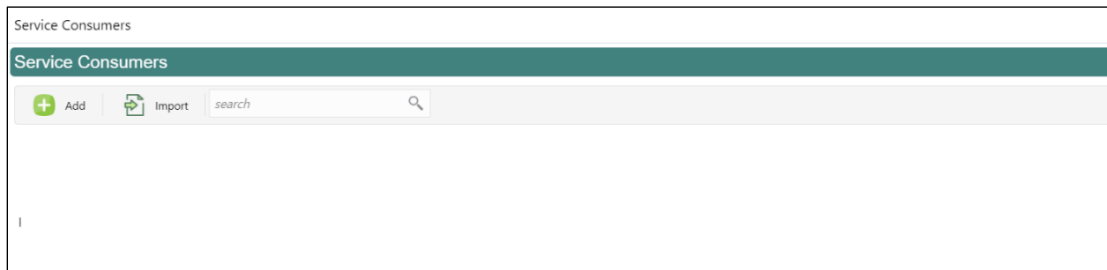
OBLM_Consumer.json

NOTE: Refer to PDF attachments for downloading the configuration file.

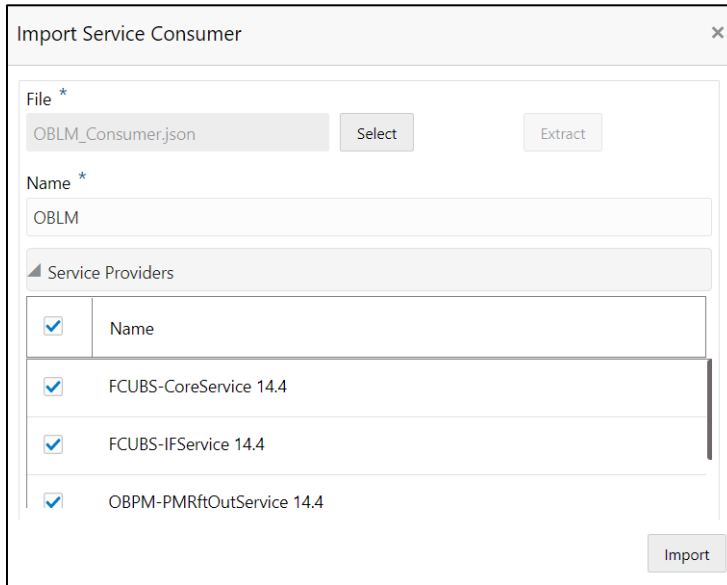
Ignore below steps 3 & 4 if the files are already imported during installation.

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

→ The **Service Consumers** appears.

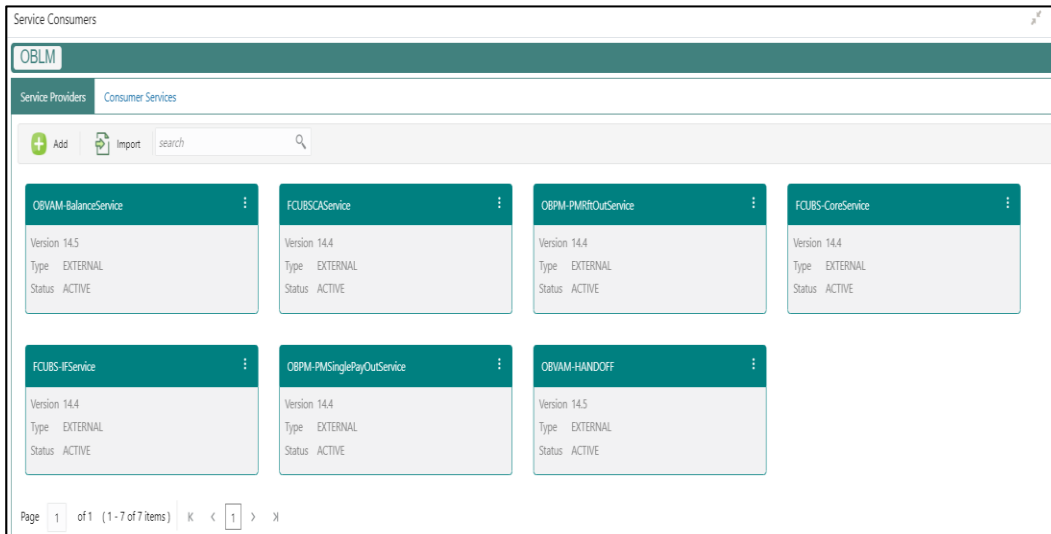


- Click **Import** button, select file **OBLM_Consumer.json** and click on **Extract** button and then choose all the service providers and click on **Import**.






2.2 Service Providers

Oracle Banking Liquidity Management Service Providers



2.3 Consumer Services

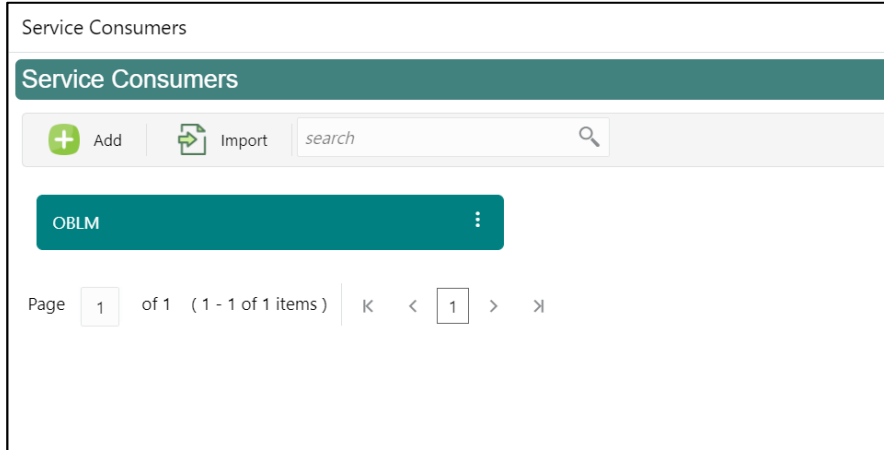
Oracle Banking Liquidity Management Consumer Services

Service Consumers		
OBLM		
Service Providers		Consumer Services
 Add	 Import	<input type="text" value="search"/>
Actions	Name	Description
⋮	CreateEcablk	CreateEcablk
⋮	CloseEcablk	CloseEcablk
⋮	CreateRTLResponse	CreateRTLResponse
⋮	PMRftOutService	Request for transfer - MT101
⋮	ACCOUNTHANDOFF	DDA account handoff
⋮	BALANCEQUERY	Account balance query service
⋮	PMSinglePayOutService	Cross Border payment service - MT103
Page	<input type="text" value="1"/> of 1 (1 - 7 of 7 items)	

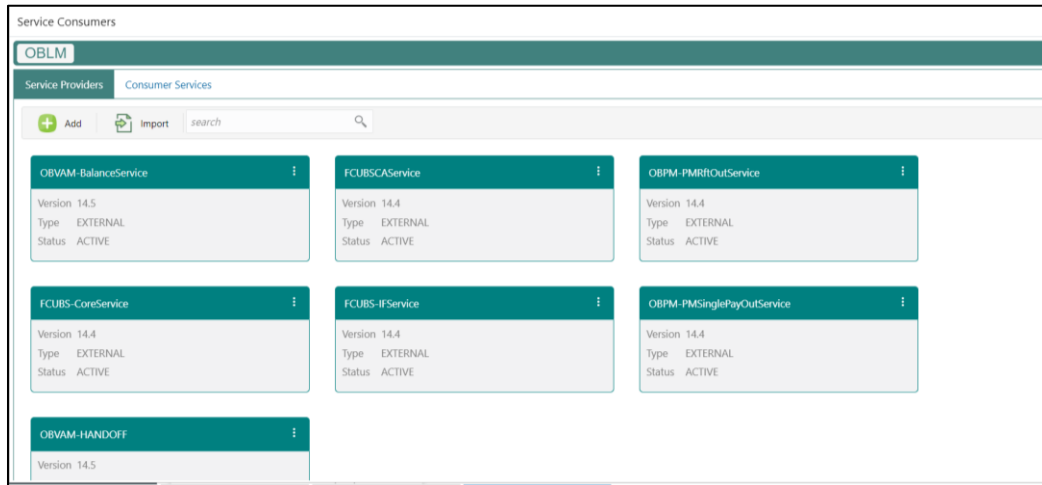
2.4 Configuring Service Providers

Follow the below steps to configure all service providers.

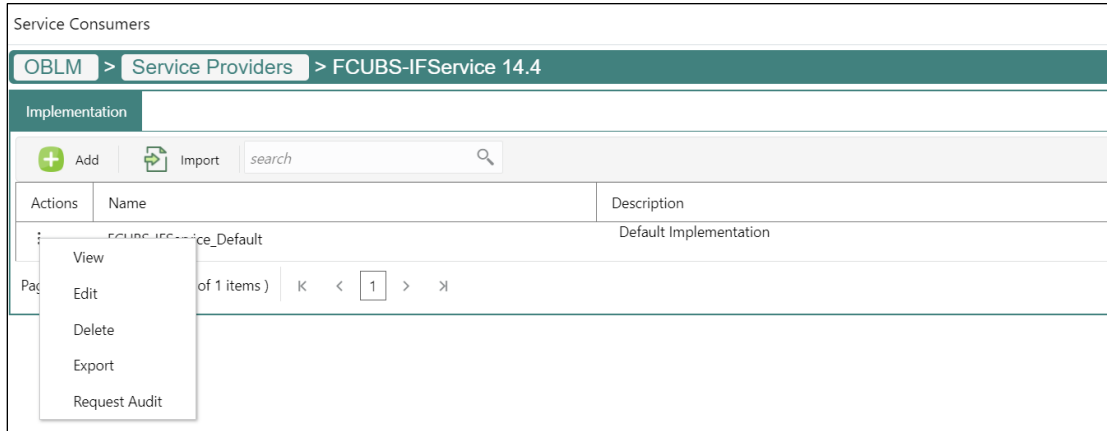
1. Click on consumer **OBLM**.



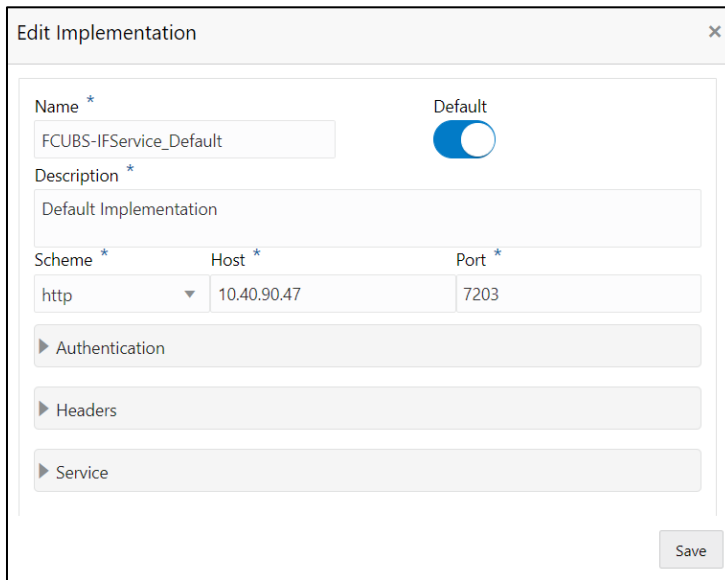
2. Click on any service providers (For example **FCUBS-IFService**)



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



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

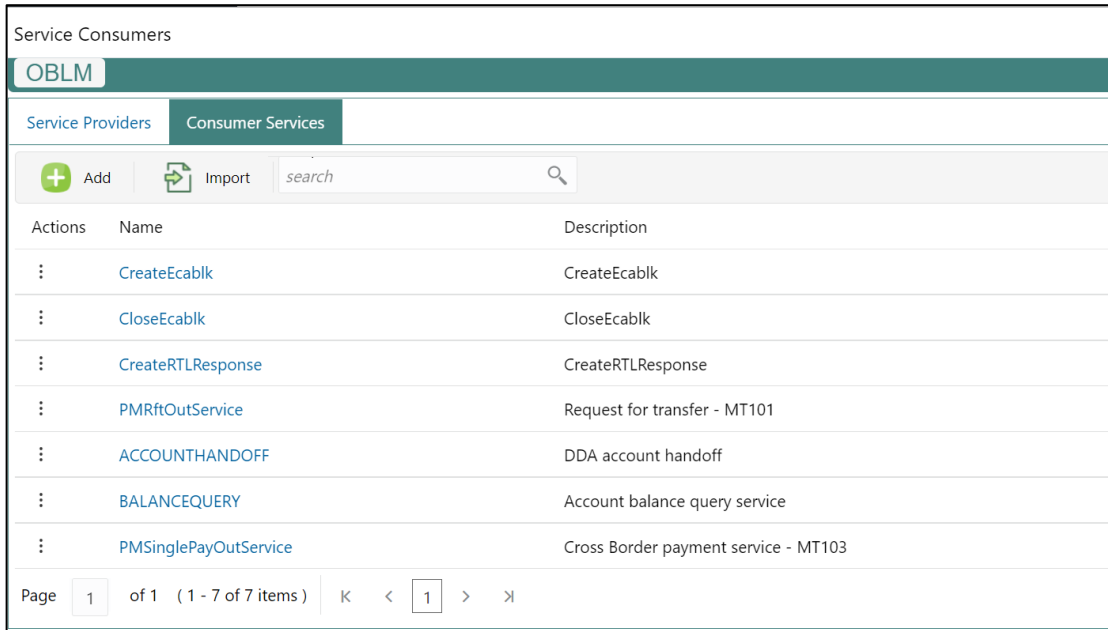


5. Repeat the step 2 to 4 for all other service providers and update appropriate Host & Port No.

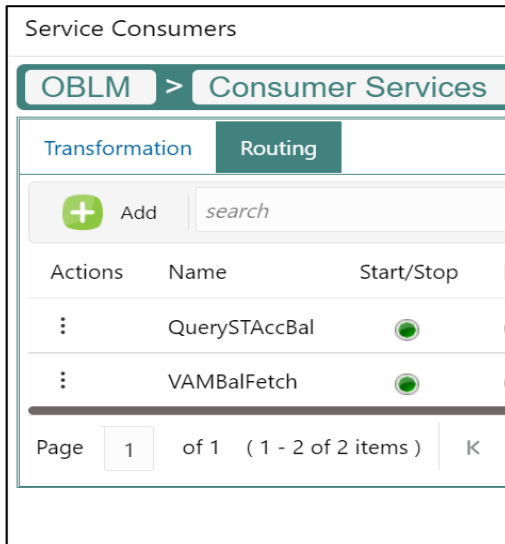
2.5 Configuring Consumer Services

2.5.1 Oracle Banking Virtual Account Management

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



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



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

Edit Route

Name *
VAMBalFetch

Start/Stop: **START** STOP

Auto Shutdown:

Default Rule Custom Rule

Transformations

+ Add

Actions	Product Processor	Implementation	Transformation
:	OBVAM-BalanceService 14.5	OBVAM-BalanceService_Default	T2

Save

- Click **Action** icon and Click **Edit** to edit each header and give the proper headers.

Edit Transformation

OBVAM-BalanceService 14.5 OBVAM-BalanceService_Default

Transformation *
T2

Headers

Actions	Name	Value
:	Content-Type	application/json
:	userId	SIVA01
:	branchCode	000
:	entityId	DEFAULTENTITY
:	appld	VAM

OK

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

3 Integration Services

3.1 Oracle FLEXCUBE Universal Banking Integration

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

S.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/FCUBSTDSservice/FCUBSTDSservice?WSDL	TD Contract Hand-Off	Service API which is used for Investment Sweep - TD to FCUBS
4.	FCUBS	http://host:port/FCUBSMMSservice/FCUBSMMSservice?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	CreateExtAccEntry	Service API which is used for Accounting Hand off to FCUBS RTL

7.	FCUBS	http://host:port/FCUBSCAService/FCUBSCAService?WSDL	CreateRTLResponse	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

3.2 Payments Integration

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

3.3 Oracle Banking Virtual Account Management Integration

S.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

VamIm 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.

3.4 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	
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

S.No	Consumer System	Service URL	Service Description	Remarks
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 {structureId} – 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 3.6.4 Oracle Banking Digital Experience section for sample request payload
12	OBDX	http://host:port/api-gateway/oblm-structure-services/structure/createExternal	(POST) API to create Structure	Refer 3.6.4 Oracle Banking Digital Experience section for sample request payload

13	OBDX	http://host:port/api-gateway/oblmservice-structure/services/structure/modifyExternal	(POST) API to Modify Structure	Refer 3.6.4 Oracle Banking Digital Experience section for sample request payload
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.	

3.5 Oracle Banking Routing Hub - RTL Integration

S.No.	Provider System	Service URL	Service Description	Remarks
1.	OBRH	http://host:port/FCUBSIFService/FCUBSIFService?WSDL	CreateExtAccEcaEnteri es	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	CreateMMContractF S	Service API which is used to create money market contract.
<p>*** Note that Please update the configuration with required host and port to connect with the required Oracle FLEXCUBE Universal Banking environment</p>				

3.6 Request Payload Samples

3.6.1 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>
  </soapenv:Body>
</soapenv:Envelope>

```

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.dr crind</DRCRIND>
    <TRNREFNO>AcctEntrydetailsdetails.trnrefno</TRNREFNO>
    <EVENT>AcctEntrydetailsdetails.event</EVENT>
    <EXCHRATE>AcctEntrydetailsdetails.exchrates</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>
        </Rtl-Queue-Full>
        <RTLSTATUSMESSAGE>$body.rtlStatusMessage</RTLSTATUSMESSAGE>
      </FCUBS_BODY>
    </CREATERTLRESPONSE_FSFS_REQ>
  </env:Body>
</env:Envelope>

```

3.6.2 Oracle Banking Virtual Account Management

Balance fetch

```
{
  "sweepandVDBalanceServiceRequestDto": [
    {
      "virtualAccountNumber": "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"
    }
  ]
}
```

3.6.3 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>$fcubscopy.cstmrCdtTrfInitn.grpHdr.msgId</pms:MsgId>

<pms:CreDtTm>$fcubscopy.cstmrCdtTrfInitn.grpHdr.creDtTm</pms:CreDtTm>

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

<pms:NbOfTxs>$fcubscopy.cstmrCdtTrfInitn.grpHdr.nbOfTxs</pms:NbOfTxs>

<pms:InitgPty>$fcubscopy.cstmrCdtTrfInitn.grpHdr.initgPty</pms:InitgPty>
  </pms:GrpHdr>
  <pms:PmtInf>

<pms:PmtInfId>$fcubscopy.cstmrCdtTrfInitn.pmtInf.pmtInfId</pms:PmtInfId>
  <pms:PmtMtd>$fcubscopy.cstmrCdtTrfInitn.pmtInf.pmtMtd</pms:PmtMtd>
  <pms:PmtTpInf>

<pms:InstrPrty>$fcubscopy.cstmrCdtTrfInitn.pmtInf.pmtTpInf.instrPrty</pms:InstrPrty>
  <pms:SvcLvl>

<pms:Cd>$fcubscopy.cstmrCdtTrfInitn.pmtInf.pmtTpInf.svcLvl.cd</pms:Cd>
  </pms:SvcLvl>
  <pms:CtgyPurp>

<pms:Cd>$fcubscopy.cstmrCdtTrfInitn.pmtInf.pmtTpInf.ctgyPurp.cd</pms:Cd>
  </pms:CtgyPurp>
</pms:PmtTpInf>
<pms:ReqdExctnDt>$fcubscopy.cstmrCdtTrfInitn.pmtInf.reqdExctnDt</pms:ReqdExctnDt>

  <pms:Dbtr>
    <pms:Nm>$fcubscopy.cstmrCdtTrfInitn.pmtInf.dbtr.nm</pms:Nm>
    <pms:PstlAdr/>
    <pms:Id>
      <pms:OrgId>
        <pms:ClrSysMmbId/>
        <pms:Othr>

<pms:Id>$fcubscopy.cstmrCdtTrfInitn.pmtInf..dbtr.id.orgId.othr.id</pms:Id>
  <pms:SchmeNm>

<pms:Cd>$fcubscopy.cstmrCdtTrfInitn.pmtInf.dbtr.id.orgId.othr.schmeNm.cd</pms:Cd>
  </pms:SchmeNm>
  </pms:Othr>
  </pms:OrgId>
  </pms:Id>
</pms:Dbtr>
<pms:DbtrAcct>
  <pms:Id>
  <pms:Othr>

```

```

<pms:Id>$fcubscopybody.cstmrCdtTrfInitn.pmtInf.dbtrAcct.id.othr.id</pms:Id>
    </pms:Othr>
  </pms:Id>

<pms:Ccy>$fcubscopybody.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>$fcubscopybody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.pmtId.instrId</pms:InstrId>

<pms:EndToEndId>$fcubscopybody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.pmtId.endToEndId</pms:EndToEndId>
    </pms:PmtId>
    <pms:Amt>
      <pms:InstdAmt
Ccy="USD">$fcubscopybody.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>$fcubscopybody.cstmrCdtTrfInitn.pmtInf.cdtTrfTxInf.cdtr.nm</pms:Nm>
    <pms:PstlAdr/>
  </pms:Cdtr>
  <pms:CdtrAcct>
    <pms:Id>
    <pms:Othr>

<pms:Id>$fcubscopybody.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>$fcubscopy.cstmrcdttrfinitn.grpTlr.txnBranch</pms:TxnBranch>
<pms:HostCode>$fcubscopy.cstmrcdttrfinitn.grpTlr.hostCode</pms:HostCode>
<pms:SourceCode>$fcubscopy.cstmrcdttrfinitn.grpTlr.sourceCode</pms:SourceCode>
<pms:NetworkCode>$fcubscopy.cstmrcdttrfinitn.grpTlr.networkCode</pms:NetworkCode>
  </pms:GrpTlr>
</pms:Cstmrcdttrfinitn>
  </FCUBS_BODY>
</FCUBS_REQ_ENV>

```

3.6.4 Oracle Banking Digital Experience

Execute Sweep Structure

```

{
  "overridePending": "N",
  "allowMbcccAccountPair": "N",
  "mode": "A",
  "structureList": [
    {
      "structureId": "ST20217167444516010503",
      "versionNumber": 1
    }
  ]
}

```

Create Sweep Structure

```

{
  "data": [
    {
      "headerAccountNumber": "HEL0046400178",
      "endDate": "2022-07-01",
      "currencyRateType": "STANDARD",
      "backwardTreatment": "N",
      "balanceType": "V",
      "versionNo": 1,
      "centralAccountNumber": null,
      "allowSweepOnCurrencyHol": "Y",
      "holidayTreatment": "P",
      "structureStatus": "A",
      "structurePriority": 25,
      "fxRatePickup": "Offline",
      "headerCurrency": "GBP",
      "reallocationMethod": "No Reallocation",
      "maxBackwardDays": 2,
      "LmmTmStructureDetailsDTO": [
        {
          "reverseSweepFrequency": null,
          "percentageShare": 0,
          "accountCurrency": "GBP",
          "bookingAccountCurrency": "GBP",
          "rateType": "STANDARD",
          "isTwoWay": "Y",
          "structureMasterId": "",
          "LmmTmStructureInstructionDTO": [],
          "isExternal": "Internal",
          "accountType": "Sweep",
          "accountLevel": 0,
          "branchCode": "HEL",
          "isNotional": "N",
          "reallocationMethod": null,
          "bookingAccountNumber": "HEL0046400178",
          "sweepPriority": null,
          "bookingAccountBranch": "HEL",
          "parentAccountBranch": null,
          "isNominatedAccount": "Y",
          "accountNumber": "HEL0046400178",
          "parentAccountNumber": null,
          "accCategory": "Sweep",
          "parentAccountCurrency": null
        }
      ],
    }
  ],
}

```

```

{
  "reverseSweepFrequency": "FM2341112",
  "percentageShare": 0,
  "accountCurrency": "GBP",
  "bookingAccountCurrency": "GBP",
  "rateType": "STANDARD",
  "isTwoWay": "Y",
  "structureMasterId": "",
  "LmmTmStructureInstructionDTO": [
    {
      "structureDetailsId": "",
      "LmmTmStructureInstructionDetDTO": [
        {
          "structureInstructionId": "",
          "paramName": "Maximum",
          "paramValue": "4000"
        },
        {
          "structureInstructionId": "",
          "paramName": "MaximumDeficit",
          "paramValue": "1000"
        },
        {
          "structureInstructionId": "",
          "paramName": "Minimum",
          "paramValue": "1"
        }
      ],
      "structureInstructionId": "",
      "paramName": "MinimumDeficit",
      "paramValue": "100"
    },
    {
      "structureInstructionId": "",
      "paramName": "Multiple",
      "paramValue": "10"
    }
  ],
  "instrDesc": "Zero Balance Model",
  "instructionPriority": 1,
  "LmmTmStructureInstructionFrequencyDTO": [
    {
      "frequencyId": "FM2341112",
      "structureInstructionId": "",
      "freqDesc": null
    }
  ],
  "instructionId": "TEST22"
},
],

```

```

    "isExternal": "Internal",
      "accountType": "Sweep",
      "accountLevel": 1,
      "branchCode": "HEL",
      "isNotional": "N",
      "reallocationMethod": null,
      "bookingAccountNumber": "HEL0046400067",
      "sweepPriority": 1,
      "bookingAccountBranch": "HEL",
      "parentAccountBranch": "HEL",
      "isNominatedAccount": "Y",
      "accountNumber": "HEL0046400067",
      "parentAccountNumber": "HEL0046400178",
      "accCategory": "Sweep",
      "parentAccountCurrency": "GBP"
    }
  ],
  "centralAccountCurrency": null,
  "sourceSystem": "OBDX",
  "structureDescription": "Sweep 19721",
  "systemAccountCurrency": null,
  "systemAccountBranch": null,
  "LmmTmStructureAccountsDTO": [
    {
      "isExternal": "Internal",
      "accountCurrency": "GBP",
      "accountNumber": "HEL0046400178",
      "isNotional": "N",
      "isSelected": "Y",
      "accCategory": "Sweep",
      "accountBranch": "HEL"
    },
    {
      "isExternal": "Internal",
      "accountCurrency": "GBP",
      "accountNumber": "HEL0046400067",
      "isNotional": "N",
      "isSelected": "Y",
      "accCategory": "Sweep",
      "accountBranch": "HEL"
    }
  ],
  "customerId": "000464",
  "systemAccountNumber": null,
  "considerPostSweepBalance": "Y",
  "ratePickUp": "Previous Day Rate",
  "structureId": "STG5MWB4PS39",
  "multiBankFlag": true,
  "centralAccountBranch": null,
  "structureType": "Sweep",
  "headerBranchCode": "HEL",
  "interestMethod": "I",
  "effectiveDate": "2018-07-19"
}
]
}

```

Modify Sweep Structure

```

{
  "data": [
    {
      "keyId": "40e011ff-0ff7-4f8c-a70b-aa01fed8ca59",
      "makerId": "OBDX02",
      "makerDateStamp": "2018-11-30T11:12:24.000+00:00",
      "checkerId": "OBDX02",
      "checkerDateStamp": "2018-11-30T11:12:24.000+00:00",
      "modNo": 1,
      "recordStatus": "O",
      "authStatus": "A",
      "onceAuth": "Y",
      "doerRemarks": null,
      "approverRemarks": null,
      "links": [],
      "structureId": "STG5MWB4PS39",
      "structureDescription": "Sweep 19721",
      "customerId": "000464",
      "customerName": "XXX XXXXXX",
      "numberOfAccountsLinked": 2,
      "structureType": "Sweep",
      "structurePriority": 25,
      "effectiveDate": "2018-07-19",
      "endDate": "2022-07-01",
      "headerAccountNumber": "HEL0046400178",
      "headerBranchCode": "HEL",
      "headerCurrency": "GBP",
      "multiBankFlag": "N",
      "crossBorderFlag": "N",
      "crossCurrencyFlag": "N",
      "balanceType": "V",
      "structureFrequency": null,
      "currencyRateType": "STANDARD",
      "allowSweepOnCurrencyHol": "Y",
      "interestMethod": "I",
      "ratePickUp": "Previous Day Rate",
      "nextRunDate": null,
      "eodExecution": null,
      "reverseFrequency": null,
      "instructionType": null,
      "reallocationMethod": "No Reallocation",
      "holidayTreatment": "P",
      "maxBackwardDays": 2,
      "backwardTreatment": "N",
      "centralAccountNumber": null,
      "centralAccountBranch": null,
      "centralAccountCurrency": null,
      "nextRunDateReverse": null,
      "prevRunDateReverse": null,
      "structureStatus": "A",
      "investmentSweep": null,
      "considerPostSweepBalance": "Y",
    }
  ]
}

```

```

"fxRatePickup": "Offline",
"limitTrackingFlag": null,
"sourceSystem": "OBDX",
"systemAccountNumber": null,
"systemAccountBranch": null,
"systemAccountCurrency": null,
"pauseStartDate": "2021-07-01",
"pauseEndDate": "2021-10-01",
"action": "NEW",
"versionNo": 1,
"isSimulation": "N",
"simulationId": null,
"exStrId": null,
"callFromValidate": false,
"bodExecution": null,
"revFreqEodExecution": null,
"revFreqBodExecution": null,
"isDirty": "Y",
"lastSuccessfulSweepDate": null,
"batchStatus": null,
"trackIcl": null,
"LmmTmStructureDetailsDTO": [
  {
    "id": "1883ba34-0575-4177-8422-c52616c3bab4",
    "structureMasterId": "40e011ff-0ff7-4f8c-a70b-
aa01fed8ca59",
    "accountNumber": "HEL0046400067",
    "accountDescription": "ALL SPORTS",
    "branchCode": "HEL",
    "accountCurrency": "GBP",
    "isExternal": "Internal",
    "acyAvailableBal": 2500,
    "bankCode": "0020",
    "countryId": "AUS",
    "cityId": "Sydney",
    "region": "America/Detroit",
    "latitude": -33.92,
    "longitude": 151.1852,
    "isNotional": "N",
    "accCategory": "Sweep",
    "parentAccountNumber": "HEL0046400178",
    "parentAccountBranch": "HEL",
    "parentAccountCurrency": "GBP",
    "bookingAccountNumber": "HEL0046400067",
    "bookingAccountBranch": "HEL",
    "bookingAccountCurrency": "GBP",
    "rateType": "STANDARD",
    "accountType": "Sweep",
    "sweepPriority": 1,
    "isTwoWay": "Y",
    "reverseSweepFrequency": "FM2341112",
    "twowaySweepPriority": null,
    "onlineBalanceFetch": null,
  }
]

```

```

"partialReverseSweep": null,
"isHold": null,
"eodExecution": null,
"ratePickUp": null,
"reallocationRequired": null,
"reallocationMethod": null,
"allowReverseSweep": null,
"isNominatedAccount": "Y",
"accountLevel": 1,
"centralAccountNumber": null,
"centralAccountBranch": null,
"centralAccountCurrency": null,
"percentageShare": 0,
"percentageChildShare": null,
"partialTransferAllowed": null,
"holdStartDate": null,
"holdEndDate": null,
"isVirtual": "N",
"oneWayAccountGroup": null,
"twoWayAccountGroup": null,
"isRegulatedDebits": "N",
"entityID": "HEL_ENTITY",
"entityName": "HEL_ENTITY_NAME",
"iban": null,
"customerName": "XXX XXXXXX",
"LmmTmStructureInstructionDTO": [
  {
    "id": "2c83f188-240f-4e79-9fc6-452e00bf5f47",
    "structureDetailsId": "1883ba34-0575-4177-8422-
c52616c3bab4",
    "instructionId": "TEST22",
    "instrDesc": "Zero Balance Model",
    "instructionPriority": 1,
    "suspensionStartDate": null,
    "suspensionEndDate": null,
    "LmmTmStructureInstructionFrequencyDTO": [
      {
        "id": "b38012af-9a09-49c0-90bb-
3fa8f4d05368",
        "structureInstructionId": "2c83f188-240f-
4e79-9fc6-452e00bf5f47",
        "frequencyId": "FM2341112",
        "freqDesc": "FM2341112"
      }
    ],
    "LmmTmStructureInstructionDetDTO": [
      {
        "id": "70557117-7bd6-41c7-850f-
2d634325b84b",
        "structureInstructionId": "2c83f188-240f-
4e79-9fc6-452e00bf5f47",
        "paramName": "MinimumDeficit",
        "paramValue": "100"
      }
    ]
  }
]

```

```

        {
            "id": "4465bf7e-4a64-42f9-b56a-d49c7b3185fe",
            "structureInstructionId": "2c83f188-240f-4e79-9fc6-
452e00bf5f47",
            "paramName": "Multiple",
            "paramValue": "10"
        },
        {
            "id": "591a3a02-fcac-4b92-bcd5-809f33eeacc5",
            "structureInstructionId": "2c83f188-240f-4e79-9fc6-
452e00bf5f47",
            "paramName": "Maximum",
            "paramValue": "4000"
        },
        {
            "id": "3bb941c7-f55c-4a98-9b68-d14942c93b85",
            "structureInstructionId": "2c83f188-240f-4e79-9fc6-
452e00bf5f47",
            "paramName": "Minimum",
            "paramValue": "1"
        },
        {
            "id": "b4d48a90-1cf3-49e9-a3ee-47508fa3d3e1",
            "structureInstructionId": "2c83f188-240f-4e79-9fc6-
452e00bf5f47",
            "paramName": "MaximumDeficit",
            "paramValue": "1000"
        }
    ]
}
],
"LmmTmStructurePaymentDTO": [
    {
        "id": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
        "structureDetailsId": "1883ba34-0575-4177-8422-
c52616c3bab4",
        "sweepDirection": "Twoway",
        "interfaceMasterId": "2b274af6-2f1f-4892-b1c5-
bc0f3e75ea09",
        "LmmTmStructurePaymentDetailDTO": [
            {
                "id": "66ac2418-d1b2-4996-9746-ab36c63f4678",
                "structurePaymentId": "b3278ecd-50f7-4b74-b314-
d02cb56fc226",
                "paramName": "LCYAMOUNT",
                "paramValue": "#TO_AMOUNT"
            },
            {
                "id": "4390fcca-e372-4172-bc8a-2990c20b5d47",
                "structurePaymentId": "b3278ecd-50f7-4b74-b314-
d02cb56fc226",
                "paramName": "FROM_ACC_LCY",
                "paramValue": "#FROM_ACC_LCY"
            }
        ]
    }
]

```

```

{
  "id": "9c25e848-12ba-4c9f-bcde-cfe5e2cf1163",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "MODULE",
  "paramValue": "DE"
},
{
  "id": "010f53ba-3293-4680-a32b-0e4e7a48425f",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "AMOUNTTAG",
  "paramValue": "TXN_AMT1"
},
{
  "id": "f7f5b999-ee59-4ffd-a5d3-b88618fb27f5",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "FROM_ACC_BRANCH",
  "paramValue": "#FROM_ACC_BRANCH"
},
{
  "id": "2683bbdb-20d2-41ba-b3ae-1b82abcce776",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "TOAC_FCYAMT",
  "paramValue": "#TOAC_FCYAMT"
},
{
  "id": "80aaa799-6448-4019-8acf-e3b71dee5829",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "EVENT",
  "paramValue": "INIT"
},
{
  "id": "ee5189b5-c654-420e-bf22-cafaaa3e9cdf",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "TRNREFNO",
  "paramValue": "#EXT_TRANSACTION_NO"
},
{
  "id": "87b117f2-5a94-481a-b530-50293c5a9018",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "FROM_ACC_CCY",
  "paramValue": "#FROM_ACC_CCY"
},
{
  "id": "57eb1a1d-877b-4736-9091-46bcb5d2087f",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "TO_ACC_CCY",
  "paramValue": "#TO_ACC_CCY"
},
{
  "id": "ece41aef-1c6f-402b-8f4e-3c4859b28b87",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "TO_ACC_BRANCH",
  "paramValue": "#TO_ACC_BRANCH"
}

```

```

{
  "id": "82ddb23c-bc1a-473c-9b3f-bdaa135bb1e4",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "EVENTSRNO",
  "paramValue": "1"
},
{
  "id": "9c52db58-b94a-4e08-b91a-9ae66f715bfc",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "VALUEDT",
  "paramValue": "#VALUE_DT"
},
{
  "id": "6fd645ed-e1d6-4059-ae13-c7b7b5bc7349",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "FROM_ACC",
  "paramValue": "#FROM_ACC"
},
{
  "id": "84c27c7c-9b81-43c8-b20b-855cbe2e51b2",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "TOAC_LCYAMT",
  "paramValue": "#TOAC_LCYAMT"
},
{
  "id": "e26ed62d-e0c5-4a33-b936-8b79d34d8b94",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "AVAILBALREQD",
  "paramValue": "#AVAILBALREQD"
},
{
  "id": "d334ab6d-9314-453f-afb9-af75612bfbb2",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "ENTITY_ID",
  "paramValue": "#ENTITY_ID"
},
{
  "id": "91912e01-67ca-4170-ab8d-110afdda94cf",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "TRNDT",
  "paramValue": "#LOG_TIME"
},
{
  "id": "1ba49b02-2d74-42d7-9eee-f94272f73880",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "TO_ACC_LCY",
  "paramValue": "#TO_ACC_LCY"
},
{
  "id": "33857b79-f596-441d-b96f-1d920a4983f6",
  "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
  "paramName": "FCYAMOUNT",
  "paramValue": "#TO_FCY_AMOUNT"
},

```

```

    {
      "id": "9323458b-8659-48f9-87f3-015551734bf6",
      "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
      "paramName": "FROMAC_FCYAMOUNT",
      "paramValue": "#FROMAC_FCYAMOUNT"
    },
    {
      "id": "fb31738c-0bbb-4a49-aa16-050ab60ffd0f",
      "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
      "paramName": "EXCHRATE",
      "paramValue": "#FX_RATE"
    },
    {
      "id": "4b03f4dc-08e9-48c6-aa76-1c7f5bf1fd06",
      "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
      "paramName": "TRNCODE",
      "paramValue": "000"
    },
    {
      "id": "d1646dcc-b60e-452c-9f22-3198ade9a63b",
      "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
      "paramName": "TO_ACC",
      "paramValue": "#TO_ACC"
    },
    {
      "id": "2cf58a66-2895-48c5-9474-34168e487190",
      "structurePaymentId": "b3278ecd-50f7-4b74-b314-d02cb56fc226",
      "paramName": "FROMAC_LCYAMOUNT",
      "paramValue": "#FROMAC_LCYAMOUNT"
    }
  ]
},
{
  "id": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "structureDetailsId": "1883ba34-0575-4177-8422-c52616c3bab4",
  "sweepDirection": "Oneway",
  "interfaceMasterId": "2b274af6-2f1f-4892-b1c5-bc0f3e75ea09",
  "LmmTmStructurePaymentDetailDTO": [
    {
      "id": "d0154169-9f45-40cb-9fc3-eee4d5f631a9",
      "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
      "paramName": "MODULE",
      "paramValue": "DE"
    },
    {
      "id": "743a71c8-791d-4ae1-9359-b4e0ddb04e78",
      "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
      "paramName": "TOAC_FCYAMT",
      "paramValue": "#TOAC_FCYAMT"
    },
    {
      "id": "9f93b945-4020-44f6-8096-18db67e4af5e",
      "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
      "paramName": "FROMAC_LCYAMOUNT",
      "paramValue": "#FROMAC_LCYAMOUNT"
    }
  ],
}

```

```

{
  "id": "151b61a9-06ed-46aa-aaae-0939c3cf39cc",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "EXCHRATE",
  "paramValue": "#FX_RATE"
},
{
  "id": "bb8f0079-e8e6-4ece-b977-644aaa82f662",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "FROMAC_FCYAMOUNT",
  "paramValue": "#FROMAC_FCYAMOUNT"
},
{
  "id": "21432c65-ce9e-488e-8f10-41f4240bb8cc",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "VALUEDT",
  "paramValue": "#VALUE_DT"
},
{
  "id": "81b7ce68-03d6-46be-b500-274517325485",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "TRNREFNO",
  "paramValue": "#EXT_TRANSACTION_NO"
},
{
  "id": "5561f633-a93f-4fa4-bd7b-b2ecb0b787c9",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "FROM_ACC_CCY",
  "paramValue": "#FROM_ACC_CCY"
},
{
  "id": "67babc1d-6853-40b2-915e-aa3f104aed2f",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "TOAC_LCYAMT",
  "paramValue": "#TOAC_LCYAMT"
},
{
  "id": "7f64aa04-71ce-4d47-a7d4-4a6547495251",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "TO_ACC",
  "paramValue": "#TO_ACC"
},
{
  "id": "0777f8a2-6827-4d0a-84e7-1c0ac17e04e1",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "TO_ACC_CCY",
  "paramValue": "#TO_ACC_CCY"
},
{
  "id": "245aec61-63ae-41c8-9991-6438d774b7dc",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "TRNCODE",
  "paramValue": "000"
},

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{
  "id": "42c546fd-87de-4a75-ba4c-ddd2181e0e84",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "FROM_ACC_BRANCH",
  "paramValue": "#FROM_ACC_BRANCH"
},
{
  "id": "3196a5b4-afd9-4e47-af13-1b0be0e34bbc",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "EVENT",
  "paramValue": "INIT"
},
{
  "id": "1ff6d74f-8488-4da6-9a75-3c34d0b92614",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "TO_ACC_LCY",
  "paramValue": "#TO_ACC_LCY"
},
{
  "id": "722ba682-75db-40da-83d1-a498ed696682",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "AMOUNTTAG",
  "paramValue": "TXN_AMT1"
},
{
  "id": "4621dbd6-00f6-4159-8198-a4affc299d69",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "ENTITY_ID",
  "paramValue": "#ENTITY_ID"
},
{
  "id": "a1d7ebdd-62e4-4890-b4cc-847be38a84eb",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "AVAILBALREQD",
  "paramValue": "#AVAILBALREQD"
},
{
  "id": "6a4ae0c7-9459-44c5-905a-131d0f1d28fe",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "TRNDT",
  "paramValue": "#LOG_TIME"
},
{
  "id": "b772d21e-59ea-46aa-a162-ab16fae5dcd1",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "FROM_ACC",
  "paramValue": "#FROM_ACC"
},
{
  "id": "96549e49-65af-47b6-89a5-e13550d6ca43",
  "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
  "paramName": "EVENTSRNO",
  "paramValue": "1"
},
}

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    {
      "id": "1bf32b00-a7f7-4b78-be6a-51cb583653b9",
      "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
      "paramName": "FROM_ACC_LCY",
      "paramValue": "#FROM_ACC_LCY"
    },
    {
      "id": "bb4417ad-1ea0-47b5-8fee-be027bb9b962",
      "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
      "paramName": "TO_ACC_BRANCH",
      "paramValue": "#TO_ACC_BRANCH"
    },
    {
      "id": "ca076ed5-a313-4fce-90dd-99c8c93d59ca",
      "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
      "paramName": "LCYAMOUNT",
      "paramValue": "#TO_AMOUNT"
    },
    {
      "id": "b0bfba49-be88-456f-bc12-1948c031d210",
      "structurePaymentId": "9df0c2e5-4667-4ef7-adb1-da89b940ffe9",
      "paramName": "FCYAMOUNT",
      "paramValue": "#TO_FCY_AMOUNT"
    }
  ]
},
"LmmTmStructureAccPriorityDTO": [],
"LmmTmStrRevSweepDetailsDTO": [],
"LmmTmStructureIclDTO": []
},

```

```

{
  "id": "87d8762d-7127-4064-8eca-17f70d25584a",
  "structureMasterId": "40e011ff-0ff7-4f8c-a70b-aa01fed8ca59",
  "accountNumber": "HEL0046400178",
  "accountDescription": "HEL0046400178",
  "branchCode": "HEL",
  "accountCurrency": "GBP",
  "isExternal": "Internal",
  "acyAvailableBal": 1000000,
  "bankCode": "0020",
  "countryId": "AUS",
  "cityId": "Sydney",
  "region": "Australia/Adelaide",
  "latitude": -33.92,
  "longitude": 151.1852,
  "isNotional": "N",
  "accCategory": "Sweep",
  "parentAccountNumber": null,
  "parentAccountBranch": null,
  "parentAccountCurrency": null,

```

```

    "bookingAccountNumber": "HEL0046400178",
    "bookingAccountBranch": "HEL",
    "bookingAccountCurrency": "GBP",
    "rateType": "STANDARD",
    "accountType": "Sweep",
    "sweepPriority": null,
    "isTwoWay": "Y",
    "reverseSweepFrequency": null,
    "twowaySweepPriority": null,
    "onlineBalanceFetch": null,
    "partialReverseSweep": null,
    "isHold": null,
    "eodExecution": null,
    "ratePickUp": null,
    "reallocationRequired": null,
    "reallocationMethod": null,
    "allowReverseSweep": null,
    "isNominatedAccount": "Y",
    "accountLevel": 0,
    "centralAccountNumber": null,
    "centralAccountBranch": null,
    "centralAccountCurrency": null,
    "percentageShare": 0,
    "percentageChildShare": null,
    "partialTransferAllowed": null,
    "holdStartDate": null,
    "holdEndDate": null,
    "isVirtual": "N",
    "oneWayAccountGroup": null,
    "twoWayAccountGroup": null,
    "isRegulatedDebits": "N",
    "entityID": "HEL_ENTITY",
    "entityName": "HEL_ENTITY_NAME",
    "iban": null,
    "customerName": "XXX XXXXXX",
    "LmmTmStructureInstructionDTO": [],
    "LmmTmStructurePaymentDTO": [],
    "LmmTmStructureAccPriorityDTO": [],
    "LmmTmStrRevSweepDetailsDTO": [],
    "LmmTmStructureIclDTO": []
  }
],

```

```

"LmmTmStructureAccountsDTO": [
  {
    "id": "1fb03839-982e-42fd-ac81-e5f4fd2ee281",
    "structureMasterId": "40e011ff-0ff7-4f8c-a70b-aa01fed8ca59",
    "accountNumber": "HEL0046400178",
    "accountDescription": "HEL0046400178",
    "accountBranch": "HEL",
    "accountCurrency": "GBP",
    "isExternal": "Internal",
    "isNotional": "N",
    "accCategory": "Sweep",
    "accountType": null,
    "acyAvailableBal": 1000000,
    "bankCode": "0020",
    "countryId": "AUS",
    "cityId": "Sydney",
    "region": "Australia/Adelaide",
    "isSelected": "Y",
    "isRegulatedDebits": "N",
    "entityID": "HEL_ENTITY",
    "entityName": "HEL_ENTITY_NAME",
    "iban": null,
    "customerName": "XXX XXXXXX"
  },
  {
    "id": "386a0140-1a7e-4d62-a421-7eae57bb98e1",
    "structureMasterId": "40e011ff-0ff7-4f8c-a70b-aa01fed8ca59",
    "accountNumber": "HEL0046400067",
    "accountDescription": "ALL SPORTS",
    "accountBranch": "HEL",
    "accountCurrency": "GBP",
    "isExternal": "Internal",
    "isNotional": "N",
    "accCategory": "Sweep",
    "accountType": null,
    "acyAvailableBal": 2500,
    "bankCode": "0020",
    "countryId": "AUS",
    "cityId": "Sydney",
    "region": "America/Detroit",
    "isSelected": "Y",
    "isRegulatedDebits": "N",
    "entityID": "HEL_ENTITY",
    "entityName": "HEL_ENTITY_NAME",
    "iban": null,
    "customerName": "XXX XXXXXX"
  }
]
}

```

Create Pool Structure

```

{
  "data": [
    {
      "headerAccountNumber": null,
      "endDate": "2022-07-01",
      "currencyRateType": "STANDARD",
      "backwardTreatment": "H",
      "balanceType": "V",
      "versionNo": 1,
      "centralAccountNumber": null,
      "allowSweepOnCurrencyHol": "Y",
      "holidayTreatment": "P",
      "structureStatus": "A",
      "struturePriority": 55,
      "fxRatePickup": "Offline",
      "headerCurrency": null,
      "reallocationMethod": "Even Direct Distribution",
      "maxBackwardDays": 2,
      "LmmTmStructureDetailsDTO": [
        {
          "reverseSweepFrequency": null,
          "percentageShare": 0,
          "accountCurrency": "GBP",
          "bookingAccountCurrency": "GBP",
          "rateType": "STANDARD",
          "isTwoWay": "Y",
          "structureMasterId": "",
          "LmmTmStructureInstructionDTO": [],
          "isExternal": "Internal",
          "accountType": "Pool",
          "accountLevel": 1,
          "branchCode": "HEL",
          "isNotional": "N",
          "reallocationMethod": null,
          "bookingAccountNumber": "HEL0046400067",
          "sweepPriority": null,
          "bookingAccountBranch": "HEL",
          "parentAccountBranch": null,
          "isNominatedAccount": "Y",
          "accountNumber": "HEL0046400067",
          "parentAccountNumber": null,
          "accCategory": "Pool",
          "parentAccountCurrency": null
        }
      ],
      "centralAccountCurrency": null,
      "sourceSystem": "OBDX",
      "structureDescription": "Pool 19721",
      "systemAccountCurrency": "GBP",
      "systemAccountBranch": "HEL",
      "LmmTmStructureAccountsDTO": [

```

```

        {
            "isExternal": "Internal",
            "accountCurrency": "GBP",
            "accountNumber": "HEL0046400067",
            "isNotional": "N",
            "isSelected": "Y",
            "accCategory": "Pool",
            "accountBranch": "HEL"
        }
    ],
    "customerId": "000464",
    "systemAccountNumber": null,
    "considerPostSweepBalance": "N",
    "ratePickUp": "Past 5 day Average Rate",
    "structureId": "ST98TZE860XD",
    "multiBankFlag": true,
    "centralAccountBranch": null,
    "structureType": "Pool",
    "headerBranchCode": null,
    "interestMethod": "I",
    "effectiveDate": "2018-07-19"
}
]
}

```

Modify Pool Structure

```

{
  "data": [{
    "keyId": "f8996b15-ca0d-4933-977c-5a3d4d29cd3d",
    "makerId": "OBDX02",
    "makerDateStamp": "2018-11-30T10:48:10.000+00:00",
    "checkerId": "OBDX02",
    "checkerDateStamp": "2018-11-30T10:48:10.000+00:00",
    "modNo": 1,
    "recordStatus": "O",
    "authStatus": "A",
    "onceAuth": "Y",
    "doerRemarks": null,
    "approverRemarks": null,
    "links": [],
    "structureId": "ST98TZE860XD",
    "structureDescription": "Pool 19721",
    "customerId": "000464",
    "customerName": "XXX XXXXXX",
    "numberOfAccountsLinked": 2,
    "structureType": "Pool",
    "structurePriority": 55,
    "effectiveDate": "2018-07-19",
    "endDate": "2022-07-01",
  }
]
}

```

```

"headerAccountNumber": "OBDX_SYSACC_7153",
"headerBranchCode": "HEL",
"headerCurrency": "GBP",
"multiBankFlag": "N",
"crossBorderFlag": "N",
"crossCurrencyFlag": "N",
"balanceType": "V",
"structureFrequency": null,
"currencyRateType": "STANDARD",
"allowSweepOnCurrencyHol": "Y",
"interestMethod": "I",
"ratePickUp": "Past 5 day Average Rate",
"nextRunDate": null,
"eodExecution": null,
"reverseFrequency": null,
"instructionType": null,
"reallocationMethod": "Even Direct Distribution",
"holidayTreatment": "P",
"maxBackwardDays": 2,
"backwardTreatment": "H",
"centralAccountNumber": null,
"centralAccountBranch": null,
"centralAccountCurrency": null,
"nextRunDateReverse": null,
"prevRunDateReverse": null,
"structureStatus": "A",
"investmentSweep": null,
"considerPostSweepBalance": "N",
"fxRatePickup": "Offline",
"limitTrackingFlag": null,
"sourceSystem": "OBDX",
"systemAccountNumber": null,
"systemAccountBranch": null,
"systemAccountCurrency": null,
"pauseStartDate": null,
"pauseEndDate": null,
"action": "NEW",
"versionNo": 1,
"isSimulation": "N",
"simulationId": null,
"exStrId": null,
"callFromValidate": false,
"bodExecution": null,
"revFreqEodExecution": null,
"revFreqBodExecution": null,
"isDirty": "Y",
"lastSuccessfulSweepDate": null,
"batchStatus": null,
"trackIcl": null,
"LmmTmStructureDetailsDTO": [
  {
    "id": "4c0499a6-32a6-406f-b31d-0b96d044d325",
    "structureMasterId": "f8996b15-ca0d-4933-977c-
5a3d4d29cd3d",
    "accountNumber": "OBDX_SYSACC_7153",

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```

"accountDescription": "OBDX_SYSACC_7153 Notional Account",
"branchCode": "HEL",
"accountCurrency": "GBP",
"isExternal": "External",
"acyAvailableBal": null,
"bankCode": "0020",
"countryId": "AUS",
"cityId": "Sydney",
"region": "Australia/Adelaide",
"latitude": -33.92,
"longitude": 151.1852,
"isNotional": "Y",
"accCategory": "Pool",
"parentAccountNumber": null,
"parentAccountBranch": null,
"parentAccountCurrency": null,
"bookingAccountNumber": "OBDX_SYSACC_7153",
"bookingAccountBranch": "HEL",
"bookingAccountCurrency": "GBP",
"rateType": null,
"accountType": "Notional",
"sweepPriority": 1,
"isTwoWay": null,
"reverseSweepFrequency": null,
"twowaySweepPriority": null,
"onlineBalanceFetch": null,
"partialReverseSweep": null,
"isHold": "N",
"eodExecution": "N",
"ratePickUp": null,
"reallocationRequired": null,
"reallocationMethod": null,
"allowReverseSweep": "N",
"isNominatedAccount": null,
"accountLevel": 0,
"centralAccountNumber": null,
"centralAccountBranch": null,
"centralAccountCurrency": null,
"percentageShare": null,
"percentageChildShare": null,
"partialTransferAllowed": null,
"holdStartDate": null,
"holdEndDate": null,
"isVirtual": null,
"oneWayAccountGroup": null,
"twoWayAccountGroup": null,
"isRegulatedDebits": "N",
"entityID": "HEL_ENTITY",
"entityName": "HEL_ENTITY_NAME",
"iban": null,
"customerName": "XXX XXXXXX",
"LmmTmStructureInstructionDTO": [],
"LmmTmStructurePaymentDTO": [],
"LmmTmStructureAccPriorityDTO": [],
"LmmTmStrRevSweepDetailsDTO": [],
"LmmTmStructureIclDTO": []
},

```

```

{
  "id": "bf46f936-elf0-4ec9-a3e7-a9036f2bd7b6",
  "structureMasterId": "f8996b15-ca0d-4933-977c-
5a3d4d29cd3d",
  "accountNumber": "HEL0046400067",
  "accountDescription": "ALL SPORTS",
  "branchCode": "HEL",
  "accountCurrency": "GBP",
  "isExternal": "Internal",
  "acyAvailableBal": 2500,
  "bankCode": "0020",
  "countryId": "AUS",
  "cityId": "Sydney",
  "region": "America/Detroit",
  "latitude": -33.92,
  "longitude": 151.1852,
  "isNotional": "N",
  "accCategory": "Pool",
  "parentAccountNumber": "OBDX_SYSACC_7153",
  "parentAccountBranch": "HEL",
  "parentAccountCurrency": "GBP",
  "bookingAccountNumber": "HEL0046400067",
  "bookingAccountBranch": "HEL",
  "bookingAccountCurrency": "GBP",
  "rateType": "STANDARD",
  "accountType": "Pool",
  "sweepPriority": null,
  "isTwoWay": "Y",
  "reverseSweepFrequency": null,
  "twowaySweepPriority": null,
  "onlineBalanceFetch": null,
  "partialReverseSweep": null,
  "isHold": null,
  "eodExecution": null,
  "ratePickUp": null,
  "reallocationRequired": null,
  "reallocationMethod": null,
  "allowReverseSweep": null,
  "isNominatedAccount": "Y",
  "accountLevel": 1,
  "centralAccountNumber": null,
  "centralAccountBranch": null,
  "centralAccountCurrency": null,
  "percentageShare": 0,
  "percentageChildShare": null,
  "partialTransferAllowed": null,
  "holdStartDate": null,
  "holdEndDate": null,
  "isVirtual": "N",
  "oneWayAccountGroup": null,
  "twoWayAccountGroup": null,
  "isRegulatedDebits": "N",
  "entityID": "HEL_ENTITY",
  "entityName": "HEL_ENTITY_NAME",
  "iban": null,

```

```

        "customerName": "XXX XXXXXXX",
        "LmmTmStructureInstructionDTO": [],
        "LmmTmStructurePaymentDTO": [],
        "LmmTmStructureAccPriorityDTO": [],
        "LmmTmStrRevSweepDetailsDTO": [],
        "LmmTmStructureIclDTO": []
    }
],
"LmmTmStructureAccountsDTO": [
    {
        "id": "851563de-855a-412a-b8fe-0bac5b5df735",
        "structureMasterId": "f8996b15-ca0d-4933-977c-5a3d4d29cd3d",
        "accountNumber": "OBDX_SYSACC_7153",
        "accountDescription": "OBDX_SYSACC_7153 Notional Account",
        "accountBranch": "HEL",
        "accountCurrency": "GBP",
        "isExternal": "External",
        "isNotional": "Y",
        "accCategory": "Pool",
        "accountType": "Notional",
        "acyAvailableBal": null,
        "bankCode": "0020",
        "countryId": "AUS",
        "cityId": "Sydney",
        "region": "Australia/Adelaide",
        "isSelected": "Y",
        "isRegulatedDebits": "N",
        "entityID": "HEL_ENTITY",
        "entityName": "HEL_ENTITY_NAME",
        "iban": null,
        "customerName": "XXX XXXXXXX"
    },

```

```

    {
      "id": "52a00e2f-394c-4b70-8b27-29b39ed4a5fb",
      "structureMasterId": "f8996b15-ca0d-4933-977c-5a3d4d29cd3d",
      "accountNumber": "HEL0046400067",
      "accountDescription": "ALL SPORTS",
      "accountBranch": "HEL",
      "accountCurrency": "GBP",
      "isExternal": "Internal",
      "isNotional": "N",
      "accCategory": "Pool",
      "accountType": null,
      "acyAvailableBal": 2500,
      "bankCode": "0020",
      "countryId": "AUS",
      "cityId": "Sydney",
      "region": "America/Detroit",
      "isSelected": "Y",
      "isRegulatedDebits": "N",
      "entityID": "HEL_ENTITY",
      "entityName": "HEL_ENTITY_NAME",
      "iban": null,
      "customerName": "XXX XXXXXXX"
    }
  ]
}

```

Create Hybrid Structure

```

{
  "data": [
    {
      "headerAccountNumber": null,
      "endDate": "2022-07-01",
      "currencyRateType": "STANDARD",
      "backwardTreatment": "H",
      "balanceType": "V",
      "versionNo": 1,
      "centralAccountNumber": null,
      "allowSweepOnCurrencyHol": "Y",
      "holidayTreatment": "P",
      "structureStatus": "A",
      "struturePriority": 57,
      "fxRatePickup": "Offline",
      "headerCurrency": null,
      "reallocationMethod": "Absolute Pro-Rata Distribution",
      "maxBackwardDays": 2,
      "LmmTmStructureDetailsDTO": [

```

```

{
    "reverseSweepFrequency": null,
    "percentageShare": 0,
    "accountCurrency": "GBP",
    "bookingAccountCurrency": "GBP",
    "rateType": "STANDARD",
    "isTwoWay": "Y",
    "structureMasterId": "",
    "LmmTmStructureInstructionDTO": [],
    "isExternal": "Internal",
    "accountType": "Pool",
    "accountLevel": 1,
    "branchCode": "HEL",
    "isNotional": "N",
    "reallocationMethod": null,
    "bookingAccountNumber": "HEL0046400067",
    "sweepPriority": null,
    "bookingAccountBranch": "HEL",
    "parentAccountBranch": null,
    "isNominatedAccount": "Y",
    "accountNumber": "HEL0046400067",
    "parentAccountNumber": null,
    "accCategory": "Pool",
    "parentAccountCurrency": null
},
{
    "reverseSweepFrequency": "FM2341112",
    "percentageShare": 0,
    "accountCurrency": "GBP",
    "bookingAccountCurrency": "GBP",
    "rateType": "STANDARD",
    "isTwoWay": "Y",
    "structureMasterId": "",
    "LmmTmStructureInstructionDTO": [
        {
            "structureDetailsId": "",
            "LmmTmStructureInstructionDetDTO": [
                {
                    "structureInstructionId": "",
                    "paramName": "Maximum",
                    "paramValue": "4000"
                },
                {
                    "structureInstructionId": "",
                    "paramName": "MaximumDeficit",
                    "paramValue": "1000"
                }
            ],
            {
                "structureInstructionId": "",
                "paramName": "Minimum",
                "paramValue": "1"
            }
        ]
    ]
}

```

```

        {
            "structureInstructionId": "",
            "paramName": "MinimumDeficit",
            "paramValue": "100"
        },
        {
            "structureInstructionId": "",
            "paramName": "Multiple",
            "paramValue": "10"
        }
    ],
    "instrDesc": "Zero Balance Model",
    "instructionPriority": 1,
    "LmmTmStructureInstructionFrequencyDTO": [
        {
            "frequencyId": "FM2341112",
            "structureInstructionId": "",
            "freqDesc": null
        }
    ],
    "instructionId": "TEST22"
},
}
],
"isExternal": "Internal",
"accountType": "Sweep",
"accountLevel": 2,
"branchCode": "HEL",
"isNotional": "N",
"reallocationMethod": null,
"bookingAccountNumber": "HEL0046400178",
"sweepPriority": 1,
"bookingAccountBranch": "HEL",
"parentAccountBranch": "HEL",
"isNominatedAccount": "Y",
"accountNumber": "HEL0046400178",
"parentAccountNumber": "HEL0046400067",
"accCategory": "Sweep",
"parentAccountCurrency": "GBP"
}
],
"centralAccountCurrency": null,
"sourceSystem": "OBDX",
"structureDescription": "Hybrid 19721",
"systemAccountCurrency": "GBP",
"systemAccountBranch": "HEL",
"LmmTmStructureAccountsDTO": [

```

```

    {
      "isExternal": "Internal",
      "accountCurrency": "GBP",
      "accountNumber": "HEL0046400067",
      "isNotional": "N",
      "isSelected": "Y",
      "accCategory": "Pool",
      "accountBranch": "HEL"
    },
    {
      "isExternal": "Internal",
      "accountCurrency": "GBP",
      "accountNumber": "HEL0046400178",
      "isNotional": "N",
      "isSelected": "Y",
      "accCategory": "Sweep",
      "accountBranch": "HEL"
    }
  ],
  "customerId": "000464",
  "systemAccountNumber": null,
  "considerPostSweepBalance": "Y",
  "ratePickUp": "Past 5 day Average Rate",
  "structureId": "STUY82QJW4SH",
  "multiBankFlag": true,
  "centralAccountBranch": null,
  "structureType": "Hybrid",
  "headerBranchCode": null,
  "interestMethod": "I",
  "effectiveDate": "2018-07-19"
}
]
}

```

Modify Hybrid Structure

```

{
  "data": [
    {
      "headerAccountNumber": null,
      "endDate": "2022-07-01",
      "currencyRateType": "STANDARD",
      "backwardTreatment": "H",
      "balanceType": "V",
      "versionNo": 1,
      "centralAccountNumber": null,
      "allowSweepOnCurrencyHol": "Y",
      "holidayTreatment": "P",
      "structureStatus": "A",
      "struturePriority": 57,
      "fxRatePickup": "Offline",
      "headerCurrency": null,
      "reallocationMethod": "Absolute Pro-Rata Distribution",
      "maxBackwardDays": 2,
      "LmmTmStructureDetailsDTO": [
        {
          "reverseSweepFrequency": null,
          "percentageShare": 0,
          "accountCurrency": "GBP",
          "bookingAccountCurrency": "GBP",
          "rateType": "STANDARD",
          "isTwoWay": "Y",
          "structureMasterId": "",
          "LmmTmStructureInstructionDTO": [],
          "isExternal": "Internal",
          "accountType": "Pool",
          "accountLevel": 1,
          "branchCode": "HEL",
          "isNotional": "N",
          "reallocationMethod": null,
          "bookingAccountNumber": "HEL0046400067",
          "sweepPriority": null,
          "bookingAccountBranch": "HEL",
          "parentAccountBranch": null,
          "isNominatedAccount": "Y",
          "accountNumber": "HEL0046400067",
          "parentAccountNumber": null,
          "accCategory": "Pool",
          "parentAccountCurrency": null
        }
      ],
    }
  ],
}

```

```

{
  "reverseSweepFrequency": "FM2341112",
  "percentageShare": 0,
  "accountCurrency": "GBP",
  "bookingAccountCurrency": "GBP",
  "rateType": "STANDARD",
  "isTwoWay": "Y",
  "structureMasterId": "",
  "LmmTmStructureInstructionDTO": [
    {
      "structureDetailsId": "",
      "LmmTmStructureInstructionDetDTO": [
        {
          "structureInstructionId": "",
          "paramName": "Maximum",
          "paramValue": "4000"
        },
        {
          "structureInstructionId": "",
          "paramName": "MaximumDeficit",
          "paramValue": "1000"
        },
        {
          "structureInstructionId": "",
          "paramName": "Minimum",
          "paramValue": "1"
        },
        {
          "structureInstructionId": "",
          "paramName": "MinimumDeficit",
          "paramValue": "100"
        },
        {
          "structureInstructionId": "",
          "paramName": "Multiple",
          "paramValue": "10"
        }
      ],
      "instrDesc": "Zero Balance Model",
      "instructionPriority": 1,
      "LmmTmStructureInstructionFrequencyDTO": [
        {
          "frequencyId": "FM2341112",
          "structureInstructionId": "",
          "freqDesc": null
        }
      ],
      "instructionId": "TEST22"
    }
  ],
}

```

```

        "isExternal": "Internal",
        "accountType": "Sweep",
        "accountLevel": 2,
        "branchCode": "HEL",
        "isNotional": "N",
        "reallocationMethod": null,
        "bookingAccountNumber": "HEL0046400178",
        "sweepPriority": 1,
        "bookingAccountBranch": "HEL",
        "parentAccountBranch": "HEL",
        "isNominatedAccount": "Y",
        "accountNumber": "HEL0046400178",
        "parentAccountNumber": "HEL0046400067",
        "accCategory": "Sweep",
        "parentAccountCurrency": "GBP"
    }
],
"centralAccountCurrency": null,
"sourceSystem": "OBDX",
"structureDescription": "Hybrid 19721",
"systemAccountCurrency": "GBP",
"systemAccountBranch": "HEL",
"LmmTmStructureAccountsDTO": [
    {
        "isExternal": "Internal",
        "accountCurrency": "GBP",
        "accountNumber": "HEL0046400067",
        "isNotional": "N",
        "isSelected": "Y",
        "accCategory": "Pool",
        "accountBranch": "HEL"
    },
    {
        "isExternal": "Internal",
        "accountCurrency": "GBP",
        "accountNumber": "HEL0046400178",
        "isNotional": "N",
        "isSelected": "Y",
        "accCategory": "Sweep",
        "accountBranch": "HEL"
    }
],
"customerId": "000464",
"systemAccountNumber": null,
"considerPostSweepBalance": "Y",
"ratePickUp": "Past 5 day Average Rate",
"structureId": "STUY82QJW4SH",
"multiBankFlag": true,
"centralAccountBranch": null,
"structureType": "Hybrid",
"headerBranchCode": null,
"interestMethod": "I",
"effectiveDate": "2018-07-19"
}
]
}

```

4 Inbound API



Oracle Banking Liquidity Management Service APIs use HTTP verbs and a RESTful endpoint structure. Request and response payloads are formatted as JSON.



Refer to the **Application Program Interface Guide** for the detailed inbound APIs.

https://docs.oracle.com/cd/F57137_01/api.htm

5 Events

Oracle Banking Liquidity Management provides a facility for the below events.

S.No	Topic	Purpose	Avro Schema
1	sweep-success (S)	Event is generated when a sweep is successful	 LmxTbSweepEventLo gDTO.avsc
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	 LmmTmStructureEven tsDTO.avsc
6	structure-createdAndAuthorized	Event is generated when a structure is created and authorized	
7	structure-modified	Event is generated when a structure is modified	
8	structure-modifiedAndAuthorized	Event is generated when a structure is modified and authorized	
9	structure-closed	Event is generated when a structure is closed	
10	structure-closedAndAuthorized	Event is generated when a structure is closed and authorized	
11	structure-reopen	Event is generated when a structure is reopened	
12	structure-reopenAndAuthorized	Event is generated when a structure is reopened and authorized	
13	structure-expiry	Event is generated when a structure is expired	

S.No	Topic	Purpose	Avro Schema
14	vamlm.bankchargeeventrequest	Event is generated when Bank is authorized	 VamlmAccount.avsc
15	vamlm.branchchargeeventrequest	Event is generated when Branch is authorized	
16	vamlm.structurechargeeventnotification	Event is generated when Structure is authorized	
17	vamlm.pricingmapnotification	Event is generated when Customer is authorized	
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	 EventMessage.avsc

NOTE: Refer to PDF attachments for downloading the avro schema files.

6 File Upload

Oracle Banking Liquidity Management has the following File Upload 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

Refer to the **Oracle Banking Liquidity Management File Upload User Guide** for the more details.

https://docs.oracle.com/cd/F57137_01/index.htm

7 FOP for Advices

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

7.1 Pre-requisite

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

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
```

For more details on Oracle Banking Microservices Architecture for **Step 2** and **Step 3**, refer to **Oracle Banking Microservices Platform Foundation Installation Guide**.

https://docs.oracle.com/cd/F46760_01/install.htm

4. Create the folder structure mentioned in **Step 3**. Place the “fop.xconf”(Refer to PDF Attachment) file in the directory: /scratch/oblm/report-service



fop.xconf

NOTE: Refer to PDF attachments for downloading the configuration file.

5. Restart plato-config-service.

6. 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

7. Deploy oblm-report-services

8. Once the oblm-report-services is deployed, ensure the below table is added in LMR schema

- LMR_TB_ADVICE

7.2 Template Upload Process

For Template Upload process, refer to **Section 3: Report Template** in **Oracle Banking Microservices Platform Foundation User Guide**.

https://docs.oracle.com/cd/FXXXXX_01/index.htm

Naming convention of Report names for creating Report Linkage:

- OBLM-Interest-Paid-Advice
- OBLM-Interest-Reallocation-Advice
- OBLM-Simulation-Sweep-Advice
- OBLM-Simulation-Pool-Advice



InterestPaid.xml



InterestRellocation
Report.xml



SimulationReport.xml



SimulationPoolReport
t.xml

NOTE: Refer to PDF Attachment for downloading the templates.

7.3 Generate Advices

Interest Paid Advice and Interest Reallocation Advice is generated 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.