Oracle® Banking Virtual Account Management Cloud Service Oracle Banking Routing Hub Integration Guide





Oracle Banking Virtual Account Management Cloud Service Oracle Banking Routing Hub Integration Guide, Release 14.8.1.0.0

G45759-01

Copyright © 2023, 2025, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Preface

Purpose		
Audience		
Documentation A	Accessibility	
Diversity and Inc	clusion	
Related Resource	ces	i
Conventions		i
Screenshot Disc	claimer	i
Acronyms and A	Abbreviations	i
Integration (Guide	
1.1 Introduction		1
	gured using Oracle Banking Routing Hub	1
	A Implementation	2
1.2.1.1	Service Providers - DDA	2
1.2.1.2	Environment Variable Configuration	3
1.2.1.3	Consumer Services - DDA	4
1.2.2 EXT	ERNAL ACCOUNT Implementation	8
1.2.2.1	Service Providers - EXTERNAL ACCOUNT	10
1.2.2.2	Consumer Services - EXTERNAL ACCOUNT	10
1.2.3 Orac	cle Banking Payments Implementation	12
1.2.3.1	Service Providers - Oracle Banking Payments	13
1.2.3.2	Consumer Services - Oracle Banking Payments	13
1.2.4 Inter	rest and Charges Implementation	20
1.2.4.1	Service Providers - Interest and Charges	22
1.2.4.2	Consumer Services - Interest and Charges	22
1.2.5 Orac	cle Banking Liquidity Management Implementation	31
1.2.5.1	Service Providers - Oracle Banking Liquidity Management	32
1.2.5.2	Consumer Services - Oracle Banking Liquidity Management	33
1.2.6 Orac	cle Banking Host to Host Implementation	36
1.2.6.1	Service Providers - Oracle Banking Electronic Data Exchange	37
1.2.6.2	Consumer Services - Oracle Banking Electronic Data Exchange	37
1.2.7 EXT	ERNAL IDENTIFIER Implementation	45

1.2.7.1	Service Providers - EXTERNAL IDENTIFIER	46
1.2.7.2	Consumer Services - EXTERNAL IDENTIFIER	46
1.2.7.3	OBRH JSON	48

Index



Preface

- Purpose
- Audience
- Documentation Accessibility
- Diversity and Inclusion
- Related Resources
- Conventions
- Screenshot Disclaimer
- Acronyms and Abbreviations

Purpose

This guide provides information about the APIs configured in Oracle Banking Virtual Account Management through Oracle Banking Routing Hub. These APIs are configured to use the jars directly for the endpoint for different APIs like amount block, transaction journaling etc.

Audience

This guide is primarily intended for the following user/user roles:

Table 1 Audience

Role	Function	
Implementation and IT Staff	Implementation and maintenance of the software	

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners,



we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Resources

The related documents are as follows:

- Oracle Banking Common Core User Guide
- Oracle Banking Getting Started User Guide
- Routing Hub Configuration User Guide

Conventions

The following text conventions are used in this document:

Convention	Meaning	
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.	
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.	
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.	

Screenshot Disclaimer

Personal information used in the interface or documents are dummy and does not exist in the real world. It is only for reference purposes.

Acronyms and Abbreviations

The list of acronyms and abbreviations that are used in this guide are as follows:

Table 2 Acronyms and Abbreviations

Abbreviation	Description
API	Application Programming Interface
ECA	External Credit Approval
REST	Representational State Transfer
URL	Uniform Resource Locator

Integration Guide

This topic provides information about the APIs configured in Oracle® Banking Virtual Account Management Cloud Service through Oracle Banking Routing Hub.

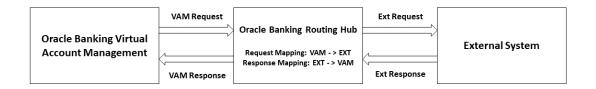
- Introduction
 - This topic provides the overview about Oracle Banking Routing Hub.
- APIs configured using Oracle Banking Routing Hub
 This topic describes about the various APIs configured using Oracle Banking Routing Hub.

1.1 Introduction

This topic provides the overview about Oracle Banking Routing Hub.

Oracle Banking Routing Hub enables seamless & standardised integrations between FSGBU Banking Products using configurations provided as part of the product Infrastructure.

Figure 1-1 Oracle Banking Routing Hub Integration



For more details on configuration, refer to Routing Hub Configuration User Guide.

1.2 APIs configured using Oracle Banking Routing Hub

This topic describes about the various APIs configured using Oracle Banking Routing Hub.

- DDA Implementation
 This topic provides the API information for DDA Implementation.
- EXTERNAL ACCOUNT Implementation
 This topic provides the API information for EXTERNAL ACCOUNT Implementation.
- Oracle Banking Payments Implementation
 This topic provides the API information for Oracle Banking Payments Implementation.
- Interest and Charges Implementation
 This topic provides the API information for Interest and Charges Implementation.



- Oracle Banking Liquidity Management Implementation
 - This topic provides the API information for Oracle Banking Liquidity Management Implementation.
- Oracle Banking Host to Host Implementation
 This topic provides the API information for Oracle Banking Host to Host Implementation.
- <u>EXTERNAL IDENTIFIER Implementation</u>
 This topic provides the API information for EXTERNAL IDENTIFIER Implementation.

1.2.1 DDA Implementation

This topic provides the API information for DDA Implementation.

The following APIs are configured using Oracle Banking Routing Hub.

Table 1-1 DDA Implementation - Parameters

API	Host	Version
closeECA	FCUBS OBA	14.1 / 14.4 14.7
EAC	FCUBS OBA	14.1 / 14.4 14.7
createECA	FCUBS OBA	14.1 / 14.4 14.7
handofftoDDA	FCUBS OBA	14.1 / 14.4 14.7

The following Service Providers and Consumer Services needs to be configured in Oracle Banking Routing Hub:

- Service Providers DDA
 - This topic describes about the service providers configuration for DDA systems.
- Environment Variable Configuration
 - This topic describes the systematic instruction to configure the environment variables for DDA systems.
- Consumer Services DDA
 This topic describes about the consumer services required for DDA Implementation.

1.2.1.1 Service Providers - DDA

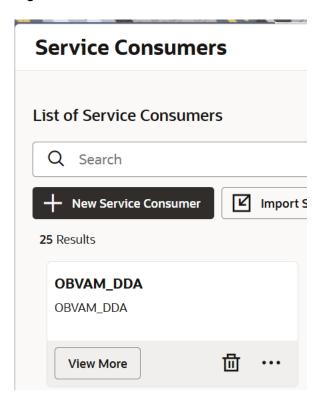
This topic describes about the service providers configuration for DDA systems.

Multiple DDA providers are added to configure FCUBS 14.1 and FCUBS 14.4. They use SOAP APIs for request/response. Oracle Banking Virtual Account Management also supports the integration to Oracle Banking Accounts 14.7. They use REST APIs for request/response.

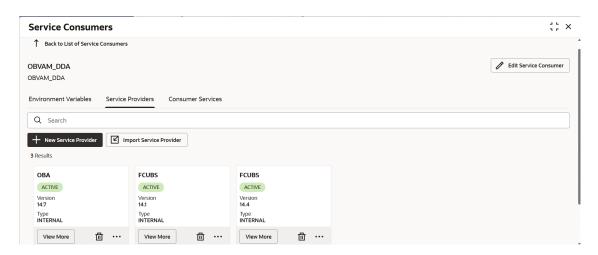
On Service Consumer screen, click on view more option for OBVAM_DDA tile.



Figure 1-2 Service Providers - DDA



On Service Consumer screen, click on view more option for OBVAM_DDA tile.



1.2.1.2 Environment Variable Configuration

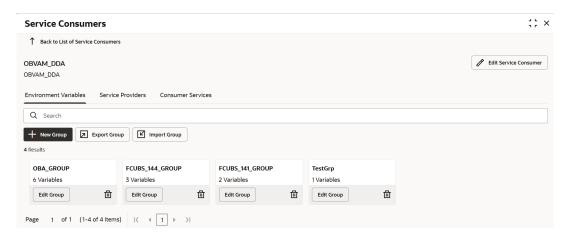
This topic describes the systematic instruction to configure the environment variables for DDA systems.

Environment variables are used to set values for the headers. Set environment specific values for variables like User ID, Branch code, Entity ID.

On Service ConsumersScreen, click view more option for OBVAM_DDA tile
 It launches the Environment variables tab and lists already available environment groups.

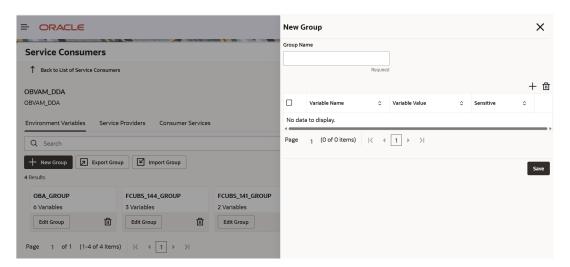


Figure 1-3 Environment variables



For new environment variable configuration, Under Environment Variables section, click on New Group

The New Group screen displays.



- 3. On the New Group screen, create the environment group. Give name to add the environment new group.
- To add the new environment variables, click+icon. And specify the environment variable and its value.
- Once all the required environment variables are configured, click Save button to save environment variable and its group.

1.2.1.3 Consumer Services - DDA

This topic describes about the consumer services required for DDA Implementation.

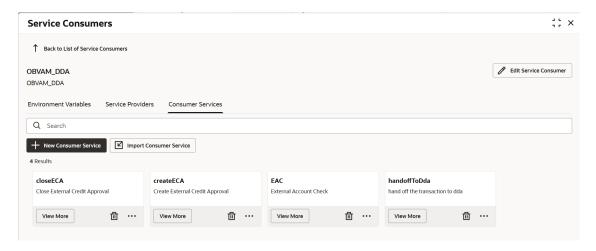
The below endpoints must be configured under Consumer Services in Oracle Banking Routing Hub:

- Create an amount block (createECA)
- Close/release amount block (closeECA)
- 3. External account check (EAC)



Create a transaction (handofftoDDA)

Figure 1-4 Consumer Services - DDA



createECA

This API enables the user to create an amount block.

SERVICE-CONSUMER = "OBVAM_DDA"

SERVICE-CONSUMER-SERVICE="createECA"

```
"currentUserID": "",
"currentBranchCode": "",
"ddaSystem": "",
"transactionrefNo": "",
"creatEextRefNo": "",
"ecaReferenceNo": "",
"source": "",
"effectiveDate": "",
"expiryDate":"","
"ecaBlockDetailsDTO":
    "accountNo": "",
    "accCurrency": "",
    "accountbranch": "",
    "blockStatus": "",
    "drCrIndicator": "",
    "sweepRequired": "",
    "partialBlkReqd": "",
    "remarks": "",
    "requestBlkAmount": "",
    "approvedBlkAmount": "",
    "outstandingBlkAmount": "",
    "partialReleaseAllowed": ""
```



```
]
```

```
{
  "MSGSTAT":"" (SUCCESS/FAILURE)
  "RABLOCKDETAILS":
  [
    {
      "RealAccountNumber":"{Real Account Number}",
      "BLOCKREFERENCENO":"{Block Reference Number}"
    }
  ]
  "DDAREFERENCENO": "{DDA reference number}"
  "{ERROR_CODE}":"{ERROR_DESC}"(if MSGSTAT = FAILURE)
}
```

closeECA

This API enables the user to close/release the amount block.

SERVICE-CONSUMER = "OBVAM_DDA"

SERVICE-CONSUMER-SERVICE = "closeECA"

Request:

```
{
    "MSGSTAT":""
}
```



EAC

This API enables the user to perform an external account check.

SERVICE-CONSUMER = "OBVAM_DDA"

SERVICE-CONSUMER-SERVICE = "ECA"

Request:

```
"currentUserID": "",
"currentBranchCode": "",
"ddaSystem": "",
"realAccountNo": "",
"transactionDate": "",
"drCrIndicator": "",
"externalRefNo": "",
"mcyFlag": "",
"customerBranchCode": "",
"ccy": "",
```

Response:

```
{
   "isValidAccount":""
}
```

handoffToDda

This API enables the user to create a transaction.

```
SERVICE-CONSUMER = "OBVAM_DDA"
```

SERVICE-CONSUMER-SERVICE = "handoffToDda"



```
"accountNumber": "",
      "accCCY": "",
      "drCrIndicator": "",
      "amttag": "",
      "lcyAmt": 0,
      "trnDate": "",
      "valueDate": "",
      "ecaRefernceNo": "",
      "blockReleaseStatus": "",
      "chequeMandatory": "",
      "availBalReqd": "",
      "intraDayRelease": "",
      "availInfo": "",
      "salaryCredit": ""
      "sweepRequried": "",
      "escrow": "",
      "AMLMontoring": "",
      "considerForAccActivity": "",
      "balUpdThruPC": "",
      "txnNarrative": "",
      "txnCode": "",
      "relatedCustomer": "",
      "fcyAmount": 0,
      "exchrate": 0,
      "accountEntryType": "",
      "forceDebit": "",
      "ecaBlockReferenceNumber" : "",
      "accountingRefNo" : ""
 ]
Response:
```

```
"MSGSTAT":"",
"ACCOUNTINGDETAILS":
  "AccountNumber": "",
  "accountingRefNo":"",
  "eventserialNo":""
1
```

1.2.2 EXTERNAL ACCOUNT Implementation

This topic provides the API information for EXTERNAL ACCOUNT Implementation.

This API is used when the account number needs to be generated externally. Oracle Banking Virtual Account Management's account number generation will be suppressed and externally generated account number will be assigned.

The following API is configured using Oracle Banking Routing Hub:



ext acc

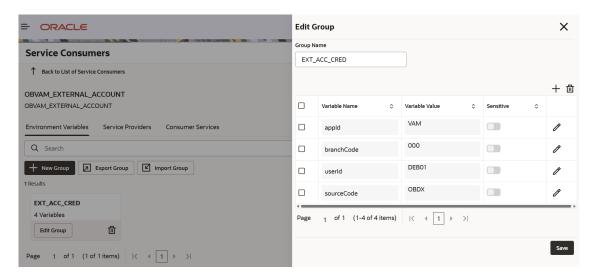
- Host Ext Acc Provider
- Version 14.4
- API /api-gateway/cmc-obrh-services/route/dispatch
- Headers
 - SERVICE-CONSUMER OBVAM EXTERNAL ACCOUNT
 - SERVICE-CONSUMER-SERVICE ext_acc
 - REQUIRED ACTION VA / IBAN / VA IBAN

(i) Note

VA / IBAN / VA_IBAN — Choose of the option based on Branch Parameter configuration.

Environment variables are used to set values for the headers. Set environment specific values for variables like User ID. Branch code.

Figure 1-5 Environmental Variable - EXTERNAL ACCOUNT



Refer the <u>Environment Variable Configuration</u> topic to set the values in **Edit Service** Consumer screen.

The following Service Providers and Consumer Services needs to be configured in Oracle Banking Routing Hub:

- <u>Service Providers EXTERNAL ACCOUNT</u>
 This topic describes about the service providers configuration for EXTERNAL ACCOUNT.
- Consumer Services EXTERNAL ACCOUNT
 This topic describes about the consumer services required for EXTERNAL ACCOUNT Implementation.

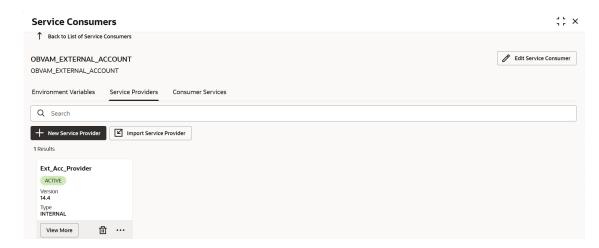


1.2.2.1 Service Providers - EXTERNAL ACCOUNT

This topic describes about the service providers configuration for EXTERNAL ACCOUNT.

To configure the external system in Oracle Banking Routing Hub, import WSDL / Swagger provided by the external system.

Figure 1-6 Service Providers - EXTERNAL ACCOUNT



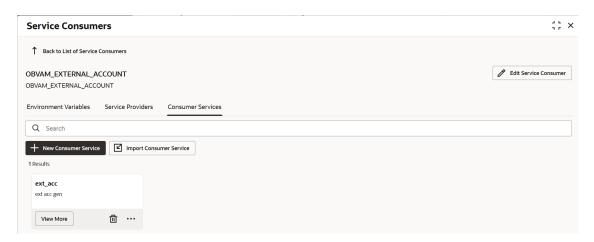
1.2.2.2 Consumer Services - EXTERNAL ACCOUNT

This topic describes about the consumer services required for EXTERNAL ACCOUNT Implementation.

The below endpoint must be configured under Consumer Services in Oracle Banking Routing Hub:

Generate the account number externally (ext acc)

Figure 1-7 Consumer Services - EXTERNAL ACCOUNT





ext acc

This API enables the user to generate the account number externally.

```
"branchCode": "",
  "virtualEntityId": "",
  "virtualEntityName": "",
  "realCustomerNo": "",
  "defaultAccCcy": "",
  "virtualAccProduct": "",
  "virtualAccountNo": "",
  "ibanRequired": "",
  "ibanAccNo": "",
  "realAccountNo": "",
  "virtualAccountName": "",
  "addressLine1": "",
  "addressLine2": "",
  "addressLine3": "",
  "addressLine4": "",
  "pincode": "",
  "countryCode": "",
  "accountPurpose": "",
  "interestCalcReq": "",
  "accountFrozen": "",
  "balChkForDebits": "",
  "balAvailabilityOptions": "",
  "fixedAmtFromPool": "",
  "overdraftAllowed": "",
  "fixedAmount": "",
  "creditTxnsAllowed": "",
  "debitTxnsAllowed": "",
  "status": "",
  "realAccLinkage": "",
  "realAccountCcy": "",
  "realAccountBrn": "",
  "accOpenDate": "",
  "accClosureDate": "",
  "lastActivityDate": "",
  "odStartDate": "",
  "odEndDate": "",
  "additionalFields": "",
  "StructuredAddressDTO": [],
  "sanctionChkStatus": ""
Response:
  "virtualAccountNo": "",
  "ibanAccNo": ""
```



1.2.3 Oracle Banking Payments Implementation

This topic provides the API information for Oracle Banking Payments Implementation.

The following APIs is configured for Oracle Banking Payments Implementation using Oracle Banking Routing Hub:

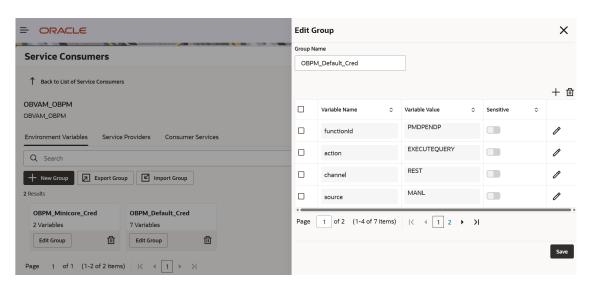
- 1. PendingPaymentQuery
- 2. StrcAddressServiceCreate
- 3. StrcAddressServiceModify
- 4. StrcAddressServiceClose
- 5. StrcAddressServiceReopen
- 6. CreateExtVirtualAcc
- 7. ModifyExtVirtualAcc
- 8. CloseExtVirtualAcc
- 9. ReopenExtVirtualAcc

SERVICE-CONSUMER - OBVAM_OBPM

- API /api-gateway/cmc-obrh-services/route/dispatch
- Host OBPM
- Version 14.4

Environment variables are used to set values for the headers. Set environment specific values for variables like User ID, Branch code.

Figure 1-8 Edit Service Consumer - Oracle Banking Payments



Refer the **Environment Variable Configuration** topic to set the values in **Edit Service Consumer** screen.

The following Service Providers and Consumer Services needs to be configured in Oracle Banking Routing Hub:



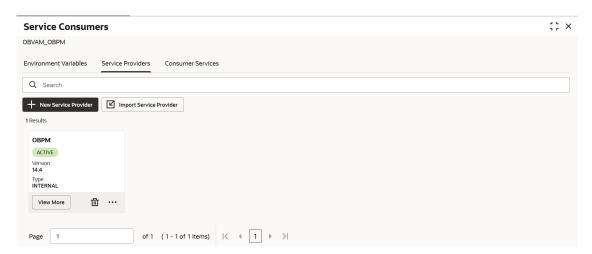
- <u>Service Providers Oracle Banking Payments</u>
 This topic describes about the service providers configuration for Oracle Banking Payments.
- Consumer Services Oracle Banking Payments
 This topic describes about the consumer services required for Oracle Banking Payments Implementation.

1.2.3.1 Service Providers - Oracle Banking Payments

This topic describes about the service providers configuration for Oracle Banking Payments.

To configure Oracle Banking Payments in Oracle Banking Routing Hub, import WSDL / Swagger provided by Oracle Banking Payments.

Figure 1-9 Service Providers - Oracle Banking Payments



1.2.3.2 Consumer Services - Oracle Banking Payments

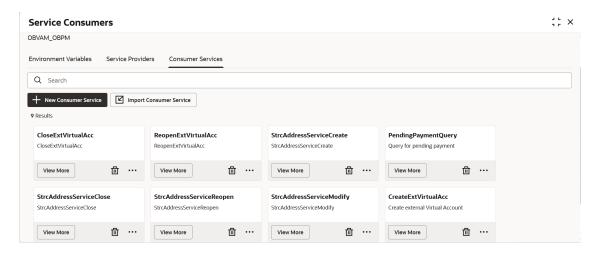
This topic describes about the consumer services required for Oracle Banking Payments Implementation.

The below endpoints must be configured under Consumer Services in Oracle Banking Routing Hub:

- Query for pending payment (PendingPaymentQuery)
- Structure Address Create (StrcAddressServiceCreate)
- 3. Structure Address Modify (StrcAddressServiceModify)
- Structure Address Close (StrcAddressServiceClose)
- Structure Address Reopen (StrcAddressServiceReopen)
- Create External VA (CreateExtVirtualAcc)
- Modify External VA (ModifyExtVirtualAcc)
- 8. Close External VA (CloseExtVirtualAcc)
- Reopen External VA (ReopenExtVirtualAcc)



Figure 1-10 Consumer Services - Oracle Banking Payments



PendingPaymentQuery

This API enables the user to query Oracle Banking Payments system for pending payments during account closure.

SERVICE-CONSUMER = "OBVAM_OBPM"

SERVICE-CONSUMER-SERVICE= "PendingPaymentQuery"

Request:

```
{
  "txnDet":
  {
    "customerAccount": ""
  },
    "header":
  {
    "functionId": "PMDPENDP",
    "action": "EXECUTEQUERY",
    "channel": "REST",
    "source": "MANL",
    "moduleId": "PM",
    "userId": "USER02", ** this user needs to be update as per OBPM user
    "userBranch": "HEL", ** this branch needs to be updated as per OBPM
user's branch
    "transactionId": ""
  }
}

Response:
```

"status": "",
"errorDTOList":

"errorCode": "",



StrcAddressServiceCreate

This API enables the user to create structure address.

Request / Response for OBPM Version 14.4

SERVICE-CONSUMER = "OBVAM_OBPM"

SERVICE-CONSUMER-SERVICE= "StrcAddressServiceCreate"

Request

```
{
  "department": "",
  "subDepartment": "",
  "streetName": "",
  "buildingNumber": "",
  "buildingName": "",
  "floor": "",
  "postbox": "",
  "room": "",
  "postcode": "",
  "townName": "",
  "townLocationName": "",
  "districtName": "",
  "countrySubDivision": "",
  "strrCountry": "",
  "virtualAccountNo": "",
  "branchId": ""
```

Response:

```
{
    "MSGSTAT":""
}
```

StrcAddressServiceModify

This API enables the user to modify structure address.

Request / Response for OBPM Version 14.4

```
SERVICE-CONSUMER = "OBVAM_OBPM"
```

SERVICE-CONSUMER-SERVICE= "StrcAddressServiceModify"



```
"subDepartment": "",
    "streetName": "",
    "buildingNumber": "",
    "buildingName": "",
    "floor": "",
    "postbox": "",
    "room": "",
    "postcode": "",
    "townName": "",
    "townLocationName": "",
    "districtName": "",
    "countrySubDivision": "",
    "strrCountry": "",
    "virtualAccountNo": "",
    "branchId": ""
}
```

```
{
    "MSGSTAT":""
}
```

StrcAddressServiceClose

This API enables the user to close structure address.

Request / Response for OBPM Version 14.4

SERVICE-CONSUMER = "OBVAM_OBPM"

SERVICE-CONSUMER-SERVICE= "StrcAddressServiceClose"

```
"department": "",
"subDepartment": "",
"streetName": "",
"buildingNumber": "",
"buildingName": "",
"floor": "",
"postbox": "",
"room": "",
"postcode": "",
"townName": "",
"townLocationName": "",
"districtName": "",
"countrySubDivision": "",
"strrCountry": "",
"virtualAccountNo": "",
"branchId": ""
```



```
"MSGSTAT":""
```

StrcAddressServiceReopen

This API enables the user to reopen structure address.

Request / Response for OBPM Version 14.4

```
SERVICE-CONSUMER = "OBVAM_OBPM"
```

SERVICE-CONSUMER-SERVICE= "StrcAddressServiceReopen"

Request:

```
"department": "",
    "subDepartment": "",
    "streetName": "",
    "buildingNumber": "",
    "buildingName": "",
    "floor": "",
    "postbox": "",
    "room": "",
    "postcode": "",
    "townName": "",
    "townLocationName": "",
    "districtName": "",
    "countrySubDivision": "",
    "strrCountry": "",
    "virtualAccountNo": "",
    "branchId": ""
}
```

Response:

```
{
    "MSGSTAT":""
}
```

CreateExtVirtualAcc

This API enables the user to create external virtual account.

Request / Response for OBPM Version 14.4

```
SERVICE-CONSUMER = "OBVAM_OBPM"
```

SERVICE-CONSUMER-SERVICE= "CreateExtVirtualAcc"

```
{
"countryCode": "",
```



```
"address4": " ",
    "address3": "",
    "address2": "",
    "address1": "",
    "ecaCheckReq": "",
    "accountClass": "",
    "acStatDormant": "",
    "acStatFrozen": "",
    "glStatBlocked": "",
    "acStatNoDr": "",
    "acStatNoCr": "",
    "acOpenDate": "",
    "custAcName": "",
    "custAcCcy": "",
    "customerNo": "",
    "sourceSystemAccBrn": "",
    "sourceSystemAccNo": "",
    "sourceSystem": "",
    "custAcIban": "",
    "hostCode": "",
    "custAccountNo": "",
    "branchId": ""
}
```

```
{
    "MSGSTAT":""
}
```

ModifyExtVirtualAcc

This API enables the user to modify external virtual account.

Request / Response for OBPM Version 14.4

SERVICE-CONSUMER = "OBVAM_OBPM"

SERVICE-CONSUMER-SERVICE= "ModifyExtVirtualAcc"

```
{
    "countryCode": "",
    "address4": " ",
    "address3": "",
    "address1": "",
    "acaCheckReq": "",
    "accountClass": "",
    "acStatDormant": "",
    "acStatFrozen": "",
    "glStatBlocked": "",
    "acStatNoDr": "",
    "acStatNoCr": "",
    "acOpenDate": "",
```



```
"custAcName": "",
    "custAcCcy": "",
    "customerNo": "",
    "sourceSystemAccBrn": "",
    "sourceSystemAccNo": "",
    "sourceSystem": "",
    "custAcIban": "",
    "hostCode": "",
    "custAccountNo": "",
    "branchId": ""
}
Response:
```

CloseExtVirtualAcc

This API enables the user to close external virtual account.

Request / Response for OBPM Version 14.4

SERVICE-CONSUMER = "OBVAM_OBPM"

SERVICE-CONSUMER-SERVICE= "CloseExtVirtualAcc"

```
"countryCode": "",
    "address4": " ",
    "address3": "",
    "address2": "",
    "address1": "",
    "ecaCheckReq": "",
    "accountClass": "",
    "acStatDormant": "",
    "acStatFrozen": "",
    "glStatBlocked": "",
    "acStatNoDr": "",
    "acStatNoCr": "",
    "acOpenDate": "",
    "custAcName": "",
    "custAcCcy": "",
    "customerNo": "",
    "sourceSystemAccBrn": "",
    "sourceSystemAccNo": "",
    "sourceSystem": "",
    "custAcIban": "",
    "hostCode": "",
    "custAccountNo": "",
    "branchId": ""
}
```



```
{
    "MSGSTAT":""
}
```

ReopenExtVirtualAcc

This API enables the user to reopen external virtual account.

Request / Response for OBPM Version 14.4

```
SERVICE-CONSUMER = "OBVAM_OBPM"
```

SERVICE-CONSUMER-SERVICE= "ReopenExtVirtualAcc"

Request:

```
"countryCode": "",
    "address4": " ",
    "address3": "",
    "address2": "",
    "address1": "",
    "ecaCheckReq": "",
    "accountClass": "",
    "acStatDormant": "",
    "acStatFrozen": "",
    "glStatBlocked": "",
    "acStatNoDr": "",
    "acStatNoCr": "",
    "acOpenDate": "",
    "custAcName": "",
    "custAcCcy": "",
    "customerNo": "",
    "sourceSystemAccBrn": "",
    "sourceSystemAccNo": "",
    "sourceSystem": "",
    "custAcIban": "",
    "hostCode": "",
    "custAccountNo": "",
    "branchId": ""
}
```

Response:

```
{
    "MSGSTAT":""
}
```

1.2.4 Interest and Charges Implementation

This topic provides the API information for Interest and Charges Implementation.

The following APIs are configured for DDA Implementation using Oracle Banking Routing Hub:



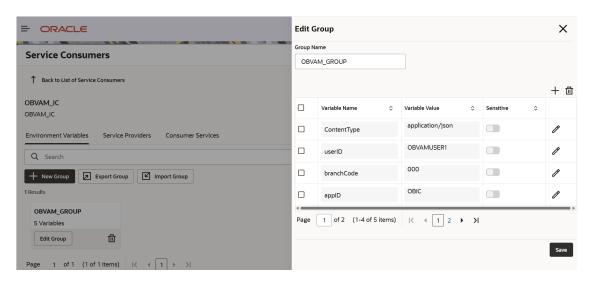
- 1. fetchgcSclcRate
- 2. closelEAccount
- 3. CREATE_EXT_IC_GRP_PRD
- 4. fetchAccuredInt
- 5. CREATE EXT IC GRP
- 6. liquidateInterest
- 7. fetchExtICGrps
- 8. fetchPrdMapForGrp
- 9. CREATE_IC_ACCOUNT
- 10. vdbalMaster

SERVICE-CONSUMER - OBVAM_IC

- Host OBVAM
- Version 14.4

Environment variables are used to set values for the headers. Set environment specific values for variables like User ID, Branch code.

Figure 1-11 Environmental variable - Interest and Charges



Refer the <u>Environment Variable Configuration</u> topic to set the values in **Edit Service Consumer** screen.

The following Service Providers and Consumer Services needs to be configured in Oracle Banking Routing Hub:

- <u>Service Providers Interest and Charges</u>
 This topic describes about the service providers configuration for Interest and Charges.
- Consumer Services Interest and Charges
 This topic describes about the consumer services required for Interest and Charges Implementation.

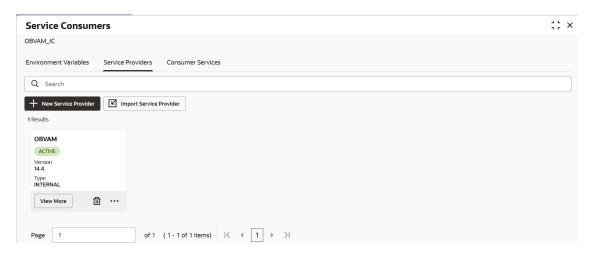


1.2.4.1 Service Providers - Interest and Charges

This topic describes about the service providers configuration for Interest and Charges.

To configure the Interest and Charges services in Oracle Banking Routing Hub, import WSDL / Swagger provided by Interest and charges services.

Figure 1-12 Service Providers - Interest and Charges



1.2.4.2 Consumer Services - Interest and Charges

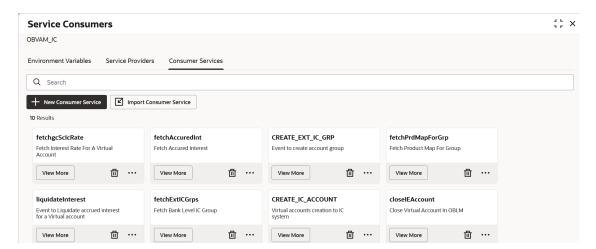
This topic describes about the consumer services required for Interest and Charges Implementation.

The below endpoints must be configured under Consumer Services in Oracle Banking Routing Hub:

- Fetch Interest Rate for A Virtual Account (fetchgcScIcRate)
- Close Virtual Account (closeIEAccount)
- Event for account group product mapping (CREATE EXT IC GRP PRD)
- Fetch Accrued Interest (fetchAccuredInt)
- Event to create account group (CREATE_EXT_IC_GRP)
- 6. Event to Liquidate accrued interest for a Virtual account (liquidateInterest)
- Fetch Bank Level IC Group (fetchExtICGrps)
- 8. Fetch Product Map For Group (fetchPrdMapForGrp)
- Virtual accounts creation to IC system (CREATE_IC_ACCOUNT)
- 10. Event to trigger Value dated balance fetch (vdbalMaster)



Figure 1-13 Consumer Services - Interest and Charges



fetchgcSclcRate

This API enables the user to fetch the interest rates for a Virtual Account.

Request / Response

SERVICE-CONSUMER = "OBVAM_IC"

SERVICE-CONSUMER-SERVICE = "fetchgcSclcRate"

Request:

```
"branch": "string",

"account": "string",

"extAccGrp": "string",

"accGrp": "string",

"dateFrom": "string",

"dateTo": "string",

"ccy": "string",

"dateType": "string",
```



```
"udeId": "string",
        "udeDesc": "string",
        "udeType": "string",
        "udeValue": 0,
        "rateCode": "string",
        "tdRateCode": "string"
    ]
  }
],
"warnings":
    "warningCode": "string",
    "warningDesc": "string"
],
"errors":
[
    "errorCode": "string",
    "errorDesc": "string"
]
```

closelEAccount

This API enables the user to close a Virtual Account.

Request / Response

SERVICE-CONSUMER = "OBVAM_IC"

SERVICE-CONSUMER-SERVICE = "closelEAccount"

Request:

```
{
    "source": "string",
    "branch": "string",
    "acc": "string",
    "currency": "string"
}
```

```
"warnings":
[
    {
        "warningCode": "string",
        "warningDesc": "string"
    }
],
"errors":
[
```



```
{
    "errorCode": "string",
    "errorDesc": "string"
}
]
```

CREATE_EXT_IC_GRP_PRD

This API enables the user to generate an event for account group product mapping.

Request / Response

```
SERVICE-CONSUMER = "OBVAM IC"
```

SERVICE-CONSUMER-SERVICE = "CREATE_EXT_IC_GRP_PRD"

Request:

Response:

fetchAccuredInt

This API enables the user to fetch the accrued Interest.

Request / Response



SERVICE-CONSUMER = "OBVAM IC"

SERVICE-CONSUMER-SERVICE = "fetchAccuredInt"

Request:

```
{
  "brn": string,
  "acc": string,
  "source": string
}
```

Response:

```
"data":
  "brn": "string",
  "acc": "string",
  "source": "string",
  "totalAccrDr": 0,
  "totalAccrCr": 0,
  "accruedAmtList":
  [
      "acc": "string",
      "brn": "string",
      "prod": "string",
      "frmNo": 0,
      "accruedAmt": 0,
      "drcr": "string"
  ]
},
"warnings":
[
    "warningCode": "string",
    "warningDesc": "string"
],
"errors":
[
    "errorCode": "string",
    "errorDesc": "string"
]
```

CREATE_EXT_IC_GRP

This API enables the user to generate an event to create an account group.

Request / Response

SERVICE-CONSUMER = "OBVAM IC"



SERVICE-CONSUMER-SERVICE = "CREATE_EXT_IC_GRP"

Request:

```
{
  "accGrp": "string"
  "accGrpDesc": "string"
  "extAccGrp": "string"
  "extAccGrpDesc": "string"
  "extAccGrpType": "string"
}
```

Response:

liquidateInterest

This API enables the user to generate an event to liquidate accrued interest for a Virtual account.

Request / Response

SERVICE-CONSUMER = "OBVAM_IC"

SERVICE-CONSUMER-SERVICE = "liquidateInterest"

```
{
    "onliq":
    [
        {
            "branchCode": "string",
            "accountNumber": "string",
            "productCode": "string",
            "liquidationDate": "string"
        }
    ]
}
```



fetchExtlCGrps

This API enables the user to fetch a Bank-Level IC Group.

Request / Response

```
SERVICE-CONSUMER = "OBVAM_IC"
```

SERVICE-CONSUMER-SERVICE = "fetchExtICGrps"

Request:

```
{
   "accGrp": "string",
   "extAccGrpType": "string"
}
```



```
},
  "errors":
[
    {
        "errorCode": "string",
        "errorDesc": "string"
    }
]
```

fetchPrdMapForGrp

This API enables the user to fetch a Product Map for Group.

Request / Response

SERVICE-CONSUMER = "OBVAM_IC"

SERVICE-CONSUMER-SERVICE = "fetchPrdMapForGrp"

Request:

```
{
  "accGrp": "string",
  "productCode": "string",
  "ccy": "string"
}
```

```
"data":
  "IcGrpPrdList":
      "accGrp": "string",
      "accGrpDesc": "string",
      "accProdList":
          "productCode": "string",
          "productDescription": "string",
          "ccy": "string",
          "open": "string"
      ]
    }
 ]
"errors":
[
    "errorCode": "string",
    "errorDesc": "string"
```



```
}
```

CREATE_IC_ACCOUNT

This API enables the user to create a Virtual account for the IC system.

Request / Response

SERVICE-CONSUMER = "OBVAM_IC"

SERVICE-CONSUMER-SERVICE = "CREATE_IC_ACCOUNT"

Request:

```
"accMasterList":
    "acc": "string",
    "childAcc": "string",
    "accountClass": "string",
    "accType": "string",
    "acOpenDate": "string",
    "bookAcc": "string",
    "bookBrn": "string",
    "bookCcy": "string",
    "brn": "string",
    "calcAcc": "string",
    "ccy": "string",
    "custNo": "string",
    "consolChgAcc": "string",
    "intStartDate": "string",
    "sourceSystem": "string",
    "sourceSystemBrn": "string",
    "sourceSystemAcc": "string",
    "chargeBookAcc": "string",
    "chargeBookBrn": "string",
    "chargeBookCcy": "string",
    "chgStartDate": "string"
]
```



```
"errorCode": "string",
    "errorDesc": "string"
}
]
```

vdbalMaster

This API enables the user to fetch a Virtual account balance.

Request / Response

```
SERVICE-CONSUMER = "OBVAM_IC"
```

SERVICE-CONSUMER-SERVICE = "vdbalMaster"

Request:

```
{
  "type" : "string",
  "extRefNo" : "string",
  "sourceCode" : "string",
  "vdBalList":[
    {
      "acc" : "string",
      "brn": "string",
      "ccy": "string",
      "valDt": "string"
    }
]
```

Response:

1.2.5 Oracle Banking Liquidity Management Implementation

This topic provides the API information for Oracle Banking Liquidity Management Implementation.

The following API is configured for Oracle Banking Liquidity Management Implementation using Oracle Banking Routing Hub:

1. getLMAccount

SERVICE-CONSUMER - OBVAM_OBLM

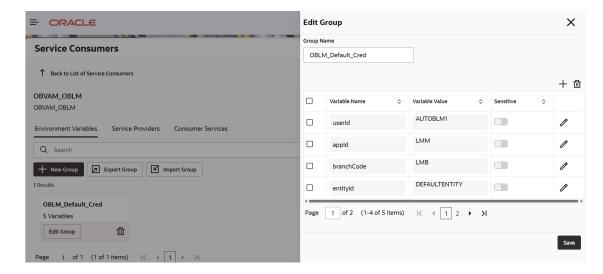
Host - OBVAM



Version - 14.4

Environment variables are used to set values for the headers. Set environment specific values for variables like User ID, Branch code.

Figure 1-14 Environment Variable- Oracle Banking Liquidity Management



Refer the <u>Environment Variable Configuration</u> topic to set the values in **Edit Service Consumer** screen.

The following Service Providers and Consumer Services needs to be configured in Oracle Banking Routing Hub:

- <u>Service Providers Oracle Banking Liquidity Management</u>
 This topic describes about the service providers configuration for Oracle Banking Liquidity Management.
- Consumer Services Oracle Banking Liquidity Management
 This topic describes about the consumer services required for Oracle Banking Liquidity Management Implementation.

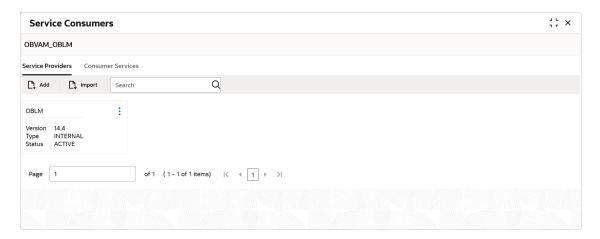
1.2.5.1 Service Providers - Oracle Banking Liquidity Management

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

To configure the Oracle Banking Liquidity Management in Oracle Banking Routing Hub, import WSDL / Swagger provided by Oracle Banking Liquidity Management.



Figure 1-15 Service Providers - Oracle Banking Liquidity Management



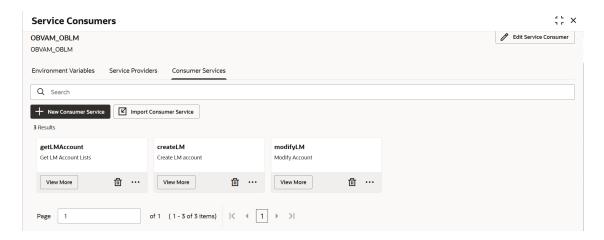
1.2.5.2 Consumer Services - Oracle Banking Liquidity Management

This topic describes about the consumer services required for Oracle Banking Liquidity Management Implementation.

The below endpoint must be configured under Consumer Services in Oracle Banking Routing Hub:

Get the Liquidity Management account lists (getLMAccount)

Figure 1-16 Consumer Services - Oracle Banking Liquidity Management



getLMAccount

This API enables the user to get the Liquidity Management account lists.

```
{
    "includeAllAccount": "",
    "authStat": "",
    "multiCcyAccountNumber": "",
    "isProspect": "",
```



```
"acyAvailableBal": "",
       "offset": "",
       "isExternal": "",
       "includecloseandunauth": "",
       "recordStat": "0",
       "accountNumber": "1000242",
       "isActive": "",
       "sourceSystemAccNo": "",
       "branchCode": "",
       "isNotional": "",
       "limit": "",
       "customerId": "",
       "currency": "",
       "isResident": ""
Response:
 {
           "body": {
            "data": {
              "data": [
                 {
                     "keyId": "1a939627-4629-4b30-bd10-ebdc01d7ba27",
                    "makerId": "OBDX02",
                    "makerDateStamp": "2018-11-30T13:05:31.000+00:00",
                    "checkerId": "OBDX02",
                    "checkerDateStamp": "2018-11-30T13:05:31.000+00:00",
                     "modNo": 1,
                    "recordStatus": "0",
                    "authStatus": "A",
                    "onceAuth": "Y",
                    "doerRemarks": null,
                    "approverRemarks": null,
                    "sourceSystem": "OBDX",
                     "sourceSystemAccNo": null,
                    "iban": null,
                    "updatedIban": null,
                     "logCode": "fb79f58f-8206-465d-9bdd-72fb8cccd31b",
                     "accountNumber": "OBDX_SYSACC_8665",
                    "accountDescription": "OBDX_SYSACC_8665 Notional Account",
                    "branchCode": "HEL",
                     "bankCode": "0020",
                    "cityId": "Sydney",
                    "countryId": "AUS",
                    "currency": "GBP",
                     "customerId": "000464",
                    "customerName": "XXX XXXXXX",
                    "accCreatedDate": null,
                    "accOpenDate": "2020-03-26",
                     "accClosedDate": null,
                    "acyAvailableBal": null,
                    "acyCurrentBal": null,
                     "lastBalUpdateTime": null,
                    "isActive": "A",
```



```
"isExternal": "External",
            "isResident": "R",
            "isNotional": "Y",
            "acyCasaBlockedAmt": null,
            "accCategory": "S",
            "drLimit": null,
            "crLimit": null,
            "ilRouteCode": null,
            "lineId": null,
            "limitCcy": null,
            "region": "Asia/Kolkata",
            "uncollFundsLimit": null,
            "uncollAvailable": null,
            "balCompParticipation": null,
            "odLimit": null,
            "isDebitUnlimited": "N",
            "groupCode": null,
            "groupDescription": null,
            "isNoCredit": null,
            "isNoDebit": null,
            "isFrozen": null,
            "isBlocked": null,
            "countryCode": null,
            "address4": null,
            "address3": null,
            "address2": null,
            "address1": null,
            "isDormant": null,
            "isProspect": "N",
            "isVirtual": null,
            "isICRequired": null,
            "isMultiCurrencyAccount": null,
            "multiCcyAccountNumber": null,
            "noBalanceHandling": "Last Balance",
            "isBalanceOnline": "Y",
            "branchDate": "2020-03-30",
            "isRegulatedDebits": "N",
            "entityID": "HEL_ENTITY",
            "entityName": "HEL_ENTITY_NAME",
            "bankName": "Futura Bank",
            "branchName": "HEL FC UNIVERSAL BANK",
            "countryName": "Australia",
            "simAccount": null,
            "LmmTmMultiCcyAccountDTO": null
    ],
    "paging": {
        "totalResults": 1,
        "links": {
            "next": null,
            "prev": null
    }
"messages": {
    "keyId": null,
```

},



1.2.6 Oracle Banking Host to Host Implementation

This topic provides the API information for Oracle Banking Host to Host Implementation.

The following callback API is configured for Oracle Banking Electronic Data Exchange Implementation using Oracle Banking Routing Hub.

- parseResponse
- 2. handoffResponse
- 3. outgoingFileCallBackResponse

SERVICE-CONSUMER - OBVAM_OBEDX

- Host OBVAM
- Version 14.6

Environment variables are used to set values for the headers. Set environment specific values for variables like User ID, Branch code.

ORACLE **Edit Group** X **Service Consumers** OBEDX_144_GROUP ↑ Back to List of Service Consumers 十 🗇 OBVAM OBEDX EDXWORKFLOW userID OBEDX П applD П branchCode DEFAULTENTITY OBEDX 144 GROUP 1 of 2 (1-4 of 7 items) Edit Group Save 1 of 1 (1 of 1 items) |< ∢ 1 → >|

Figure 1-17 Environment variables - Oracle Banking Electronic Data Exchange

Refer the **Environment Variable Configuration** topic to set the values in **Edit Service Consumer** screen.

The following Service Providers and Consumer Services needs to be configured in Oracle Banking Routing Hub:



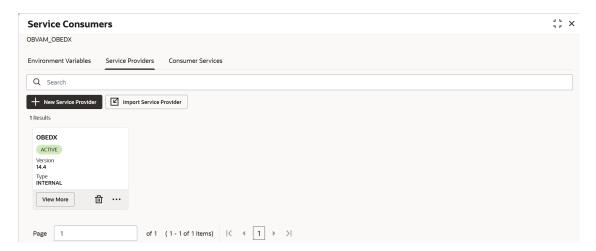
- Service Providers Oracle Banking Electronic Data Exchange
 This topic describes about the service providers configuration for Oracle Banking Electronic Data Exchange Implementation.
- Consumer Services Oracle Banking Electronic Data Exchange
 This topic describes about the consumer services required for Oracle Banking Electronic Data Exchange Implementation.

1.2.6.1 Service Providers - Oracle Banking Electronic Data Exchange

This topic describes about the service providers configuration for Oracle Banking Electronic Data Exchange Implementation.

To configure the Oracle Banking Electronic Data Exchange in Oracle Banking Routing Hub, import WSDL / Swagger provided by Oracle Banking Electronic Data Exchange.

Figure 1-18 Service Providers - Oracle Banking Electronic Data Exchange



In Request Transformation, template needs to be added for ParseResponse consumer service.

```
{
    "external-parser-output":
    {
        "output-file":$custom.toJson($body)
    }
}
```

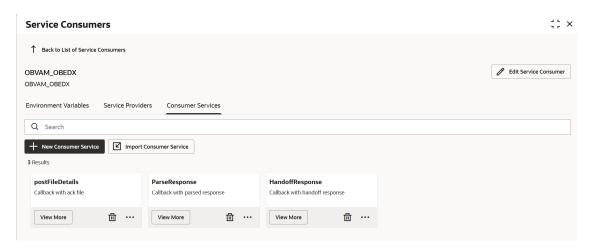
1.2.6.2 Consumer Services - Oracle Banking Electronic Data Exchange

This topic describes about the consumer services required for Oracle Banking Electronic Data Exchange Implementation.

The following callback API is configured for Oracle Banking Electronic Data Exchange Implementation using Oracle Banking Routing Hub



Figure 1-19 Consumer Services - OBVAM_OBEDX



HandoffResponse

```
{
    "fileRefId": 110634,
    "internalRefId": null,
    "workflowInstanceId": "",
    "fileStatus": "",
    "cacheVersion": 0,
    "fileOriginalName": "",
    "fileModifiedName": "",
    "fileSize": 692,
    "formatName": null,
    "createdBy": null,
    "createdDate": 1651721400000,
    "modifiedBy": null,
    "modifiedDate": 1651721405000,
    "transactionId": "",
    "transactionName": null,
    "transactionModNo": 1,
    "formatId": "",
    "formatModNo": 1,
    "channelId": "",
    "channelModNo": 1,
    "corporateId": "",
    "corporateModNo": 1,
    "corporateRef": null,
    "totalRecords": 2,
    "successRecords": 0,
    "failedRecords": 0,
    "totalAmount": null,
    "totalAmountCurrency": null,
    "messageId": null,
    "initiatingPartyName": null,
    "initiatingPartyId": "",
    "initiatingPartyCD": null,
    "initiatingPartyAddress": {},
```



```
"groupStatus": null,
"groupStatusReasonCode": null,
"noOfHandoff": null,
"handoffId": null,
"corelationLevel": null,
"recordPersist": false,
"chunkSize": 2,
"chunkIndex": 1,
"totalChunks": 1,
"retryCount": 0,
"retryForChunk": [],
"fieldData": {
    "handoffId": null,
    "initiatingPartyName": null
},
"recordList": [{
    "recordId": 971614727779409900,
    "fileRefId": 110634,
    "modifiedBy": "",
    "modifiedDate": 1523052010000,
    "txnStatus": "",
    "statusCodes": "",
    "transactionId": ""
    "transactionModNo": 1,
    "createdDate": null,
    "createdBy": null,
    "fxRate": null,
    "convertedCurrency": null,
    "convertedAmount": null,
    "fieldData": {
        "odStartDate": "",
        "virtualAccountName": "",
        "debitTxnsAllowed": "",
        "fixedAmtFromPool": null,
        "odEndDate": "",
        "transferInVirAccNo": null,
        "accountPurpose": "",
        "action": "new",
        "addressLine1": ""
        "buildingNumber": "",
        "addressLine2": "",
        "addressLine3": "",
        "addressLine4": "",
        "pincode": "",
        "townName": "",
        "overdraftSanctionAmount": null,
        "defaultAccCcy": "",
        "postBox": "",
        "virtualParentAcc": null,
        "realCustomerNo": "",
        "branchCode": "",
        "virtualEntityId": "",
        "transferOutVirAccNo": null,
        "buildingName": "",
        "structureCode": null,
        "postCode": "",
```



```
"virtualAccountNo": null,
            "interestCalcReq": "N",
            "realAccountBrn": null,
            "ibanAccNo": null,
            "countrySubDivision": "",
            "realAccountCcy": null,
            "accountFrozen": "N",
            "subDepartment": "",
            "realAccountNo": null,
            "streetName": "",
            "ibanRequired": "",
            "countryCode": "",
            "balChkForDebits": "",
            "department": "",
            "floor": "",
            "virtualAccProduct": "",
            "townLocationName": "",
            "districtName": "",
            "overdraftAllowed": "",
            "creditTxnsAllowed": "",
            "strrCountry": "",
            "room": "",
            "realAccLinkage": "",
            "remarks": "",
            "balAvailabilityOptions": ""
        },
        "exceptionList": [{
            "exceptionCode": "",
            "exceptionArgs": "",
            "lineNo": 1,
            "CreatedDate": null
        }]
    }],
    "exceptionList": []
Response:
{
    "body": {
        "messages": {
            "status": "SUCCESS",
            "codes": [{
                "information": true,
                "override": false,
                "error": false,
                "overrideAuthLevelsReqd": 0,
                "desc": "Record Created successfully",
                "code": "EDX-HCB-000",
                "language": "ENG",
                "type": "I"
            }],
            "httpStatusCode": "OK"
        "data": {
```



```
"links": []
}
}
```

ParseResponse

```
"fileRefId": 110635,
"internalRefId": null,
"workflowInstanceId": "",
"fileStatus": "",
"cacheVersion": 0,
"fileOriginalName": "",
"fileModifiedName": "",
"fileSize": 692,
"formatName": "CSV",
"createdBy": null,
"createdDate": 1651721490130,
"modifiedBy": null,
"modifiedDate": null,
"transactionId": "",
"transactionName": "Open Virtual Account",
"transactionModNo": 1,
"formatId": "",
"formatModNo": 1,
"channelId": "",
"channelModNo": 1,
"corporateId": "",
"corporateModNo": 1,
"corporateRef": null,
"totalRecords": 2,
"successRecords": 0,
"failedRecords": 0,
"totalAmount": null,
"totalAmountCurrency": null,
"messageId": null,
"initiatingPartyName": null,
"initiatingPartyId": "",
"initiatingPartyCD": null,
"initiatingPartyAddress": {},
"groupStatus": null,
"groupStatusReasonCode": null,
"noOfHandoff": null,
"handoffId": null,
"corelationLevel": null,
"recordPersist": false,
"chunkSize": 2,
"chunkIndex": 1,
"totalChunks": 1,
"retryCount": 0,
"retryForChunk": [
    n
],
```



```
"fieldData": {
    "handoffId": null,
    "initiatingPartyName": null
"recordList": [{
    "recordId": 971615103983312900,
    "fileRefId": 110635,
    "modifiedBy": null,
    "modifiedDate": null,
    "txnStatus": "",
    "statusCodes": null,
    "transactionId": "",
    "transactionModNo": 1,
    "createdDate": null,
    "createdBy": "",
    "fxRate": null,
    "convertedCurrency": null,
    "convertedAmount": null,
    "fieldData": {
        "odStartDate": "",
        "accLiqdAllowed": "",
        "virtualAccountName": "",
        "debitTxnsAllowed": "Y",
        "fixedAmtFromPool": "",
        "odEndDate": "1990-01-01",
        "transferInVirAccNo": "",
        "accountPurpose": "",
        "action": "new",
        "addressLine1": "",
        "buildingNumber": "88",
        "addressLine2": "",
        "addressLine3": "",
        "addressLine4": "",
        "pincode": "",
        "townName": "",
        "defaultAccCcy": "",
        "postBox": "",
        "virtualParentAcc": "",
        "realCustomerNo": "",
        "branchCode": "",
        "virtualEntityId": "",
        "transferOutVirAccNo": "",
        "buildingName": "",
        "structureCode": "",
        "postCode": "",
        "virtualAccountNo": "",
        "interestCalcReq": "",
        "realAccountBrn": "",
        "ibanAccNo": "",
        "countrySubDivision": "",
        "realAccountCcy": "",
        "accountFrozen": "",
        "subDepartment": "",
        "realAccountNo": "",
        "streetName": "",
        "ibanRequired": "",
```



```
"countryCode": "",
            "balChkForDebits": "",
            "fixedAmount": "",
            "department": "",
            "floor": "8",
            "virtualAccProduct": "",
            "townLocationName": "",
            "districtName": "",
            "overdraftAllowed": "",
            "creditTxnsAllowed": "",
            "strrCountry": "",
            "room": "",
            "realAccLinkage": "",
            "remarks": ",
            "balAvailabilityOptions": ""
        "exceptionList": [{
            "exceptionCode": "",
            "exceptionArgs": "",
            "lineNo": 1,
            "CreatedDate": 1651721492536
        } ]
    }],
    "exceptionList": []
Response:
{
    "body": {
        "messages": {
            "status": "SUCCESS",
            "codes": [{
                "information": true,
                "override": false,
                "error": false,
                "overrideAuthLevelsReqd": 0,
                "desc": "Record Created successfully",
                "code": "EDX-PCB-000",
                "language": "ENG",
                "type": "I"
            }],
            "httpStatusCode": "OK"
        },
        "data": {
            "links": []
    }
```



postFileDetails

```
Request:
{
    "ackFileDTO":
    [
        "index": 1,
        "type": "TEXT",
           "content":
"{\"fileRefId\":16652,\"ackfileRefId\":16652,\"ackfileName\":\"ACME_CSV_Open
                Virtual
Account_20221010000004\",\"ackfileChannelName\":\"AutoCorpOutgoing\",
\"ackResponseIdentifier\":\"RESPONSE_FILE\",\"ackfileStatus\":\"EDX-COF-000\",
\"chunkSize\":0,\"chunkIndex\":0,\"totalChunks\":0,\"totalRecords\":1,
                \"recordList\":
[{\"recordId\":1033332842200104960,\"lineNo\":null,
                \"status\":\"EDX-COR-000\",\"exceptionList\":[]}]}"
    ],
    "file":
    Γ
        "fileName": "ACME_CSV_Open Virtual
Account_20221010000004.csv",
        "file": "file_0",
        "index": 0,
        "type": "FILE"
    ]
}
Response:
    "headers": {},
    "body": {
        "data": {
            "messages": {
                "status": "SUCCESS",
                "codes": [
                    "information": false,
                    "override": false,
                     "error": false,
                    "code": "EDX-ADS-009"
                ]
        },
        "messages": {
```

"keyId": null,



1.2.7 EXTERNAL IDENTIFIER Implementation

This topic provides the API information for EXTERNAL IDENTIFIER Implementation.

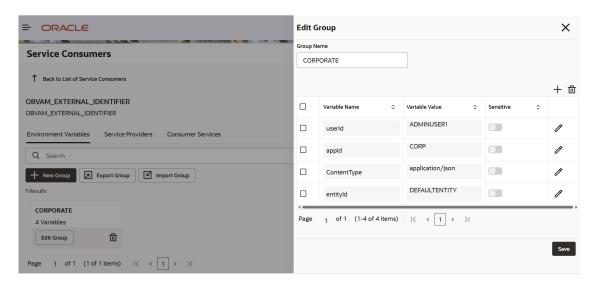
This API is used when the Identifier needs to be generated externally. Oracle Banking Virtual Account Management's Identifier generation will be suppressed and externally generated.

The following API is configured using Oracle Banking Routing Hub:

SERVICE-CONSUMER - OBVAM_EXTERNAL_IDENTIFIER

Environment variables are used to set values for the headers. Set environment specific values for variables like User ID, Branch code.

Figure 1-20 Environment variables- EXTERNAL IDENTIFIER



Refer the **Environment Variable Configuration** topic to set the values in **Edit Service Consumer** screen.

The following Service Providers and Consumer Services needs to be configured in Oracle Banking Routing Hub:

- <u>Service Providers EXTERNAL IDENTIFIER</u>
 This topic describes about the service providers configuration for EXTERNAL IDENTIFIER.
- Consumer Services EXTERNAL IDENTIFIER
 This topic describes about the consumer services required for EXTERNAL IDENTIFIER Implementation.



OBRH JSON

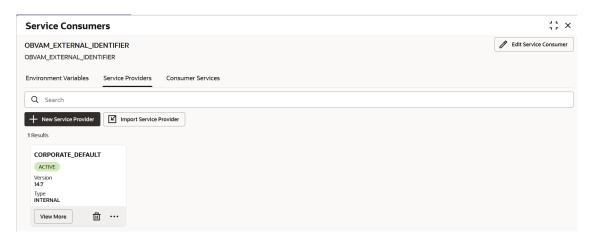
This topic provides the OBRH JSON details.

1.2.7.1 Service Providers - EXTERNAL IDENTIFIER

This topic describes about the service providers configuration for EXTERNAL IDENTIFIER.

To configure the external system in Oracle Banking Routing Hub, import WSDL / Swagger provided by the external system.

Figure 1-21 Service Providers - EXTERNAL IDENTIFIER



1.2.7.2 Consumer Services - EXTERNAL IDENTIFIER

This topic describes about the consumer services required for EXTERNAL IDENTIFIER Implementation.

The below endpoint must be configured under Consumer Services in Oracle Banking Routing Hub:"OBVAM EXTERNAL IDENTIFIER"

Figure 1-22 Consumer Services - EXTERNAL ACCOUNT



OBVAM_EXTERNAL_IDENTIFIER

This API enables the user to generate the Identifier externally.



```
{
    "headers": {
        "Accept": [
            "*/*"
        "appId": [
            "CMNCORE"
        ],
        "userId": [
            "USER78"
        "branchCode": [
            "B01"
        ],
        "Content-Type": [
            "application/json"
        ],
        "SERVICE-CONSUMER": [
            "OBVAM_EXTERNAL_IDENTIFIER"
        "SERVICE-CONSUMER-SERVICE": [
            "TxnValidation"
        "X-B3-TraceId": [
            "89b855e1dcec3a6b"
        ],
        "X-B3-SpanId": [
            "74bc9367771558df"
        "X-B3-ParentSpanId": [
            "bca22da650c156c6"
        ],
        "X-B3-Sampled": [
            "1"
        "piiEnabled": [
            "true"
        "languageCode": [
            "ENG"
        ],
        "sessionRef": [
olkcyao6kldKgMcXJR3kxjHrTvhRutKYNzP8FPq6jul5Fy_NRME2eD8rnDBeLRk6B4PJDfWYiddhB8
i02TIbw"
        ],
        "entityId": [
            "DEFAULTENTITY"
        "Content-Length": [
            "136"
        ],
        "Host": [
            "ofss-mum-1462.snbomprshared1.gbucdsint02bom.oraclevcn.com:8016"
```



```
"Connection": [
            "Keep-Alive"
        ],
        "User-Agent": [
            "Apache-HttpClient/4.5.14 (Java/11.0.16)"
        "Accept-Encoding": [
            "gzip,deflate"
        1
    },
    "serviceConsumerServiceName": "TxnValidation",
    "body": {
        "txnAccountBrn": "000",
        "virtualIdentifier": "101",
        "customerId": "TCUST01",
        "txnAccount": "101",
        "drCrInd": "D",
        "txnAmount": 101,
        "txnCcy": "GBP"
    },
    "serviceConsumerName": "OBVAM_EXTERNAL_IDENTIFIER"
Response:
    "headers": {},
    "body": {
        "data": {
            "status": "SUCCESS"
        "messages": {
            "keyId": null,
            "status": "SUCCESS",
            "codes": [],
            "requestId": null,
            "httpStatusCode": "OK",
            "overrideAuthLevelsReqd": null
```

1.2.7.3 OBRH JSON

This topic provides the OBRH JSON details.

The full set of OBVAM OBRH JSON is listed here: OBRH.Zip

The set of OBVAM OBRH that has changes in 14.8.1.0.0 release is listed here: OBRH changes.zip

Index

D	1
DDA Implementation, 2	Interest and Charges Implementation, 20
E	O
Environment Variable Configuration, 3 EXTERNAL ACCOUNT Implementation, 8 EXTERNAL IDENTIFIER Implementation, 45	Oracle Banking Host to Host Implementation, 36 Oracle Banking Liquidity Management Implementation, 31 Oracle Banking Payments Implementation, 12