# Oracle® Banking Virtual Account Management Oracle Banking Routing Hub Integration Guide



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ORACLE

Oracle Banking Virtual Account Management Oracle Banking Routing Hub Integration Guide, Release 14.8.0.0.0

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# Preface

- Purpose
- Audience
- Documentation Accessibility
- Diversity and Inclusion
- Related Resources
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- 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

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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



# 1 Integration Guide

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

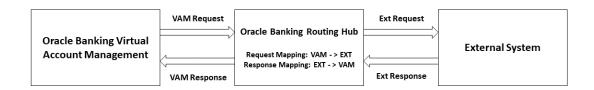
- Introduction This topic provides the overview about Oracle Banking Routing Hub.
- APIs configured using Oracle Banking Routing Hub This topic describes about the various APIs configured using Oracle Banking Routing Hub.

# 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.
- EXTERNAL IDENTIFIER Implementation 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	s - DDA
------------	-------------------	---------

Service Consumers				
List of Service Consumer	s			
Q Search				
+ New Service Consumer	Ľ	Import S		
25 Results				
<b>OBVAM_DDA</b> OBVAM_DDA				
View More	団	•••		

On Service Consumer screen, click on view more option for OBVAM\_DDA tile.

ervice Consumers	10		
Back to List of Service Consul	ners		
BVAM_DDA			🥟 Edit Service Consumer
BVAM_DDA			
vironment Variables Serv	ice Providers Consumer Services		
Q Search			
+ New Service Provider	Import Service Provider		
Results			
ОВА	FCUBS	FCUBS	
ACTIVE	ACTIVE	ACTIVE	
Version 14.7	Version 14.1	Version 14.4	
Type INTERNAL	Type INTERNAL	Type INTERNAL	
INTERNAL			

### 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.

1. 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

Service Consumers			:: ×			
Back to List of Service Consumers						
OBVAM_DDA Edit Service Const OBVAM_DDA						
Environment Variables Service Providers Consumer Service	5					
Q Search						
+ New Group Export Group						
4 Results						
OBA_GROUP FCUBS_144_GROUP	FCUBS_141_GROUP	TestGrp				
6 Variables 3 Variables	2 Variables	1 Variables				
Edit Group 🔟	Edit Group	Edit Group				
Page 1 of 1 (1-4 of 4 items)  < ∢ 1 → >						

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

ORACLE = New Group × Group Name **Service Consumers** ↑ Back to List of Service Consumers 十 団 OBVAM DDA OBVAM\_DDA Variable Name Variable Value 0 Sensitive No data to display Environment Variables Service Providers Consumer Services 1 (0 of 0 items) |< ∢ 1 → >| Page Q Search + New Group 🛛 Export Group 🗹 Import Group Save 4 Results FCUBS 144 GROUP FCUBS 141 GROUP **OBA GROUP** 6 Variables 3 Variables 2 Variables Edit Group 崮 Edit Group 峃 Edit Group Page 1 of 1 (1-4 of 4 items) |< ∢ 1 → >|

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.
- 5. 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:

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

4. Create a transaction (handofftoDDA)

Figure 1-4 Consumer Services - DDA

Service Consumers				:: ×	
↑ Back to List of Service Consumers					
OBVAM_DDA				Bdit Service Consumer	
OBVAM_DDA					
Environment Variables Service Provide	ers Consumer Services				
Q Search					
+ New Consumer Service Import Consumer Service					
4 Results					
closeECA	createECA	EAC	handoffToDda		
Close External Credit Approval	Create External Credit Approval	External Account Check	hand off the transaction to dda		
View More	View More 🛄 …	View More 🛄 …	View More		

#### createECA

This API enables the user to create an amount block.

SERVICE-CONSUMER = "OBVAM\_DDA"

SERVICE-CONSUMER-SERVICE="createECA"

#### **Request:**

```
{
  "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:**

```
{
  "currentUserID": "",
  "currentBranchCode": "",
  "ddaSystem": "",
  "ecaReferenceNo": "",
  "ddaReferenceNo": "",
  "createextRefNo": "",
  "source": "",
  "ecaCloseDetailsDTO":
  [
    {
      "accountNo": "",
      "accCurreny": "",
      "accountbranch": "",
      "blockStatus": ""
    }
 ]
}
```

```
{
"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"

#### **Request:**

```
{
 "currentUserID": "",
  "currentBranchCode": "",
  "action": "",
  "sourceReferenceNo": "",
  "ddaSystem": "",
  "externalReferenceNo": "",
  "source": "",
  "sourceReferenceNo":"",
  "ecaEntriesDetailsDTO":
  [
    {
      "module": "",
      "transactionRefNo": "",
      "eventserialNo": "",
      "event": "",
      "accBranch": "",
```

```
"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" : ""
  }
]
```

}

### **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:



- 1. 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

#### 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

= ORACLE	Edit 0	Group			×
Service Consumers	Group N	lame _ACC_CRED			
Back to List of Service Consumers      OBVAM_EXTERNAL_ACCOUNT					十 団
OBVAM_EXTERNAL_ACCOUNT		Variable Name 🗘	Variable Value 🗘	Sensitive 0	
Environment Variables Service Providers Consumer Services		appld	VAM		P
Q Search		branchCode	000		P
+ New Group Export Group		userld	DEB01		P
1 Results EXT_ACC_CRED		sourceCode	OBDX		1
4 Variables	Page	1 of 1 (1-4 of 4 items)	$ \langle  \langle  1  \rangle  \rangle $		
Page 1 of 1 (1 of 1 items)  < ∢ 1 → >					Save

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 EXTERNAL ACCOUNT 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

Service Consumers	: - ×
Back to List of Service Consumers	
OBVAM_EXTERNAL_ACCOUNT	🖉 Edit Service Consumer
OBVAM_EXTERNAL_ACCOUNT	
Environment Variables Service Providers Consumer Services	
Q Search	
+ New Service Provider	
1 Results	
Ext_Acc_Provider	
ACTIVE	
Version 14.4	
Type INTERNAL	
View More	

### 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:

1. Generate the account number externally (ext\_acc)

Figure 1-7 Consumer Services - EXTERNAL ACCOUNT

Service Consumers	::×
Back to List of Service Consumers	
OBVAM_EXTERNAL_ACCOUNT OBVAM_EXTERNAL_ACCOUNT	C Edit Service Consumer
Environment Variables Service Providers Consumer Services	
Q Search	
+ New Consumer Service Import Consumer Service	
1 Results	
ext.acc gen	
View More	



#### ext\_acc

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

#### **Request:**

{

```
"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

	Edit Group	×
Service Consumers	Group Name OBPM_Default_Cred	
Back to List of Service Consumers		+ 茴
OBVAM_OBPM OBVAM_OBPM	□ Variable Name ≎ Variable	e Value 🗘 Sensitive 🗘
- Environment Variables Service Providers Consumer Services	functionId PMDI	PENDP
Q Search	action EXEC	
+ New Group 🗵 Export Group	Channel REST	
2 Results	source MAN	
OBPM_Minicore_Cred         OBPM_Default_Cred           2 Variables         7 Variables	Page 1 of 2 (1-4 of 7 items)  <	< 1 2 → X
Edit Group		
Page 1 of 1 (1-2 of 2 items)  < ∢ 1 → >		Save

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 Payments 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

Service Consumers	;:×
OBVAM_OBPM	
Environment Variables Service Providers Consumer Services	
Q Search	
+ New Service Provider	
1 Results	
ОВРМ	
ACTIVE	
14.4 Type	
INTERNAL	
View More	
Page 1 of 1 (1 - 1 of 1 items)  ζ ◀ 1 → >	

### 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:

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



#### ::× Service Consumers OBVAM\_OBPM Environment Variables Service Providers Consumer Services Q Search + New Consumer Service Import Consumer Service 9 Results CloseExtVirtualAcc ReopenExtVirtualAcc StrcAddressServiceCreate PendingPaymentQuery CloseExtVirtualAcc ReopenExtVirtualAcc StrcAddressServiceCreate Query for pending payment View More 茴 … 山 … **山** … View More View More View More **山** … StrcAddressServiceClose StrcAddressServiceReopen StrcAddressServiceModify CreateExtVirtualAcc StrcAddressServiceClose StrcAddressServiceReopen StrcAddressServiceModify Create external Virtual Account View More **山** … View More 茴 … View More 茴 … View More **茴**…

#### 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", ^{\star\star} 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": ""
  }
}
```

```
{
  "status": "",
  "errorDTOList":
  [
   {
        "errorCode"::"",
        "errorCode":"",
        "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"

#### **Request:**

{

```
"department": "",
```



```
"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"

#### **Request:**

{

```
"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"

#### **Request:**

{

```
"countryCodo
```

"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"

#### **Request:**

{

```
"countryCode": "",
"address4": " ",
"address3": "",
"address2": "",
"address1": "",
"ecaCheckReq": "",
"acCountClass": "",
"acStatDormant": "",
"aCStatFrozen": "",
"aCStatNoDr": "",
"acStatNoCr": "",
"acOpenDate": "",
```



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

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

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"

**Request:** 

}

{

```
"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. fetchExtlCGrps
- 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

	Edit G	roup			×
Service Consumers		Group Name OBVAM_GROUP			
Back to List of Service Consumers					十団
OBVAM_IC OBVAM_IC		Variable Name 🗘	Variable Value	Sensitive \$	
- Environment Variables Service Providers Consumer Services		ContentType	application/json		P
Q Search		userID	OBVAMUSER1		P
+ New Group Export Group		branchCode	000		P
1 Results		appID	OBIC		P
OBVAM_GROUP 5 Variables Edit Group	Page	1 of 2 (1-4 of 5 items)	K ∢ 1 2 → X		Save
Page 1 of 1 (1 of 1 items)  < ∢ 1 → >					

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 Interest and Charges 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

Service Consumers	::×
OBVAM_IC	
Environment Variables Service Providers Consumer Services	
Q Search	
+ New Service Provider	
1 Results	
OBVAM	
Active Version	
144 Type	
INTERNAL	
View More	
Page 1 of 1 (1 - 1 of 1 items)  < ∢ 1 → >	

### 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:

- 1. Fetch Interest Rate for A Virtual Account (fetchgcScIcRate)
- 2. Close Virtual Account (closeIEAccount)
- 3. Event for account group product mapping (CREATE\_EXT\_IC\_GRP\_PRD)
- 4. Fetch Accrued Interest (fetchAccuredInt)
- 5. Event to create account group (CREATE\_EXT\_IC\_GRP)
- 6. Event to Liquidate accrued interest for a Virtual account (liquidateInterest)
- 7. Fetch Bank Level IC Group (fetchExtICGrps)
- 8. Fetch Product Map For Group (fetchPrdMapForGrp)
- 9. Virtual accounts creation to IC system (CREATE\_IC\_ACCOUNT)
- 10. Event to trigger Value dated balance fetch (vdbalMaster)



Service Consumers				::×
OBVAM_IC				
Environment Variables Service Provid	ers Consumer Services			
Q Search				
+ New Consumer Service	Consumer Service			
10 Results				
fetchgcScIcRate	fetchAccuredInt	CREATE_EXT_IC_GRP	fetchPrdMapForGrp	
Fetch Interest Rate For A Virtual Account	Fetch Accured Interest	Event to create account group	Fetch Product Map For Group	
View More 🛄 …	View More	View More	View More	
liquidateInterest	fetchExtlCGrps	CREATE_IC_ACCOUNT	closelEAccount	
Event to Liquidate accrued interest for a Virtual account	Fetch Bank Level IC Group	Virtual accounts creation to IC system	Close Virtual Account In OBLM	
View More	View More	View More	View More 🛄 …	

#### 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",
  "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"
}
```



```
{
    "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:**

}

```
{
  "accGrp": "string",
  "accGrpDesc": "string",
  "accProdList":
  [
    {
        "productCode": "string",
        "productDescription": "string",
        "ccy": "string",
        "open": "string"
    }
]
```

#### **Response:**

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

#### 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:**

```
{
  "warnings":
  [
    {
      "warningCode": "string",
      "warningDesc": "string"
    }
  ],
  "errors":
  [
    {
      "errorCode": "string",
      "errorDesc": "string"
    }
  1
}
```

#### 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"

#### **Request:**

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



```
{
  "onliq":
  [
    {
      "msgStat": "string",
      "onliq": {},
      "warnings":
      ſ
        {
          "warningCode": "string",
          "warningDesc": "string"
        }
      ],
      "errors":
      ſ
        {
          "errorCode": "string",
          "errorDesc": "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"
}
```

```
{
   "data":
   {
    "AccGrpList":
    [
        {
            "accGrp": "string",
            "accGrpDesc": "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:**

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

# 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.

- ORACLE	Edit G	roup			×
Service Consumers	Group Na	ime 1_Default_Cred			
Back to List of Service Consumers					十 位
OBVAM_OBLM OBVAM_OBLM		Variable Name	Variable Value	Sensitive 🗘	
Environment Variables Service Providers Consumer Services		userId	AUTOBLM1		P
Q Search		appld	LMM		P
+ New Group Export Group		branchCode	LMB		I
1 Results		entityld	DEFAULTENTITY		I
OBLM_Default_Cred 5 Variables	Page	1 of 2 (1-4 of 5 items)	K ≪ 1 2 → X	1	
Edit Group					Save
Page 1 of 1 (1 of 1 items)  < ∢ 1 → >					

#### Figure 1-14 Environment Variable- Oracle Banking Liquidity Management

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 Liquidity Management 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.



Service Consu	Imers	:: ×
OBVAM_OBLM		
Service Providers C	onsumer Services	
Cî Add	Search Q	
OBLM Version 14.4 Type INTERNAL Status ACTIVE	:	
Page 1	of 1 (1-1 of 1 items) $ \langle \langle   1 \rangle \rangle$	

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:

1. Get the Liquidity Management account lists (getLMAccount)

ervice Consumer	s						:: >
BVAM_OBLM BVAM_OBLM							Edit Service Consumer
nvironment Variables S	Service Provider	s Consumer Servio	ces				
Q Search							
+ New Consumer Service	Import Co	onsumer Service					
Results							
getLMAccount		createLM		modifyLM			
Berrinaccoditt							
Get LM Account Lists		Create LM account		Modify Account			
Get LM Account Lists	団 …	Create LM account	置 …	Modify Account	面 …		
Get LM Account Lists			<b>山</b> …		面 …		

### Figure 1-16 Consumer Services - Oracle Banking Liquidity Management

### getLMAccount

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

#### **Request:**

{

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



```
"acyAvailableBal": "",
"offset": "",
"isExternal": "",
"includecloseandunauth": "",
"recordStat": "0",
"accountNumber": "1000242",
"isActive": "",
"sourceSystemAccNo": "",
"branchCode": "",
"branchCode": "",
"limit": "",
"customerId": "",
"currency": "",
"isResident": ""
```

{

```
"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,
```

},

```
"status": "SUCCESS",
    "codes": [],
    "requestId": null,
    "httpStatusCode": "OK",
    "overrideAuthLevelsReqd": 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.

- 1. 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.

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

	Edit G	iroup			×
Service Consumers	Group N	ame DX_144_GROUP			
Back to List of Service Consumers					十団
OBVAM_OBEDX OBVAM_OBEDX		Variable Name 🗘	Variable Value	Sensitive \$	
Environment Variables Service Providers Consumer Services		userID	EDXWORKFLOW		P
Q Search		appID	OBEDX		P
+ New Group Export Group		branchCode	006		P
1 Results		entityID	DEFAULTENTITY		P
OBEDX_144_GROUP 7 Variables Edit Group 面	Page	1 of 2 (1-4 of 7 items)	< ∢ 1 2 → >	1	
Page 1 of 1 (1 of 1 items)  < ∢ 1 → >					Save

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

Service Consumers	::×
OBVAM_OBEDX	
Environment Variables Service Providers Consumer Services	
Q Search	
+ New Service Provider	
1 Results	
OBEDX	
ACTIVE	
Version 14.4	
Type INTERNAL	
View More	
Page         1         of 1         (1 - 1 of 1 items)         I         I         >	

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

Service Consumers	:: ×
↑ Back to List of Service Consumers	
OBVAM_OBEDX OBVAM_OBEDX	C Edit Service Consumer
Environment Variables Service Providers Consumer Services	
Q Search	
+ New Consumer Service	
3 Results	
postFileDetails         ParseResponse           Callback with ack file         Callback with parsed response	HandoffResponse Callback with handoff response
View More 🗓 …	View More

#### HandoffResponse

#### **Request:**

{

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

```
{
    "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

#### **Request:**

```
{
    "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": [
        0
    ],
```



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

```
{
    "body": {
        "messages": {
            "status": "SUCCESS",
            "codes": [{
                "information": true,
                "override": false,
                "error": false,
                "overrideAuthLevelsRegd": 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":
    [
           {
        "fileName": "ACME_CSV_Open Virtual
Account_2022101000004.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,
```



```
"status": "SUCCESS",
    "codes": [],
    "requestId": null,
    "httpStatusCode": "OK",
    "overrideAuthLevelsReqd": 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

	Edit G	roup			×
Service Consumers	Group Na	ame PORATE			
Back to List of Service Consumers					十 団
OBVAM_EXTERNAL_IDENTIFIER OBVAM_EXTERNAL_IDENTIFIER		Variable Name 🗘	Variable Value	Sensitive 0	
Environment Variables Service Providers Consumer Services		userld	ADMINUSER1		P
Q Search		appld	CORP		P
+ New Group Export Group		ContentType	application/json		P
1 Results		entityld	DEFAULTENTITY		P
CORPORATE 4 Variables Edit Group	4 Page	1 of 1 (1-4 of 4 items)	$ \langle \langle 1 \rangle \rangle$		
Page 1 of 1 (1 of 1 items)  < ∢ 1 → >					Save

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 EXTERNAL IDENTIFIER 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.



### 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

Service Consumers		;: ×
OBVAM_EXTERNAL_IDENTIFIER OBVAM_EXTERNAL_IDENTIFIER		Edit Service Consumer
Environment Variables Service Pro	oviders Consumer Services	
Q Search		
+ New Service Provider	ort Service Provider	
1 Results		
CORPORATE_DEFAULT		
ACTIVE		
Version 14.7		
Type INTERNAL		
View More		

### 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 OBVAM_EXTERNAL_IDENTIFIER	P Edit Service Consumer
Environment Variables Service Providers Consumer Services	
Q Search	
+ New Consumer Service Import Consumer Service	
1 Results	
TxnValidation	
Check if the transaction details is valid for identifier account	
View More	

#### OBVAM\_EXTERNAL\_IDENTIFIER

This API enables the user to generate the Identifier externally.



#### Request:

```
{
    "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": [
            "_
oIkcyao6k1dKgMcXJR3kxjHrTvhRutKYNzP8FPq6jul5Fy 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"
    ]
},
"serviceConsumerServiceName": "TxnValidation",
"body": {
    "txnAccountBrn": "000",
    "virtualIdentifier": "101",
    "customerId": "TCUST01",
    "txnAccount": "101",
    "drCrInd": "D",
    "txnAmount": 101,
    "txnCcy": "GBP"
},
"serviceConsumerName": "OBVAM EXTERNAL IDENTIFIER"
```

}

```
{
    "headers": {},
    "body": {
        "data": {
            "status": "SUCCESS"
        },
        "messages": {
            "keyId": null,
            "status": "SUCCESS",
            "codes": [],
            "requestId": null,
            "httpStatusCode": "OK",
            "overrideAuthLevelsReqd": null
        }
    }
}
```



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