

Oracle® Banking Virtual Account Management Integration Guide



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Preface

Purpose

This guide describes the information on inter-connecting Oracle Banking Virtual Account Management to other systems, inbound APIs, outbound API calls through Oracle Banking Routing Hub, File Upload features, Events, and FOP template for statement advices.

Audience

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

Table 1 Audience

| Role | Function |
|------------------------------|---|
| Back Office Data Entry Clerk | To input functions for maintenance related to the interface |
| Implementation teams | Implementation and maintenance of the software |

Acronyms and Abbreviations

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

Table 2 Acronyms and Abbreviations

| Acronyms and Abbreviation | Description |
|---------------------------|-----------------------------------|
| API | Application Programming Interface |
| Core DDA | Oracle Banking Digital Experience |
| ECA | External Credit Approval |
| KYC | Know Your Customer |
| VA | Core Banking System |

List of Topics

This guide is organized as follows:

Table 3 List of Topics

| Topics | Description |
|------------------------------|---|
| Overview | This topic provides the overview on inter-connecting Oracle Banking Virtual Account Management to other systems. |
| Inbound APIs | This topic provides the information on the set of inbound APIs provided by Oracle Banking Virtual Account Management. |

Table 3 (Cont.) List of Topics

| Topics | Description |
|---|---|
| File Upload | This topic provides the information on the various File Upload features supported by Oracle Banking Virtual Account Management. |
| Events | This topic provides the information on the list of events in Oracle Banking Virtual Account Management. |
| Outbound API calls through Oracle Banking Routing Hub | This topic provides the information on the outbound API calls to Oracle Banking Virtual Account Management. |
| FOP for Statement Advice | This topic provides the information to configure and generate virtual account statement using a template created in Apache FOP. |

Related Documents

The related documents are as follows:

- *Oracle Banking Security Management System User Guide*
- *Oracle Banking Common Core User Guide*
- *Oracle Banking Microservices Platform Foundation User Guide*
- *Oracle Banking Getting Started User Guide*
- *Configuration User Guide*
- *Charges User Guide*
- *Overview User Guide*
- *Identifier User Guide*
- *Customer and Accounts User Guide*
- *Transactions User Guide*
- *Oracle Banking Virtual Account Management Installation Guides*
- *Oracle Banking Virtual Account Management Integration Guides*

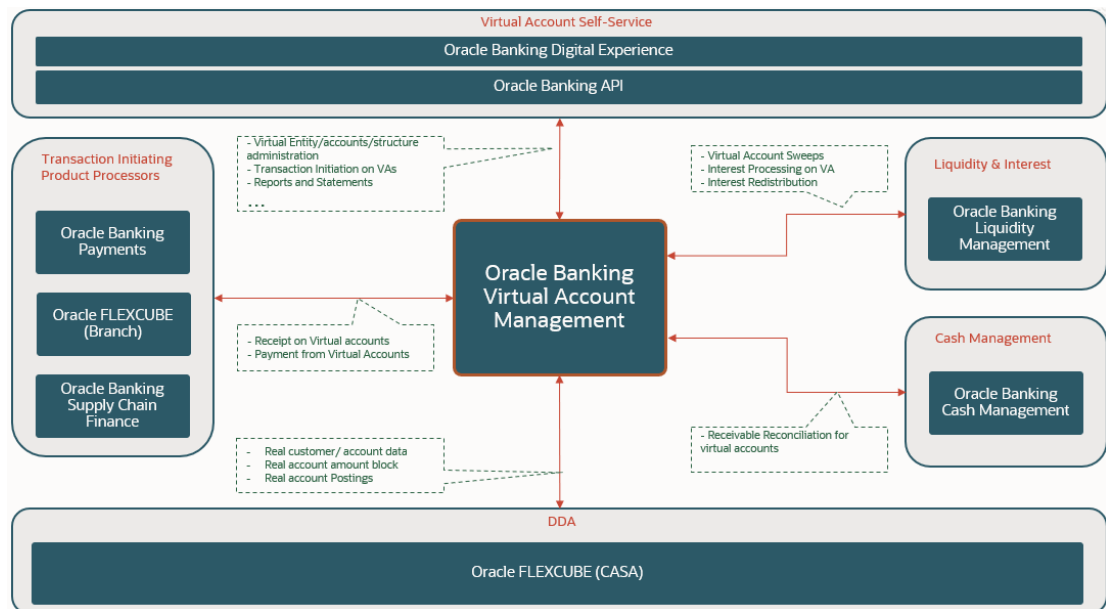
1

Overview

This topic provides the overview on inter-connecting Oracle Banking Virtual Account Management to other systems.

Oracle Banking Virtual Account Management supports the integration with Core Banking, Payment and Receivables, and Liquidity Management systems for various use cases. It also provides interfaces for self-service portals.

Figure 1-1 Oracle Banking Virtual Account Management - Overview



Core Banking

This is an outbound integration from Oracle Banking Virtual Account Management to Core Banking system.

Outbound Interface

Oracle Banking Virtual Account Management supports the following outbound interfaces:

- **Virtual Account Creation:** This is used to populate a common data store to synchronize the Core Banking data store for a virtual account so that it is available in transactions.
- **External Account Check:** For real account check mapped to virtual account.
- **External Credit Approval:** For balance check and amount block on debit transactions.
- **Accounting Posting:** Actual entries posted to Core Banking. The entries are posted if the Skip DDA option at the transaction level is set as No.

Payments and Receivables

This is an inbound/outbound integration with Payments and Receivables system.

Inbound Interface

The interface exposed by Oracle Banking Virtual Account Management that Payments and Receivables system can consume are:

- **Virtual Account Check/External Account Check:** To perform account validations
- **Virtual Account Credit Approval/External Credit Approval:** To perform balance check and define an amount block on the virtual account.
- **Accounting Posting on VA:** To post entries on virtual accounts that in turn posts to Core Banking System.

Outbound Interface

Oracle Banking Virtual Account Management supports the following outbound interface:

- **Pending Payment Query:** To check for pending payments during Virtual Account closure.

Liquidity Management

1. Interest Re-distribution and Sweeping

This is an inbound/outbound interface with the Liquidity Management system.

Inbound Interface

The interface exposed by Oracle Banking Virtual Account Management are:

- **Value Date Balance Fetch:** For fetching the virtual account's value dated balance.
- **Accounting Posting to VA:** For posting entries to virtual account.
- **Sweep Eligible Balance Fetch:** For fetching the virtual account's Sweep Eligible balance and value dated balance.

Outbound Interface

Oracle Banking Virtual Account Management supports the following outbound interface:

- **Get LM Account:** To check whether Virtual Account is participating in a LM structure during Virtual Account closure.

Event Based:

Vamlm Account Event

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

2. Interest Calculation and Liquidation on Individual Accounts

This is an inbound/outbound interface with Interest and Charges system.

Outbound Interface

The outbound interfaces supported by Oracle Banking Virtual Account Management are:

- **Virtual Account Handoff:** This is an online interface. The account details are handed off to the adapter when an account is authorized.
- **Accrued Interest Fetch:** For fetching accrued interest for a Virtual Account.
- **Online Interest Liquidation:** To initiate interest liquidation for a Virtual Account.
- **Fetch Bank Level IC Group:** To fetch bank-level IC Groups.
- **Fetch product Map:** To fetch product Map for a specific group.
- **Create Account Group:** To create an Account Group in IC.
- **Create Account Group - Product Mapping:** To create an Account Group - Product Mapping in IC.
- **vdbalMaster:** For IC trigger of Value Dated Balance.

Inbound Interface

The interface exposed by Oracle Banking Virtual Account Management are:

- **Accounting Posting to VA:** For posting interest liquidation entries to the virtual account.

Self-Service Portal

This is an inbound integration to Oracle Banking Virtual Account Management from Self-Service portal.

Inbound Interface

The interfaces available for the Self-Service portal are:

- Virtual Entity Creation
- Virtual Account Creation
- Account Structure Creation
- Virtual ID Remitter Management
- VA to VA Internal Transfer
- Virtual Account Balance
- Account Structure Details
- Virtual Account Statements
- Virtual Account Reports
- Virtual Account Queries
- Internal Credit Line
- Remittance Details
- Charges Inquiry

Cash Management

This is an inbound integration to Oracle Banking Virtual Account Management from Cash Management System.

The interface exposed is:

- Get Account Details

Oracle Banking Enterprise Party Management

This is an inbound integration to Oracle Banking Virtual Account Management from Enterprise Party Management.

Inbound Interface

The interface exposed by Oracle Banking Virtual Account Management that Enterprise Party Management system can consume is:

- Corporate 360 View of Oracle Banking Virtual Account Management's Virtual Account, Structure, Entity and Currency Wise Balance of Real Customer.

Host To Host Integration with Oracle Banking Electronic Data Exchange

This is a host to host integration of Oracle Banking Virtual Account Management and Oracle Banking Electronic Data Exchange System.

Inbound Interface

The interface exposed by Oracle Banking Virtual Account Management that Oracle Banking Electronic Data Exchange can consume are:

- Parse File API: To send the virtual account creation file from corporate ERP system and to validate data in the file.
- Handoff API: To perform virtual account create.

Outbound Interface

The outbound interfaces exposed by Oracle Banking Electronic Data Exchange and consumed by Oracle Banking Virtual Account Management are:

- Parse Response API: To send the file data after validation to Electronic Data Exchange System.
- Handoff Response API: To send the virtual account creation status and the newly created virtual account number to Electronic Data Exchange system.

Refer to [Host To Host Integration](#) for the detailed explanation.

2

Inbound APIs

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

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

3

File Upload

This topic provides the information on the various File Upload features supported by Oracle Banking Virtual Account Management.

The user can perform the following actions:

- New – Creation of new records
- Modify – Modification of existing records
- Close – Closure of existing records

File Naming Convention: feedname_xxx

For example: virtualentity_27april2020

File Format: .csv

The processing status of the records in the file can be enquired through **View File Upload Status** screen.



Note:

Refer to **Oracle Banking Microservices Platform Foundation User Guide** for the detailed explanation.

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

- [Virtual Entity](#)
- [Virtual Account](#)
- [Account Structure](#)
- [Remittance Details](#)
- [Journal Posting](#)
- [Journal Posting Reversal](#)

3.1 Virtual Entity

Virtual Entity File Upload is used for the bulk creation, modification and closure of Virtual Entities.

Feed Name: virtualentity

The following table describes the details of file structure.

Table 3-1 Virtual Entity - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|---------------------------|--|----------------------------|--------------|
| 1 | Action | Specifies the operation to be performed. Allowed operations are as following: <ul style="list-style-type: none"> • New: Creation of Virtual Entities • Modify: Modification of existing Virtual Entities • Close: Closure of existing Virtual Entities | VARCHAR2 | - |
| 2 | Operation | Specifies the operation to be performed. Allowed operations are as following: <ul style="list-style-type: none"> • E - Action specific to only Entities • ES – Action applicable for both Entities and Statement Preferences | VARCHAR2 | - |
| 3 | Last KYC Date | Specifies the last KYC date. | DATE Format: YYYY-MM-DD | - |
| 4 | KYC Reference | Specifies the KYC Reference Number. | VARCHAR2 | 100 |
| 5 | KYC Status | Specifies the KYC Status of the entity. Available values are as following: <ul style="list-style-type: none"> • P - Pending • V - Verified • E - Expired | CHAR | 1 |
| 6 | Tax Identification Number | Specifies the Tax Identification Number. | VARCHAR2 | 100 |
| 7 | Identification Number | Specifies the Identification Number. | VARCHAR2 | 100 |

Table 3-1 (Cont.) Virtual Entity - File Structure


| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|--------------------------------|---|-----------|--------------|
| 8 | Identification Type | <p>Specifies the Identification Type.</p> <p>Valid values are as following:</p> <ul style="list-style-type: none"> • N - National ID • P- Passport • S - SSN <div>  Note: The values can be updated at bank level as a part of Day 0 setup. </div> | CHAR | 1 |
| 9 | Registered Address Pincode | Specifies the Pincode of Registered Address. | VARCHAR2 | 15 |
| 10 | Registered Address Country | Specifies the Registered Address Country. | VARCHAR2 | 15 |
| 11 | Registered Address Line 1 | Specifies the Registered Address Line 1. | VARCHAR2 | 105 |
| 12 | Registered Address Line 2 | Specifies the Registered Address Line 2. | VARCHAR2 | 105 |
| 13 | Registered Address Line 3 | Specifies the Registered Address Line 3. | VARCHAR2 | 105 |
| 14 | Registered Address Line 4 | Specifies the Registered Address Line 4. | VARCHAR2 | 105 |
| 15 | Correspondence Address Pincode | Specifies the Pincode of Correspondence Address. | VARCHAR2 | 15 |
| 16 | Correspondence Address Country | Specifies the Correspondence Address Country. | VARCHAR2 | 3 |
| 17 | Correspondence Address Line 1 | Specifies the Correspondence Address Line 1. | VARCHAR2 | 105 |

Table 3-1 (Cont.) Virtual Entity - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-------------------------------|---|-----------|--------------|
| 18 | Correspondence Address Line 2 | Specifies the Correspondence Address Line 2. | VARCHAR2 | 105 |
| 19 | Correspondence Address Line 3 | Specifies the Correspondence Address Line 3. | VARCHAR2 | 105 |
| 20 | Correspondence Address Line 4 | Specifies the Correspondence Address Line 4. | VARCHAR2 | 105 |
| 21 | Entity Type | Specifies the Entity Type. Valid values are as following: <ul style="list-style-type: none"> • C - Corporate • I - Individual | CHAR | 1 |
| 22 | Virtual Entity Name | Specifies the Virtual Entity Name. | VARCHAR2 | 105 |
| 23 | Virtual Entity ID | Specifies the Virtual Entity Identification. | VARCHAR2 | 12 |
| 24 | Real Customer Number | Specifies the Real Customer Number for virtual entity creation. | VARCHAR2 | 20 |
| 25 | Doer Remarks | Specifies the Requester Remarks. | VARCHAR2 | 200 |
| 26 | Approver Remarks | Specifies the Approver Remarks. | VARCHAR2 | 200 |
| 27 | Individual Preferred Mode | Specifies the Individual Preferred mode of communication. Applicable for Entity Type as "I". Valid values are as following: <ul style="list-style-type: none"> • E - Email • M - Mobile | CHAR | 1 |
| 28 | Individual Email | Specifies the Email Details. Applicable for Entity Type as "I" and individualDetails_preferredMode as "E". | VARCHAR2 | 255 |
| 29 | Individual Work Phone Number | Specifies the Work Phone Number. Applicable for Entity Type as "I". | VARCHAR2 | 10 |
| 30 | Individual Work Phone ISD | Specifies the International Subscriber Dialing code for Work Phone Number. Applicable for Entity Type as "I". | VARCHAR2 | 10 |
| 31 | Individual Home Phone Number | Specifies the Home Phone Number. Applicable for Entity Type as "I". | VARCHAR2 | 10 |
| 32 | Individual Home Phone ISD | Specifies the International Subscriber Dialing code for Home Phone Number. Applicable for Entity Type as "I". | VARCHAR2 | 10 |

Table 3-1 (Cont.) Virtual Entity - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|------------------------------------|--|----------------------------|--------------|
| 33 | Individual Mobile Number ISD | Specifies the International Subscriber Dialing code for Mobile Number. Applicable for Entity Type as "I" and individualDetails_preferredMode as "M". | VARCHAR2 | 10 |
| 34 | Individual Mobile Number | Specifies the Mobile Phone Number. Applicable for Entity Type as "I" and individualDetails_preferredMode as "M". | VARCHAR2 | 10 |
| 35 | Individual National ID | Specifies the National Identification of Individual. Applicable for Entity Type as "I". | VARCHAR2 | 35 |
| 36 | Individual Nationality | Specifies the Nationality of Individual. Applicable for Entity Type as "I". | VARCHAR2 | 3 |
| 37 | Individual Gender | Specifies the Gender. Applicable for Entity Type as "I". Valid values are as following: <ul style="list-style-type: none"> • M – Male • F – Female • O – Others | CHAR | 1 |
| 38 | Individual Date Of Birth | Specifies the Date of Birth of Individual. Applicable for Entity Type as "I". | DATE Format: YYYY-MM-DD | - |
| 39 | Individual Last Name | Specifies the Individual Last Name. Applicable for Entity Type as "I". | VARCHAR2 | 105 |
| 40 | Individual Middle Name | Specifies the Individual Middle Name. Applicable for Entity Type as "I". | VARCHAR2 | 105 |
| 41 | Individual First Name | Specifies the Individual First Name. Applicable for Entity Type as "I". | VARCHAR2 | 105 |
| 42 | Corporate Date Of Incorporation | Specifies the Date of Incorporation of the Corporate. Applicable for Entity Type as "C". | DATE Format: YYYY-MM-DD | - |
| 43 | Corporate Country Of Incorporation | Specifies the Country of Incorporation of the Corporate. Applicable for Entity Type as "C". | VARCHAR2 | 105 |
| 44 | Corporate Unique Id | Specifies the Unique ID of the Corporate. Applicable for Entity Type as "C". | VARCHAR2 | 35 |

Table 3-1 (Cont.) Virtual Entity - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|----------------------------|--|-----------|--------------|
| 45 | Corporate Work Phone 1 ISD | Specifies the International Subscriber Dialing code for Work Phone Number1. Applicable for Entity Type as "C". | VARCHAR2 | 10 |
| 46 | Corporate Work Phone No 1 | Specifies the Work Phone Number 1. Applicable for Entity Type as "C". | VARCHAR2 | 10 |
| 47 | Corporate Work Phone 2 ISD | Specifies the International Subscriber Dialing code for Work Phone Number 2. Applicable for Entity Type as "C". | VARCHAR2 | 10 |
| 48 | Corporate Work Phone No 2 | Specifies the Work Phone Number 2. Applicable for Entity Type as "C". | VARCHAR2 | 10 |
| 49 | Corporate Mobile No ISD | Specifies the International Subscriber Dialing code for Mobile Number. Applicable for Entity Type as "C" and individualDetails_preferredMode as "M". | VARCHAR | 10 |
| 50 | Corporate Mobile No | Specifies the Corporate Mobile Number. Applicable for Entity Type as "C" and individualDetails_preferredMode as "M". | VARCHAR | 10 |
| 51 | Corporate Email | Specifies the Corporate Email Details. Applicable for Entity Type as "C" and individualDetails_preferredMode as "E". | VARCHAR | 255 |
| 52 | Corporate Preferred Mode | Specifies the Corporate Preferred mode of communication. Applicable for Entity Type as "C". Valid values are as following: <ul style="list-style-type: none"> • E - Email • M - Mobile | CHAR | 1 |

Table 3-1 (Cont.) Virtual Entity - File Structure


| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-------------------------|---|-----------|--------------|
| 53 | Corporate Entity Type | <p>Specifies the Corporate Entity Type. Applicable for Entity Type as "C". Valid values are as following:</p> <ul style="list-style-type: none"> • C - Corporation • P - Partnership • S - Sole Partnership • O - Cooperative <div>  Note: The values can be updated at bank level as a part of Day 0 setup. </div> | CHAR | 1 |
| 54 | Generate PDF Statements | <p>Indicates if PDF statement is required. Valid values are as following:</p> <ul style="list-style-type: none"> • Y – Yes • N – No | VARCHAR2 | 1 |
| 55 | Statement Type | <p>Specifies the PDF Statement Type. Valid values are as following:</p> <ul style="list-style-type: none"> • C - Consolidated • A - Account Level | CHAR | 1 |
| 56 | Frequency | <p>Specifies the Statement Generation Frequency. Valid values are as following:</p> <ul style="list-style-type: none"> • D – Daily • W – Weekly • M – Monthly • Q – Quarterly • Y – Yearly | CHAR | 1 |

Table 3-1 (Cont.) Virtual Entity - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|---------------------------------|---|-----------|--------------|
| 57 | Due On | Specifies the Statement Generation Day. Applicable for the following Frequency types: <ul style="list-style-type: none"> • D • W • M • Q • Y | NUMBER | - |
| 58 | Generate MT 940 | Indicates if MT940 is required. Valid values are as following: <ul style="list-style-type: none"> • Y – Yes • N – No | VARCHAR2 | 1 |
| 59 | Generate MT 950 | Indicates if MT950 is required. Valid values are as following: <ul style="list-style-type: none"> • Y – Yes • N – No | VARCHAR2 | 1 |
| 60 | Generate MT 942 | Indicates if MT942 is required. Valid values are as following: <ul style="list-style-type: none"> • Y – Yes • N – No | VARCHAR2 | 1 |
| 61 | Display IBAN | Indicates if IBAN is to be displayed. Valid values are as following: <ul style="list-style-type: none"> • Y – Yes • N – No | VARCHAR2 | 1 |
| 62 | Generate MT942 On Movement | Indicates when to generate to MT942. Applicable if Generate MT 942 is set as Y . Valid values are as following: <ul style="list-style-type: none"> • Y – Yes • N – No | VARCHAR2 | 1 |
| 63 | MT 942 Report Transaction Since | Applicable if Generate MT 942 is set as Y . Valid values are as following: <ul style="list-style-type: none"> • 940 • 950 • 942 | VARCHAR2 | 4 |
| 64 | MT 942 Generation Time | Specifies the Generation Time of MT 942 Report. Multiple times can be configured using pipe separator with hourly interval. | VARCHAR2 | - |

Table 3-1 (Cont.) Virtual Entity - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|------------------------------------|--|-----------|--------------|
| 65 | Generate CAMT 053 | Indicates if CAMT.053 is required. Valid values are as following: <ul style="list-style-type: none"> Y – Yes N – No | VARCHAR2 | 1 |
| 66 | Generate CAMT 052 | Indicates if CAMT.052 is required. Valid values are as following: <ul style="list-style-type: none"> Y – Yes N – No | VARCHAR2 | 1 |
| 67 | Generate CAMT 052 On Movement | Indicates if Generate CAMT.052 is required. Valid values are as following: <ul style="list-style-type: none"> Y – Yes N – No | VARCHAR2 | 1 |
| 68 | CAMT 052 Report Transaction Since | Applicable if Generate CAMT 052 is set as Y . Valid values are as following: <ul style="list-style-type: none"> 052 053 | VARCHAR2 | 4 |
| 69 | CAMT 052 Generation Time | Specifies the Generation Time of CAMT.052 Report. Multiple times can be configured using pipe separator with hourly interval. | VARCHAR2 | - |
| 70 | Structured Address Department | Specifies the structured address - department. | VARCHAR2 | 70 |
| 71 | Structured Address Sub Department | Specifies the structured address – sub-department. | VARCHAR2 | 70 |
| 72 | Structured Address Street Name | Specifies the structured address - street name. | VARCHAR2 | 70 |
| 73 | Structured Address Building Number | Specifies the structured address – building number. | VARCHAR2 | 16 |
| 74 | Structured Address Building Name | Specifies the structured address - building name. | VARCHAR2 | 35 |
| 75 | Structured Address Floor | Specifies the structured address - floor. | VARCHAR2 | 70 |
| 76 | Structured Address Post Box | Specifies the structured address - post box. | VARCHAR2 | 16 |
| 77 | Structured Address Room | Specifies the structured address - room. | VARCHAR2 | 70 |

Table 3-1 (Cont.) Virtual Entity - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|---|--|-----------|--------------|
| 78 | Structured Address Post Code | Specifies the structured address - Post Code. | VARCHAR2 | 16 |
| 79 | Structured Address Town Name | Specifies the structured address - town name. | VARCHAR2 | 35 |
| 80 | Structured Address Town Location Name | Specifies the structured address - town location name. | VARCHAR2 | 35 |
| 81 | Structured Address District Name | Specifies the structured address - district name. | VARCHAR2 | 35 |
| 82 | Structured Address Country Sub Division | Specifies the structured address - country sub division. | VARCHAR2 | 35 |
| 83 | Structured Address Country | Specifies the structured address - country. | VARCHAR2 | 2 |
| 84 | BIC Code | Customer's BIC code | VARCHAR2 | 11 |

3.2 Virtual Account

Virtual Account File Upload is used for the bulk creation, modification and closure of Virtual Accounts.

Feed Name: virtualaccount

The following table describes the details of the file structure.

Table 3-2 Virtual Account - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-------------------|--|-----------|--------------|
| 1 | Action | Specifies the operation to be performed. Allowed operations are as following: <ul style="list-style-type: none"> • New: Creation of virtual accounts • Modify: Modification of existing virtual accounts • Close: Closure of existing virtual accounts | VARCHAR2 | - |
| 2 | Branch Code | Specifies the branch under which virtual account to be created. | VARCHAR2 | 3 |
| 3 | Virtual Entity ID | Specifies the Virtual Entity for which virtual account to be created. | VARCHAR2 | 12 |

Table 3-2 (Cont.) Virtual Account - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-------------------------------|---|-----------|--------------|
| 4 | Real Customer Number | Specifies the Real Customer Number for which the Virtual Account is to be created. | VARCHAR2 | 20 |
| 5 | Account Currency | Specifies the Account Currency. | VARCHAR2 | 3 |
| 6 | Virtual Account Product | Specifies the product under which virtual account to be created. | VARCHAR2 | 4 |
| 7 | Virtual Account Number | Virtual Account Number is applicable for Modify and Close operations. | VARCHAR2 | 20 |
| 8 | IBAN Required | Specifies if IBAN is to be generated or not. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 9 | IBAN Account Number | Specifies the IBAN Account Number. | VARCHAR2 | 30 |
| 10 | Virtual Account Name | Specifies the virtual account name. | VARCHAR2 | 105 |
| 11 | Address Line 1 | Specifies the Correspondence Address Line 1. | VARCHAR2 | 35 |
| 12 | Address Line 2 | Specifies the Correspondence Address Line 2. | VARCHAR2 | 35 |
| 13 | Address Line 3 | Specifies the Correspondence Address Line 3. | VARCHAR2 | 35 |
| 14 | Address Line 4 | Specifies the Correspondence Address Line 4. | VARCHAR2 | 35 |
| 15 | Address Pincode | Specifies the Correspondence Address Zip code. | VARCHAR2 | 15 |
| 16 | Address Country Code | Specifies the Correspondence Address Country Code. | VARCHAR2 | 3 |
| 17 | Account Purpose | Specifies the description of the Account Purpose. | VARCHAR2 | 105 |
| 18 | Interest Calculation Required | Flag to indicate if Interest Calculation is required for the Virtual Account. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 19 | Account Frozen | Flag to indicate if whether virtual account is frozen. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |

Table 3-2 (Cont.) Virtual Account - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|------------------------------|--|-----------|--------------|
| 20 | Balance Check For Debits | Flag to indicate whether balance check is required for debit transactions. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 21 | Balance Availability Options | Balance Options Available options are as following: <ul style="list-style-type: none"> • O - Own Balance • P - Pool Balance • B - Own Balance + Fixed Amount from Pool | CHAR | 1 |
| 22 | Fixed Amount From Pool | Specifies the Fixed Amount contribution from pool. Applicable if balAvailabilityOptions = Own Balance + Fixed Amount from Pool. | NUMBER | 22, 3 |
| 23 | Overdraft Allowed | Flag to indicate whether virtual account can be overdrawn. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 24 | Overdraft Sanction Amount | Specifies the Overdraft amount sanctioned. | NUMBER | 22, 3 |
| 25 | Credit Transactions Allowed | Flag to indicate whether credit transactions are allowed on the virtual account. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 26 | Debit Transactions Allowed | Flag to indicate whether debit transactions are allowed on the virtual account. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 27 | Real Account Linkage | Specifies the Real Account Linkage. Valid values are as following: <ul style="list-style-type: none"> • S - Structure Level • A - Account Level Default value is A. | CHAR | 1 |
| 28 | Real Account Number | Specifies the Real Account Number. Applicable if realAccLinkage = A. | VARCHAR2 | 20 |

Table 3-2 (Cont.) Virtual Account - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-------------------------------------|---|----------------------------|--------------|
| 29 | Real Account Currency | Specifies the Real Account Currency. Applicable if realAccLinkage = A. | VARCHAR2 | 3 |
| 30 | Real Account Branch | Specifies the Real Account Branch. Applicable if realAccLinkage = A. | VARCHAR2 | 3 |
| 31 | Overdraft Start Date | Specifies the Overdraft Start Date. | DATE Format: YYYY-MM-DD | - |
| 32 | Overdraft End Date | Specifies the Overdraft End Date. | DATE Format: YYYY-MM-DD | - |
| 33 | Remarks | Specifies the Account Remarks. | VARCHAR2 | 200 |
| 34 | Transfer In Virtual Account Number | In case of negative balance, a designated Virtual Account Number from which the said amount needs to be transferred from. | VARCHAR2 | 20 |
| 35 | Transfer Out Virtual Account Number | In case of positive balance, a designated Virtual Account Number to which the said amount needs to be transferred to. | VARCHAR2 | 20 |
| 36 | Structured Address Department | Specifies the structured address - department. | VARCHAR2 | 70 |
| 37 | Structured Address Sub Department | Specifies the structured address - sub-department. | VARCHAR2 | 70 |
| 38 | Structured Address Street Name | Specifies the structured address - street name. | VARCHAR2 | 70 |
| 39 | Structured Address Building Number | Specifies the structured address - building number. | VARCHAR2 | 16 |
| 40 | Structured Address Building Name | Specifies the structured address - building name. | VARCHAR2 | 35 |
| 41 | Structured Address Floor | Specifies the structured address - floor. | VARCHAR2 | 70 |
| 42 | Structured Address Post Box | Specifies the structured address - post box. | VARCHAR2 | 16 |
| 43 | Structured Address Room | Specifies the structured address - room. | VARCHAR2 | 70 |
| 44 | Structured Address Post Code | Specifies the structured address - Post Code. | VARCHAR2 | 16 |

Table 3-2 (Cont.) Virtual Account - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|--|---|-----------|--------------|
| 45 | Structured Address Town Name | Specifies the structured address - town name. | VARCHAR2 | 35 |
| 46 | Structured Address Town Location Name | Specifies the structured address - town location name. | VARCHAR2 | 35 |
| 47 | Structured Address District Name | Specifies the structured address - district name. | VARCHAR2 | 35 |
| 48 | Structured Address Country Sub Divison | Specifies the structured address - country sub divison. | VARCHAR2 | 35 |
| 49 | Structured Address Country | Specifies the structured address - country. | VARCHAR2 | 2 |
| 50 | Structure Code | Specifies an existing structure code for linking to account structure. | VARCHAR2 | 20 |
| 51 | Virtual Parent Account Number | Specifies the Virtual Parent Account Number of the account structure for linkage. | VARCHAR2 | 35 |
| 52 | accLiqdAllowed | Specifies the Liquidity Management allowed or not. | VARCHAR2 | 1 |

3.3 Account Structure

Account Structure File Upload is used for the bulk creation, modification and closure of Virtual Account Structures.

Feed Name: virtualAccountMap

The following table describes the details of the file structure.

Table 3-3 Account Structure - Master Reocrds

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-------------|---|-----------|--------------|
| 1 | Action | Specifies the operation to be performed. Allowed operations are as following: <ul style="list-style-type: none"> • New: Creation of Account Structure • Modify: Modification of existing account structures • Close: Closure of existing account structures | VARCHAR2 | - |
| 2 | Branch Code | Specifies the Branch Code. | VARCHAR2 | 3 |

Table 3-3 (Cont.) Account Structure - Master Records

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-------------------------------|--|-----------|--------------|
| 3 | Real Customer Number | Specifies the Real Customer Number for which the Account Structure is to be created. | VARCHAR2 | 20 |
| 4 | Structure Code | Specifies the Unique Identifier of the Structure. | VARCHAR2 | 20 |
| 5 | Structure Description | Specifies the Structure Description. | VARCHAR2 | 35 |
| 6 | Virtual Main Account | Specifies the Virtual Header Account. | VARCHAR2 | 20 |
| 7 | Real Account Number | Specifies the Real Account Number linked to the account structure. Applicable if the value for Account Linkage is A . | VARCHAR2 | 20 |
| 8 | Real Account Branch | Specifies the Real Account Branch. Applicable if the value for Account Linkage is A . | VARCHAR2 | 3 |
| 9 | Account Linkage | Specifies the Account Linkage Type. Valid values are as following: <ul style="list-style-type: none"> • A - Real Account • G - Virtual Multi-Currency Account | CHAR | 1 |
| 10 | Account Group ID | Specifies the Virtual Multi-Currency Account. Applicable if the value for Account Linkage is G . | VARCHAR2 | 8 |
| 11 | Interest Calculation Required | Flag to indicate if Interest Calculation is required. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 12 | Remarks | Specifies the Additional Remarks. | VARCHAR2 | 200 |
| 13 | Charge Account | Specifies Customer's Charge Account | VARCHAR2 | 35 |
| 14 | Charge Account Branch | Charge Account's Branch | VARCHAR2 | 3 |
| 15 | Charge Account Currency | Charge Account Currency | VARCHAR2 | 3 |

Table 3-4 Account Structure - Child Records

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|------------------------|---------------------------------------|-----------|--------------|
| 1 | Virtual Parent Account | Specifies the Parent Virtual Account. | VARCHAR2 | 20 |

Table 3-4 (Cont.) Account Structure - Child Reocrds

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|-----------------------|--------------------------------------|-----------|--------------|
| 2 | Virtual Child Account | Specifies the Child Virtual Account. | VARCHAR2 | 20 |

3.4 Remittance Details

Remittance Details File Upload is used for the bulk creation, modification and closure of Remittance.

Feed Name: remittanceDetails

The following table describes the details of the file structure.

Table 3-5 Remittance Details - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|----------------------------|--|----------------------------|--------------|
| 1 | Action | Specifies the operation to be performed. Allowed operations are as following: <ul style="list-style-type: none"> • New: Creation of Remittance IDs • Modify: Modification of existing Remittance IDs • Close: Closure of existing Remittance IDs | VARCHAR2 | - |
| 2 | Real Customer Number | Specifies the Customer Number for which the Remittance ID is maintained. | VARCHAR2 | 20 |
| 3 | Virtual Identifier | Specifies the Virtual Identifier of the Corporate | VARCHAR2 | 15 |
| 4 | Remittance ID | Specifies the unique Identification of the Remittance ID. | VARCHAR2 | 35 |
| 5 | IBAN Required | Specifies if IBAN is to be generated or not. Valid values are as following: <ul style="list-style-type: none"> • Y • N | CHAR | 1 |
| 6 | Validity Start Date | Specifies the start date of Remittance ID | DATE Format: YYYY-MM-DD | - |
| 7 | Validity End Date | Specifies the end date of Remittance ID | DATE Format: YYYY-MM-DD | - |
| 8 | Reconciliation Information | Specifies the Reference number provided by the corporate for reconciliation purpose. | VARCHAR2 | 255 |

Table 3-5 (Cont.) Remittance Details - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|------------------------|---|-----------|--------------|
| 9 | Additional Information | Specifies the additional information provided by the corporate for further use. | VARCHAR2 | 255 |
| 10 | Remarks | Specifies the Remarks. Applicable for closure of Remittance ID. | VARCHAR2 | 200 |

3.5 Journal Posting

Journal Posting File Upload is used for the bulk upload of the journal postings.

Feed Name: JournalPosting

The following table describes the details of the file structure.

Table 3-6 Journal Posting - Master Records

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|---------------------|---|-----------|--------------|
| 1 | Discriminator | Specifies the discriminator for Parent Record. Allowed Discriminator value = P | - | - |
| 2 | Action | Specifies the operation to be performed. Allowed operations are as following: <ul style="list-style-type: none"> New: Creation of Transaction Journal | VARCHAR2 | - |
| 3 | Source Code | Specifies the Source Code. | VARCHAR2 | 15 |
| 4 | Source Reference No | Specifies the Source Reference number. | VARCHAR2 | 20 |
| 5 | SkipDDAEntries | Specifies the indicator to skip DDA entries. Valid values are as following: <ul style="list-style-type: none"> true - To skip DDAEntries false - Not to SkipDDAEntries | VARCHAR2 | 4 |

Table 3-7 Journal Posting - Child Records

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|---------------|--|-----------|--------------|
| 1 | Discriminator | Specifies the discriminator for child record. Allowed Discriminator value = C | VARCHAR2 | - |
| 2 | TxnAccount | Specifies the Transaction Account Number. | VARCHAR2 | 35 |

Table 3-7 (Cont.) Journal Posting - Child Records

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|------------------|---|----------------------------|--------------|
| 3 | TxnAccountCcy | Specifies the Transaction Account Currency. | VARCHAR2 | 3 |
| 4 | TxnAccountBrn | Specifies the Transaction Account Branch. | VARCHAR2 | 3 |
| 5 | DrCrInd | Specifies the Debit/Credit Indicator. Valid Values are as following: <ul style="list-style-type: none"> • D - Debit • C - Credit | CHAR | 1 |
| 6 | ForceDebit | Specifies the ForceDebit Indicator. Valid Values are as following: <ul style="list-style-type: none"> • N • Y | CHAR | 1 |
| 7 | TxnCcy | Specifies the Transaction Currency. | VARCHAR2 | 3 |
| 8 | TxnAmount | Specifies the Transaction Amount. | NUMBER | 22, 3 |
| 9 | TxnCode | Specifies the Transaction Code. | VARCHAR2 | 3 |
| 10 | ValueDate | Specifies the Value Date. | DATE Format: YYYY-MM-DD | - |
| 11 | ExchRate | Specifies the Exchange Rate for the Currency. | NUMBER | 24, 12 |
| 12 | AmtInTxnAccCcy | Specifies the Amount in Transaction Account Currency. | NUMBER | 22, 3 |
| 13 | ReconRefNo | Specifies the Recon Reference Number. | VARCHAR2 | 35 |
| 14 | EcaOrBlockRefNo | Specifies ECA or Block Reference Number. | VARCHAR2 | 35 |
| 15 | BlkReleaseStatus | Specifies the Block Release Status. Valid values are as following: <ul style="list-style-type: none"> • F - Full BlkRelease • P - Partial BlkRelease | CHAR | 1 |
| 16 | DdaOffset | Specifies the DDA Offset Number. | VARCHAR2 | 35 |
| 17 | AddlText | Specifies the additional text. | VARCHAR2 | 4000 |

3.6 Journal Posting Reversal

Journal Posting Reversal File Upload is used for the bulk reversal of the transaction journals.

Feed Name: JournalPostingRev

The following table describes the details of the file structure.

Table 3-8 Journal Posting Reversal - File Structure

| Sequence Number | Field Name | Description | Data Type | Field Length |
|-----------------|------------|--|-----------|--------------|
| 1 | txnRefNo | Specifies the Transaction Reference Number to be reversed. | VARCHAR2 | 35 |

4

Events

This topic provides the information on the list of events in Oracle Banking Virtual Account Management.

Refer to the [Async API Documentation](#) for the event details.

5

Outbound API calls through Oracle Banking Routing Hub

This topic provides the information on the outbound API calls to Oracle Banking Virtual Account Management.

Oracle Banking Virtual Account Management supports the outbound API calls from the below-listed products through Oracle Banking Routing Hub.

- Oracle FLEXCUBE Universal Banking
- Oracle Banking Virtual Account Management External Account
- Oracle Banking Liquidity Management
- Oracle Banking Payments
- IC Interface
- Oracle Banking Electronic Data Exchange

Refer to the respective **Integration Guide** for a detailed explanation.

6

FOP for Statement Advice

This topic provides the information to configure and generate virtual account statement using a template created in Apache FOP.

- [Prerequisites](#)
- [Template Upload Process](#)
- [Generate Statement Advice](#)

6.1 Prerequisites

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

Table 6-1 Data Source List

| Data Source Name | Data Source JNDI | Targets |
|------------------|--------------------|-----------------------------|
| PLATOCMC | jdbc/CMNCORE | Plato-Common-Core-Server |
| PLATOSMS | jdbc/sms | Plato-SMS-Server |
| REPORTSERVICE | jdbc/REPORTSERVICE | Plato-Report-Service-Server |

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

```
flyway.domain.placeholders.report-service.hostname=  
<http://<REPORT_SERVICE_HOSTNAME>:<REPORT_SERVICE_PORT>  
flyway.domain.placeholders.report-  
service.server.port=<REPORT_SERVICE_PORT>  
flyway.domain.placeholders.report-service.domain.jndi=jdbc/REPORTSERVICE  
flyway.domain.placeholders.report-service.template-metadata-directory=/  
scratch/obvam/report-service/template_metadata  
flyway.domain.placeholders.report-service.output-directory=/scratch/obvam/  
report-service/output/  
flyway.domain.placeholders.report-service.fop-config-file=/scratch/obvam/  
report-service/fop.xconf
```

Note:

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

4. Create the folder structure as mentioned in Step 3.
5. Download [fop.xconf](#) file and place in the below directory:
/scratch/obvam/report-service

6. Restart plato-config-service.
7. Deploy plato-report-services.

Once the plato-report-service deployed successfully, ensure that the below tables created in the PLATO-REPORT-SERVICE schema.

- ERTB_MSGS
- flyway_schema_history
- OBMA_DOCUMENT_STORE
- OBMA_EXTRACTOR_CONFIG
- OBMA_REPORT_LOG
- OBMA_TEMPLATE_IMAGE
- OBMA_TM_REPORT_METADATA
- OBMA_TM_TEMPLATE_IMAGE
- OBMA_TM_TEMPLATE_METADATA
- OBMA_TW_REPORT_METADATA
- OBMA_TW_TEMPLATE_IMAGE
- OBMA_TW_TEMPLATE_METADATA

8. Deploy obvam-statement-services.
9. Once the obvam-statement-services is deployed, ensure the below table is added in VAS schema.
 - VAS_TB_ADVICE

6.2 Template Upload Process

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

Naming convention for Report name for creating Report Linkage: OBVAM-Statement-Advice.

Download [AccountStatement.xsl](#) the Account Statement template.

6.3 Generate Statement Advice

User can generate the statement advice in usual way, either by batch process or adhoc statement generation process.

7

Host To Host Integration

This topic provides the information to configure and host to host integration for file processing via file upload user can create and close virtual account.

- [Initial Configurations](#)
- [File Structure](#)

7.1 Initial Configurations

- **OBVAM-OBEDX Service Consumer:** OBVAM-OBEDX service consumer must create in Routing Hub to integrate with Oracle Banking Electronic Data Exchange and Oracle Banking Electronic Data Exchange callback API details must be provided there.
- Below Functional activities will be created via flyway when use deploy obvam-account-service. User must map these functional activities with the appropriate role.
 1. VAM_FA_H2H_PARSE
 2. VAM_FA_H2H_HANDOFF
- When the users deploy the obvam-account-services, the below 3 tables must be populated via flyway.
 1. VAM_H2H_TM_FILE
 2. VAM_H2H_TM_FILE_FIELDS
 3. VAM_H2H_TM_FILE_DELIMITERS

7.2 File Structure

Virtual Account Create file is a csv file (for current release) and structure is similar as mentioned in [Virtual Account](#)

Feedback and Support

Oracle welcomes customers' comments and suggestions on the quality and usefulness of the document. Your feedback is important to us. If you have a query that is not covered in this user guide or if you still need assistance, please contact documentation team.

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