

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*

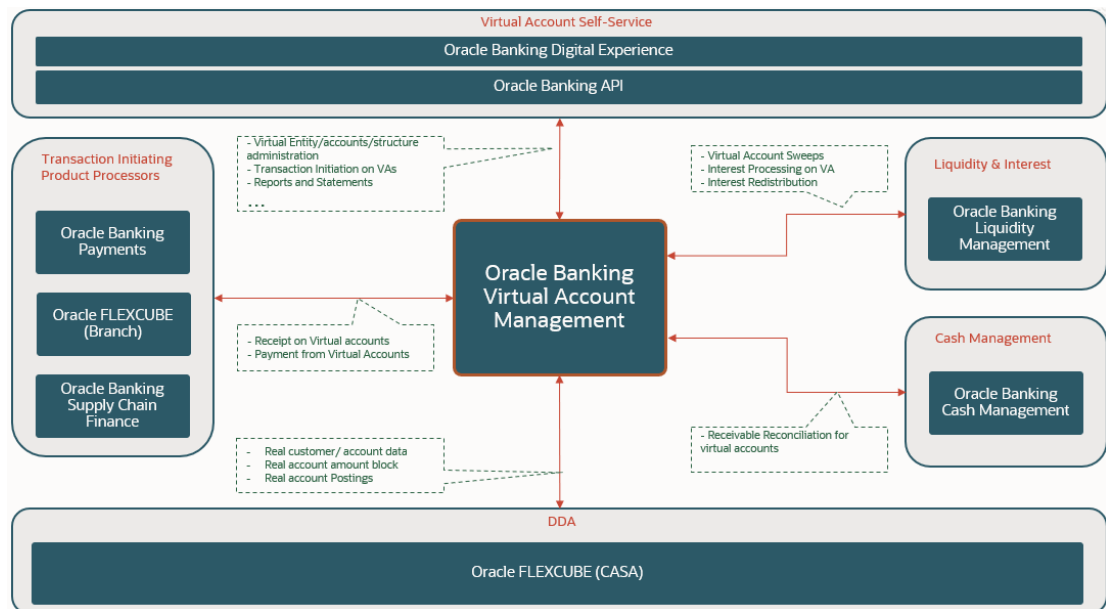
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Overview

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
- Account Transaction Limits
- Account Transaction Utilization

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 or virtual account closure file from corporate ERP system and to validate data in the file.
- Handoff API: To perform virtual account create or close.
- Ack File API: To get the record status, the failure reason for each record from Electronic Data Exchange system, and create consolidated ack csv file based on this data.

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/closure status and the newly created virtual account number to Electronic Data Exchange system.
- Outgoing Ack File API: To send the virtual account creation/closure status and the failure reason (in case, the record creation/closure is failed) in a consolidated csv file to Electronic Data Exchange system.

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

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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	Modifiable (NA/Y/N)
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	-	NA
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	-	NA
3	Last KYC Date	Specifies the last KYC date.	DATE Format: YYYY-MM-DD	-	Y
4	KYC Reference	Specifies the KYC Reference Number.	VARCHAR2	100	Y
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	Y
6	Tax Identification Number	Specifies the Tax Identification Number.	VARCHAR2	100	Y
7	Identification Number	Specifies the Identification Number.	VARCHAR2	100	Y

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


Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
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	Y
9	Registered Address Pincode	Specifies the Pincode of Registered Address.	VARCHAR2	15	Y
10	Registered Address Country	Specifies the Registered Address Country.	VARCHAR2	15	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
11	Registered Address Line 1	Specifies the Registered Address Line 1.	VARCHAR2	105	Y
12	Registered Address Line 2	Specifies the Registered Address Line 2.	VARCHAR2	105	Y
13	Registered Address Line 3	Specifies the Registered Address Line 3.	VARCHAR2	105	Y
14	Registered Address Line 4	Specifies the Registered Address Line 4.	VARCHAR2	105	Y
15	Correspondence Address Pincode	Specifies the Pincode of Correspondence Address.	VARCHAR2	15	Y
16	Correspondence Address Country	Specifies the Correspondence Address Country.	VARCHAR2	3	Y
17	Correspondence Address Line 1	Specifies the Correspondence Address Line 1.	VARCHAR2	105	Y
18	Correspondence Address Line 2	Specifies the Correspondence Address Line 2.	VARCHAR2	105	Y
19	Correspondence Address Line 3	Specifies the Correspondence Address Line 3.	VARCHAR2	105	Y
20	Correspondence Address Line 4	Specifies the Correspondence Address Line 4.	VARCHAR2	105	Y
21	Entity Type	Specifies the Entity Type. Valid values are as following: <ul style="list-style-type: none"> • C - Corporate • I - Individual 	CHAR	1	N
22	Virtual Entity Name	Specifies the Virtual Entity Name.	VARCHAR2	105	Y
23	Virtual Entity ID	Specifies the Virtual Entity Identification.	VARCHAR2	12	N
24	Real Customer Number	Specifies the Real Customer Number for virtual entity creation.	VARCHAR2	20	N

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
25	Doer Remarks	Specifies the Requester Remarks.	VARCHAR2	200	Y
26	Approver Remarks	Specifies the Approver Remarks.	VARCHAR2	200	Y
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	Y
28	Individual Email	Specifies the Email Details. Applicable for Entity Type as "I" and individualDetails_preferredMode as "E".	VARCHAR2	255	Y
29	Individual Work Phone Number	Specifies the Work Phone Number. Applicable for Entity Type as "I".	VARCHAR2	10	Y
30	Individual Work Phone ISD	Specifies the International Subscriber Dialing code for Work Phone Number. Applicable for Entity Type as "I".	NUMBER	4	Y
31	Individual Home Phone Number	Specifies the Home Phone Number. Applicable for Entity Type as "I".	VARCHAR2	10	Y
32	Individual Home Phone ISD	Specifies the International Subscriber Dialing code for Home Phone Number. Applicable for Entity Type as "I".	NUMBER	4	Y
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".	NUMBER	4	Y
34	Individual Mobile Number	Specifies the Mobile Phone Number. Applicable for Entity Type as "I" and individualDetails_preferredMode as "M".	VARCHAR2	10	Y

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


Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
35	Individual National ID	Specifies the National Identification of Individual. Applicable for Entity Type as "I".	VARCHAR2	35	Y
36	Individual Nationality	Specifies the Nationality of Individual. Applicable for Entity Type as "I".	VARCHAR2	3	Y
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	Y
38	Individual Date Of Birth	Specifies the Date of Birth of Individual. Applicable for Entity Type as "I".	DATE Format: YYYY-MM-DD	-	Y
39	Individual Last Name	Specifies the Individual Last Name. Applicable for Entity Type as "I".	VARCHAR2	105	Y
40	Individual Middle Name	Specifies the Individual Middle Name. Applicable for Entity Type as "I".	VARCHAR2	105	Y
41	Individual First Name	Specifies the Individual First Name. Applicable for Entity Type as "I".	VARCHAR2	105	Y
42	Corporate Date Of Incorporation	Specifies the Date of Incorporation of the Corporate. Applicable for Entity Type as "C".	DATE Format: YYYY-MM-DD	-	Y
43	Corporate Country Of Incorporation	Specifies the Country of Incorporation of the Corporate. Applicable for Entity Type as "C".	VARCHAR2	105	Y
44	Corporate Unique Id	Specifies the Unique ID of the Corporate. Applicable for Entity Type as "C".	VARCHAR2	35	Y
45	Corporate Work Phone 1 ISD	Specifies the International Subscriber Dialing code for Work Phone Number1. Applicable for Entity Type as "C".	VARCHAR2	10	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
46	Corporate Work Phone No 1	Specifies the Work Phone Number 1. Applicable for Entity Type as "C".	VARCHAR2	10	Y
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	Y
48	Corporate Work Phone No 2	Specifies the Work Phone Number 2. Applicable for Entity Type as "C".	VARCHAR2	10	Y
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	Y
50	Corporate Mobile No	Specifies the Corporate Mobile Number. Applicable for Entity Type as "C" and individualDetails_preferredMode as "M".	VARCHAR	10	Y
51	Corporate Email	Specifies the Corporate Email Details. Applicable for Entity Type as "C" and individualDetails_preferredMode as "E".	VARCHAR	255	Y
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	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
53	Corporate Entity Type	<p>Specifies the Corporate Entity Type.</p> <p>Applicable for Entity Type as "C".</p> <p>Valid values are as following:</p> <ul style="list-style-type: none">• C - Corporation• P - Partnership• S - Sole Partnership• O - Cooperative	CHAR	1	Y

 **Note:**

The values can be updated at bank level as a part of Day 0 setup.

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
54	Generate PDF Statements	Indicates if PDF statement is required. Valid values are as following: <ul style="list-style-type: none"> Y – Yes N – No 	VARCHAR2	1	Y
55	Statement Type	Specifies the PDF Statement Type. Valid values are as following: <ul style="list-style-type: none"> C - Consolidated A - Account Level 	CHAR	1	Y
56	Frequency	Specifies the Statement Generation Frequency. Valid values are as following: <ul style="list-style-type: none"> D – Daily W – Weekly M – Monthly Q – Quarterly Y – Yearly 	CHAR	1	Y
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	-	Y
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	Y
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	Y
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	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
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	Y
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	Y (conditional based on Generate MT 942 value)
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	Y (conditional based on Generate MT 942 value)
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	-	Y (conditional based on Generate MT 942 value)
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	Y
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	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
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	Y (conditional based on Generate CAMT 052 value)
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	Y (conditional based on Generate CAMT 052 value)
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	-	Y (conditional based on Generate CAMT 052 value)
70	Structured Address Department	Specifies the structured address - department.	VARCHAR2	70	Y
71	Structured Address Sub Department	Specifies the structured address – sub-department.	VARCHAR2	70	Y
72	Structured Address Street Name	Specifies the structured address - street name.	VARCHAR2	70	Y
73	Structured Address Building Number	Specifies the structured address – building number.	VARCHAR2	16	Y
74	Structured Address Building Name	Specifies the structured address - building name.	VARCHAR2	35	Y
75	Structured Address Floor	Specifies the structured address - floor.	VARCHAR2	70	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
76	Structured Address Post Box	Specifies the structured address - post box.	VARCHAR2	16	Y
77	Structured Address Room	Specifies the structured address - room.	VARCHAR2	70	Y
78	Structured Address Post Code	Specifies the structured address - Post Code.	VARCHAR2	16	Y
79	Structured Address Town Name	Specifies the structured address - town name.	VARCHAR2	35	Y
80	Structured Address Town Location Name	Specifies the structured address - town location name.	VARCHAR2	35	Y
81	Structured Address District Name	Specifies the structured address - district name.	VARCHAR2	35	Y
82	Structured Address Country Sub Division	Specifies the structured address - country sub division.	VARCHAR2	35	Y
83	Structured Address Country	Specifies the structured address - country.	VARCHAR2	2	Y
84	BIC Code	Customer's BIC code	VARCHAR2	11	Y

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	Modifiable (NA/Y/N)
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	-	NA
2	Branch Code	Specifies the branch under which virtual account to be created.	VARCHAR2	3	N
3	Virtual Entity ID	Specifies the Virtual Entity for which virtual account to be created.	VARCHAR2	12	N
4	Real Customer Number	Specifies the Real Customer Number for which the Virtual Account is to be created.	VARCHAR2	20	N
5	Account Currency	Specifies the Account Currency.	VARCHAR2	3	N
6	Virtual Account Product	Specifies the product under which virtual account to be created.	VARCHAR2	4	N
7	Virtual Account Number	Virtual Account Number is applicable for Modify and Close operations.	VARCHAR2	20	N
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	N
9	IBAN Account Number	Specifies the IBAN Account Number.	VARCHAR2	30	N
10	Virtual Account Name	Specifies the virtual account name.	VARCHAR2	105	Y
11	Address Line 1	Specifies the Correspondence Address Line 1.	VARCHAR2	35	Y
12	Address Line 2	Specifies the Correspondence Address Line 2.	VARCHAR2	35	Y
13	Address Line 3	Specifies the Correspondence Address Line 3.	VARCHAR2	35	Y
14	Address Line 4	Specifies the Correspondence Address Line 4.	VARCHAR2	35	Y
15	Address Pincode	Specifies the Correspondence Address Zip code.	VARCHAR2	15	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
16	Address Country Code	Specifies the Correspondence Address Country Code.	VARCHAR2	3	Y
17	Account Purpose	Specifies the description of the Account Purpose.	VARCHAR2	105	Y
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	Y (conditional based on account product)
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	Y (conditional based on account product)
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	Y
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	Y
22	Fixed Amount From Pool	Specifies the Fixed Amount contribution from pool. Applicable if balAvailabilityOptions = Own Balance + Fixed Amount from Pool.	NUMBER	22, 3	Y (conditional)
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	Y (conditional based on account product)

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
24	Overdraft Sanction Amount	Specifies the Overdraft amount sanctioned.	NUMBER	22, 3	Y (conditional based on Overdraft Allowed)
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	Y (based on account product configuration)
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	Y (based on account product configuration)
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	N
28	Real Account Number	Specifies the Real Account Number. Applicable if realAccLinkage = A.	VARCHAR2	20	N
29	Real Account Currency	Specifies the Real Account Currency. Applicable if realAccLinkage = A.	VARCHAR2	3	N
30	Real Account Branch	Specifies the Real Account Branch. Applicable if realAccLinkage = A.	VARCHAR2	3	N
31	Overdraft Start Date	Specifies the Overdraft Start Date.	DATE Format: YYYY-MM-DD	-	Y (conditional based on Overdraft Allowed)

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
32	Overdraft End Date	Specifies the Overdraft End Date.	DATE Format: YYYY-MM-DD	-	Y (conditional based on Overdraft Allowed)
33	Remarks	Specifies the Account Remarks.	VARCHAR2	200	Y
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	NA
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	NA
36	Structured Address Department	Specifies the structured address - department.	VARCHAR2	70	Y
37	Structured Address Sub Department	Specifies the structured address - sub-department.	VARCHAR2	70	Y
38	Structured Address Street Name	Specifies the structured address - street name.	VARCHAR2	70	Y
39	Structured Address Building Number	Specifies the structured address - building number.	VARCHAR2	16	Y
40	Structured Address Building Name	Specifies the structured address - building name.	VARCHAR2	35	Y
41	Structured Address Floor	Specifies the structured address - floor.	VARCHAR2	70	Y
42	Structured Address Post Box	Specifies the structured address - post box.	VARCHAR2	16	Y
43	Structured Address Room	Specifies the structured address - room.	VARCHAR2	70	Y
44	Structured Address Post Code	Specifies the structured address - Post Code.	VARCHAR2	16	Y

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

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

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 Records

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
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	-	NA
2	Branch Code	Specifies the Branch Code.	VARCHAR2	3	NA
3	Real Customer Number	Specifies the Real Customer Number for which the Account Structure is to be created.	VARCHAR2	20	N
4	Structure Code	Specifies the Unique Identifier of the Structure.	VARCHAR2	20	N
5	Structure Description	Specifies the Structure Description.	VARCHAR2	35	Y
6	Virtual Main Account	Specifies the Virtual Header Account.	VARCHAR2	20	N
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	Y (conditional if the linkage is Real Account)
8	Real Account Branch	Specifies the Real Account Branch. Applicable if the value for Account Linkage is A .	VARCHAR2	3	Y (conditional if the Real Account is changed)
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	Y

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

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
10	Account Group ID	Specifies the Virtual Multi-Currency Account. Applicable if the value for Account Linkage is G .	VARCHAR2	8	Y (conditional based on linkage)
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	Y
12	Remarks	Specifies the Additional Remarks.	VARCHAR2	200	Y
13	Charge Account	Specifies Customer's Charge Account	VARCHAR2	35	Y
14	Charge Account Branch	Charge Account's Branch	VARCHAR2	3	Y
15	Charge Account Currency	Charge Account Currency	VARCHAR2	3	Y

Table 3-4 Account Structure - Child Records

Sequence Number	Field Name	Description	Data Type	Field Length	Modifiable (NA/Y/N)
1	Virtual Parent Account	Specifies the Parent Virtual Account.	VARCHAR2	20	NA
2	Virtual Child Account	Specifies the Child Virtual Account.	VARCHAR2	20	NA

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	Modifiable (NA/Y/N)
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	-	NA
2	Real Customer Number	Specifies the Customer Number for which the Remittance ID is maintained.	VARCHAR2	20	N
3	Virtual Identifier	Specifies the Virtual Identifier of the Corporate	VARCHAR2	15	N
4	Remittance ID	Specifies the unique Identification of the Remittance ID.	VARCHAR2	35	N
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	N
6	Validity Start Date	Specifies the start date of Remittance ID	DATE Format: YYYY-MM-DD	-	Y
7	Validity End Date	Specifies the end date of Remittance ID	DATE Format: YYYY-MM-DD	-	Y
8	Reconciliation Information	Specifies the Reference number provided by the corporate for reconciliation purpose.	VARCHAR2	255	Y
9	Additional Information	Specifies the additional information provided by the corporate for further use.	VARCHAR2	255	Y
10	Remarks	Specifies the Remarks. Applicable for closure of Remittance ID.	VARCHAR2	200	Y

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
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	-

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

Sequence Number	Field Name	Description	Data Type	Field Length
11	ExchRate	Specifies the Exchange Rate for the Currency.	NUMBER	24, 12
12	AmtInTxnAccC cy	Specifies the Amount in Transaction Account Currency.	NUMBER	22, 3
13	ReconRefNo	Specifies the Recon Reference Number.	VARCHAR2	35
14	EcaOrBlockRef No	Specifies ECA or Block Reference Number.	VARCHAR2	35
15	BlkReleaseStat us	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 Guides** 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.

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.
- The following 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 following tables must be populated via flyway.
 1. VAM_H2H_TM_FILE
 2. VAM_H2H_TM_FILE_FIELDS
 3. VAM_H2H_TM_FILE_DELIMITERS
- The default chunk size of parse and handoff api is 500 and default time of closure wait time is 3 mins. The user can modify these values in PROPERTIES table by updating the following properties:
 1. chunks.parse.size
 2. chunks.handoff.size
 3. closure.handoff.waitTime
- The default path of H2H acknowledgement file path is "/scratch/obvam/H2H". The user can modify this path by updating the following key in PROPERTIES table.
 1. ack.file.path

The user has to create this directory in server and need to give required permission.

7.2 File Structure

- Virtual Account Create and Virtual Account Closure file is a csv file and the structure is similar as mentioned in [Virtual Account](#).
- Virtual Account Acknowledgement file is a csv file and the format is given in [H2H Virtual Account Acknowledgement File](#).

H2H Virtual Account Acknowledgement File

H2H Virtual Account Acknowledgement File is used to send the status of records to Customer's ERP System in a consolidated csv file.

The following table describes the details of file structure:

Table 7-1 Virtual Account Acknowledgement - File Structure

Field Sequence Number	Field Name	Description	Data Type	Is Mandatory Field?
1	Line Number	Line Number of the record in original Virtual Account Open/Close File	String	Y
2	Canonical Format	Canonical Format of data of Virtual Account Open/Close File in String format	String	Y
3	Status	Status of the record send from EDX	String	Y
4	Reason Code	Reason Code in case of Rejected OR Failed record	String	N
5	Reason Description	Reason Description in case of Rejected OR Failed record	String	N

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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